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: N/A
County: Garfield
Facility Name: Chevron TR 21-20-597
Facility Number: 284697
Well Name: Chevron TR 21-20-597
Well Number: N/A
Location: (QtrQtr, Sec, Twp, Rng, Meridian): SENW, SEC 20, T5S, R97W, 6th PM Latitude: 39.601501 Longitude: -108.302601

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-Complex, 5-30% slopes

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Wiess Creek lies approximately 1769 feet to the west.

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

Impacted Media (check):	Extent of Impact:	How Determined:
☑ Soils	Please See Attached Notice of Completion Report	Visual obersation, field screening equipment, and analytical analysis
☐ Vegetation	for Remediation # 5949	
☐ Groundwater		
☐ Surface Water		

REMEDIATION WORKPLAN

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

Please See Attached Notice of Completion Report for Remediation # 5949

Describe how source is to be removed:

Please See Attached Notice of Completion Report for Remediation # 5949

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.:

Please See Attached Notice of Completion Report for Remediation # 5949

Submit Page 2 with Page 1

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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: REM # 5949
Name of Operator: WILLIAMS
OGCC Operator No:
Received Date:
Well Name & No:
Facility Name & No: CHEVRON TR 21-20-597

REMEDIATION WORKPLAN (Cont.)

OGCC Employee:

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

Please See Attached Notice of Completion Report for Remediation # 5949

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.

Please See Attached Notice of Completion Report for Remediation # 5949

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:

Please See Attached Notice of Completion Report for Remediation # 5949

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

Please See Attached Notice of Completion Report for Remediation # 5949

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: August 14, 2011	Date Site Investigation Completed: August 14, 2011	Date Remediation Plan Submitted: July 12, 2011
Remediation Start Date: August 16, 2011	Anticipated Completion Date: November 4, 2011	Actual Completion Date: November 4, 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: 12/15/2011

OGCC Approved: Title: FOR Chris Canfield Date: 01/26/2012

EPS NW Region

Please notify COGCC when pit backfill and reclamation are completed, to issue NFA letter and close the project.

Sensitive Area Determination Checklist

Williams Production RMT Company – Highlands			
Person(s) Conducting Field Inspection	Ashlee Lane	9/9/10	
	Biologist		
Site Information			
Location:	TR 22-20-597	Time: 1230	
Type of Facility:	Existing Well Pad		
Environmental Conditions	Clear and extremely windy; soil conditions are dry.		
Temperature (°F)	70°		

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: There were three springs identified that are outside of the ¼ mile buffer zone that will be elaborated on in the ground water comments section.

   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): Multi-well 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 stated in the surface water section of this sensitive area determination, there are no surface water features identified within the ¼ mile buffer zone of the existing facility. There are several large valleys located to the northwest, southwest and southeast of the facility; however no defined channels have been identified on the USGS topographic maps in addition to the site investigation confirming this finding. The facility as it is currently constructed, limits the flow directions of a potential release to the western, southern, and eastern edges of the facility. If a release were to migrate off the facility it would run down the hillsides towards the above mentioned valleys. However the potential for fluids to reach any of the identified intermittent channels in the valleys would be very low due to the thick vegetative cover consisting of service berry, oak brush, sage brush, grasses, the moderate to high infiltration rates of the underlying soils, and the distance a potential release would have to travel in order to reach any indentified intermittent stream channel. There are currently adequate Best Management Practices (BMPs) installed in the form of a perimeter berm on the western, southern, and eastern edges of the facility. These BMPs should be monitored and maintained to further ensure site containment in the event of a release. With the current BMPs in place, the topographical setting of the facility, the thick vegetation surrounding the facility, the moderate to high infiltration rates of the underlying soil, and the distance to any identified intermittent channels the potential to impact surface water features outside the quarter mile buffer zone would be deemed very low.

The State Engineer's Office and USGS records were reviewed and no records were revealed that would provide additional information pertaining to the depth to groundwater. The vegetative cover in the immediate vicinity of the facility, service berry, oak brush, and, sage brush does not suggest the presence of shallow groundwater. However, there were two springs identified on the USGS topographic map southwest of the existing facility approximately 2,562 feet (SWNW Sec 20) and southeast of the facility approximately 1,746 feet (NWSE Sec 20). In addition one additional spring was indentified during the site investigation approximately 2,070 feet northwest of the facility (NWNW Sec 20). The facility resides in the Uintah formation, which like the Green River Formation, tends to be fractured both vertically and horizontally allowing fluids to migrate in the subsurface over large distances. Based on the topographical setting of the facility, it is not anticipated that an overland release would impact groundwater and thus potentially the spring to the northwest due to the short duration time involved and the fact it would spread out over a large area. The greatest potential for impact to groundwater would be from a release that occurred over a longer period of time such as a leaking pit, due to the close proximity of the subject pit to the springs and the likelihood of fractured bedrock. Note however that due to the topographical setting of the existing facility, the greatest potential for any impacts to the above mentioned springs would be to the springs to the northwest and southeast of the facility. Therefore it would be highly recommended that the pit be lined in accordance to COGCC criteria and tested prior to placement of any materials into it.

Based on the information collected during the site investigation and desktop review, the potential to impact surface water has been deemed very low. The greatest potential for impacts from the facility would be to groundwater due to the geologic conditions in the area and the relatively close proximity of the springs to the northwest and southeast of the existing facility. With this potential to impact groundwater, the facility should be designated as being in a sensitive area

Inspector Signature(s): _____ Date: 9/15/2010

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

_____ Date: 9/9/2010

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

WILLIAMS PRODUCTION RMT COMPANY

TRAIL RIDGE FIELD

CHEVRON TR 21-20-597

NOTICE OF COMPLETION REPORT FOR REMEDIATION # 5949

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

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Form 27 Attachment

Introduction

The purpose of this Notice of Completion report – for the closure of the Williams TR 21-20-597 production pit (COGCC Facility ID # 284697; hereinafter also referred to as TR 22-20-597) – is to provide detailed information and findings analysis for the previously submitted and approved (remediation number 5949) 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 was delivered via electronic email on July 12, 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 July 26, 2011; at which time the aforementioned remediation number was issued. Closure activities began in August 15, 2011 and were concluded on November 8, 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

Remaining pit contents were removed from the pit using hydro-vac trucks and placed in a lined bermed containment to have free liquids removed via filter press.

The filter press sludge was placed into the aforementioned lined bermed containment cell, profiled for disposal/characterization purposes, and transported to ECDC Environmental for disposal on September 5, 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 and Appendix 3 for background sampling results.

Pit Liner Investigation and Integrity Assessment

The pit liner system – containing two of layers of poly synthetic material/liner and one layer of felt was present within the pit. A pit liner investigation was unable to be conducted prior to removal due to scheduling and miscommunication of crews.

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, examined below the pit lining, were inspected visually and through the use of specialized field screening equipment (identified 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 bottom, southern and eastern walls were stained black and contained a moderate hydrocarbon odor. The western wall did not contain any staining nor did the soil exhibit any hydrocarbon odor.

Field screening of the pit footprint and walls was performed along the entire pit in a grid pattern of sections. The pit bottom was separated into two sections, west and east, and a five point composite sample was collected from each of the half sections, with a depth of 0-6 inches below the surface and analyzed utilizing a PetroFlag (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.

Figure 1 outlines the pit sampling nomenclature and field screening results using the PetroFlag unit. 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

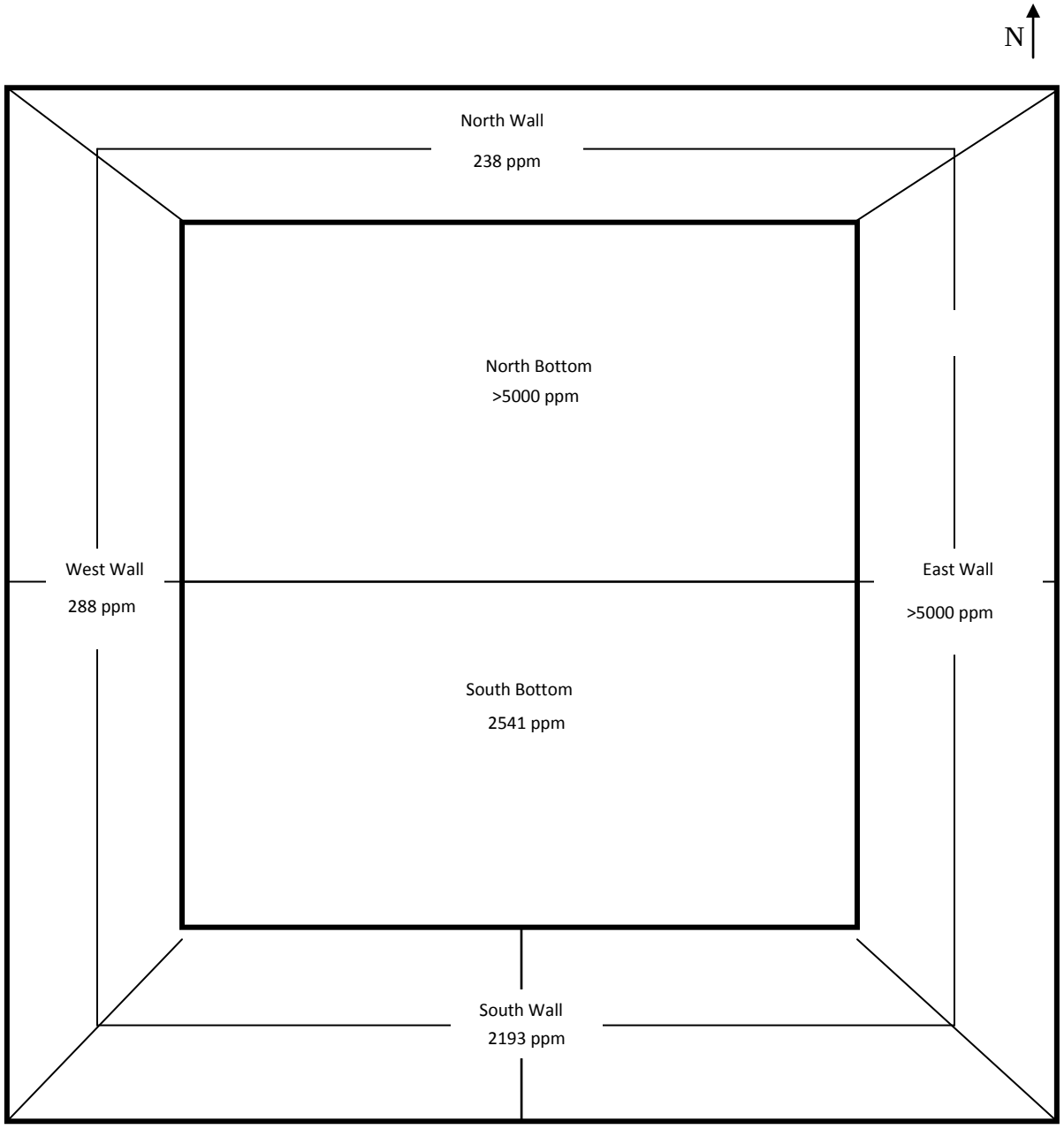


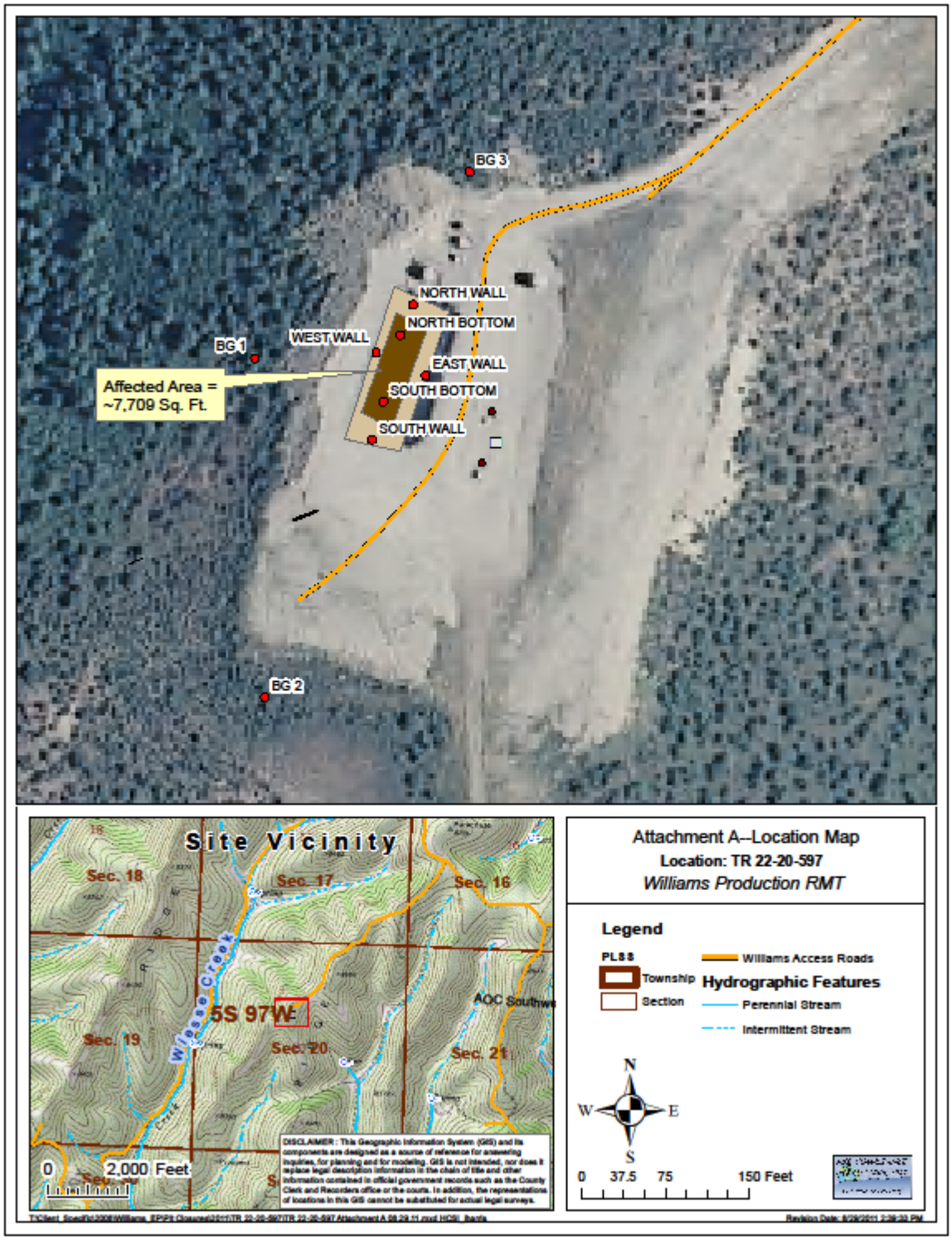
Table 1: PetroFlag Hydrocarbon Initial Field Screening Results

Sample ID	Results mg/kg
North Wall	238
East Wall	>5000
South Wall	2193
West Wall	288
North Bottom	>5000
South Bottom	2541

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 indicate that remediation is required due to TPH concentrations being above COGCC Table 910-1 standards.

Remediation Activities

Soil exhibiting dark stains and hydrocarbon odors were located on the pit bottom as well as the east and south pit walls, indicating the potential presence of hydrocarbon concentrations exceeding 500 ppm and thus required remediation. The pit bottom, east wall, and south wall was excavated to a depth of approximately 2 feet in areas containing a potential hydrocarbon concentration above 500 ppm. Field screening at that depth indicated that soils located on the east wall and northern pit bottom still exceeded COGCC Table 910-1 concentrations and required additional excavation. The north pit bottom and eastern wall was excavated to a total of 6 feet, where 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 halves, 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 pit bottom, as well as the southern pit wall still exceeded COGCC Table 910-1 for hydrocarbon concentrations exceeding 500 ppm in the DRO range. An additional 3 feet was excavated from the pit bottom and re-sampled for DRO. Confirmation samples collected at 8 feet below the original pit bottom 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 after the initial 2 feet of soil was excavated from the pit footprint (raw analytical results are available for review in Appendix 1 of this report) at various depths and Table 3 provides confirmation sampling analysis of additional excavation performed on the pit bottom and southern 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 bottom and side wall raw analytical results, and Table 3 (additional detail provided in Appendix 2) which provides raw analytical results for the additional excavation on the north and south pit bottom, as well as the southern pit wall analytical results, and Table 4 (additional detail provided in Appendix 3) for background analytical results. See attached Table 5 for confirmation analysis of the bioremediated soil located within the treatment cell (additional detail provided in Appendix 4).

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 inches and treated on site with bioremediation product. See Table 5 (additional detail is provided in Appendix 4) for the treatment cell soil samples collected from the treated soil, providing confirmation that soil meets COGCC Table 910-1 allowable concentrations.

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 5 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 and south pit bottom as well as the southern pit wall confirmation analytical data, and Appendix 3 for background analytical data. Appendix 4 provides confirmation analytical data for the successfully treated soil within the treatment cell.

Figures

Figure 3

Visual representation of the pit facing north after Excavation

Summary Tables

Table 2: Post Excavation Pit Bottom Analytical Results

Pit Bottom and Side Walls Post Excavation of 2 feet.	SAMPLE LOCATIONS					
	N. Bottom	N. Wall	S. Bottom	S. Wall	W. Wall	E. Wall
TEPH (DRO) (mg/kg)	1100	37	1400	910	420	13
TVPH (GRO) (mg/kg)	ND	ND	ND	ND	ND	ND
BENZENE (mg/kg)	ND	ND	ND	ND	ND	ND
TOLUENE (mg/kg)	ND	ND	ND	ND	ND	ND
ETHYLBENZENE (mg/kg)	ND	ND	ND	ND	ND	ND
XYLENE TOTAL (mg/kg)	ND	ND	ND	ND	ND	ND
ACENAPHTHENE (mg/kg)	ND	ND	ND	ND	ND	ND
ACENAPHTHYLENE (mg/kg)	NS	NS	NS	NS	NS	NS
ANTHRACENE (mg/kg)	ND	ND	ND	ND	ND	ND
BENZO(A)ANTRHACENE (mg/kg)	ND	ND	ND	ND	ND	ND
BENZO(A)PYRENE (mg/kg)	ND	ND	ND	ND	ND	ND
BENZO(B)FLUORANTHENE (mg/kg)	ND	ND	ND	ND	ND	ND
BENZO(G,H,I)PERYLENE (mg/kg)	ND	ND	ND	ND	ND	ND
BENZO(K)FLUORANTHENE (mg/kg)	ND	ND	ND	ND	ND	ND
CHRYSENE (mg/kg)	ND	ND	ND	ND	ND	ND
DIBENZO(A,H)ANTHRANCENE (mg/kg)	ND	ND	ND	ND	ND	ND
FLUORANTHENE (mg/kg)	ND	ND	ND	ND	0.06	ND
FLUORENE (mg/kg)	ND	ND	ND	ND	0.042	ND
INDENO(1,2,3-CD)PYRENE (mg/kg)	ND	ND	ND	ND	ND	ND
1-METHYLNAPHTHALENE (mg/kg)	NS	NS	NS	NS	NS	NS
2-METHYLNAPHTHALENE (mg/kg)	NS	NS	NS	NS	NS	NS
NAPHTHALENE (mg/kg)	ND	ND	ND	ND	0.14	ND
PHENANTHRENE (mg/kg)	NS	NS	NS	NS	NS	NS
PYRENE (mg/kg)	ND	ND	0.045	ND	0.063	ND
ARSENIC (mg/kg)	2	1.7	2.2	2	4.1	2.8
BARIUM (mg/kg)	620	700	290	550	1000	380
CADMIUM (mg/kg)	ND	ND	0.78	ND	ND	ND
CHROMIUM (mg/kg)	17	43	16	22	30	38
CHROMIUM (III) (mg/kg)	17	43	16	22	31	37
CHROMIUM (IV) (mg/kg)	ND	ND	ND	ND	ND	ND
COPPER (mg/kg)	6.9	22	7.9	12	19	13
LEAD (mg/kg)	12	19	13	18	14	17
MERCURY (mg/kg)	ND	0.027	0.024	0.02	0.043	0.023
NICKEL (mg/kg)	10	24	10	14	18	18
SELENIUM (mg/kg)	ND	ND	ND	ND	ND	ND
SILVER (mg/kg)	ND	ND	ND	ND	ND	ND
ZINC (mg/kg)	70	72	48	67	78	64
ELECTRICAL CONDUCTIVITY (EC) (mmho/cm)	0.36	0.81	4.21	3.63	3.33	0.83
pH	8.35	8.14	8.21	8.58	8.65	7.75
SODIUM ABSORPTION RATIO (SAR)	0.7	10	71.2	62.8	42.7	2.8
CALCIUM (ppm)	69	113	281	254	503	158
MAGNESIUM (ppm)	15	21	35	34	46	30
SODIUM (ppm)	24	441	4811	4024	3740	144

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

Table 3: Pit Bottom and Southern Wall – Additional Excavation

Post Excavation Pit Bottom @ 6 ft	North Bottom	South Bottom	South Wall
TEPH (DRO)	31	71	110

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

Table 4: Background Analytical Data

	Arsenic	Sodium Absorption Ratio (unitless)	Electro Conductivity (mmhos/cm)	pH (unitless)
BKGD 1	5.4	46.8	3.01	7.02
BKGD 2	5.2			
BKGD 3	5.7			

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

Table 5: Treatment Cell Confirmation Analytical Data

Treatment Cell Confirmation	SAMPLE LOCATIONS	
	North Side	South South
TEPH (DRO) (mg/kg)	96	47
TVPH (GRO) (mg/kg)	ND	ND
BENZENE (mg/kg)	ND	ND
TOLUENE (mg/kg)	ND	ND
ETHYLBENZENE (mg/kg)	ND	ND
XYLENE TOTAL (mg/kg)	ND	ND
ACENAPHTHENE (mg/kg)	ND	ND
ACENAPHTHYLENE (mg/kg)	NS	NS
ANTHRACENE (mg/kg)	ND	ND
BENZO(A)ANTRHACENE (mg/kg)	ND	ND
BENZO(A)PYRENE (mg/kg)	ND	ND
BENZO(B)FLUORANTHENE (mg/kg)	ND	ND
BENZO(G,H,I)PERYLENE (mg/kg)	ND	ND
BENZO(K)FLUORANTHENE (mg/kg)	ND	ND
CHRYSENE (mg/kg)	ND	ND
DIBENZO(A,H)ANTHRANCENE (mg/kg)	ND	ND
FLUORANTHENE (mg/kg)	ND	ND
FLUORENE (mg/kg)	ND	ND
INDENO(1,2,3-CD)PYRENE (mg/kg)	ND	ND
1-METHYLNAPHTHALENE (mg/kg)	NS	NS
2-METHYLNAPHTHALENE (mg/kg)	NS	NS
NAPHTHALENE (mg/kg)	ND	ND
PHENANTHRENE (mg/kg)	NS	NS
PYRENE (mg/kg)	ND	ND
ARSENIC (mg/kg)	2.7	3.9
BARIUM (mg/kg)	500	540
CADMIUM (mg/kg)	ND	ND
CHROMIUM (mg/kg)	17	16
CHROMIUM (III) (mg/kg)	17	16
CHROMIUM (IV) (mg/kg)	ND	ND
COPPER (mg/kg)	10	10
LEAD (mg/kg)	22	20
MERCURY (mg/kg)	ND	ND
NICKEL (mg/kg)	12	11
SELENIUM (mg/kg)	ND	ND
SILVER (mg/kg)	ND	ND
ZINC (mg/kg)	48	44
ELECTRICAL CONDUCTIVITY (EC) (mmho/cm)	3.03	2.22
pH	8.95	8.93
SODIUM ABSORPTION RATIO (SAR)	30.3	26.7

Note: All results are reported in mg/kg, unless otherwise noted.

Appendix 1: Pit Bottom and Walls Confirmation after 2 ft Raw Analytical Data

08-Sep-2011

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

Re: **Williams TR 22-20-597 Pad LOE 8/24/11** Work Order: **1108912**

Dear Kris,

ALS Environmental received 6 samples on 30-Aug-2011 10:30 AM for the analyses presented in the following report.

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

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 49.

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: 08-Sep-11

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11
Work Order: **1108912**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1108912-01	TR 22-20-597 N. Bottom	Soil		8/24/2011 14:20	8/30/2011 10:30	☐
1108912-02	TR 22-20-597 N. Wall	Soil		8/24/2011 13:45	8/30/2011 10:30	☐
1108912-03	TR 22-20-597 S Bottom	Soil		8/24/2011 14:15	8/30/2011 10:30	☐
1108912-04	TR 22-20-597 S. Wall	Soil		8/24/2011 14:00	8/30/2011 10:30	☐
1108912-05	TR 22-20-597 W. Wall	Soil		8/24/2011 13:50	8/30/2011 10:30	☐
1108912-06	TR 22-20-597 E. Wall	Soil		8/24/2011 14:10	8/30/2011 10:30	☐

ALS Group USA, Corp

Date: 08-Sep-11

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11
Work Order: 1108912

Case Narrative

Batch 35228 sample TR-22-20-597 S Bottom MS/MSD recoveries for Barium, Lead and Zinc were above control limits, The results for these elements in the parent sample may be biased high due to matrix interference. The MS/MSD recoveries for Silver were below control limits. The results for Silver in the parent sample may be biased low due to matrix interference. The MS recoveries for Chromium and Copper were below control limits, but both the MSD recoveries and RPDs met quality control criteria.

Batch 35235 sample 1108912-04B PAH surrogate recoveries were above control limits, but all PAH compounds were ND. Samples 1108912-01 and 1108912-03 had a few PAH compounds that were reported with a dilution and raised reporting limits due to matrix interference.

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

ALS Group USA, Corp

Date: 08-Sep-11

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11
WorkOrder: **1108912**

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: *08-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11 **Work Order:** 1108912
Sample ID: TR 22-20-597 N. Bottom **Lab ID:** 1108912-01
Collection Date: 8/24/2011 02:20 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **8/30/2011**	Analyst: **RM**
DRO (C10-C28)	**1,100**		**4.7**	**mg/Kg-dry**	1	8/31/2011 05:35 PM
Surr: 4-Terphenyl-d14	*60.7*		*39-115*	*%REC*	1	8/31/2011 05:35 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.8	mg/Kg-dry	100	8/31/2011 09:51 PM
Surr: Toluene-d8	*105*		*50-150*	*%REC*	100	8/31/2011 09:51 PM
MERCURY BY CVAA			**SW7471**		Prep Date: **8/31/2011**	Analyst: **LR**
Mercury	ND		0.020	mg/Kg-dry	1	9/1/2011 02:28 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **8/30/2011**	Analyst: **CES**
Arsenic	**2.0**		**1.8**	**mg/Kg-dry**	4	8/31/2011 07:09 PM
Barium	**620**		**1.8**	**mg/Kg-dry**	4	8/31/2011 07:09 PM
Cadmium	ND		0.70	mg/Kg-dry	4	8/31/2011 07:09 PM
Chromium	**17**		**1.8**	**mg/Kg-dry**	4	8/31/2011 07:09 PM
Copper	**6.9**		**1.8**	**mg/Kg-dry**	4	8/31/2011 07:09 PM
Lead	**12**		**1.8**	**mg/Kg-dry**	4	9/1/2011 12:42 PM
Nickel	**10**		**1.8**	**mg/Kg-dry**	4	8/31/2011 07:09 PM
Selenium	ND		1.8	mg/Kg-dry	4	8/31/2011 07:09 PM
Silver	ND		1.8	mg/Kg-dry	4	8/31/2011 07:09 PM
Zinc	**70**		**3.5**	**mg/Kg-dry**	4	8/31/2011 07:09 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 9/6/11**			**as noted**	1	9/6/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **8/30/2011**	Analyst: **HL**
Acenaphthene	ND		680	µg/Kg-dry	20	9/1/2011 11:02 PM
Anthracene	ND		34	µg/Kg-dry	1	8/31/2011 07:16 PM
Benzo(a)anthracene	ND		34	µg/Kg-dry	1	8/31/2011 07:16 PM
Benzo(a)pyrene	ND		34	µg/Kg-dry	1	8/31/2011 07:16 PM
Benzo(b)fluoranthene	ND		34	µg/Kg-dry	1	8/31/2011 07:16 PM
Benzo(g,h,i)perylene	ND		34	µg/Kg-dry	1	8/31/2011 07:16 PM
Benzo(k)fluoranthene	ND		34	µg/Kg-dry	1	8/31/2011 07:16 PM
Chrysene	ND		34	µg/Kg-dry	1	8/31/2011 07:16 PM
Dibenzo(a,h)anthracene	ND		34	µg/Kg-dry	1	8/31/2011 07:16 PM
Fluoranthene	ND		34	µg/Kg-dry	1	8/31/2011 07:16 PM
Fluorene	ND		680	µg/Kg-dry	20	9/1/2011 11:02 PM
Indeno(1,2,3-cd)pyrene	ND		34	µg/Kg-dry	1	8/31/2011 07:16 PM
Naphthalene	ND		34	µg/Kg-dry	1	8/31/2011 07:16 PM
Pyrene	ND		34	µg/Kg-dry	1	8/31/2011 07:16 PM
Surr: 2,4,6-Tribromophenol	*139*		*34-140*	*%REC*	1	8/31/2011 07:16 PM

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

ALS Group USA, Corp

Date: *08-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11 **Work Order:** 1108912
Sample ID: TR 22-20-597 N. Bottom **Lab ID:** 1108912-01
Collection Date: 8/24/2011 02:20 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	*86.4*		*12-100*	*%REC*	20	9/1/2011 11:02 PM
Surr: 2-Fluorophenol	*101*		*33-117*	*%REC*	1	8/31/2011 07:16 PM
Surr: 4-Terphenyl-d14	*106*		*25-137*	*%REC*	1	8/31/2011 07:16 PM
Surr: Nitrobenzene-d5	*66.8*		*37-107*	*%REC*	20	9/1/2011 11:02 PM
Surr: Phenol-d6	*103*		*40-106*	*%REC*	1	8/31/2011 07:16 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **BG**
Benzene	ND		120	µg/Kg-dry	100	9/1/2011 08:28 AM
Ethylbenzene	ND		120	µg/Kg-dry	100	9/1/2011 08:28 AM
m,p-Xylene	ND		120	µg/Kg-dry	100	9/1/2011 08:28 AM
o-Xylene	ND		120	µg/Kg-dry	100	9/1/2011 08:28 AM
Toluene	ND		120	µg/Kg-dry	100	9/1/2011 08:28 AM
Xylenes, Total	ND		350	µg/Kg-dry	100	9/1/2011 08:28 AM
Surr: 1,2-Dichloroethane-d4	*103*		*70-120*	*%REC*	100	9/1/2011 08:28 AM
Surr: 4-Bromofluorobenzene	*102*		*75-120*	*%REC*	100	9/1/2011 08:28 AM
Surr: Dibromofluoromethane	*94.6*		*85-115*	*%REC*	100	9/1/2011 08:28 AM
Surr: Toluene-d8	*97.4*		*85-115*	*%REC*	100	9/1/2011 08:28 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**17**			**mg/kg-dry**	1	9/2/2011 02:35 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **9/1/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	9/2/2011 01:00 PM
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**14**		**0.050**	**% of sample**	1	8/30/2011 02:49 PM
PH			**SW9045D**			Analyst: **JJG**
pH	**8.35**	H		**s.u.**	1	8/30/2011 10:15 AM

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

ALS Group USA, Corp

Date: *08-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11 **Work Order:** 1108912
Sample ID: TR 22-20-597 N. Wall **Lab ID:** 1108912-02
Collection Date: 8/24/2011 01:45 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **8/30/2011**	Analyst: **RM**
DRO (C10-C28)	**37**		**4.9**	**mg/Kg-dry**	1	8/31/2011 05:35 PM
Surr: 4-Terphenyl-d14	*89.7*		*39-115*	*%REC*	1	8/31/2011 05:35 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.9	mg/Kg-dry	100	8/31/2011 10:17 PM
Surr: Toluene-d8	*106*		*50-150*	*%REC*	100	8/31/2011 10:17 PM
MERCURY BY CVAA			**SW7471**		Prep Date: **8/31/2011**	Analyst: **LR**
Mercury	**0.027**		**0.018**	**mg/Kg-dry**	1	9/1/2011 02:30 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **8/30/2011**	Analyst: **CES**
Arsenic	**1.8**		**1.6**	**mg/Kg-dry**	4	8/31/2011 07:14 PM
Barium	**700**		**16**	**mg/Kg-dry**	40	9/1/2011 12:47 PM
Cadmium	ND		0.62	mg/Kg-dry	4	8/31/2011 07:14 PM
Chromium	**43**		**1.6**	**mg/Kg-dry**	4	8/31/2011 07:14 PM
Copper	**22**		**1.6**	**mg/Kg-dry**	4	8/31/2011 07:14 PM
Lead	**19**		**1.6**	**mg/Kg-dry**	4	9/1/2011 12:53 PM
Nickel	**24**		**1.6**	**mg/Kg-dry**	4	8/31/2011 07:14 PM
Selenium	ND		1.6	mg/Kg-dry	4	8/31/2011 07:14 PM
Silver	ND		1.6	mg/Kg-dry	4	8/31/2011 07:14 PM
Zinc	**72**		**3.1**	**mg/Kg-dry**	4	8/31/2011 07:14 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 9/6/11**			**as noted**	1	9/6/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **8/30/2011**	Analyst: **HL**
Acenaphthene	ND		35	µg/Kg-dry	1	8/31/2011 06:45 PM
Anthracene	ND		35	µg/Kg-dry	1	8/31/2011 06:45 PM
Benzo(a)anthracene	ND		35	µg/Kg-dry	1	8/31/2011 06:45 PM
Benzo(a)pyrene	ND		35	µg/Kg-dry	1	8/31/2011 06:45 PM
Benzo(b)fluoranthene	ND		35	µg/Kg-dry	1	8/31/2011 06:45 PM
Benzo(g,h,i)perylene	ND		35	µg/Kg-dry	1	8/31/2011 06:45 PM
Benzo(k)fluoranthene	ND		35	µg/Kg-dry	1	8/31/2011 06:45 PM
Chrysene	ND		35	µg/Kg-dry	1	8/31/2011 06:45 PM
Dibenzo(a,h)anthracene	ND		35	µg/Kg-dry	1	8/31/2011 06:45 PM
Fluoranthene	ND		35	µg/Kg-dry	1	8/31/2011 06:45 PM
Fluorene	ND		35	µg/Kg-dry	1	8/31/2011 06:45 PM
Indeno(1,2,3-cd)pyrene	ND		35	µg/Kg-dry	1	8/31/2011 06:45 PM
Naphthalene	ND		35	µg/Kg-dry	1	8/31/2011 06:45 PM
Pyrene	ND		35	µg/Kg-dry	1	8/31/2011 06:45 PM
Surr: 2,4,6-Tribromophenol	*111*		*34-140*	*%REC*	1	8/31/2011 06:45 PM

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

ALS Group USA, Corp

Date: *08-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11 **Work Order:** 1108912
Sample ID: TR 22-20-597 N. Wall **Lab ID:** 1108912-02
Collection Date: 8/24/2011 01:45 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	*69.8*		*12-100*	*%REC*	1	8/31/2011 06:45 PM
Surr: 2-Fluorophenol	*77.3*		*33-117*	*%REC*	1	8/31/2011 06:45 PM
Surr: 4-Terphenyl-d14	*98.3*		*25-137*	*%REC*	1	8/31/2011 06:45 PM
Surr: Nitrobenzene-d5	*67.1*		*37-107*	*%REC*	1	8/31/2011 06:45 PM
Surr: Phenol-d6	*75.9*		*40-106*	*%REC*	1	8/31/2011 06:45 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **BG**
Benzene	ND		120	µg/Kg-dry	100	9/1/2011 08:53 AM
Ethylbenzene	ND		120	µg/Kg-dry	100	9/1/2011 08:53 AM
m,p-Xylene	ND		120	µg/Kg-dry	100	9/1/2011 08:53 AM
o-Xylene	ND		120	µg/Kg-dry	100	9/1/2011 08:53 AM
Toluene	ND		120	µg/Kg-dry	100	9/1/2011 08:53 AM
Xylenes, Total	ND		360	µg/Kg-dry	100	9/1/2011 08:53 AM
Surr: 1,2-Dichloroethane-d4	*100*		*70-120*	*%REC*	100	9/1/2011 08:53 AM
Surr: 4-Bromofluorobenzene	*99.8*		*75-120*	*%REC*	100	9/1/2011 08:53 AM
Surr: Dibromofluoromethane	*93.2*		*85-115*	*%REC*	100	9/1/2011 08:53 AM
Surr: Toluene-d8	*97.5*		*85-115*	*%REC*	100	9/1/2011 08:53 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**43**			**mg/kg-dry**	1	9/2/2011 02:35 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **9/1/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.59	mg/Kg-dry	1	9/2/2011 01:00 PM
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**16**		**0.050**	**% of sample**	1	8/30/2011 02:49 PM
PH			**SW9045D**			Analyst: **JJG**
pH	**8.14**	H		**s.u.**	1	8/30/2011 10:15 AM

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

ALS Group USA, Corp

Date: *08-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11 **Work Order:** 1108912
Sample ID: TR 22-20-597 S Bottom **Lab ID:** 1108912-03
Collection Date: 8/24/2011 02:15 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **8/30/2011**	Analyst: **RM**
DRO (C10-C28)	**1,400**		**4.6**	**mg/Kg-dry**	1	8/31/2011 05:58 PM
Surr: 4-Terphenyl-d14	*80.9*		*39-115*	*%REC*	1	8/31/2011 05:58 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.7	mg/Kg-dry	100	8/31/2011 10:43 PM
Surr: Toluene-d8	*103*		*50-150*	*%REC*	100	8/31/2011 10:43 PM
MERCURY BY CVAA			**SW7471**		Prep Date: **8/31/2011**	Analyst: **LR**
Mercury	**0.024**		**0.021**	**mg/Kg-dry**	1	9/1/2011 02:32 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **8/30/2011**	Analyst: **CES**
Arsenic	**2.2**		**1.7**	**mg/Kg-dry**	4	8/31/2011 07:19 PM
Barium	**290**		**1.7**	**mg/Kg-dry**	4	8/31/2011 07:19 PM
Cadmium	**0.78**		**0.70**	**mg/Kg-dry**	4	8/31/2011 07:19 PM
Chromium	**16**		**1.7**	**mg/Kg-dry**	4	8/31/2011 07:19 PM
Copper	**7.9**		**1.7**	**mg/Kg-dry**	4	8/31/2011 07:19 PM
Lead	**13**		**1.7**	**mg/Kg-dry**	4	9/1/2011 12:58 PM
Nickel	**10**		**1.7**	**mg/Kg-dry**	4	8/31/2011 07:19 PM
Selenium	ND		1.7	mg/Kg-dry	4	8/31/2011 07:19 PM
Silver	ND		1.7	mg/Kg-dry	4	8/31/2011 07:19 PM
Zinc	**48**		**3.5**	**mg/Kg-dry**	4	8/31/2011 07:19 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 9/6/11**			**as noted**	1	9/6/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **8/30/2011**	Analyst: **HL**
Acenaphthene	ND		670	µg/Kg-dry	20	9/1/2011 11:33 PM
Anthracene	ND		670	µg/Kg-dry	20	9/1/2011 11:33 PM
Benzo(a)anthracene	ND		33	µg/Kg-dry	1	8/31/2011 06:14 PM
Benzo(a)pyrene	ND		33	µg/Kg-dry	1	8/31/2011 06:14 PM
Benzo(b)fluoranthene	ND		33	µg/Kg-dry	1	8/31/2011 06:14 PM
Benzo(g,h,i)perylene	ND		33	µg/Kg-dry	1	8/31/2011 06:14 PM
Benzo(k)fluoranthene	ND		33	µg/Kg-dry	1	8/31/2011 06:14 PM
Chrysene	ND		33	µg/Kg-dry	1	8/31/2011 06:14 PM
Dibenzo(a,h)anthracene	ND		33	µg/Kg-dry	1	8/31/2011 06:14 PM
Fluoranthene	ND		670	µg/Kg-dry	20	9/1/2011 11:33 PM
Fluorene	ND		670	µg/Kg-dry	20	9/1/2011 11:33 PM
Indeno(1,2,3-cd)pyrene	ND		33	µg/Kg-dry	1	8/31/2011 06:14 PM
Naphthalene	ND		33	µg/Kg-dry	1	8/31/2011 06:14 PM
Pyrene	**45**		**33**	**µg/Kg-dry**	1	8/31/2011 06:14 PM
Surr: 2,4,6-Tribromophenol	*85.2*		*34-140*	*%REC*	20	9/1/2011 11:33 PM

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

ALS Group USA, Corp

Date: *08-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11 **Work Order:** 1108912
Sample ID: TR 22-20-597 S Bottom **Lab ID:** 1108912-03
Collection Date: 8/24/2011 02:15 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	*84.8*		*12-100*	*%REC*	20	9/1/2011 11:33 PM
Surr: 2-Fluorophenol	*80.5*		*33-117*	*%REC*	1	8/31/2011 06:14 PM
Surr: 4-Terphenyl-d14	*83.5*		*25-137*	*%REC*	1	8/31/2011 06:14 PM
Surr: Nitrobenzene-d5	*71.2*		*37-107*	*%REC*	20	9/1/2011 11:33 PM
Surr: Phenol-d6	*88.1*		*40-106*	*%REC*	1	8/31/2011 06:14 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **BG**
Benzene	ND		110	µg/Kg-dry	100	9/1/2011 09:19 AM
Ethylbenzene	ND		110	µg/Kg-dry	100	9/1/2011 09:19 AM
m,p-Xylene	ND		110	µg/Kg-dry	100	9/1/2011 09:19 AM
o-Xylene	ND		110	µg/Kg-dry	100	9/1/2011 09:19 AM
Toluene	ND		110	µg/Kg-dry	100	9/1/2011 09:19 AM
Xylenes, Total	ND		340	µg/Kg-dry	100	9/1/2011 09:19 AM
Surr: 1,2-Dichloroethane-d4	*101*		*70-120*	*%REC*	100	9/1/2011 09:19 AM
Surr: 4-Bromofluorobenzene	*100*		*75-120*	*%REC*	100	9/1/2011 09:19 AM
Surr: Dibromofluoromethane	*94.7*		*85-115*	*%REC*	100	9/1/2011 09:19 AM
Surr: Toluene-d8	*97.2*		*85-115*	*%REC*	100	9/1/2011 09:19 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**16**			**mg/kg-dry**	1	9/2/2011 02:35 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **9/1/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.56	mg/Kg-dry	1	9/2/2011 01:00 PM
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**12**		**0.050**	**% of sample**	1	8/30/2011 02:49 PM
PH			**SW9045D**			Analyst: **JJG**
pH	**8.21**	H		**s.u.**	1	8/30/2011 10:15 AM

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

ALS Group USA, Corp

Date: *08-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11 **Work Order:** 1108912
Sample ID: TR 22-20-597 S. Wall **Lab ID:** 1108912-04
Collection Date: 8/24/2011 02:00 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **8/31/2011**	Analyst: **RM**
DRO (C10-C28)	**910**		**4.8**	**mg/Kg-dry**	1	9/1/2011 03:18 PM
Surr: 4-Terphenyl-d14	*51.2*		*39-115*	*%REC*	1	9/1/2011 03:18 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.9	mg/Kg-dry	100	8/31/2011 11:09 PM
Surr: Toluene-d8	*106*		*50-150*	*%REC*	100	8/31/2011 11:09 PM
MERCURY BY CVAA			**SW7471**		Prep Date: **8/31/2011**	Analyst: **LR**
Mercury	**0.020**		**0.019**	**mg/Kg-dry**	1	9/1/2011 02:34 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **8/30/2011**	Analyst: **CES**
Arsenic	**2.0**		**1.6**	**mg/Kg-dry**	4	8/31/2011 07:45 PM
Barium	**550**		**1.6**	**mg/Kg-dry**	4	8/31/2011 07:45 PM
Cadmium	ND		0.66	mg/Kg-dry	4	8/31/2011 07:45 PM
Chromium	**22**		**1.6**	**mg/Kg-dry**	4	8/31/2011 07:45 PM
Copper	**12**		**1.6**	**mg/Kg-dry**	4	8/31/2011 07:45 PM
Lead	**18**		**1.6**	**mg/Kg-dry**	4	9/1/2011 01:24 PM
Nickel	**14**		**1.6**	**mg/Kg-dry**	4	8/31/2011 07:45 PM
Selenium	ND		1.6	mg/Kg-dry	4	8/31/2011 07:45 PM
Silver	ND		1.6	mg/Kg-dry	4	8/31/2011 07:45 PM
Zinc	**67**		**3.3**	**mg/Kg-dry**	4	8/31/2011 07:45 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 9/6/11**			**as noted**	1	9/6/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **8/31/2011**	Analyst: **HL**
Acenaphthene	ND		350	µg/Kg-dry	10	9/8/2011 03:59 PM
Anthracene	ND		35	µg/Kg-dry	1	9/2/2011 01:07 AM
Benzo(a)anthracene	ND		35	µg/Kg-dry	1	9/2/2011 01:07 AM
Benzo(a)pyrene	ND		35	µg/Kg-dry	1	9/2/2011 01:07 AM
Benzo(b)fluoranthene	ND		35	µg/Kg-dry	1	9/2/2011 01:07 AM
Benzo(g,h,i)perylene	ND		35	µg/Kg-dry	1	9/2/2011 01:07 AM
Benzo(k)fluoranthene	ND		35	µg/Kg-dry	1	9/2/2011 01:07 AM
Chrysene	ND		35	µg/Kg-dry	1	9/2/2011 01:07 AM
Dibenzo(a,h)anthracene	ND		35	µg/Kg-dry	1	9/2/2011 01:07 AM
Fluoranthene	ND		35	µg/Kg-dry	1	9/2/2011 01:07 AM
Fluorene	ND		350	µg/Kg-dry	10	9/8/2011 03:59 PM
Indeno(1,2,3-cd)pyrene	ND		35	µg/Kg-dry	1	9/2/2011 01:07 AM
Naphthalene	ND		35	µg/Kg-dry	1	9/2/2011 01:07 AM
Pyrene	ND		35	µg/Kg-dry	1	9/2/2011 01:07 AM
Surr: 2,4,6-Tribromophenol	*134*		*34-140*	*%REC*	1	9/2/2011 01:07 AM

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

ALS Group USA, Corp

Date: *08-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11 **Work Order:** 1108912
Sample ID: TR 22-20-597 S. Wall **Lab ID:** 1108912-04
Collection Date: 8/24/2011 02:00 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	*118*	S	*12-100*	*%REC*	10	9/8/2011 03:59 PM
Surr: 2-Fluorophenol	*94.3*		*33-117*	*%REC*	1	9/2/2011 01:07 AM
Surr: 4-Terphenyl-d14	*99.6*		*25-137*	*%REC*	1	9/2/2011 01:07 AM
Surr: Nitrobenzene-d5	*123*	S	*37-107*	*%REC*	10	9/8/2011 03:59 PM
Surr: Phenol-d6	*90.9*		*40-106*	*%REC*	1	9/2/2011 01:07 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **BG**
Benzene	ND		120	µg/Kg-dry	100	9/1/2011 09:44 AM
Ethylbenzene	ND		120	µg/Kg-dry	100	9/1/2011 09:44 AM
m,p-Xylene	ND		120	µg/Kg-dry	100	9/1/2011 09:44 AM
o-Xylene	ND		120	µg/Kg-dry	100	9/1/2011 09:44 AM
Toluene	ND		120	µg/Kg-dry	100	9/1/2011 09:44 AM
Xylenes, Total	ND		350	µg/Kg-dry	100	9/1/2011 09:44 AM
Surr: 1,2-Dichloroethane-d4	*101*		*70-120*	*%REC*	100	9/1/2011 09:44 AM
Surr: 4-Bromofluorobenzene	*98.0*		*75-120*	*%REC*	100	9/1/2011 09:44 AM
Surr: Dibromofluoromethane	*94.4*		*85-115*	*%REC*	100	9/1/2011 09:44 AM
Surr: Toluene-d8	*94.7*		*85-115*	*%REC*	100	9/1/2011 09:44 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**22**			**mg/kg-dry**	1	9/2/2011 02:35 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **9/1/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.57	mg/Kg-dry	1	9/2/2011 01:00 PM
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**15**		**0.050**	**% of sample**	1	8/30/2011 02:49 PM
PH			**SW9045D**			Analyst: **JJG**
pH	**8.58**	H		**s.u.**	1	8/30/2011 10:15 AM

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

ALS Group USA, Corp

Date: *08-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11 **Work Order:** 1108912
Sample ID: TR 22-20-597 W. Wall **Lab ID:** 1108912-05
Collection Date: 8/24/2011 01:50 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **8/31/2011**	Analyst: **RM**
DRO (C10-C28)	**420**		**4.6**	**mg/Kg-dry**	1	9/1/2011 03:18 PM
Surr: 4-Terphenyl-d14	*71.8*		*39-115*	*%REC*	1	9/1/2011 03:18 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.7	mg/Kg-dry	100	8/31/2011 11:35 PM
Surr: Toluene-d8	*104*		*50-150*	*%REC*	100	8/31/2011 11:35 PM
MERCURY BY CVAA			**SW7471**		Prep Date: **8/31/2011**	Analyst: **LR**
Mercury	**0.043**		**0.021**	**mg/Kg-dry**	1	9/1/2011 02:41 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **8/30/2011**	Analyst: **CES**
Arsenic	**4.1**		**1.7**	**mg/Kg-dry**	4	8/31/2011 09:37 PM
Barium	**1,000**		**17**	**mg/Kg-dry**	40	9/1/2011 01:29 PM
Cadmium	ND		0.66	mg/Kg-dry	4	8/31/2011 09:37 PM
Chromium	**30**		**1.7**	**mg/Kg-dry**	4	8/31/2011 09:37 PM
Copper	**19**		**1.7**	**mg/Kg-dry**	4	8/31/2011 09:37 PM
Lead	**14**		**1.7**	**mg/Kg-dry**	4	8/31/2011 09:37 PM
Nickel	**18**		**1.7**	**mg/Kg-dry**	4	8/31/2011 09:37 PM
Selenium	ND		1.7	mg/Kg-dry	4	8/31/2011 09:37 PM
Silver	ND		1.7	mg/Kg-dry	4	8/31/2011 09:37 PM
Zinc	**78**		**3.3**	**mg/Kg-dry**	4	8/31/2011 09:37 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 9/6/11**			**as noted**	1	9/6/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **8/31/2011**	Analyst: **HL**
Acenaphthene	ND		33	µg/Kg-dry	1	9/2/2011 02:10 AM
Anthracene	ND		33	µg/Kg-dry	1	9/2/2011 02:10 AM
Benzo(a)anthracene	ND		33	µg/Kg-dry	1	9/2/2011 02:10 AM
Benzo(a)pyrene	ND		33	µg/Kg-dry	1	9/2/2011 02:10 AM
Benzo(b)fluoranthene	ND		33	µg/Kg-dry	1	9/2/2011 02:10 AM
Benzo(g,h,i)perylene	ND		33	µg/Kg-dry	1	9/2/2011 02:10 AM
Benzo(k)fluoranthene	ND		33	µg/Kg-dry	1	9/2/2011 02:10 AM
Chrysene	ND		33	µg/Kg-dry	1	9/2/2011 02:10 AM
Dibenzo(a,h)anthracene	ND		33	µg/Kg-dry	1	9/2/2011 02:10 AM
Fluoranthene	**60**		**33**	**µg/Kg-dry**	1	9/2/2011 02:10 AM
Fluorene	**42**		**33**	**µg/Kg-dry**	1	9/2/2011 02:10 AM
Indeno(1,2,3-cd)pyrene	ND		33	µg/Kg-dry	1	9/2/2011 02:10 AM
Naphthalene	**140**		**33**	**µg/Kg-dry**	1	9/2/2011 02:10 AM
Pyrene	**63**		**33**	**µg/Kg-dry**	1	9/2/2011 02:10 AM
Surr: 2,4,6-Tribromophenol	*105*		*34-140*	*%REC*	1	9/2/2011 02:10 AM

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

ALS Group USA, Corp

Date: *08-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11 **Work Order:** 1108912
Sample ID: TR 22-20-597 W. Wall **Lab ID:** 1108912-05
Collection Date: 8/24/2011 01:50 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	*92.0*		*12-100*	*%REC*	1	9/2/2011 02:10 AM
Surr: 2-Fluorophenol	*84.4*		*33-117*	*%REC*	1	9/2/2011 02:10 AM
Surr: 4-Terphenyl-d14	*103*		*25-137*	*%REC*	1	9/2/2011 02:10 AM
Surr: Nitrobenzene-d5	*79.7*		*37-107*	*%REC*	1	9/2/2011 02:10 AM
Surr: Phenol-d6	*84.8*		*40-106*	*%REC*	1	9/2/2011 02:10 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **BG**
Benzene	ND		110	µg/Kg-dry	100	9/1/2011 10:09 AM
Ethylbenzene	ND		110	µg/Kg-dry	100	9/1/2011 10:09 AM
m,p-Xylene	**120**		**110**	**µg/Kg-dry**	100	9/1/2011 10:09 AM
o-Xylene	ND		110	µg/Kg-dry	100	9/1/2011 10:09 AM
Toluene	ND		110	µg/Kg-dry	100	9/1/2011 10:09 AM
Xylenes, Total	ND		340	µg/Kg-dry	100	9/1/2011 10:09 AM
Surr: 1,2-Dichloroethane-d4	*100*		*70-120*	*%REC*	100	9/1/2011 10:09 AM
Surr: 4-Bromofluorobenzene	*100*		*75-120*	*%REC*	100	9/1/2011 10:09 AM
Surr: Dibromofluoromethane	*96.2*		*85-115*	*%REC*	100	9/1/2011 10:09 AM
Surr: Toluene-d8	*99.3*		*85-115*	*%REC*	100	9/1/2011 10:09 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**31**			**mg/kg-dry**	1	9/2/2011 02:35 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **9/1/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.55	mg/Kg-dry	1	9/2/2011 01:00 PM
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**12**		**0.050**	**% of sample**	1	8/30/2011 02:49 PM
PH			**SW9045D**			Analyst: **JJG**
pH	**8.65**	H		**s.u.**	1	8/30/2011 10:15 AM

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

ALS Group USA, Corp

Date: *08-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11 **Work Order:** 1108912
Sample ID: TR 22-20-597 E. Wall **Lab ID:** 1108912-06
Collection Date: 8/24/2011 02:10 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **8/31/2011**	Analyst: **RM**
DRO (C10-C28)	**13**		**4.8**	**mg/Kg-dry**	1	9/1/2011 03:42 PM
Surr: 4-Terphenyl-d14	*45.5*		*39-115*	*%REC*	1	9/1/2011 03:42 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.8	mg/Kg-dry	100	9/1/2011 12:01 PM
Surr: Toluene-d8	*103*		*50-150*	*%REC*	100	9/1/2011 12:01 PM
MERCURY BY CVAA			**SW7471**		Prep Date: **8/31/2011**	Analyst: **LR**
Mercury	**0.023**		**0.021**	**mg/Kg-dry**	1	9/1/2011 02:43 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **8/30/2011**	Analyst: **CES**
Arsenic	**2.8**		**1.8**	**mg/Kg-dry**	4	8/31/2011 10:04 PM
Barium	**380**		**1.8**	**mg/Kg-dry**	4	8/31/2011 10:04 PM
Cadmium	ND		0.73	mg/Kg-dry	4	8/31/2011 10:04 PM
Chromium	**38**		**1.8**	**mg/Kg-dry**	4	8/31/2011 10:04 PM
Copper	**13**		**1.8**	**mg/Kg-dry**	4	8/31/2011 10:04 PM
Lead	**17**		**1.8**	**mg/Kg-dry**	4	8/31/2011 10:04 PM
Nickel	**18**		**1.8**	**mg/Kg-dry**	4	8/31/2011 10:04 PM
Selenium	ND		1.8	mg/Kg-dry	4	8/31/2011 10:04 PM
Silver	ND		1.8	mg/Kg-dry	4	8/31/2011 10:04 PM
Zinc	**64**		**3.7**	**mg/Kg-dry**	4	8/31/2011 10:04 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 9/6/11**			**as noted**	1	9/6/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **9/6/2011**	Analyst: **HL**
Acenaphthene	ND		34	µg/Kg-dry	1	9/8/2011 02:36 AM
Anthracene	ND		34	µg/Kg-dry	1	9/8/2011 02:36 AM
Benzo(a)anthracene	ND		34	µg/Kg-dry	1	9/8/2011 02:36 AM
Benzo(a)pyrene	ND		34	µg/Kg-dry	1	9/8/2011 02:36 AM
Benzo(b)fluoranthene	ND		34	µg/Kg-dry	1	9/8/2011 02:36 AM
Benzo(g,h,i)perylene	ND		34	µg/Kg-dry	1	9/8/2011 02:36 AM
Benzo(k)fluoranthene	ND		34	µg/Kg-dry	1	9/8/2011 02:36 AM
Chrysene	ND		34	µg/Kg-dry	1	9/8/2011 02:36 AM
Dibenzo(a,h)anthracene	ND		34	µg/Kg-dry	1	9/8/2011 02:36 AM
Fluoranthene	ND		34	µg/Kg-dry	1	9/8/2011 02:36 AM
Fluorene	ND		34	µg/Kg-dry	1	9/8/2011 02:36 AM
Indeno(1,2,3-cd)pyrene	ND		34	µg/Kg-dry	1	9/8/2011 02:36 AM
Naphthalene	ND		34	µg/Kg-dry	1	9/8/2011 02:36 AM
Pyrene	ND		34	µg/Kg-dry	1	9/8/2011 02:36 AM
Surr: 2,4,6-Tribromophenol	*99.8*		*34-140*	*%REC*	1	9/8/2011 02:36 AM

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

ALS Group USA, Corp

Date: *08-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11 **Work Order:** 1108912
Sample ID: TR 22-20-597 E. Wall **Lab ID:** 1108912-06
Collection Date: 8/24/2011 02:10 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	*66.8*		*12-100*	*%REC*	1	9/8/2011 02:36 AM
Surr: 2-Fluorophenol	*83.0*		*33-117*	*%REC*	1	9/8/2011 02:36 AM
Surr: 4-Terphenyl-d14	*96.1*		*25-137*	*%REC*	1	9/8/2011 02:36 AM
Surr: Nitrobenzene-d5	*70.2*		*37-107*	*%REC*	1	9/8/2011 02:36 AM
Surr: Phenol-d6	*78.4*		*40-106*	*%REC*	1	9/8/2011 02:36 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **BG**
Benzene	ND		120	µg/Kg-dry	100	9/1/2011 10:34 AM
Ethylbenzene	ND		120	µg/Kg-dry	100	9/1/2011 10:34 AM
m,p-Xylene	**130**		**120**	**µg/Kg-dry**	100	9/1/2011 10:34 AM
o-Xylene	ND		120	µg/Kg-dry	100	9/1/2011 10:34 AM
Toluene	ND		120	µg/Kg-dry	100	9/1/2011 10:34 AM
Xylenes, Total	ND		350	µg/Kg-dry	100	9/1/2011 10:34 AM
Surr: 1,2-Dichloroethane-d4	*98.0*		*70-120*	*%REC*	100	9/1/2011 10:34 AM
Surr: 4-Bromofluorobenzene	*99.1*		*75-120*	*%REC*	100	9/1/2011 10:34 AM
Surr: Dibromofluoromethane	*94.3*		*85-115*	*%REC*	100	9/1/2011 10:34 AM
Surr: Toluene-d8	*99.0*		*85-115*	*%REC*	100	9/1/2011 10:34 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**37**			**mg/kg-dry**	1	9/2/2011 02:35 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **9/1/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	9/2/2011 01:00 PM
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**15**		**0.050**	**% of sample**	1	8/30/2011 02:49 PM
PH			**SW9045D**			Analyst: **JJG**
pH	**7.75**	H		**s.u.**	1	8/30/2011 10:15 AM

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

Report Number: F11244-0176
Acount Number: 91000

A & L GREAT LAKES LABORATORIES, INC.

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www.algreatlakes.com • lab@algreatlakes.com

QUALITY ANALYSES FOR INFORMED DECISIONS

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

RE: 1108912

DATE RECEIVED: 09/01/2011
DATE REPORTED: 09/06/2011
PAGE: 1
P.O. NUMBER: 20-122010668

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
82829	01C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.36	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	69	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	15	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	24	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	0.7	-	USDA Handbook 60
82830	02C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.81	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	113	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	21	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	441	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	10.0	-	USDA Handbook 60
82831	03C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	4.21	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	281	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	35	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	4811	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	71.2	-	USDA Handbook 60
82832	04C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	3.63	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	254	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	34	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	4024	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	62.8	-	USDA Handbook 60

Report Number: F11244-0176
Acount Number: 91000

A & L GREAT LAKES LABORATORIES, INC.

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QUALITY ANALYSES FOR INFORMED DECISIONS

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

RE: 1108912

DATE RECEIVED: 09/01/2011
DATE REPORTED: 09/06/2011
PAGE: 2
P.O. NUMBER: 20-122010668

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
82833	05C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	3.33	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	503	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	46	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	3740	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	42.7	-	USDA Handbook 60
82834	06C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.83	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	158	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	30	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	144	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	2.8	-	USDA Handbook 60

ALS Group USA, Corp

Date: 08-Sep-11

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1108912

Project: Williams TR 22-20-597 Pad LOE 8/24/11

Batch ID: **35214** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-35214-35214** Units: **mg/Kg** Analysis Date: **8/31/2011 12:52 PM**

Client ID: Run ID: **GC8_110830A** SeqNo: **1722245** Prep Date: **8/30/2011** 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	*1.312*	0	*1.667*	0	*78.7*	*39-115*	0			

LCS Sample ID: **DLCSS1-35214-35214** Units: **mg/Kg** Analysis Date: **8/31/2011 02:01 PM**

Client ID: Run ID: **GC8_110830A** SeqNo: **1723379** Prep Date: **8/30/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	150.4	4.2	166.7	0	90.2	60-130	0			
Surr: 4-Terphenyl-d14	*1.083*	0	*1.667*	0	*65*	*39-115*	0			

LCSD Sample ID: **DLCSDS1-35214-35214** Units: **mg/Kg** Analysis Date: **8/31/2011 02:01 PM**

Client ID: Run ID: **GC8_110830A** SeqNo: **1723419** Prep Date: **8/30/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	175.6	4.2	166.7	0	105	60-130	150.4	15.5	30	
Surr: 4-Terphenyl-d14	*1.288*	0	*1.667*	0	*77.3*	*39-115*	1.083	*17.3*	*30*	

MS Sample ID: **1108889-20B MS** Units: **mg/Kg** Analysis Date: **8/31/2011 02:24 PM**

Client ID: Run ID: **GC8_110830A** SeqNo: **1723380** Prep Date: **8/30/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	276.9	7.9	316.4	4.124	86.2	60-130	0			
Surr: 4-Terphenyl-d14	*1.939*	0	*3.164*	0	*61.3*	*39-115*	0			

MSD Sample ID: **1108889-20B MSD** Units: **mg/Kg** Analysis Date: **8/31/2011 02:24 PM**

Client ID: Run ID: **GC8_110830A** SeqNo: **1723420** Prep Date: **8/30/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	226.2	8.1	322.4	4.124	68.9	60-130	276.9	20.2	30	
Surr: 4-Terphenyl-d14	*1.819*	0	*3.224*	0	*56.4*	*39-115*	1.939	*6.35*	*30*	

The following samples were analyzed in this batch: 1108912-01B 1108912-02B 1108912-03B

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35236** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-35236-35236** Units: **mg/Kg** Analysis Date: **9/1/2011 02:55 PM**
Client ID: Run ID: **GC8_110901A** SeqNo: **1723709** Prep Date: **8/31/2011** 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	*1.36*	0	*1.667*	0	*81.6*	*39-115*	0			

LCS Sample ID: **DLCSS1-35236-35236** Units: **mg/Kg** Analysis Date: **9/1/2011 12:59 PM**
Client ID: Run ID: **GC8_110901A** SeqNo: **1724697** Prep Date: **8/31/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	158.1	4.2	166.7	0	94.9	60-130	0			
Surr: 4-Terphenyl-d14	*1.182*	0	*1.667*	0	*70.9*	*39-115*	0			

LCSD Sample ID: **DLCSDS1-35236-35236** Units: **mg/Kg** Analysis Date: **9/1/2011 01:23 PM**
Client ID: Run ID: **GC8_110901A** SeqNo: **1724676** Prep Date: **8/31/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	168	4.2	166.7	0	101	60-130	158.1	6.05	30	
Surr: 4-Terphenyl-d14	*1.06*	0	*1.667*	0	*63.6*	*39-115*	1.182	*10.8*	*30*	

MS Sample ID: **1108926-27B MS** Units: **mg/Kg** Analysis Date: **9/1/2011 01:23 PM**
Client ID: Run ID: **GC8_110901A** SeqNo: **1724698** Prep Date: **8/31/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	287.3	8.1	324.7	3.173	87.5	60-130	0			
Surr: 4-Terphenyl-d14	*2.023*	0	*3.247*	0	*62.3*	*39-115*	0			

MSD Sample ID: **1108926-27B MSD** Units: **mg/Kg** Analysis Date: **9/1/2011 01:46 PM**
Client ID: Run ID: **GC8_110901A** SeqNo: **1724677** Prep Date: **8/31/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	356.8	8.3	331.9	3.173	107	60-130	287.3	21.6	30	
Surr: 4-Terphenyl-d14	*2.177*	0	*3.319*	0	*65.6*	*39-115*	2.023	*7.32*	*30*	

The following samples were analyzed in this batch: 1108912-04B 1108912-05B 1108912-06B

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **R94173** Instrument ID **GC9** Method: **SW8015**

MBLK Sample ID: **MBLK-R94173-R94173** Units: **µg/L** Analysis Date: **8/31/2011 03:19 PM**
Client ID: Run ID: **GC9_110831A** SeqNo: **1723625** 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	*110.1*	0	*100*	0	*110*	*70-130*	0			

LCS Sample ID: **LCS-R94173-R94173** Units: **µg/L** Analysis Date: **8/31/2011 02:01 PM**
Client ID: Run ID: **GC9_110831A** SeqNo: **1723623** 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)	26600	200	25000	0	106	70-130	0			
Surr: Toluene-d8	*111.9*	0	*100*	0	*112*	*70-130*	0			

LCSD Sample ID: **LCSD-R94173-R94173** Units: **µg/L** Analysis Date: **8/31/2011 02:27 PM**
Client ID: Run ID: **GC9_110831A** SeqNo: **1723624** 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)	25570	200	25000	0	102	70-130	26600	3.94	30	
Surr: Toluene-d8	*105.8*	0	*100*	0	*106*	*70-130*	111.9	*5.56*	*30*	

MS Sample ID: **1108889-20A MS** Units: **µg/Kg** Analysis Date: **9/1/2011 01:18 AM**
Client ID: Run ID: **GC9_110831A** SeqNo: **1723645** 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)	1300000	2,500	1250000	0	104	70-130	0			
Surr: Toluene-d8	*5097*	0	*5000*	0	*102*	*50-150*	0			

MS Sample ID: **1108889-06A MS** Units: **µg/Kg** Analysis Date: **9/1/2011 12:27 PM**
Client ID: Run ID: **GC9_110831A** SeqNo: **1723648** 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)	1367000	2,500	1250000	0	109	70-130	0			
Surr: Toluene-d8	*5460*	0	*5000*	0	*109*	*50-150*	0			

MSD Sample ID: **1108889-20A MSD** Units: **µg/Kg** Analysis Date: **9/1/2011 01:44 AM**
Client ID: Run ID: **GC9_110831A** SeqNo: **1723646** 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)	1259000	2,500	1250000	0	101	70-130	1300000	3.16	30	
Surr: Toluene-d8	*5130*	0	*5000*	0	*103*	*50-150*	5097	*0.645*	*30*	

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **R94173** Instrument ID **GC9** Method: **SW8015**

MSD Sample ID: **1108889-06A MSD** Units: **µg/Kg** Analysis Date: **9/1/2011 12:53 PM**

Client ID: Run ID: **GC9_110831A** SeqNo: **1723649** 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)	1321000	2,500	1250000	0	106	70-130	1367000	3.38	30	
Surr: Toluene-d8	*5160*	0	*5000*	0	*103*	*50-150*	5460	*5.64*	*30*	

The following samples were analyzed in this batch:

1108912-01A	1108912-02A	1108912-03A
1108912-04A	1108912-05A	1108912-06A

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35252** Instrument ID **HG1** Method: **SW7471**

MBLK Sample ID: **MBLK-35252-35252** Units: **mg/Kg** Analysis Date: **9/1/2011 01:49 PM**
Client ID: Run ID: **HG1_110901A** SeqNo: **1723335** Prep Date: **8/31/2011** 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-35252-35252** Units: **mg/Kg** Analysis Date: **9/1/2011 01:51 PM**
Client ID: Run ID: **HG1_110901A** SeqNo: **1723336** Prep Date: **8/31/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1721	0.020	0.1665	0	103	80-120	0			

LCSD Sample ID: **LCSD-35252-35252** Units: **mg/Kg** Analysis Date: **9/1/2011 01:53 PM**
Client ID: Run ID: **HG1_110901A** SeqNo: **1723337** Prep Date: **8/31/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1744	0.020	0.1665	0	105	80-120	0.1721	1.35	20	

MS Sample ID: **1108867-03A MS** Units: **mg/Kg** Analysis Date: **9/1/2011 02:00 PM**
Client ID: Run ID: **HG1_110901A** SeqNo: **1723340** Prep Date: **8/31/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1475	0.017	0.1415	0.0005556	104	75-125	0			

MSD Sample ID: **1108867-03A MSD** Units: **mg/Kg** Analysis Date: **9/1/2011 02:02 PM**
Client ID: Run ID: **HG1_110901A** SeqNo: **1723341** Prep Date: **8/31/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1574	0.018	0.1507	0.0005556	104	75-125	0.1475	6.52	35	

The following samples were analyzed in this batch:

1108912-01B	1108912-02B	1108912-03B
1108912-04B	1108912-05B	1108912-06B

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35228** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-35228-35228** Units: **mg/Kg** Analysis Date: **8/31/2011 06:11 PM**
Client ID: Run ID: **ICPMS1_110831A** SeqNo: **1722949** Prep Date: **8/30/2011** 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	0.001396	0.10								J
Chromium	0.004901	0.25								J
Copper	ND	0.25								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	0.04614	0.50								J

LCS Sample ID: **LCS-35228-35228** Units: **mg/Kg** Analysis Date: **8/31/2011 06:16 PM**
Client ID: Run ID: **ICPMS1_110831A** SeqNo: **1722950** Prep Date: **8/30/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.609	0.50	5	0	92.2	80-120	0			
Barium	4.557	0.50	5	0	91.1	80-120	0			
Cadmium	4.603	0.20	5	0	92.1	80-120	0			
Chromium	4.679	0.50	5	0	93.6	80-120	0			
Copper	4.727	0.50	5	0	94.5	80-120	0			
Lead	4.696	0.50	5	0	93.9	80-120	0			
Nickel	4.736	0.50	5	0	94.7	80-120	0			
Selenium	4.543	0.50	5	0	90.9	80-120	0			
Silver	4.487	0.50	5	0	89.7	80-120	0			
Zinc	4.629	1.0	5	0	92.6	80-120	0			

LCSD Sample ID: **LCSD-35228-35228** Units: **mg/Kg** Analysis Date: **8/31/2011 06:21 PM**
Client ID: Run ID: **ICPMS1_110831A** SeqNo: **1722951** Prep Date: **8/30/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.403	0.50	5	0	88.1	80-120	4.609	4.57	20	
Barium	4.427	0.50	5	0	88.5	80-120	4.557	2.89	20	
Cadmium	4.452	0.20	5	0	89	80-120	4.603	3.34	20	
Chromium	4.506	0.50	5	0	90.1	80-120	4.679	3.77	20	
Copper	4.482	0.50	5	0	89.6	80-120	4.727	5.32	20	
Lead	4.481	0.50	5	0	89.6	80-120	4.696	4.69	20	
Nickel	4.513	0.50	5	0	90.3	80-120	4.736	4.82	20	
Selenium	4.486	0.50	5	0	89.7	80-120	4.543	1.26	20	
Silver	4.313	0.50	5	0	86.3	80-120	4.487	3.95	20	
Zinc	4.459	1.0	5	0	89.2	80-120	4.629	3.74	20	

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35228** Instrument ID **ICPMS1** Method: **SW6020A**

MS Sample ID: **1108912-03BMS** Units: **mg/Kg** Analysis Date: **8/31/2011 07:30 PM**
Client ID: **TR 22-20-597 S Bottom** Run ID: **ICPMS1_110831A** SeqNo: **1722962** Prep Date: **8/30/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	8.025	1.4	6.84	1.905	89.5	80-120	0			
Barium	302.3	1.4	6.84	252.2	734	80-120	0			SO
Cadmium	7.111	0.55	6.84	0.6827	94	80-120	0			
Chromium	19.5	1.4	6.84	14.36	75.2	80-120	0			S
Copper	12.23	1.4	6.84	6.889	78.1	80-120	0			S
Nickel	14.9	1.4	6.84	8.84	88.6	80-120	0			
Selenium	6.865	1.4	6.84	0.8821	87.5	80-120	0			
Silver	5.261	1.4	6.84	0.04208	76.3	80-120	0			S
Zinc	51.6	2.7	6.84	41.83	143	80-120	0			SO

MS Sample ID: **1108912-03BMS** Units: **mg/Kg** Analysis Date: **9/1/2011 01:08 PM**
Client ID: **TR 22-20-597 S Bottom** Run ID: **ICPMS1_110901A** SeqNo: **1723489** Prep Date: **8/30/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Lead	21.47	1.4	6.84	11.44	147	80-120	0			S

MSD Sample ID: **1108912-03BMSD** Units: **mg/Kg** Analysis Date: **8/31/2011 07:35 PM**
Client ID: **TR 22-20-597 S Bottom** Run ID: **ICPMS1_110831A** SeqNo: **1722963** Prep Date: **8/30/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	8.815	1.5	7.692	1.905	89.8	80-120	8.025	9.39	25	
Barium	312.6	1.5	7.692	252.2	786	80-120	302.3	3.35	25	SO
Cadmium	7.6	0.62	7.692	0.6827	89.9	80-120	7.111	6.65	25	
Chromium	22.05	1.5	7.692	14.36	100	80-120	19.5	12.3	25	
Copper	13.9	1.5	7.692	6.889	91.2	80-120	12.23	12.8	25	
Nickel	16.44	1.5	7.692	8.84	98.8	80-120	14.9	9.79	25	
Selenium	7.225	1.5	7.692	0.8821	82.5	80-120	6.865	5.11	25	
Silver	6.138	1.5	7.692	0.04208	79.3	80-120	5.261	15.4	25	S
Zinc	57.14	3.1	7.692	41.83	199	80-120	51.6	10.2	25	SO

MSD Sample ID: **1108912-03BMSD** Units: **mg/Kg** Analysis Date: **9/1/2011 01:14 PM**
Client ID: **TR 22-20-597 S Bottom** Run ID: **ICPMS1_110901A** SeqNo: **1723491** Prep Date: **8/30/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Lead	22.34	1.5	7.692	11.44	142	80-120	21.47	3.96	25	S

The following samples were analyzed in this batch:

1108912-01B	1108912-02B	1108912-03B
1108912-04B	1108912-05B	1108912-06B

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35213** Instrument ID **SVMS4** Method: **SW8270**

MBLK Sample ID: **SBLKS1-35213-35213** Units: **µg/Kg** Analysis Date: **8/31/2011 10:59 AM**

Client ID: Run ID: **SVMS4_110831A** SeqNo: **1721969** Prep Date: **8/30/2011** 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	*1260*	0	*1667*	0	*75.6*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1153*	0	*1667*	0	*69.2*	*12-100*	0			
Surr: 2-Fluorophenol	*1222*	0	*1667*	0	*73.3*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1431*	0	*1667*	0	*85.9*	*25-137*	0			
Surr: Nitrobenzene-d5	*1131*	0	*1667*	0	*67.8*	*37-107*	0			
Surr: Phenol-d6	*1236*	0	*1667*	0	*74.1*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35213** Instrument ID **SVMS4** Method: **SW8270**

LCS Sample ID: **SLCSS1-35213-35213** Units: **µg/Kg** Analysis Date: **8/31/2011 09:57 AM**

Client ID: Run ID: **SVMS4_110831A** SeqNo: **1722118** Prep Date: **8/30/2011** 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	1336	30	1333	0	100	55-105	0			
Benzo(a)anthracene	1278	30	1333	0	95.9	50-110	0			
Benzo(a)pyrene	1194	30	1333	0	89.6	50-110	0			
Benzo(b)fluoranthene	1253	30	1333	0	94	45-115	0			
Benzo(g,h,i)perylene	1199	30	1333	0	89.9	40-125	0			
Benzo(k)fluoranthene	1264	30	1333	0	94.8	45-115	0			
Chrysene	1368	30	1333	0	103	55-110	0			
Dibenzo(a,h)anthracene	1226	30	1333	0	92	40-125	0			
Fluoranthene	1239	30	1333	0	92.9	55-115	0			
Fluorene	1256	30	1333	0	94.2	50-110	0			
Indeno(1,2,3-cd)pyrene	1213	30	1333	0	91	40-120	0			
Naphthalene	924.3	30	1333	0	69.3	40-105	0			
Pyrene	1201	30	1333	0	90.1	45-125	0			
Surr: 2,4,6-Tribromophenol	*1522*	0	*1667*	0	*91.3*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1238*	0	*1667*	0	*74.3*	*12-100*	0			
Surr: 2-Fluorophenol	*1112*	0	*1667*	0	*66.7*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1590*	0	*1667*	0	*95.4*	*25-137*	0			
Surr: Nitrobenzene-d5	*1163*	0	*1667*	0	*69.8*	*37-107*	0			
Surr: Phenol-d6	*1197*	0	*1667*	0	*71.8*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35213** Instrument ID **SVMS4** Method: **SW8270**

LCSD Sample ID: **SLCSDS1-35213-35213** Units: **µg/Kg** Analysis Date: **8/31/2011 10:28 AM**

Client ID: Run ID: **SVMS4_110831A** SeqNo: **1722119** Prep Date: **8/30/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1259	30	1333	0	94.5	45-110	1153	8.84	25	
Anthracene	1367	30	1333	0	103	55-105	1336	2.32	25	
Benzo(a)anthracene	1307	30	1333	0	98	50-110	1278	2.24	25	
Benzo(a)pyrene	1216	30	1333	0	91.2	50-110	1194	1.83	25	
Benzo(b)fluoranthene	1174	30	1333	0	88.1	45-115	1253	6.51	25	
Benzo(g,h,i)perylene	1224	30	1333	0	91.8	40-125	1199	2.06	25	
Benzo(k)fluoranthene	1240	30	1333	0	93	45-115	1264	1.89	25	
Chrysene	1383	30	1333	0	104	55-110	1368	1.11	25	
Dibenzo(a,h)anthracene	1266	30	1333	0	95	40-125	1226	3.18	25	
Fluoranthene	1274	30	1333	0	95.5	55-115	1239	2.79	25	
Fluorene	1302	30	1333	0	97.7	50-110	1256	3.62	25	
Indeno(1,2,3-cd)pyrene	1253	30	1333	0	94	40-120	1213	3.24	25	
Naphthalene	1126	30	1333	0	84.5	40-105	924.3	19.7	25	
Pyrene	1262	30	1333	0	94.7	45-125	1201	4.95	25	
Surr: 2,4,6-Tribromophenol	*1613*	0	*1667*	0	*96.8*	*34-140*	1522	*5.76*	*40*	
Surr: 2-Fluorobiphenyl	*1476*	0	*1667*	0	*88.5*	*12-100*	1238	*17.5*	*40*	
Surr: 2-Fluorophenol	*1384*	0	*1667*	0	*83.1*	*33-117*	1112	*21.8*	*40*	
Surr: 4-Terphenyl-d14	*1644*	0	*1667*	0	*98.6*	*25-137*	1590	*3.36*	*40*	
Surr: Nitrobenzene-d5	*1422*	0	*1667*	0	*85.3*	*37-107*	1163	*20*	*40*	
Surr: Phenol-d6	*1483*	0	*1667*	0	*89*	*40-106*	1197	*21.3*	*40*	

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35213** Instrument ID **SVMS4** Method: **SW8270**

MS Sample ID: **1108889-20B MS** Units: **µg/Kg** Analysis Date: **8/31/2011 11:30 AM**

Client ID: Run ID: **SVMS4_110831A** SeqNo: **1722120** Prep Date: **8/30/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1870	57	2546	0	73.5	45-110	0			
Anthracene	2013	57	2546	0	79.1	55-105	0			
Benzo(a)anthracene	1978	57	2546	0	77.7	50-110	0			
Benzo(a)pyrene	1713	57	2546	0	67.3	50-110	0			
Benzo(b)fluoranthene	1841	57	2546	0	72.3	45-115	0			
Benzo(g,h,i)perylene	1757	57	2546	0	69	40-125	0			
Benzo(k)fluoranthene	1815	57	2546	0	71.3	45-115	0			
Chrysene	2037	57	2546	0	80	55-110	0			
Dibenzo(a,h)anthracene	1818	57	2546	0	71.4	40-125	0			
Fluoranthene	1825	57	2546	0	71.7	55-115	0			
Fluorene	1981	57	2546	0	77.8	50-110	0			
Indeno(1,2,3-cd)pyrene	1776	57	2546	0	69.8	40-120	0			
Naphthalene	1759	57	2546	0	69.1	40-105	0			
Pyrene	1862	57	2546	0	73.2	45-125	0			
Surr: 2,4,6-Tribromophenol	*2535*	0	*3182*	0	*79.7*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*2092*	0	*3182*	0	*65.7*	*12-100*	0			
Surr: 2-Fluorophenol	*2086*	0	*3182*	0	*65.5*	*33-117*	0			
Surr: 4-Terphenyl-d14	*2140*	0	*3182*	0	*67.3*	*25-137*	0			
Surr: Nitrobenzene-d5	*2238*	0	*3182*	0	*70.3*	*37-107*	0			
Surr: Phenol-d6	*2202*	0	*3182*	0	*69.2*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35213** Instrument ID **SVMS4** Method: **SW8270**

MSD Sample ID: **1108889-20B MSD** Units: **µg/Kg** Analysis Date: **8/31/2011 12:01 PM**

Client ID: Run ID: **SVMS4_110831A** SeqNo: **1722121** Prep Date: **8/30/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1795	59	2643	0	67.9	45-110	1870	4.1	30	
Anthracene	1827	59	2643	0	69.1	55-105	2013	9.68	30	
Benzo(a)anthracene	1786	59	2643	0	67.6	50-110	1978	10.2	30	
Benzo(a)pyrene	1533	59	2643	0	58	50-110	1713	11.1	30	
Benzo(b)fluoranthene	1558	59	2643	0	59	45-115	1841	16.6	30	
Benzo(g,h,i)perylene	1546	59	2643	0	58.5	40-125	1757	12.7	30	
Benzo(k)fluoranthene	1821	59	2643	0	68.9	45-115	1815	0.336	30	
Chrysene	1799	59	2643	0	68.1	55-110	2037	12.4	30	
Dibenzo(a,h)anthracene	1560	59	2643	0	59	40-125	1818	15.3	30	
Fluoranthene	1657	59	2643	0	62.7	55-115	1825	9.61	30	
Fluorene	1877	59	2643	0	71	50-110	1981	5.42	30	
Indeno(1,2,3-cd)pyrene	1542	59	2643	0	58.4	40-120	1776	14.1	30	
Naphthalene	1737	59	2643	0	65.7	40-105	1759	1.25	30	
Pyrene	1657	59	2643	0	62.7	45-125	1862	11.7	30	
Surr: 2,4,6-Tribromophenol	*2336*	0	*3304*	0	*70.7*	*34-140*	2535	*8.17*	*40*	
Surr: 2-Fluorobiphenyl	*2037*	0	*3304*	0	*61.6*	*12-100*	2092	*2.68*	*40*	
Surr: 2-Fluorophenol	*2061*	0	*3304*	0	*62.4*	*33-117*	2086	*1.21*	*40*	
Surr: 4-Terphenyl-d14	*1841*	0	*3304*	0	*55.7*	*25-137*	2140	*15*	*40*	
Surr: Nitrobenzene-d5	*2234*	0	*3304*	0	*67.6*	*37-107*	2238	*0.212*	*40*	
Surr: Phenol-d6	*2172*	0	*3304*	0	*65.7*	*40-106*	2202	*1.34*	*40*	

The following samples were analyzed in this batch: 1108912-01B 1108912-02B 1108912-03B

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35235** Instrument ID **SVMS6** Method: **SW8270**

MBLK Sample ID: **SBLKS1-35235-35235** Units: **µg/Kg** Analysis Date: **9/1/2011 11:58 AM**

Client ID: Run ID: **SVMS6_110901A** SeqNo: **1724106** Prep Date: **8/31/2011** 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	*1546*	0	*1667*	0	*92.7*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1272*	0	*1667*	0	*76.3*	*12-100*	0			
Surr: 2-Fluorophenol	*1393*	0	*1667*	0	*83.6*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1410*	0	*1667*	0	*84.6*	*25-137*	0			
Surr: Nitrobenzene-d5	*1378*	0	*1667*	0	*82.7*	*37-107*	0			
Surr: Phenol-d6	*1412*	0	*1667*	0	*84.7*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35235** Instrument ID **SVMS6** Method: **SW8270**

LCS Sample ID: **SLCSS1-35235-35235** Units: **µg/Kg** Analysis Date: **9/1/2011 11:04 AM**

Client ID: Run ID: **SVMS6_110901A** SeqNo: **1724104** Prep Date: **8/31/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1181	30	1333	0	88.6	45-110	0			
Anthracene	1242	30	1333	0	93.2	55-105	0			
Benzo(a)anthracene	1235	30	1333	0	92.6	50-110	0			
Benzo(a)pyrene	1314	30	1333	0	98.5	50-110	0			
Benzo(b)fluoranthene	1239	30	1333	0	92.9	45-115	0			
Benzo(g,h,i)perylene	1342	30	1333	0	101	40-125	0			
Benzo(k)fluoranthene	1309	30	1333	0	98.2	45-115	0			
Chrysene	1226	30	1333	0	92	55-110	0			
Dibenzo(a,h)anthracene	1367	30	1333	0	103	40-125	0			
Fluoranthene	1253	30	1333	0	94	55-115	0			
Fluorene	1191	30	1333	0	89.3	50-110	0			
Indeno(1,2,3-cd)pyrene	1361	30	1333	0	102	40-120	0			
Naphthalene	1164	30	1333	0	87.3	40-105	0			
Pyrene	1249	30	1333	0	93.7	45-125	0			
Surr: 2,4,6-Tribromophenol	*1689*	0	*1667*	0	*101*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1305*	0	*1667*	0	*78.3*	*12-100*	0			
Surr: 2-Fluorophenol	*1371*	0	*1667*	0	*82.3*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1483*	0	*1667*	0	*89*	*25-137*	0			
Surr: Nitrobenzene-d5	*1395*	0	*1667*	0	*83.7*	*37-107*	0			
Surr: Phenol-d6	*1345*	0	*1667*	0	*80.7*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35235** Instrument ID **SVMS6** Method: **SW8270**

LCSD Sample ID: **SLCSDS1-35235-35235** Units: **µg/Kg** Analysis Date: **9/1/2011 11:31 AM**

Client ID: Run ID: **SVMS6_110901A** SeqNo: **1724105** Prep Date: **8/31/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1092	30	1333	0	81.9	45-110	1181	7.8	25	
Anthracene	1188	30	1333	0	89.1	55-105	1242	4.44	25	
Benzo(a)anthracene	1204	30	1333	0	90.3	50-110	1235	2.49	25	
Benzo(a)pyrene	1270	30	1333	0	95.2	50-110	1314	3.41	25	
Benzo(b)fluoranthene	1348	30	1333	0	101	45-115	1239	8.43	25	
Benzo(g,h,i)perylene	1210	30	1333	0	90.7	40-125	1342	10.3	25	
Benzo(k)fluoranthene	1319	30	1333	0	98.9	45-115	1309	0.736	25	
Chrysene	1204	30	1333	0	90.3	55-110	1226	1.81	25	
Dibenzo(a,h)anthracene	1315	30	1333	0	98.6	40-125	1367	3.88	25	
Fluoranthene	1215	30	1333	0	91.2	55-115	1253	3.03	25	
Fluorene	1122	30	1333	0	84.1	50-110	1191	6	25	
Indeno(1,2,3-cd)pyrene	1300	30	1333	0	97.5	40-120	1361	4.53	25	
Naphthalene	1055	30	1333	0	79.1	40-105	1164	9.88	25	
Pyrene	1222	30	1333	0	91.7	45-125	1249	2.19	25	
Surr: 2,4,6-Tribromophenol	*1595*	0	*1667*	0	*95.7*	*34-140*	1689	*5.72*	*40*	
Surr: 2-Fluorobiphenyl	*1199*	0	*1667*	0	*71.9*	*12-100*	1305	*8.47*	*40*	
Surr: 2-Fluorophenol	*1286*	0	*1667*	0	*77.2*	*33-117*	1371	*6.37*	*40*	
Surr: 4-Terphenyl-d14	*1471*	0	*1667*	0	*88.3*	*25-137*	1483	*0.812*	*40*	
Surr: Nitrobenzene-d5	*1287*	0	*1667*	0	*77.2*	*37-107*	1395	*8.06*	*40*	
Surr: Phenol-d6	*1263*	0	*1667*	0	*75.8*	*40-106*	1345	*6.31*	*40*	

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35235** Instrument ID **SVMS6** Method: **SW8270**

MS Sample ID: **1108926-27B MS** Units: **µg/Kg** Analysis Date: **9/1/2011 02:59 PM**

Client ID: Run ID: **SVMS6_110901A** SeqNo: **1724444** Prep Date: **8/31/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	2149	59	2604	0	82.5	45-110	0			
Anthracene	2305	59	2604	0	88.5	55-105	0			
Benzo(a)anthracene	2310	59	2604	0	88.7	50-110	0			
Benzo(a)pyrene	2418	59	2604	0	92.8	50-110	0			
Benzo(b)fluoranthene	2526	59	2604	0	97	45-115	0			
Benzo(g,h,i)perylene	2388	59	2604	0	91.7	40-125	0			
Benzo(k)fluoranthene	2621	59	2604	0	101	45-115	0			
Chrysene	2343	59	2604	0	90	55-110	0			
Dibenzo(a,h)anthracene	2505	59	2604	0	96.2	40-125	0			
Fluoranthene	2349	59	2604	0	90.2	55-115	0			
Fluorene	2201	59	2604	0	84.5	50-110	0			
Indeno(1,2,3-cd)pyrene	2452	59	2604	0	94.2	40-120	0			
Naphthalene	2088	59	2604	0	80.2	40-105	0			
Pyrene	2383	59	2604	0	91.5	45-125	0			
Surr: 2,4,6-Tribromophenol	*3134*	0	*3256*	0	*96.3*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*2329*	0	*3256*	0	*71.5*	*12-100*	0			
Surr: 2-Fluorophenol	*2506*	0	*3256*	0	*77*	*33-117*	0			
Surr: 4-Terphenyl-d14	*2667*	0	*3256*	0	*81.9*	*25-137*	0			
Surr: Nitrobenzene-d5	*2576*	0	*3256*	0	*79.1*	*37-107*	0			
Surr: Phenol-d6	*2487*	0	*3256*	0	*76.4*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35235** Instrument ID **SVMS6** Method: **SW8270**

MSD Sample ID: **1108926-27B MSD** Units: **µg/Kg** Analysis Date: **9/1/2011 03:27 PM**

Client ID: Run ID: **SVMS6_110901A** SeqNo: **1724445** Prep Date: **8/31/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	2190	60	2650	0	82.6	45-110	2149	1.9	30	
Anthracene	2305	60	2650	0	87	55-105	2305	0.00899	30	
Benzo(a)anthracene	2312	60	2650	0	87.3	50-110	2310	0.127	30	
Benzo(a)pyrene	2432	60	2650	0	91.8	50-110	2418	0.582	30	
Benzo(b)fluoranthene	2590	60	2650	0	97.7	45-115	2526	2.49	30	
Benzo(g,h,i)perylene	2439	60	2650	0	92	40-125	2388	2.1	30	
Benzo(k)fluoranthene	2420	60	2650	0	91.3	45-115	2621	7.97	30	
Chrysene	2320	60	2650	0	87.5	55-110	2343	0.986	30	
Dibenzo(a,h)anthracene	2516	60	2650	0	94.9	40-125	2505	0.439	30	
Fluoranthene	2340	60	2650	0	88.3	55-115	2349	0.382	30	
Fluorene	2230	60	2650	0	84.1	50-110	2201	1.3	30	
Indeno(1,2,3-cd)pyrene	2495	60	2650	0	94.1	40-120	2452	1.72	30	
Naphthalene	2120	60	2650	0	80	40-105	2088	1.53	30	
Pyrene	2352	60	2650	0	88.8	45-125	2383	1.3	30	
Surr: 2,4,6-Tribromophenol	*3098*	0	*3313*	0	*93.5*	*34-140*	3134	*1.16*	*40*	
Surr: 2-Fluorobiphenyl	*2433*	0	*3313*	0	*73.4*	*12-100*	2329	*4.37*	*40*	
Surr: 2-Fluorophenol	*2566*	0	*3313*	0	*77.5*	*33-117*	2506	*2.37*	*40*	
Surr: 4-Terphenyl-d14	*2835*	0	*3313*	0	*85.6*	*25-137*	2667	*6.12*	*40*	
Surr: Nitrobenzene-d5	*2595*	0	*3313*	0	*78.3*	*37-107*	2576	*0.731*	*40*	
Surr: Phenol-d6	*2524*	0	*3313*	0	*76.2*	*40-106*	2487	*1.46*	*40*	

The following samples were analyzed in this batch: 1108912-04B 1108912-05B 1108912-06B

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35319** Instrument ID **SVMS4** Method: **SW8270**

MBLK Sample ID: **SBLKS1-35319-35319** Units: **µg/Kg** Analysis Date: **9/6/2011 06:49 PM**

Client ID: Run ID: **SVMS4_110906A** SeqNo: **1726859** Prep Date: **9/6/2011** 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	*1431*	0	*1667*	0	*85.8*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1104*	0	*1667*	0	*66.2*	*12-100*	0			
Surr: 2-Fluorophenol	*1304*	0	*1667*	0	*78.3*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1694*	0	*1667*	0	*102*	*25-137*	0			
Surr: Nitrobenzene-d5	*1128*	0	*1667*	0	*67.7*	*37-107*	0			
Surr: Phenol-d6	*1226*	0	*1667*	0	*73.6*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35319** Instrument ID **SVMS4** Method: **SW8270**

LCS Sample ID: **SLCSS1-35319-35319** Units: **µg/Kg** Analysis Date: **9/6/2011 05:47 PM**

Client ID: Run ID: **SVMS4_110906A** SeqNo: **1726857** Prep Date: **9/6/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1139	30	1333	0	85.4	45-110	0			
Anthracene	1257	30	1333	0	94.3	55-105	0			
Benzo(a)anthracene	1363	30	1333	0	102	50-110	0			
Benzo(a)pyrene	1310	30	1333	0	98.3	50-110	0			
Benzo(b)fluoranthene	1232	30	1333	0	92.4	45-115	0			
Benzo(g,h,i)perylene	1274	30	1333	0	95.5	40-125	0			
Benzo(k)fluoranthene	1252	30	1333	0	93.9	45-115	0			
Chrysene	1277	30	1333	0	95.8	55-110	0			
Dibenzo(a,h)anthracene	1295	30	1333	0	97.2	40-125	0			
Fluoranthene	1261	30	1333	0	94.6	55-115	0			
Fluorene	1367	30	1333	0	103	50-110	0			
Indeno(1,2,3-cd)pyrene	1310	30	1333	0	98.3	40-120	0			
Naphthalene	1133	30	1333	0	85	40-105	0			
Pyrene	1306	30	1333	0	98	45-125	0			
Surr: 2,4,6-Tribromophenol	*1544*	0	*1667*	0	*92.6*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1248*	0	*1667*	0	*74.9*	*12-100*	0			
Surr: 2-Fluorophenol	*1197*	0	*1667*	0	*71.8*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1641*	0	*1667*	0	*98.5*	*25-137*	0			
Surr: Nitrobenzene-d5	*1199*	0	*1667*	0	*71.9*	*37-107*	0			
Surr: Phenol-d6	*1247*	0	*1667*	0	*74.8*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35319** Instrument ID **SVMS4** Method: **SW8270**

LCSD Sample ID: **SLCSDS1-35319-35319** Units: **µg/Kg** Analysis Date: **9/6/2011 06:18 PM**

Client ID: Run ID: **SVMS4_110906A** SeqNo: **1726858** Prep Date: **9/6/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1023	30	1333	0	76.7	45-110	1139	10.8	25	
Anthracene	1127	30	1333	0	84.5	55-105	1257	11	25	
Benzo(a)anthracene	1247	30	1333	0	93.5	50-110	1363	8.86	25	
Benzo(a)pyrene	1182	30	1333	0	88.7	50-110	1310	10.3	25	
Benzo(b)fluoranthene	1178	30	1333	0	88.4	45-115	1232	4.45	25	
Benzo(g,h,i)perylene	1158	30	1333	0	86.8	40-125	1274	9.54	25	
Benzo(k)fluoranthene	1239	30	1333	0	92.9	45-115	1252	1.02	25	
Chrysene	1148	30	1333	0	86.1	55-110	1277	10.6	25	
Dibenzo(a,h)anthracene	1179	30	1333	0	88.4	40-125	1295	9.43	25	
Fluoranthene	1120	30	1333	0	84	55-115	1261	11.9	25	
Fluorene	1241	30	1333	0	93.1	50-110	1367	9.67	25	
Indeno(1,2,3-cd)pyrene	1182	30	1333	0	88.6	40-120	1310	10.3	25	
Naphthalene	1070	30	1333	0	80.3	40-105	1133	5.69	25	
Pyrene	1181	30	1333	0	88.6	45-125	1306	10.1	25	
Surr: 2,4,6-Tribromophenol	*1425*	0	*1667*	0	*85.5*	*34-140*	1544	*8.04*	*40*	
Surr: 2-Fluorobiphenyl	*1153*	0	*1667*	0	*69.2*	*12-100*	1248	*7.97*	*40*	
Surr: 2-Fluorophenol	*1190*	0	*1667*	0	*71.4*	*33-117*	1197	*0.531*	*40*	
Surr: 4-Terphenyl-d14	*1475*	0	*1667*	0	*88.5*	*25-137*	1641	*10.7*	*40*	
Surr: Nitrobenzene-d5	*1140*	0	*1667*	0	*68.4*	*37-107*	1199	*5.04*	*40*	
Surr: Phenol-d6	*1200*	0	*1667*	0	*72*	*40-106*	1247	*3.87*	*40*	

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35319** Instrument ID **SVMS4** Method: **SW8270**

MS Sample ID: **1109075-05A MS** Units: **µg/Kg** Analysis Date: **9/6/2011 07:20 PM**

Client ID: Run ID: **SVMS4_110906A** SeqNo: **1726860** Prep Date: **9/6/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	2186	60	2649	0	82.5	45-110	0			
Anthracene	2417	60	2649	0	91.2	55-105	0			
Benzo(a)anthracene	2616	60	2649	0	98.8	50-110	0			
Benzo(a)pyrene	2471	60	2649	0	93.3	50-110	0			
Benzo(b)fluoranthene	2380	60	2649	0	89.9	45-115	0			
Benzo(g,h,i)perylene	2593	60	2649	0	97.9	40-125	0			
Benzo(k)fluoranthene	2754	60	2649	0	104	45-115	0			
Chrysene	2462	60	2649	0	92.9	55-110	0			
Dibenzo(a,h)anthracene	2514	60	2649	0	94.9	40-125	0			
Fluoranthene	2419	60	2649	0	91.3	55-115	0			
Fluorene	2657	60	2649	0	100	50-110	0			
Indeno(1,2,3-cd)pyrene	2534	60	2649	0	95.7	40-120	0			
Naphthalene	2314	60	2649	0	87.4	40-105	0			
Pyrene	2500	60	2649	0	94.4	45-125	0			
Surr: 2,4,6-Tribromophenol	*3166*	0	*3312*	0	*95.6*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*2423*	0	*3312*	0	*73.2*	*12-100*	0			
Surr: 2-Fluorophenol	*2601*	0	*3312*	0	*78.5*	*33-117*	0			
Surr: 4-Terphenyl-d14	*3040*	0	*3312*	0	*91.8*	*25-137*	0			
Surr: Nitrobenzene-d5	*2491*	0	*3312*	0	*75.2*	*37-107*	0			
Surr: Phenol-d6	*2648*	0	*3312*	0	*80*	*40-106*	0			

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35319** Instrument ID **SVMS4** Method: **SW8270**

MSD Sample ID: **1109075-05A MSD** Units: **µg/Kg** Analysis Date: **9/6/2011 07:51 PM**

Client ID: Run ID: **SVMS4_110906A** SeqNo: **1726861** Prep Date: **9/6/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	2103	58	2574	0	81.7	45-110	2186	3.89	30	
Anthracene	2241	58	2574	0	87.1	55-105	2417	7.57	30	
Benzo(a)anthracene	2465	58	2574	0	95.8	50-110	2616	5.94	30	
Benzo(a)pyrene	2330	58	2574	0	90.5	50-110	2471	5.85	30	
Benzo(b)fluoranthene	2279	58	2574	0	88.6	45-115	2380	4.34	30	
Benzo(g,h,i)perylene	2391	58	2574	0	92.9	40-125	2593	8.1	30	
Benzo(k)fluoranthene	2499	58	2574	0	97.1	45-115	2754	9.69	30	
Chrysene	2288	58	2574	0	88.9	55-110	2462	7.34	30	
Dibenzo(a,h)anthracene	2326	58	2574	0	90.4	40-125	2514	7.77	30	
Fluoranthene	2219	58	2574	0	86.2	55-115	2419	8.6	30	
Fluorene	2516	58	2574	0	97.8	50-110	2657	5.43	30	
Indeno(1,2,3-cd)pyrene	2360	58	2574	0	91.7	40-120	2534	7.1	30	
Naphthalene	2283	58	2574	0	88.7	40-105	2314	1.35	30	
Pyrene	2349	58	2574	0	91.3	45-125	2500	6.22	30	
Surr: 2,4,6-Tribromophenol	*2930*	0	*3218*	0	*91.1*	*34-140*	3166	*7.75*	*40*	
Surr: 2-Fluorobiphenyl	*2413*	0	*3218*	0	*75*	*12-100*	2423	*0.429*	*40*	
Surr: 2-Fluorophenol	*2640*	0	*3218*	0	*82.1*	*33-117*	2601	*1.5*	*40*	
Surr: 4-Terphenyl-d14	*2827*	0	*3218*	0	*87.9*	*25-137*	3040	*7.27*	*40*	
Surr: Nitrobenzene-d5	*2551*	0	*3218*	0	*79.3*	*37-107*	2491	*2.4*	*40*	
Surr: Phenol-d6	*2708*	0	*3218*	0	*84.2*	*40-106*	2648	*2.26*	*40*	

The following samples were analyzed in this batch: 1108912-06B

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **R94139** Instrument ID **VMS6** Method: **SW8260**

MBLK Sample ID: **VBLKW3-110831-R94139** Units: **µg/L** Analysis Date: **9/1/2011 05:32 AM**
Client ID: Run ID: **VMS6_110831B** SeqNo: **1722685** 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	*99.77*	0	*100*	0	*99.8*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*98.59*	0	*100*	0	*98.6*	*75-120*	0			
Surr: Dibromofluoromethane	*98.56*	0	*100*	0	*98.6*	*85-115*	0			
Surr: Toluene-d8	*95.9*	0	*100*	0	*95.9*	*85-120*	0			

LCS Sample ID: **VLCSW2-110831-R94139** Units: **µg/L** Analysis Date: **9/1/2011 04:17 AM**
Client ID: Run ID: **VMS6_110831B** SeqNo: **1722683** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.86	1.0	20	0	104	80-120	0			
Ethylbenzene	20.74	1.0	20	0	104	75-125	0			
m,p-Xylene	42.12	2.0	40	0	105	75-130	0			
o-Xylene	20.7	1.0	20	0	104	80-120	0			
Toluene	20.68	1.0	20	0	103	75-120	0			
Xylenes, Total	62.82	2.0	60	0	105	75-130	0			
Surr: 1,2-Dichloroethane-d4	*99.47*	0	*100*	0	*99.5*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*103.1*	0	*100*	0	*103*	*75-120*	0			
Surr: Dibromofluoromethane	*100.9*	0	*100*	0	*101*	*85-115*	0			
Surr: Toluene-d8	*99.09*	0	*100*	0	*99.1*	*85-120*	0			

LCSD Sample ID: **VLCSDW2-110831-R94139** Units: **µg/L** Analysis Date: **9/1/2011 04:42 AM**
Client ID: Run ID: **VMS6_110831B** SeqNo: **1722684** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.4	1.0	20	0	97	80-120	20.86	7.25	30	
Ethylbenzene	19.48	1.0	20	0	97.4	75-125	20.74	6.27	30	
m,p-Xylene	38.81	2.0	40	0	97	75-130	42.12	8.18	30	
o-Xylene	19.44	1.0	20	0	97.2	80-120	20.7	6.28	30	
Toluene	19.37	1.0	20	0	96.8	75-120	20.68	6.54	30	
Xylenes, Total	58.25	2.0	60	0	97.1	75-130	62.82	7.55	30	
Surr: 1,2-Dichloroethane-d4	*98.84*	0	*100*	0	*98.8*	*70-120*	99.47	*0.635*	*30*	
Surr: 4-Bromofluorobenzene	*103.4*	0	*100*	0	*103*	*75-120*	103.1	*0.339*	*30*	
Surr: Dibromofluoromethane	*101.3*	0	*100*	0	*101*	*85-115*	100.9	*0.396*	*30*	
Surr: Toluene-d8	*96.15*	0	*100*	0	*96.2*	*85-120*	99.09	*3.01*	*30*	

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **R94139** Instrument ID **VMS6** Method: **SW8260**

MS Sample ID: **1108912-01A MS** Units: **µg/Kg** Analysis Date: **9/1/2011 01:57 PM**

Client ID: **TR 22-20-597 N. Bottom** Run ID: **VMS6_110831B** SeqNo: **1723399** Prep Date: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	2028	100	2000	0	101	75-125	0			
Ethylbenzene	1894	200	2000	0	94.7	75-125	0			
m,p-Xylene	3911	200	4000	0	97.8	80-125	0			
o-Xylene	1975	100	2000	0	98.8	75-125	0			
Toluene	1865	150	2000	0	93.2	70-125	0			
Xylenes, Total	5886	300	6000	0	98.1	75-125	0			
Surr: 1,2-Dichloroethane-d4	*10070*	0	*10000*	0	*101*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*11130*	0	*10000*	0	*111*	*75-120*	0			
Surr: Dibromofluoromethane	*9675*	0	*10000*	0	*96.8*	*85-115*	0			
Surr: Toluene-d8	*9694*	0	*10000*	0	*96.9*	*85-115*	0			

MSD Sample ID: **1108912-01A MSD** Units: **µg/Kg** Analysis Date: **9/1/2011 02:22 PM**

Client ID: **TR 22-20-597 N. Bottom** Run ID: **VMS6_110831B** SeqNo: **1723400** Prep Date: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	2005	100	2000	0	100	75-125	2028	1.14	30	
Ethylbenzene	1818	200	2000	0	90.9	75-125	1894	4.09	30	
m,p-Xylene	3747	200	4000	0	93.7	80-125	3911	4.28	30	
o-Xylene	1872	100	2000	0	93.6	75-125	1975	5.35	30	
Toluene	1858	150	2000	0	92.9	70-125	1865	0.376	30	
Xylenes, Total	5619	300	6000	0	93.6	75-125	5886	4.64	30	
Surr: 1,2-Dichloroethane-d4	*9675*	0	*10000*	0	*96.8*	*70-120*	10070	*4.04*	*30*	
Surr: 4-Bromofluorobenzene	*10210*	0	*10000*	0	*102*	*75-120*	11130	*8.6*	*30*	
Surr: Dibromofluoromethane	*9612*	0	*10000*	0	*96.1*	*85-115*	9675	*0.653*	*30*	
Surr: Toluene-d8	*9698*	0	*10000*	0	*97*	*85-115*	9694	*0.0413*	*30*	

The following samples were analyzed in this batch:

1108912-01A	1108912-02A	1108912-03A
1108912-04A	1108912-05A	1108912-06A

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

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: 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: 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:

1108912-01B	1108912-02B	1108912-03B
1108912-04B	1108912-05B	1108912-06B

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

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: 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: **TR 22-20-597 W. Wall** 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	H

The following samples were analyzed in this batch:

1108912-01B	1108912-02B	1108912-03B
1108912-04B	1108912-05B	1108912-06B

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

Client: HRL Compliance Solutions
Work Order: 1108912
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **R94091** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS1-R94091** Units: **% of sample** Analysis Date: **8/30/2011 02:49 PM**
Client ID: Run ID: **MOIST_110830C** SeqNo: **1721824** 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-R94091** Units: **% of sample** Analysis Date: **8/30/2011 02:49 PM**
Client ID: Run ID: **MOIST_110830C** SeqNo: **1721823** 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: **1108898-01ADUP** Units: **% of sample** Analysis Date: **8/30/2011 02:49 PM**
Client ID: Run ID: **MOIST_110830C** SeqNo: **1721813** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	0.75	0.050	0	0	0	0-0	0.76	1.32	20	

DUP Sample ID: **1108912-01BDUP** Units: **% of sample** Analysis Date: **8/30/2011 02:49 PM**
Client ID: **TR 22-20-597 N. Bottom** Run ID: **MOIST_110830C** SeqNo: **1721817** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	14.53	0.050	0	0	0	0-0	14.03	3.5	20	

The following samples were analyzed in this batch:

1108912-01B	1108912-02B	1108912-03B
1108912-04B	1108912-05B	1108912-06B

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

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WORKORDER # 1108912

PAGE 1 of 1

DISPOSAL: By Lab or Return to Client

PROJECT NAME	TR 22-20-597 Pad LOE	SAMPLER	Reed Wold
PROJECT No.		SITE ID	TR 22-20-597
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	HRL COMPLIANCE SOLUTIONS Inc.	BILL TO COMPANY	Williams
SEND REPORT TO	CC Mark Mumby / Kris	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	Krowe@hrlcomp.com	E-MAIL	Karolia.blaney@williams.com

DATE: 8/29/2011

TURNAROUND: Standard

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX/ GRO	DRO/ PAH/ Metals (table 910-1)	SAR/ EC/ PH
01	TR 22-20-597 N. Bottom	SO	8/24/2011	2:20	3	8		X	X	X
02	TR 22-20-597 N. Wall	SO	8/24/2011	1:45	3	8		X	X	X
03	TR 22-20-597 S Bottom	SO	8/24/2011	2:15	3	8		X	X	X
04	TR 22-20-597 S. Wall	SO	8/24/2011	2:00	3	8		X	X	X
05	TR 22-20-597 W.Wall	SO	8/24/2011	1:50	3	8		X	X	X
06	TR 22-20-597 E. Wall	SO	8/24/2011	2:10	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°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	Reed Wold	Reed Wold	8/29/11	6pm
RECEIVED BY	[signature]	Diane F. Shaw	8/30/11	1030
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: (260) 483-5274
Acct #: 91000

CHAIN-OF-CUSTODY RECORD

Date: 30-Aug-11
COC ID: 3077
Due Date 07-Sep-11

Customer Information		Project Information		Parameter/Method Request for Analysis
Purchase Order		Project Name	1108912	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
1108912-01C (TR 22-20-597 N. Bottom)	Soil	24/Aug/2011 14:20	(1) MISC	X									
1108912-02C (TR 22-20-597 N. Wall)	Soil	24/Aug/2011 13:45	(1) MISC	X									
1108912-03C (TR 22-20-597 S Bottom)	Soil	24/Aug/2011 14:15	(1) MISC	X									
1108912-04C (TR 22-20-597 S. Wall)	Soil	24/Aug/2011 14:00	(1) MISC	X									
1108912-05C (TR 22-20-597 W. Wall)	Soil	24/Aug/2011 13:50	(1) MISC	X									
1108912-06C (TR 22-20-597 E. Wall)	Soil	24/Aug/2011 14:10	(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		

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **30-Aug-11 10:30**

Work Order: **1108912** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 30-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:

CUSTODY SEAL

DATE 6/29/11

SIGNATURE

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

FedEx Express **NEW Package US Airbill**

FedEx Tracking Number: 8758 3471 3970

0200 Form ID No.

FedEx Retrieval Copy

1 From

Date 6/29/11 Sender's FedEx Account Number

Sender's Name Rick Wolf Phone 720 443-3271

Company HCST

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 616 399-6670

Company NLS Group

Address 3268 124th 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.

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:*

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

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

[redacted] 15 [redacted]

Total Packages 1 Total Weight 72 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 2: North, South Pit Bottom and Southern Pit Wall Additional Excavation Raw Analytical Data

28-Sep-2011

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

Re: **Williams TR 22-20-597 Pad LOE 9/19/11** Work Order: **1109654**

Dear Kris,

ALS Environmental received 3 samples on 21-Sep-2011 10:30 AM for the analyses presented in the following report.

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

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 11.

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: 28-Sep-11

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 9/19/11
Work Order: **1109654**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1109654-01	TR 22-20-597 N. Bottom	Soil		9/19/2011 15:15	9/21/2011 10:30	☐
1109654-02	TR 22-20-597 S. Bottom	Soil		9/19/2011 15:20	9/21/2011 10:30	☐
1109654-03	TR 22-20-597 S. Wall	Soil		9/19/2011 15:25	9/21/2011 10:30	☐

ALS Group USA, Corp

Date: 28-Sep-11

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 9/19/11
WorkOrder: **1109654**

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
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group USA, Corp

Date: *28-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 9/19/11 **Work Order:** 1109654
Sample ID: TR 22-20-597 N. Bottom **Lab ID:** 1109654-01
Collection Date: 9/19/2011 03:15 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **9/21/2011**	Analyst: **RM**
DRO (C10-C28)	**31**		**5.4**	**mg/Kg-dry**	1	9/22/2011 05:43 PM
Surr: 4-Terphenyl-d14	*63.1*		*39-115*	*%REC*	1	9/22/2011 05:43 PM
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**24**		**0.050**	**% of sample**	1	9/21/2011 04:33 PM

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

ALS Group USA, Corp

Date: *28-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 9/19/11 **Work Order:** 1109654
Sample ID: TR 22-20-597 S. Bottom **Lab ID:** 1109654-02
Collection Date: 9/19/2011 03:20 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **9/21/2011**	Analyst: **RM**
DRO (C10-C28)	**71**		**4.7**	**mg/Kg-dry**	1	9/22/2011 05:43 PM
Surr: 4-Terphenyl-d14	*39.3*		*39-115*	*%REC*	1	9/22/2011 05:43 PM
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**13**		**0.050**	**% of sample**	1	9/21/2011 04:33 PM

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

ALS Group USA, Corp

Date: *28-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 9/19/11
Work Order: 1109654
Sample ID: TR 22-20-597 S. Wall
Lab ID: 1109654-03
Collection Date: 9/19/2011 03:25 PM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **9/21/2011**	Analyst: **RM**
DRO (C10-C28)	**110**		**5.2**	**mg/Kg-dry**	1	9/22/2011 06:05 PM
Surr: 4-Terphenyl-d14	*70.4*		*39-115*	*%REC*	1	9/22/2011 06:05 PM
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**22**		**0.050**	**% of sample**	1	9/21/2011 04:33 PM

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

ALS Group USA, Corp

Date: 28-Sep-11

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1109654

Project: Williams TR 22-20-597 Pad LOE 9/19/11

Batch ID: **35736** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-35736-35736** Units: **mg/Kg** Analysis Date: **9/22/2011 02:25 PM**

Client ID: Run ID: **GC8_110922A** SeqNo: **1744437** Prep Date: **9/21/2011** 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	*1.473*	0	*1.667*	0	*88.4*	*39-115*	0			

LCS Sample ID: **DLCSS1-35736-35736** Units: **mg/Kg** Analysis Date: **9/22/2011 01:19 PM**

Client ID: Run ID: **GC8_110922A** SeqNo: **1744435** Prep Date: **9/21/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	147.1	4.2	166.7	0	88.3	60-130	0			
Surr: 4-Terphenyl-d14	*1.243*	0	*1.667*	0	*74.6*	*39-115*	0			

LCSD Sample ID: **DLCSDS1-35736-35736** Units: **mg/Kg** Analysis Date: **9/22/2011 01:19 PM**

Client ID: Run ID: **GC8_110922A** SeqNo: **1744441** Prep Date: **9/21/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	150.8	4.2	166.7	0	90.5	60-130	147.1	2.45	30	
Surr: 4-Terphenyl-d14	*1.043*	0	*1.667*	0	*62.6*	*39-115*	1.243	*17.6*	*30*	

MS Sample ID: **1109625-21B MS** Units: **mg/Kg** Analysis Date: **9/22/2011 01:41 PM**

Client ID: Run ID: **GC8_110922A** SeqNo: **1744436** Prep Date: **9/21/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	285.5	8.0	321.1	6.641	86.8	60-130	0			
Surr: 4-Terphenyl-d14	*2.285*	0	*3.211*	0	*71.1*	*39-115*	0			

MSD Sample ID: **1109625-21B MSD** Units: **mg/Kg** Analysis Date: **9/22/2011 01:41 PM**

Client ID: Run ID: **GC8_110922A** SeqNo: **1744442** Prep Date: **9/21/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	267.2	7.9	316.7	6.641	82.3	60-130	285.5	6.61	30	
Surr: 4-Terphenyl-d14	*1.911*	0	*3.167*	0	*60.4*	*39-115*	2.285	*17.8*	*30*	

The following samples were analyzed in this batch: 1109654-01A 1109654-02A 1109654-03A

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

Client: HRL Compliance Solutions
Work Order: 1109654
Project: Williams TR 22-20-597 Pad LOE 9/19/11

QC BATCH REPORT

Batch ID: **R94973** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS1-R94973** Units: **% of sample** Analysis Date: **9/21/2011 04:33 PM**
Client ID: Run ID: **MOIST_110921E** SeqNo: **1743850** 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-R94973** Units: **% of sample** Analysis Date: **9/21/2011 04:33 PM**
Client ID: Run ID: **MOIST_110921E** SeqNo: **1743849** 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: **1109618-03BDUP** Units: **% of sample** Analysis Date: **9/21/2011 04:33 PM**
Client ID: Run ID: **MOIST_110921E** SeqNo: **1743824** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	77.53	0.050	0	0	0	0-0	78.11	0.745	20	

DUP Sample ID: **1109623-03BDUP** Units: **% of sample** Analysis Date: **9/21/2011 04:33 PM**
Client ID: Run ID: **MOIST_110921E** SeqNo: **1743829** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	9.59	0.050	0	0	0	0-0	8.98	6.57	20	

The following samples were analyzed in this batch: 1109654-01A 1109654-02A 1109654-03A

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

WORKORDER # 1109654

PROJECT NAME	Williams TR 22-20-597 Pad LOE	SAMPLER	Reed Wold	DATE	9/20/2011	PAGE	1 of 1
PROJECT No.		SITE ID	TR 22-20-597	TURNAROUND	Standard	DISPOSAL	By Lab or Return to Client
		EDD FORMAT					
		PURCHASE ORDER					
COMPANY NAME	HRL Compliance	BILL TO COMPANY	Williams				
SEND REPORT TO	Kris Rowe	INVOICE ATTN TO	Karolina Blaney				
ADDRESS	744 Horizon Ct Ste. 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					
E-MAIL	Krowe@hrlcomp.com	E-MAIL	Karolina.blaney@williams.com				

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	DRO
01	TR 22-20-597 N. Bottom	SO	9/19/2011	3:15	1	8		X
02	TR 22-20-597 S. Bottom	SO	9/19/2011	3:20	1	8		X
03	TR 22-20-597 S.Wall	SO	9/19/2011	3:25	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:

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	Reed Wold	Reed Wold	9/20/11	4:30pm
RECEIVED BY	Alex J Gonzales	Alex J Gonzales	9/21/11	10:30
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **21-Sep-11 10:30**

Work Order: **1109654** Received by: **AC**

Checklist completed by Alex Csaszar (eSignature) 21-Sep-11 (Date) Reviewed by: Ann Preston (eSignature) 22-Sep-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 degrees 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 3471 3683

0200 Form ID No.

FedEx Retrieval Copy

1 From

Date 9/19/11 — Sender's FedEx Account Number

Sender's Name — Phone

Company

Address — Dept/Floor/Suite/Room

City — State — ZIP

2 Your Internal Billing Reference

3 To

Recipient's Name Sample Receiving — Phone

Company

Address — We cannot deliver to P.O. boxes or P.O. ZIP codes. — Dept/Floor/Suite/Room

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

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

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

City Holland — State MI — ZIP 49424

4 Express Package Service — *To most locations. — Packages up to 150 lbs.

NOTE: Service order has changed. Please select carefully. — For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

FedEx 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.

FedEx 2 or 3 Business Day

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.

20 Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.

21 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 — 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

[redacted]

Total Packages 1 — Total Weight 8 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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fedex.com 1.800.GoFedEx 1.800.463.3339

CUSTODY SEAL

9601 San Leandro St. Oakland, CA 800-2...

Date: 9/20/11

Signature:

5.2°C

Appendix 3: Background Raw Analytical Data

08-Sep-2011

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

Re: **Williams TR 22-20-597 Pad LOE 8/24/11** Work Order: **1108948**

Dear Kris,

ALS Environmental received 3 samples on 31-Aug-2011 09:00 AM for the analyses presented in the following report.

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

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 17.

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: 08-Sep-11

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11
Work Order: **1108948**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1108948-01	TR 22-20-597 BG 1	Soil		8/24/2011 13:15	8/31/2011 09:00	☐
1108948-02	TR 22-20-597 BG 2	Soil		8/24/2011 13:20	8/31/2011 09:00	☐
1108948-03	TR 22-20-597 BG 3	Soil		8/24/2011 13:25	8/31/2011 09:00	☐

ALS Group USA, Corp

Date: 08-Sep-11

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11
Work Order: 1108948

Case Narrative

Batch 35255 MS/MSD data for Metals is not related to this project's samples.

ALS Group USA, Corp

Date: 08-Sep-11

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11
WorkOrder: **1108948**

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
as noted	
mg/Kg-dry	Milligrams per Kilogram Dry Weight
s.u.	Standard Units

ALS Group USA, Corp

Date: *08-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11 **Work Order:** 1108948
Sample ID: TR 22-20-597 BG 1 **Lab ID:** 1108948-01
Collection Date: 8/24/2011 01:15 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **8/31/2011**	Analyst: **CES**
Arsenic	**5.4**		**0.95**	**mg/Kg-dry**	2	9/1/2011 11:04 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 9/6/11**			**as noted**	1	9/6/2011
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**21**		**0.050**	**% of sample**	1	8/31/2011 01:03 PM
PH			**SW9045D**			Analyst: **JJG**
pH	**7.02**	H		**s.u.**	1	8/31/2011 08:30 AM

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

ALS Group USA, Corp

Date: *08-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11 **Work Order:** 1108948
Sample ID: TR 22-20-597 BG 2 **Lab ID:** 1108948-02
Collection Date: 8/24/2011 01:20 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **8/31/2011**	Analyst: **CES**
Arsenic	**5.2**		**0.84**	**mg/Kg-dry**	2	9/1/2011 11:10 PM
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**6.2**		**0.050**	**% of sample**	1	8/31/2011 01:03 PM

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

ALS Group USA, Corp

Date: *08-Sep-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Pad LOE 8/24/11 **Work Order:** 1108948
Sample ID: TR 22-20-597 BG 3 **Lab ID:** 1108948-03
Collection Date: 8/24/2011 01:25 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			**SW6020A**		Prep Date: **9/1/2011**	Analyst: **CES**
Arsenic	**5.7**		**0.73**	**mg/Kg-dry**	2	9/6/2011 05:44 PM
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**7.0**		**0.050**	**% of sample**	1	8/31/2011 01:03 PM

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

Report Number: F11244-0175
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: 1108948

DATE RECEIVED: 09/01/2011
DATE REPORTED: 09/06/2011
PAGE: 1
P.O. NUMBER: 20-122010675

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
82828	01B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	3.01	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	275	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	39	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	3137	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	46.8	-	USDA Handbook 60

ALS Group USA, Corp

Date: 08-Sep-11

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1108948

Project: Williams TR 22-20-597 Pad LOE 8/24/11

Batch ID: **35255** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-35255-35255** Units: **mg/Kg** Analysis Date: **9/1/2011 07:48 PM**

Client ID: Run ID: **ICPMS1_110901A** SeqNo: **1723857** Prep Date: **8/31/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								

LCS Sample ID: **LCS-35255-35255** Units: **mg/Kg** Analysis Date: **9/1/2011 07:53 PM**

Client ID: Run ID: **ICPMS1_110901A** SeqNo: **1723858** Prep Date: **8/31/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.757	0.50	5	0	95.1	80-120	0			

LCSD Sample ID: **LCSD-35255-35255** Units: **mg/Kg** Analysis Date: **9/1/2011 08:20 PM**

Client ID: Run ID: **ICPMS1_110901A** SeqNo: **1723861** Prep Date: **8/31/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.786	0.50	5	0	95.7	80-120	4.757	0.608	20	

MS Sample ID: **1108926-21BMS** Units: **mg/Kg** Analysis Date: **9/1/2011 08:41 PM**

Client ID: Run ID: **ICPMS1_110901A** SeqNo: **1723865** Prep Date: **8/31/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	12.04	1.4	7.123	7.383	65.4	80-120	0			S

MS Sample ID: **1108926-27BMS** Units: **mg/Kg** Analysis Date: **9/1/2011 09:55 PM**

Client ID: Run ID: **ICPMS1_110901A** SeqNo: **1723877** Prep Date: **8/31/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	14.1	1.6	7.924	7.02	89.3	80-120	0			

MSD Sample ID: **1108926-21BMSD** Units: **mg/Kg** Analysis Date: **9/1/2011 08:46 PM**

Client ID: Run ID: **ICPMS1_110901A** SeqNo: **1723866** Prep Date: **8/31/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	12.02	1.4	6.993	7.383	66.3	80-120	12.04	0.169	25	S

MSD Sample ID: **1108926-27BMSD** Units: **mg/Kg** Analysis Date: **9/1/2011 10:01 PM**

Client ID: Run ID: **ICPMS1_110901A** SeqNo: **1723878** Prep Date: **8/31/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	13.98	1.6	7.752	7.02	89.8	80-120	14.1	0.855	25	

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

Client: HRL Compliance Solutions
Work Order: 1108948
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35255** Instrument ID **ICPMS1** Method: **SW6020A**

The following samples were analyzed in this batch: 1108948-01A 1108948-02A

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

Client: HRL Compliance Solutions
Work Order: 1108948
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **35276** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-35276-35276** Units: **mg/Kg** Analysis Date: **9/6/2011 02:22 PM**
Client ID: Run ID: **ICPMS1_110906A** SeqNo: **1725875** 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
Arsenic	ND	0.25								

LCS Sample ID: **LCS-35276-35276** Units: **mg/Kg** Analysis Date: **9/6/2011 02:28 PM**
Client ID: Run ID: **ICPMS1_110906A** SeqNo: **1725876** Prep Date: **9/1/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.617	0.50	5	0	92.3	80-120	0			

LCSD Sample ID: **LCSD-35276-35276** Units: **mg/Kg** Analysis Date: **9/6/2011 02:54 PM**
Client ID: Run ID: **ICPMS1_110906A** SeqNo: **1726029** Prep Date: **9/1/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.606	0.50	5	0	92.1	80-120	4.617	0.239	20	

MS Sample ID: **1108982-28BMS** Units: **mg/Kg** Analysis Date: **9/6/2011 03:36 PM**
Client ID: Run ID: **ICPMS1_110906A** SeqNo: **1726037** Prep Date: **9/1/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	14.63	1.4	6.897	8.826	84.2	80-120	0			

MSD Sample ID: **1108982-28BMSD** Units: **mg/Kg** Analysis Date: **9/6/2011 03:41 PM**
Client ID: Run ID: **ICPMS1_110906A** SeqNo: **1726038** Prep Date: **9/1/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	15.41	1.3	6.64	8.826	99.1	80-120	14.63	5.15	25	

The following samples were analyzed in this batch: 1108948-03A

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

Client: HRL Compliance Solutions
Work Order: 1108948
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **R94122** Instrument ID **WETCHEM** Method: **SW9045D**

DUP Sample ID: **1108840-01A DUP** Units: **s.u.** Analysis Date: **8/31/2011 08:30 AM**

Client ID: Run ID: **WETCHEM_110831E** SeqNo: **1722332** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.51	0	0	0	0	0-0	7.51	0	20	

DUP Sample ID: **1108951-01D DUP** Units: **s.u.** Analysis Date: **8/31/2011 08:30 AM**

Client ID: Run ID: **WETCHEM_110831E** SeqNo: **1722340** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.32	0	0	0	0	0-0	8.32	0	20	

The following samples were analyzed in this batch: 1108948-01A

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

Client: HRL Compliance Solutions
Work Order: 1108948
Project: Williams TR 22-20-597 Pad LOE 8/24/11

QC BATCH REPORT

Batch ID: **R94148** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS1-R94148** Units: **% of sample** Analysis Date: **8/31/2011 01:03 PM**
Client ID: Run ID: **MOIST_110831C** SeqNo: **1723039** 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-R94148** Units: **% of sample** Analysis Date: **8/31/2011 01:03 PM**
Client ID: Run ID: **MOIST_110831C** SeqNo: **1723038** 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: **1108926-07BDUP** Units: **% of sample** Analysis Date: **8/31/2011 01:03 PM**
Client ID: Run ID: **MOIST_110831C** SeqNo: **1723023** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	10.85	0.050	0	0	0	0-0	9.48	13.5	20	

DUP Sample ID: **1108926-16BDUP** Units: **% of sample** Analysis Date: **8/31/2011 01:03 PM**
Client ID: Run ID: **MOIST_110831C** SeqNo: **1723033** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	9.2	0.050	0	0	0	0-0	7.85	15.8	20	

The following samples were analyzed in this batch: 1108948-01A 1108948-02A 1108948-03A

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

WORKORDER # 1108948

PAGE 1 of 1

DISPOSAL By Lab or Return to Client

PROJECT NAME	TR 22-20-597 Pad LOE	SAMPLER	Reed Wold	DATE	8/30/2011
PROJECT No.		SITE ID	TR 22-20-597	TURNAROUND	Standard
		EDD FORMAT			
		PURCHASE ORDER			
COMPANY NAME	HRL COMPLIANCE SOLUTIONS Inc.	BILL TO COMPANY	Williams		
SEND REPORT TO	KRIS ROWE	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	Krowe@hrlcomp.com	E-MAIL	Karolia.blaney@williams.com		

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	Arsenic	SAR/ EC/ PH
01	TR 22-20-597 BG 1	SO	8/24/2011	1:15	2	8		X	X
02	TR 22-20-597 BG 2	SO	8/24/2011	1:20	1	8		X	
03	TR 22-20-597 BG 3	SO	8/24/2011	1:25	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:

3.2c

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		Reed Wold	8/30/11	5:30
RECEIVED BY		Diane F. Shaw	8/31/11	0900
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: 31-Aug-11
COC ID: 3081
Due Date 07-Sep-11

Customer Information		Project Information		Parameter/Method Request for Analysis
Purchase Order		Project Name	1108948	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
1108948-01B (TR 22-20-597 BG 1)	Soil	24/Aug/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
					Std
Relinquished by:	Date/Time	Received by:	Date/Time		

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **31-Aug-11 09:00**

Work Order: **1108948** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 31-Aug-11 (Date) Reviewed by: Ann Preston (eSignature) 02-Sep-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):	3.2 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:			

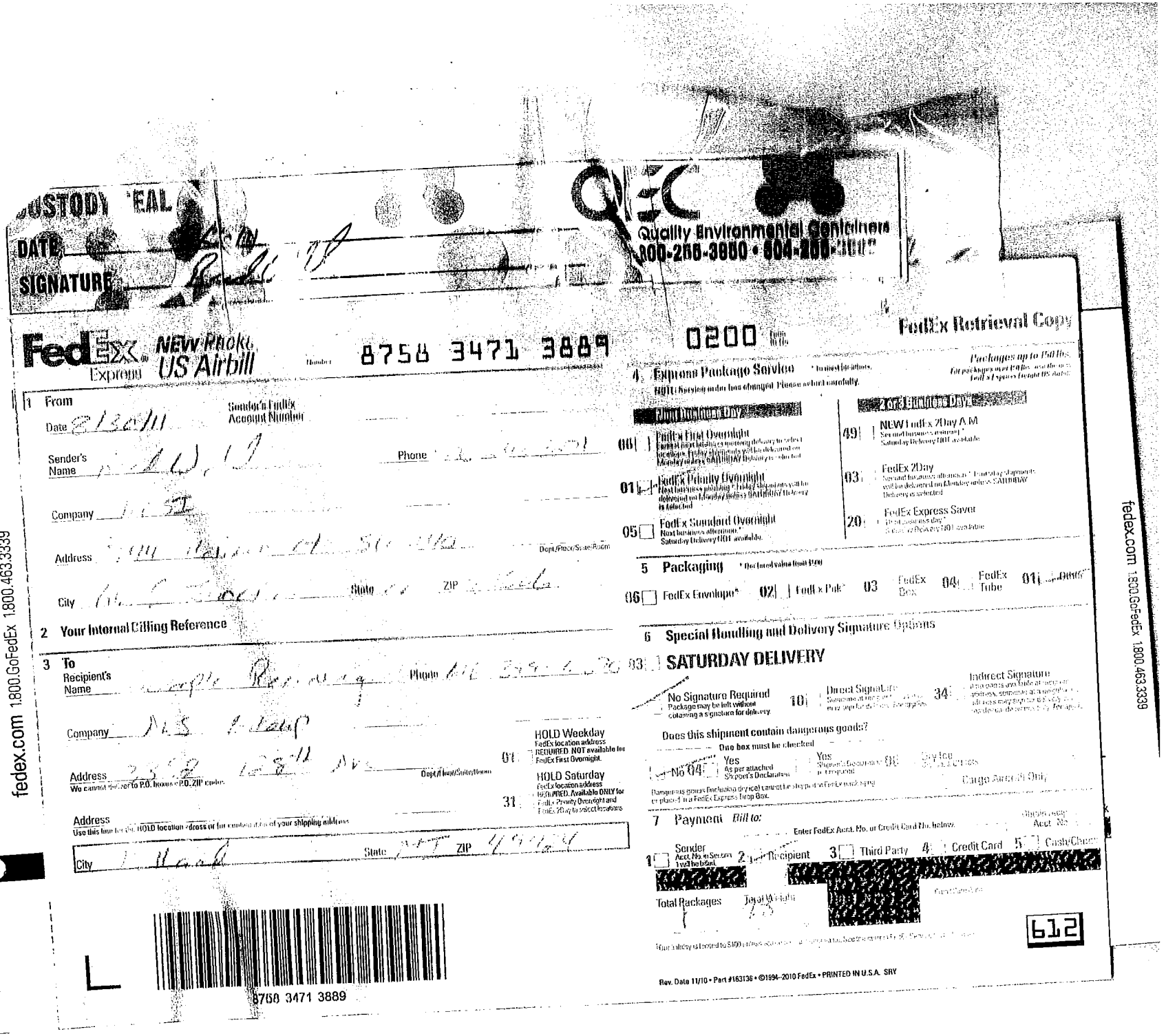
Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:


CUSTODY SEAL
DATE
SIGNATURE
Quality Environmental Containers
800-258-3850 • 304-255-3850
FedEx Express
NEW Packaging
US Airbill
8758 3471 3889
0200
FedEx Retrieval Copy
1 From
Date
Sender's FedEx Account Number
Sender's Name
Phone
Company
Address
Dept/Floor/Suite/Room
City
State
ZIP
2 Your Internal Billing Reference
3 To
Recipient's Name
Phone
Company
Address
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
State
ZIP
HOLD Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.
HOLD Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.
4 Express Package Service
Packages up to 150 lbs.
For packages over 150 lbs., see the FedEx Freight box.
Next Business Day
FedEx First Overnight
FedEx Priority Overnight
Next business afternoon.
FedEx Standard Overnight
Next business afternoon.
2nd Business Day
NEW FedEx 2Day A.M.
FedEx 2Day
FedEx Express Saver
3rd business day.
5 Packaging
FedEx Envelope
FedEx Pak
FedEx Box
FedEx Tube
Other
6 Special Handling and Delivery Signature Options
SATURDAY DELIVERY
No Signature Required
Package may be left without obtaining a signature for delivery.
Direct Signature
Indirect Signature
Does this shipment contain dangerous goods?
One box must be checked.
No
Yes
As per attached Shipper's Declaration
Yes
Shipper's Declaration not required
Dry Ice
Cargo Aircraft Only
Dangerous goods (including dry ice) cannot be shipped in a FedEx package or placed in a FedEx Express Drop Box.
7 Payment Bill to:
Enter FedEx Acct. No. or Credit Card No. below.
Acct. No.
Sender
Recipient
Third Party
Credit Card
Cash/Check
Total Packages
Total Weight
612
Rev. Date 11/10 • Part #163136 • ©1994–2010 FedEx • PRINTED IN U.S.A. SRY
8758 3471 3889
fedex.com 1.800.GoFedEx 1.800.463.3339
fedex.com 1.800.GoFedEx 1.800.463.3339

Appendix 4: Treatment Cell Confirmation Raw Analytical Data

15-Dec-2011

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

Re: **Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/11**

Work Order: **1111567**
Revision: **1**

Dear Kris,

ALS Environmental received 2 samples on 16-Nov-2011 10:00 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 28.

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

Sincerely,

Ann Preston

Electronically approved by: Alex Csaszar

Ann Preston
Project Manager

Certificate No: IL100452

ALS Group USA, Corp

Date: 15-Dec-11

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/11
Work Order: **1111567**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1111567-01	Treatment Cell North Side	Soil		11/8/2011 12:30	11/16/2011 10:00	☐
1111567-02	Treatment Cell South Side	Soil		11/8/2011 12:35	11/16/2011 10:00	☐

ALS Group USA, Corp

Date: 15-Dec-11

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/11
Work Order: 1111567

Case Narrative

Batch 37526 MS/MSD data for DRO is not related to this project's samples.

Batch 37537 MS/MSD data for Metals is not related to this project's samples.

Batch R97849 samples 1111567-01 and 1111567-02 samples for pH were received after the hold time had expired.

Batch R97862 samples 1111567-01 and 1111567-02 samples for % Moisture were received after the hold time had expired.

Revised report issued per client request. Project name and sample IDs were changed.

ALS Group USA, Corp

Date: 15-Dec-11

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/11
WorkOrder: **1111567**

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
RPD	Relative Percent Difference
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: *15-Dec-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/11 **Work Order:** 1111567
Sample ID: Treatment Cell North Side **Lab ID:** 1111567-01
Collection Date: 11/8/2011 12:30 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **11/17/2011**	Analyst: **RM**
DRO (C10-C28)	**96**		**5.3**	**mg/Kg-dry**	1	11/18/2011 08:11 PM
Surr: 4-Terphenyl-d14	*60.8*		*39-115*	*%REC*	1	11/18/2011 08:11 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		6.5	mg/Kg-dry	100	11/21/2011 08:46 AM
Surr: Toluene-d8	*112*		*50-150*	*%REC*	100	11/21/2011 08:46 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **11/18/2011**	Analyst: **LR**
Mercury	ND		0.026	mg/Kg-dry	1	11/21/2011 01:35 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **11/17/2011**	Analyst: **CES**
Arsenic	**2.7**		**0.83**	**mg/Kg-dry**	2	11/18/2011 08:49 PM
Barium	**500**		**8.3**	**mg/Kg-dry**	20	11/22/2011 02:54 AM
Cadmium	ND		0.33	mg/Kg-dry	2	11/18/2011 08:49 PM
Chromium	**17**		**0.83**	**mg/Kg-dry**	2	11/18/2011 08:49 PM
Copper	**10**		**0.83**	**mg/Kg-dry**	2	11/18/2011 08:49 PM
Lead	**22**		**0.83**	**mg/Kg-dry**	2	11/18/2011 08:49 PM
Nickel	**12**		**0.83**	**mg/Kg-dry**	2	11/18/2011 08:49 PM
Selenium	ND		0.83	mg/Kg-dry	2	11/18/2011 08:49 PM
Silver	ND		0.83	mg/Kg-dry	2	11/18/2011 08:49 PM
Zinc	**48**		**1.7**	**mg/Kg-dry**	2	11/18/2011 08:49 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 11/21/11**			**as noted**	1	11/21/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **11/17/2011**	Analyst: **CW**
Acenaphthene	ND		38	µg/Kg-dry	1	11/20/2011 10:21 AM
Anthracene	ND		38	µg/Kg-dry	1	11/20/2011 10:21 AM
Benzo(a)anthracene	ND		38	µg/Kg-dry	1	11/20/2011 10:21 AM
Benzo(a)pyrene	ND		38	µg/Kg-dry	1	11/20/2011 10:21 AM
Benzo(b)fluoranthene	ND		38	µg/Kg-dry	1	11/20/2011 10:21 AM
Benzo(g,h,i)perylene	ND		38	µg/Kg-dry	1	11/20/2011 10:21 AM
Benzo(k)fluoranthene	ND		38	µg/Kg-dry	1	11/20/2011 10:21 AM
Chrysene	ND		38	µg/Kg-dry	1	11/20/2011 10:21 AM
Dibenzo(a,h)anthracene	ND		38	µg/Kg-dry	1	11/20/2011 10:21 AM
Fluoranthene	ND		38	µg/Kg-dry	1	11/20/2011 10:21 AM
Fluorene	ND		38	µg/Kg-dry	1	11/20/2011 10:21 AM
Indeno(1,2,3-cd)pyrene	ND		38	µg/Kg-dry	1	11/20/2011 10:21 AM
Naphthalene	ND		38	µg/Kg-dry	1	11/20/2011 10:21 AM
Pyrene	ND		38	µg/Kg-dry	1	11/20/2011 10:21 AM
Surr: 2,4,6-Tribromophenol	*69.8*		*34-140*	*%REC*	1	11/20/2011 10:21 AM

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

Revision: 1

Client: HRL Compliance Solutions

Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/11 **Work Order:** 1111567

Sample ID: Treatment Cell North Side **Lab ID:** 1111567-01

Collection Date: 11/8/2011 12:30 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	*64.1*		*12-100*	*%REC*	1	11/20/2011 10:21 AM
Surr: 2-Fluorophenol	*72.9*		*33-117*	*%REC*	1	11/20/2011 10:21 AM
Surr: 4-Terphenyl-d14	*85.9*		*25-137*	*%REC*	1	11/20/2011 10:21 AM
Surr: Nitrobenzene-d5	*69.6*		*37-107*	*%REC*	1	11/20/2011 10:21 AM
Surr: Phenol-d6	*74.0*		*40-106*	*%REC*	1	11/20/2011 10:21 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **CW**
Benzene	ND		130	µg/Kg-dry	100	11/20/2011 05:48 AM
Ethylbenzene	ND		260	µg/Kg-dry	100	11/20/2011 05:48 AM
m,p-Xylene	ND		260	µg/Kg-dry	100	11/20/2011 05:48 AM
o-Xylene	ND		130	µg/Kg-dry	100	11/20/2011 05:48 AM
Toluene	ND		190	µg/Kg-dry	100	11/20/2011 05:48 AM
Xylenes, Total	ND		390	µg/Kg-dry	100	11/20/2011 05:48 AM
Surr: 1,2-Dichloroethane-d4	*94.7*		*70-120*	*%REC*	100	11/20/2011 05:48 AM
Surr: 4-Bromofluorobenzene	*92.2*		*75-120*	*%REC*	100	11/20/2011 05:48 AM
Surr: Dibromofluoromethane	*93.5*		*85-115*	*%REC*	100	11/20/2011 05:48 AM
Surr: Toluene-d8	*106*		*85-115*	*%REC*	100	11/20/2011 05:48 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**17**		**0.65**	**mg/Kg-dry**	1	11/22/2011 03:20 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **11/20/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.65	mg/Kg-dry	1	11/22/2011 01:00 PM
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**23**	H	**0.050**	**% of sample**	1	11/16/2011 02:34 PM
PH			**SW9045D**			Analyst: **JJG**
pH	**8.95**	H		**s.u.**	1	11/17/2011 08:40 AM

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

Revision: 1

ALS Group USA, Corp

Date: *15-Dec-11*

Client: HRL Compliance Solutions
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/11 **Work Order:** 1111567
Sample ID: Treatment Cell South Side **Lab ID:** 1111567-02
Collection Date: 11/8/2011 12:35 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **11/17/2011**	Analyst: **RM**
DRO (C10-C28)	**47**		**5.0**	**mg/Kg-dry**	1	11/18/2011 03:07 PM
Surr: 4-Terphenyl-d14	*67.7*		*39-115*	*%REC*	1	11/18/2011 03:07 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		6.1	mg/Kg-dry	100	11/21/2011 09:11 AM
Surr: Toluene-d8	*111*		*50-150*	*%REC*	100	11/21/2011 09:11 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **11/18/2011**	Analyst: **LR**
Mercury	ND		0.023	mg/Kg-dry	1	11/21/2011 01:37 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **11/17/2011**	Analyst: **CES**
Arsenic	**3.9**		**0.99**	**mg/Kg-dry**	2	11/18/2011 08:54 PM
Barium	**540**		**9.9**	**mg/Kg-dry**	20	11/22/2011 02:59 AM
Cadmium	ND		0.40	mg/Kg-dry	2	11/18/2011 08:54 PM
Chromium	**16**		**0.99**	**mg/Kg-dry**	2	11/18/2011 08:54 PM
Copper	**10**		**0.99**	**mg/Kg-dry**	2	11/18/2011 08:54 PM
Lead	**20**		**0.99**	**mg/Kg-dry**	2	11/18/2011 08:54 PM
Nickel	**11**		**0.99**	**mg/Kg-dry**	2	11/18/2011 08:54 PM
Selenium	ND		0.99	mg/Kg-dry	2	11/18/2011 08:54 PM
Silver	ND		0.99	mg/Kg-dry	2	11/18/2011 08:54 PM
Zinc	**44**		**2.0**	**mg/Kg-dry**	2	11/18/2011 08:54 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 11/21/11**			**as noted**	1	11/21/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **11/17/2011**	Analyst: **CW**
Acenaphthene	ND		36	µg/Kg-dry	1	11/20/2011 10:56 AM
Anthracene	ND		36	µg/Kg-dry	1	11/20/2011 10:56 AM
Benzo(a)anthracene	ND		36	µg/Kg-dry	1	11/20/2011 10:56 AM
Benzo(a)pyrene	ND		36	µg/Kg-dry	1	11/20/2011 10:56 AM
Benzo(b)fluoranthene	ND		36	µg/Kg-dry	1	11/20/2011 10:56 AM
Benzo(g,h,i)perylene	ND		36	µg/Kg-dry	1	11/20/2011 10:56 AM
Benzo(k)fluoranthene	ND		36	µg/Kg-dry	1	11/20/2011 10:56 AM
Chrysene	ND		36	µg/Kg-dry	1	11/20/2011 10:56 AM
Dibenzo(a,h)anthracene	ND		36	µg/Kg-dry	1	11/20/2011 10:56 AM
Fluoranthene	ND		36	µg/Kg-dry	1	11/20/2011 10:56 AM
Fluorene	ND		36	µg/Kg-dry	1	11/20/2011 10:56 AM
Indeno(1,2,3-cd)pyrene	ND		36	µg/Kg-dry	1	11/20/2011 10:56 AM
Naphthalene	ND		36	µg/Kg-dry	1	11/20/2011 10:56 AM
Pyrene	ND		36	µg/Kg-dry	1	11/20/2011 10:56 AM
Surr: 2,4,6-Tribromophenol	*74.1*		*34-140*	*%REC*	1	11/20/2011 10:56 AM

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

Revision: 1

Client: HRL Compliance Solutions

Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/11 **Work Order:** 1111567

Sample ID: Treatment Cell South Side **Lab ID:** 1111567-02

Collection Date: 11/8/2011 12:35 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	*64.3*		*12-100*	*%REC*	1	11/20/2011 10:56 AM
Surr: 2-Fluorophenol	*69.9*		*33-117*	*%REC*	1	11/20/2011 10:56 AM
Surr: 4-Terphenyl-d14	*89.7*		*25-137*	*%REC*	1	11/20/2011 10:56 AM
Surr: Nitrobenzene-d5	*65.5*		*37-107*	*%REC*	1	11/20/2011 10:56 AM
Surr: Phenol-d6	*70.1*		*40-106*	*%REC*	1	11/20/2011 10:56 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **CW**
Benzene	ND		120	µg/Kg-dry	100	11/20/2011 06:12 AM
Ethylbenzene	ND		240	µg/Kg-dry	100	11/20/2011 06:12 AM
m,p-Xylene	ND		240	µg/Kg-dry	100	11/20/2011 06:12 AM
o-Xylene	ND		120	µg/Kg-dry	100	11/20/2011 06:12 AM
Toluene	ND		180	µg/Kg-dry	100	11/20/2011 06:12 AM
Xylenes, Total	ND		370	µg/Kg-dry	100	11/20/2011 06:12 AM
Surr: 1,2-Dichloroethane-d4	*95.8*		*70-120*	*%REC*	100	11/20/2011 06:12 AM
Surr: 4-Bromofluorobenzene	*94.6*		*75-120*	*%REC*	100	11/20/2011 06:12 AM
Surr: Dibromofluoromethane	*96.4*		*85-115*	*%REC*	100	11/20/2011 06:12 AM
Surr: Toluene-d8	*100*		*85-115*	*%REC*	100	11/20/2011 06:12 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**16**		**0.61**	**mg/Kg-dry**	1	11/22/2011 03:20 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **11/20/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.60	mg/Kg-dry	1	11/22/2011 01:00 PM
MOISTURE			**A2540 G**			Analyst: **CG**
Moisture	**18**	H	**0.050**	**% of sample**	1	11/16/2011 02:34 PM
PH			**SW9045D**			Analyst: **JJG**
pH	**8.93**	H		**s.u.**	1	11/17/2011 08:40 AM

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

Revision: 1

Report Number: F11321-0533
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: 1111567

DATE RECEIVED: 11/17/2011
DATE REPORTED: 11/21/2011
PAGE: 1
P.O. NUMBER: 20-122011243

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
67963	01C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	3.03	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	103	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	13	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	1229	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	30.3	-	USDA Handbook 60
67964	02C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	2.22	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	59	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	9	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	834	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	26.7	-	USDA Handbook 60

ALS Group USA, Corp

Date: 15-Dec-11

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1111567

Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/1

Batch ID: **37526** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-37526-37526** Units: **mg/Kg** Analysis Date: **11/18/2011 05:54 PM**

Client ID: Run ID: **GC8_111118A** SeqNo: **1830261** Prep Date: **11/17/2011** 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	*1.086*	0	*1.667*	0	*65.1*	*39-115*	0			

LCS Sample ID: **DLCSS1-37526-37526** Units: **mg/Kg** Analysis Date: **11/18/2011 04:46 PM**

Client ID: Run ID: **GC8_111118A** SeqNo: **1830258** Prep Date: **11/17/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	156	4.2	166.7	0	93.6	60-130	0			
Surr: 4-Terphenyl-d14	*0.902*	0	*1.667*	0	*54.1*	*39-115*	0			

LCSD Sample ID: **DLCSDS1-37526-37526** Units: **mg/Kg** Analysis Date: **11/18/2011 05:09 PM**

Client ID: Run ID: **GC8_111118A** SeqNo: **1830237** Prep Date: **11/17/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	137	4.2	166.7	0	82.2	60-130	156	12.9	30	
Surr: 4-Terphenyl-d14	*0.9867*	0	*1.667*	0	*59.2*	*39-115*	0.902	*8.97*	*30*	

MS Sample ID: **1111465-01A MS** Units: **mg/Kg** Analysis Date: **11/18/2011 05:09 PM**

Client ID: Run ID: **GC8_111118A** SeqNo: **1830259** Prep Date: **11/17/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	446.1	4.1	164.1	417	17.7	60-130	0			S
Surr: 4-Terphenyl-d14	*1.239*	0	*1.641*	0	*75.5*	*39-115*	0			

MSD Sample ID: **1111465-01A MSD** Units: **mg/Kg** Analysis Date: **11/18/2011 05:32 PM**

Client ID: Run ID: **GC8_111118A** SeqNo: **1830238** Prep Date: **11/17/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	414.7	4.1	165.2	417	-1.42	60-130	446.1	7.3	30	S
Surr: 4-Terphenyl-d14	*1.139*	0	*1.652*	0	*69*	*39-115*	1.239	*8.43*	*30*	

The following samples were analyzed in this batch: 1111567-01B 1111567-02B

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

Revision: 1

Client: HRL Compliance Solutions
Work Order: 1111567
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/1

QC BATCH REPORT

Batch ID: **R98155** Instrument ID **GC9** Method: **SW8015**

MBLK Sample ID: **MBLK-R98155-R98155** Units: **µg/L** Analysis Date: **11/21/2011 01:12 AM**
Client ID: Run ID: **GC9_111120A** SeqNo: **1831029** 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	*111.9*	0	*100*	0	*112*	*70-130*	0			

LCS Sample ID: **LCS-R98155-R98155** Units: **µg/L** Analysis Date: **11/20/2011 11:56 PM**
Client ID: Run ID: **GC9_111120A** SeqNo: **1831028** 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)	22740	200	25000	0	91	70-130	0			
Surr: Toluene-d8	*92.23*	0	*100*	0	*92.2*	*70-130*	0			

LCSD Sample ID: **LCSD-R98155-R98155** Units: **µg/L** Analysis Date: **11/21/2011 12:21 PM**
Client ID: Run ID: **GC9_111120A** SeqNo: **1831030** 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)	22390	200	25000	0	89.6	70-130	22740	1.56	30	
Surr: Toluene-d8	*96.89*	0	*100*	0	*96.9*	*70-130*	92.23	*4.93*	*30*	

MS Sample ID: **1111590-13A MS** Units: **µg/Kg** Analysis Date: **11/21/2011 10:02 AM**
Client ID: Run ID: **GC9_111120A** SeqNo: **1831051** 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)	1220000	2,500	1250000	0	97.6	70-130	0			
Surr: Toluene-d8	*4619*	0	*5000*	0	*92.4*	*50-150*	0			

MSD Sample ID: **1111590-13A MSD** Units: **µg/Kg** Analysis Date: **11/21/2011 10:27 AM**
Client ID: Run ID: **GC9_111120A** SeqNo: **1831052** 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)	1201000	2,500	1250000	0	96.1	70-130	1220000	1.57	30	
Surr: Toluene-d8	*4582*	0	*5000*	0	*91.6*	*50-150*	4619	*0.804*	*30*	

The following samples were analyzed in this batch: 1111567-01A 1111567-02A

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

Revision: 1

Client: HRL Compliance Solutions
Work Order: 1111567
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/1

QC BATCH REPORT

Batch ID: **37601** Instrument ID **HG1** Method: **SW7471**

MBLK Sample ID: **MBLK-37601-37601** Units: **mg/Kg** Analysis Date: **11/21/2011 01:05 PM**
Client ID: Run ID: **HG1_111121A** SeqNo: **1828453** Prep Date: **11/18/2011** 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-37601-37601** Units: **mg/Kg** Analysis Date: **11/21/2011 01:13 PM**
Client ID: Run ID: **HG1_111121A** SeqNo: **1828454** Prep Date: **11/18/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1586	0.020	0.1665	0	95.2	80-120	0			

LCSD Sample ID: **LCSD-37601-37601** Units: **mg/Kg** Analysis Date: **11/21/2011 01:15 PM**
Client ID: Run ID: **HG1_111121A** SeqNo: **1828455** Prep Date: **11/18/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1491	0.020	0.1665	0	89.5	80-120	0.1586	6.18	20	

MS Sample ID: **1111558-02BMS** Units: **mg/Kg** Analysis Date: **11/21/2011 01:26 PM**
Client ID: Run ID: **HG1_111121A** SeqNo: **1828460** Prep Date: **11/18/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1237	0.017	0.1382	0.01107	81.5	75-125	0			

MSD Sample ID: **1111558-02BMSD** Units: **mg/Kg** Analysis Date: **11/21/2011 01:28 PM**
Client ID: Run ID: **HG1_111121A** SeqNo: **1828461** Prep Date: **11/18/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1219	0.016	0.1337	0.01107	82.9	75-125	0.1237	1.49	35	

The following samples were analyzed in this batch: 1111567-01B 1111567-02B

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

Revision: 1

Client: HRL Compliance Solutions
Work Order: 1111567
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/1

QC BATCH REPORT

Batch ID: **37537** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-37537-37537** Units: **mg/Kg** Analysis Date: **11/18/2011 07:50 PM**
Client ID: Run ID: **ICPMS1_111117A** SeqNo: **1828236** Prep Date: **11/17/2011** 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	ND	0.25								
Copper	0.02006	0.25								J
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS Sample ID: **LCS-37537-37537** Units: **mg/Kg** Analysis Date: **11/18/2011 07:56 PM**
Client ID: Run ID: **ICPMS1_111117A** SeqNo: **1828237** Prep Date: **11/17/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.145	0.50	5	0	82.9	80-120	0			
Barium	4.558	0.50	5	0	91.2	80-120	0			
Cadmium	4.736	0.20	5	0	94.7	80-120	0			
Chromium	4.384	0.50	5	0	87.7	80-120	0			
Copper	4.382	0.50	5	0	87.6	80-120	0			
Lead	4.536	0.50	5	0	90.7	80-120	0			
Nickel	4.343	0.50	5	0	86.9	80-120	0			
Selenium	4.291	0.50	5	0	85.8	80-120	0			
Silver	4.21	0.50	5	0	84.2	80-120	0			
Zinc	4.678	1.0	5	0	93.6	80-120	0			

LCSD Sample ID: **LCSD-37537-37537** Units: **mg/Kg** Analysis Date: **11/18/2011 08:01 PM**
Client ID: Run ID: **ICPMS1_111117A** SeqNo: **1828238** Prep Date: **11/17/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.306	0.50	5	0	86.1	80-120	4.145	3.81	20	
Barium	4.527	0.50	5	0	90.5	80-120	4.558	0.682	20	
Cadmium	4.796	0.20	5	0	95.9	80-120	4.736	1.26	20	
Chromium	4.381	0.50	5	0	87.6	80-120	4.384	0.0685	20	
Copper	4.422	0.50	5	0	88.4	80-120	4.382	0.909	20	
Lead	4.602	0.50	5	0	92	80-120	4.536	1.44	20	
Nickel	4.362	0.50	5	0	87.2	80-120	4.343	0.437	20	
Selenium	4.457	0.50	5	0	89.1	80-120	4.291	3.8	20	
Silver	4.24	0.50	5	0	84.8	80-120	4.21	0.71	20	
Zinc	4.452	1.0	5	0	89	80-120	4.678	4.95	20	

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

Revision: 1

Client: HRL Compliance Solutions

Work Order: 1111567

Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/1

QC BATCH REPORT

Batch ID: **37537** Instrument ID **ICPMS1** Method: **SW6020A**

MS Sample ID: **1111569-04AMS** Units: **mg/Kg** Analysis Date: **11/18/2011 09:25 PM**

Client ID: Run ID: **ICPMS1_111117A** SeqNo: **1828252** Prep Date: **11/17/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	8.15	0.80	8	1.708	80.5	80-120	0			
Barium	673	0.80	8	507.7	2070	80-120	0			SEO
Cadmium	7.17	0.32	8	0.1583	87.6	80-120	0			
Chromium	27.06	0.80	8	22.79	53.3	80-120	0			S
Copper	12.67	0.80	8	7.653	62.7	80-120	0			S
Lead	14.62	0.80	8	7.673	86.8	80-120	0			
Nickel	14.52	0.80	8	10.07	55.7	80-120	0			S
Selenium	6.395	0.80	8	0.3981	75	80-120	0			S
Silver	5.403	0.80	8	0.02799	67.2	80-120	0			S
Zinc	35.2	1.6	8	31.22	49.8	80-120	0			S

MSD Sample ID: **1111569-04AMSD** Units: **mg/Kg** Analysis Date: **11/18/2011 11:17 PM**

Client ID: Run ID: **ICPMS1_111117A** SeqNo: **1828266** Prep Date: **11/17/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	9.214	0.76	7.587	1.708	98.9	80-120	8.15	12.2	25	
Barium	488.6	0.76	7.587	507.7	-251	80-120	673	31.7	25	SREO
Cadmium	6.954	0.30	7.587	0.1583	89.6	80-120	7.17	3.05	25	
Chromium	30.74	0.76	7.587	22.79	105	80-120	27.06	12.8	25	
Copper	14.44	0.76	7.587	7.653	89.4	80-120	12.67	13	25	
Lead	15.36	0.76	7.587	7.673	101	80-120	14.62	4.94	25	
Nickel	18.12	0.76	7.587	10.07	106	80-120	14.52	22	25	
Selenium	6.53	0.76	7.587	0.3981	80.8	80-120	6.395	2.08	25	
Silver	5.31	0.76	7.587	0.02799	69.6	80-120	5.403	1.75	25	S
Zinc	39.7	1.5	7.587	31.22	112	80-120	35.2	12	25	O

The following samples were analyzed in this batch: 1111567-01B 1111567-02B

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

Revision: 1

Client: HRL Compliance Solutions
Work Order: 1111567
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/1

QC BATCH REPORT

Batch ID: **37525** Instrument ID **SVMS7** Method: **SW8270**

MBLK Sample ID: **SBLKS1-37525-37525** Units: **µg/Kg** Analysis Date: **11/18/2011 10:08 AM**
Client ID: Run ID: **SVMS7_111118A** SeqNo: **1826696** Prep Date: **11/17/2011** 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	*1338*	0	*1667*	0	*80.3*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1062*	0	*1667*	0	*63.7*	*12-100*	0			
Surr: 2-Fluorophenol	*1255*	0	*1667*	0	*75.3*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1209*	0	*1667*	0	*72.5*	*25-137*	0			
Surr: Nitrobenzene-d5	*1171*	0	*1667*	0	*70.2*	*37-107*	0			
Surr: Phenol-d6	*1278*	0	*1667*	0	*76.7*	*40-106*	0			

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

Revision: 1

QC BATCH REPORT

Batch ID: **37525** Instrument ID **SVMS7** Method: **SW8270**

LCS Sample ID: **SLCSS1-37525-37525** Units: **µg/Kg** Analysis Date: **11/18/2011 10:37 AM**
Client ID: Run ID: **SVMS7_111118A** SeqNo: **1826697** Prep Date: **11/17/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1026	30	1333	0	76.9	45-110	0			
Anthracene	1070	30	1333	0	80.3	55-105	0			
Benzo(a)anthracene	998	30	1333	0	74.9	50-110	0			
Benzo(a)pyrene	1100	30	1333	0	82.5	50-110	0			
Benzo(b)fluoranthene	968.3	30	1333	0	72.6	45-115	0			
Benzo(g,h,i)perylene	1128	30	1333	0	84.6	40-125	0			
Benzo(k)fluoranthene	1073	30	1333	0	80.5	45-115	0			
Chrysene	1031	30	1333	0	77.3	55-110	0			
Dibenzo(a,h)anthracene	1153	30	1333	0	86.5	40-125	0			
Fluoranthene	1040	30	1333	0	78	55-115	0			
Fluorene	1106	30	1333	0	82.9	50-110	0			
Indeno(1,2,3-cd)pyrene	1159	30	1333	0	86.9	40-120	0			
Naphthalene	1006	30	1333	0	75.5	40-105	0			
Pyrene	1128	30	1333	0	84.6	45-125	0			
Surr: 2,4,6-Tribromophenol	*1375*	0	*1667*	0	*82.5*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1116*	0	*1667*	0	*66.9*	*12-100*	0			
Surr: 2-Fluorophenol	*1255*	0	*1667*	0	*75.3*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1295*	0	*1667*	0	*77.7*	*25-137*	0			
Surr: Nitrobenzene-d5	*1271*	0	*1667*	0	*76.3*	*37-107*	0			
Surr: Phenol-d6	*1230*	0	*1667*	0	*73.8*	*40-106*	0			

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

Revision: 1

Client: HRL Compliance Solutions
Work Order: 1111567
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/1

QC BATCH REPORT

Batch ID: **37525** Instrument ID **SVMS7** Method: **SW8270**

LCSD Sample ID: **SLCSDS1-37525-37525** Units: **µg/Kg** Analysis Date: **11/18/2011 11:06 AM**
Client ID: Run ID: **SVMS7_111118A** SeqNo: **1826698** Prep Date: **11/17/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1032	30	1333	0	77.4	45-110	1026	0.583	25	
Anthracene	1076	30	1333	0	80.7	55-105	1070	0.59	25	
Benzo(a)anthracene	1007	30	1333	0	75.5	50-110	998	0.865	25	
Benzo(a)pyrene	1107	30	1333	0	83	50-110	1100	0.574	25	
Benzo(b)fluoranthene	1073	30	1333	0	80.5	45-115	968.3	10.3	25	
Benzo(g,h,i)perylene	1128	30	1333	0	84.6	40-125	1128	0.0295	25	
Benzo(k)fluoranthene	932	30	1333	0	69.9	45-115	1073	14.1	25	
Chrysene	1043	30	1333	0	78.2	55-110	1031	1.16	25	
Dibenzo(a,h)anthracene	1169	30	1333	0	87.7	40-125	1153	1.32	25	
Fluoranthene	1053	30	1333	0	79	55-115	1040	1.27	25	
Fluorene	1110	30	1333	0	83.3	50-110	1106	0.391	25	
Indeno(1,2,3-cd)pyrene	1167	30	1333	0	87.5	40-120	1159	0.659	25	
Naphthalene	1001	30	1333	0	75.1	40-105	1006	0.465	25	
Pyrene	1130	30	1333	0	84.7	45-125	1128	0.177	25	
Surr: 2,4,6-Tribromophenol	*1419*	0	*1667*	0	*85.1*	*34-140*	1375	*3.15*	*40*	
Surr: 2-Fluorobiphenyl	*1130*	0	*1667*	0	*67.8*	*12-100*	1116	*1.28*	*40*	
Surr: 2-Fluorophenol	*1263*	0	*1667*	0	*75.8*	*33-117*	1255	*0.662*	*40*	
Surr: 4-Terphenyl-d14	*1312*	0	*1667*	0	*78.7*	*25-137*	1295	*1.25*	*40*	
Surr: Nitrobenzene-d5	*1265*	0	*1667*	0	*75.9*	*37-107*	1271	*0.447*	*40*	
Surr: Phenol-d6	*1258*	0	*1667*	0	*75.5*	*40-106*	1230	*2.28*	*40*	

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

Revision: 1

Client: HRL Compliance Solutions
Work Order: 1111567
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/1

QC BATCH REPORT

Batch ID: **37525** Instrument ID **SVMS7** Method: **SW8270**

MS Sample ID: **1111465-01A MS** Units: **µg/Kg** Analysis Date: **11/19/2011 10:46 PM**
Client ID: Run ID: **SVMS7_111119A** SeqNo: **1827080** Prep Date: **11/17/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	965.6	30	1317	0	73.3	45-110	0			
Anthracene	916.2	30	1317	0	69.6	55-105	0			
Benzo(a)anthracene	998.2	30	1317	0	75.8	50-110	0			
Benzo(a)pyrene	991.6	30	1317	0	75.3	50-110	0			
Benzo(b)fluoranthene	1101	30	1317	0	83.6	45-115	0			
Benzo(g,h,i)perylene	1019	30	1317	0	77.4	40-125	0			
Benzo(k)fluoranthene	878.7	30	1317	0	66.7	45-115	0			
Chrysene	979.1	30	1317	0	74.4	55-110	0			
Dibenzo(a,h)anthracene	887.9	30	1317	0	67.4	40-125	0			
Fluoranthene	1009	30	1317	0	76.6	55-115	0			
Fluorene	999.9	30	1317	0	75.9	50-110	0			
Indeno(1,2,3-cd)pyrene	911.3	30	1317	0	69.2	40-120	0			
Naphthalene	1305	30	1317	137.1	88.7	40-105	0			
Pyrene	1057	30	1317	0	80.3	45-125	0			
Surr: 2,4,6-Tribromophenol	*1191*	0	*1646*	0	*72.4*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*997.2*	0	*1646*	0	*60.6*	*12-100*	0			
Surr: 2-Fluorophenol	*1026*	0	*1646*	0	*62.3*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1252*	0	*1646*	0	*76.1*	*25-137*	0			
Surr: Nitrobenzene-d5	*1058*	0	*1646*	0	*64.3*	*37-107*	0			
Surr: Phenol-d6	*1071*	0	*1646*	0	*65.1*	*40-106*	0			

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

Revision: 1

Client: HRL Compliance Solutions
Work Order: 1111567
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/1

QC BATCH REPORT

Batch ID: **37525** Instrument ID **SVMS7** Method: **SW8270**

MSD Sample ID: **1111465-01A MSD** Units: **µg/Kg** Analysis Date: **11/19/2011 11:16 PM**
Client ID: Run ID: **SVMS7_111119A** SeqNo: **1827081** Prep Date: **11/17/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1043	30	1327	0	78.6	45-110	965.6	7.68	30	
Anthracene	941.5	30	1327	0	70.9	55-105	916.2	2.72	30	
Benzo(a)anthracene	1029	30	1327	0	77.6	50-110	998.2	3.08	30	
Benzo(a)pyrene	1031	30	1327	0	77.7	50-110	991.6	3.94	30	
Benzo(b)fluoranthene	1136	30	1327	0	85.6	45-115	1101	3.19	30	
Benzo(g,h,i)perylene	957.8	30	1327	0	72.2	40-125	1019	6.22	30	
Benzo(k)fluoranthene	942.5	30	1327	0	71	45-115	878.7	7.01	30	
Chrysene	1021	30	1327	0	76.9	55-110	979.1	4.14	30	
Dibenzo(a,h)anthracene	869.2	30	1327	0	65.5	40-125	887.9	2.13	30	
Fluoranthene	1060	30	1327	0	79.9	55-115	1009	4.99	30	
Fluorene	1064	30	1327	0	80.2	50-110	999.9	6.21	30	
Indeno(1,2,3-cd)pyrene	884.4	30	1327	0	66.6	40-120	911.3	2.99	30	
Naphthalene	1332	30	1327	137.1	90	40-105	1305	2.08	30	
Pyrene	1113	30	1327	0	83.9	45-125	1057	5.22	30	
Surr: 2,4,6-Tribromophenol	*1226*	0	*1659*	0	*73.9*	*34-140*	1191	*2.85*	*40*	
Surr: 2-Fluorobiphenyl	*1097*	0	*1659*	0	*66.1*	*12-100*	997.2	*9.54*	*40*	
Surr: 2-Fluorophenol	*1141*	0	*1659*	0	*68.8*	*33-117*	1026	*10.7*	*40*	
Surr: 4-Terphenyl-d14	*1293*	0	*1659*	0	*77.9*	*25-137*	1252	*3.22*	*40*	
Surr: Nitrobenzene-d5	*1156*	0	*1659*	0	*69.7*	*37-107*	1058	*8.83*	*40*	
Surr: Phenol-d6	*1153*	0	*1659*	0	*69.5*	*40-106*	1071	*7.31*	*40*	

The following samples were analyzed in this batch: 1111567-01B 1111567-02B

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

Revision: 1

Client: HRL Compliance Solutions
Work Order: 1111567
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/1

QC BATCH REPORT

Batch ID: **R97963** Instrument ID **VMS9** Method: **SW8260**

MBLK Sample ID: **VBLKW2-111119-R97963** Units: **µg/L** Analysis Date: **11/20/2011 03:46 AM**
Client ID: Run ID: **VMS9_111119B** SeqNo: **1827243** 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	3.0								
Surr: 1,2-Dichloroethane-d4	*95.32*	0	*100*	0	*95.3*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*97.33*	0	*100*	0	*97.3*	*75-120*	0			
Surr: Dibromofluoromethane	*97.63*	0	*100*	0	*97.6*	*85-115*	0			
Surr: Toluene-d8	*95.35*	0	*100*	0	*95.4*	*85-120*	0			

LCS Sample ID: **VLCSW2-111119-R97963** Units: **µg/L** Analysis Date: **11/20/2011 02:32 AM**
Client ID: Run ID: **VMS9_111119B** SeqNo: **1827241** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	22.51	1.0	20	0	113	80-120	0			
Ethylbenzene	22.53	1.0	20	0	113	75-125	0			
m,p-Xylene	45.18	2.0	40	0	113	75-130	0			
o-Xylene	22.33	1.0	20	0	112	80-120	0			
Toluene	22.43	1.0	20	0	112	75-120	0			
Xylenes, Total	67.51	3.0	60	0	113	75-130	0			
Surr: 1,2-Dichloroethane-d4	*94.82*	0	*100*	0	*94.8*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*95.12*	0	*100*	0	*95.1*	*75-120*	0			
Surr: Dibromofluoromethane	*95.49*	0	*100*	0	*95.5*	*85-115*	0			
Surr: Toluene-d8	*99.48*	0	*100*	0	*99.5*	*85-120*	0			

LCSD Sample ID: **VLCSDW2-111119-R97963** Units: **µg/L** Analysis Date: **11/20/2011 02:57 AM**
Client ID: Run ID: **VMS9_111119B** SeqNo: **1827242** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.95	1.0	20	0	110	80-120	22.51	2.52	30	
Ethylbenzene	22.13	1.0	20	0	111	75-125	22.53	1.79	30	
m,p-Xylene	44.38	2.0	40	0	111	75-130	45.18	1.79	30	
o-Xylene	22.06	1.0	20	0	110	80-120	22.33	1.22	30	
Toluene	22.1	1.0	20	0	110	75-120	22.43	1.48	30	
Xylenes, Total	66.44	3.0	60	0	111	75-130	67.51	1.6	30	
Surr: 1,2-Dichloroethane-d4	*94.69*	0	*100*	0	*94.7*	*70-120*	94.82	*0.137*	*30*	
Surr: 4-Bromofluorobenzene	*96.16*	0	*100*	0	*96.2*	*75-120*	95.12	*1.09*	*30*	
Surr: Dibromofluoromethane	*96.34*	0	*100*	0	*96.3*	*85-115*	95.49	*0.886*	*30*	
Surr: Toluene-d8	*99.55*	0	*100*	0	*99.6*	*85-120*	99.48	*0.0703*	*30*	

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

Revision: 1

Client: HRL Compliance Solutions
Work Order: 1111567
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/1

QC BATCH REPORT

Batch ID: **R97963** Instrument ID **VMS9** Method: **SW8260**

MS Sample ID: **1111525-02A MS** Units: **µg/L** Analysis Date: **11/20/2011 12:19 PM**
Client ID: Run ID: **VMS9_111119B** SeqNo: **1827256** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	22.62	1.0	20	0	113	80-120	0			
Ethylbenzene	22.99	1.0	20	0	115	75-125	0			
m,p-Xylene	45.64	2.0	40	0	114	75-130	0			
o-Xylene	22.35	1.0	20	0	112	80-120	0			
Toluene	23.07	1.0	20	0	115	75-120	0			
Xylenes, Total	67.99	3.0	60	0	113	75-130	0			
Surr: 1,2-Dichloroethane-d4	*95.65*	0	*100*	0	*95.6*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*95.15*	0	*100*	0	*95.2*	*75-120*	0			
Surr: Dibromofluoromethane	*96.24*	0	*100*	0	*96.2*	*85-115*	0			
Surr: Toluene-d8	*100.6*	0	*100*	0	*101*	*85-120*	0			

MSD Sample ID: **1111525-02A MSD** Units: **µg/L** Analysis Date: **11/20/2011 12:44 PM**
Client ID: Run ID: **VMS9_111119B** SeqNo: **1827257** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.69	1.0	20	0	108	80-120	22.62	4.2	30	
Ethylbenzene	21.8	1.0	20	0	109	75-125	22.99	5.31	30	
m,p-Xylene	43.3	2.0	40	0	108	75-130	45.64	5.26	30	
o-Xylene	21.44	1.0	20	0	107	80-120	22.35	4.16	30	
Toluene	21.74	1.0	20	0	109	75-120	23.07	5.94	30	
Xylenes, Total	64.74	3.0	60	0	108	75-130	67.99	4.9	30	
Surr: 1,2-Dichloroethane-d4	*95.19*	0	*100*	0	*95.2*	*70-120*	95.65	*0.482*	*30*	
Surr: 4-Bromofluorobenzene	*96.45*	0	*100*	0	*96.4*	*75-120*	95.15	*1.36*	*30*	
Surr: Dibromofluoromethane	*96.29*	0	*100*	0	*96.3*	*85-115*	96.24	*0.0519*	*30*	
Surr: Toluene-d8	*99.67*	0	*100*	0	*99.7*	*85-120*	100.6	*0.949*	*30*	

The following samples were analyzed in this batch: 1111567-01A 1111567-02A

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

Revision: 1

Client: HRL Compliance Solutions
Work Order: 1111567
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/1

QC BATCH REPORT

Batch ID: **37655** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MBLK-37655-37655** Units: **mg/Kg** Analysis Date: **11/22/2011 01:00 PM**
Client ID: Run ID: **WETCHEM_111122L** SeqNo: **1830803** Prep Date: **11/20/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	ND	0.50								

LCS Sample ID: **LCS-37655-37655** Units: **mg/Kg** Analysis Date: **11/22/2011 01:00 PM**
Client ID: Run ID: **WETCHEM_111122L** SeqNo: **1830804** Prep Date: **11/20/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.928	0.50	2	0	96.4	75-110	0			

LCSD Sample ID: **LCSD-37655-37655** Units: **mg/Kg** Analysis Date: **11/22/2011 01:00 PM**
Client ID: Run ID: **WETCHEM_111122L** SeqNo: **1830817** Prep Date: **11/20/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.98	0.50	2	0	99	75-110	1.928	2.66	20	

MS Sample ID: **1111615-01A MS** Units: **mg/Kg** Analysis Date: **11/22/2011 01:00 PM**
Client ID: Run ID: **WETCHEM_111122L** SeqNo: **1830814** Prep Date: **11/20/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.243	0.50	1.992	0	62.4	60-130	0			

MSD Sample ID: **1111615-01A MSD** Units: **mg/Kg** Analysis Date: **11/22/2011 01:00 PM**
Client ID: Run ID: **WETCHEM_111122L** SeqNo: **1830815** Prep Date: **11/20/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.243	0.50	1.992	0	62.4	60-130	1.243	0	30	

The following samples were analyzed in this batch: 1111567-01B 1111567-02B

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

Revision: 1

Client: HRL Compliance Solutions
Work Order: 1111567
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/1

QC BATCH REPORT

Batch ID: **R97849** Instrument ID **WETCHEM** Method: **SW9045D**

LCS Sample ID: **LCS-R97849-R97849** Units: **s.u.** Analysis Date: **11/17/2011 08:40 AM**
Client ID: Run ID: **WETCHEM_111117A** SeqNo: **1823641** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	4.39	0	4.4	0	99.8	90-110	0			

DUP Sample ID: **1111557-01B DUP** Units: **s.u.** Analysis Date: **11/17/2011 08:40 AM**
Client ID: Run ID: **WETCHEM_111117A** SeqNo: **1823643** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.75	0	0	0	0	0-0	8.75	0	20	H

The following samples were analyzed in this batch: 1111567-01B 1111567-02B

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

Revision: 1

Client: HRL Compliance Solutions
Work Order: 1111567
Project: Williams TR 22-20-597 Treat. Cell Pad LOE 11/8/1

QC BATCH REPORT

Batch ID: **R97862** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS1-R97862** Units: **% of sample** Analysis Date: **11/16/2011 02:34 PM**
Client ID: Run ID: **MOIST_111116B** SeqNo: **1823914** 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-R97862** Units: **% of sample** Analysis Date: **11/16/2011 02:34 PM**
Client ID: Run ID: **MOIST_111116B** SeqNo: **1823913** 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: **1111558-02BDUP** Units: **% of sample** Analysis Date: **11/16/2011 02:34 PM**
Client ID: Run ID: **MOIST_111116B** SeqNo: **1823897** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	14.84	0.050	0	0	0	0-0	14.8	0.27	20	

DUP Sample ID: **1111566-01ADUP** Units: **% of sample** Analysis Date: **11/16/2011 02:34 PM**
Client ID: Run ID: **MOIST_111116B** SeqNo: **1823904** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	16.06	0.050	0	0	0	0-0	16.97	5.51	20	H

The following samples were analyzed in this batch: 1111567-01B 1111567-02B

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

Revision: 1

ALS Environmental

Subcontractor:
A & L Great Lakes Agricultural La
3505 Conestoga Dr
Ft. Wayne, IN 46808
TEL: (260) 483-4759
FAX: (260) 483-5274
Acct #: 91000

Salesperson: Debbie Fazio

CHAIN-OF-CUSTODY RECORD

Date: 16-Nov-11
COC ID: 3309
Due Da 22-Nov-11

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order	20-122011243	Project Name	1111567	A	Subcontracted Analyses (SUBCONTRACT) SAR-EC
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
1111567-01C	Soil	8/Nov/2011 12:30	(1) MISC	X									
1111567-02C	Soil	8/Nov/2011 12:35	(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
[signature]	11/16/11 1330				Std
Relinquished by:	Date/Time	Received by:	Date/Time		

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 #	1111567
PAGE	1 of 1
DISPOSAL	By Lab or Return to Client

PROJECT NAME	TR 22-20-597 Pad LOE Willaims	SAMPLER	Reed Wold
PROJECT No.		SITE ID	TR 22-20-597
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	HRL Compliance	BILL TO COMPANY	Williams
SEND REPORT TO	Kris Rowe	INVOICE ATTN TO	Karolina Blaney
ADDRESS	744 Horizon Ct Ste. 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	
E-MAIL	Krowe@hrlcomp.com	E-MAIL	Karolina.blaney@williams.com

DATE: 11/14/2011
TURNAROUND: Standard

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX/ GRO	DRO/ PAH/ Metals (Per table 910-1)	SAR/ EC/ pH
	N. Side	SO	11/8/2011	12:30	3	8		X	X	X
	S. Side	SO	11/8/2011	12:35	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:	QC PACKAGE (check below)	
5.8c	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	Reed Wold	11/14/11	5:00
RECEIVED BY		Diane F. Shaw	11/16/11	1000
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Group USA, Corp

Sample Receipt Checklist

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

Work Order: **1111567** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 16-Nov-11 (Date) Reviewed by: Alex Csaszar (eSignature) 16-Nov-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):	5.8 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:

Revision: 1

CUSTODY SEAL

DATE 11/14/2011

SIGNATURE

QEC

Quality Environmental Containers

800-255-3950 • 304-255-3900

Express US Airbill Number 8769 1479 5625 Form ID No. 0215 FedEx Retrieval Copy

1 From

Date 11/14/11 Sender's FedEx Account Number

Sender's Name [illegible] Phone [illegible]

Company [illegible]

Address [illegible]

City [illegible] State [illegible] ZIP [illegible]

2 Your Internal Billing Reference

3 To

Recipient's Name [illegible] Phone [illegible]

Company [illegible]

Address [illegible]

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

Address

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

City [illegible] State [illegible] ZIP [illegible]

HOLD Weekday 01

FedEx location address REQUIRED. NOT available for FedEx First Overnight

HOLD Saturday 31

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

4 Express Package Service

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.

06	FedEx First Overnight	49	NEW FedEx 2Day A.M.
01	FedEx Priority Overnight	03	FedEx 2Day
05	FedEx Standard Overnight	20	FedEx Express Saver

5 Packaging

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 1D Direct Signature 3D Indirect Signature

Does this shipment contain dangerous goods?

No 04 Yes Shipper's Declaration not required 05 Dry Ice

Cargo Aircraft Only

7 Payment Bill to:

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Appendix 5: Sundry Notice Form 4 for Background Arsenic Consideration

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 284697
6. Well/Facility Name: Chevron TR 21-20-597
7. Well/Facility Number 21-20-597
8. Location (QtrQtr, Sec, Twp, Rng, Meridian): SENW, Sec 20, TSS, R97W, 6th PM
9. County: Garfield
10. Field Name: Trail Ridge
11. Federal, Indian or State Lease Number:

REM # 5949

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)	☐ Request to Vent or Flare	☐ E&P Waste Disposal
☐ Change Drilling Plans	☐ Repair Well	☐ Beneficial Reuse of E&P Waste
☐ Gross Interval Changed?	☐ Rule 502 variance requested	☐ Status Update/Change of Remediation Plans for Spills and Releases
☐ Casing/Cementing Program Change	☒ Other: Background	

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

Signed:
Date: 12/15/2011
Email: Karolina.Blaney@williams.com
Print Name: Karolina Blaney
Title: Environmental Specialist

COGCC Approved: Carlos Berger
Title: FOR Chris Canfield EPS NW Region
Date: 01/26/2012
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 # 284697
3. Well/Facility Name: Chevron TR 21-20-597 Well/Facility Number: 21-20-597
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SENW, Sec 20, T5S, R97W, 6th PM

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 21-20-597 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)

Eight (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.

North Pit Bottom - 2 mg/kg
South Pit Bottom - 2.2 mg/kg
East Wall - 2.8 mg/kg
South Wall - East Half - 2.0 mg/kg
West Wall - 4.1 mg/kg
North Wall - 1.7 mg/kg

Average Concentration: 2.46 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 - 5.4 mg/kg
BKGD 2 - 5.2 mg/kg
BKGD 3 - 5.7 mg/kg

Average Concentration: 5.43 mg/kg

Williams is requesting this approval in order to proceed with closure and reclamation of the production pit on the Chevron TR 21-20-597 well pad.