FORM
27
Rev 6/99

State of Colorado
Oil and Gas Conservation Commission

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

FOR OGCC USE ONLY

OGCC Employee:
☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV
Tracking No:

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☐ Site/Facility Closure ☑ Other (describe): Pit Closure

OGCC Operator Number: 96850
Name of Operator: Williams Production RMT Company
Address: 1058 County Road 215
City: Parachute State: CO Zip: 81635

Contact Name and Telephone:
Karolina Blaney
No: 970-683-2295
Fax: 970-285-9573

API Number:
County: Garfield
Facility Name: Chevron TR 41-6-697
Facility Number: 422330
Well Name: Chevron TR 41-6-697
Well Number: N/A
Location: (QtrQtr, Sec, Twp, Rng, Meridian): NENE, Section 6, T6S, R97W, 6th PM Latitude: 39.56036 Longitude: -108.2547

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Produced Water

Site Conditions: Is location within a sensitive area (according to Rule 901e)? ☑ Y ☐ N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): Rangeland, Non-Crop Land

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Parachute-Irigul-Rhone, 25-50% slopes

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Crystal Creek lies approximately 1,967 ft to the west and an un-named tributary to Crystal Creek lies approximately 1,849 ft to the south. Nearest water well is ~3639 feet to the east

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):	Extent of Impact:	How Determined:
☑ Soils	See Attached Notice of Completion Report	Visual observations, field screening, and analytical analysis
☐ Vegetation	Remediation # 5866	
☐ Groundwater		
☐ Surface Water		

REMEDIATION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

See Attached Notice of Completion Report, Remediation # 5866

Describe how source is to be removed:

See Attached Notice of Completion Report, Remediation # 5866

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

See Attached Notice of Completion Report, Remediation # 5866

Submit Page 2 with Page 1

FORM 27 Rev 6/99

Page 2

State of Colorado
Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801, Denver, Colorado 80203
(303)894-2100 Fax:(303)894-2109

Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
Facility Name & No: _____

REMEDIATION WORKPLAN (Cont.)

OGCC Employee:

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

See Attached Notice of Completion Report, Remediation # 5866

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

See Attached Notice of Completion Report, Remediation # 5866

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? ☑ Y ☐ N If yes, describe:

See Attached Notice of Completion Report, Remediation # 5866

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

See Attached Notice of Completion Report, Remediation # 5866

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: June 8, 2011	Date Site Investigation Completed: June 8,2011	Date Remediation Plan Submitted: May 27, 2011
Remediation Start Date: June 8, 2011	Anticipated Completion Date: July 5, 2011	Actual Completion Date: July 7, 2011

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

Print Name: Karolina Blaney Signed: Karolina Blaney

Title: Environmental Specialist Date: 8/25/2011

OGCC Approved: _____ Title: FOR Chris Canfield Date: 09/21/2011

EPS NW Region

COA: Arsenic concentrations in the pit are slightly above background max + 10%. During back fill, cover w/ 3' of clean material.

Sensitive Area Determination Checklist

Williams Production RMT Company			
Person(s) Conducting Field Inspection		Ashlee Lane	9/28/10
		Biologist	
Site Information			
Location:	TR 41-6-697		Time: 1200
Type of Facility:	Existing Well Pad		
Environmental Conditions	Clear and calm; no recent precipitation		
Temperature (°F)	85°		

Has the proposed, new or existing location been designated as a sensitive area?
☐ Yes ☒ No

SURFACE WATER

1. Are there any surface water features or SWSAs adjacent to or within ¼ mile of the proposed/new or existing facility?
   ☐ Yes ☒ No

   If yes, list type of surface water feature(s), i.e. rivers, creeks, streams, seeps, springs, wetlands: Three springs were identified outside of the ¼ mile buffer zone and are addressed in the additional comments section of this sensitive area determination checklist.

   If yes, describe location relative to facility:

2. Could a potential release from the facility reach surface water features?
   ☐ Yes ☒ No

   If yes, describe the pathway a release from the facility would likely follow to determine if the potential to impact surface water is high or low.

3. Is the potential to impact surface water from a facility release high or low?
   ☐ High ☒ Low

GROUNDWATER

1. Will the proposed/new or existing facility have any pits which will contain hydrocarbons and chlorides or other E&P wastes?
   ☒ Yes ☐ No
   If yes, List the pit type(s): Drilling pit.

2. Is the site of the proposed facility underlain by an unconfined aquifer or recharge zone?
   ☒ Yes ☐ No

3. Is the hydraulic conductivity of the underlying soil or geologic material $\leq 1.0x10^{-7}$ cm/sec?
   ☐ Yes ☒ No

4. Is the proposed facility located within 1/8 mile of a domestic water well or 1/4 mile of a public water supply well which would use the same aquifer?
   ☐ Yes ☒ No

5. Is the proposed facility located within a 100 year floodplain?
   ☐ Yes (*Sensitive Area*) ☒ No (*If no, proceed to question #6.*)

6. Is the depth to groundwater known?
   ☐ Yes (*If yes, follow instructions provided in 6(a) of this section).*
   ☒ No (*If no, follow instructions provided in 6(b) of this section*).

   (a) If yes, could a potential release from the proposed facility reach groundwater?
   ☐ Yes ☐ No
   If yes, explain:

   (b) If no:
   (i) Evaluate surrounding soils, topography, and vegetation which may suggest the presence of shallow groundwater.
   (ii) Gather information from surrounding well data in order to determine a depth to groundwater, i.e. State Engineers Office.

7. Is the potential to impact ground water from the facility in the event of a release high or low?
   ☐ High ☒ Low

Additional Comments:

As noted in the surface water section of this sensitive area determination there are no surface water features within the quarter mile buffer zone. If flow from a potential release were to migrate off the facility the surface water features outside the quarter mile buffer zone would not be impacted due to the thick vegetative cover consisting of service berry, oak brush, and sage brush and the moderate to high infiltration rates of the underlying soils. There are currently Best Management Practices (BMP's) installed in the form of a perimeter berm and diversion ditch on the northern, southern and western edges of the facility. These BMP's should be monitored and maintained to ensure site containment in the event of a release.

The State Engineers Office and USGS records were reviewed and four permitted wells were indentified in Section 5. All of the permitted wells in Section 5 were constructed to monitor water quality and none were intended or used for domestic purposes. However there are no completion records or water levels noted for any of the wells. The topographic setting and vegetative cover in the vicinity of the facility, service berry, oak brush, and sage brush does not suggest the presence of shallow groundwater. There are three springs indentified on the USGS topographic maps and confirmed during the site investigation. The first spring is located approximately 2,220 feet to the north northwest of the existing facility (SESE Sec 34 T5S R97W). This spring is located on the perennial portion of Crystal Creek. The second spring is located 1,958 feet to the northeast of the existing facility (SWSW Sec 35 T5S R97W). This spring is located on an unnamed intermittent drainage which is tributary to Crystal Creek. The third spring (Rock Spring) is located 2,380 feet to the southeast of the existing facility. This spring forms the perennial section of an unnamed drainage which is also tributary to Crystal Creek. The facility resides in the Uintah Formation, which like the Green River Formation, tends to be fractured both vertically and horizontally which allows for fluids to migrate in the subsurface over larger distances. Based on the topographical setting of the existing facility; it is not anticipated that an overland release would impact groundwater and thus potentially the springs due to the duration of time involved and the fact it would spread out over a large area. The greatest potential for impacts to groundwater would be from a release that occurred over a longer period of time such as a leaking pit and fractured bedrock. Based on the topographic setting of the existing facility and the locations of the springs relative to the facility, it is not anticipated that a potential release from the facility would impact any of the above mentioned springs due to the fact the water sources feeding water to the springs appear to be in different flow regimes that would not be impacted by a potential release from the facility. It would still be recommended, due to the presence of fractured bedrock below the facility, that the pit be lined to prevent any potential impacts to the underlying bedrock.

Based on the information collected during the site investigation and desktop review, the potential to impact surface water has been deemed very low. As stated above, the potential to impact the above noted springs has also been deemed to be low due to the topographic setting of the facility relative to the springs. Therefore the facility can be designated as being in a non-sensitive area.

Inspector Signature(s): _____ Date: _10/02010

Mark E. Mumby, *Project Manager/RPG*
HRL Compliance Solutions, Inc.

_____ Date: _9/30/2010

Ashlee Lane, *Biologist*
HRL Compliance Solutions, Inc.

WILLIAMS PRODUCTION RMT COMPANY

OPERATOR # 96850

TRAIL RIDGE FIELD

CHEVRON TR 41-6-697

NOTICE OF COMPLETION REPORT FOR REMEDIATION # 5866

August 2011

Prepared For:

1058 County Road 215
P.O. Box 370
Parachute, Colorado 81635

Prepared By:

744 Horizon Court, Suite 140
Grand Junction, CO 81506
Phone: 970-243-3271
Fax: 970-243-3280

Table of Contents

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

Form 27 Attachment

Introduction

The purpose of this Notice of Completion report – for the closure of the Williams TR 41-6-697 production pit (COGCC API Number 05-045-14092; hereinafter also referred to as TR 41-6-697) – is to provide detailed information and findings analysis for the previously submitted and approved (remediation number 5866) Colorado Oil and Gas Conservation Commission (COGCC) Site Investigation and Remediation Workplan, Form 27. This report will provide the documentation necessary to demonstrate a comprehensive and diligent investigation of the pit and adjacent environment which was obtained as described and in accordance with all appropriate county, state and federal rules and regulations.

The subject Form 27, COGCC document number 2214577, was delivered via electronic email on May 27, 2011. Preliminary approval to proceed with closure of the subject pit was issued by the COGCC and obtained by Williams Production RMT Company (Williams) on June 17, 2011; at which time the aforementioned remediation number was issued. Closure activities began in June 8, 2011 and were concluded on July 7, 2011. Information in this report includes, but is not limited to: field screening results; laboratory analytical; subliner soil remediation; liner recycling; and bioremediation of the excavated impacted soils.

Evacuation of Pit Contents

The pit contents were removed from the pit using hydro-vac trucks and all free liquids were removed via filter press. The solids collected were placed in a lined bermed containment.

The filter press sludg placed into the aforementioned lined bermed containment cell was profiled for disposal/characterization purposes, and transported to ECDC Environmental for disposal in July, 2011.

Background Sampling

Three samples were collected from the up-gradient undisturbed hillsides surrounding the pad. All background samples were analyzed for arsenic as well as additional analysis at one location which included inorganic parameters of COGCC Table 910-1(i.e. SAR, EC, pH). Refer to Table 4 in the summary table and Appendix 3 for background sampling results.

Pit Liner Investigation and Integrity Assessment

The pit liner system consisted of two layers of poly synthetic material/liner and one layer of felt. No rips, holes, or other physical defects were observed in the primary liner during a liner investigation conducted on June 8, 2011. The presences of water still remaining in the pit, above the liner, made the liner investigation of the bottom section inaccessible.

Pit Liner Removal

Removal of the pit liners consisted of a crew cutting the liner along the crest of the pit at an elevation adjacent to the surface of the well pad. A trackhoe bucket was utilized to grab sections of the liner for extraction and place them in a lined earthen bermed containment cell for subsequent management. Sections of liner that contained residual or trace amounts of sludge were pulled, placed into the containment cell, and allowed to dry. Liners were stored in a lined bermed containment until being banded to pallets to be recycled. During the liner removal, the bottom section of the liner was accessible for inspection and revealed no signs of tears or holes.

Subliner Soil Investigation and Activities

Subliner soils below the pit liner, were inspected visually and through the use of specialized field screening equipment (specifically below) to identify areas which may exceed standards set forth in Table 910-1 of the COGCC 900-Series Rule for hydrocarbons within the soil. Soils below the second lining system on the pit floor and walls were stained black and contained a moderate hydrocarbon odor, indicating that there may have been impacts to the subliner soils.

Field screening of the pit footprint and walls was performed along the entire pit footprint in a sectional grid pattern. The pit bottom was separated into two sections and a five point composite sample was collected from each of the half sections, with a depth of 0-6 inches below the surface. The composite sample was analyzed utilizing a PetroFlag hydrocarbon detector. In addition to the bottom, a five point composite sample was collected from each of the pit walls and field screened for hydrocarbons. Grab samples were collected from each section to provide laboratory confirmation of field screen results.

Figure 1 outlines the pit sampling nomenclature and field screening results using a PetroFlag Hydrocarbon Unit (PetroFlag©). Figure 2 is a GIS map of the pit outlining sample locations within the pit as well as background sample locations from the nearby uphill undisturbed soil.

Figure 1

PetroFlag Results and Pit Sampling ID Layout

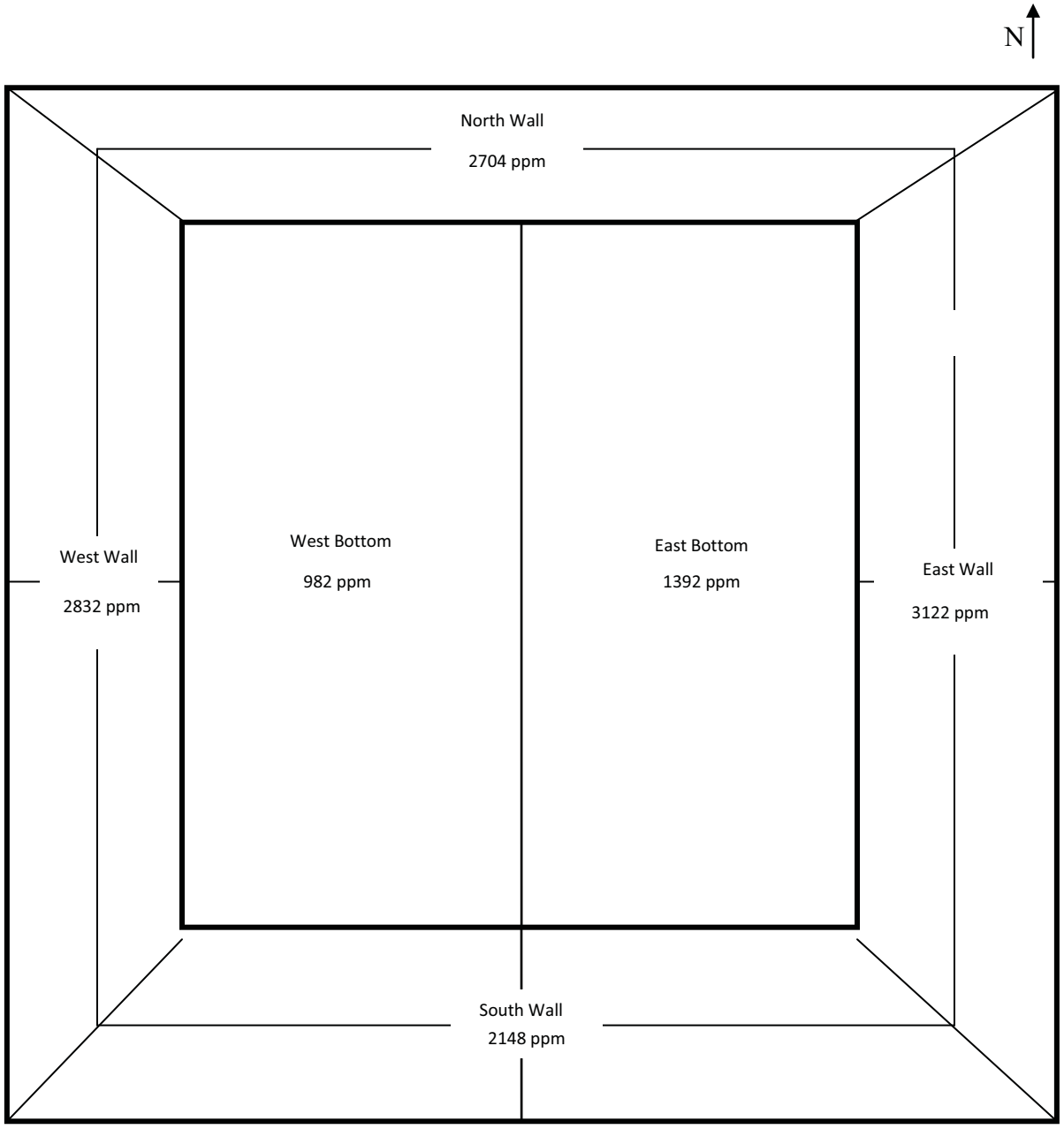


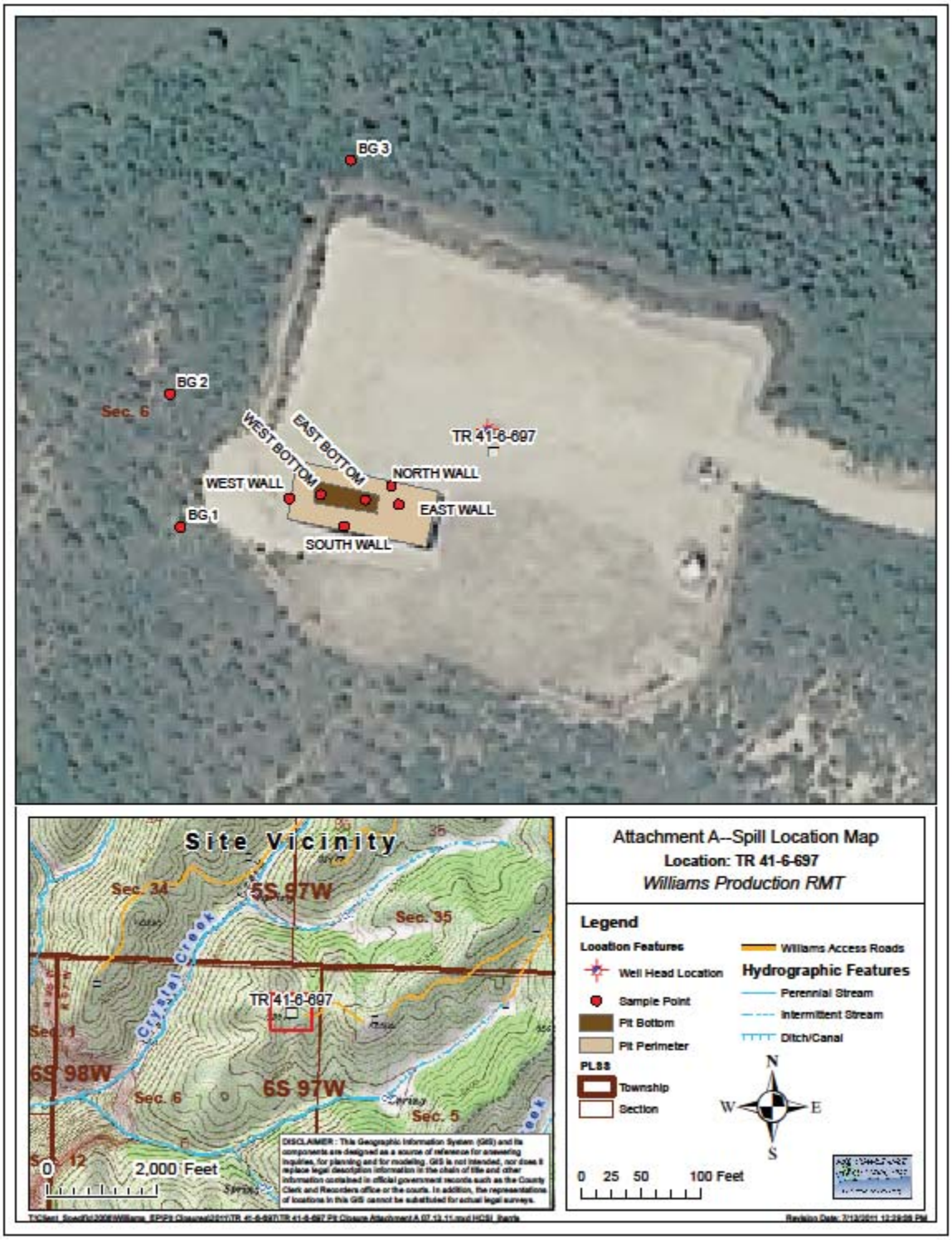
Table 1: PetroFlag Hydrocarbon Initial Field Screening Results

Sample ID	Results mg/kg
North Wall	2704
East Wall	3122
South Wall	2148
West Wall	2832
East Bottom	1392
West Bottom	982

Note: All results are in mg/kg
Highlighted numbers indicate areas that warranted additional inspection and analysis

Figure 2

GIS Map of Sampling Locations



Field screening results are provided in Table 1 and indicated that remediation was necessary due to the anticipation that TPH concentrations would be above COGCC Table 910-1 standards.

Remediation Activities

Soil exhibiting dark stains and a hydrocarbon odor were located on the pit bottom and adjacent walls indicating the potential presence of hydrocarbon concentrations exceeding 500 ppm and thus required remediation. The pit footprint was initially excavated to a depth approximately 3 feet in areas containing a potential hydrocarbon concentration above 500 ppm. Discoloration within soil was no longer present at the excavated depth and field screening results indicated that hydrocarbon concentrations were below 500 ppm. Confirmation samples were collected and analyzed for COGCC Table 910-1.

- Confirmation samples, in accordance with Rule 905.b.(4), were collected from the sides walls at a position that was centered vertically and horizontally. These samples were collected for confirmation of compliance with COGCC Rule 910 and Table 910-1; as well as verification of field screening analysis. Two (2) additional grab samples were collected from the base of the pit, dividing the bottom of the pit into quarters, which included the low point of the base, to demonstrate compliance in accordance with Rule 905.b.(1).
- A Trimble Geo XT 2008 was used to satisfy requirements outlined in COGCC Rule 215 for collecting GPS locations of each confirmation sample location from the pit walls and pit footprint.
- Visual inspection of the pit bottoms, field screening techniques, and sampling procedures were followed in accordance with Williams Highlands Pit Closure Plan (COGCC document #01175818).

Confirmation samples indicated that the eastern pit bottom, north pit wall, and east pit wall remained to exceed the COGCC Table 910-1 500 ppm threshold for hydrocarbon concentrations, specifically in the DRO range. An additional three feet was excavated from the eastern pit bottom and two feet excavated from the pit walls and re-sampled for DRO. Confirmation samples collected from the total excavated depth of 6 feet in the east pit bottom and 5 feet on the eastern & northern pit wall indicated that the DRO concentrations were below COGCC Table 910-1. No additional remediation was required.

Analytical data presented in Table 2 provides results for the confirmation sampling performed post excavation of the pit footprint (raw analytical results are available for review in Appendix 1 of this report) and Table 3 provides confirmation sampling analysis of additional excavation performed in the areas exceeding COGCC standards in Table 2 - east pit bottom, north pit wall, and eastern pit wall (raw analytical results are available for review in Appendix 2)

Sample Analysis

See attached Table 2 (additional detail provided in Appendix 1) for summary of pit footprint raw analytical results, and Table 3 (additional detail provided in Appendix 2) which provides raw analytical results for additional excavation on the eastern pit bottom and wall of the pit, and Table 4 (additional detail provided in Appendix 3) for background analytical results.

Management of Stockpiled Material

The pit liner was segregated according to material type and placed in a bermed containment. Plastic lining material was placed in the south end of the containment and felt liners were placed on the north end. High Plains Services compressed and collected the liners and bound them to pallets for transportation to be recycled.

Excavated soils from within the pit was placed in treatment cells, no thicker than 18" and treated on site with bioremediation product.

Backfill Material

The backfill material utilized was from the stockpiled soil present on the east side of the pad from the initial construction of the pit.

- The soil was placed in lifts and was not compacted beyond the point of making an impenetrable layer but sufficient to suppose subsequent operations and prevent subsidence.
- The pit was reclaimed in accordance with the COGCC 1000 Series Rule in addition to all SUA/COA's per the land owner.

Exceptions to COGCC Table 910-1

The only exceedances with COGCC Table 910-1 are within the confines of constituents listed for inorganics and metals (i.e. arsenic). Refer to Appendix 4 for the Sundry Notice for consideration of background arsenic concentrations in the immediate area of the subject facility.

Analytical Data Management

See Appendix 1 for post excavated pit bottom and wall raw analytical data, Appendix 2 for additional excavation performed on the north pit bottom confirmation analytical data, and Appendix 3 for background analytical data.

Figures

Figure 3

Visual Representation of the Pit Facing East During Excavation

Summary Tables

Table 2: Post Excavation Pit Footprint Analytical Results

Post Excavation of Pit Walls and Bottom	East Bottom	West Bottom	East Wall	South Wall	West Wall	North Wall
TEPH (DRO)	990	280	710	15	24	2200
TVPH (GRO)	ND	ND	ND	ND	ND	ND
BENZENE	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND
XYLENE TOTAL	ND	ND	ND	ND	ND	ND
ACENAPHTHENE	ND	ND	ND	ND	ND	ND
ACENAPHTHYLENE	ND	ND	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	ND	ND	ND
BENZO(A)ANTRHACENE	ND	ND	ND	ND	ND	ND
BENZO(A)PYRENE	ND	ND	ND	ND	ND	.039
BENZO(B)FLUORANTHENE	ND	ND	ND	ND	ND	ND
BENZO(G,H,I)PERYLENE	ND	ND	ND	ND	ND	ND
BENZO(K)FLUORANTHENE	ND	ND	ND	ND	ND	ND
CHRYSENE	ND	ND	ND	ND	ND	ND
DIBENZO(A,H)ANTHRANCENE	ND	ND	.037	ND	ND	.040
FLUORANTHENE	ND	ND	ND	ND	ND	ND
FLUORENE	ND	ND	ND	ND	ND	.097
INDENO(1,2,3-CD)PYRENE	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	ND	ND	ND	ND
PYRENE	ND	ND	ND	ND	ND	ND
ARSENIC	15	6.2	6.4	6.7	7.4	11
BARIUM	440	370	930	360	340	670
CADMIUM	0.69	0.87	0.83	0.53	0.85	0.47
CHROMIUM	28	29	33	32	29	37
CHROMIUM (III)	28	29	33	32	29	37
CHROMIUM (IV)	ND	ND	ND	ND	ND	ND
COPPER	18	19	17	17	19	17
LEAD	20	17	16	17	19	16
NICKEL	34	26	23	22	25	27
SELENIUM	1.2	0.97	0.84	0.86	0.96	0.90
SILVER	ND	ND	ND	ND	ND	ND
ZINC	75	65	49	55	64	56
Sodium Absorbtion Ratio (unitless)	103.0	129.3	41.9	168.4	7.1	128.5
Electric Conductivity (mmho/cm)	11.73	11.87	3.41	10.11	0.40	9.03
pH (unitless)	8.18	8.62	8.71	8.09	8.81	8.80

Note: all results are in, mg/kg = milligram per kilogram, unless noted
Exceedances are highlighted in yellow.

Table 3: North Bottom – Additional Excavation

Post Excavation Pit Bottom and Walls after Additional Excavation	**East Pit Bottom**	**East Pit Wall**	**North Pit Wall**
TEPH - DRO	170	110	220
DIBENZO(A,H)ANTHRANCENE	N/A	ND	ND
BENZO(A)PYRENE	N/A	N/A	ND

Note: All results are in, mg/L = milligrams per liter, unless noted otherwise

Table 4: Background Analytical Data

	Arsenic	Sodium Adsorption Ratio (unitless)	Electrical Conductivity (mmhos/cm)	pH (unitless)
BKGD 1	5.8	0.6	0.27	7.29
BKGD 2	7.6	N/A	N/A	N/A
BKGD 3	6.3	N/A	N/A	N/A

All results are in, mg/kg = milligram per kilogram, unless noted otherwise

Appendix 1: Pit Footprint Confirmation Raw Analytical Data

25-Aug-2011

Kris Rowe
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **Williams TR 41-6-697 Pit Closure 6/20/11** Work Order: **1106585**

Dear Kris,

ALS Environmental received 10 samples on 22-Jun-2011 07:30 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 50.

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

Sincerely,

Ann Preston

Electronically approved by: Ann Preston

Ann Preston
Project Manager

Certificate No: IL100452

ALS Group USA, Corp

Date: 25-Aug-11

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11
Work Order: **1106585**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1106585-01	East Pit Bottom	Soil		6/20/2011 14:15	6/22/2011 07:30	☐
1106585-02	West Pit Bottom	Soil		6/20/2011 14:30	6/22/2011 07:30	☐
1106585-03	East Wall	Soil		6/20/2011 14:10	6/22/2011 07:30	☐
1106585-04	North Wall	Soil		6/20/2011 14:00	6/22/2011 07:30	☐
1106585-05	South Wall	Soil		6/20/2011 14:40	6/22/2011 07:30	☐
1106585-06	West Wall	Soil		6/20/2011 14:20	6/22/2011 07:30	☐
1106585-07	BKGD 1	Soil		6/21/2011 13:15	6/22/2011 07:30	☐
1106585-08	BKGD 2	Soil		6/21/2011 13:20	6/22/2011 07:30	☐
1106585-09	BKGD 3	Soil		6/21/2011 13:30	6/22/2011 07:30	☐
1106585-10	Treatment Cell Baseline	Soil		6/21/2011 12:00	6/22/2011 07:30	☐

ALS Group USA, Corp

Date: 25-Aug-11

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11
Work Order: 1106585

Case Narrative

Batches 33973 and 33995 MS/MSD data for Metals is not related to this project's samples.

Batch 33990 MS/MSD data for PAH is not related to this project's samples.

Batch 33934 sample 1106585-03A analysis had one or more PAH surrogate recoveries that were above the upper control limits. The sample results and reporting limits may be biased high.

Batch 34084 MS/MSD data for Hexavalent Chromium is not related to this project's samples.

At the client's request the sample IDs for 1106585-01 and -02 were changed as specified in the attached email.

ALS Group USA, Corp

Date: 25-Aug-11

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11
WorkOrder: **1106585**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	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

Acronym	Description
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

Units Reported	Description
% 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: *25-Aug-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: East Pit Bottom **Lab ID:** 1106585-01
Collection Date: 6/20/2011 02:15 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **6/22/2011**	Analyst: **RM**
DRO (C10-C28)	**990**		**4.8**	**mg/Kg-dry**	1	6/23/2011 01:37 PM
Surr: 4-Terphenyl-d14	*75.9*		*39-115*	*%REC*	1	6/23/2011 01:37 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.9	mg/Kg-dry	100	6/28/2011 01:26 AM
Surr: Toluene-d8	*102*		*50-150*	*%REC*	100	6/28/2011 01:26 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **6/23/2011**	Analyst: **LR**
Mercury	**0.044**		**0.020**	**mg/Kg-dry**	1	6/24/2011 03:47 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/23/2011**	Analyst: **RH**
Arsenic	**15**		**0.84**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
Barium	**440**		**8.4**	**mg/Kg-dry**	20	6/25/2011 10:14 AM
Cadmium	**0.69**		**0.34**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
Chromium	**28**		**0.84**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
Copper	**18**		**0.84**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
Lead	**20**		**0.84**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
Nickel	**34**		**0.84**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
Selenium	**1.2**		**0.84**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
Silver	ND		0.84	mg/Kg-dry	2	6/25/2011 12:19 AM
Zinc	**75**		**1.7**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 6/27/11**			**attached**	1	6/27/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **6/22/2011**	Analyst: **CW**
Acenaphthene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Anthracene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Benzo(a)anthracene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Benzo(a)pyrene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Benzo(b)fluoranthene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Benzo(g,h,i)perylene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Benzo(k)fluoranthene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Chrysene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Dibenzo(a,h)anthracene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Fluoranthene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Fluorene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Indeno(1,2,3-cd)pyrene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Naphthalene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Pyrene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Surr: 2,4,6-Tribromophenol	*80.8*		*34-140*	*%REC*	1	6/23/2011 06:50 PM

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

ALS Group USA, Corp

Date: *25-Aug-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: East Pit Bottom **Lab ID:** 1106585-01
Collection Date: 6/20/2011 02:15 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	*107*	S	*12-100*	*%REC*	1	6/23/2011 06:50 PM
Surr: 2-Fluorophenol	*78.3*		*33-117*	*%REC*	1	6/23/2011 06:50 PM
Surr: 4-Terphenyl-d14	*95.3*		*25-137*	*%REC*	1	6/23/2011 06:50 PM
Surr: Nitrobenzene-d5	*61.9*		*37-107*	*%REC*	1	6/23/2011 06:50 PM
Surr: Phenol-d6	*73.9*		*40-106*	*%REC*	1	6/23/2011 06:50 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **BG**
Benzene	ND		120	µg/Kg-dry	100	6/25/2011 08:05 AM
Ethylbenzene	ND		120	µg/Kg-dry	100	6/25/2011 08:05 AM
m,p-Xylene	ND		120	µg/Kg-dry	100	6/25/2011 08:05 AM
o-Xylene	ND		120	µg/Kg-dry	100	6/25/2011 08:05 AM
Toluene	ND		120	µg/Kg-dry	100	6/25/2011 08:05 AM
Xylenes, Total	ND		350	µg/Kg-dry	100	6/25/2011 08:05 AM
Surr: 1,2-Dichloroethane-d4	*103*		*70-120*	*%REC*	100	6/25/2011 08:05 AM
Surr: 4-Bromofluorobenzene	*99.7*		*75-120*	*%REC*	100	6/25/2011 08:05 AM
Surr: Dibromofluoromethane	*96.9*		*85-115*	*%REC*	100	6/25/2011 08:05 AM
Surr: Toluene-d8	*101*		*85-115*	*%REC*	100	6/25/2011 08:05 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **EE**
Chromium, Trivalent	**28**			**mg/L-dry**	1	6/28/2011 04:45 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **6/24/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.57	mg/Kg-dry	1	6/28/2011 02:00 PM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**15**		**0.050**	**% of sample**	1	6/22/2011 12:10 PM
PH			**SW9045D**			Analyst: **JS**
pH	**8.18**			**s.u.**	1	6/22/2011 08:30 AM

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

ALS Group USA, Corp

Date: *25-Aug-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: West Pit Bottom **Lab ID:** 1106585-02
Collection Date: 6/20/2011 02:30 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **6/22/2011**	Analyst: **RM**
DRO (C10-C28)	**280**		**4.6**	**mg/Kg-dry**	1	6/23/2011 02:01 PM
Surr: 4-Terphenyl-d14	*92.1*		*39-115*	*%REC*	1	6/23/2011 02:01 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.7	mg/Kg-dry	100	6/28/2011 01:52 AM
Surr: Toluene-d8	*103*		*50-150*	*%REC*	100	6/28/2011 01:52 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **6/23/2011**	Analyst: **LR**
Mercury	**0.041**		**0.020**	**mg/Kg-dry**	1	6/24/2011 03:49 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/23/2011**	Analyst: **RH**
Arsenic	**6.2**		**0.77**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
Barium	**370**		**7.7**	**mg/Kg-dry**	20	6/25/2011 10:20 AM
Cadmium	**0.87**		**0.31**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
Chromium	**29**		**0.77**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
Copper	**19**		**0.77**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
Lead	**17**		**0.77**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
Nickel	**26**		**0.77**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
Selenium	**0.97**		**0.77**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
Silver	ND		0.77	mg/Kg-dry	2	6/25/2011 12:25 AM
Zinc	**65**		**1.5**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 6/27/11**			**attached**	1	6/27/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **6/22/2011**	Analyst: **CW**
Acenaphthene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Anthracene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Benzo(a)anthracene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Benzo(a)pyrene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Benzo(b)fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Benzo(g,h,i)perylene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Benzo(k)fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Chrysene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Dibenzo(a,h)anthracene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Fluorene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Indeno(1,2,3-cd)pyrene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Naphthalene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Pyrene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Surr: 2,4,6-Tribromophenol	*70.4*		*34-140*	*%REC*	1	6/23/2011 07:27 PM

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

Client: HRL Compliance Solutions

Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585

Sample ID: West Pit Bottom **Lab ID:** 1106585-02

Collection Date: 6/20/2011 02:30 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	*65.7*		*12-100*	*%REC*	1	6/23/2011 07:27 PM
Surr: 2-Fluorophenol	*74.1*		*33-117*	*%REC*	1	6/23/2011 07:27 PM
Surr: 4-Terphenyl-d14	*101*		*25-137*	*%REC*	1	6/23/2011 07:27 PM
Surr: Nitrobenzene-d5	*63.1*		*37-107*	*%REC*	1	6/23/2011 07:27 PM
Surr: Phenol-d6	*71.6*		*40-106*	*%REC*	1	6/23/2011 07:27 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **BG**
Benzene	ND		110	µg/Kg-dry	100	6/25/2011 08:30 AM
Ethylbenzene	ND		110	µg/Kg-dry	100	6/25/2011 08:30 AM
m,p-Xylene	ND		110	µg/Kg-dry	100	6/25/2011 08:30 AM
o-Xylene	ND		110	µg/Kg-dry	100	6/25/2011 08:30 AM
Toluene	ND		110	µg/Kg-dry	100	6/25/2011 08:30 AM
Xylenes, Total	ND		340	µg/Kg-dry	100	6/25/2011 08:30 AM
Surr: 1,2-Dichloroethane-d4	*105*		*70-120*	*%REC*	100	6/25/2011 08:30 AM
Surr: 4-Bromofluorobenzene	*98.2*		*75-120*	*%REC*	100	6/25/2011 08:30 AM
Surr: Dibromofluoromethane	*95.8*		*85-115*	*%REC*	100	6/25/2011 08:30 AM
Surr: Toluene-d8	*100*		*85-115*	*%REC*	100	6/25/2011 08:30 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **EE**
Chromium, Trivalent	**29**			**mg/L-dry**	1	6/28/2011 04:45 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **6/24/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.55	mg/Kg-dry	1	6/28/2011 02:00 PM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**12**		**0.050**	**% of sample**	1	6/22/2011 12:10 PM
PH			**SW9045D**			Analyst: **JS**
pH	**8.62**			**s.u.**	1	6/22/2011 08:30 AM

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

ALS Group USA, Corp

Date: *25-Aug-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: East Wall **Lab ID:** 1106585-03
Collection Date: 6/20/2011 02:10 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **6/22/2011**	Analyst: **RM**
DRO (C10-C28)	**710**		**4.5**	**mg/Kg-dry**	1	6/23/2011 06:33 PM
Surr: 4-Terphenyl-d14	*69.1*		*39-115*	*%REC*	1	6/23/2011 06:33 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.5	mg/Kg-dry	100	6/28/2011 02:18 AM
Surr: Toluene-d8	*104*		*50-150*	*%REC*	100	6/28/2011 02:18 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **6/23/2011**	Analyst: **LR**
Mercury	**0.049**		**0.019**	**mg/Kg-dry**	1	6/24/2011 03:51 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/23/2011**	Analyst: **RH**
Arsenic	**6.4**		**0.75**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
Barium	**930**		**7.5**	**mg/Kg-dry**	20	6/25/2011 10:26 AM
Cadmium	**0.83**		**0.30**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
Chromium	**33**		**0.75**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
Copper	**17**		**0.75**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
Lead	**16**		**0.75**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
Nickel	**23**		**0.75**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
Selenium	**0.84**		**0.75**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
Silver	ND		0.75	mg/Kg-dry	2	6/25/2011 12:31 AM
Zinc	**49**		**1.5**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 6/27/11**			**attached**	1	6/27/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **6/22/2011**	Analyst: **JG**
Acenaphthene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Anthracene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Benzo(a)anthracene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Benzo(a)pyrene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Benzo(b)fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Benzo(g,h,i)perylene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Benzo(k)fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Chrysene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Dibenzo(a,h)anthracene	**37**		**33**	**µg/Kg-dry**	1	6/23/2011 08:01 PM
Fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Fluorene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Indeno(1,2,3-cd)pyrene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Naphthalene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Pyrene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Surr: 2,4,6-Tribromophenol	*107*		*34-140*	*%REC*	1	6/23/2011 08:01 PM

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

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: East Wall **Lab ID:** 1106585-03
Collection Date: 6/20/2011 02:10 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	*107*	S	*12-100*	*%REC*	1	6/23/2011 08:01 PM
Surr: 2-Fluorophenol	*68.1*		*33-117*	*%REC*	1	6/23/2011 08:01 PM
Surr: 4-Terphenyl-d14	*91.1*		*25-137*	*%REC*	1	6/23/2011 08:01 PM
Surr: Nitrobenzene-d5	*67.2*		*37-107*	*%REC*	1	6/23/2011 08:01 PM
Surr: Phenol-d6	*67.7*		*40-106*	*%REC*	1	6/23/2011 08:01 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **BG**
Benzene	ND		110	µg/Kg-dry	100	6/25/2011 08:55 AM
Ethylbenzene	ND		110	µg/Kg-dry	100	6/25/2011 08:55 AM
m,p-Xylene	ND		110	µg/Kg-dry	100	6/25/2011 08:55 AM
o-Xylene	ND		110	µg/Kg-dry	100	6/25/2011 08:55 AM
Toluene	ND		110	µg/Kg-dry	100	6/25/2011 08:55 AM
Xylenes, Total	ND		330	µg/Kg-dry	100	6/25/2011 08:55 AM
Surr: 1,2-Dichloroethane-d4	*103*		*70-120*	*%REC*	100	6/25/2011 08:55 AM
Surr: 4-Bromofluorobenzene	*99.1*		*75-120*	*%REC*	100	6/25/2011 08:55 AM
Surr: Dibromofluoromethane	*95.6*		*85-115*	*%REC*	100	6/25/2011 08:55 AM
Surr: Toluene-d8	*101*		*85-115*	*%REC*	100	6/25/2011 08:55 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **EE**
Chromium, Trivalent	**33**			**mg/L-dry**	1	6/28/2011 04:45 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **6/24/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.54	mg/Kg-dry	1	6/28/2011 02:00 PM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**8.8**		**0.050**	**% of sample**	1	6/22/2011 12:10 PM
PH			**SW9045D**			Analyst: **JS**
pH	**8.71**			**s.u.**	1	6/22/2011 08:30 AM

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

ALS Group USA, Corp

Date: *25-Aug-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: North Wall **Lab ID:** 1106585-04
Collection Date: 6/20/2011 02:00 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **6/22/2011**	Analyst: **RM**
DRO (C10-C28)	**2,200**		**46**	**mg/Kg-dry**	10	6/24/2011 02:55 PM
Surr: 4-Terphenyl-d14	*72.8*		*39-115*	*%REC*	10	6/24/2011 02:55 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.6	mg/Kg-dry	100	6/28/2011 02:44 AM
Surr: Toluene-d8	*104*		*50-150*	*%REC*	100	6/28/2011 02:44 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **6/23/2011**	Analyst: **LR**
Mercury	**0.040**		**0.017**	**mg/Kg-dry**	1	6/24/2011 03:53 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/23/2011**	Analyst: **RH**
Arsenic	**11**		**0.81**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
Barium	**670**		**8.1**	**mg/Kg-dry**	20	6/25/2011 10:32 AM
Cadmium	**0.47**		**0.33**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
Chromium	**37**		**0.81**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
Copper	**17**		**0.81**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
Lead	**16**		**0.81**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
Nickel	**27**		**0.81**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
Selenium	**0.90**		**0.81**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
Silver	ND		0.81	mg/Kg-dry	2	6/25/2011 12:37 AM
Zinc	**56**		**1.6**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 6/27/11**			**attached**	1	6/27/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **6/22/2011**	Analyst: **HL**
Acenaphthene	ND		330	µg/Kg-dry	10	6/26/2011 10:49 PM
Anthracene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Benzo(a)anthracene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Benzo(a)pyrene	**39**		**33**	**µg/Kg-dry**	1	6/23/2011 08:27 PM
Benzo(b)fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Benzo(g,h,i)perylene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Benzo(k)fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Chrysene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Dibenzo(a,h)anthracene	**40**		**33**	**µg/Kg-dry**	1	6/23/2011 08:27 PM
Fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Fluorene	ND		330	µg/Kg-dry	10	6/26/2011 10:49 PM
Indeno(1,2,3-cd)pyrene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Naphthalene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Pyrene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Surr: 2,4,6-Tribromophenol	*98.3*		*34-140*	*%REC*	1	6/23/2011 08:27 PM

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

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: North Wall **Lab ID:** 1106585-04
Collection Date: 6/20/2011 02:00 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	*69.6*		*12-100*	*%REC*	10	6/26/2011 10:49 PM
Surr: 2-Fluorophenol	*74.7*		*33-117*	*%REC*	1	6/23/2011 08:27 PM
Surr: 4-Terphenyl-d14	*98.7*		*25-137*	*%REC*	1	6/23/2011 08:27 PM
Surr: Nitrobenzene-d5	*68.4*		*37-107*	*%REC*	1	6/23/2011 08:27 PM
Surr: Phenol-d6	*74.9*		*40-106*	*%REC*	1	6/23/2011 08:27 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **BG**
Benzene	ND		110	µg/Kg-dry	100	6/25/2011 09:20 AM
Ethylbenzene	ND		110	µg/Kg-dry	100	6/25/2011 09:20 AM
m,p-Xylene	ND		110	µg/Kg-dry	100	6/25/2011 09:20 AM
o-Xylene	ND		110	µg/Kg-dry	100	6/25/2011 09:20 AM
Toluene	ND		110	µg/Kg-dry	100	6/25/2011 09:20 AM
Xylenes, Total	ND		340	µg/Kg-dry	100	6/25/2011 09:20 AM
Surr: 1,2-Dichloroethane-d4	*104*		*70-120*	*%REC*	100	6/25/2011 09:20 AM
Surr: 4-Bromofluorobenzene	*101*		*75-120*	*%REC*	100	6/25/2011 09:20 AM
Surr: Dibromofluoromethane	*96.8*		*85-115*	*%REC*	100	6/25/2011 09:20 AM
Surr: Toluene-d8	*101*		*85-115*	*%REC*	100	6/25/2011 09:20 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **EE**
Chromium, Trivalent	**37**			**mg/L-dry**	1	6/28/2011 04:45 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **6/24/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.56	mg/Kg-dry	1	6/28/2011 02:00 PM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**11**		**0.050**	**% of sample**	1	6/22/2011 12:10 PM
PH			**SW9045D**			Analyst: **JS**
pH	**8.80**			**s.u.**	1	6/22/2011 08:30 AM

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

ALS Group USA, Corp

Date: *25-Aug-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: South Wall **Lab ID:** 1106585-05
Collection Date: 6/20/2011 02:40 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **6/22/2011**	Analyst: **RM**
DRO (C10-C28)	**15**		**4.8**	**mg/Kg-dry**	1	6/23/2011 06:57 PM
Surr: 4-Terphenyl-d14	*80.2*		*39-115*	*%REC*	1	6/23/2011 06:57 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.8	mg/Kg-dry	100	6/28/2011 03:10 AM
Surr: Toluene-d8	*104*		*50-150*	*%REC*	100	6/28/2011 03:10 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **6/23/2011**	Analyst: **LR**
Mercury	**0.028**		**0.019**	**mg/Kg-dry**	1	6/24/2011 03:56 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/24/2011**	Analyst: **RH**
Arsenic	**6.7**		**0.85**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
Barium	**360**		**8.5**	**mg/Kg-dry**	20	6/25/2011 07:51 AM
Cadmium	**0.53**		**0.34**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
Chromium	**32**		**0.85**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
Copper	**17**		**0.85**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
Lead	**17**		**0.85**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
Nickel	**22**		**0.85**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
Selenium	**0.86**		**0.85**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
Silver	ND		0.85	mg/Kg-dry	2	6/24/2011 06:38 PM
Zinc	**55**		**1.7**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 6/27/11**			**attached**	1	6/27/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **6/24/2011**	Analyst: **CW**
Acenaphthene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Anthracene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Benzo(a)anthracene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Benzo(a)pyrene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Benzo(b)fluoranthene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Benzo(g,h,i)perylene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Benzo(k)fluoranthene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Chrysene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Dibenzo(a,h)anthracene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Fluoranthene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Fluorene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Indeno(1,2,3-cd)pyrene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Naphthalene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Pyrene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Surr: 2,4,6-Tribromophenol	*74.2*		*34-140*	*%REC*	1	6/26/2011 01:38 AM

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

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: South Wall **Lab ID:** 1106585-05
Collection Date: 6/20/2011 02:40 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	*61.6*		*12-100*	*%REC*	1	6/26/2011 01:38 AM
Surr: 2-Fluorophenol	*68.7*		*33-117*	*%REC*	1	6/26/2011 01:38 AM
Surr: 4-Terphenyl-d14	*84.5*		*25-137*	*%REC*	1	6/26/2011 01:38 AM
Surr: Nitrobenzene-d5	*66.4*		*37-107*	*%REC*	1	6/26/2011 01:38 AM
Surr: Phenol-d6	*64.6*		*40-106*	*%REC*	1	6/26/2011 01:38 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **BG**
Benzene	ND		120	µg/Kg-dry	100	6/25/2011 09:45 AM
Ethylbenzene	ND		120	µg/Kg-dry	100	6/25/2011 09:45 AM
m,p-Xylene	ND		120	µg/Kg-dry	100	6/25/2011 09:45 AM
o-Xylene	ND		120	µg/Kg-dry	100	6/25/2011 09:45 AM
Toluene	ND		120	µg/Kg-dry	100	6/25/2011 09:45 AM
Xylenes, Total	ND		350	µg/Kg-dry	100	6/25/2011 09:45 AM
Surr: 1,2-Dichloroethane-d4	*104*		*70-120*	*%REC*	100	6/25/2011 09:45 AM
Surr: 4-Bromofluorobenzene	*99.0*		*75-120*	*%REC*	100	6/25/2011 09:45 AM
Surr: Dibromofluoromethane	*94.5*		*85-115*	*%REC*	100	6/25/2011 09:45 AM
Surr: Toluene-d8	*101*		*85-115*	*%REC*	100	6/25/2011 09:45 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **EE**
Chromium, Trivalent	**32**			**mg/L-dry**	1	6/28/2011 04:45 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **6/24/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.57	mg/Kg-dry	1	6/28/2011 02:00 PM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**14**		**0.050**	**% of sample**	1	6/22/2011 12:10 PM
PH			**SW9045D**			Analyst: **JS**
pH	**8.09**			**s.u.**	1	6/22/2011 08:30 AM

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

ALS Group USA, Corp

Date: *25-Aug-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: West Wall **Lab ID:** 1106585-06
Collection Date: 6/20/2011 02:20 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **6/22/2011**	Analyst: **RM**
DRO (C10-C28)	**24**		**4.9**	**mg/Kg-dry**	1	6/23/2011 07:22 PM
Surr: 4-Terphenyl-d14	*93.7*		*39-115*	*%REC*	1	6/23/2011 07:22 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		6.1	mg/Kg-dry	100	6/28/2011 03:36 AM
Surr: Toluene-d8	*103*		*50-150*	*%REC*	100	6/28/2011 03:36 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **6/23/2011**	Analyst: **LR**
Mercury	**0.033**		**0.023**	**mg/Kg-dry**	1	6/24/2011 04:02 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/24/2011**	Analyst: **RH**
Arsenic	**7.4**		**0.87**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
Barium	**340**		**8.7**	**mg/Kg-dry**	20	6/25/2011 08:21 AM
Cadmium	**0.85**		**0.35**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
Chromium	**29**		**0.87**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
Copper	**19**		**0.87**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
Lead	**19**		**0.87**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
Nickel	**25**		**0.87**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
Selenium	**0.96**		**0.87**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
Silver	ND		0.87	mg/Kg-dry	2	6/24/2011 06:44 PM
Zinc	**64**		**1.7**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 6/27/11**			**attached**	1	6/27/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **6/24/2011**	Analyst: **CW**
Acenaphthene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Anthracene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Benzo(a)anthracene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Benzo(a)pyrene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Benzo(b)fluoranthene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Benzo(g,h,i)perylene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Benzo(k)fluoranthene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Chrysene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Dibenzo(a,h)anthracene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Fluoranthene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Fluorene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Indeno(1,2,3-cd)pyrene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Naphthalene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Pyrene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Surr: 2,4,6-Tribromophenol	*74.8*		*34-140*	*%REC*	1	6/26/2011 02:13 AM

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

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: West Wall **Lab ID:** 1106585-06
Collection Date: 6/20/2011 02:20 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	*71.8*		*12-100*	*%REC*	1	6/26/2011 02:13 AM
Surr: 2-Fluorophenol	*80.4*		*33-117*	*%REC*	1	6/26/2011 02:13 AM
Surr: 4-Terphenyl-d14	*84.2*		*25-137*	*%REC*	1	6/26/2011 02:13 AM
Surr: Nitrobenzene-d5	*79.4*		*37-107*	*%REC*	1	6/26/2011 02:13 AM
Surr: Phenol-d6	*77.2*		*40-106*	*%REC*	1	6/26/2011 02:13 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **BG**
Benzene	ND		120	µg/Kg-dry	100	6/25/2011 10:10 AM
Ethylbenzene	ND		120	µg/Kg-dry	100	6/25/2011 10:10 AM
m,p-Xylene	ND		120	µg/Kg-dry	100	6/25/2011 10:10 AM
o-Xylene	ND		120	µg/Kg-dry	100	6/25/2011 10:10 AM
Toluene	ND		120	µg/Kg-dry	100	6/25/2011 10:10 AM
Xylenes, Total	ND		360	µg/Kg-dry	100	6/25/2011 10:10 AM
Surr: 1,2-Dichloroethane-d4	*103*		*70-120*	*%REC*	100	6/25/2011 10:10 AM
Surr: 4-Bromofluorobenzene	*98.2*		*75-120*	*%REC*	100	6/25/2011 10:10 AM
Surr: Dibromofluoromethane	*94.1*		*85-115*	*%REC*	100	6/25/2011 10:10 AM
Surr: Toluene-d8	*102*		*85-115*	*%REC*	100	6/25/2011 10:10 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **EE**
Chromium, Trivalent	**29**			**mg/L-dry**	1	6/28/2011 04:45 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **6/24/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.59	mg/Kg-dry	1	6/28/2011 02:00 PM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**18**		**0.050**	**% of sample**	1	6/22/2011 12:10 PM
PH			**SW9045D**			Analyst: **JS**
pH	**8.81**			**s.u.**	1	6/22/2011 08:30 AM

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

ALS Group USA, Corp

Date: *25-Aug-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: BKGD 1 **Lab ID:** 1106585-07
Collection Date: 6/21/2011 01:15 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/24/2011**	Analyst: **RH**
Arsenic	**5.8**		**0.80**	**mg/Kg-dry**	2	6/24/2011 06:50 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 6/27/11**			**attached**	1	6/27/2011
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**11**		**0.050**	**% of sample**	1	6/22/2011 12:10 PM
PH			**SW9045D**			Analyst: **JS**
pH	**7.29**			**s.u.**	1	6/22/2011 08:30 AM

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

ALS Group USA, Corp

Date: *25-Aug-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: BKGD 2 **Lab ID:** 1106585-08
Collection Date: 6/21/2011 01:20 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/24/2011**	Analyst: **RH**
Arsenic	**7.6**		**0.88**	**mg/Kg-dry**	2	6/25/2011 08:39 AM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**15**		**0.050**	**% of sample**	1	6/22/2011 12:10 PM

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

ALS Group USA, Corp

Date: *25-Aug-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: BKGD 3 **Lab ID:** 1106585-09
Collection Date: 6/21/2011 01:30 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/24/2011**	Analyst: **RH**
Arsenic	**6.3**		**0.77**	**mg/Kg-dry**	2	6/25/2011 08:45 AM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**3.0**		**0.050**	**% of sample**	1	6/22/2011 12:10 PM

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

ALS Group USA, Corp

Date: *25-Aug-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: Treatment Cell Baseline **Lab ID:** 1106585-10
Collection Date: 6/21/2011 12:00 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **6/22/2011**	Analyst: **RM**
DRO (C10-C28)	**570**		**4.8**	**mg/Kg-dry**	1	6/23/2011 07:22 PM
Surr: 4-Terphenyl-d14	*103*		*39-115*	*%REC*	1	6/23/2011 07:22 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	**400**		**5.9**	**mg/Kg-dry**	100	6/23/2011 07:54 AM
Surr: Toluene-d8	*119*		*50-150*	*%REC*	100	6/23/2011 07:54 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **BG**
Benzene	ND		120	µg/Kg-dry	100	6/22/2011 10:42 PM
Ethylbenzene	**520**		**120**	**µg/Kg-dry**	100	6/22/2011 10:42 PM
m,p-Xylene	**11,000**		**120**	**µg/Kg-dry**	100	6/22/2011 10:42 PM
o-Xylene	**1,700**		**120**	**µg/Kg-dry**	100	6/22/2011 10:42 PM
Toluene	**2,300**		**120**	**µg/Kg-dry**	100	6/22/2011 10:42 PM
Xylenes, Total	**13,000**		**350**	**µg/Kg-dry**	100	6/22/2011 10:42 PM
Surr: 1,2-Dichloroethane-d4	*103*		*70-120*	*%REC*	100	6/22/2011 10:42 PM
Surr: 4-Bromofluorobenzene	*106*		*75-120*	*%REC*	100	6/22/2011 10:42 PM
Surr: Dibromofluoromethane	*95.1*		*85-115*	*%REC*	100	6/22/2011 10:42 PM
Surr: Toluene-d8	*100*		*85-115*	*%REC*	100	6/22/2011 10:42 PM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**15**		**0.050**	**% of sample**	1	6/22/2011 12:22 PM

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

Batch ID: **33935** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-33935-33935** Units: **mg/Kg** Analysis Date: **6/23/2011 11:59 AM**

Client ID: Run ID: **GC8_110623A** SeqNo: **1658103** Prep Date: **6/22/2011** 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								
Surr: 4-Terphenyl-d14	*1.402*	0	*1.667*	0	*84.1*	*39-115*	0			

LCS Sample ID: **DLCSS1-33935-33935** Units: **mg/Kg** Analysis Date: **6/23/2011 10:45 AM**

Client ID: Run ID: **GC8_110623A** SeqNo: **1658101** Prep Date: **6/22/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	162.7	4.2	166.7	0	97.6	60-130	0			
Surr: 4-Terphenyl-d14	*1.267*	0	*1.667*	0	*76*	*39-115*	0			

LCSD Sample ID: **DLCSDS1-33935-33935** Units: **mg/Kg** Analysis Date: **6/23/2011 10:45 AM**

Client ID: Run ID: **GC8_110623A** SeqNo: **1658111** Prep Date: **6/22/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	161.3	4.2	166.7	0	96.8	60-130	162.7	0.868	30	
Surr: 4-Terphenyl-d14	*1.256*	0	*1.667*	0	*75.4*	*39-115*	1.267	*0.845*	*30*	

MS Sample ID: **1106554-02B MS** Units: **mg/Kg** Analysis Date: **6/23/2011 11:10 AM**

Client ID: Run ID: **GC8_110623A** SeqNo: **1658102** Prep Date: **6/22/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	303.7	8.1	326	3.384	92.1	60-130	0			
Surr: 4-Terphenyl-d14	*2.276*	0	*3.26*	0	*69.8*	*39-115*	0			

MSD Sample ID: **1106554-02B MSD** Units: **mg/Kg** Analysis Date: **6/23/2011 11:10 AM**

Client ID: Run ID: **GC8_110623A** SeqNo: **1658112** Prep Date: **6/22/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	333.9	8.0	319.2	3.384	104	60-130	303.7	9.49	30	
Surr: 4-Terphenyl-d14	*2.548*	0	*3.192*	0	*79.8*	*39-115*	*2.276*	*11.3*	*30*	

The following samples were analyzed in this batch:

1106585-01A	1106585-02A	1106585-03A
1106585-04A	1106585-05A	1106585-06A
1106585-10B		

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **R91426** Instrument ID **GC9** Method: **SW8015**

MBLK Sample ID: **MBLK-R91426-R91426** Units: **µg/L** Analysis Date: **6/23/2011 12:58 PM**
Client ID: Run ID: **GC9_110622B** SeqNo: **1657618** 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								
Surr: Toluene-d8	*104.9*	0	*100*	0	*105*	*70-130*	0			

LCS Sample ID: **LCS-R91426-R91426** Units: **µg/L** Analysis Date: **6/22/2011 11:41 PM**
Client ID: Run ID: **GC9_110622B** SeqNo: **1657616** 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)	24400	200	25000	0	97.6	70-130	0			
Surr: Toluene-d8	*98.09*	0	*100*	0	*98.1*	*70-130*	0			

LCSD Sample ID: **LCSD-R91426-R91426** Units: **µg/L** Analysis Date: **6/23/2011 12:06 PM**
Client ID: Run ID: **GC9_110622B** SeqNo: **1657617** 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)	23850	200	25000	0	95.4	70-130	24400	2.29	30	
Surr: Toluene-d8	*94.73*	0	*100*	0	*94.7*	*70-130*	98.09	*3.49*	*30*	

MS Sample ID: **1106512-03A MS** Units: **µg/Kg** Analysis Date: **6/23/2011 08:19 AM**
Client ID: Run ID: **GC9_110622B** SeqNo: **1657635** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1290000	2,500	1250000	0	103	70-130	0			
Surr: Toluene-d8	*5120*	0	*5000*	0	*102*	*50-150*	0			

MSD Sample ID: **1106512-03A MSD** Units: **µg/Kg** Analysis Date: **6/23/2011 08:46 AM**
Client ID: Run ID: **GC9_110622B** SeqNo: **1657636** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1269000	2,500	1250000	0	102	70-130	1290000	1.65	30	
Surr: Toluene-d8	*4957*	0	*5000*	0	*99.1*	*50-150*	5120	*3.23*	*30*	

The following samples were analyzed in this batch: 1106585-10A

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **R91627** Instrument ID **GC9** Method: **SW8015**

MBLK Sample ID: **MBLK-R91627-R91627** Units: **µg/L** Analysis Date: **6/27/2011 07:18 PM**
Client ID: Run ID: **GC9_110627B** SeqNo: **1663008** 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								
Surr: Toluene-d8	*106.4*	0	*100*	0	*106*	*70-130*	0			

LCS Sample ID: **LCS-R91627-R91627** Units: **µg/L** Analysis Date: **6/27/2011 05:59 PM**
Client ID: Run ID: **GC9_110627B** SeqNo: **1663006** 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)	26580	200	25000	0	106	70-130	0			
Surr: Toluene-d8	*109.5*	0	*100*	0	*109*	*70-130*	0			

LCSD Sample ID: **LCSD-R91627-R91627** Units: **µg/L** Analysis Date: **6/27/2011 06:25 PM**
Client ID: Run ID: **GC9_110627B** SeqNo: **1663007** 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)	26170	200	25000	0	105	70-130	26580	1.56	30	
Surr: Toluene-d8	*107.2*	0	*100*	0	*107*	*70-130*	109.5	*2.06*	*30*	

MS Sample ID: **1106715-23A MS** Units: **µg/Kg** Analysis Date: **6/28/2011 04:28 AM**
Client ID: Run ID: **GC9_110627B** SeqNo: **1663027** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1322000	2,500	1250000	0	106	70-130	0			
Surr: Toluene-d8	*5434*	0	*5000*	0	*109*	*50-150*	0			

MSD Sample ID: **1106715-23A MSD** Units: **µg/Kg** Analysis Date: **6/28/2011 04:54 AM**
Client ID: Run ID: **GC9_110627B** SeqNo: **1663028** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1288000	2,500	1250000	0	103	70-130	1322000	2.59	30	
Surr: Toluene-d8	*5249*	0	*5000*	0	*105*	*50-150*	5434	*3.47*	*30*	

The following samples were analyzed in this batch:

1106585-01A	1106585-02A	1106585-03A
1106585-04A	1106585-05A	1106585-06A

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **33977** Instrument ID **HG1** Method: **SW7471**

MBLK Sample ID: **MBLK-33977-33977** Units: **mg/Kg** Analysis Date: **6/24/2011 03:21 PM**
Client ID: Run ID: **HG1_110624A** SeqNo: **1659528** Prep Date: **6/23/2011** 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-33977-33977** Units: **mg/Kg** Analysis Date: **6/24/2011 03:23 PM**
Client ID: Run ID: **HG1_110624A** SeqNo: **1659529** Prep Date: **6/23/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1761	0.020	0.1665	0	106	80-120	0			

LCSD Sample ID: **LCSD-33977-33977** Units: **mg/Kg** Analysis Date: **6/24/2011 03:25 PM**
Client ID: Run ID: **HG1_110624A** SeqNo: **1659530** Prep Date: **6/23/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1686	0.020	0.1665	0	101	80-120	0.1761	4.35	20	

The following samples were analyzed in this batch:

1106585-01A	1106585-02A	1106585-03A
1106585-04A	1106585-05A	1106585-06A

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **33973** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-33973-33973** Units: **mg/Kg** Analysis Date: **6/24/2011 05:57 AM**
Client ID: Run ID: **ICPMS1_110623A** SeqNo: **1658316** Prep Date: **6/23/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	0.00739	0.10								J
Chromium	0.01576	0.25								J
Copper	ND	0.25								
Lead	0.01924	0.25								J
Nickel	0.01258	0.25								J
Selenium	ND	0.25								
Silver	0.004904	0.25								J
Zinc	ND	0.50								

LCS Sample ID: **LCS-33973-33973** Units: **mg/Kg** Analysis Date: **6/24/2011 06:03 AM**
Client ID: Run ID: **ICPMS1_110623A** SeqNo: **1658317** Prep Date: **6/23/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.686	0.50	5	0	93.7	80-120	0			
Barium	4.786	0.50	5	0	95.7	80-120	0			
Cadmium	4.86	0.20	5	0	97.2	80-120	0			
Chromium	5.105	0.50	5	0	102	80-120	0			
Copper	5.059	0.50	5	0	101	80-120	0			
Lead	4.929	0.50	5	0	98.6	80-120	0			
Nickel	5.123	0.50	5	0	102	80-120	0			
Selenium	4.804	0.50	5	0	96.1	80-120	0			
Silver	5.033	0.50	5	0	101	80-120	0			
Zinc	4.648	1.0	5	0	93	80-120	0			

LCSD Sample ID: **LCSD-33973-33973** Units: **mg/Kg** Analysis Date: **6/24/2011 06:09 AM**
Client ID: Run ID: **ICPMS1_110623A** SeqNo: **1658318** Prep Date: **6/23/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.269	0.50	5	0	85.4	80-120	4.686	9.31	20	
Barium	4.208	0.50	5	0	84.2	80-120	4.786	12.9	20	
Cadmium	4.337	0.20	5	0	86.7	80-120	4.86	11.4	20	
Chromium	4.481	0.50	5	0	89.6	80-120	5.105	13	20	
Copper	4.449	0.50	5	0	89	80-120	5.059	12.8	20	
Lead	4.348	0.50	5	0	87	80-120	4.929	12.5	20	
Nickel	4.508	0.50	5	0	90.2	80-120	5.123	12.8	20	
Selenium	4.237	0.50	5	0	84.7	80-120	4.804	12.5	20	
Silver	4.479	0.50	5	0	89.6	80-120	5.033	11.6	20	
Zinc	4.202	1.0	5	0	84	80-120	4.648	10.1	20	

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **33973** Instrument ID **ICPMS1** Method: **SW6020A**

MS Sample ID: **1106553-03BMS** Units: **mg/Kg** Analysis Date: **6/24/2011 06:38 AM**
Client ID: Run ID: **ICPMS1_110623A** SeqNo: **1658323** Prep Date: **6/23/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	24.45	1.3	6.72	11.32	195	80-120	0			S
Barium	158	1.3	6.72	118.2	592	80-120	0			SO
Cadmium	7.731	0.54	6.72	0.9027	102	80-120	0			
Chromium	46.1	1.3	6.72	31.81	213	80-120	0			SO
Copper	51.32	1.3	6.72	39.49	176	80-120	0			SO
Lead	70.27	1.3	6.72	52.75	261	80-120	0			SO
Nickel	19.26	1.3	6.72	10.05	137	80-120	0			S
Selenium	7.54	1.3	6.72	1.167	94.8	80-120	0			
Silver	6.995	1.3	6.72	0.767	92.7	80-120	0			
Zinc	154.1	2.7	6.72	113	611	80-120	0			SO

MSD Sample ID: **1106553-03BMSD** Units: **mg/Kg** Analysis Date: **6/24/2011 07:08 AM**
Client ID: Run ID: **ICPMS1_110623A** SeqNo: **1658326** Prep Date: **6/23/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	18.55	1.3	6.649	11.32	109	80-120	24.45	27.5	25	R
Barium	134.9	1.3	6.649	118.2	253	80-120	158	15.7	25	SO
Cadmium	7.356	0.53	6.649	0.9027	97.1	80-120	7.731	4.97	25	
Chromium	35.37	1.3	6.649	31.81	53.6	80-120	46.1	26.3	25	SRO
Copper	44.97	1.3	6.649	39.49	82.5	80-120	51.32	13.2	25	O
Nickel	17.5	1.3	6.649	10.05	112	80-120	19.26	9.58	25	
Selenium	7.75	1.3	6.649	1.167	99	80-120	7.54	2.74	25	
Silver	6.859	1.3	6.649	0.767	91.6	80-120	6.995	1.96	25	
Zinc	124	2.7	6.649	113	166	80-120	154.1	21.6	25	SO

MSD Sample ID: **1106553-03BMSD** Units: **mg/Kg** Analysis Date: **6/24/2011 03:57 PM**
Client ID: Run ID: **ICPMS1_110624A** SeqNo: **1659651** Prep Date: **6/23/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Lead	56.3	1.3	6.649	52.75	53.5	80-120	70.27	22.1	25	SO

The following samples were analyzed in this batch:

1106585-01A	1106585-02A	1106585-03A
1106585-04A		

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **33995** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-33995-33995** Units: **mg/Kg** Analysis Date: **6/24/2011 03:16 PM**
Client ID: Run ID: **ICPMS1_110624A** SeqNo: **1659645** Prep Date: **6/24/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.10								
Chromium	0.00511	0.25								J
Copper	ND	0.25								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS Sample ID: **LCS-33995-33995** Units: **mg/Kg** Analysis Date: **6/24/2011 03:22 PM**
Client ID: Run ID: **ICPMS1_110624A** SeqNo: **1659646** Prep Date: **6/24/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.451	0.50	5	0	89	80-120	0			
Barium	4.506	0.50	5	0	90.1	80-120	0			
Cadmium	4.466	0.20	5	0	89.3	80-120	0			
Chromium	4.724	0.50	5	0	94.5	80-120	0			
Copper	4.573	0.50	5	0	91.5	80-120	0			
Lead	4.641	0.50	5	0	92.8	80-120	0			
Nickel	4.677	0.50	5	0	93.5	80-120	0			
Selenium	4.198	0.50	5	0	84	80-120	0			
Silver	4.72	0.50	5	0	94.4	80-120	0			
Zinc	4.446	1.0	5	0	88.9	80-120	0			

LCSD Sample ID: **LCSD-33995-33995** Units: **mg/Kg** Analysis Date: **6/24/2011 03:28 PM**
Client ID: Run ID: **ICPMS1_110624A** SeqNo: **1659647** Prep Date: **6/24/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.518	0.50	5	0	90.4	80-120	4.451	1.49	20	
Barium	4.588	0.50	5	0	91.8	80-120	4.506	1.8	20	
Cadmium	4.605	0.20	5	0	92.1	80-120	4.466	3.06	20	
Chromium	4.859	0.50	5	0	97.2	80-120	4.724	2.82	20	
Copper	4.746	0.50	5	0	94.9	80-120	4.573	3.71	20	
Lead	4.734	0.50	5	0	94.7	80-120	4.641	1.98	20	
Nickel	4.702	0.50	5	0	94	80-120	4.677	0.533	20	
Selenium	4.369	0.50	5	0	87.4	80-120	4.198	3.99	20	
Silver	4.853	0.50	5	0	97.1	80-120	4.72	2.78	20	
Zinc	4.39	1.0	5	0	87.8	80-120	4.446	1.27	20	

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **33995** Instrument ID **ICPMS1** Method: **SW6020A**

MS Sample ID: **1106554-02BMS** Units: **mg/Kg** Analysis Date: **6/24/2011 03:45 PM**
Client ID: Run ID: **ICPMS1_110624A** SeqNo: **1659649** Prep Date: **6/24/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	10.62	1.3	6.739	4.115	96.6	80-120	0			
Barium	32.83	1.3	6.739	23.23	142	80-120	0			S
Cadmium	6.677	0.54	6.739	0.1458	96.9	80-120	0			
Chromium	17.08	1.3	6.739	9.344	115	80-120	0			
Copper	9.507	1.3	6.739	2.92	97.8	80-120	0			
Lead	12.46	1.3	6.739	4.668	116	80-120	0			
Nickel	12	1.3	6.739	4.249	115	80-120	0			
Selenium	6.439	1.3	6.739	0.1708	93	80-120	0			
Silver	6.787	1.3	6.739	0.02963	100	80-120	0			
Zinc	36.87	2.7	6.739	26.51	154	80-120	0			S

MSD Sample ID: **1106554-02BMSD** Units: **mg/Kg** Analysis Date: **6/24/2011 03:51 PM**
Client ID: Run ID: **ICPMS1_110624A** SeqNo: **1659650** Prep Date: **6/24/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	9.978	1.4	6.84	4.115	85.7	80-120	10.62	6.26	25	
Barium	30.59	1.4	6.84	23.23	108	80-120	32.83	7.07	25	
Cadmium	6.7	0.55	6.84	0.1458	95.8	80-120	6.677	0.357	25	
Chromium	15.07	1.4	6.84	9.344	83.7	80-120	17.08	12.5	25	
Copper	8.881	1.4	6.84	2.92	87.2	80-120	9.507	6.81	25	
Lead	11.87	1.4	6.84	4.668	105	80-120	12.46	4.83	25	
Nickel	10.16	1.4	6.84	4.249	86.4	80-120	12	16.6	25	
Selenium	6.364	1.4	6.84	0.1708	90.5	80-120	6.439	1.18	25	
Silver	6.594	1.4	6.84	0.02963	96	80-120	6.787	2.89	25	
Zinc	32.39	2.7	6.84	26.51	86	80-120	36.87	12.9	25	

The following samples were analyzed in this batch:

1106585-05A	1106585-06A	1106585-07A
1106585-08A	1106585-09A	

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **33934** Instrument ID **SVMS4** Method: **SW8270**

MBLK Sample ID: **SBLKS1-33934-33934** Units: **µg/Kg** Analysis Date: **6/22/2011 05:37 PM**

Client ID: Run ID: **SVMS4_110622A** SeqNo: **1657190** Prep Date: **6/22/2011** 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								
Surr: 2,4,6-Tribromophenol	*1242*	0	*1667*	0	*74.5*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1085*	0	*1667*	0	*65.1*	*12-100*	0			
Surr: 2-Fluorophenol	*1339*	0	*1667*	0	*80.4*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1284*	0	*1667*	0	*77.1*	*25-137*	0			
Surr: Nitrobenzene-d5	*1225*	0	*1667*	0	*73.5*	*37-107*	0			
Surr: Phenol-d6	*1349*	0	*1667*	0	*80.9*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **33934** Instrument ID **SVMS4** Method: **SW8270**

LCS Sample ID: **SLCSS1-33934-33934** Units: **µg/Kg** Analysis Date: **6/22/2011 06:10 PM**

Client ID: Run ID: **SVMS4_110622A** SeqNo: **1657191** Prep Date: **6/22/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1065	30	1333	0	79.9	45-110	0			
Anthracene	1152	30	1333	0	86.4	55-105	0			
Benzo(a)anthracene	1197	30	1333	0	89.8	50-110	0			
Benzo(a)pyrene	1277	30	1333	0	95.8	50-110	0			
Benzo(b)fluoranthene	1290	30	1333	0	96.8	45-115	0			
Benzo(g,h,i)perylene	1250	30	1333	0	93.8	40-125	0			
Benzo(k)fluoranthene	1189	30	1333	0	89.2	45-115	0			
Chrysene	1177	30	1333	0	88.3	55-110	0			
Dibenzo(a,h)anthracene	1240	30	1333	0	93	40-125	0			
Fluoranthene	1189	30	1333	0	89.2	55-115	0			
Fluorene	1058	30	1333	0	79.4	50-110	0			
Indeno(1,2,3-cd)pyrene	1250	30	1333	0	93.7	40-120	0			
Naphthalene	1038	30	1333	0	77.9	40-105	0			
Pyrene	1282	30	1333	0	96.1	45-125	0			
Surr: 2,4,6-Tribromophenol	*1351*	0	*1667*	0	*81.1*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1145*	0	*1667*	0	*68.7*	*12-100*	0			
Surr: 2-Fluorophenol	*1226*	0	*1667*	0	*73.6*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1465*	0	*1667*	0	*87.9*	*25-137*	0			
Surr: Nitrobenzene-d5	*1207*	0	*1667*	0	*72.4*	*37-107*	0			
Surr: Phenol-d6	*1159*	0	*1667*	0	*69.5*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **33934** Instrument ID **SVMS4** Method: **SW8270**

LCSD Sample ID: **SLCSDS1-33934-33934** Units: **µg/Kg** Analysis Date: **6/22/2011 06:42 PM**

Client ID: Run ID: **SVMS4_110622A** SeqNo: **1657192** Prep Date: **6/22/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1100	30	1333	0	82.5	45-110	1065	3.23	25	
Anthracene	1180	30	1333	0	88.5	55-105	1152	2.46	25	
Benzo(a)anthracene	1162	30	1333	0	87.2	50-110	1197	2.97	25	
Benzo(a)pyrene	1263	30	1333	0	94.7	50-110	1277	1.08	25	
Benzo(b)fluoranthene	1317	30	1333	0	98.8	45-115	1290	2.1	25	
Benzo(g,h,i)perylene	1221	30	1333	0	91.6	40-125	1250	2.4	25	
Benzo(k)fluoranthene	1130	30	1333	0	84.8	45-115	1189	5.06	25	
Chrysene	1192	30	1333	0	89.4	55-110	1177	1.32	25	
Dibenzo(a,h)anthracene	1223	30	1333	0	91.7	40-125	1240	1.43	25	
Fluoranthene	1185	30	1333	0	88.9	55-115	1189	0.365	25	
Fluorene	1097	30	1333	0	82.3	50-110	1058	3.59	25	
Indeno(1,2,3-cd)pyrene	1228	30	1333	0	92.1	40-120	1250	1.75	25	
Naphthalene	1072	30	1333	0	80.4	40-105	1038	3.25	25	
Pyrene	1266	30	1333	0	95	45-125	1282	1.2	25	
Surr: 2,4,6-Tribromophenol	*1372*	0	*1667*	0	*82.3*	*34-140*	1351	*1.54*	*40*	
Surr: 2-Fluorobiphenyl	*1186*	0	*1667*	0	*71.2*	*12-100*	1145	*3.52*	*40*	
Surr: 2-Fluorophenol	*1262*	0	*1667*	0	*75.7*	*33-117*	1226	*2.89*	*40*	
Surr: 4-Terphenyl-d14	*1442*	0	*1667*	0	*86.5*	*25-137*	1465	*1.61*	*40*	
Surr: Nitrobenzene-d5	*1246*	0	*1667*	0	*74.8*	*37-107*	1207	*3.15*	*40*	
Surr: Phenol-d6	*1194*	0	*1667*	0	*71.6*	*40-106*	1159	*2.95*	*40*	

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **33934** Instrument ID **SVMS4** Method: **SW8270**

MS Sample ID: **1106554-02B MS** Units: **µg/Kg** Analysis Date: **6/23/2011 01:09 AM**

Client ID: Run ID: **SVMS4_110622A** SeqNo: **1657595** Prep Date: **6/22/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	2011	57	2539	0	79.2	45-110	0			
Anthracene	2137	57	2539	0	84.2	55-105	0			
Benzo(a)anthracene	2190	57	2539	11.79	85.8	50-110	0			
Benzo(a)pyrene	2335	57	2539	11.46	91.5	50-110	0			
Benzo(b)fluoranthene	2332	57	2539	18.01	91.1	45-115	0			
Benzo(g,h,i)perylene	2407	57	2539	12.44	94.3	40-125	0			
Benzo(k)fluoranthene	2199	57	2539	0	86.6	45-115	0			
Chrysene	2136	57	2539	13.1	83.6	55-110	0			
Dibenzo(a,h)anthracene	2273	57	2539	0	89.5	40-125	0			
Fluoranthene	2202	57	2539	19.32	85.9	55-115	0			
Fluorene	2001	57	2539	0	78.8	50-110	0			
Indeno(1,2,3-cd)pyrene	2324	57	2539	9.824	91.1	40-120	0			
Naphthalene	1932	57	2539	0	76.1	40-105	0			
Pyrene	2310	57	2539	16.37	90.3	45-125	0			
Surr: 2,4,6-Tribromophenol	*2593*	0	*3174*	0	*81.7*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*2118*	0	*3174*	0	*66.7*	*12-100*	0			
Surr: 2-Fluorophenol	*2356*	0	*3174*	0	*74.2*	*33-117*	0			
Surr: 4-Terphenyl-d14	*2566*	0	*3174*	0	*80.8*	*25-137*	0			
Surr: Nitrobenzene-d5	*2287*	0	*3174*	0	*72.1*	*37-107*	0			
Surr: Phenol-d6	*2233*	0	*3174*	0	*70.3*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **33934** Instrument ID **SVMS4** Method: **SW8270**

MSD Sample ID: **1106554-02B MSD** Units: **µg/Kg** Analysis Date: **6/23/2011 01:42 AM**

Client ID: Run ID: **SVMS4_110622A** SeqNo: **1657596** Prep Date: **6/22/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	2009	58	2575	0	78	45-110	2011	0.0887	30	
Anthracene	2092	58	2575	0	81.3	55-105	2137	2.1	30	
Benzo(a)anthracene	2163	58	2575	11.79	83.5	50-110	2190	1.24	30	
Benzo(a)pyrene	2263	58	2575	11.46	87.4	50-110	2335	3.13	30	
Benzo(b)fluoranthene	2362	58	2575	18.01	91	45-115	2332	1.24	30	
Benzo(g,h,i)perylene	2266	58	2575	12.44	87.5	40-125	2407	6.03	30	
Benzo(k)fluoranthene	2027	58	2575	0	78.7	45-115	2199	8.12	30	
Chrysene	2065	58	2575	13.1	79.7	55-110	2136	3.37	30	
Dibenzo(a,h)anthracene	2177	58	2575	0	84.5	40-125	2273	4.34	30	
Fluoranthene	2156	58	2575	19.32	83	55-115	2202	2.11	30	
Fluorene	1980	58	2575	0	76.9	50-110	2001	1.03	30	
Indeno(1,2,3-cd)pyrene	2213	58	2575	9.824	85.6	40-120	2324	4.85	30	
Naphthalene	1962	58	2575	0	76.2	40-105	1932	1.5	30	
Pyrene	2279	58	2575	16.37	87.8	45-125	2310	1.38	30	
Surr: 2,4,6-Tribromophenol	*2297*	0	*3219*	0	*71.4*	*34-140*	2593	*12.1*	*40*	
Surr: 2-Fluorobiphenyl	*1800*	0	*3219*	0	*55.9*	*12-100*	2118	*16.2*	*40*	
Surr: 2-Fluorophenol	*2309*	0	*3219*	0	*71.7*	*33-117*	2356	*2.02*	*40*	
Surr: 4-Terphenyl-d14	*2344*	0	*3219*	0	*72.8*	*25-137*	2566	*9.04*	*40*	
Surr: Nitrobenzene-d5	*2119*	0	*3219*	0	*65.8*	*37-107*	2287	*7.65*	*40*	
Surr: Phenol-d6	*2152*	0	*3219*	0	*66.8*	*40-106*	2233	*3.7*	*40*	

The following samples were analyzed in this batch: 1106585-01A 1106585-02A 1106585-03A 1106585-04A

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **33990** Instrument ID **SVMS5** Method: **SW8270**

MBLK Sample ID: **SBLKS1-33990-33990** Units: **µg/Kg** Analysis Date: **6/25/2011 05:19 PM**

Client ID: Run ID: **SVMS5_110625A** SeqNo: **1660676** Prep Date: **6/24/2011** 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								
Surr: 2,4,6-Tribromophenol	*1147*	0	*1667*	0	*68.8*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1321*	0	*1667*	0	*79.2*	*12-100*	0			
Surr: 2-Fluorophenol	*1392*	0	*1667*	0	*83.5*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1605*	0	*1667*	0	*96.3*	*25-137*	0			
Surr: Nitrobenzene-d5	*1389*	0	*1667*	0	*83.3*	*37-107*	0			
Surr: Phenol-d6	*1295*	0	*1667*	0	*77.7*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **33990** Instrument ID **SVMS5** Method: **SW8270**

LCS Sample ID: **SLCSS1-33990-33990** Units: **µg/Kg** Analysis Date: **6/25/2011 05:55 PM**

Client ID: Run ID: **SVMS5_110625A** SeqNo: **1660677** Prep Date: **6/24/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1192	30	1333	0	89.4	45-110	0			
Anthracene	1313	30	1333	0	98.5	55-105	0			
Benzo(a)anthracene	1154	30	1333	0	86.5	50-110	0			
Benzo(a)pyrene	1382	30	1333	0	104	50-110	0			
Benzo(b)fluoranthene	1397	30	1333	0	105	45-115	0			
Benzo(g,h,i)perylene	1482	30	1333	0	111	40-125	0			
Benzo(k)fluoranthene	1420	30	1333	0	107	45-115	0			
Chrysene	1293	30	1333	0	97	55-110	0			
Dibenzo(a,h)anthracene	1509	30	1333	0	113	40-125	0			
Fluoranthene	1323	30	1333	0	99.2	55-115	0			
Fluorene	1256	30	1333	0	94.2	50-110	0			
Indeno(1,2,3-cd)pyrene	1540	30	1333	0	115	40-120	0			
Naphthalene	1142	30	1333	0	85.6	40-105	0			
Pyrene	1187	30	1333	0	89	45-125	0			
Surr: 2,4,6-Tribromophenol	*1268*	0	*1667*	0	*76.1*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1363*	0	*1667*	0	*81.8*	*12-100*	0			
Surr: 2-Fluorophenol	*1267*	0	*1667*	0	*76*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1418*	0	*1667*	0	*85.1*	*25-137*	0			
Surr: Nitrobenzene-d5	*1340*	0	*1667*	0	*80.4*	*37-107*	0			
Surr: Phenol-d6	*1187*	0	*1667*	0	*71.2*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **33990** Instrument ID **SVMS5** Method: **SW8270**

LCSD Sample ID: **SLCSDS1-33990-33990** Units: **µg/Kg** Analysis Date: **6/25/2011 06:30 PM**

Client ID: Run ID: **SVMS5_110625A** SeqNo: **1660678** Prep Date: **6/24/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1175	30	1333	0	88.2	45-110	1192	1.41	25	
Anthracene	1261	30	1333	0	94.6	55-105	1313	3.99	25	
Benzo(a)anthracene	1121	30	1333	0	84.1	50-110	1154	2.87	25	
Benzo(a)pyrene	1323	30	1333	0	99.2	50-110	1382	4.36	25	
Benzo(b)fluoranthene	1319	30	1333	0	98.9	45-115	1397	5.79	25	
Benzo(g,h,i)perylene	1409	30	1333	0	106	40-125	1482	5.03	25	
Benzo(k)fluoranthene	1394	30	1333	0	105	45-115	1420	1.85	25	
Chrysene	1257	30	1333	0	94.3	55-110	1293	2.8	25	
Dibenzo(a,h)anthracene	1431	30	1333	0	107	40-125	1509	5.31	25	
Fluoranthene	1297	30	1333	0	97.3	55-115	1323	1.99	25	
Fluorene	1217	30	1333	0	91.3	50-110	1256	3.13	25	
Indeno(1,2,3-cd)pyrene	1466	30	1333	0	110	40-120	1540	4.88	25	
Naphthalene	1166	30	1333	0	87.5	40-105	1142	2.14	25	
Pyrene	1139	30	1333	0	85.4	45-125	1187	4.16	25	
Surr: 2,4,6-Tribromophenol	*1188*	0	*1667*	0	*71.3*	*34-140*	1268	*6.51*	*40*	
Surr: 2-Fluorobiphenyl	*1355*	0	*1667*	0	*81.3*	*12-100*	1363	*0.589*	*40*	
Surr: 2-Fluorophenol	*1278*	0	*1667*	0	*76.7*	*33-117*	1267	*0.891*	*40*	
Surr: 4-Terphenyl-d14	*1369*	0	*1667*	0	*82.2*	*25-137*	1418	*3.49*	*40*	
Surr: Nitrobenzene-d5	*1383*	0	*1667*	0	*83*	*37-107*	1340	*3.16*	*40*	
Surr: Phenol-d6	*1213*	0	*1667*	0	*72.8*	*40-106*	1187	*2.17*	*40*	

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **33990** Instrument ID **SVMS5** Method: **SW8270**

MS Sample ID: **1106632-03A MS** Units: **µg/Kg** Analysis Date: **6/25/2011 11:51 PM**

Client ID: Run ID: **SVMS5_110625A** SeqNo: **1660687** Prep Date: **6/24/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1934	54	2399	0	80.6	45-110	0			
Anthracene	1995	54	2399	0	83.2	55-105	0			
Benzo(a)anthracene	1827	54	2399	0	76.2	50-110	0			
Benzo(a)pyrene	2071	54	2399	0	86.3	50-110	0			
Benzo(b)fluoranthene	2247	54	2399	0	93.7	45-115	0			
Benzo(g,h,i)perylene	2155	54	2399	0	89.8	40-125	0			
Benzo(k)fluoranthene	1928	54	2399	0	80.4	45-115	0			
Chrysene	1921	54	2399	0	80.1	55-110	0			
Dibenzo(a,h)anthracene	2172	54	2399	0	90.5	40-125	0			
Fluoranthene	2052	54	2399	0	85.5	55-115	0			
Fluorene	2004	54	2399	0	83.5	50-110	0			
Indeno(1,2,3-cd)pyrene	2232	54	2399	0	93	40-120	0			
Naphthalene	1926	54	2399	0	80.3	40-105	0			
Pyrene	1752	54	2399	0	73	45-125	0			
Surr: 2,4,6-Tribromophenol	*2181*	0	*2999*	0	*72.7*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*2230*	0	*2999*	0	*74.3*	*12-100*	0			
Surr: 2-Fluorophenol	*2274*	0	*2999*	0	*75.8*	*33-117*	0			
Surr: 4-Terphenyl-d14	*2126*	0	*2999*	0	*70.9*	*25-137*	0			
Surr: Nitrobenzene-d5	*2383*	0	*2999*	0	*79.5*	*37-107*	0			
Surr: Phenol-d6	*2115*	0	*2999*	0	*70.5*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **33990** Instrument ID **SVMS5** Method: **SW8270**

MSD Sample ID: **1106632-03A MSD** Units: **µg/Kg** Analysis Date: **6/26/2011 12:27 PM**

Client ID: Run ID: **SVMS5_110625A** SeqNo: **1660691** Prep Date: **6/24/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	2221	57	2515	0	88.3	45-110	1934	13.8	30	
Anthracene	2395	57	2515	0	95.2	55-105	1995	18.2	30	
Benzo(a)anthracene	2146	57	2515	0	85.3	50-110	1827	16	30	
Benzo(a)pyrene	2488	57	2515	0	98.9	50-110	2071	18.3	30	
Benzo(b)fluoranthene	2553	57	2515	0	102	45-115	2247	12.8	30	
Benzo(g,h,i)perylene	2529	57	2515	0	101	40-125	2155	16	30	
Benzo(k)fluoranthene	2874	57	2515	0	114	45-115	1928	39.4	30	R
Chrysene	2311	57	2515	0	91.9	55-110	1921	18.4	30	
Dibenzo(a,h)anthracene	2570	57	2515	0	102	40-125	2172	16.8	30	
Fluoranthene	2409	57	2515	0	95.8	55-115	2052	16	30	
Fluorene	2321	57	2515	0	92.3	50-110	2004	14.7	30	
Indeno(1,2,3-cd)pyrene	2627	57	2515	0	104	40-120	2232	16.3	30	
Naphthalene	2213	57	2515	0	88	40-105	1926	13.9	30	
Pyrene	2075	57	2515	0	82.5	45-125	1752	16.9	30	
Surr: 2,4,6-Tribromophenol	*2485*	0	*3144*	0	*79.1*	*34-140*	2181	*13.1*	*40*	
Surr: 2-Fluorobiphenyl	*2563*	0	*3144*	0	*81.5*	*12-100*	2230	*13.9*	*40*	
Surr: 2-Fluorophenol	*2557*	0	*3144*	0	*81.3*	*33-117*	2274	*11.7*	*40*	
Surr: 4-Terphenyl-d14	*2511*	0	*3144*	0	*79.9*	*25-137*	2126	*16.6*	*40*	
Surr: Nitrobenzene-d5	*2682*	0	*3144*	0	*85.3*	*37-107*	2383	*11.8*	*40*	
Surr: Phenol-d6	*2367*	0	*3144*	0	*75.3*	*40-106*	2115	*11.2*	*40*	

The following samples were analyzed in this batch: 1106585-05A 1106585-06A

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **R91381** Instrument ID **VMS6** Method: **SW8260**

MBLK Sample ID: **VBLKW1-110622-R91381** Units: **µg/L** Analysis Date: **6/22/2011 04:23 PM**
Client ID: Run ID: **VMS6_110622A** SeqNo: **1657117** 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								
Surr: 1,2-Dichloroethane-d4	*102.5*	0	*100*	0	*102*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*96.93*	0	*100*	0	*96.9*	*75-120*	0			
Surr: Dibromofluoromethane	*99.43*	0	*100*	0	*99.4*	*85-115*	0			
Surr: Toluene-d8	*100.3*	0	*100*	0	*100*	*85-120*	0			

LCS Sample ID: **VLCSW2-110622-R91381** Units: **µg/L** Analysis Date: **6/22/2011 03:33 PM**
Client ID: Run ID: **VMS6_110622A** SeqNo: **1656402** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.29	1.0	20	0	106	80-120	0			
Ethylbenzene	20.99	1.0	20	0	105	75-125	0			
m,p-Xylene	42.56	2.0	40	0	106	75-130	0			
o-Xylene	20.66	1.0	20	0	103	80-120	0			
Toluene	20.91	1.0	20	0	105	75-120	0			
Xylenes, Total	63.22	2.0	60	0	105	75-130	0			
Surr: 1,2-Dichloroethane-d4	*102*	0	*100*	0	*102*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*97.82*	0	*100*	0	*97.8*	*75-120*	0			
Surr: Dibromofluoromethane	*100.8*	0	*100*	0	*101*	*85-115*	0			
Surr: Toluene-d8	*99.8*	0	*100*	0	*99.8*	*85-120*	0			

LCSD Sample ID: **VLCSDW1-110622-R91381** Units: **µg/L** Analysis Date: **6/22/2011 02:39 PM**
Client ID: Run ID: **VMS6_110622A** SeqNo: **1656288** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	23.52	1.0	20	0	118	80-120	21.29	9.95	30	
Ethylbenzene	23.17	1.0	20	0	116	75-125	20.99	9.87	30	
m,p-Xylene	46.6	2.0	40	0	116	75-130	42.56	9.06	30	
o-Xylene	22.9	1.0	20	0	114	80-120	20.66	10.3	30	
Toluene	23.07	1.0	20	0	115	75-120	20.91	9.82	30	
Xylenes, Total	69.5	2.0	60	0	116	75-130	63.22	9.46	30	
Surr: 1,2-Dichloroethane-d4	*101.6*	0	*100*	0	*102*	*70-120*	102	*0.363*	*30*	
Surr: 4-Bromofluorobenzene	*97.51*	0	*100*	0	*97.5*	*75-120*	97.82	*0.317*	*30*	
Surr: Dibromofluoromethane	*100.7*	0	*100*	0	*101*	*85-115*	100.8	*0.139*	*30*	
Surr: Toluene-d8	*100.2*	0	*100*	0	*100*	*85-120*	99.8	*0.43*	*30*	

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **R91381** Instrument ID **VMS6** Method: **SW8260**

MS Sample ID: **1106552-02A MS** Units: **µg/L** Analysis Date: **6/22/2011 11:57 PM**

Client ID: Run ID: **VMS6_110622A** SeqNo: **1657122** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.53	1.0	20	0	103	80-120	0			
Ethylbenzene	21.82	1.0	20	0	109	75-125	0			
m,p-Xylene	48.34	2.0	40	0	121	75-130	0			
o-Xylene	22.49	1.0	20	0	112	80-120	0			
Toluene	20.36	1.0	20	0	102	75-120	0			
Xylenes, Total	70.83	2.0	60	0	118	75-130	0			
Surr: 1,2-Dichloroethane-d4	*99.34*	0	*100*	0	*99.3*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*98.73*	0	*100*	0	*98.7*	*75-120*	0			
Surr: Dibromofluoromethane	*97.02*	0	*100*	0	*97*	*85-115*	0			
Surr: Toluene-d8	*99.71*	0	*100*	0	*99.7*	*85-120*	0			

MSD Sample ID: **1106552-02A MSD** Units: **µg/L** Analysis Date: **6/23/2011 12:22 PM**

Client ID: Run ID: **VMS6_110622A** SeqNo: **1657123** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.34	1.0	20	0	102	80-120	20.53	0.93	30	
Ethylbenzene	20.31	1.0	20	0	102	75-125	21.82	7.17	30	
m,p-Xylene	42.71	2.0	40	0	107	75-130	48.34	12.4	30	
o-Xylene	20.53	1.0	20	0	103	80-120	22.49	9.11	30	
Toluene	19.94	1.0	20	0	99.7	75-120	20.36	2.08	30	
Xylenes, Total	63.24	2.0	60	0	105	75-130	70.83	11.3	30	
Surr: 1,2-Dichloroethane-d4	*100.4*	0	*100*	0	*100*	*70-120*	99.34	*1.08*	*30*	
Surr: 4-Bromofluorobenzene	*97.73*	0	*100*	0	*97.7*	*75-120*	98.73	*1.02*	*30*	
Surr: Dibromofluoromethane	*99.67*	0	*100*	0	*99.7*	*85-115*	97.02	*2.69*	*30*	
Surr: Toluene-d8	*99.01*	0	*100*	0	*99*	*85-120*	99.71	*0.705*	*30*	

The following samples were analyzed in this batch: 1106585-10A

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **R91506A** Instrument ID **VMS6** Method: **SW8260**

MBLK Sample ID: **VBLKW2-110624-R91506A** Units: **µg/L** Analysis Date: **6/25/2011 02:12 AM**
Client ID: Run ID: **VMS6_110624B** SeqNo: **1660191** 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								
Surr: 1,2-Dichloroethane-d4	*101.6*	0	*100*	0	*102*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*97.29*	0	*100*	0	*97.3*	*75-120*	0			
Surr: Dibromofluoromethane	*100.5*	0	*100*	0	*100*	*85-115*	0			
Surr: Toluene-d8	*101.1*	0	*100*	0	*101*	*85-120*	0			

LCS Sample ID: **VLCSW2-110624-R91506A** Units: **µg/L** Analysis Date: **6/25/2011 12:58 PM**
Client ID: Run ID: **VMS6_110624B** SeqNo: **1660196** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.91	1.0	20	0	110	80-120	0			
Ethylbenzene	21.81	1.0	20	0	109	75-125	0			
m,p-Xylene	43.95	2.0	40	0	110	75-130	0			
o-Xylene	21.12	1.0	20	0	106	80-120	0			
Toluene	20.93	1.0	20	0	105	75-120	0			
Xylenes, Total	65.07	2.0	60	0	108	75-130	0			
Surr: 1,2-Dichloroethane-d4	*100.1*	0	*100*	0	*100*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*99.03*	0	*100*	0	*99*	*75-120*	0			
Surr: Dibromofluoromethane	*102.4*	0	*100*	0	*102*	*85-115*	0			
Surr: Toluene-d8	*99.42*	0	*100*	0	*99.4*	*85-120*	0			

LCSD Sample ID: **VLCSDW2-110624-R91506A** Units: **µg/L** Analysis Date: **6/25/2011 01:23 AM**
Client ID: Run ID: **VMS6_110624B** SeqNo: **1660190** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.37	1.0	20	0	107	80-120	21.91	2.5	30	
Ethylbenzene	21.31	1.0	20	0	107	75-125	21.81	2.32	30	
m,p-Xylene	42.65	2.0	40	0	107	75-130	43.95	3	30	
o-Xylene	20.67	1.0	20	0	103	80-120	21.12	2.15	30	
Toluene	20.24	1.0	20	0	101	75-120	20.93	3.35	30	
Xylenes, Total	63.32	2.0	60	0	106	75-130	65.07	2.73	30	
Surr: 1,2-Dichloroethane-d4	*101.1*	0	*100*	0	*101*	*70-120*	100.1	*0.984*	*30*	
Surr: 4-Bromofluorobenzene	*100.1*	0	*100*	0	*100*	*75-120*	99.03	*1.04*	*30*	
Surr: Dibromofluoromethane	*100.7*	0	*100*	0	*101*	*85-115*	102.4	*1.68*	*30*	
Surr: Toluene-d8	*100.1*	0	*100*	0	*100*	*85-120*	99.42	*0.662*	*30*	

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **R91506A** Instrument ID **VMS6** Method: **SW8260**

The following samples were analyzed in this batch:

1106585-01A	1106585-02A	1106585-03A
1106585-04A	1106585-05A	1106585-06A

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **34084** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MBLK-34084-34084** Units: **mg/Kg** Analysis Date: **6/28/2011 02:00 PM**
Client ID: Run ID: **WETCHEM_110628D** SeqNo: **1663445** Prep Date: **6/24/2011** 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-34084-34084** Units: **mg/Kg** Analysis Date: **6/28/2011 02:00 PM**
Client ID: Run ID: **WETCHEM_110628D** SeqNo: **1663443** Prep Date: **6/24/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.629	0.49	1.953	0	83.4	75-110	0			

LCSD Sample ID: **LCSD-34084-34084** Units: **mg/Kg** Analysis Date: **6/28/2011 02:00 PM**
Client ID: Run ID: **WETCHEM_110628D** SeqNo: **1663444** Prep Date: **6/24/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.642	0.49	1.969	0	83.4	75-110	1.629	0.784	20	

MS Sample ID: **1106560-01B MS** Units: **mg/Kg** Analysis Date: **6/28/2011 02:00 PM**
Client ID: Run ID: **WETCHEM_110628D** SeqNo: **1663428** Prep Date: **6/24/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	ND	0.49	1.969	0	0	60-130	0			S

MSD Sample ID: **1106560-01B MSD** Units: **mg/Kg** Analysis Date: **6/28/2011 02:00 PM**
Client ID: Run ID: **WETCHEM_110628D** SeqNo: **1663429** Prep Date: **6/24/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	ND	0.49	1.961	0	0	60-130	0	0	30	S

The following samples were analyzed in this batch:

1106585-01A	1106585-02A	1106585-03A
1106585-04A	1106585-05A	1106585-06A

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **R91382** Instrument ID **WETCHEM** Method: **SW9045D**

DUP Sample ID: **1106560-01BDUP** Units: **s.u.** Analysis Date: **6/22/2011 08:30 AM**

Client ID: Run ID: **WETCHEM_110622F** SeqNo: **1656290** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.89	0	0	0	0	0-0	8.89	0	20	

DUP Sample ID: **1106585-01ADUP** Units: **s.u.** Analysis Date: **6/22/2011 08:30 AM**

Client ID: **East Pit Bottom** Run ID: **WETCHEM_110622F** SeqNo: **1656298** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.19	0	0	0	0	0-0	8.18	0.122	20	

The following samples were analyzed in this batch:

1106585-01A	1106585-02A	1106585-03A
1106585-04A	1106585-05A	1106585-06A
1106585-07A		

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **R91388** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS1-R91388** Units: **% of sample** Analysis Date: **6/22/2011 12:22 PM**
Client ID: Run ID: **MOIST_110622A** SeqNo: **1656555** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	0.03	0.050								J

LCS Sample ID: **LCS-R91388** Units: **% of sample** Analysis Date: **6/22/2011 12:22 PM**
Client ID: Run ID: **MOIST_110622A** SeqNo: **1656554** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	99.99	0.050	100	0	100	99.5-100.5	0			

DUP Sample ID: **1106585-10BDUP** Units: **% of sample** Analysis Date: **6/22/2011 12:22 PM**
Client ID: **Treatment Cell Baseline** Run ID: **MOIST_110622A** SeqNo: **1656548** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	14.61	0.050	0	0	0	0-0	14.68	0.478	20	

DUP Sample ID: **1106604-03BDUP** Units: **% of sample** Analysis Date: **6/22/2011 12:22 PM**
Client ID: Run ID: **MOIST_110622A** SeqNo: **1656552** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	10.19	0.050	0	0	0	0-0	8.8	14.6	20	

The following samples were analyzed in this batch: 1106585-10B

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

Client: HRL Compliance Solutions
Work Order: 1106585
Project: Williams TR 41-6-697 Pit Closure 6/20/11

QC BATCH REPORT

Batch ID: **R91415** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS1-R91415** Units: **% of sample** Analysis Date: **6/22/2011 12:10 PM**
Client ID: Run ID: **MOIST_110622C** SeqNo: **1657260** 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-R91415** Units: **% of sample** Analysis Date: **6/22/2011 12:10 PM**
Client ID: Run ID: **MOIST_110622C** SeqNo: **1657259** 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: **1106585-05ADUP** Units: **% of sample** Analysis Date: **6/22/2011 12:10 PM**
Client ID: **South Wall** Run ID: **MOIST_110622C** SeqNo: **1657254** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	13.56	0.050	0	0	0	0-0	13.63	0.515	20	

DUP Sample ID: **1106560-07ADUP** Units: **% of sample** Analysis Date: **6/22/2011 12:10 PM**
Client ID: Run ID: **MOIST_110622C** SeqNo: **1657264** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	7.43	0.050	0	0	0	0-0	7.48	0.671	20	

The following samples were analyzed in this batch:

1106585-01A	1106585-02A	1106585-03A
1106585-04A	1106585-05A	1106585-06A
1106585-07A	1106585-08A	1106585-09A

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 # 1106585

PAGE 1 of 2

PROJECT NAME	Williams TR 41-6-597 Pit Closure	SAMPLER	Reed Wold
PROJECT No.	697 JP 8/25/11	SITE ID	
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	HRL COMPLIANCE SOLUTIONS Inc.	BILL TO COMPANY	Williams Production RMT
SEND REPORT TO	KRIS ROWE	INVOICE ATTN TO	Karolina Blaney
ADDRESS	744 HORIZON CT SUITE 140	ADDRESS	1058 County Road 215
CITY / STATE / ZIP	GRAND JUNCTION CO 81506	CITY / STATE / ZIP	Parachute CO 81635
PHONE	970-243-3271	PHONE	970-683-2295
FAX	970-243-3280	FAX	970-285-9573
E-MAIL	KROWE@HRLCOMP.COM	E-MAIL	Karolina.Blaney@williams.com

DATE: 6/21/2011

TURNAROUND: See Comments

DISPOSAL: By Lab or Return to Client

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	TEPH	TVPH	BTEX	SEMI VOLS - PAH	910-1 TOTAL METALS (SEE COMMENTS)	SAR / EC / pH	ARSENIC
01	East Pit North Bottom	SO	6/20/2011	14:15	2			X	X	X	X	X	X	
02	West Pit South Bottom 8/25/11	SO	6/20/2011	14:30	2			X	X	X	X	X	X	
03	East Wall	SO	6/20/2011	14:10	2			X	X	X	X	X	X	
04	North Wall	SO	6/20/2011	14:00	2			X	X	X	X	X	X	
05	South Wall	SO	6/20/2011	14:40	2			X	X	X	X	X	X	
06	West Wall	SO	6/20/2011	14:20	2			X	X	X	X	X	X	
07	BKGD 1	SO	6/21/2011	13:15	2								X	X
08	BKGD 2	SO	6/21/2011	13:20	1									X
09	BKGD 3	SO	6/21/2011	13:30	1									X
10	Treatment Cell Baseline	SO	6/21/2011	12:00	2			X	X	X				

*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: 3.0°C

Report Barium as total Barium and do not run Boron

Treatment Cell Baseline - 24 HR Turn-Around
All Other Samples - Standart Turn-Around

QC PACKAGE (check below)	
	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw data)

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		Kris Rowe	6/21/2011	17:00
RECEIVED BY		Diane F. Shaw	6/22/11	0730
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS 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: 22-Jun-11
COC ID: 2967
Due Date 28-Jun-11

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	1106585	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
1106585-01B (North Bottom) East P/L	Soil	20/Jun/2011 14:15	(1) MISC	X									
1106585-02B (South Bottom) West P/L	Soil	20/Jun/2011 14:30	(1) MISC	X									
1106585-03B (East Wall)	Soil	20/Jun/2011 14:10	(1) MISC	X									
1106585-04B (North Wall)	Soil	20/Jun/2011 14:00	(1) MISC	X									
1106585-05B (South Wall)	Soil	20/Jun/2011 14:40	(1) MISC	X									
1106585-06B (West Wall)	Soil	20/Jun/2011 14:20	(1) MISC	X									
1106585-07B (BKGD 1)	Soil	21/Jun/2011 13:15	(1) MISC	X									

Comments:
Please analyze for SAR-EC. Email results to Ann Preston.

Relinquished by:	Date/Time	Received by:	Date/Time	Cooler IDs	Report/QC Level
	6/22/11	Fed Ex			Std
Relinquished by:	Date/Time	Received by:	Date/Time		

Ann Preston

From: Kris Rowe [krowe@hrlcomp.com]
Sent: Tuesday, August 23, 2011 8:15 PM
To: Ann Preston
Subject: TR 41-6-697 Sample Nomenclature Change
Attachments: 1106585 (HRL) Williams TR 41-6-597 Pit Closure.pdf; 1107192 (HRL) TR 41-6-697 Pad LOE 7.7.11.pdf

Ann,

Sorry to be a pain, but could you change the sample nomenclature on these two sample result profiles. Below is how I need the nomenclature to read;

North Pit Bottom = East Pit Bottom
South Pit Bottom = West Pit Bottom

Also, could you have the first document changed from TR 41-6-597 to TR 41-6-697. The issue is the 597 at the end. Those number correspond to township/range for location of the well pad and the first analytical packet had a 597 and it should read 697. The rest of the sample names are good to go.

Thanks Ann.

Kris Rowe
Waste Management Project Manager
HRL Compliance Solutions Inc.
744 Horizon Ct. Suite 140
Grand Junction, CO 81506
www.hrlcomp.com
970-243-3271
970-261-2015

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **22-Jun-11 07:30**

Work Order: **1106585** Received by: **DS**

Checklist completed by Diane Shaw eSignature 22-Jun-11 Date Reviewed by: Ann Preston eSignature 22-Jun-11 Date

Matrices: Soil
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.0 c		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

Appendix 2: East Pit Bottom, Northern Pit Wall, and Eastern Pit Wall Additional Excavation Raw Analytical Data

25-Aug-2011

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

Re: **TR 41-6-697 Pad LOE 7/7/11** Work Order: **1107192**

Dear Mark,

ALS Environmental received 3 samples on 09-Jul-2011 11:00 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 16.

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

Sincerely,

Ann Preston

Electronically approved by: Ann Preston

Ann Preston
Project Manager

Certificate No: IL100452

ALS Group USA, Corp

Date: 25-Aug-11

Client: HRL Compliance Solutions
Project: TR 41-6-697 Pad LOE 7/7/11
Work Order: **1107192**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1107192-01	East Bottom	Soil		7/7/2011 14:10	7/9/2011 11:00	☐
1107192-02	N. Wall	Soil		7/7/2011 14:00	7/9/2011 11:00	☐
1107192-03	E. Wall	Soil		7/7/2011 14:20	7/9/2011 11:00	☐

ALS Group USA, Corp

Date: 25-Aug-11

Client: HRL Compliance Solutions
Project: TR 41-6-697 Pad LOE 7/7/11
Work Order: 1107192

Case Narrative

Batch 34292 MS/MSD data for DRO is not related to this project's samples.

Batch 34291 MS/MSD data for PAH is not related to this project's samples.

At the client's request, sample N. Bottom was changed to East Bottom in the revised report sent 8/25/11.

ALS Group USA, Corp

Date: 25-Aug-11

Client: HRL Compliance Solutions
Project: TR 41-6-697 Pad LOE 7/7/11
WorkOrder: **1107192**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	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

Acronym	Description
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

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group USA, Corp

Date: *25-Aug-11*

Client: HRL Compliance Solutions
Project: TR 41-6-697 Pad LOE 7/7/11 **Work Order:** 1107192
Sample ID: East Bottom **Lab ID:** 1107192-01
Collection Date: 7/7/2011 02:10 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **7/14/2011**	Analyst: **RM**
DRO (C10-C28)	**170**		**4.4**	**mg/Kg-dry**	1	7/14/2011 04:15 PM
Surr: 4-Terphenyl-d14	*80.2*		*39-115*	*%REC*	1	7/14/2011 04:15 PM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**6.4**		**0.050**	**% of sample**	1	7/11/2011 02:15 PM

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

ALS Group USA, Corp

Date: *25-Aug-11*

Client: HRL Compliance Solutions
Project: TR 41-6-697 Pad LOE 7/7/11 **Work Order:** 1107192
Sample ID: N. Wall **Lab ID:** 1107192-02
Collection Date: 7/7/2011 02:00 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **7/14/2011**	Analyst: **RM**
DRO (C10-C28)	**220**		**4.6**	**mg/Kg-dry**	1	7/14/2011 02:13 PM
Surr: 4-Terphenyl-d14	*85.6*		*39-115*	*%REC*	1	7/14/2011 02:13 PM
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **7/14/2011**	Analyst: **HL**
Benzo(a)anthracene	ND		33	µg/Kg-dry	1	7/14/2011 05:38 PM
Benzo(a)pyrene	ND		33	µg/Kg-dry	1	7/14/2011 05:38 PM
Benzo(b)fluoranthene	ND		33	µg/Kg-dry	1	7/14/2011 05:38 PM
Benzo(g,h,i)perylene	ND		33	µg/Kg-dry	1	7/14/2011 05:38 PM
Benzo(k)fluoranthene	ND		33	µg/Kg-dry	1	7/14/2011 05:38 PM
Dibenzo(a,h)anthracene	ND		33	µg/Kg-dry	1	7/14/2011 05:38 PM
Surr: 2-Fluorobiphenyl	*82.3*		*12-100*	*%REC*	1	7/14/2011 05:38 PM
Surr: 4-Terphenyl-d14	*71.6*		*25-137*	*%REC*	1	7/14/2011 05:38 PM
Surr: Nitrobenzene-d5	*52.0*		*37-107*	*%REC*	1	7/14/2011 05:38 PM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**11**		**0.050**	**% of sample**	1	7/11/2011 02:15 PM

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

ALS Group USA, Corp

Date: *25-Aug-11*

Client: HRL Compliance Solutions
Project: TR 41-6-697 Pad LOE 7/7/11 **Work Order:** 1107192
Sample ID: E. Wall **Lab ID:** 1107192-03
Collection Date: 7/7/2011 02:20 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **7/14/2011**	Analyst: **RM**
DRO (C10-C28)	**110**		**4.5**	**mg/Kg-dry**	1	7/14/2011 02:13 PM
Surr: 4-Terphenyl-d14	*82.9*		*39-115*	*%REC*	1	7/14/2011 02:13 PM
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **7/14/2011**	Analyst: **HL**
Dibenzo(a,h)anthracene	ND		32	µg/Kg-dry	1	7/14/2011 06:05 PM
Surr: 2-Fluorobiphenyl	*53.3*		*12-100*	*%REC*	1	7/14/2011 06:05 PM
Surr: 4-Terphenyl-d14	*73.0*		*25-137*	*%REC*	1	7/14/2011 06:05 PM
Surr: Nitrobenzene-d5	*48.8*		*37-107*	*%REC*	1	7/14/2011 06:05 PM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**8.1**		**0.050**	**% of sample**	1	7/11/2011 02:15 PM

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

QC BATCH REPORT

Batch ID: **34292** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-34292-34292** Units: **mg/Kg** Analysis Date: **7/14/2011 08:57 AM**

Client ID: Run ID: **GC8_110714A** SeqNo: **1676822** Prep Date: **7/14/2011** 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								
Surr: 4-Terphenyl-d14	*1.248*	0	*1.667*	0	*74.9*	*39-115*	0			

LCS Sample ID: **DLCSS1-34292-34292** Units: **mg/Kg** Analysis Date: **7/14/2011 08:09 AM**

Client ID: Run ID: **GC8_110714A** SeqNo: **1676821** Prep Date: **7/14/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	116.6	4.2	166.7	0	69.9	60-130	0			
Surr: 4-Terphenyl-d14	*1.181*	0	*1.667*	0	*70.8*	*39-115*	0			

LCSD Sample ID: **DLCSDS1-34292-34292** Units: **mg/Kg** Analysis Date: **7/14/2011 08:09 AM**

Client ID: Run ID: **GC8_110714A** SeqNo: **1676834** Prep Date: **7/14/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	125.5	4.2	166.7	0	75.3	60-130	116.6	7.36	30	
Surr: 4-Terphenyl-d14	*1.408*	0	*1.667*	0	*84.5*	*39-115*	1.181	*17.5*	*30*	

MS Sample ID: **1107258-14A MS** Units: **mg/Kg** Analysis Date: **7/14/2011 11:47 AM**

Client ID: Run ID: **GC8_110714A** SeqNo: **1676842** Prep Date: **7/14/2011** DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	26970	3,300	330.9	0	8150	60-130	0			S
Surr: 4-Terphenyl-d14	*ND*	0	*3.309*	0	*0*	*39-115*	0			*S*

MSD Sample ID: **1107258-14A MSD** Units: **mg/Kg** Analysis Date: **7/14/2011 12:12 PM**

Client ID: Run ID: **GC8_110714A** SeqNo: **1676830** Prep Date: **7/14/2011** DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	30820	3,300	329.1	0	9360	60-130	26970	13.3	30	S
Surr: 4-Terphenyl-d14	*ND*	0	*3.291*	0	*0*	*39-115*	0	*0*	*30*	*S*

The following samples were analyzed in this batch: 1107192-02A 1107192-03A

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

Client: HRL Compliance Solutions
Work Order: 1107192
Project: TR 41-6-697 Pad LOE 7/7/11

QC BATCH REPORT

Batch ID: **34293** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-34293-34293** Units: **mg/Kg** Analysis Date: **7/14/2011 08:57 AM**
Client ID: Run ID: **GC8_110714A** SeqNo: **1676835** Prep Date: **7/14/2011** 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								
Surr: 4-Terphenyl-d14	*1.478*	0	*1.667*	0	*88.7*	*39-115*	0			

LCS Sample ID: **DLCSS1-34293-34293** Units: **mg/Kg** Analysis Date: **7/14/2011 12:12 PM**
Client ID: Run ID: **GC8_110714A** SeqNo: **1676843** Prep Date: **7/14/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	116.3	4.2	166.7	0	69.8	60-130	0			
Surr: 4-Terphenyl-d14	*1.504*	0	*1.667*	0	*90.3*	*39-115*	0			

LCSD Sample ID: **DLCSDS1-34293-34293** Units: **mg/Kg** Analysis Date: **7/14/2011 12:36 PM**
Client ID: Run ID: **GC8_110714A** SeqNo: **1676831** Prep Date: **7/14/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	136.2	4.2	166.7	0	81.7	60-130	116.3	15.8	30	
Surr: 4-Terphenyl-d14	*1.38*	0	*1.667*	0	*82.8*	*39-115*	1.504	*8.6*	*30*	

MS Sample ID: **1107189-01A MS** Units: **mg/Kg** Analysis Date: **7/14/2011 12:36 PM**
Client ID: Run ID: **GC8_110714A** SeqNo: **1676844** Prep Date: **7/14/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	909.1	8.1	324.5	557.5	108	60-130	0			
Surr: 4-Terphenyl-d14	*1.735*	0	*3.245*	0	*53.5*	*39-115*	0			

MSD Sample ID: **1107189-01A MSD** Units: **mg/Kg** Analysis Date: **7/14/2011 01:00 PM**
Client ID: Run ID: **GC8_110714A** SeqNo: **1676832** Prep Date: **7/14/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	835.1	8.0	318.2	557.5	87.2	60-130	909.1	8.49	30	
Surr: 4-Terphenyl-d14	*2.647*	0	*3.182*	0	*83.2*	*39-115*	1.735	*41.6*	*30*	*R*

The following samples were analyzed in this batch: 1107192-01A

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

Client: HRL Compliance Solutions
Work Order: 1107192
Project: TR 41-6-697 Pad LOE 7/7/11

QC BATCH REPORT

Batch ID: **34291** Instrument ID **SVMS5** Method: **SW8270**

MBLK Sample ID: **SBLKS1-34291-34291** Units: **µg/Kg** Analysis Date: **7/14/2011 10:16 AM**
Client ID: Run ID: **SVMS5_110714A** SeqNo: **1676591** Prep Date: **7/14/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
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								
Dibenzo(a,h)anthracene	ND	30								
Surr: 2-Fluorobiphenyl	*749*	0	*1667*	0	*44.9*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1722*	0	*1667*	0	*103*	*25-137*	0			
Surr: Nitrobenzene-d5	*841.3*	0	*1667*	0	*50.5*	*37-107*	0			

MBLK Sample ID: **SBLKSG2-34291-34291** Units: **µg/Kg** Analysis Date: **7/18/2011 08:20 PM**
Client ID: Run ID: **SVMS5_110718A** SeqNo: **1679804** Prep Date: **7/14/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
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								
Dibenzo(a,h)anthracene	ND	30								
Surr: 2-Fluorobiphenyl	*756.7*	0	*1667*	0	*45.4*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1616*	0	*1667*	0	*96.9*	*25-137*	0			
Surr: Nitrobenzene-d5	*501*	0	*1667*	0	*30.1*	*37-107*	0			*S*

LCS Sample ID: **SLCSS1-34291-34291** Units: **µg/Kg** Analysis Date: **7/14/2011 09:08 AM**
Client ID: Run ID: **SVMS5_110714A** SeqNo: **1676589** Prep Date: **7/14/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)anthracene	1177	30	1333	0	88.3	50-110	0			
Benzo(a)pyrene	1283	30	1333	0	96.3	50-110	0			
Benzo(b)fluoranthene	1175	30	1333	0	88.1	45-115	0			
Benzo(g,h,i)perylene	1360	30	1333	0	102	40-125	0			
Benzo(k)fluoranthene	1415	30	1333	0	106	45-115	0			
Dibenzo(a,h)anthracene	1450	30	1333	0	109	40-125	0			
Surr: 2-Fluorobiphenyl	*948.7*	0	*1667*	0	*56.9*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1530*	0	*1667*	0	*91.8*	*25-137*	0			
Surr: Nitrobenzene-d5	*1044*	0	*1667*	0	*62.6*	*37-107*	0			

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

Client: HRL Compliance Solutions
Work Order: 1107192
Project: TR 41-6-697 Pad LOE 7/7/11

QC BATCH REPORT

Batch ID: **34291** Instrument ID **SVMS5** Method: **SW8270**

LCS Sample ID: **SLCSSG2-34291-34291** Units: **µg/Kg** Analysis Date: **7/18/2011 08:56 PM**
Client ID: Run ID: **SVMS5_110718A** SeqNo: **1679805** Prep Date: **7/14/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)anthracene	1254	30	1333	0	94.1	50-110	0			
Benzo(a)pyrene	1330	30	1333	0	99.8	50-110	0			
Benzo(b)fluoranthene	1279	30	1333	0	95.9	45-115	0			
Benzo(g,h,i)perylene	1646	30	1333	0	123	40-125	0			
Benzo(k)fluoranthene	1218	30	1333	0	91.3	45-115	0			
Dibenzo(a,h)anthracene	1523	30	1333	0	114	40-125	0			
Surr: 2-Fluorobiphenyl	*885*	0	*1667*	0	*53.1*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1594*	0	*1667*	0	*95.7*	*25-137*	0			
Surr: Nitrobenzene-d5	*715.7*	0	*1667*	0	*42.9*	*37-107*	0			

LCSD Sample ID: **SLCSDS1-34291-34291** Units: **µg/Kg** Analysis Date: **7/14/2011 09:42 AM**
Client ID: Run ID: **SVMS5_110714A** SeqNo: **1676590** Prep Date: **7/14/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)anthracene	1132	30	1333	0	84.9	50-110	1177	3.93	25	
Benzo(a)pyrene	1252	30	1333	0	93.9	50-110	1283	2.5	25	
Benzo(b)fluoranthene	1155	30	1333	0	86.6	45-115	1175	1.72	25	
Benzo(g,h,i)perylene	1320	30	1333	0	99	40-125	1360	2.96	25	
Benzo(k)fluoranthene	1382	30	1333	0	104	45-115	1415	2.36	25	
Dibenzo(a,h)anthracene	1399	30	1333	0	105	40-125	1450	3.58	25	
Surr: 2-Fluorobiphenyl	*1068*	0	*1667*	0	*64.1*	*12-100*	948.7	*11.9*	*40*	
Surr: 4-Terphenyl-d14	*1494*	0	*1667*	0	*89.7*	*25-137*	1530	*2.38*	*40*	
Surr: Nitrobenzene-d5	*1170*	0	*1667*	0	*70.2*	*37-107*	1044	*11.4*	*40*	

LCSD Sample ID: **SLCSDSG2-34291-34291** Units: **µg/Kg** Analysis Date: **7/18/2011 09:33 PM**
Client ID: Run ID: **SVMS5_110718A** SeqNo: **1679806** Prep Date: **7/14/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)anthracene	1238	30	1333	0	92.9	50-110	1254	1.26	25	
Benzo(a)pyrene	1310	30	1333	0	98.3	50-110	1330	1.49	25	
Benzo(b)fluoranthene	1224	30	1333	0	91.8	45-115	1279	4.39	25	
Benzo(g,h,i)perylene	1528	30	1333	0	115	40-125	1646	7.44	25	
Benzo(k)fluoranthene	1283	30	1333	0	96.2	45-115	1218	5.2	25	
Dibenzo(a,h)anthracene	1480	30	1333	0	111	40-125	1523	2.84	25	
Surr: 2-Fluorobiphenyl	*893*	0	*1667*	0	*53.6*	*12-100*	885	*0.9*	*40*	
Surr: 4-Terphenyl-d14	*1577*	0	*1667*	0	*94.6*	*25-137*	1594	*1.09*	*40*	
Surr: Nitrobenzene-d5	*759.7*	0	*1667*	0	*45.6*	*37-107*	715.7	*5.96*	*40*	

The following samples were analyzed in this batch: 1107192-02A 1107192-03A

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

Client: HRL Compliance Solutions
Work Order: 1107192
Project: TR 41-6-697 Pad LOE 7/7/11

QC BATCH REPORT

Batch ID: **R92093** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS1-R92093** Units: **% of sample** Analysis Date: **7/11/2011 02:15 PM**
Client ID: Run ID: **MOIST_110711B** SeqNo: **1674113** 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-R92093** Units: **% of sample** Analysis Date: **7/11/2011 02:15 PM**
Client ID: Run ID: **MOIST_110711B** SeqNo: **1674112** 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: **1107174-02ADUP1** Units: **% of sample** Analysis Date: **7/11/2011 02:15 PM**
Client ID: Run ID: **MOIST_110711B** SeqNo: **1674090** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	55.67	0.050	0	0	0	0-0	55.61	0.108	20	

DUP Sample ID: **1107174-02ADUP2** Units: **% of sample** Analysis Date: **7/11/2011 02:15 PM**
Client ID: Run ID: **MOIST_110711B** SeqNo: **1674091** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	55.3	0.050	0	0	0	0-0	55.61	0.559	20	

DUP Sample ID: **1107199-03BDUP1** Units: **% of sample** Analysis Date: **7/11/2011 02:15 PM**
Client ID: Run ID: **MOIST_110711B** SeqNo: **1674107** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	80.55	0.050	0	0	0	0-0	80.74	0.236	20	

DUP Sample ID: **1107199-03BDUP2** Units: **% of sample** Analysis Date: **7/11/2011 02:15 PM**
Client ID: Run ID: **MOIST_110711B** SeqNo: **1674108** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	80.06	0.050	0	0	0	0-0	80.74	0.846	20	

The following samples were analyzed in this batch: 1107192-01A 1107192-02A 1107192-03A

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

WORK ORDER # 1107192

PROJECT NAME	TR 41-6-697 Pad LOE	SAMPLER	Reed Wold	DATE	7/7/2011	PAGE	1 of 1
PROJECT No.		SITE ID	TR 41-6-697	TURNAROUND	Standard	DISPOSAL	By Lab or Return to Client
		EDD FORMAT					
		PURCHASE ORDER					
COMPANY NAME	HRL COMPLIANCE SOLUTIONS Inc.	BILL TO COMPANY	Williams				
SEND REPORT TO	Mark Mumby	INVOICE ATTN TO	Karolia Blaney				
ADDRESS	744 HORIZON CT SUITE 140	ADDRESS	1058 co rd 215				
CITY/STATE/ZIP	GRAND JUNCTION CO 81506	CITY/STATE/ZIP	Parachute CO 81635				
PHONE	970-243-3271	PHONE	970-683-2295				
FAX	970-243-3280	FAX	970-285-9573				
E-MAIL	Mmumby@hrlcomp.com	E-MAIL	Karolia.blaney@williams.com				

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	DRO	DRO and Dibenzo(a,h)anthracene	DRO, Dibenzo(a,h)anthracene, and Benzo
1	East N. Bottom	SO	7/7/2011	2:10	1	8		X		
2	N. Wall	SO	7/7/2011	2:00	1	8				X
3	E. Wall	SO	7/7/2011	2:20	1	8			X	

*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)	
1.8°C	X	LEVEL II (Standard QC)
		LEVEL III (Std QC + forms)
		LEVEL IV (Std QC + forms + raw data)

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	7/8/11	5pm
RECEIVED BY		Keith Wierenga	7/9/11	1100
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

Ann Preston

From: Kris Rowe [krowe@hrlcomp.com]
Sent: Tuesday, August 23, 2011 8:15 PM
To: Ann Preston
Subject: TR 41-6-697 Sample Nomenclature Change
Attachments: 1106585 (HRL) Williams TR 41-6-597 Pit Closure.pdf; 1107192 (HRL) TR 41-6-697 Pad LOE 7.7.11.pdf

Ann,

Sorry to be a pain, but could you change the sample nomenclature on these two sample result profiles. Below is how I need the nomenclature to read;

North Pit Bottom = East Pit Bottom
South Pit Bottom = West Pit Bottom

Also, could you have the first document changed from TR 41-6-597 to TR 41-6-697. The issue is the 597 at the end. Those number correspond to township/range for location of the well pad and the first analytical packet had a 597 and it should read 697. The rest of the sample names are good to go.

Thanks Ann.

Kris Rowe
Waste Management Project Manager
HRL Compliance Solutions Inc.
744 Horizon Ct. Suite 140
Grand Junction, CO 81506
www.hrlcomp.com
970-243-3271
970-261-2015

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **09-Jul-11 11:00**

Work Order: **1107192** Received by: **KRW**

Checklist completed by Keith Wierenga (eSignature) 09-Jul-11 (Date) Reviewed by: Ann Preston (eSignature) 13-Jul-11 (Date)

Matrices: Soil
Carrier name: Courier

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	1.8 C		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

FedEx Express NEW Package US Airbill

FedEx Tracking Number: 8758 3475 6105

0200 Form ID No.

FedEx Retrieval Copy

From

Date 7/8/11 Sender's FedEx Account Number

Sender's Name Ron Ulo Phone 970 243-3271

Company HRL compliance co

Address 744 Horizon ct ste 140 Dept./Floor/Suite/Room

City Grand Junction State CO ZIP 81506

Your Internal Billing Reference

To

Recipient's Name Sample Receiving 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.

8758 3475 6105

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

06 ☒ FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

01 ☒ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

05 ☐ FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

49 ☐ NEW FedEx 2Day A.M.
Second business morning.* Saturday Delivery NOT available.

03 ☐ FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 ☐ FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

06 ☐ FedEx Envelope* 02 ☐ FedEx 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, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

1 ☐ Sender Acct. No. in Section 1 will be billed. 2 ☒ Recipient 3 ☐ Third Party 4 ☐ Credit Card 5 ☐ Cash/Check

Total Packages 1 Total Weight 31 lbs. Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

612

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Appendix 3: Background Raw Analytical Data

ALS Group USA, Corp

Date: *29-Jun-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-597 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: BKGD 1 **Lab ID:** 1106585-07
Collection Date: 6/21/2011 01:15 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/24/2011**	Analyst: **RH**
Arsenic	**5.8**		**0.80**	**mg/Kg-dry**	2	6/24/2011 06:50 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 6/27/11**			**attached**	1	6/27/2011
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**11**		**0.050**	**% of sample**	1	6/22/2011 12:10 PM
PH			**SW9045D**			Analyst: **JS**
pH	**7.29**			**s.u.**	1	6/22/2011 08:30 AM

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

ALS Group USA, Corp

Date: *29-Jun-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-597 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: BKGD 2 **Lab ID:** 1106585-08
Collection Date: 6/21/2011 01:20 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/24/2011**	Analyst: **RH**
Arsenic	**7.6**		**0.88**	**mg/Kg-dry**	2	6/25/2011 08:39 AM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**15**		**0.050**	**% of sample**	1	6/22/2011 12:10 PM

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

ALS Group USA, Corp

Date: *29-Jun-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-597 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: BKGD 3 **Lab ID:** 1106585-09
Collection Date: 6/21/2011 01:30 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/24/2011**	Analyst: **RH**
Arsenic	**6.3**		**0.77**	**mg/Kg-dry**	2	6/25/2011 08:45 AM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**3.0**		**0.050**	**% of sample**	1	6/22/2011 12:10 PM

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

Appendix 4: Sundry Notice Form 4

FORM 4
Rev 12/05

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	DE	ES

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
2. Name of Operator: Williams Production RMT Company
3. Address: 1058 County Road 215
City: Parachute State: CO Zip: 81635
4. Contact Name: Karolina Blaney
Phone: 970-683-2295
Fax: 970-285-9573

Complete the Attachment Checklist

	OP	OGCC
Survey Plat		
Directional Survey		
Surface Eqpmt Diagram		
Technical Info Page	X	
Other		

5. API Number 05- N/A
OGCC Facility ID Number 422330
6. Well/Facility Name: Chevron TR 41-6-697
7. Well/Facility Number TR 41-6-697
8. Location (QtrQtr, Sec, Twp, Rng, Meridian): NENE, Sec 6, T6S, R97W, 6th PM
9. County: Garfield
10. Field Name: Trail Ridge
11. Federal, Indian or State Lease Number:

General Notice

☐ CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)

	FNL/FSL		FEL/FWL	
Change of **Surface** Footage **from** Exterior Section Lines:				
Change of **Surface** Footage **to** Exterior Section Lines:				
Change of **Bottomhole** Footage **from** Exterior Section Lines:				
Change of **Bottomhole** Footage **to** Exterior Section Lines:				attach directional survey

Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer
Latitude
Longitude
Ground Elevation
Distance to nearest property line
Distance to nearest lease line
Distance to nearest well same formation
Distance to nearest bldg, public rd, utility or RR
Is location in a High Density Area (rule 603b)? Yes/No
Surface owner consultation date:

GPS DATA:
Date of Measurement PDOP Reading Instrument Operator's Name

☐ CHANGE SPACING UNIT

Formation	Formation Code	Spacing order number	Unit Acreage	Unit configuration

☐ Remove from surface bond
Signed surface use agreement attached

☐ CHANGE OF OPERATOR (prior to drilling):
Effective Date:
Plugging Bond: ☐ Blanket ☐ Individual

☐ CHANGE WELL NAME NUMBER
From:
To:
Effective Date:

☐ ABANDONED LOCATION:
Was location ever built? ☐ Yes ☐ No
Is site ready for Inspection? ☐ Yes ☐ No
Date Ready for Inspection:

☐ NOTICE OF CONTINUED SHUT IN STATUS
Date well shut in or temporarily abandoned:
Has Production Equipment been removed from site? ☐ Yes ☐ No
MIT required if shut in longer than two years. Date of last MIT

☐ SPUD DATE:

☐ REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)

☐ 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

☐ RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.
Final reclamation will commence on approximately ☐ Final reclamation is completed and site is ready for inspection.

Technical Engineering/Environmental Notice

☐ Notice of Intent
Approximate Start Date:

☐ Report of Work Done
Date Work Completed:

Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)

☐ Intent to Recomplete (submit form 2)
☐ Change Drilling Plans
☐ Gross Interval Changed?
☐ Casing/Cementing Program Change
☐ Request to Vent or Flare
☐ Repair Well
☐ Rule 502 variance requested
☒ Other: Background
☐ E&P Waste Disposal
☐ Beneficial Reuse of E&P Waste
☐ Status Update/Change of Remediation Plans 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: 8/25/2011 Email: Karolina.Blaney@williams.com
Print Name: Karolina Blaney Title: Environmental Specialist

COGCC Approved: Title: Date:
CONDITIONS OF APPROVAL, IF ANY:

FORM 4 Rev 12/05

TECHNICAL INFORMATION PAGE

FOR OGCC USE ONLY

1. OGCC Operator Number: 96850 API Number: N/A
2. Name of Operator: Williams Production RMT OGCC Facility ID # 422330
3. Well/Facility Name: Chevron TR 41-6-697 Well/Facility Number: TR 41-6-697
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): NENE, Sec 6, T6S, R97W, 6PM

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**

This COGCC Form 4 is being submitted as a request to consider the background concentration levels for arsenic at the Chevron TR 41-6-697 well pad relative to production pit closure at the subject facillity in accordance with footnote 1 to the COGCC Table 9101-1.

The request is based on the analytical results below (see attached analytical)

Six (6) grab samples were collected from locations within the pit footprint at depths of approximately 18' to 18.6' below pad grade to ascertain the arsenic concentrations of the facility.

East Bottom - 15 mg/kg
West Bottom - 6.2 mg/kg
East Wall - 6.4 mg/kg
South Wall - 6.7 mg/kg
West Wall - 7.4 mg/kg
North Wall - 11 mg/kg

Average Concentration: 8.78 mg/kg

Three (3) grab samples were collected from nearby non-impacted, native soil from surface to 6" below to establish the background arsenic concentrations.

BKGD 1 - 5.8 mg/kg
BKGD 2 - 7.6 mg/kg
BKGD 3 - 6.3 mg/kg

Average Concentration: 6.56 mg/kg

Williams is requesting this approval in order to proceed with closure and reclamation of the production pit on the Chevron TR 41-6-697 well pad.

FORM 4
Rev 12/05

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	CA

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
2. Name of Operator: Williams Production RMT Company
3. Address: 1058 County Road 215
City: Parachute State: CO Zip:81635
4. Contact Name: Karolina Blaney
Phone: 970-683-2295
Fax: 970-285-9573

Complete the Attachment Checklist

	OP	OGCC
Survey Plat		
Directional Survey		
Surface Eqpmt Diagram		
Technical Info Page	X	
Other		

5. API Number 05- N/A
6. Well/Facility Name: Chevron TR 41-6-697
7. OGCC Facility ID Number 422330
Well/Facility Number TR 41-6-697
8. Location (QtrQtr, Sec, Twp, Rng, Meridian): NENE, Sec 6, T6S, R97W, 6th PM
9. County: Garfield
10. Field Name: Trail Ridge
11. Federal, Indian or State Lease Number:

General Notice

☐ CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)

	FNL/FSL		FEL/FWL	
Change of **Surface** Footage from Exterior Section Lines:				
Change of **Surface** Footage to Exterior Section Lines:				
Change of **Bottomhole** Footage from Exterior Section Lines:				
Change of **Bottomhole** Footage to Exterior Section Lines:				attach directional survey

Bottomhole location Qtr/Qtr Sec, Twp, Rng, Mer

Latitude
Longitude
Ground Elevation
Distance to nearest property line
Distance to nearest lease line
Distance to nearest well same formation
Distance to nearest bldg, public rd, utility or RR
Is location in a High Density Area (rule 603b)? Yes/No
Surface owner consultation date:

GPS DATA:
Date of Measurement PDOP Reading Instrument Operator's Name

☐ CHANGE SPACING UNIT

Formation	Formation Code	Spacing order number	Unit Acreage	Unit configuration

☐ Remove from surface bond
Signed surface use agreement attached

☐ CHANGE OF OPERATOR (prior to drilling):
Effective Date:
Plugging Bond: ☐ Blanket ☐ Individual

☐ CHANGE WELL NAME NUMBER
From:
To:
Effective Date:

☐ ABANDONED LOCATION:
Was location ever built? ☐ Yes ☐ No
Is site ready for Inspection? ☐ Yes ☐ No
Date Ready for Inspection:

☐ NOTICE OF CONTINUED SHUT IN STATUS
Date well shut in or temporarily abandoned:
Has Production Equipment been removed from site? ☐ Yes ☐ No
MIT required if shut in longer than two years. Date of last MIT

☐ SPUD DATE:

☐ REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)

☐ 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

☐ RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.
Final reclamation will commence on approximately
☐ Final reclamation is completed and site is ready for inspection.

Technical Engineering/Environmental Notice

☐ Notice of Intent
Approximate Start Date:

☐ Report of Work Done
Date Work Completed:

Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)

☐ Intent to Recomplete (submit form 2)
☐ Change Drilling Plans
☐ Gross Interval Changed?
☐ Casing/Cementing Program Change
☐ Request to Vent or Flare
☐ Repair Well
☐ Rule 502 variance requested
☒ Other: Background
☐ E&P Waste Disposal
☐ Beneficial Reuse of E&P Waste
☐ Status Update/Change of Remediation Plans 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: 8/25/2011 Email: Karolina.Blaney@williams.com
Print Name: Karolina Blaney Title: Environmental Specialist

COGCC Approved: Title: FOR Date: 09/21/2011
CONDITIONS OF APPROVAL, IF ANY:
Chris Canfield
EPS NW Region

FORM 4 Rev 12/05

TECHNICAL INFORMATION PAGE

FOR OGCC USE ONLY

1. OGCC Operator Number: 96850 API Number: N/A
2. Name of Operator: Williams Production RMT OGCC Facility ID # 422330
3. Well/Facility Name: Chevron TR 41-6-697 Well/Facility Number: TR 41-6-697
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): NENE, Sec 6, T6S, R97W, 6PM

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**

This COGCC Form 4 is being submitted as a request to consider the background concentration levels for arsenic at the Chevron TR 41-6-697 well pad relative to production pit closure at the subject facillity in accordance with footnote 1 to the COGCC Table 9101-1.

The request is based on the analytical results below (see attached analytical)

Six (6) grab samples were collected from locations within the pit footprint at depths of approximately 18' to 18.6' below pad grade to ascertain the arsenic concentrations of the facility.

East Bottom - 15 mg/kg
West Bottom - 6.2 mg/kg
East Wall - 6.4 mg/kg
South Wall - 6.7 mg/kg
West Wall - 7.4 mg/kg
North Wall - 11 mg/kg

Average Concentration: 8.78 mg/kg

Three (3) grab samples were collected from nearby non-impacted, native soil from surface to 6" below to establish the background arsenic concentrations.

BKGD 1 - 5.8 mg/kg
BKGD 2 - 7.6 mg/kg
BKGD 3 - 6.3 mg/kg

Average Concentration: 6.56 mg/kg

Williams is requesting this approval in order to proceed with closure and reclamation of the production pit on the Chevron TR 41-6-697 well pad.

ALS Group USA, Corp

Date: *25-Aug-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: East Pit Bottom **Lab ID:** 1106585-01
Collection Date: 6/20/2011 02:15 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **6/22/2011**	Analyst: **RM**
DRO (C10-C28)	**990**		**4.8**	**mg/Kg-dry**	1	6/23/2011 01:37 PM
Surr: 4-Terphenyl-d14	*75.9*		*39-115*	*%REC*	1	6/23/2011 01:37 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.9	mg/Kg-dry	100	6/28/2011 01:26 AM
Surr: Toluene-d8	*102*		*50-150*	*%REC*	100	6/28/2011 01:26 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **6/23/2011**	Analyst: **LR**
Mercury	**0.044**		**0.020**	**mg/Kg-dry**	1	6/24/2011 03:47 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/23/2011**	Analyst: **RH**
Arsenic	**15**		**0.84**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
Barium	**440**		**8.4**	**mg/Kg-dry**	20	6/25/2011 10:14 AM
Cadmium	**0.69**		**0.34**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
Chromium	**28**		**0.84**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
Copper	**18**		**0.84**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
Lead	**20**		**0.84**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
Nickel	**34**		**0.84**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
Selenium	**1.2**		**0.84**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
Silver	ND		0.84	mg/Kg-dry	2	6/25/2011 12:19 AM
Zinc	**75**		**1.7**	**mg/Kg-dry**	2	6/25/2011 12:19 AM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 6/27/11**			**attached**	1	6/27/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **6/22/2011**	Analyst: **CW**
Acenaphthene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Anthracene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Benzo(a)anthracene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Benzo(a)pyrene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Benzo(b)fluoranthene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Benzo(g,h,i)perylene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Benzo(k)fluoranthene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Chrysene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Dibenzo(a,h)anthracene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Fluoranthene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Fluorene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Indeno(1,2,3-cd)pyrene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Naphthalene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Pyrene	ND		35	µg/Kg-dry	1	6/23/2011 06:50 PM
Surr: 2,4,6-Tribromophenol	*80.8*		*34-140*	*%REC*	1	6/23/2011 06:50 PM

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

ALS Group USA, Corp

Date: *25-Aug-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-697 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: West Pit Bottom **Lab ID:** 1106585-02
Collection Date: 6/20/2011 02:30 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **6/22/2011**	Analyst: **RM**
DRO (C10-C28)	**280**		**4.6**	**mg/Kg-dry**	1	6/23/2011 02:01 PM
Surr: 4-Terphenyl-d14	*92.1*		*39-115*	*%REC*	1	6/23/2011 02:01 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.7	mg/Kg-dry	100	6/28/2011 01:52 AM
Surr: Toluene-d8	*103*		*50-150*	*%REC*	100	6/28/2011 01:52 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **6/23/2011**	Analyst: **LR**
Mercury	**0.041**		**0.020**	**mg/Kg-dry**	1	6/24/2011 03:49 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/23/2011**	Analyst: **RH**
Arsenic	**6.2**		**0.77**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
Barium	**370**		**7.7**	**mg/Kg-dry**	20	6/25/2011 10:20 AM
Cadmium	**0.87**		**0.31**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
Chromium	**29**		**0.77**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
Copper	**19**		**0.77**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
Lead	**17**		**0.77**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
Nickel	**26**		**0.77**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
Selenium	**0.97**		**0.77**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
Silver	ND		0.77	mg/Kg-dry	2	6/25/2011 12:25 AM
Zinc	**65**		**1.5**	**mg/Kg-dry**	2	6/25/2011 12:25 AM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 6/27/11**			**attached**	1	6/27/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **6/22/2011**	Analyst: **CW**
Acenaphthene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Anthracene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Benzo(a)anthracene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Benzo(a)pyrene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Benzo(b)fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Benzo(g,h,i)perylene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Benzo(k)fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Chrysene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Dibenzo(a,h)anthracene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Fluorene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Indeno(1,2,3-cd)pyrene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Naphthalene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Pyrene	ND		33	µg/Kg-dry	1	6/23/2011 07:27 PM
Surr: 2,4,6-Tribromophenol	*70.4*		*34-140*	*%REC*	1	6/23/2011 07:27 PM

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

ALS Group USA, Corp

Date: *29-Jun-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-597 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: East Wall **Lab ID:** 1106585-03
Collection Date: 6/20/2011 02:10 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **6/22/2011**	Analyst: **RM**
DRO (C10-C28)	**710**		**4.5**	**mg/Kg-dry**	1	6/23/2011 06:33 PM
Surr: 4-Terphenyl-d14	*69.1*		*39-115*	*%REC*	1	6/23/2011 06:33 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.5	mg/Kg-dry	100	6/28/2011 02:18 AM
Surr: Toluene-d8	*104*		*50-150*	*%REC*	100	6/28/2011 02:18 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **6/23/2011**	Analyst: **LR**
Mercury	**0.049**		**0.019**	**mg/Kg-dry**	1	6/24/2011 03:51 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/23/2011**	Analyst: **RH**
Arsenic	**6.4**		**0.75**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
Barium	**930**		**7.5**	**mg/Kg-dry**	20	6/25/2011 10:26 AM
Cadmium	**0.83**		**0.30**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
Chromium	**33**		**0.75**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
Copper	**17**		**0.75**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
Lead	**16**		**0.75**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
Nickel	**23**		**0.75**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
Selenium	**0.84**		**0.75**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
Silver	ND		0.75	mg/Kg-dry	2	6/25/2011 12:31 AM
Zinc	**49**		**1.5**	**mg/Kg-dry**	2	6/25/2011 12:31 AM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 6/27/11**			**attached**	1	6/27/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **6/22/2011**	Analyst: **JG**
Acenaphthene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Anthracene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Benzo(a)anthracene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Benzo(a)pyrene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Benzo(b)fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Benzo(g,h,i)perylene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Benzo(k)fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Chrysene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Dibenzo(a,h)anthracene	**37**		**33**	**µg/Kg-dry**	1	6/23/2011 08:01 PM
Fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Fluorene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Indeno(1,2,3-cd)pyrene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Naphthalene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Pyrene	ND		33	µg/Kg-dry	1	6/23/2011 08:01 PM
Surr: 2,4,6-Tribromophenol	*107*		*34-140*	*%REC*	1	6/23/2011 08:01 PM

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

ALS Group USA, Corp

Date: *29-Jun-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-597 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: West Wall **Lab ID:** 1106585-06
Collection Date: 6/20/2011 02:20 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **6/22/2011**	Analyst: **RM**
DRO (C10-C28)	**24**		**4.9**	**mg/Kg-dry**	1	6/23/2011 07:22 PM
Surr: 4-Terphenyl-d14	*93.7*		*39-115*	*%REC*	1	6/23/2011 07:22 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		6.1	mg/Kg-dry	100	6/28/2011 03:36 AM
Surr: Toluene-d8	*103*		*50-150*	*%REC*	100	6/28/2011 03:36 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **6/23/2011**	Analyst: **LR**
Mercury	**0.033**		**0.023**	**mg/Kg-dry**	1	6/24/2011 04:02 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/24/2011**	Analyst: **RH**
Arsenic	**7.4**		**0.87**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
Barium	**340**		**8.7**	**mg/Kg-dry**	20	6/25/2011 08:21 AM
Cadmium	**0.85**		**0.35**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
Chromium	**29**		**0.87**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
Copper	**19**		**0.87**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
Lead	**19**		**0.87**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
Nickel	**25**		**0.87**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
Selenium	**0.96**		**0.87**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
Silver	ND		0.87	mg/Kg-dry	2	6/24/2011 06:44 PM
Zinc	**64**		**1.7**	**mg/Kg-dry**	2	6/24/2011 06:44 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 6/27/11**			**attached**	1	6/27/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **6/24/2011**	Analyst: **CW**
Acenaphthene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Anthracene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Benzo(a)anthracene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Benzo(a)pyrene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Benzo(b)fluoranthene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Benzo(g,h,i)perylene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Benzo(k)fluoranthene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Chrysene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Dibenzo(a,h)anthracene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Fluoranthene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Fluorene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Indeno(1,2,3-cd)pyrene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Naphthalene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Pyrene	ND		36	µg/Kg-dry	1	6/26/2011 02:13 AM
Surr: 2,4,6-Tribromophenol	*74.8*		*34-140*	*%REC*	1	6/26/2011 02:13 AM

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

ALS Group USA, Corp

Date: *29-Jun-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-597 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: South Wall **Lab ID:** 1106585-05
Collection Date: 6/20/2011 02:40 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **6/22/2011**	Analyst: **RM**
DRO (C10-C28)	**15**		**4.8**	**mg/Kg-dry**	1	6/23/2011 06:57 PM
Surr: 4-Terphenyl-d14	*80.2*		*39-115*	*%REC*	1	6/23/2011 06:57 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.8	mg/Kg-dry	100	6/28/2011 03:10 AM
Surr: Toluene-d8	*104*		*50-150*	*%REC*	100	6/28/2011 03:10 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **6/23/2011**	Analyst: **LR**
Mercury	**0.028**		**0.019**	**mg/Kg-dry**	1	6/24/2011 03:56 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/24/2011**	Analyst: **RH**
Arsenic	**6.7**		**0.85**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
Barium	**360**		**8.5**	**mg/Kg-dry**	20	6/25/2011 07:51 AM
Cadmium	**0.53**		**0.34**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
Chromium	**32**		**0.85**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
Copper	**17**		**0.85**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
Lead	**17**		**0.85**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
Nickel	**22**		**0.85**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
Selenium	**0.86**		**0.85**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
Silver	ND		0.85	mg/Kg-dry	2	6/24/2011 06:38 PM
Zinc	**55**		**1.7**	**mg/Kg-dry**	2	6/24/2011 06:38 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 6/27/11**			**attached**	1	6/27/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **6/24/2011**	Analyst: **CW**
Acenaphthene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Anthracene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Benzo(a)anthracene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Benzo(a)pyrene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Benzo(b)fluoranthene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Benzo(g,h,i)perylene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Benzo(k)fluoranthene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Chrysene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Dibenzo(a,h)anthracene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Fluoranthene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Fluorene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Indeno(1,2,3-cd)pyrene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Naphthalene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Pyrene	ND		34	µg/Kg-dry	1	6/26/2011 01:38 AM
Surr: 2,4,6-Tribromophenol	*74.2*		*34-140*	*%REC*	1	6/26/2011 01:38 AM

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

ALS Group USA, Corp

Date: *29-Jun-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-597 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: North Wall **Lab ID:** 1106585-04
Collection Date: 6/20/2011 02:00 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **6/22/2011**	Analyst: **RM**
DRO (C10-C28)	**2,200**		**46**	**mg/Kg-dry**	10	6/24/2011 02:55 PM
Surr: 4-Terphenyl-d14	*72.8*		*39-115*	*%REC*	10	6/24/2011 02:55 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.6	mg/Kg-dry	100	6/28/2011 02:44 AM
Surr: Toluene-d8	*104*		*50-150*	*%REC*	100	6/28/2011 02:44 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **6/23/2011**	Analyst: **LR**
Mercury	**0.040**		**0.017**	**mg/Kg-dry**	1	6/24/2011 03:53 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/23/2011**	Analyst: **RH**
Arsenic	**11**		**0.81**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
Barium	**670**		**8.1**	**mg/Kg-dry**	20	6/25/2011 10:32 AM
Cadmium	**0.47**		**0.33**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
Chromium	**37**		**0.81**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
Copper	**17**		**0.81**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
Lead	**16**		**0.81**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
Nickel	**27**		**0.81**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
Selenium	**0.90**		**0.81**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
Silver	ND		0.81	mg/Kg-dry	2	6/25/2011 12:37 AM
Zinc	**56**		**1.6**	**mg/Kg-dry**	2	6/25/2011 12:37 AM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 6/27/11**			**attached**	1	6/27/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **6/22/2011**	Analyst: **HL**
Acenaphthene	ND		330	µg/Kg-dry	10	6/26/2011 10:49 PM
Anthracene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Benzo(a)anthracene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Benzo(a)pyrene	**39**		**33**	**µg/Kg-dry**	1	6/23/2011 08:27 PM
Benzo(b)fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Benzo(g,h,i)perylene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Benzo(k)fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Chrysene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Dibenzo(a,h)anthracene	**40**		**33**	**µg/Kg-dry**	1	6/23/2011 08:27 PM
Fluoranthene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Fluorene	ND		330	µg/Kg-dry	10	6/26/2011 10:49 PM
Indeno(1,2,3-cd)pyrene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Naphthalene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Pyrene	ND		33	µg/Kg-dry	1	6/23/2011 08:27 PM
Surr: 2,4,6-Tribromophenol	*98.3*		*34-140*	*%REC*	1	6/23/2011 08:27 PM

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

ALS Group USA, Corp

Date: *29-Jun-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-597 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: BKGD 1 **Lab ID:** 1106585-07
Collection Date: 6/21/2011 01:15 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/24/2011**	Analyst: **RH**
Arsenic	**5.8**		**0.80**	**mg/Kg-dry**	2	6/24/2011 06:50 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 6/27/11**			**attached**	1	6/27/2011
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**11**		**0.050**	**% of sample**	1	6/22/2011 12:10 PM
PH			**SW9045D**			Analyst: **JS**
pH	**7.29**			**s.u.**	1	6/22/2011 08:30 AM

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

ALS Group USA, Corp

Date: *29-Jun-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-597 Pit Closure 6/20/11 **Work Order:** 1106585
Sample ID: BKGD 2 **Lab ID:** 1106585-08
Collection Date: 6/21/2011 01:20 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/24/2011**	Analyst: **RH**
Arsenic	**7.6**		**0.88**	**mg/Kg-dry**	2	6/25/2011 08:39 AM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**15**		**0.050**	**% of sample**	1	6/22/2011 12:10 PM

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

ALS Group USA, Corp

Date: *29-Jun-11*

Client: HRL Compliance Solutions
Project: Williams TR 41-6-597 Pit Closure 6/20/11
Work Order: 1106585
Sample ID: BKGD 3
Lab ID: 1106585-09
Collection Date: 6/21/2011 01:30 PM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **6/24/2011**	Analyst: **RH**
Arsenic	**6.3**		**0.77**	**mg/Kg-dry**	2	6/25/2011 08:45 AM
MOISTURE			**A2540 G**			Analyst: **JS**
Moisture	**3.0**		**0.050**	**% of sample**	1	6/22/2011 12:10 PM

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

23-Aug-2011

Kris Rowe
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **TR 41-6-697 Treatment Cell 8/12/11** Work Order: **1108492**

Dear Kris,

ALS Environmental received 1 sample on 16-Aug-2011 10:00 AM for the analyses presented in the following report.

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

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 12.

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

Sincerely,

Ann Preston

Electronically approved by: Ann Preston

Ann Preston
Project Manager

Certificate No: IL100452

ALS Group USA, Corp

Date: 23-Aug-11

Client: HRL Compliance Solutions
Project: TR 41-6-697 Treatment Cell 8/12/11
Work Order: **1108492**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1108492-01	Treatment Cell	Soil		8/12/2011 11:30	8/16/2011 10:00	☐

ALS Group USA, Corp

Date: 23-Aug-11

Client: HRL Compliance Solutions
Project: TR 41-6-697 Treatment Cell 8/12/11
WorkOrder: **1108492**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	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

Acronym	Description
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

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group USA, Corp

Date: *23-Aug-11*

Client: HRL Compliance Solutions
Project: TR 41-6-697 Treatment Cell 8/12/11 **Work Order:** 1108492
Sample ID: Treatment Cell **Lab ID:** 1108492-01
Collection Date: 8/12/2011 11:30 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **8/18/2011**	Analyst: **RM**
DRO (C10-C28)	**79**		**4.6**	**mg/Kg-dry**	1	8/19/2011 04:13 PM
Surr: 4-Terphenyl-d14	*99.0*		*39-115*	*%REC*	1	8/19/2011 04:13 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.6	mg/Kg-dry	100	8/19/2011 05:28 PM
Surr: Toluene-d8	*101*		*50-150*	*%REC*	100	8/19/2011 05:28 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **AK**
Benzene	ND		110	µg/Kg-dry	100	8/19/2011 05:40 PM
Ethylbenzene	ND		110	µg/Kg-dry	100	8/19/2011 05:40 PM
m,p-Xylene	ND		110	µg/Kg-dry	100	8/19/2011 05:40 PM
o-Xylene	ND		110	µg/Kg-dry	100	8/19/2011 05:40 PM
Toluene	ND		110	µg/Kg-dry	100	8/19/2011 05:40 PM
Xylenes, Total	ND		330	µg/Kg-dry	100	8/19/2011 05:40 PM
Surr: 1,2-Dichloroethane-d4	*102*		*70-120*	*%REC*	100	8/19/2011 05:40 PM
Surr: 4-Bromofluorobenzene	*101*		*75-120*	*%REC*	100	8/19/2011 05:40 PM
Surr: Dibromofluoromethane	*95.4*		*85-115*	*%REC*	100	8/19/2011 05:40 PM
Surr: Toluene-d8	*98.2*		*85-115*	*%REC*	100	8/19/2011 05:40 PM
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**10**		**0.050**	**% of sample**	1	8/17/2011 02:07 PM

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

ALS Group USA, Corp

Date: 23-Aug-11

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1108492

Project: TR 41-6-697 Treatment Cell 8/12/11

Batch ID: **34980** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-34980-34980** Units: **mg/Kg** Analysis Date: **8/19/2011 03:03 PM**

Client ID: Run ID: **GC8_110819A** SeqNo: **1712847** Prep Date: **8/18/2011** 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								
Surr: 4-Terphenyl-d14	*1.452*	0	*1.667*	0	*87.1*	*39-115*	0			

LCS Sample ID: **DLCSS1-34980-34980** Units: **mg/Kg** Analysis Date: **8/19/2011 01:54 PM**

Client ID: Run ID: **GC8_110819A** SeqNo: **1712845** Prep Date: **8/18/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	162.2	4.2	166.7	0	97.4	60-130	0			
Surr: 4-Terphenyl-d14	*1.06*	0	*1.667*	0	*63.6*	*39-115*	0			

LCSD Sample ID: **DLCSDS1-34980-34980** Units: **mg/Kg** Analysis Date: **8/19/2011 02:17 PM**

Client ID: Run ID: **GC8_110819A** SeqNo: **1712827** Prep Date: **8/18/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	180.9	4.2	166.7	0	109	60-130	162.2	10.8	30	
Surr: 4-Terphenyl-d14	*1.35*	0	*1.667*	0	*81*	*39-115*	1.06	*24.1*	*30*	

MS Sample ID: **1108553-01A MS** Units: **mg/Kg** Analysis Date: **8/19/2011 02:17 PM**

Client ID: Run ID: **GC8_110819A** SeqNo: **1712846** Prep Date: **8/18/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	313.4	7.9	315.9	5.225	97.6	60-130	0			
Surr: 4-Terphenyl-d14	*2.142*	0	*3.159*	0	*67.8*	*39-115*	0			

MSD Sample ID: **1108553-01A MSD** Units: **mg/Kg** Analysis Date: **8/19/2011 02:40 PM**

Client ID: Run ID: **GC8_110819A** SeqNo: **1712828** Prep Date: **8/18/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	309.1	8.2	326.7	5.225	93	60-130	313.4	1.39	30	
Surr: 4-Terphenyl-d14	*2.216*	0	*3.267*	0	*67.8*	*39-115*	2.142	*3.43*	*30*	

The following samples were analyzed in this batch: 1108492-01B

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

Client: HRL Compliance Solutions
Work Order: 1108492
Project: TR 41-6-697 Treatment Cell 8/12/11

QC BATCH REPORT

Batch ID: **R93673** Instrument ID **GC9** Method: **SW8015**

MBLK Sample ID: **MBLK-R93673-R93673** Units: **µg/L** Analysis Date: **8/19/2011 12:45 PM**
Client ID: Run ID: **GC9_110819A** SeqNo: **1712452** 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								
Surr: Toluene-d8	*96.28*	0	*100*	0	*96.3*	*70-130*	0			

LCS Sample ID: **LCS-R93673-R93673** Units: **µg/L** Analysis Date: **8/19/2011 11:28 AM**
Client ID: Run ID: **GC9_110819A** SeqNo: **1712450** 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)	22830	200	25000	0	91.3	70-130	0			
Surr: Toluene-d8	*89.44*	0	*100*	0	*89.4*	*70-130*	0			

LCSD Sample ID: **LCSD-R93673-R93673** Units: **µg/L** Analysis Date: **8/19/2011 11:54 AM**
Client ID: Run ID: **GC9_110819A** SeqNo: **1712451** 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)	22310	200	25000	0	89.2	70-130	22830	2.32	30	
Surr: Toluene-d8	*87.67*	0	*100*	0	*87.7*	*70-130*	89.44	*2*	*30*	

MS Sample ID: **1108598-05A MS** Units: **µg/Kg** Analysis Date: **8/19/2011 09:55 PM**
Client ID: Run ID: **GC9_110819A** SeqNo: **1712473** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1282000	2,500	1250000	0	103	70-130	0			
Surr: Toluene-d8	*4972*	0	*5000*	0	*99.4*	*50-150*	0			

MSD Sample ID: **1108598-05A MSD** Units: **µg/Kg** Analysis Date: **8/19/2011 10:21 PM**
Client ID: Run ID: **GC9_110819A** SeqNo: **1712474** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1239000	2,500	1250000	0	99.1	70-130	1282000	3.43	30	
Surr: Toluene-d8	*4952*	0	*5000*	0	*99*	*50-150*	4972	*0.403*	*30*	

The following samples were analyzed in this batch: 1108492-01A

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

Client: HRL Compliance Solutions
Work Order: 1108492
Project: TR 41-6-697 Treatment Cell 8/12/11

QC BATCH REPORT

Batch ID: **R93597** Instrument ID **VMS8** Method: **SW8260**

MBLK Sample ID: **VBLKW1-110819-R93597** Units: **µg/L** Analysis Date: **8/19/2011 12:53 PM**
Client ID: Run ID: **VMS8_110819A** SeqNo: **1712429** 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								
Surr: 1,2-Dichloroethane-d4	*102.4*	0	*100*	0	*102*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*99.15*	0	*100*	0	*99.2*	*75-120*	0			
Surr: Dibromofluoromethane	*99.45*	0	*100*	0	*99.4*	*85-115*	0			
Surr: Toluene-d8	*100.2*	0	*100*	0	*100*	*85-120*	0			

LCS Sample ID: **VLCSW1-110819-R93597** Units: **µg/L** Analysis Date: **8/19/2011 10:39 AM**
Client ID: Run ID: **VMS8_110819A** SeqNo: **1710172** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.38	1.0	20	0	107	80-120	0			
Ethylbenzene	21.34	1.0	20	0	107	75-125	0			
m,p-Xylene	43.05	2.0	40	0	108	75-130	0			
o-Xylene	20.95	1.0	20	0	105	80-120	0			
Toluene	21.66	1.0	20	0	108	75-120	0			
Xylenes, Total	64	2.0	60	0	107	75-130	0			
Surr: 1,2-Dichloroethane-d4	*101.5*	0	*100*	0	*102*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*99.72*	0	*100*	0	*99.7*	*75-120*	0			
Surr: Dibromofluoromethane	*103.5*	0	*100*	0	*104*	*85-115*	0			
Surr: Toluene-d8	*99.53*	0	*100*	0	*99.5*	*85-120*	0			

LCSD Sample ID: **VLCSDW2-118019-R93597** Units: **µg/L** Analysis Date: **8/19/2011 11:54 AM**
Client ID: Run ID: **VMS8_110819A** SeqNo: **1710381** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.31	1.0	20	0	107	80-120	21.38	0.328	30	
Ethylbenzene	21.23	1.0	20	0	106	75-125	21.34	0.517	30	
m,p-Xylene	42.59	2.0	40	0	106	75-130	43.05	1.07	30	
o-Xylene	20.76	1.0	20	0	104	80-120	20.95	0.911	30	
Toluene	21.62	1.0	20	0	108	75-120	21.66	0.185	30	
Xylenes, Total	63.35	2.0	60	0	106	75-130	64	1.02	30	
Surr: 1,2-Dichloroethane-d4	*102.3*	0	*100*	0	*102*	*70-120*	101.5	*0.756*	*30*	
Surr: 4-Bromofluorobenzene	*100.2*	0	*100*	0	*100*	*75-120*	99.72	*0.49*	*30*	
Surr: Dibromofluoromethane	*102.4*	0	*100*	0	*102*	*85-115*	103.5	*1.06*	*30*	
Surr: Toluene-d8	*99.82*	0	*100*	0	*99.8*	*85-120*	99.53	*0.291*	*30*	

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

Client: HRL Compliance Solutions
Work Order: 1108492
Project: TR 41-6-697 Treatment Cell 8/12/11

QC BATCH REPORT

Batch ID: **R93597** Instrument ID **VMS8** Method: **SW8260**

MS Sample ID: **1108599-02A MS** Units: **µg/L** Analysis Date: **8/19/2011 09:14 PM**

Client ID: Run ID: **VMS8_110819A** SeqNo: **1712435** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	22.12	1.0	20	0	111	80-120	0			
Ethylbenzene	22.79	1.0	20	0	114	75-125	0			
m,p-Xylene	48.32	2.0	40	0	121	75-130	0			
o-Xylene	23.63	1.0	20	0	118	80-120	0			
Toluene	21.34	1.0	20	0.81	103	75-120	0			
Xylenes, Total	71.95	2.0	60	0	120	75-130	0			
Surr: 1,2-Dichloroethane-d4	*100.8*	0	*100*	0	*101*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*111.9*	0	*100*	0	*112*	*75-120*	0			
Surr: Dibromofluoromethane	*104*	0	*100*	0	*104*	*85-115*	0			
Surr: Toluene-d8	*93.57*	0	*100*	0	*93.6*	*85-120*	0			

MSD Sample ID: **1108599-02A MSD** Units: **µg/L** Analysis Date: **8/19/2011 09:38 PM**

Client ID: Run ID: **VMS8_110819A** SeqNo: **1712436** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.49	1.0	20	0	107	80-120	22.12	2.89	30	
Ethylbenzene	21.39	1.0	20	0	107	75-125	22.79	6.34	30	
m,p-Xylene	44.02	2.0	40	0	110	75-130	48.32	9.31	30	
o-Xylene	21.43	1.0	20	0	107	80-120	23.63	9.76	30	
Toluene	21.2	1.0	20	0.81	102	75-120	21.34	0.658	30	
Xylenes, Total	65.45	2.0	60	0	109	75-130	71.95	9.46	30	
Surr: 1,2-Dichloroethane-d4	*101.7*	0	*100*	0	*102*	*70-120*	100.8	*0.879*	*30*	
Surr: 4-Bromofluorobenzene	*105*	0	*100*	0	*105*	*75-120*	111.9	*6.4*	*30*	
Surr: Dibromofluoromethane	*104.5*	0	*100*	0	*104*	*85-115*	104	*0.451*	*30*	
Surr: Toluene-d8	*97.54*	0	*100*	0	*97.5*	*85-120*	93.57	*4.15*	*30*	

The following samples were analyzed in this batch: 1108492-01A

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

Client: HRL Compliance Solutions
Work Order: 1108492
Project: TR 41-6-697 Treatment Cell 8/12/11

QC BATCH REPORT

Batch ID: **R93537** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS1-R93537** Units: **% of sample** Analysis Date: **8/17/2011 02:07 PM**
Client ID: Run ID: **MOIST_110817B** SeqNo: **1709134** 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-R93537** Units: **% of sample** Analysis Date: **8/17/2011 02:07 PM**
Client ID: Run ID: **MOIST_110817B** SeqNo: **1709133** 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: **1108505-09ADUP** Units: **% of sample** Analysis Date: **8/17/2011 02:07 PM**
Client ID: Run ID: **MOIST_110817B** SeqNo: **1709115** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	9.5	0.050	0	0	0	0-0	8.77	7.99	20	

DUP Sample ID: **1108525-01ADUP1** Units: **% of sample** Analysis Date: **8/17/2011 02:07 PM**
Client ID: Run ID: **MOIST_110817B** SeqNo: **1709124** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	5.74	0.050	0	0	0	0-0	5.61	2.29	20	

DUP Sample ID: **1108525-01ADUP2** Units: **% of sample** Analysis Date: **8/17/2011 02:07 PM**
Client ID: Run ID: **MOIST_110817B** SeqNo: **1709125** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	5.47	0.050	0	0	0	0-0	5.61	2.53	20	

The following samples were analyzed in this batch: 1108492-01B

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 #	1108492
PAGE	1 of 1
DISPOSAL	By Lab or Return to Client

PROJECT NAME	TR 41-6-697 Treatment Cell	SAMPLER	Dan Pinegar
PROJECT No.		SITE ID	TR 41-6-697 Well Pad
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	HRL Compliance Solutions, Inc.	BILL TO COMPANY	
SEND REPORT TO	Kris Rowe	INVOICE ATTN TO	
ADDRESS	744 Horizon Ct. Suite 140	ADDRESS	
CITY / STATE / ZIP	Grand Junction, CO. 81506	CITY / STATE / ZIP	
PHONE	970-243-3271	PHONE	
FAX	970-243-3280	FAX	
E-MAIL	krowe@hrlcomp.com	E-MAIL	

DATE: 8/15/2011
TURNAROUND: 7 days

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	GRO	DRO
01	~~Composite~~ Treatment cell	soil	8/12/2011	11:30 AM	2	8		x	x	x

*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:

5.2°c

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

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		Dan Pinegar	8/15/2011	5:00 PM
RECEIVED BY		Diane F. Shaw	8/16/11	1000
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **16-Aug-11 10:00**

Work Order: **1108492** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 16-Aug-11 (Date) Reviewed by: Ann Preston (eSignature) 18-Aug-11 (Date)

Matrices: Soil
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	5.2 c		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

CUSTODY SEAL

DATE 8/15/11

SIGNATURE

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

FedEx Express **NEW** Package US Airbill

FedEx Tracking Number 8758 3471 3823

Form ID No.

FedEx Retrieval Copy

1 From

Date 8/15/11 Sender's FedEx Account Number

Sender's Name DAN PINEGAR Phone 970 243-3271

Company HCSI

Address 744 HORIZON CT. STE. 140 Dept./Floor/Suite/Room

City GRAND JUNCTION State CO ZIP 81506

2 Your Internal Billing Reference

3 To

Recipient's Name SHERRI RICHMOND Phone 616 399-1070

Company ALS GROUP

Address 5352 128th AVE Dept./Floor/Suite/Room
We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address N/A
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.

8758 3471 3823

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

06 ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

01 ☒ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

05 ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

49 ☐ **NEW** FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.

03 ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

06 ☐ FedEx Envelope* 02 ☐ FedEx 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, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

1 ☐ Sender Acct. No. in Section 1 will be billed 2 ☒ Recipient 3 ☐ Third Party 4 ☐ Credit Card 5 ☐ Cash/Check

Total Packages 1 Total Weight 4 lbs. Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

612

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02-Sep-2011

Kris Rowe
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **TR 41-6-697 Treatment Cell 8/25/11** Work Order: **1108868**

Dear Kris,

ALS Environmental received 1 sample on 27-Aug-2011 10:15 AM for the analyses presented in the following report.

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

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 24.

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

Sincerely,

Ann Preston

Electronically approved by: Ann Preston

Ann Preston
Project Manager

Certificate No: IL100452

ALS Group USA, Corp

Date: 02-Sep-11

Client: HRL Compliance Solutions
Project: TR 41-6-697 Treatment Cell 8/25/11
Work Order: **1108868**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1108868-01	TR 41-6-697 Treatment Cell	Soil		8/25/2011 16:15	8/27/2011 10:15	☐

ALS Group USA, Corp

Date: 02-Sep-11

Client: HRL Compliance Solutions
Project: TR 41-6-697 Treatment Cell 8/25/11
Work Order: 1108868

Case Narrative

Batch 35196 MS/MSD data for Metals is not related to this project's samples.

ALS Group USA, Corp

Date: 02-Sep-11

Client: HRL Compliance Solutions
Project: TR 41-6-697 Treatment Cell 8/25/11
WorkOrder: **1108868**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	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

Acronym	Description
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

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
as noted	
mg/Kg-dry	Milligrams per Kilogram Dry Weight
s.u.	Standard Units

ALS Group USA, Corp

Date: *02-Sep-11*

Client: HRL Compliance Solutions
Project: TR 41-6-697 Treatment Cell 8/25/11 **Work Order:** 1108868
Sample ID: TR 41-6-697 Treatment Cell **Lab ID:** 1108868-01
Collection Date: 8/25/2011 04:15 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date: **8/27/2011**	Analyst: **LR**
Mercury	**0.045**		**0.020**	**mg/Kg-dry**	1	8/29/2011 01:54 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **8/29/2011**	Analyst: **CES**
Arsenic	**7.7**		**0.79**	**mg/Kg-dry**	2	8/31/2011 11:26 AM
Barium	**520**		**7.9**	**mg/Kg-dry**	20	8/31/2011 11:21 AM
Cadmium	**0.90**		**0.31**	**mg/Kg-dry**	2	8/31/2011 11:26 AM
Chromium	**37**		**0.79**	**mg/Kg-dry**	2	8/31/2011 06:08 AM
Copper	**18**		**0.79**	**mg/Kg-dry**	2	8/31/2011 06:08 AM
Lead	**16**		**0.79**	**mg/Kg-dry**	2	8/31/2011 06:08 AM
Nickel	**23**		**0.79**	**mg/Kg-dry**	2	8/31/2011 06:08 AM
Selenium	**1.4**		**0.79**	**mg/Kg-dry**	2	8/31/2011 06:08 AM
Silver	ND		0.79	mg/Kg-dry	2	8/31/2011 06:08 AM
Zinc	**67**		**1.6**	**mg/Kg-dry**	2	8/31/2011 11:26 AM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 9/2/11**			**as noted**	1	9/2/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **8/29/2011**	Analyst: **CW**
Acenaphthene	ND		32	µg/Kg-dry	1	8/30/2011 01:29 PM
Anthracene	ND		32	µg/Kg-dry	1	8/30/2011 01:29 PM
Benzo(a)anthracene	ND		32	µg/Kg-dry	1	8/30/2011 01:29 PM
Benzo(a)pyrene	ND		32	µg/Kg-dry	1	8/30/2011 01:29 PM
Benzo(b)fluoranthene	ND		32	µg/Kg-dry	1	8/30/2011 01:29 PM
Benzo(g,h,i)perylene	ND		32	µg/Kg-dry	1	8/30/2011 01:29 PM
Benzo(k)fluoranthene	ND		32	µg/Kg-dry	1	8/30/2011 01:29 PM
Chrysene	ND		32	µg/Kg-dry	1	8/30/2011 01:29 PM
Dibenzo(a,h)anthracene	ND		32	µg/Kg-dry	1	8/30/2011 01:29 PM
Fluoranthene	ND		32	µg/Kg-dry	1	8/30/2011 01:29 PM
Fluorene	ND		32	µg/Kg-dry	1	8/30/2011 01:29 PM
Indeno(1,2,3-cd)pyrene	ND		32	µg/Kg-dry	1	8/30/2011 01:29 PM
Naphthalene	ND		32	µg/Kg-dry	1	8/30/2011 01:29 PM
Pyrene	ND		32	µg/Kg-dry	1	8/30/2011 01:29 PM
Surr: 2,4,6-Tribromophenol	*67.0*		*34-140*	*%REC*	1	8/30/2011 01:29 PM
Surr: 2-Fluorobiphenyl	*62.0*		*12-100*	*%REC*	1	8/30/2011 01:29 PM
Surr: 2-Fluorophenol	*72.8*		*33-117*	*%REC*	1	8/30/2011 01:29 PM
Surr: 4-Terphenyl-d14	*98.4*		*25-137*	*%REC*	1	8/30/2011 01:29 PM
Surr: Nitrobenzene-d5	*73.6*		*37-107*	*%REC*	1	8/30/2011 01:29 PM
Surr: Phenol-d6	*72.1*		*40-106*	*%REC*	1	8/30/2011 01:29 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**37**			**mg/kg-dry**	1	9/2/2011 02:35 PM

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

ALS Group USA, Corp

Date: *02-Sep-11*

Client: HRL Compliance Solutions
Project: TR 41-6-697 Treatment Cell 8/25/11 **Work Order:** 1108868
Sample ID: TR 41-6-697 Treatment Cell **Lab ID:** 1108868-01
Collection Date: 8/25/2011 04:15 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **9/1/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.52	mg/Kg-dry	1	9/2/2011 01:00 PM
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**7.2**		**0.050**	**% of sample**	1	8/29/2011 11:39 AM
PH			**SW9045D**			Analyst: **JJG**
pH	**8.26**			**s.u.**	1	8/30/2011 10:15 AM

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

Report Number: F11243-0163
Acount 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: 1108868

DATE RECEIVED: 08/31/2011
DATE REPORTED: 09/02/2011
PAGE: 1
P.O. NUMBER: 20-122010662

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
81612	01B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	5.53	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	188	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	36	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	4590	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	80.2	-	USDA Handbook 60

ALS Group USA, Corp

Date: 02-Sep-11

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1108868

Project: TR 41-6-697 Treatment Cell 8/25/11

Batch ID: **35187** Instrument ID **HG1** Method: **SW7471**

MBLK Sample ID: **MBLK-35187-35187** Units: **mg/Kg** Analysis Date: **8/29/2011 01:17 PM**

Client ID: Run ID: **HG1_110829A** SeqNo: **1719407** Prep Date: **8/27/2011** 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-35187-35187** Units: **mg/Kg** Analysis Date: **8/29/2011 01:19 PM**

Client ID: Run ID: **HG1_110829A** SeqNo: **1719408** Prep Date: **8/27/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1646	0.020	0.1665	0	98.8	80-120	0			

LCSD Sample ID: **LCSD-35187-35187** Units: **mg/Kg** Analysis Date: **8/29/2011 01:21 PM**

Client ID: Run ID: **HG1_110829A** SeqNo: **1719409** Prep Date: **8/27/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1584	0.020	0.1665	0	95.1	80-120	0.1646	3.82	20	

MS Sample ID: **1108821-01BMS** Units: **mg/Kg** Analysis Date: **8/29/2011 01:30 PM**

Client ID: Run ID: **HG1_110829A** SeqNo: **1719413** Prep Date: **8/27/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1673	0.019	0.1604	0.01787	93.2	75-125	0			

MSD Sample ID: **1108821-01BMSD** Units: **mg/Kg** Analysis Date: **8/29/2011 01:32 PM**

Client ID: Run ID: **HG1_110829A** SeqNo: **1719414** Prep Date: **8/27/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1738	0.019	0.1609	0.01787	96.9	75-125	0.1673	3.86	35	

The following samples were analyzed in this batch: 1108868-01A

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

Client: HRL Compliance Solutions
Work Order: 1108868
Project: TR 41-6-697 Treatment Cell 8/25/11

QC BATCH REPORT

Batch ID: **35196** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-35196-35196** Units: **mg/Kg** Analysis Date: **8/31/2011 02:10 AM**
Client ID: Run ID: **ICPMS1_110830A** SeqNo: **1721720** Prep Date: **8/29/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	0.001144	0.10								J
Chromium	0.002806	0.25								J
Copper	ND	0.25								
Lead	0.002402	0.25								J
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS Sample ID: **LCS-35196-35196** Units: **mg/Kg** Analysis Date: **8/31/2011 02:15 AM**
Client ID: Run ID: **ICPMS1_110830A** SeqNo: **1721721** Prep Date: **8/29/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.663	0.50	5	0	93.3	80-120	0			
Barium	4.779	0.50	5	0	95.6	80-120	0			
Cadmium	4.603	0.20	5	0	92.1	80-120	0			
Chromium	4.697	0.50	5	0	93.9	80-120	0			
Copper	4.763	0.50	5	0	95.3	80-120	0			
Lead	4.714	0.50	5	0	94.3	80-120	0			
Nickel	4.729	0.50	5	0	94.6	80-120	0			
Selenium	4.607	0.50	5	0	92.1	80-120	0			
Silver	4.489	0.50	5	0	89.8	80-120	0			
Zinc	4.588	1.0	5	0	91.8	80-120	0			

LCSD Sample ID: **LCSD-35196-35196** Units: **mg/Kg** Analysis Date: **8/31/2011 02:20 AM**
Client ID: Run ID: **ICPMS1_110830A** SeqNo: **1721722** Prep Date: **8/29/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.766	0.50	5	0	95.3	80-120	4.663	2.18	20	
Barium	4.746	0.50	5	0	94.9	80-120	4.779	0.693	20	
Cadmium	4.647	0.20	5	0	92.9	80-120	4.603	0.951	20	
Chromium	4.764	0.50	5	0	95.3	80-120	4.697	1.42	20	
Copper	4.848	0.50	5	0	97	80-120	4.763	1.77	20	
Lead	4.769	0.50	5	0	95.4	80-120	4.714	1.16	20	
Nickel	4.795	0.50	5	0	95.9	80-120	4.729	1.39	20	
Selenium	4.702	0.50	5	0	94	80-120	4.607	2.04	20	
Silver	4.543	0.50	5	0	90.9	80-120	4.489	1.2	20	
Zinc	4.681	1.0	5	0	93.6	80-120	4.588	2.01	20	

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

Client: HRL Compliance Solutions
Work Order: 1108868
Project: TR 41-6-697 Treatment Cell 8/25/11

QC BATCH REPORT

Batch ID: **35196** Instrument ID **ICPMS1** Method: **SW6020A**

MS Sample ID: **1108879-03BMS** Units: **mg/Kg** Analysis Date: **8/31/2011 02:46 AM**

Client ID: Run ID: **ICPMS1_110830A** SeqNo: **1721727** Prep Date: **8/29/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	10.74	1.5	7.342	3.799	94.6	80-120	0			
Barium	19.68	1.5	7.342	13.09	89.8	80-120	0			
Cadmium	6.831	0.59	7.342	0.1448	91.1	80-120	0			
Chromium	12	1.5	7.342	5.1	94	80-120	0			
Copper	14.94	1.5	7.342	7.488	101	80-120	0			
Lead	11.54	1.5	7.342	4.501	95.9	80-120	0			
Nickel	13.82	1.5	7.342	6.964	93.4	80-120	0			
Selenium	7.319	1.5	7.342	0.6311	91.1	80-120	0			
Silver	5.93	1.5	7.342	0.01805	80.5	80-120	0			
Zinc	36.27	2.9	7.342	27.47	120	80-120	0			

MSD Sample ID: **1108879-03BMSD** Units: **mg/Kg** Analysis Date: **8/31/2011 04:38 AM**

Client ID: Run ID: **ICPMS1_110830A** SeqNo: **1721741** Prep Date: **8/29/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	10.93	1.5	7.342	3.799	97.1	80-120	10.74	1.68	25	
Barium	19.29	1.5	7.342	13.09	84.5	80-120	19.68	2.02	25	
Cadmium	7.001	0.59	7.342	0.1448	93.4	80-120	6.831	2.46	25	
Chromium	12.12	1.5	7.342	5.1	95.6	80-120	12	0.974	25	
Copper	15.19	1.5	7.342	7.488	105	80-120	14.94	1.68	25	
Lead	11.46	1.5	7.342	4.501	94.8	80-120	11.54	0.689	25	
Nickel	13.81	1.5	7.342	6.964	93.3	80-120	13.82	0.0425	25	
Selenium	7.48	1.5	7.342	0.6311	93.3	80-120	7.319	2.18	25	
Silver	6.123	1.5	7.342	0.01805	83.2	80-120	5.93	3.22	25	
Zinc	38.59	2.9	7.342	27.47	151	80-120	36.27	6.2	25	S

The following samples were analyzed in this batch: 1108868-01A

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

Client: HRL Compliance Solutions
Work Order: 1108868
Project: TR 41-6-697 Treatment Cell 8/25/11

QC BATCH REPORT

Batch ID: **35190** Instrument ID **SVMS6** Method: **SW8270**

MBLK Sample ID: **SBLKS1-35190-35190** Units: **µg/Kg** Analysis Date: **8/30/2011 10:21 AM**

Client ID: Run ID: **SVMS6_110830A** SeqNo: **1720453** Prep Date: **8/29/2011** 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								
Surr: 2,4,6-Tribromophenol	*1483*	0	*1667*	0	*89*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1289*	0	*1667*	0	*77.4*	*12-100*	0			
Surr: 2-Fluorophenol	*1410*	0	*1667*	0	*84.6*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1471*	0	*1667*	0	*88.3*	*25-137*	0			
Surr: Nitrobenzene-d5	*1400*	0	*1667*	0	*84*	*37-107*	0			
Surr: Phenol-d6	*1415*	0	*1667*	0	*84.9*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1108868
Project: TR 41-6-697 Treatment Cell 8/25/11

QC BATCH REPORT

Batch ID: **35190** Instrument ID **SVMS6** Method: **SW8270**

LCS Sample ID: **SLCSS1-35190-35190** Units: **µg/Kg** Analysis Date: **8/30/2011 10:48 AM**

Client ID: Run ID: **SVMS6_110830A** SeqNo: **1720540** Prep Date: **8/29/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1153	30	1333	0	86.5	45-110	0			
Anthracene	1258	30	1333	0	94.4	55-105	0			
Benzo(a)anthracene	1230	30	1333	0	92.3	50-110	0			
Benzo(a)pyrene	1298	30	1333	0	97.4	50-110	0			
Benzo(b)fluoranthene	1354	30	1333	0	102	45-115	0			
Benzo(g,h,i)perylene	1407	30	1333	0	106	40-125	0			
Benzo(k)fluoranthene	1342	30	1333	0	101	45-115	0			
Chrysene	1278	30	1333	0	95.9	55-110	0			
Dibenzo(a,h)anthracene	1350	30	1333	0	101	40-125	0			
Fluoranthene	1255	30	1333	0	94.1	55-115	0			
Fluorene	1175	30	1333	0	88.1	50-110	0			
Indeno(1,2,3-cd)pyrene	1371	30	1333	0	103	40-120	0			
Naphthalene	1141	30	1333	0	85.6	40-105	0			
Pyrene	1306	30	1333	0	97.9	45-125	0			
Surr: 2,4,6-Tribromophenol	*1608*	0	*1667*	0	*96.5*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1302*	0	*1667*	0	*78.1*	*12-100*	0			
Surr: 2-Fluorophenol	*1354*	0	*1667*	0	*81.2*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1564*	0	*1667*	0	*93.8*	*25-137*	0			
Surr: Nitrobenzene-d5	*1383*	0	*1667*	0	*83*	*37-107*	0			
Surr: Phenol-d6	*1332*	0	*1667*	0	*79.9*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1108868
Project: TR 41-6-697 Treatment Cell 8/25/11

QC BATCH REPORT

Batch ID: **35190** Instrument ID **SVMS6** Method: **SW8270**

LCSD Sample ID: **SLCSDS1-35190-35190** Units: **µg/Kg** Analysis Date: **8/30/2011 11:14 AM**

Client ID: Run ID: **SVMS6_110830A** SeqNo: **1720541** Prep Date: **8/29/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1046	30	1333	0	78.4	45-110	1153	9.76	25	
Anthracene	1162	30	1333	0	87.2	55-105	1258	7.93	25	
Benzo(a)anthracene	1158	30	1333	0	86.9	50-110	1230	6.03	25	
Benzo(a)pyrene	1209	30	1333	0	90.7	50-110	1298	7.1	25	
Benzo(b)fluoranthene	1169	30	1333	0	87.7	45-115	1354	14.7	25	
Benzo(g,h,i)perylene	1330	30	1333	0	99.8	40-125	1407	5.63	25	
Benzo(k)fluoranthene	1110	30	1333	0	83.2	45-115	1342	19	25	
Chrysene	1192	30	1333	0	89.4	55-110	1278	6.99	25	
Dibenzo(a,h)anthracene	1270	30	1333	0	95.3	40-125	1350	6.11	25	
Fluoranthene	1163	30	1333	0	87.2	55-115	1255	7.58	25	
Fluorene	1067	30	1333	0	80	50-110	1175	9.63	25	
Indeno(1,2,3-cd)pyrene	1284	30	1333	0	96.3	40-120	1371	6.58	25	
Naphthalene	1032	30	1333	0	77.4	40-105	1141	10	25	
Pyrene	1224	30	1333	0	91.8	45-125	1306	6.48	25	
Surr: 2,4,6-Tribromophenol	*1502*	0	*1667*	0	*90.1*	*34-140*	1608	*6.8*	*40*	
Surr: 2-Fluorobiphenyl	*1182*	0	*1667*	0	*70.9*	*12-100*	1302	*9.72*	*40*	
Surr: 2-Fluorophenol	*1256*	0	*1667*	0	*75.4*	*33-117*	1354	*7.48*	*40*	
Surr: 4-Terphenyl-d14	*1478*	0	*1667*	0	*88.7*	*25-137*	1564	*5.68*	*40*	
Surr: Nitrobenzene-d5	*1275*	0	*1667*	0	*76.5*	*37-107*	1383	*8.15*	*40*	
Surr: Phenol-d6	*1242*	0	*1667*	0	*74.5*	*40-106*	1332	*7.04*	*40*	

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

Client: HRL Compliance Solutions
Work Order: 1108868
Project: TR 41-6-697 Treatment Cell 8/25/11

QC BATCH REPORT

Batch ID: **35190** Instrument ID **SVMS6** Method: **SW8270**

MS Sample ID: **1108858-03A MS** Units: **µg/Kg** Analysis Date: **8/30/2011 12:19 PM**

Client ID: Run ID: **SVMS6_110830A** SeqNo: **1720753** Prep Date: **8/29/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	2226	60	2649	0	84.1	45-110	0			
Anthracene	2291	60	2649	0	86.5	55-105	0			
Benzo(a)anthracene	2287	60	2649	0	86.4	50-110	0			
Benzo(a)pyrene	2355	60	2649	0	88.9	50-110	0			
Benzo(b)fluoranthene	2665	60	2649	0	101	45-115	0			
Benzo(g,h,i)perylene	2611	60	2649	0	98.6	40-125	0			
Benzo(k)fluoranthene	2017	60	2649	0	76.2	45-115	0			
Chrysene	2343	60	2649	0	88.5	55-110	0			
Dibenzo(a,h)anthracene	2472	60	2649	0	93.3	40-125	0			
Fluoranthene	2310	60	2649	0	87.2	55-115	0			
Fluorene	2226	60	2649	0	84	50-110	0			
Indeno(1,2,3-cd)pyrene	2502	60	2649	0	94.5	40-120	0			
Naphthalene	2220	60	2649	0	83.8	40-105	0			
Pyrene	2427	60	2649	0	91.6	45-125	0			
Surr: 2,4,6-Tribromophenol	*3071*	0	*3311*	0	*92.8*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*2449*	0	*3311*	0	*74*	*12-100*	0			
Surr: 2-Fluorophenol	*2627*	0	*3311*	0	*79.3*	*33-117*	0			
Surr: 4-Terphenyl-d14	*2823*	0	*3311*	0	*85.3*	*25-137*	0			
Surr: Nitrobenzene-d5	*2717*	0	*3311*	0	*82.1*	*37-107*	0			
Surr: Phenol-d6	*2610*	0	*3311*	0	*78.8*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1108868
Project: TR 41-6-697 Treatment Cell 8/25/11

QC BATCH REPORT

Batch ID: **35190** Instrument ID **SVMS6** Method: **SW8270**

MS Sample ID: **1108752-01C MS** Units: **µg/Kg** Analysis Date: **9/1/2011 07:19 PM**

Client ID: Run ID: **SVMS4_110901A** SeqNo: **1723896** Prep Date: **8/29/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	2293	57	2511	0	91.3	45-110	0			
Anthracene	2475	57	2511	0	98.6	55-105	0			
Benzo(a)anthracene	2399	57	2511	17.13	94.8	50-110	0			
Benzo(a)pyrene	2262	57	2511	74.32	87.1	50-110	0			
Benzo(b)fluoranthene	2279	57	2511	46.53	88.9	45-115	0			
Benzo(g,h,i)perylene	2214	57	2511	51.7	86.1	40-125	0			
Benzo(k)fluoranthene	2440	57	2511	51.7	95.1	45-115	0			
Chrysene	2637	57	2511	0	105	55-110	0			
Dibenzo(a,h)anthracene	2237	57	2511	81.11	85.9	40-125	0			
Fluoranthene	2285	57	2511	53.64	88.8	55-115	0			
Fluorene	2364	57	2511	0	94.2	50-110	0			
Indeno(1,2,3-cd)pyrene	2236	57	2511	77.23	86	40-120	0			
Naphthalene	2117	57	2511	0	84.3	40-105	0			
Pyrene	2306	57	2511	47.5	90	45-125	0			
Surr: 2,4,6-Tribromophenol	*3087*	0	*3139*	0	*98.4*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*2698*	0	*3139*	0	*85.9*	*12-100*	0			
Surr: 2-Fluorophenol	*2500*	0	*3139*	0	*79.7*	*33-117*	0			
Surr: 4-Terphenyl-d14	*3109*	0	*3139*	0	*99*	*25-137*	0			
Surr: Nitrobenzene-d5	*2645*	0	*3139*	0	*84.3*	*37-107*	0			
Surr: Phenol-d6	*2742*	0	*3139*	0	*87.4*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1108868
Project: TR 41-6-697 Treatment Cell 8/25/11

QC BATCH REPORT

Batch ID: **35190** Instrument ID **SVMS6** Method: **SW8270**

MSD Sample ID: **1108858-03A MSD** Units: **µg/Kg** Analysis Date: **8/30/2011 12:46 PM**

Client ID: Run ID: **SVMS6_110830A** SeqNo: **1720754** Prep Date: **8/29/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	2144	59	2619	0	81.9	45-110	2226	3.76	30	
Anthracene	2278	59	2619	0	87	55-105	2291	0.594	30	
Benzo(a)anthracene	2248	59	2619	0	85.8	50-110	2287	1.72	30	
Benzo(a)pyrene	2376	59	2619	0	90.7	50-110	2355	0.891	30	
Benzo(b)fluoranthene	2649	59	2619	0	101	45-115	2665	0.617	30	
Benzo(g,h,i)perylene	2591	59	2619	0	98.9	40-125	2611	0.784	30	
Benzo(k)fluoranthene	2150	59	2619	0	82.1	45-115	2017	6.41	30	
Chrysene	2314	59	2619	0	88.4	55-110	2343	1.25	30	
Dibenzo(a,h)anthracene	2496	59	2619	0	95.3	40-125	2472	0.981	30	
Fluoranthene	2306	59	2619	0	88	55-115	2310	0.171	30	
Fluorene	2180	59	2619	0	83.2	50-110	2226	2.07	30	
Indeno(1,2,3-cd)pyrene	2513	59	2619	0	96	40-120	2502	0.463	30	
Naphthalene	2046	59	2619	0	78.1	40-105	2220	8.15	30	
Pyrene	2391	59	2619	0	91.3	45-125	2427	1.5	30	
Surr: 2,4,6-Tribromophenol	*3045*	0	*3274*	0	*93*	*34-140*	3071	*0.854*	*40*	
Surr: 2-Fluorobiphenyl	*2213*	0	*3274*	0	*67.6*	*12-100*	2449	*10.1*	*40*	
Surr: 2-Fluorophenol	*2474*	0	*3274*	0	*75.6*	*33-117*	2627	*5.99*	*40*	
Surr: 4-Terphenyl-d14	*2625*	0	*3274*	0	*80.2*	*25-137*	2823	*7.28*	*40*	
Surr: Nitrobenzene-d5	*2487*	0	*3274*	0	*76*	*37-107*	2717	*8.83*	*40*	
Surr: Phenol-d6	*2425*	0	*3274*	0	*74.1*	*40-106*	2610	*7.34*	*40*	

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

Client: HRL Compliance Solutions
Work Order: 1108868
Project: TR 41-6-697 Treatment Cell 8/25/11

QC BATCH REPORT

Batch ID: **35190** Instrument ID **SVMS6** Method: **SW8270**

MSD Sample ID: **1108752-01C MSD** Units: **µg/Kg** Analysis Date: **9/1/2011 07:51 PM**

Client ID: Run ID: **SVMS4_110901A** SeqNo: **1723897** Prep Date: **8/29/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	2355	60	2652	0	88.8	45-110	2293	2.7	30	
Anthracene	2551	60	2652	0	96.2	55-105	2475	3	30	
Benzo(a)anthracene	2477	60	2652	17.13	92.8	50-110	2399	3.22	30	
Benzo(a)pyrene	2331	60	2652	74.32	85.1	50-110	2262	3.03	30	
Benzo(b)fluoranthene	2426	60	2652	46.53	89.7	45-115	2279	6.24	30	
Benzo(g,h,i)perylene	2275	60	2652	51.7	83.9	40-125	2214	2.74	30	
Benzo(k)fluoranthene	2461	60	2652	51.7	90.9	45-115	2440	0.837	30	
Chrysene	2750	60	2652	0	104	55-110	2637	4.2	30	
Dibenzo(a,h)anthracene	2292	60	2652	81.11	83.4	40-125	2237	2.42	30	
Fluoranthene	2354	60	2652	53.64	86.8	55-115	2285	3	30	
Fluorene	2422	60	2652	0	91.4	50-110	2364	2.42	30	
Indeno(1,2,3-cd)pyrene	2307	60	2652	77.23	84.1	40-120	2236	3.14	30	
Naphthalene	2199	60	2652	0	82.9	40-105	2117	3.8	30	
Pyrene	2388	60	2652	47.5	88.3	45-125	2306	3.49	30	
Surr: 2,4,6-Tribromophenol	*3190*	0	*3315*	0	*96.2*	*34-140*	3087	*3.26*	*40*	
Surr: 2-Fluorobiphenyl	*2776*	0	*3315*	0	*83.7*	*12-100*	2698	*2.85*	*40*	
Surr: 2-Fluorophenol	*2704*	0	*3315*	0	*81.6*	*33-117*	2500	*7.82*	*40*	
Surr: 4-Terphenyl-d14	*3149*	0	*3315*	0	*95*	*25-137*	3109	*1.3*	*40*	
Surr: Nitrobenzene-d5	*2756*	0	*3315*	0	*83.1*	*37-107*	2645	*4.11*	*40*	
Surr: Phenol-d6	*2845*	0	*3315*	0	*85.8*	*40-106*	2742	*3.69*	*40*	

The following samples were analyzed in this batch: 1108868-01A

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

Client: HRL Compliance Solutions
Work Order: 1108868
Project: TR 41-6-697 Treatment Cell 8/25/11

QC BATCH REPORT

Batch ID: **35281** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MBLK-35281-35281** Units: **mg/Kg** Analysis Date: **9/2/2011 01:00 PM**
Client ID: Run ID: **WETCHEM_110902C** SeqNo: **1724443** Prep Date: **9/1/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	ND	0.49								

LCS Sample ID: **LCS-35281-35281** Units: **mg/Kg** Analysis Date: **9/2/2011 01:00 PM**
Client ID: Run ID: **WETCHEM_110902C** SeqNo: **1724441** Prep Date: **9/1/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	2.054	0.48	1.931	0	106	75-110	0			

LCSD Sample ID: **LCSD-35281-35281** Units: **mg/Kg** Analysis Date: **9/2/2011 01:00 PM**
Client ID: Run ID: **WETCHEM_110902C** SeqNo: **1724442** Prep Date: **9/1/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	2.078	0.49	1.953	0	106	75-110	2.054	1.17	20	

MS Sample ID: **1108868-01A MS** Units: **mg/Kg** Analysis Date: **9/2/2011 01:00 PM**
Client ID: **TR 41-6-697 Treatment Cell** Run ID: **WETCHEM_110902C** SeqNo: **1724424** Prep Date: **9/1/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.616	0.48	1.938	0.2326	71.4	60-130	0			

MSD Sample ID: **1108868-01A MSD** Units: **mg/Kg** Analysis Date: **9/2/2011 01:00 PM**
Client ID: **TR 41-6-697 Treatment Cell** Run ID: **WETCHEM_110902C** SeqNo: **1724425** Prep Date: **9/1/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.806	0.50	1.984	0.2326	79.3	60-130	1.616	11.1	30	

The following samples were analyzed in this batch: 1108868-01A

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

Client: HRL Compliance Solutions
Work Order: 1108868
Project: TR 41-6-697 Treatment Cell 8/25/11

QC BATCH REPORT

Batch ID: **R94038** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS1-R94038** Units: **% of sample** Analysis Date: **8/29/2011 11:39 AM**
Client ID: Run ID: **MOIST_110829A** SeqNo: **1720347** 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-R94038** Units: **% of sample** Analysis Date: **8/29/2011 11:39 AM**
Client ID: Run ID: **MOIST_110829A** SeqNo: **1720346** 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: **1108867-03BDUP** Units: **% of sample** Analysis Date: **8/29/2011 11:39 AM**
Client ID: Run ID: **MOIST_110829A** SeqNo: **1720332** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	6.87	0.050	0	0	0	0-0	6.69	2.65	20	

DUP Sample ID: **1108879-03BDUP1** Units: **% of sample** Analysis Date: **8/29/2011 11:39 AM**
Client ID: Run ID: **MOIST_110829A** SeqNo: **1720339** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	15.85	0.050	0	0	0	0-0	15.69	1.01	20	

DUP Sample ID: **1108879-03BDUP2** Units: **% of sample** Analysis Date: **8/29/2011 11:39 AM**
Client ID: Run ID: **MOIST_110829A** SeqNo: **1720340** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	15.53	0.050	0	0	0	0-0	15.69	1.02	20	

The following samples were analyzed in this batch: 1108868-01A

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

Client: HRL Compliance Solutions
Work Order: 1108868
Project: TR 41-6-697 Treatment Cell 8/25/11

QC BATCH REPORT

Batch ID: **R94050** Instrument ID **WETCHEM** Method: **A4500-H B**

DUP Sample ID: **1108914-01A DUP** Units: **s.u.** Analysis Date: **8/30/2011 10:15 AM**
Client ID: Run ID: **WETCHEM_110830F** SeqNo: **1720591** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.57	0	0	0	0	0-0	8.57	0	20	

DUP Sample ID: **1108868-01A DUP** Units: **s.u.** Analysis Date: **8/30/2011 10:15 AM**
Client ID: **TR 41-6-697 Treatment Cell** Run ID: **WETCHEM_110830F** SeqNo: **1720594** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.26	0	0	0	0	0-0	8.26	0	20	

DUP Sample ID: **1108912-05B DUP** Units: **s.u.** Analysis Date: **8/30/2011 10:15 AM**
Client ID: Run ID: **WETCHEM_110830F** SeqNo: **1720606** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.65	0	0	0	0	0-0	8.65	0	20	HH

The following samples were analyzed in this batch: 1108868-01A

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

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **27-Aug-11 10:15**

Work Order: **1108868** Received by: **WJC**

Checklist completed by Bill Carey (eSignature) 27-Aug-11 (Date) Reviewed by: Ann Preston (eSignature) 30-Aug-11 (Date)

Matrices: Soil
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.4 C		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

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 # 1108868

PAGE 1 of 1

DISPOSAL By Lab or Return to Client

PROJECT NAME	TR 41-6-697 Treatment Cell	SAMPLER	Dan Pinegar
PROJECT No.		SITE ID	TR 41-6-697 Well Pad
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	HRL Compliance Solutions, Inc.	BILL TO COMPANY	
SEND REPORT TO	Kris Rowe	INVOICE ATTN TO	
ADDRESS	744 Horizon Ct. Suite 140	ADDRESS	
CITY / STATE / ZIP	Grand Junction, CO. 81506	CITY / STATE / ZIP	
PHONE	970-243-3271	PHONE	
FAX	970-243-3280	FAX	
E-MAIL	krowe@hrlcomp.com	E-MAIL	

DATE 8/26/2011

TURNAROUND 7 days

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	Total Metals (Table 910.1)	SAR, EC, Ph	Semi Vols / PAH
1	TR 41-6-697 Treatment Cell	soil	8/25/2011	4:15 PM	3	8		x	x	x

*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:

4.4

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

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		Dan Pinegar	8/26/2011	5:00 PM
RECEIVED BY		US FedEx	8/27/11	1015
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

Subcontractor:
A & L Great Lakes Agricultural La
3505 Conestoga Dr
Ft. Wayne, IN 46808
TEL: (260) 483-4759
FAX: (260) 483-5274
Acct #: 91000

CHAIN-OF-CUSTODY RECORD

Date: 30-Aug-11
COC ID: 3075
Due Date 06-Sep-11

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	1108868	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
1108868-01B (TR 41-6-697 Treatment Cell)	Soil	25/Aug/2011 16:15	(1) MISC	X									

Comments:

Please analyze for SAR-EC. Email results to Ann Preston.

Relinquished by:	Date/Time	Received by:	Date/Time	Cooler IDs	Report/QC Level
					Std
Relinquished by:	Date/Time	Received by:	Date/Time		

FedEx Express **NEW Package US Airbill**

FedEx Tracking Number **8758 3471 3960**

Form ID No. **0200**

FedEx Retrieval Copy

1 From

Date 3-26-11 Sender's FedEx Account Number

Sender's Name DAN PIMLOAR Phone 170 471 3271

Company MCST

Address 744 HORIZON CT STE 140 Dept/Floor/Suite/Room

City GRAND JUNCTION State CO ZIP 81506

2 Your Internal Billing Reference

3 To

Recipient's Name SAMPLE RECEIVING 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

HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight. 01 ☐

HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations. 31 ☐

8758 3471 3960

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

06 ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

01 ☒ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

05 ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

49 ☐ NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.

03 ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

06 ☐ FedEx Envelope* 02 ☐ FedEx 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, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box. ☐ Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

1 ☐ Sender Acct. No. in Section 1 will be billed. 2 ☒ Recipient 3 ☐ Third Party 4 ☐ Credit Card 5 ☐ Cash/Check

Total Packages 1 Total Weight ____ lbs. Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

612

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