

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

**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 Employee:

☐ Spill ☐ Complaint  
☐ Inspection ☐ NOAV

Tracking No:

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: Juhan 14-26H

Facility Number: 414574

Well Name: Juhan 14-26H

Well Number: N/A

Location: (QtrQtr, Sec, Twp, Rng, Meridian): SESW, Sec 26, T6S, R94W, 6th PM Latitude: 39.492069 Longitude: -108.859513

**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: Nilhill Channery Loam, 1 to 6 percent slopes

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Water well located approximately 685 feet to southeast. Porcupine Creek is located approximately 380 feet to the west.

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

Impacted Media (check):

- ☒ Soils  
☐ Vegetation  
☐ Groundwater  
☐ Surface Water

Extent of Impact:

Please see the attached Notice of Completion Report for Remediation # 6236

How Determined:

Visual observations, field screening, and analytical analysis

**REMEDIALATION WORKPLAN**

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

See attached Notice of Completion Report for Remediation # 6236

**Describe how source is to be removed:**

See attached Notice of Completion Report for Remediation # 6236

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

See attached Notice of Completion Report for Remediation # 6236



Tracking Number: REM # 6236  
Name of Operator: WILLIAMS  
OGCC Operator No: \_\_\_\_\_  
Received Date: \_\_\_\_\_  
Well Name & No: \_\_\_\_\_  
Facility Name & No: Juham 14-26H

Page 2

REMEDIATION WORKPLAN (Cont.)

OGCC Employee: \_\_\_\_\_

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

See attached Notice of Completion Report for Remediation # 6236

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

See attached Notice of Completion Report for Remediation # 6236

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

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

See attached Notice of Completion Report for Remediation # 6236

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

See attached Notice of Completion Report for Remediation # 6236

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: November 4, 2011 Date Site Investigation Completed: November 4, 2011 Date Remediation Plan Submitted: September 30, 2011  
Remediation Start Date: November 5, 2011 Anticipated Completion Date: December 4, 2011 Actual Completion Date: December 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: December 14, 2011

OGCC Approved: Carolyn Beejar

Title: FOR Chris Canfield

Date: 01/26/2012

Please notify OGCC when backfill and reclamation have been completed to issue NFA letter and close the project, calc.

## Sensitive Area Determination Checklist

Williams Production RMT Company		
<b>Person(s) Conducting Field Inspection</b>	Jennifer Belcastro	6/20/11
	<i>Environmental Scientist</i>	
<b>Site Information</b>		
Location:	Juhan 14-26H	Time: 1330
Type of Facility:	Frac Water Storage Pit	
<b>Environmental Conditions</b>	Overcast; soil conditions are dry.	
Temperature (°F)	65°	

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: Porcupine Creek, an intermittent stream, and three (3) unnamed USGS identified intermittent drainages.

If yes, describe location relative to facility: Porcupine Creek is located 249 feet to the west of the facility. The three USGS identified unnamed intermittent drainages are located 524 feet to the west, 294 and 325 feet to the northeast of the 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. If a potential release were to migrate off the northeast corner of the facility it could potentially impact the unnamed intermittent drainage to the northeast.

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): Frac water storage 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  $\leq 1.0 \times 10^{-7}$  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, Porcupine Creek is an intermittent stream located 249 feet west of the facility. One of the three unnamed intermittent drainages is located 294 feet to the northeast of the facility. The facility, as it is currently constructed, limits the path of a potential release to the northeast corner of the facility. By COGCC decision this would classify the facility as being in a sensitive area. However the potential to impact surface water features is low due to the fact that the pit itself is located on the cut slope end of the facility and there are extensive Best Management Practices (BMPs) currently installed in the form of a large earthen perimeter berm that would prevent a release from reaching Porcupine Creek. The greatest potential for impacts would be to the unnamed intermittent drainage located to the northeast of the facility. However, to impact this drainage the release would have to be very large and would have to breach the perimeter berm on the northeast corner in order to impact this drainage. It is not anticipated that the intermittent drainage located to the west of the facility would be impacted by a potential release as it is isolated from the facility by Porcupine Creek stream channel. The third unnamed intermittent drainage located 325 feet to the northeast of the facility would not be impacted by a potential release due to its topographical location relative to that of the facility.

The State Engineers office and USGS records were reviewed and it was revealed that there is one permitted water well located 543 feet southeast of the facility with a known depth of 80 feet to groundwater. The well is located upgradient from the facility and would not be impacted by a potential release. Further review of the well records indicate that the actual pumping interval from the well is located at a depth of greater than 100 feet further reducing potential impacts to groundwater by a release from the facility.

Based on the information collected during the site investigation and desktop review, the potential to impact surface water has been deemed low. However with the close proximity of Porcupine Creek and the unnamed intermittent drainage there is the potential these surface water features could be impacted by a very large release. Based on the well records and soils data it is not anticipated that groundwater would be impacted by a potential release even one that occurred over a longer period of time such as a leaking pit. However based on the close proximity of the two surface water features the facility should be designated as being in a sensitive area.

Inspector Signature(s):  Date: 9/30/2011

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

 Date: 6/17/2011

Jennifer Belcastro, *Environmental Scientist*  
HRL Compliance Solutions, Inc.

***WILLIAMS PRODUCTION RMT COMPANY  
SOUTH RULISON FIELD  
NOTICE OF COMPLETION REPORT FOR  
JUHAN 14-26H FRAC PIT  
REMEDICATION # 6236***

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 Juhan 14-26H special use pit (COGCC Facility ID # number 414574; hereinafter also referred to as Juhan 14-26H) – is to provide detailed information and findings analysis for the previously submitted and approved 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 Certified Express Mail and electronic email on September 30, 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 October 7, 2011; at which time the remediation number, 6236, was issued. Closure activities began on November 4, 2011 and were concluded on December 9, 2011. Information included in this report includes, but is not limited to: field screening results, laboratory analytical, subliner soil remediation, soil disposal, and liner recycling.

### **Evacuation of Pit Contents**

Produced water was removed from the pit using hydro-vac trucks and hauled to an approved disposal/evaporation facilities located in the Parachute area.

Any residual pit contents remaining on the pit liner were removed and collected during pit liner removal through the use of a hydro-vac truck. All residuals collected were placed within the bermed revetment.

### **Background Sampling**

Three grab samples were collected from the up-gradient undisturbed hillsides surrounding the pad. Background samples were analyzed for arsenic as well as one location which included inorganic parameters of COGCC Table 910-1. Refer to Table 3 (additional detail provided in Appendix 3) for background sampling results.

### **Pit Liner Investigation and Integrity Assessment:**

The integrity of the pit liner system – containing one layer of liner and one layer of felt laying across the pit bottom – revealed no apparent defects. Although, an abnormal liner condition located near the southeast corner of the pit suggested additional attention be paid to this area throughout the remainder of the pit investigation and closure activities. During the pit liner investigation, a slight bulge was noticed in the southeast corner where soil was present (see Figure 3 for photographic representation of the area of concern). After further investigation, it was discovered that soil and sand had fallen into the pit, giving the impression that the liner had been compromised in the corner, when in fact it was still intact and had not been compromised.



### **Pit Liner Removal:**

Removal of the pit liners consisted of using a trackhoe bucket to grab sections of the liner and pulling them out, placing them in an earthen bermed containment cell for recycling. Trace amounts of pit sludge was present throughout the pit liners and was all captured in the lining material as they were removed. The liners that contained trace amounts of sludge were placed on the well pad and allowed to dry before being placed within the liner containment cell.

- Liners placed in a lined bermed containment pending recycling

While removing the primary liner, it was discovered that a protective layer of felt underlayment was present along the bottom of the pit. The presence and use of felt underlayment identifies that preventative and precautionary measures were taken during the construction of the pit liner system in order to preserve the pit bottom integrity and the overall containment system. To reiterate, the pit liner system consisted of the following profile: primary liner and a geotextile (felt liner).

No defects were identified, during the removal of the pit liner or the felt liner layer, which would suggest the integrity of the containment system, had been compromised during operation/use of the pit. After all lining material was removed; no signs of free liquid were present throughout the subliner soils (See Figure 4).

### **Subliner Investigation and Activities:**

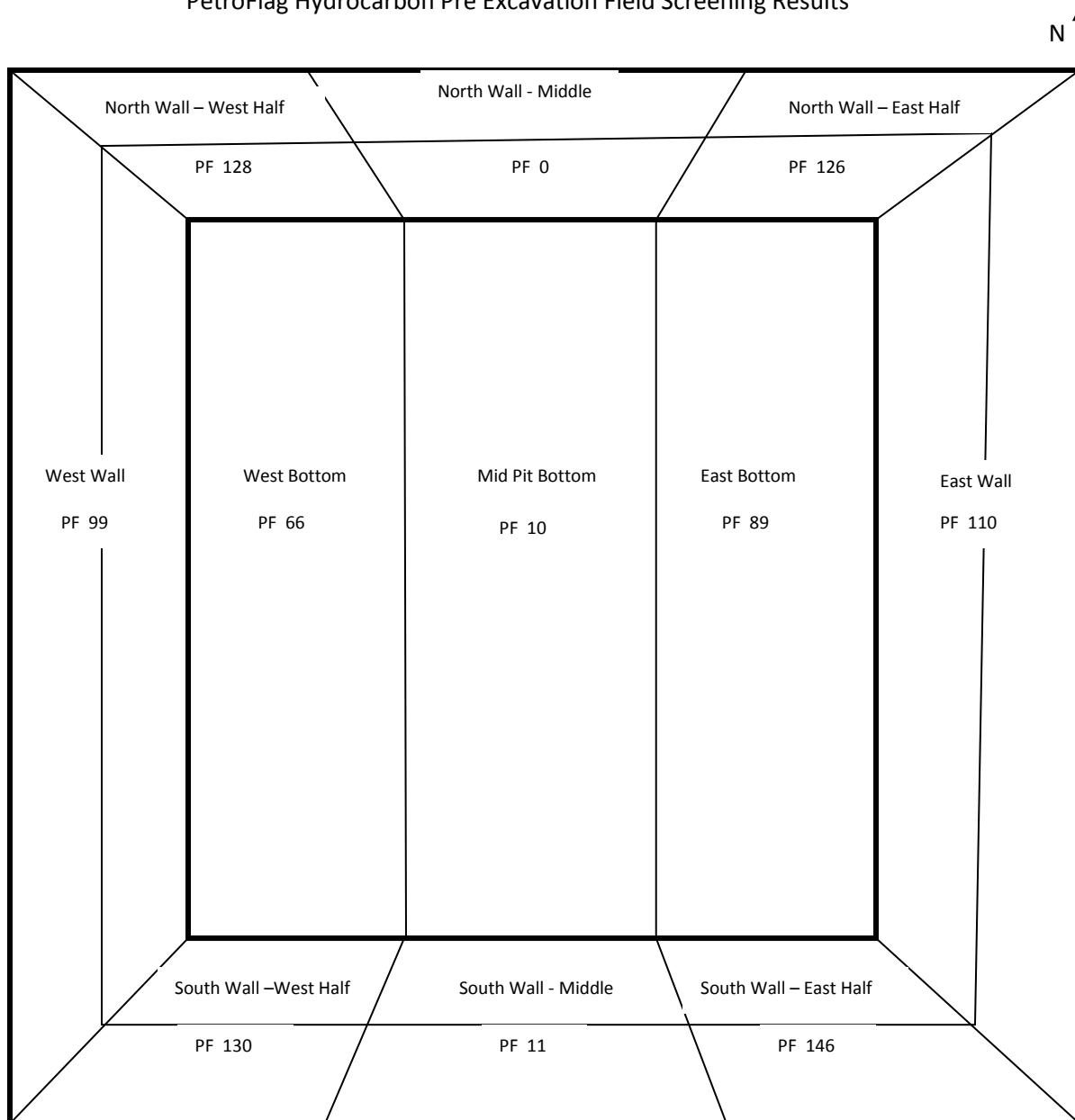
Subliner soils, examined below the pit lining, were inspected visually and field screened using a PetroFlag Hydrocarbon Unit (PetroFlag©) to identify areas which may exceed standards set forth in Table 910-1 of the COGCC 900-series Rule for hydrocarbons within the soil.

Field screening of the pit bottom and walls was performed along the entire pit footprint in a grid pattern of thirds. The pit bottom was separated into three sections and a five point composite sample was collected from each of the sections, with a depth of 0-6 inches below the surface. A five point composite sample was collected from each of the pit walls and analyzed for hydrocarbons.

Figure 1 outlines the PetroFlag© results taken from each section of the pit bottom and walls. Even though no visual signs of impacts were present along the pit walls and bottom, PetroFlag© readings were still collected to confirm prior to collecting samples for compliance with COGCC Table 910-1 allowable concentrations and thresholds.

Figure 1

PetroFlag Hydrocarbon Pre Excavation Field Screening Results



\*Results are in ppm (mg/kg)

Facility Name: Juhan 14-26 H  
Facility ID # 414574  
Remediation # 6236

Name of Operator: Williams Production RMT Company  
Latitude: 39.492069 Longitude -107.859513  
Location (QtrQtr, Sec, Twp, Rng, Meridian): SESW, Sec 26, T6S, R94W, 6<sup>th</sup> PM

COGCC Operator # 96850  
County: Garfield

**Table 1: PetroFlag Field Screening Results**

Sample Location	0-6"
North Wall – Middle	0
North Wall – East Half	126
North Wall – West Half	128
East Wall	110
South Wall – East Half	146
South Wall – Middle	11
South Wall – West Half	130
West Wall	99
Pit Bottom – West Half	66
Bottom – Middle	10
Pit Bottom – East Half	89

All results are in ppm (mg/kg)

Facility Name: Juhan 14-26 H  
 Facility ID # 414574  
 Remediation # 6236

Name of Operator: Williams Production RMT Company  
 Latitude: 39.492069 Longitude -107.859513  
 Location (QtrQtr, Sec, Twp, Rng, Meridian): SESW, Sec 26, T6S, R94W, 6<sup>th</sup> PM

COGCC Operator # 96850  
 County: Garfield

Figure 2: GIS Sample Location Map

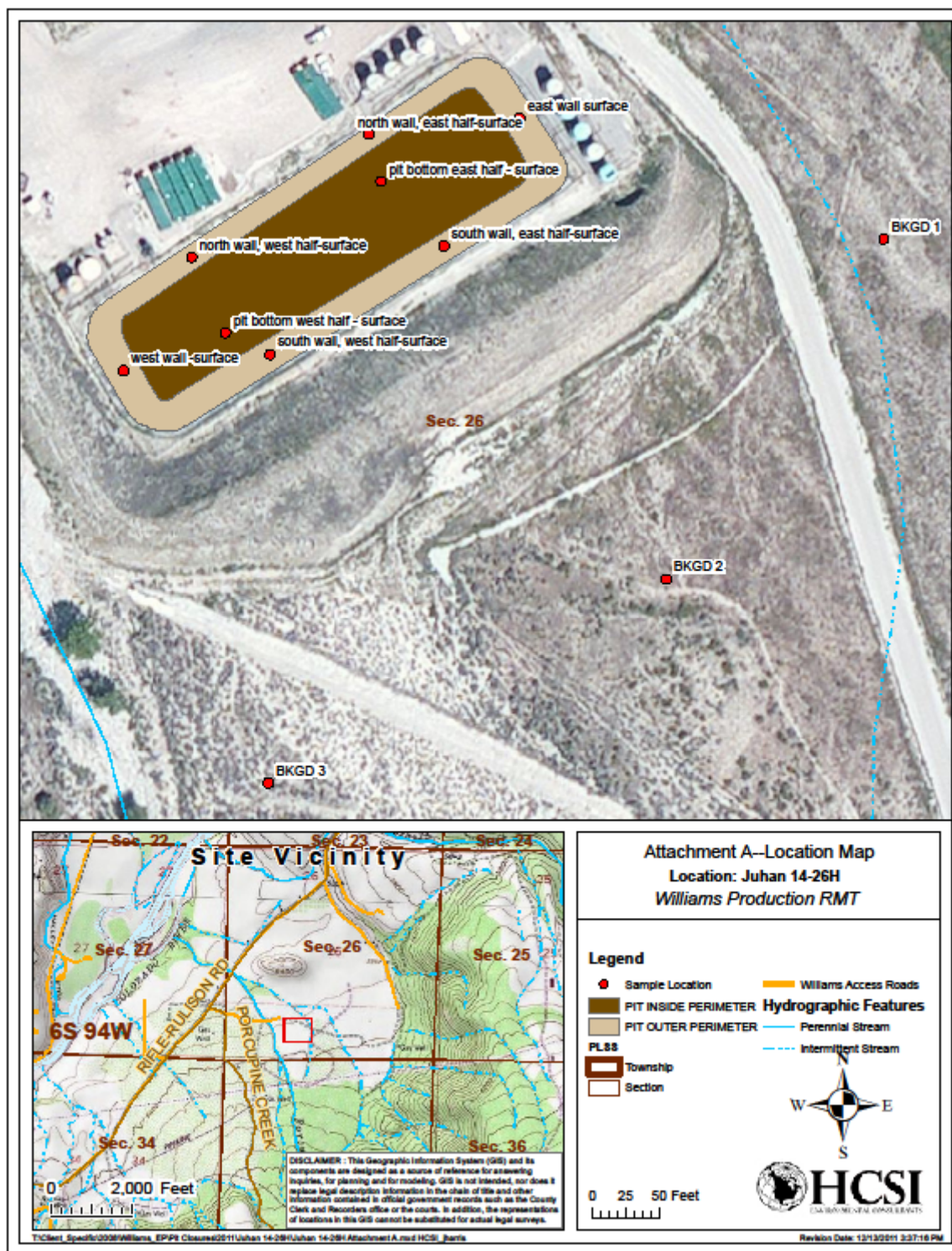


Table 1 shows PetroFlag© results for the specific location screened with the corresponding depths for the extent of contamination. Hydrocarbon concentrations would be displayed from laboratory analysis when results are received.

- Confirmation sample(s), Rule 905.b.(4), were collected from each of the side walls half way down the side and half way between the two adjacent side walls for confirmation of compliance within COGCC Rule 910 and Table 910-1; verification of field screening analysis. Grab samples were collected from the base of the pit as well to demonstrate compliance in accordance with Rule 905.b.(1).
- A Trimble Geo XT 2008 was used to collect GPS locations of each field screen location as well as confirmation sample locations 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 Pit Closure Plan (COGCC document #01175818).

### **Remediation Activities**

Confirmation samples collected indicated that the west wall exceeded the allowable concentrations set forth in the COGCC Table 910-1 for benzene. Two feet was excavated from the wall and re-sampled for benzene. Analytical confirmation indicates that soil at the excavated depth of 2 feet is below COGCC Table 910-1 allowable standards for benzene in soil. See Table 3 (additional detail provided in Appendix 2) for analytical results. Excavated soils were stockpiled in the bottom of the pit and will be amended with backfill soil during final closure.

### **Sample Analysis**

Sampling was performed in accordance with Williams Highlands Pit Closure Plan, Phase IV, Task 2.

See attached Table 2 (additional detail provided in Appendix 1) for summary of initial analytical results.

### **Management of Stockpiled Material**

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

Due to space constraints, impacted soils were stockpiled on the bottom of the pit and will be amended with the original soil removed from the initial construction of the pit.

### **Backfill Material**

Soils that will be used to backfill the pit will be of the original excavated soils from the construction of the pit currently stockpiled on the south end of the pad.

- The soil will be placed in five (5) foot lifts and will not compacted beyond the point of making an impenetrable layer but sufficient to suppose subsequent operations and prevent subsidence.
- The pit will be reclaimed in accordance with the COGCC 1000 Series Rule in addition to all SUA/COA's per the land owner (Chevron).

### **Exceptions to COGCC Table 910-1**

The only exceedances with COGCC Table 910-1 are within the inorganics and arsenic sampling. Refer to the Sundry Notice for consideration of background inorganic and arsenic concentrations in the immediate area of the subject facility. Refer to appendix 4 for submitted Sundry Notice.

### **Analytical Data Management**

See Appendix 1 for raw analytical analysis for samples collected along the pit bottom and sides. Table 2 also includes all analytical results, highlighting areas exceeding COGCC Table 910-1 concentrations. See Appendix 2 for raw analytical analysis for post excavation of the west wall at 2 feet. Appendix 3 includes background raw analytical data for samples collected upgradient from an undisturbed location.

## Figures



**Figure 3**



Visual representation of the soil and sand present above the liner in the southeast corner.



**Figure 4**



Visual representation of the pit standing on the north wall facing southwest. Water present within the pit is from previous days precipitation events.

## Tables

**Table 2: Pre Excavation Analytical Results**

Pit Bottom and Side Walls	SAMPLE LOCATIONS							
	East Wall	South Wall (East Half)	South Wall, (West Half)	West Wall	North Wall (West Half)	North Wall (East Half)	Pit Bottom (East Half)	Pit Bottom (West Half)
TEPH (DRO)	440	110	52	64	97	92	21	9.4
TVPH (GRO)	21	32	20	72	33	11	ND	ND
BENZENE	0.11	ND	ND	0.51	ND	ND	ND	ND
TOLUENE	0.89	0.2	0.43	4.8	1.4	0.2	ND	ND
ETHYLBENZENE	ND	ND	ND	0.61	ND	ND	ND	ND
XYLENE TOTAL	1.8	1.2	1.1	13	4.7	0.96	ND	ND
ACENAPHTHENE	ND	ND	ND	ND	ND	ND	ND	ND
ACENAPHTHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(A)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(A)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(B)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(G,H,I)PERYLEN	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(K)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND
CHRYSENE (mg/kg)	ND	ND	ND	ND	ND	ND	ND	ND
DIBENZO(A,H)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND
FLUORENE	ND	ND	ND	ND	ND	ND	ND	ND
INDENO(1,2,3-CD)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND
1-METHYLNAPHTHALENE	NS	NS	NS	NS	NS	NS	NS	ND
2-METHYLNAPHTHALENE	0.84	0.18	ND	0.23	0.12	0.22	ND	ND
NAPHTHALENE	0.73	0.43	0.047	0.42	0.21	0.077	ND	ND
PHENANTHRENE	0.044	ND	ND	ND	ND	ND	ND	ND
PYRENE	ND	ND	ND	ND	ND	ND	ND	ND
ARSENIC	7.9	9	8.1	13	7.9	7.2	5.3	5.6
BARIUM	220	210	230	260	1000	230	170	250
CADMIUM	0.48	0.45	0.48	1	0.48	0.48	0.49	0.61
CHROMIUM	14	15	14	18	15	14	13	12
CHROMIUM (III)	14	15	14	18	15	14	13	12
CHROMIUM (IV)	ND	ND	ND	ND	ND	ND	ND	ND
COPPER	13	12	13	17	13	12	11	10
LEAD	11	10	11	14	11	11	11	12
MERCURY	0.035	0.04	0.03	0.049	0.031	0.031	0.029	0.03
NICKEL	17	16	18	18	16	16	16	16
SELENIUM	1.1	1.1	1.1	1.2	1.1	0.98	1.1	1.1
SILVER	ND	ND	ND	ND	ND	ND	ND	ND
ZINC	54	49	50	58	77	49	52	56
ELECTRICAL CONDUCTIVITY (EC) (mmho/cm)	0.69	0.87	0.83	0.79	0.74	0.87	0.46	0.35
pH	8.82	8.69	8.7	8.83	8.95	8.68	9.19	9.2
SODIUM ABSORPTION RATIO (SAR)	4.3	3.8	3.5	2.8	3.9	5.4	4.6	1.9
CALCIUM (ppm)	63	89	86	86	71	85	31	31
MAGNESIUM (ppm)	29	41	39	38	30	38	20	16
SODIUM (ppm)	166	173	155	126	154	237	135	51

Exceedances are highlighted in yellow.

Note: all results are in, mg/kg = milligram per kilogram, unless noted otherwise

**Table 3: Post Excavation of West Wall at 2 Feet**

	Benzene
West Wall	ND

Note: all results are in, mg/kg = milligram per kilogram, unless noted otherwise

**Table 4: Background Analytical Results**

	Arsenic	Conductivity	pH	Sodium Adsorption Ratio
BKGD 1	14			
BKGD 2	9.5			
BKGD 3	11	0.25	8.27	1.0

Note: all results are in, mg/kg = milligram per kilogram, unless noted otherwise

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## **Appendix 1: Pit Bottom and Side Wall Sampling Raw Analytical**



28-Nov-2011

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

Re: **Williams Juhan 14-26 11/11/11**

Work Order: **1111465**

Dear Kris,

ALS Environmental received 11 samples on 12-Nov-2011 11:35 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 75.

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

Sincerely,

Ann Preston  
Project Manager



Certificate No: IL100452

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Work Order:** 1111465

**Work Order Sample Summary**

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1111465-01	East Wall - Surface	Soil		11/11/2011 11:05	11/12/2011 11:35	<input type="checkbox"/>
1111465-02	South Wall, East Half - Surface	Soil		11/11/2011 11:15	11/12/2011 11:35	<input type="checkbox"/>
1111465-03	South Wall, West Half - Surface	Soil		11/11/2011 11:25	11/12/2011 11:35	<input type="checkbox"/>
1111465-04	West Wall - Surface	Soil		11/11/2011 11:35	11/12/2011 11:35	<input type="checkbox"/>
1111465-05	North Wall, West Half - Surface	Soil		11/11/2011 11:45	11/12/2011 11:35	<input type="checkbox"/>
1111465-06	North Wall, East Half - Surface	Soil		11/11/2011 11:55	11/12/2011 11:35	<input type="checkbox"/>
1111465-07	Pit Bottom East Half - Surface	Soil		11/11/2011 12:05	11/12/2011 11:35	<input type="checkbox"/>
1111465-08	Pit Bottom West Half - Surface	Soil		11/11/2011 12:15	11/12/2011 11:35	<input type="checkbox"/>
1111465-09	BKGD 1	Soil		11/11/2011 12:45	11/12/2011 11:35	<input type="checkbox"/>
1111465-10	BKGD 2	Soil		11/11/2011 13:05	11/12/2011 11:35	<input type="checkbox"/>
1111465-11	BKGD 3	Soil		11/11/2011 13:05	11/12/2011 11:35	<input type="checkbox"/>

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**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Work Order:** 1111465

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**Case Narrative**

Batch 37406 MS/MSD data for Metals is not related to this project's samples.

Batch 37500 MS/MSD data for Hexavalent Chromium is not related to this project's samples.

Batch 37526 sample East Wall-Surface MS/MSD recoveries for DRO were below the lower control limit. The corresponding result in the parent sample may be biased low for DRO.

Batch 37642 LCSD recovery for Hexachlorocyclopentadiene was below control limits and is considered a Sporadic Marginal Exceedence allowed by the SOP. The RPD between the LCS and LCSD for 2,4-Dinitrophenol was outside of the control limit. The individual LCS/LCSD recoveries for this compound met quality control criteria. The MS/MSD data for Semi-Volatiles is not related to this project's samples.

Batch 37525 sample East Wall-Surface MS/MSD recoveries for Hexachlorocyclopentadiene were below control limits. The corresponding result in the parent sample may be biased low for this compound.



**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**WorkOrder:** 1111465

**QUALIFIERS,  
ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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

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

# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** East Wall - Surface  
**Collection Date:** 11/11/2011 11:05 AM

**Work Order:** 1111465  
**Lab ID:** 1111465-01  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep Date: <b>11/21/2011</b>	Analyst: <b>RM</b>
<b>DRO (C10-C28)</b>	<b>440</b>		<b>4.4</b>	<b>mg/Kg-dry</b>	1	11/22/2011 04:24 AM
Surr: 4-Terphenyl-d14	69.6		39-115	%REC	1	11/22/2011 04:24 AM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>JD</b>
<b>GRO (C6-C10)</b>	<b>21</b>		<b>5.3</b>	<b>mg/Kg-dry</b>	100	11/18/2011 12:34 PM
Surr: Toluene-d8	101		50-150	%REC	100	11/18/2011 12:34 PM
<b>MERCURY BY CVAA</b>						
			<b>SW7471</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>LR</b>
<b>Mercury</b>	<b>0.035</b>		<b>0.018</b>	<b>mg/Kg-dry</b>	1	11/15/2011 02:14 PM
<b>METALS BY ICP-MS</b>						
			<b>SW6020A</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>CES</b>
<b>Arsenic</b>	<b>7.9</b>		<b>0.92</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:30 PM
<b>Barium</b>	<b>220</b>		<b>0.92</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:30 PM
<b>Cadmium</b>	<b>0.48</b>		<b>0.37</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:30 PM
<b>Chromium</b>	<b>14</b>		<b>0.92</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:30 PM
<b>Copper</b>	<b>13</b>		<b>0.92</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:30 PM
<b>Lead</b>	<b>11</b>		<b>0.92</b>	<b>mg/Kg-dry</b>	2	11/17/2011 01:03 PM
<b>Nickel</b>	<b>17</b>		<b>0.92</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:30 PM
<b>Selenium</b>	<b>1.1</b>		<b>0.92</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:30 PM
<b>Silver</b>	<b>ND</b>		<b>0.92</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:30 PM
<b>Zinc</b>	<b>54</b>		<b>1.8</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:30 PM
<b>SUBCONTRACTED ANALYSES</b>						
<b>Subcontracted Analyses</b>	<b>Rcvd 11/18/11</b>		<b>SUBCONTRACT</b>			Analyst: <b>A&amp;LGL</b>
			<b>as noted</b>		1	11/18/2011
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8270</b>		Prep Date: <b>11/21/2011</b>	Analyst: <b>CW</b>
1,2,4-Trichlorobenzene	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
1,2-Dichlorobenzene	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
1,3-Dichlorobenzene	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
1,4-Dichlorobenzene	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
2,4,5-Trichlorophenol	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
2,4,6-Trichlorophenol	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
2,4-Dichlorophenol	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
2,4-Dimethylphenol	ND		350	µg/Kg-dry	1	11/22/2011 10:39 AM
2,4-Dinitrophenol	ND		700	µg/Kg-dry	1	11/22/2011 10:39 AM
2,4-Dinitrotoluene	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
2,6-Dinitrotoluene	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
2-Chloronaphthalene	ND		84	µg/Kg-dry	1	11/22/2011 10:39 AM
2-Chlorophenol	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
<b>2-Methylnaphthalene</b>	<b>840</b>		<b>84</b>	<b>µg/Kg-dry</b>	1	11/22/2011 10:39 AM
2-Methylphenol	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM

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

**ALS Group USA, Corp****Date:** 28-Nov-11**Client:** HRL Compliance Solutions**Project:** Williams Juhan 14-26 11/11/11**Work Order:** 1111465**Sample ID:** East Wall - Surface**Lab ID:** 1111465-01**Collection Date:** 11/11/2011 11:05 AM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
2-Nitroaniline	ND		700	µg/Kg-dry	1	11/22/2011 10:39 AM
2-Nitrophenol	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
3,3'-Dichlorobenzidine	ND		700	µg/Kg-dry	1	11/22/2011 10:39 AM
3-Nitroaniline	ND		700	µg/Kg-dry	1	11/22/2011 10:39 AM
4,6-Dinitro-2-methylphenol	ND		350	µg/Kg-dry	1	11/22/2011 10:39 AM
4-Bromophenyl phenyl ether	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
4-Chloro-3-methylphenol	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
4-Chloroaniline	ND		700	µg/Kg-dry	1	11/22/2011 10:39 AM
4-Chlorophenyl phenyl ether	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
4-Methylphenol	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
4-Nitroaniline	ND		700	µg/Kg-dry	1	11/22/2011 10:39 AM
4-Nitrophenol	ND		700	µg/Kg-dry	1	11/22/2011 10:39 AM
Acenaphthene	ND		32	µg/Kg-dry	1	11/22/2011 10:39 AM
Acenaphthylene	ND		32	µg/Kg-dry	1	11/22/2011 10:39 AM
Anthracene	ND		32	µg/Kg-dry	1	11/22/2011 10:39 AM
Benzo(a)anthracene	ND		32	µg/Kg-dry	1	11/22/2011 10:39 AM
Benzo(a)pyrene	ND		32	µg/Kg-dry	1	11/22/2011 10:39 AM
Benzo(b)fluoranthene	ND		32	µg/Kg-dry	1	11/22/2011 10:39 AM
Benzo(g,h,i)perylene	ND		32	µg/Kg-dry	1	11/22/2011 10:39 AM
Benzo(k)fluoranthene	ND		32	µg/Kg-dry	1	11/22/2011 10:39 AM
Bis(2-chloroethoxy)methane	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
Bis(2-chloroethyl)ether	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
Bis(2-chloroisopropyl)ether	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
Bis(2-ethylhexyl)phthalate	ND		350	µg/Kg-dry	1	11/22/2011 10:39 AM
Butyl benzyl phthalate	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
Carbazole	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
Chrysene	ND		32	µg/Kg-dry	1	11/22/2011 10:39 AM
Dibenzo(a,h)anthracene	ND		32	µg/Kg-dry	1	11/22/2011 10:39 AM
Dibenzofuran	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
Diethyl phthalate	ND		350	µg/Kg-dry	1	11/22/2011 10:39 AM
Dimethyl phthalate	ND		350	µg/Kg-dry	1	11/22/2011 10:39 AM
Di-n-butyl phthalate	ND		350	µg/Kg-dry	1	11/22/2011 10:39 AM
Di-n-octyl phthalate	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
Fluoranthene	ND		32	µg/Kg-dry	1	11/22/2011 10:39 AM
Fluorene	ND		32	µg/Kg-dry	1	11/22/2011 10:39 AM
Hexachlorobenzene	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
Hexachlorobutadiene	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
Hexachlorocyclopentadiene	ND		350	µg/Kg-dry	1	11/22/2011 10:39 AM
Hexachloroethane	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
Indeno(1,2,3-cd)pyrene	ND		32	µg/Kg-dry	1	11/22/2011 10:39 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

Client: HRL Compliance Solutions

Project: Williams Juhan 14-26 11/11/11

Sample ID: East Wall - Surface

Collection Date: 11/11/2011 11:05 AM

Work Order: 1111465

Lab ID: 1111465-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Isophorone	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
<b>Naphthalene</b>	<b>730</b>		<b>32</b>	<b>µg/Kg-dry</b>	1	11/22/2011 10:39 AM
Nitrobenzene	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
N-Nitrosodi-n-propylamine	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
N-Nitrosodiphenylamine	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
Pentachlorophenol	ND		350	µg/Kg-dry	1	11/22/2011 10:39 AM
<b>Phenanthrene</b>	<b>44</b>		<b>32</b>	<b>µg/Kg-dry</b>	1	11/22/2011 10:39 AM
Phenol	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
Pyrene	ND		32	µg/Kg-dry	1	11/22/2011 10:39 AM
Pyridine	ND		170	µg/Kg-dry	1	11/22/2011 10:39 AM
Surr: 2,4,6-Tribromophenol	85.6		34-140	%REC	1	11/22/2011 10:39 AM
Surr: 2-Fluorobiphenyl	96.2		12-100	%REC	1	11/22/2011 10:39 AM
Surr: 2-Fluorophenol	80.6		33-117	%REC	1	11/22/2011 10:39 AM
Surr: 4-Terphenyl-d14	101		25-137	%REC	1	11/22/2011 10:39 AM
Surr: Nitrobenzene-d5	75.9		37-107	%REC	1	11/22/2011 10:39 AM
Surr: Phenol-d6	79.6		40-106	%REC	1	11/22/2011 10:39 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
<b>Benzene</b>	<b>110</b>		<b>110</b>	<b>µg/Kg-dry</b>	100	11/18/2011 11:34 AM
Ethylbenzene	ND		210	µg/Kg-dry	100	11/18/2011 11:34 AM
<b>m,p-Xylene</b>	<b>1,400</b>		<b>210</b>	<b>µg/Kg-dry</b>	100	11/18/2011 11:34 AM
<b>o-Xylene</b>	<b>340</b>		<b>110</b>	<b>µg/Kg-dry</b>	100	11/18/2011 11:34 AM
<b>Toluene</b>	<b>890</b>		<b>160</b>	<b>µg/Kg-dry</b>	100	11/18/2011 11:34 AM
<b>Xylenes, Total</b>	<b>1,800</b>		<b>320</b>	<b>µg/Kg-dry</b>	100	11/18/2011 11:34 AM
Surr: 1,2-Dichloroethane-d4	102		70-120	%REC	100	11/18/2011 11:34 AM
Surr: 4-Bromofluorobenzene	100		75-120	%REC	100	11/18/2011 11:34 AM
Surr: Dibromofluoromethane	94.9		85-115	%REC	100	11/18/2011 11:34 AM
Surr: Toluene-d8	100		85-115	%REC	100	11/18/2011 11:34 AM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>			Analyst: <b>JJG</b>
<b>Chromium, Trivalent</b>	<b>14</b>		<b>0.53</b>	<b>mg/Kg-dry</b>	1	11/17/2011 04:26 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>		Prep Date: <b>11/15/2011</b>	Analyst: <b>MB</b>
<b>Chromium, Hexavalent</b>	<b>ND</b>		<b>0.53</b>	<b>mg/Kg-dry</b>	1	11/16/2011 04:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
<b>Moisture</b>	<b>5.4</b>		<b>0.050</b>	<b>% of sample</b>	1	11/14/2011 03:04 PM
<b>PH</b>			<b>SW9045D</b>			Analyst: <b>KV</b>
<b>pH</b>	<b>8.82</b>			<b>s.u.</b>	1	11/13/2011 11:30 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** South Wall, East Half - Surface  
**Collection Date:** 11/11/2011 11:15 AM

**Work Order:** 1111465  
**Lab ID:** 1111465-02  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep Date: <b>11/17/2011</b>	Analyst: <b>RM</b>
<b>DRO (C10-C28)</b>	<b>110</b>		<b>4.5</b>	<b>mg/Kg-dry</b>	1	11/18/2011 06:17 PM
Surr: 4-Terphenyl-d14	42.8		39-115	%REC	1	11/18/2011 06:17 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>JD</b>
<b>GRO (C6-C10)</b>	<b>32</b>		<b>5.5</b>	<b>mg/Kg-dry</b>	100	11/18/2011 12:58 PM
Surr: Toluene-d8	95.4		50-150	%REC	100	11/18/2011 12:58 PM
<b>MERCURY BY CVAA</b>						
			<b>SW7471</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>LR</b>
<b>Mercury</b>	<b>0.040</b>		<b>0.023</b>	<b>mg/Kg-dry</b>	1	11/15/2011 02:16 PM
<b>METALS BY ICP-MS</b>						
			<b>SW6020A</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>CES</b>
<b>Arsenic</b>	<b>9.0</b>		<b>0.93</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:35 PM
<b>Barium</b>	<b>210</b>		<b>0.93</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:35 PM
<b>Cadmium</b>	<b>0.45</b>		<b>0.37</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:35 PM
<b>Chromium</b>	<b>15</b>		<b>0.93</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:35 PM
<b>Copper</b>	<b>12</b>		<b>0.93</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:35 PM
<b>Lead</b>	<b>10</b>		<b>0.93</b>	<b>mg/Kg-dry</b>	2	11/17/2011 01:08 PM
<b>Nickel</b>	<b>16</b>		<b>0.93</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:35 PM
<b>Selenium</b>	<b>1.1</b>		<b>0.93</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:35 PM
<b>Silver</b>	<b>ND</b>		<b>0.93</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:35 PM
<b>Zinc</b>	<b>49</b>		<b>1.9</b>	<b>mg/Kg-dry</b>	2	11/15/2011 09:35 PM
<b>SUBCONTRACTED ANALYSES</b>						
<b>Subcontracted Analyses</b>	<b>Rcvd 11/18/11</b>		<b>SUBCONTRACT</b>			Analyst: <b>A&amp;LGL</b>
			<b>as noted</b>		1	11/18/2011
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8270</b>		Prep Date: <b>11/17/2011</b>	Analyst: <b>CW</b>
1,2,4-Trichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
1,2-Dichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
1,3-Dichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
1,4-Dichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
2,4,5-Trichlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
2,4,6-Trichlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
2,4-Dichlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
2,4-Dimethylphenol	ND		360	µg/Kg-dry	1	11/20/2011 05:34 AM
2,4-Dinitrophenol	ND		720	µg/Kg-dry	1	11/20/2011 05:34 AM
2,4-Dinitrotoluene	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
2,6-Dinitrotoluene	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
2-Chloronaphthalene	ND		87	µg/Kg-dry	1	11/20/2011 05:34 AM
2-Chlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
<b>2-Methylnaphthalene</b>	<b>180</b>		<b>87</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:34 AM
2-Methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions

**Project:** Williams Juhan 14-26 11/11/11

**Sample ID:** South Wall, East Half - Surface

**Collection Date:** 11/11/2011 11:15 AM

**Work Order:** 1111465

**Lab ID:** 1111465-02

**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
2-Nitroaniline	ND		720	µg/Kg-dry	1	11/20/2011 05:34 AM
2-Nitrophenol	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
3,3'-Dichlorobenzidine	ND		720	µg/Kg-dry	1	11/20/2011 05:34 AM
3-Nitroaniline	ND		720	µg/Kg-dry	1	11/20/2011 05:34 AM
4,6-Dinitro-2-methylphenol	ND		360	µg/Kg-dry	1	11/20/2011 05:34 AM
4-Bromophenyl phenyl ether	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
4-Chloro-3-methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
4-Chloroaniline	ND		720	µg/Kg-dry	1	11/20/2011 05:34 AM
4-Chlorophenyl phenyl ether	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
4-Methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
4-Nitroaniline	ND		720	µg/Kg-dry	1	11/20/2011 05:34 AM
4-Nitrophenol	ND		720	µg/Kg-dry	1	11/20/2011 05:34 AM
Acenaphthene	ND		33	µg/Kg-dry	1	11/20/2011 05:34 AM
Acenaphthylene	ND		33	µg/Kg-dry	1	11/20/2011 05:34 AM
Anthracene	ND		33	µg/Kg-dry	1	11/20/2011 05:34 AM
Benzo(a)anthracene	ND		33	µg/Kg-dry	1	11/20/2011 05:34 AM
Benzo(a)pyrene	ND		33	µg/Kg-dry	1	11/20/2011 05:34 AM
Benzo(b)fluoranthene	ND		33	µg/Kg-dry	1	11/20/2011 05:34 AM
Benzo(g,h,i)perylene	ND		33	µg/Kg-dry	1	11/20/2011 05:34 AM
Benzo(k)fluoranthene	ND		33	µg/Kg-dry	1	11/20/2011 05:34 AM
Bis(2-chloroethoxy)methane	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
Bis(2-chloroethyl)ether	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
Bis(2-chloroisopropyl)ether	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
<b>Bis(2-ethylhexyl)phthalate</b>	<b>430</b>		<b>360</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:34 AM
Butyl benzyl phthalate	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
Carbazole	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
Chrysene	ND		33	µg/Kg-dry	1	11/20/2011 05:34 AM
Dibenzo(a,h)anthracene	ND		33	µg/Kg-dry	1	11/20/2011 05:34 AM
Dibenzofuran	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
Diethyl phthalate	ND		360	µg/Kg-dry	1	11/20/2011 05:34 AM
Dimethyl phthalate	ND		360	µg/Kg-dry	1	11/20/2011 05:34 AM
<b>Di-n-butyl phthalate</b>	<b>410</b>		<b>360</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:34 AM
Di-n-octyl phthalate	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
Fluoranthene	ND		33	µg/Kg-dry	1	11/20/2011 05:34 AM
Fluorene	ND		33	µg/Kg-dry	1	11/20/2011 05:34 AM
Hexachlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
Hexachlorobutadiene	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
Hexachlorocyclopentadiene	ND		360	µg/Kg-dry	1	11/20/2011 05:34 AM
Hexachloroethane	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
Indeno(1,2,3-cd)pyrene	ND		33	µg/Kg-dry	1	11/20/2011 05:34 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** South Wall, East Half - Surface  
**Collection Date:** 11/11/2011 11:15 AM

**Work Order:** 1111465  
**Lab ID:** 1111465-02  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Isophorone	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
<b>Naphthalene</b>	<b>430</b>		<b>33</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:34 AM
Nitrobenzene	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
N-Nitrosodi-n-propylamine	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
N-Nitrosodiphenylamine	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
Pentachlorophenol	ND		360	µg/Kg-dry	1	11/20/2011 05:34 AM
Phenanthrene	ND		33	µg/Kg-dry	1	11/20/2011 05:34 AM
Phenol	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
Pyrene	ND		33	µg/Kg-dry	1	11/20/2011 05:34 AM
Pyridine	ND		170	µg/Kg-dry	1	11/20/2011 05:34 AM
Surr: 2,4,6-Tribromophenol	75.6		34-140	%REC	1	11/20/2011 05:34 AM
Surr: 2-Fluorobiphenyl	59.8		12-100	%REC	1	11/20/2011 05:34 AM
Surr: 2-Fluorophenol	67.5		33-117	%REC	1	11/20/2011 05:34 AM
Surr: 4-Terphenyl-d14	72.7		25-137	%REC	1	11/20/2011 05:34 AM
Surr: Nitrobenzene-d5	63.8		37-107	%REC	1	11/20/2011 05:34 AM
Surr: Phenol-d6	70.6		40-106	%REC	1	11/20/2011 05:34 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>CW</b>
Benzene	ND		110	µg/Kg-dry	100	11/20/2011 08:46 AM
Ethylbenzene	ND		220	µg/Kg-dry	100	11/20/2011 08:46 AM
<b>m,p-Xylene</b>	<b>610</b>		<b>220</b>	<b>µg/Kg-dry</b>	100	11/20/2011 08:46 AM
<b>o-Xylene</b>	<b>630</b>		<b>110</b>	<b>µg/Kg-dry</b>	100	11/20/2011 08:46 AM
<b>Toluene</b>	<b>200</b>		<b>160</b>	<b>µg/Kg-dry</b>	100	11/20/2011 08:46 AM
<b>Xylenes, Total</b>	<b>1,200</b>		<b>330</b>	<b>µg/Kg-dry</b>	100	11/20/2011 08:46 AM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	100	11/20/2011 08:46 AM
Surr: 4-Bromofluorobenzene	99.2		75-120	%REC	100	11/20/2011 08:46 AM
Surr: Dibromofluoromethane	98.4		85-115	%REC	100	11/20/2011 08:46 AM
Surr: Toluene-d8	101		85-115	%REC	100	11/20/2011 08:46 AM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>			Analyst: <b>JJG</b>
<b>Chromium, Trivalent</b>	<b>15</b>		<b>0.55</b>	<b>mg/Kg-dry</b>	1	11/17/2011 04:26 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>		Prep Date: <b>11/15/2011</b>	Analyst: <b>MB</b>
<b>Chromium, Hexavalent</b>	ND		0.54	mg/Kg-dry	1	11/16/2011 04:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
<b>Moisture</b>	<b>8.3</b>		<b>0.050</b>	<b>% of sample</b>	1	11/14/2011 03:04 PM
<b>PH</b>			<b>SW9045D</b>			Analyst: <b>KV</b>
<b>pH</b>	<b>8.69</b>			<b>s.u.</b>	1	11/13/2011 11:30 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

Client: HRL Compliance Solutions

Project: Williams Juhan 14-26 11/11/11

Sample ID: South Wall, West Half - Surface

Collection Date: 11/11/2011 11:25 AM

Work Order: 1111465

Lab ID: 1111465-03

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
<b>DRO (C10-C28)</b>	<b>52</b>		<b>SW8015M</b>		Prep Date: <b>11/17/2011</b>	Analyst: <b>RM</b>
<i>Surr: 4-Terphenyl-d14</i>	<i>50.8</i>		<i>39-115</i>	<i>%REC</i>	<i>1</i>	<i>11/18/2011 06:40 PM</i>
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
<b>GRO (C6-C10)</b>	<b>20</b>		<b>SW8015</b>			Analyst: <b>JD</b>
<i>Surr: Toluene-d8</i>	<i>96.5</i>		<i>50-150</i>	<i>%REC</i>	<i>100</i>	<i>11/18/2011 01:23 AM</i>
<b>MERCURY BY CVAA</b>						
<b>Mercury</b>	<b>0.030</b>		<b>SW7471</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>LR</b>
			<b>0.022</b>	<b>mg/Kg-dry</b>	<b>1</b>	<b>11/15/2011 02:23 PM</b>
<b>METALS BY ICP-MS</b>						
<b>Arsenic</b>	<b>8.1</b>		<b>SW6020A</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>CES</b>
<b>Barium</b>	<b>230</b>		<b>0.92</b>	<b>mg/Kg-dry</b>	<b>2</b>	<b>11/15/2011 09:41 PM</b>
<b>Cadmium</b>	<b>0.48</b>		<b>0.92</b>	<b>mg/Kg-dry</b>	<b>2</b>	<b>11/15/2011 09:41 PM</b>
<b>Chromium</b>	<b>14</b>		<b>0.37</b>	<b>mg/Kg-dry</b>	<b>2</b>	<b>11/15/2011 09:41 PM</b>
<b>Copper</b>	<b>13</b>		<b>0.92</b>	<b>mg/Kg-dry</b>	<b>2</b>	<b>11/15/2011 09:41 PM</b>
<b>Lead</b>	<b>11</b>		<b>0.92</b>	<b>mg/Kg-dry</b>	<b>2</b>	<b>11/17/2011 01:14 PM</b>
<b>Nickel</b>	<b>18</b>		<b>0.92</b>	<b>mg/Kg-dry</b>	<b>2</b>	<b>11/15/2011 09:41 PM</b>
<b>Selenium</b>	<b>1.1</b>		<b>0.92</b>	<b>mg/Kg-dry</b>	<b>2</b>	<b>11/15/2011 09:41 PM</b>
<b>Silver</b>	<b>ND</b>		<b>0.92</b>	<b>mg/Kg-dry</b>	<b>2</b>	<b>11/15/2011 09:41 PM</b>
<b>Zinc</b>	<b>50</b>		<b>1.8</b>	<b>mg/Kg-dry</b>	<b>2</b>	<b>11/15/2011 09:41 PM</b>
<b>SUBCONTRACTED ANALYSES</b>						
<b>Subcontracted Analyses</b>	<b>Rcvd 11/18/11</b>		<b>SUBCONTRACT</b>			Analyst: <b>A&amp;LGL</b>
			<b>as noted</b>		<b>1</b>	<b>11/18/2011</b>
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
<b>1,2,4-Trichlorobenzene</b>	<b>ND</b>		<b>SW8270</b>		Prep Date: <b>11/17/2011</b>	Analyst: <b>CW</b>
<b>1,2-Dichlorobenzene</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	<b>1</b>	<b>11/20/2011 06:03 AM</b>
<b>1,3-Dichlorobenzene</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	<b>1</b>	<b>11/20/2011 06:03 AM</b>
<b>1,4-Dichlorobenzene</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	<b>1</b>	<b>11/20/2011 06:03 AM</b>
<b>2,4,5-Trichlorophenol</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	<b>1</b>	<b>11/20/2011 06:03 AM</b>
<b>2,4,6-Trichlorophenol</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	<b>1</b>	<b>11/20/2011 06:03 AM</b>
<b>2,4-Dichlorophenol</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	<b>1</b>	<b>11/20/2011 06:03 AM</b>
<b>2,4-Dimethylphenol</b>	<b>ND</b>		<b>350</b>	<b>µg/Kg-dry</b>	<b>1</b>	<b>11/20/2011 06:03 AM</b>
<b>2,4-Dinitrophenol</b>	<b>ND</b>		<b>690</b>	<b>µg/Kg-dry</b>	<b>1</b>	<b>11/20/2011 06:03 AM</b>
<b>2,4-Dinitrotoluene</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	<b>1</b>	<b>11/20/2011 06:03 AM</b>
<b>2,6-Dinitrotoluene</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	<b>1</b>	<b>11/20/2011 06:03 AM</b>
<b>2-Chloronaphthalene</b>	<b>ND</b>		<b>84</b>	<b>µg/Kg-dry</b>	<b>1</b>	<b>11/20/2011 06:03 AM</b>
<b>2-Chlorophenol</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	<b>1</b>	<b>11/20/2011 06:03 AM</b>
<b>2-Methylnaphthalene</b>	<b>ND</b>		<b>84</b>	<b>µg/Kg-dry</b>	<b>1</b>	<b>11/20/2011 06:03 AM</b>
<b>2-Methylphenol</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	<b>1</b>	<b>11/20/2011 06:03 AM</b>

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



# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions

**Project:** Williams Juhan 14-26 11/11/11

**Work Order:** 1111465

**Sample ID:** South Wall, West Half - Surface

**Lab ID:** 1111465-03

**Collection Date:** 11/11/2011 11:25 AM

**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
2-Nitroaniline	ND		690	µg/Kg-dry	1	11/20/2011 06:03 AM
2-Nitrophenol	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
3,3'-Dichlorobenzidine	ND		690	µg/Kg-dry	1	11/20/2011 06:03 AM
3-Nitroaniline	ND		690	µg/Kg-dry	1	11/20/2011 06:03 AM
4,6-Dinitro-2-methylphenol	ND		350	µg/Kg-dry	1	11/20/2011 06:03 AM
4-Bromophenyl phenyl ether	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
4-Chloro-3-methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
4-Chloroaniline	ND		690	µg/Kg-dry	1	11/20/2011 06:03 AM
4-Chlorophenyl phenyl ether	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
4-Methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
4-Nitroaniline	ND		690	µg/Kg-dry	1	11/20/2011 06:03 AM
4-Nitrophenol	ND		690	µg/Kg-dry	1	11/20/2011 06:03 AM
Acenaphthene	ND		32	µg/Kg-dry	1	11/20/2011 06:03 AM
Acenaphthylene	ND		32	µg/Kg-dry	1	11/20/2011 06:03 AM
Anthracene	ND		32	µg/Kg-dry	1	11/20/2011 06:03 AM
Benzo(a)anthracene	ND		32	µg/Kg-dry	1	11/20/2011 06:03 AM
Benzo(a)pyrene	ND		32	µg/Kg-dry	1	11/20/2011 06:03 AM
Benzo(b)fluoranthene	ND		32	µg/Kg-dry	1	11/20/2011 06:03 AM
Benzo(g,h,i)perylene	ND		32	µg/Kg-dry	1	11/20/2011 06:03 AM
Benzo(k)fluoranthene	ND		32	µg/Kg-dry	1	11/20/2011 06:03 AM
Bis(2-chloroethoxy)methane	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
Bis(2-chloroethyl)ether	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
Bis(2-chloroisopropyl)ether	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
<b>Bis(2-ethylhexyl)phthalate</b>	<b>1,300</b>		<b>350</b>	<b>µg/Kg-dry</b>	<b>1</b>	11/20/2011 06:03 AM
Butyl benzyl phthalate	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
Carbazole	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
Chrysene	ND		32	µg/Kg-dry	1	11/20/2011 06:03 AM
Dibenzo(a,h)anthracene	ND		32	µg/Kg-dry	1	11/20/2011 06:03 AM
Dibenzofuran	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
Diethyl phthalate	ND		350	µg/Kg-dry	1	11/20/2011 06:03 AM
Dimethyl phthalate	ND		350	µg/Kg-dry	1	11/20/2011 06:03 AM
<b>Di-n-butyl phthalate</b>	<b>870</b>		<b>350</b>	<b>µg/Kg-dry</b>	<b>1</b>	11/20/2011 06:03 AM
Di-n-octyl phthalate	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
Fluoranthene	ND		32	µg/Kg-dry	1	11/20/2011 06:03 AM
Fluorene	ND		32	µg/Kg-dry	1	11/20/2011 06:03 AM
Hexachlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
Hexachlorobutadiene	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
Hexachlorocyclopentadiene	ND		350	µg/Kg-dry	1	11/20/2011 06:03 AM
Hexachloroethane	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
Indeno(1,2,3-cd)pyrene	ND		32	µg/Kg-dry	1	11/20/2011 06:03 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

Client: HRL Compliance Solutions

Project: Williams Juhan 14-26 11/11/11

Work Order: 1111465

Sample ID: South Wall, West Half - Surface

Lab ID: 1111465-03

Collection Date: 11/11/2011 11:25 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Isophorone	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
<b>Naphthalene</b>	<b>47</b>		<b>32</b>	<b>µg/Kg-dry</b>	1	11/20/2011 06:03 AM
Nitrobenzene	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
N-Nitrosodi-n-propylamine	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
N-Nitrosodiphenylamine	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
Pentachlorophenol	ND		350	µg/Kg-dry	1	11/20/2011 06:03 AM
Phenanthrene	ND		32	µg/Kg-dry	1	11/20/2011 06:03 AM
Phenol	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
Pyrene	ND		32	µg/Kg-dry	1	11/20/2011 06:03 AM
Pyridine	ND		170	µg/Kg-dry	1	11/20/2011 06:03 AM
Surr: 2,4,6-Tribromophenol	80.1		34-140	%REC	1	11/20/2011 06:03 AM
Surr: 2-Fluorobiphenyl	62.8		12-100	%REC	1	11/20/2011 06:03 AM
Surr: 2-Fluorophenol	67.3		33-117	%REC	1	11/20/2011 06:03 AM
Surr: 4-Terphenyl-d14	79.6		25-137	%REC	1	11/20/2011 06:03 AM
Surr: Nitrobenzene-d5	65.0		37-107	%REC	1	11/20/2011 06:03 AM
Surr: Phenol-d6	72.9		40-106	%REC	1	11/20/2011 06:03 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>CW</b>
Benzene	ND		110	µg/Kg-dry	100	11/20/2011 09:12 AM
Ethylbenzene	ND		210	µg/Kg-dry	100	11/20/2011 09:12 AM
<b>m,p-Xylene</b>	<b>770</b>		<b>210</b>	<b>µg/Kg-dry</b>	100	11/20/2011 09:12 AM
<b>o-Xylene</b>	<b>350</b>		<b>110</b>	<b>µg/Kg-dry</b>	100	11/20/2011 09:12 AM
<b>Toluene</b>	<b>430</b>		<b>160</b>	<b>µg/Kg-dry</b>	100	11/20/2011 09:12 AM
<b>Xylenes, Total</b>	<b>1,100</b>		<b>320</b>	<b>µg/Kg-dry</b>	100	11/20/2011 09:12 AM
Surr: 1,2-Dichloroethane-d4	102		70-120	%REC	100	11/20/2011 09:12 AM
Surr: 4-Bromofluorobenzene	100		75-120	%REC	100	11/20/2011 09:12 AM
Surr: Dibromofluoromethane	100		85-115	%REC	100	11/20/2011 09:12 AM
Surr: Toluene-d8	101		85-115	%REC	100	11/20/2011 09:12 AM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>			Analyst: <b>JJG</b>
<b>Chromium, Trivalent</b>	<b>14</b>		<b>0.53</b>	<b>mg/Kg-dry</b>	1	11/17/2011 04:26 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>		Prep Date: <b>11/15/2011</b>	Analyst: <b>MB</b>
<b>Chromium, Hexavalent</b>	ND		0.52	mg/Kg-dry	1	11/16/2011 04:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
<b>Moisture</b>	<b>5.9</b>		<b>0.050</b>	<b>% of sample</b>	1	11/14/2011 03:04 PM
<b>PH</b>			<b>SW9045D</b>			Analyst: <b>KV</b>
<b>pH</b>	<b>8.70</b>			<b>s.u.</b>	1	11/13/2011 11:30 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

Client: HRL Compliance Solutions

Project: Williams Juhan 14-26 11/11/11

Sample ID: West Wall - Surface

Collection Date: 11/11/2011 11:35 AM

Work Order: 1111465

Lab ID: 1111465-04

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
<b>DRO (C10-C28)</b>	<b>64</b>		<b>SW8015M</b>		Prep Date: <b>11/17/2011</b>	Analyst: <b>RM</b>
			<b>4.4</b>	<b>mg/Kg-dry</b>	1	11/18/2011 06:40 PM
Surr: 4-Terphenyl-d14	53.7		39-115	%REC	1	11/18/2011 06:40 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
<b>GRO (C6-C10)</b>	<b>72</b>		<b>SW8015</b>			Analyst: <b>JD</b>
			<b>5.4</b>	<b>mg/Kg-dry</b>	100	11/18/2011 01:47 AM
Surr: Toluene-d8	101		50-150	%REC	100	11/18/2011 01:47 AM
<b>MERCURY BY CVAA</b>						
<b>Mercury</b>	<b>0.049</b>		<b>SW7471</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>LR</b>
			<b>0.020</b>	<b>mg/Kg-dry</b>	1	11/15/2011 02:25 PM
<b>METALS BY ICP-MS</b>						
<b>Arsenic</b>	<b>13</b>		<b>SW6020A</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>CES</b>
			<b>0.99</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:31 PM
<b>Barium</b>	<b>260</b>		<b>0.99</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:31 PM
<b>Cadmium</b>	<b>1.0</b>		<b>0.40</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:31 PM
<b>Chromium</b>	<b>18</b>		<b>0.99</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:31 PM
<b>Copper</b>	<b>17</b>		<b>0.99</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:31 PM
<b>Lead</b>	<b>14</b>		<b>0.99</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:31 PM
<b>Nickel</b>	<b>18</b>		<b>0.99</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:31 PM
<b>Selenium</b>	<b>1.2</b>		<b>0.99</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:31 PM
<b>Silver</b>	<b>ND</b>		<b>0.99</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:31 PM
<b>Zinc</b>	<b>58</b>		<b>2.0</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:31 PM
<b>SUBCONTRACTED ANALYSES</b>						
<b>Subcontracted Analyses</b>	<b>Rcvd 11/18/11</b>		<b>SUBCONTRACT</b>			Analyst: <b>A&amp;LGL</b>
			<b>as noted</b>		1	11/18/2011
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
<b>1,2,4-Trichlorobenzene</b>	<b>ND</b>		<b>SW8270</b>		Prep Date: <b>11/17/2011</b>	Analyst: <b>CW</b>
			<b>170</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM
<b>1,2-Dichlorobenzene</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM
<b>1,3-Dichlorobenzene</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM
<b>1,4-Dichlorobenzene</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM
<b>2,4,5-Trichlorophenol</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM
<b>2,4,6-Trichlorophenol</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM
<b>2,4-Dichlorophenol</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM
<b>2,4-Dimethylphenol</b>	<b>ND</b>		<b>350</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM
<b>2,4-Dinitrophenol</b>	<b>ND</b>		<b>700</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM
<b>2,4-Dinitrotoluene</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM
<b>2,6-Dinitrotoluene</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM
<b>2-Chloronaphthalene</b>	<b>ND</b>		<b>85</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM
<b>2-Chlorophenol</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM
<b>2-Methylnaphthalene</b>	<b>230</b>		<b>85</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM
<b>2-Methylphenol</b>	<b>ND</b>		<b>170</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions

**Project:** Williams Juhan 14-26 11/11/11

**Sample ID:** West Wall - Surface

**Collection Date:** 11/11/2011 11:35 AM

**Work Order:** 1111465

**Lab ID:** 1111465-04

**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
2-Nitroaniline	ND		700	µg/Kg-dry	1	11/20/2011 05:06 AM
2-Nitrophenol	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
3,3'-Dichlorobenzidine	ND		700	µg/Kg-dry	1	11/20/2011 05:06 AM
3-Nitroaniline	ND		700	µg/Kg-dry	1	11/20/2011 05:06 AM
4,6-Dinitro-2-methylphenol	ND		350	µg/Kg-dry	1	11/20/2011 05:06 AM
4-Bromophenyl phenyl ether	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
4-Chloro-3-methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
4-Chloroaniline	ND		700	µg/Kg-dry	1	11/20/2011 05:06 AM
4-Chlorophenyl phenyl ether	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
4-Methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
4-Nitroaniline	ND		700	µg/Kg-dry	1	11/20/2011 05:06 AM
4-Nitrophenol	ND		700	µg/Kg-dry	1	11/20/2011 05:06 AM
Acenaphthene	ND		32	µg/Kg-dry	1	11/20/2011 05:06 AM
Acenaphthylene	ND		32	µg/Kg-dry	1	11/20/2011 05:06 AM
Anthracene	ND		32	µg/Kg-dry	1	11/20/2011 05:06 AM
Benzo(a)anthracene	ND		32	µg/Kg-dry	1	11/20/2011 05:06 AM
Benzo(a)pyrene	ND		32	µg/Kg-dry	1	11/20/2011 05:06 AM
Benzo(b)fluoranthene	ND		32	µg/Kg-dry	1	11/20/2011 05:06 AM
Benzo(g,h,i)perylene	ND		32	µg/Kg-dry	1	11/20/2011 05:06 AM
Benzo(k)fluoranthene	ND		32	µg/Kg-dry	1	11/20/2011 05:06 AM
Bis(2-chloroethoxy)methane	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
Bis(2-chloroethyl)ether	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
Bis(2-chloroisopropyl)ether	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
Bis(2-ethylhexyl)phthalate	ND		350	µg/Kg-dry	1	11/20/2011 05:06 AM
Butyl benzyl phthalate	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
Carbazole	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
Chrysene	ND		32	µg/Kg-dry	1	11/20/2011 05:06 AM
Dibenzo(a,h)anthracene	ND		32	µg/Kg-dry	1	11/20/2011 05:06 AM
Dibenzofuran	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
Diethyl phthalate	ND		350	µg/Kg-dry	1	11/20/2011 05:06 AM
Dimethyl phthalate	ND		350	µg/Kg-dry	1	11/20/2011 05:06 AM
Di-n-butyl phthalate	ND		350	µg/Kg-dry	1	11/20/2011 05:06 AM
Di-n-octyl phthalate	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
Fluoranthene	ND		32	µg/Kg-dry	1	11/20/2011 05:06 AM
Fluorene	ND		32	µg/Kg-dry	1	11/20/2011 05:06 AM
Hexachlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
Hexachlorobutadiene	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
Hexachlorocyclopentadiene	ND		350	µg/Kg-dry	1	11/20/2011 05:06 AM
Hexachloroethane	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
Indeno(1,2,3-cd)pyrene	ND		32	µg/Kg-dry	1	11/20/2011 05:06 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

Client: HRL Compliance Solutions

Project: Williams Juhan 14-26 11/11/11

Sample ID: West Wall - Surface

Collection Date: 11/11/2011 11:35 AM

Work Order: 1111465

Lab ID: 1111465-04

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Isophorone	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
<b>Naphthalene</b>	<b>420</b>		<b>32</b>	<b>µg/Kg-dry</b>	1	11/20/2011 05:06 AM
Nitrobenzene	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
N-Nitrosodi-n-propylamine	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
N-Nitrosodiphenylamine	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
Pentachlorophenol	ND		350	µg/Kg-dry	1	11/20/2011 05:06 AM
Phenanthrene	ND		32	µg/Kg-dry	1	11/20/2011 05:06 AM
Phenol	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
Pyrene	ND		32	µg/Kg-dry	1	11/20/2011 05:06 AM
Pyridine	ND		170	µg/Kg-dry	1	11/20/2011 05:06 AM
Surr: 2,4,6-Tribromophenol	64.0		34-140	%REC	1	11/20/2011 05:06 AM
Surr: 2-Fluorobiphenyl	55.5		12-100	%REC	1	11/20/2011 05:06 AM
Surr: 2-Fluorophenol	57.0		33-117	%REC	1	11/20/2011 05:06 AM
Surr: 4-Terphenyl-d14	66.5		25-137	%REC	1	11/20/2011 05:06 AM
Surr: Nitrobenzene-d5	58.7		37-107	%REC	1	11/20/2011 05:06 AM
Surr: Phenol-d6	63.6		40-106	%REC	1	11/20/2011 05:06 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>CW</b>
<b>Benzene</b>	<b>510</b>		<b>110</b>	<b>µg/Kg-dry</b>	100	11/20/2011 09:38 AM
<b>Ethylbenzene</b>	<b>610</b>		<b>210</b>	<b>µg/Kg-dry</b>	100	11/20/2011 09:38 AM
<b>m,p-Xylene</b>	<b>11,000</b>		<b>210</b>	<b>µg/Kg-dry</b>	100	11/20/2011 09:38 AM
<b>o-Xylene</b>	<b>2,200</b>		<b>110</b>	<b>µg/Kg-dry</b>	100	11/20/2011 09:38 AM
<b>Toluene</b>	<b>4,800</b>		<b>160</b>	<b>µg/Kg-dry</b>	100	11/20/2011 09:38 AM
<b>Xylenes, Total</b>	<b>13,000</b>		<b>320</b>	<b>µg/Kg-dry</b>	100	11/20/2011 09:38 AM
Surr: 1,2-Dichloroethane-d4	102		70-120	%REC	100	11/20/2011 09:38 AM
Surr: 4-Bromofluorobenzene	100		75-120	%REC	100	11/20/2011 09:38 AM
Surr: Dibromofluoromethane	101		85-115	%REC	100	11/20/2011 09:38 AM
Surr: Toluene-d8	101		85-115	%REC	100	11/20/2011 09:38 AM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>			Analyst: <b>JJG</b>
<b>Chromium, Trivalent</b>	<b>18</b>		<b>0.54</b>	<b>mg/Kg-dry</b>	1	11/17/2011 04:26 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>		Prep Date: <b>11/15/2011</b>	Analyst: <b>MB</b>
<b>Chromium, Hexavalent</b>	ND		0.53	mg/Kg-dry	1	11/16/2011 04:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
<b>Moisture</b>	<b>6.7</b>		<b>0.050</b>	<b>% of sample</b>	1	11/14/2011 03:04 PM
<b>PH</b>			<b>SW9045D</b>			Analyst: <b>KV</b>
<b>pH</b>	<b>8.83</b>			<b>s.u.</b>	1	11/13/2011 11:30 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** North Wall, West Half - Surface  
**Collection Date:** 11/11/2011 11:45 AM

**Work Order:** 1111465  
**Lab ID:** 1111465-05  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep Date: <b>11/17/2011</b>	Analyst: <b>RM</b>
<b>DRO (C10-C28)</b>	<b>97</b>		<b>4.4</b>	<b>mg/Kg-dry</b>	1	11/18/2011 07:02 PM
Surr: 4-Terphenyl-d14	55.2		39-115	%REC	1	11/18/2011 07:02 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>JD</b>
<b>GRO (C6-C10)</b>	<b>33</b>		<b>5.3</b>	<b>mg/Kg-dry</b>	100	11/18/2011 02:11 AM
Surr: Toluene-d8	99.7		50-150	%REC	100	11/18/2011 02:11 AM
<b>MERCURY BY CVAA</b>						
			<b>SW7471</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>LR</b>
<b>Mercury</b>	<b>0.031</b>		<b>0.021</b>	<b>mg/Kg-dry</b>	1	11/15/2011 02:27 PM
<b>METALS BY ICP-MS</b>						
			<b>SW6020A</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>CES</b>
<b>Arsenic</b>	<b>7.9</b>		<b>0.76</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:36 PM
<b>Barium</b>	<b>1,000</b>		<b>7.6</b>	<b>mg/Kg-dry</b>	20	11/16/2011 01:14 PM
<b>Cadmium</b>	<b>0.48</b>		<b>0.30</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:36 PM
<b>Chromium</b>	<b>15</b>		<b>0.76</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:36 PM
<b>Copper</b>	<b>13</b>		<b>0.76</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:36 PM
<b>Lead</b>	<b>11</b>		<b>0.76</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:36 PM
<b>Nickel</b>	<b>16</b>		<b>0.76</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:36 PM
<b>Selenium</b>	<b>1.1</b>		<b>0.76</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:36 PM
<b>Silver</b>	<b>ND</b>		<b>0.76</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:36 PM
<b>Zinc</b>	<b>77</b>		<b>1.5</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:36 PM
<b>SUBCONTRACTED ANALYSES</b>						
<b>Subcontracted Analyses</b>	<b>Rcvd 11/18/11</b>		<b>SUBCONTRACT</b>			Analyst: <b>A&amp;LGL</b>
			<b>as noted</b>		1	11/18/2011
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8270</b>		Prep Date: <b>11/17/2011</b>	Analyst: <b>CW</b>
1,2,4-Trichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
1,2-Dichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
1,3-Dichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
1,4-Dichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
2,4,5-Trichlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
2,4,6-Trichlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
2,4-Dichlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
2,4-Dimethylphenol	ND		350	µg/Kg-dry	1	11/20/2011 06:32 AM
2,4-Dinitrophenol	ND		690	µg/Kg-dry	1	11/20/2011 06:32 AM
2,4-Dinitrotoluene	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
2,6-Dinitrotoluene	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
2-Chloronaphthalene	ND		84	µg/Kg-dry	1	11/20/2011 06:32 AM
2-Chlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
<b>2-Methylnaphthalene</b>	<b>120</b>		<b>84</b>	<b>µg/Kg-dry</b>	1	11/20/2011 06:32 AM
2-Methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions

**Project:** Williams Juhan 14-26 11/11/11

**Sample ID:** North Wall, West Half - Surface

**Collection Date:** 11/11/2011 11:45 AM

**Work Order:** 1111465

**Lab ID:** 1111465-05

**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
2-Nitroaniline	ND		690	µg/Kg-dry	1	11/20/2011 06:32 AM
2-Nitrophenol	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
3,3'-Dichlorobenzidine	ND		690	µg/Kg-dry	1	11/20/2011 06:32 AM
3-Nitroaniline	ND		690	µg/Kg-dry	1	11/20/2011 06:32 AM
4,6-Dinitro-2-methylphenol	ND		350	µg/Kg-dry	1	11/20/2011 06:32 AM
4-Bromophenyl phenyl ether	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
4-Chloro-3-methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
4-Chloroaniline	ND		690	µg/Kg-dry	1	11/20/2011 06:32 AM
4-Chlorophenyl phenyl ether	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
4-Methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
4-Nitroaniline	ND		690	µg/Kg-dry	1	11/20/2011 06:32 AM
4-Nitrophenol	ND		690	µg/Kg-dry	1	11/20/2011 06:32 AM
Acenaphthene	ND		32	µg/Kg-dry	1	11/20/2011 06:32 AM
Acenaphthylene	ND		32	µg/Kg-dry	1	11/20/2011 06:32 AM
Anthracene	ND		32	µg/Kg-dry	1	11/20/2011 06:32 AM
Benzo(a)anthracene	ND		32	µg/Kg-dry	1	11/20/2011 06:32 AM
Benzo(a)pyrene	ND		32	µg/Kg-dry	1	11/20/2011 06:32 AM
Benzo(b)fluoranthene	ND		32	µg/Kg-dry	1	11/20/2011 06:32 AM
Benzo(g,h,i)perylene	ND		32	µg/Kg-dry	1	11/20/2011 06:32 AM
Benzo(k)fluoranthene	ND		32	µg/Kg-dry	1	11/20/2011 06:32 AM
Bis(2-chloroethoxy)methane	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
Bis(2-chloroethyl)ether	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
Bis(2-chloroisopropyl)ether	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
Bis(2-ethylhexyl)phthalate	ND		350	µg/Kg-dry	1	11/20/2011 06:32 AM
Butyl benzyl phthalate	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
Carbazole	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
Chrysene	ND		32	µg/Kg-dry	1	11/20/2011 06:32 AM
Dibenzo(a,h)anthracene	ND		32	µg/Kg-dry	1	11/20/2011 06:32 AM
Dibenzofuran	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
Diethyl phthalate	ND		350	µg/Kg-dry	1	11/20/2011 06:32 AM
Dimethyl phthalate	ND		350	µg/Kg-dry	1	11/20/2011 06:32 AM
Di-n-butyl phthalate	ND		350	µg/Kg-dry	1	11/20/2011 06:32 AM
Di-n-octyl phthalate	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
Fluoranthene	ND		32	µg/Kg-dry	1	11/20/2011 06:32 AM
Fluorene	ND		32	µg/Kg-dry	1	11/20/2011 06:32 AM
Hexachlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
Hexachlorobutadiene	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
Hexachlorocyclopentadiene	ND		350	µg/Kg-dry	1	11/20/2011 06:32 AM
Hexachloroethane	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
Indeno(1,2,3-cd)pyrene	ND		32	µg/Kg-dry	1	11/20/2011 06:32 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

Client: HRL Compliance Solutions

Project: Williams Juhan 14-26 11/11/11

Sample ID: North Wall, West Half - Surface

Collection Date: 11/11/2011 11:45 AM

Work Order: 1111465

Lab ID: 1111465-05

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Isophorone	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
<b>Naphthalene</b>	<b>210</b>		<b>32</b>	<b>µg/Kg-dry</b>	1	11/20/2011 06:32 AM
Nitrobenzene	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
N-Nitrosodi-n-propylamine	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
N-Nitrosodiphenylamine	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
Pentachlorophenol	ND		350	µg/Kg-dry	1	11/20/2011 06:32 AM
Phenanthrene	ND		32	µg/Kg-dry	1	11/20/2011 06:32 AM
Phenol	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
Pyrene	ND		32	µg/Kg-dry	1	11/20/2011 06:32 AM
Pyridine	ND		170	µg/Kg-dry	1	11/20/2011 06:32 AM
Surr: 2,4,6-Tribromophenol	82.5		34-140	%REC	1	11/20/2011 06:32 AM
Surr: 2-Fluorobiphenyl	66.8		12-100	%REC	1	11/20/2011 06:32 AM
Surr: 2-Fluorophenol	71.9		33-117	%REC	1	11/20/2011 06:32 AM
Surr: 4-Terphenyl-d14	81.8		25-137	%REC	1	11/20/2011 06:32 AM
Surr: Nitrobenzene-d5	70.4		37-107	%REC	1	11/20/2011 06:32 AM
Surr: Phenol-d6	78.7		40-106	%REC	1	11/20/2011 06:32 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>CW</b>
Benzene	ND		110	µg/Kg-dry	100	11/20/2011 10:04 AM
Ethylbenzene	ND		210	µg/Kg-dry	100	11/20/2011 10:04 AM
<b>m,p-Xylene</b>	<b>3,800</b>		<b>210</b>	<b>µg/Kg-dry</b>	100	11/20/2011 10:04 AM
<b>o-Xylene</b>	<b>870</b>		<b>110</b>	<b>µg/Kg-dry</b>	100	11/20/2011 10:04 AM
<b>Toluene</b>	<b>1,400</b>		<b>160</b>	<b>µg/Kg-dry</b>	100	11/20/2011 10:04 AM
<b>Xylenes, Total</b>	<b>4,700</b>		<b>320</b>	<b>µg/Kg-dry</b>	100	11/20/2011 10:04 AM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	100	11/20/2011 10:04 AM
Surr: 4-Bromofluorobenzene	97.7		75-120	%REC	100	11/20/2011 10:04 AM
Surr: Dibromofluoromethane	100		85-115	%REC	100	11/20/2011 10:04 AM
Surr: Toluene-d8	101		85-115	%REC	100	11/20/2011 10:04 AM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>			Analyst: <b>JJG</b>
<b>Chromium, Trivalent</b>	<b>15</b>		<b>0.53</b>	<b>mg/Kg-dry</b>	1	11/17/2011 04:26 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>		Prep Date: <b>11/15/2011</b>	Analyst: <b>MB</b>
<b>Chromium, Hexavalent</b>	<b>ND</b>		<b>0.52</b>	<b>mg/Kg-dry</b>	1	11/16/2011 04:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
<b>Moisture</b>	<b>5.4</b>		<b>0.050</b>	<b>% of sample</b>	1	11/14/2011 03:04 PM
<b>PH</b>			<b>SW9045D</b>			Analyst: <b>KV</b>
<b>pH</b>	<b>8.95</b>			<b>s.u.</b>	1	11/13/2011 11:30 AM

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



# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** North Wall, East Half - Surface  
**Collection Date:** 11/11/2011 11:55 AM

**Work Order:** 1111465  
**Lab ID:** 1111465-06  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep Date: <b>11/17/2011</b>	Analyst: <b>RM</b>
<b>DRO (C10-C28)</b>	<b>92</b>		<b>4.3</b>	<b>mg/Kg-dry</b>	1	11/18/2011 07:02 PM
Surr: 4-Terphenyl-d14	39.7		39-115	%REC	1	11/18/2011 07:02 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>JD</b>
<b>GRO (C6-C10)</b>	<b>11</b>		<b>5.2</b>	<b>mg/Kg-dry</b>	100	11/18/2011 02:36 AM
Surr: Toluene-d8	97.0		50-150	%REC	100	11/18/2011 02:36 AM
<b>MERCURY BY CVAA</b>						
			<b>SW7471</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>LR</b>
<b>Mercury</b>	<b>0.031</b>		<b>0.020</b>	<b>mg/Kg-dry</b>	1	11/15/2011 02:29 PM
<b>METALS BY ICP-MS</b>						
			<b>SW6020A</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>CES</b>
<b>Arsenic</b>	<b>7.2</b>		<b>0.95</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:42 PM
<b>Barium</b>	<b>230</b>		<b>0.95</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:42 PM
<b>Cadmium</b>	<b>0.48</b>		<b>0.38</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:42 PM
<b>Chromium</b>	<b>14</b>		<b>0.95</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:42 PM
<b>Copper</b>	<b>12</b>		<b>0.95</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:42 PM
<b>Lead</b>	<b>11</b>		<b>0.95</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:42 PM
<b>Nickel</b>	<b>16</b>		<b>0.95</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:42 PM
<b>Selenium</b>	<b>0.98</b>		<b>0.95</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:42 PM
<b>Silver</b>	<b>ND</b>		<b>0.95</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:42 PM
<b>Zinc</b>	<b>49</b>		<b>1.9</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:42 PM
<b>SUBCONTRACTED ANALYSES</b>						
<b>Subcontracted Analyses</b>	<b>Rcvd 11/18/11</b>		<b>SUBCONTRACT</b>			Analyst: <b>A&amp;LGL</b>
			<b>as noted</b>		1	11/18/2011
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8270</b>		Prep Date: <b>11/17/2011</b>	Analyst: <b>CW</b>
1,2,4-Trichlorobenzene	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
1,2-Dichlorobenzene	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
1,3-Dichlorobenzene	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
1,4-Dichlorobenzene	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
2,4,5-Trichlorophenol	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
2,4,6-Trichlorophenol	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
2,4-Dichlorophenol	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
2,4-Dimethylphenol	ND		340	µg/Kg-dry	1	11/20/2011 04:37 AM
2,4-Dinitrophenol	ND		680	µg/Kg-dry	1	11/20/2011 04:37 AM
2,4-Dinitrotoluene	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
2,6-Dinitrotoluene	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
2-Chloronaphthalene	ND		82	µg/Kg-dry	1	11/20/2011 04:37 AM
2-Chlorophenol	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
<b>2-Methylnaphthalene</b>	<b>220</b>		<b>82</b>	<b>µg/Kg-dry</b>	1	11/20/2011 04:37 AM
2-Methylphenol	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions

**Project:** Williams Juhan 14-26 11/11/11

**Sample ID:** North Wall, East Half - Surface

**Collection Date:** 11/11/2011 11:55 AM

**Work Order:** 1111465

**Lab ID:** 1111465-06

**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
2-Nitroaniline	ND		680	µg/Kg-dry	1	11/20/2011 04:37 AM
2-Nitrophenol	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
3,3'-Dichlorobenzidine	ND		680	µg/Kg-dry	1	11/20/2011 04:37 AM
3-Nitroaniline	ND		680	µg/Kg-dry	1	11/20/2011 04:37 AM
4,6-Dinitro-2-methylphenol	ND		340	µg/Kg-dry	1	11/20/2011 04:37 AM
4-Bromophenyl phenyl ether	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
4-Chloro-3-methylphenol	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
4-Chloroaniline	ND		680	µg/Kg-dry	1	11/20/2011 04:37 AM
4-Chlorophenyl phenyl ether	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
4-Methylphenol	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
4-Nitroaniline	ND		680	µg/Kg-dry	1	11/20/2011 04:37 AM
4-Nitrophenol	ND		680	µg/Kg-dry	1	11/20/2011 04:37 AM
Acenaphthene	ND		31	µg/Kg-dry	1	11/20/2011 04:37 AM
Acenaphthylene	ND		31	µg/Kg-dry	1	11/20/2011 04:37 AM
Anthracene	ND		31	µg/Kg-dry	1	11/20/2011 04:37 AM
Benzo(a)anthracene	ND		31	µg/Kg-dry	1	11/20/2011 04:37 AM
Benzo(a)pyrene	ND		31	µg/Kg-dry	1	11/20/2011 04:37 AM
Benzo(b)fluoranthene	ND		31	µg/Kg-dry	1	11/20/2011 04:37 AM
Benzo(g,h,i)perylene	ND		31	µg/Kg-dry	1	11/20/2011 04:37 AM
Benzo(k)fluoranthene	ND		31	µg/Kg-dry	1	11/20/2011 04:37 AM
Bis(2-chloroethoxy)methane	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
Bis(2-chloroethyl)ether	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
Bis(2-chloroisopropyl)ether	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
<b>Bis(2-ethylhexyl)phthalate</b>	<b>760</b>		<b>340</b>	<b>µg/Kg-dry</b>	<b>1</b>	11/20/2011 04:37 AM
Butyl benzyl phthalate	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
Carbazole	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
Chrysene	ND		31	µg/Kg-dry	1	11/20/2011 04:37 AM
Dibenzo(a,h)anthracene	ND		31	µg/Kg-dry	1	11/20/2011 04:37 AM
Dibenzofuran	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
Diethyl phthalate	ND		340	µg/Kg-dry	1	11/20/2011 04:37 AM
Dimethyl phthalate	ND		340	µg/Kg-dry	1	11/20/2011 04:37 AM
<b>Di-n-butyl phthalate</b>	<b>600</b>		<b>340</b>	<b>µg/Kg-dry</b>	<b>1</b>	11/20/2011 04:37 AM
Di-n-octyl phthalate	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
Fluoranthene	ND		31	µg/Kg-dry	1	11/20/2011 04:37 AM
Fluorene	ND		31	µg/Kg-dry	1	11/20/2011 04:37 AM
Hexachlorobenzene	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
Hexachlorobutadiene	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
Hexachlorocyclopentadiene	ND		340	µg/Kg-dry	1	11/20/2011 04:37 AM
Hexachloroethane	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
Indeno(1,2,3-cd)pyrene	ND		31	µg/Kg-dry	1	11/20/2011 04:37 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** North Wall, East Half - Surface  
**Collection Date:** 11/11/2011 11:55 AM

**Work Order:** 1111465  
**Lab ID:** 1111465-06  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Isophorone	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
<b>Naphthalene</b>	<b>77</b>		<b>31</b>	<b>µg/Kg-dry</b>	1	11/20/2011 04:37 AM
Nitrobenzene	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
N-Nitrosodi-n-propylamine	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
N-Nitrosodiphenylamine	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
Pentachlorophenol	ND		340	µg/Kg-dry	1	11/20/2011 04:37 AM
Phenanthrene	ND		31	µg/Kg-dry	1	11/20/2011 04:37 AM
Phenol	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
Pyrene	ND		31	µg/Kg-dry	1	11/20/2011 04:37 AM
Pyridine	ND		160	µg/Kg-dry	1	11/20/2011 04:37 AM
Surr: 2,4,6-Tribromophenol	54.2		34-140	%REC	1	11/20/2011 04:37 AM
Surr: 2-Fluorobiphenyl	50.0		12-100	%REC	1	11/20/2011 04:37 AM
Surr: 2-Fluorophenol	51.9		33-117	%REC	1	11/20/2011 04:37 AM
Surr: 4-Terphenyl-d14	59.8		25-137	%REC	1	11/20/2011 04:37 AM
Surr: Nitrobenzene-d5	50.9		37-107	%REC	1	11/20/2011 04:37 AM
Surr: Phenol-d6	54.0		40-106	%REC	1	11/20/2011 04:37 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>CW</b>
Benzene	ND		100	µg/Kg-dry	100	11/20/2011 10:30 AM
Ethylbenzene	ND		210	µg/Kg-dry	100	11/20/2011 10:30 AM
<b>m,p-Xylene</b>	<b>780</b>		<b>210</b>	<b>µg/Kg-dry</b>	100	11/20/2011 10:30 AM
<b>o-Xylene</b>	<b>180</b>		<b>100</b>	<b>µg/Kg-dry</b>	100	11/20/2011 10:30 AM
<b>Toluene</b>	<b>200</b>		<b>160</b>	<b>µg/Kg-dry</b>	100	11/20/2011 10:30 AM
<b>Xylenes, Total</b>	<b>960</b>		<b>310</b>	<b>µg/Kg-dry</b>	100	11/20/2011 10:30 AM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	100	11/20/2011 10:30 AM
Surr: 4-Bromofluorobenzene	97.8		75-120	%REC	100	11/20/2011 10:30 AM
Surr: Dibromofluoromethane	99.7		85-115	%REC	100	11/20/2011 10:30 AM
Surr: Toluene-d8	101		85-115	%REC	100	11/20/2011 10:30 AM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>			Analyst: <b>JJG</b>
<b>Chromium, Trivalent</b>	<b>14</b>		<b>0.52</b>	<b>mg/Kg-dry</b>	1	11/17/2011 04:26 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>		Prep Date: <b>11/15/2011</b>	Analyst: <b>MB</b>
<b>Chromium, Hexavalent</b>	ND		0.50	mg/Kg-dry	1	11/16/2011 04:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
<b>Moisture</b>	<b>3.4</b>		<b>0.050</b>	<b>% of sample</b>	1	11/14/2011 03:04 PM
<b>PH</b>			<b>SW9045D</b>			Analyst: <b>KV</b>
<b>pH</b>	<b>8.68</b>			<b>s.u.</b>	1	11/13/2011 11:30 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** Pit Bottom East Half - Surface  
**Collection Date:** 11/11/2011 12:05 PM

**Work Order:** 1111465  
**Lab ID:** 1111465-07  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
<b>DRO (C10-C28)</b>	<b>21</b>		<b>SW8015M</b>		Prep Date: <b>11/17/2011</b>	Analyst: <b>RM</b>
			<b>4.4</b>	<b>mg/Kg-dry</b>	1	11/18/2011 07:25 PM
Surr: 4-Terphenyl-d14	52.4		39-115	%REC	1	11/18/2011 07:25 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
<b>GRO (C6-C10)</b>	<b>ND</b>		<b>SW8015</b>			Analyst: <b>JD</b>
			<b>5.3</b>	<b>mg/Kg-dry</b>	100	11/18/2011 03:00 AM
Surr: Toluene-d8	101		50-150	%REC	100	11/18/2011 03:00 AM
<b>MERCURY BY CVAA</b>						
<b>Mercury</b>	<b>0.029</b>		<b>SW7471</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>LR</b>
			<b>0.023</b>	<b>mg/Kg-dry</b>	1	11/15/2011 02:32 PM
<b>METALS BY ICP-MS</b>						
<b>Arsenic</b>	<b>5.3</b>		<b>SW6020A</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>CES</b>
			<b>0.84</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
<b>Barium</b>	<b>170</b>		<b>0.84</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
			<b>0.34</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
<b>Cadmium</b>	<b>0.49</b>		<b>0.84</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
			<b>0.84</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
<b>Chromium</b>	<b>13</b>		<b>0.84</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
			<b>0.84</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
<b>Copper</b>	<b>11</b>		<b>0.84</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
			<b>0.84</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
<b>Lead</b>	<b>11</b>		<b>0.84</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
			<b>0.84</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
<b>Nickel</b>	<b>16</b>		<b>0.84</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
			<b>0.84</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
<b>Selenium</b>	<b>1.1</b>		<b>0.84</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
			<b>0.84</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
<b>Silver</b>	<b>ND</b>		<b>0.84</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
			<b>1.7</b>	<b>mg/Kg-dry</b>	2	11/15/2011 11:47 PM
<b>Zinc</b>	<b>52</b>					
<b>SUBCONTRACTED ANALYSES</b>						
<b>Subcontracted Analyses</b>	<b>Rcvd 11/18/11</b>		<b>SUBCONTRACT</b>			Analyst: <b>A&amp;LGL</b>
			<b>as noted</b>		1	11/18/2011
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
<b>SW8270</b>					Prep Date: <b>11/17/2011</b>	Analyst: <b>CW</b>
1,2,4-Trichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
1,2-Dichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
1,3-Dichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
1,4-Dichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
2,4,5-Trichlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
2,4,6-Trichlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
2,4-Dichlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
2,4-Dimethylphenol	ND		350	µg/Kg-dry	1	11/20/2011 03:39 AM
2,4-Dinitrophenol	ND		700	µg/Kg-dry	1	11/20/2011 03:39 AM
2,4-Dinitrotoluene	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
2,6-Dinitrotoluene	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
2-Chloronaphthalene	ND		85	µg/Kg-dry	1	11/20/2011 03:39 AM
2-Chlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
2-Methylnaphthalene	ND		85	µg/Kg-dry	1	11/20/2011 03:39 AM
2-Methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** Pit Bottom East Half - Surface  
**Collection Date:** 11/11/2011 12:05 PM

**Work Order:** 1111465  
**Lab ID:** 1111465-07  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
2-Nitroaniline	ND		700	µg/Kg-dry	1	11/20/2011 03:39 AM
2-Nitrophenol	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
3,3'-Dichlorobenzidine	ND		700	µg/Kg-dry	1	11/20/2011 03:39 AM
3-Nitroaniline	ND		700	µg/Kg-dry	1	11/20/2011 03:39 AM
4,6-Dinitro-2-methylphenol	ND		350	µg/Kg-dry	1	11/20/2011 03:39 AM
4-Bromophenyl phenyl ether	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
4-Chloro-3-methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
4-Chloroaniline	ND		700	µg/Kg-dry	1	11/20/2011 03:39 AM
4-Chlorophenyl phenyl ether	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
4-Methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
4-Nitroaniline	ND		700	µg/Kg-dry	1	11/20/2011 03:39 AM
4-Nitrophenol	ND		700	µg/Kg-dry	1	11/20/2011 03:39 AM
Acenaphthene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM
Acenaphthylene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM
Anthracene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM
Benzo(a)anthracene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM
Benzo(a)pyrene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM
Benzo(b)fluoranthene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM
Benzo(g,h,i)perylene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM
Benzo(k)fluoranthene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM
Bis(2-chloroethoxy)methane	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
Bis(2-chloroethyl)ether	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
Bis(2-chloroisopropyl)ether	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
Bis(2-ethylhexyl)phthalate	ND		350	µg/Kg-dry	1	11/20/2011 03:39 AM
Butyl benzyl phthalate	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
Carbazole	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
Chrysene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM
Dibenzo(a,h)anthracene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM
Dibenzofuran	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
Diethyl phthalate	ND		350	µg/Kg-dry	1	11/20/2011 03:39 AM
Dimethyl phthalate	ND		350	µg/Kg-dry	1	11/20/2011 03:39 AM
Di-n-butyl phthalate	ND		350	µg/Kg-dry	1	11/20/2011 03:39 AM
Di-n-octyl phthalate	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
Fluoranthene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM
Fluorene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM
Hexachlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
Hexachlorobutadiene	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
Hexachlorocyclopentadiene	ND		350	µg/Kg-dry	1	11/20/2011 03:39 AM
Hexachloroethane	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
Indeno(1,2,3-cd)pyrene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** Pit Bottom East Half - Surface  
**Collection Date:** 11/11/2011 12:05 PM

**Work Order:** 1111465  
**Lab ID:** 1111465-07  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Isophorone	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
Naphthalene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM
Nitrobenzene	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
N-Nitrosodi-n-propylamine	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
N-Nitrosodiphenylamine	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
Pentachlorophenol	ND		350	µg/Kg-dry	1	11/20/2011 03:39 AM
Phenanthrene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM
Phenol	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
Pyrene	ND		32	µg/Kg-dry	1	11/20/2011 03:39 AM
Pyridine	ND		170	µg/Kg-dry	1	11/20/2011 03:39 AM
Surr: 2,4,6-Tribromophenol	57.4		34-140	%REC	1	11/20/2011 03:39 AM
Surr: 2-Fluorobiphenyl	53.9		12-100	%REC	1	11/20/2011 03:39 AM
Surr: 2-Fluorophenol	63.5		33-117	%REC	1	11/20/2011 03:39 AM
Surr: 4-Terphenyl-d14	60.0		25-137	%REC	1	11/20/2011 03:39 AM
Surr: Nitrobenzene-d5	59.6		37-107	%REC	1	11/20/2011 03:39 AM
Surr: Phenol-d6	65.6		40-106	%REC	1	11/20/2011 03:39 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		110	µg/Kg-dry	100	11/20/2011 03:47 AM
Ethylbenzene	ND		210	µg/Kg-dry	100	11/20/2011 03:47 AM
m,p-Xylene	ND		210	µg/Kg-dry	100	11/20/2011 03:47 AM
o-Xylene	ND		110	µg/Kg-dry	100	11/20/2011 03:47 AM
Toluene	ND		160	µg/Kg-dry	100	11/20/2011 03:47 AM
Xylenes, Total	ND		320	µg/Kg-dry	100	11/20/2011 03:47 AM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	100	11/20/2011 03:47 AM
Surr: 4-Bromofluorobenzene	96.6		75-120	%REC	100	11/20/2011 03:47 AM
Surr: Dibromofluoromethane	101		85-115	%REC	100	11/20/2011 03:47 AM
Surr: Toluene-d8	98.1		85-115	%REC	100	11/20/2011 03:47 AM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>			Analyst: <b>JJG</b>
Chromium, Trivalent	13		0.53	mg/Kg-dry	1	11/17/2011 04:26 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>		Prep Date: 11/15/2011	Analyst: <b>MB</b>
Chromium, Hexavalent	ND		0.51	mg/Kg-dry	1	11/16/2011 04:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
Moisture	5.5		0.050	% of sample	1	11/14/2011 03:04 PM
<b>PH</b>			<b>SW9045D</b>			Analyst: <b>KV</b>
pH	9.19			s.u.	1	11/13/2011 11:30 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** Pit Bottom West Half - Surface  
**Collection Date:** 11/11/2011 12:15 PM

**Work Order:** 1111465  
**Lab ID:** 1111465-08  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep Date: <b>11/17/2011</b>	Analyst: <b>RM</b>
<b>DRO (C10-C28)</b>	<b>9.4</b>		<b>4.4</b>	<b>mg/Kg-dry</b>	1	11/18/2011 07:25 PM
Surr: 4-Terphenyl-d14	74.3		39-115	%REC	1	11/18/2011 07:25 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>JD</b>
GRO (C6-C10)	ND		5.3	mg/Kg-dry	100	11/18/2011 03:25 AM
Surr: Toluene-d8	103		50-150	%REC	100	11/18/2011 03:25 AM
<b>MERCURY BY CVAA</b>						
			<b>SW7471</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>LR</b>
<b>Mercury</b>	<b>0.030</b>		<b>0.022</b>	<b>mg/Kg-dry</b>	1	11/15/2011 02:34 PM
<b>METALS BY ICP-MS</b>						
			<b>SW6020A</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>CES</b>
Arsenic	5.6		0.78	mg/Kg-dry	2	11/15/2011 11:52 PM
Barium	250		0.78	mg/Kg-dry	2	11/15/2011 11:52 PM
Cadmium	0.61		0.31	mg/Kg-dry	2	11/15/2011 11:52 PM
Chromium	12		0.78	mg/Kg-dry	2	11/15/2011 11:52 PM
Copper	10		0.78	mg/Kg-dry	2	11/15/2011 11:52 PM
Lead	12		0.78	mg/Kg-dry	2	11/15/2011 11:52 PM
Nickel	16		0.78	mg/Kg-dry	2	11/15/2011 11:52 PM
Selenium	1.1		0.78	mg/Kg-dry	2	11/15/2011 11:52 PM
Silver	ND		0.78	mg/Kg-dry	2	11/15/2011 11:52 PM
Zinc	56		1.6	mg/Kg-dry	2	11/15/2011 11:52 PM
<b>SUBCONTRACTED ANALYSES</b>						
Subcontracted Analyses	Rcvd 11/18/11		<b>SUBCONTRACT</b>			Analyst: <b>A&amp;LGL</b>
			as noted		1	11/18/2011
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8270</b>		Prep Date: <b>11/17/2011</b>	Analyst: <b>CW</b>
1,2,4-Trichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
1,2-Dichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
1,3-Dichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
1,4-Dichlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
2,4,5-Trichlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
2,4,6-Trichlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
2,4-Dichlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
2,4-Dimethylphenol	ND		340	µg/Kg-dry	1	11/20/2011 04:08 AM
2,4-Dinitrophenol	ND		690	µg/Kg-dry	1	11/20/2011 04:08 AM
2,4-Dinitrotoluene	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
2,6-Dinitrotoluene	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
2-Chloronaphthalene	ND		84	µg/Kg-dry	1	11/20/2011 04:08 AM
2-Chlorophenol	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
2-Methylnaphthalene	ND		84	µg/Kg-dry	1	11/20/2011 04:08 AM
2-Methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM

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

# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions

**Project:** Williams Juhan 14-26 11/11/11

**Sample ID:** Pit Bottom West Half - Surface

**Collection Date:** 11/11/2011 12:15 PM

**Work Order:** 1111465

**Lab ID:** 1111465-08

**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
2-Nitroaniline	ND		690	µg/Kg-dry	1	11/20/2011 04:08 AM
2-Nitrophenol	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
3,3'-Dichlorobenzidine	ND		690	µg/Kg-dry	1	11/20/2011 04:08 AM
3-Nitroaniline	ND		690	µg/Kg-dry	1	11/20/2011 04:08 AM
4,6-Dinitro-2-methylphenol	ND		340	µg/Kg-dry	1	11/20/2011 04:08 AM
4-Bromophenyl phenyl ether	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
4-Chloro-3-methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
4-Chloroaniline	ND		690	µg/Kg-dry	1	11/20/2011 04:08 AM
4-Chlorophenyl phenyl ether	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
4-Methylphenol	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
4-Nitroaniline	ND		690	µg/Kg-dry	1	11/20/2011 04:08 AM
4-Nitrophenol	ND		690	µg/Kg-dry	1	11/20/2011 04:08 AM
Acenaphthene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM
Acenaphthylene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM
Anthracene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM
Benzo(a)anthracene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM
Benzo(a)pyrene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM
Benzo(b)fluoranthene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM
Benzo(g,h,i)perylene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM
Benzo(k)fluoranthene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM
Bis(2-chloroethoxy)methane	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
Bis(2-chloroethyl)ether	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
Bis(2-chloroisopropyl)ether	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
Bis(2-ethylhexyl)phthalate	ND		340	µg/Kg-dry	1	11/20/2011 04:08 AM
Butyl benzyl phthalate	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
Carbazole	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
Chrysene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM
Dibenzo(a,h)anthracene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM
Dibenzofuran	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
Diethyl phthalate	ND		340	µg/Kg-dry	1	11/20/2011 04:08 AM
Dimethyl phthalate	ND		340	µg/Kg-dry	1	11/20/2011 04:08 AM
<b>Di-n-butyl phthalate</b>	<b>360</b>		<b>340</b>	<b>µg/Kg-dry</b>	1	11/20/2011 04:08 AM
Di-n-octyl phthalate	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
Fluoranthene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM
Fluorene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM
Hexachlorobenzene	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
Hexachlorobutadiene	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
Hexachlorocyclopentadiene	ND		340	µg/Kg-dry	1	11/20/2011 04:08 AM
Hexachloroethane	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
Indeno(1,2,3-cd)pyrene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM

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



# ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions

**Project:** Williams Juhan 14-26 11/11/11

**Work Order:** 1111465

**Sample ID:** Pit Bottom West Half - Surface

**Lab ID:** 1111465-08

**Collection Date:** 11/11/2011 12:15 PM

**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Isophorone	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
Naphthalene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM
Nitrobenzene	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
N-Nitrosodi-n-propylamine	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
N-Nitrosodiphenylamine	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
Pentachlorophenol	ND		340	µg/Kg-dry	1	11/20/2011 04:08 AM
Phenanthrene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM
Phenol	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
Pyrene	ND		31	µg/Kg-dry	1	11/20/2011 04:08 AM
Pyridine	ND		170	µg/Kg-dry	1	11/20/2011 04:08 AM
Surr: 2,4,6-Tribromophenol	69.6		34-140	%REC	1	11/20/2011 04:08 AM
Surr: 2-Fluorobiphenyl	64.5		12-100	%REC	1	11/20/2011 04:08 AM
Surr: 2-Fluorophenol	77.3		33-117	%REC	1	11/20/2011 04:08 AM
Surr: 4-Terphenyl-d14	70.0		25-137	%REC	1	11/20/2011 04:08 AM
Surr: Nitrobenzene-d5	71.7		37-107	%REC	1	11/20/2011 04:08 AM
Surr: Phenol-d6	80.4		40-106	%REC	1	11/20/2011 04:08 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		110	µg/Kg-dry	100	11/20/2011 04:13 AM
Ethylbenzene	ND		210	µg/Kg-dry	100	11/20/2011 04:13 AM
m,p-Xylene	ND		210	µg/Kg-dry	100	11/20/2011 04:13 AM
o-Xylene	ND		110	µg/Kg-dry	100	11/20/2011 04:13 AM
Toluene	ND		160	µg/Kg-dry	100	11/20/2011 04:13 AM
Xylenes, Total	ND		320	µg/Kg-dry	100	11/20/2011 04:13 AM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	100	11/20/2011 04:13 AM
Surr: 4-Bromofluorobenzene	94.8		75-120	%REC	100	11/20/2011 04:13 AM
Surr: Dibromofluoromethane	99.4		85-115	%REC	100	11/20/2011 04:13 AM
Surr: Toluene-d8	98.6		85-115	%REC	100	11/20/2011 04:13 AM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>			Analyst: <b>JJG</b>
Chromium, Trivalent	12		0.53	mg/Kg-dry	1	11/17/2011 04:26 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>		Prep Date: 11/15/2011	Analyst: <b>MB</b>
Chromium, Hexavalent	ND		0.53	mg/Kg-dry	1	11/16/2011 04:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
Moisture	4.8		0.050	% of sample	1	11/14/2011 03:04 PM
<b>PH</b>			<b>SW9045D</b>			Analyst: <b>KV</b>
pH	9.20			s.u.	1	11/13/2011 11:30 AM

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

## ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** BKGD 1  
**Collection Date:** 11/11/2011 12:45 PM

**Work Order:** 1111465  
**Lab ID:** 1111465-09  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>CES</b>
Arsenic	14		0.97	mg/Kg-dry	2	11/15/2011 11:57 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
Moisture	20		0.050	% of sample	1	11/14/2011 03:04 PM

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

## ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** BKGD 2  
**Collection Date:** 11/11/2011 01:05 PM

**Work Order:** 1111465  
**Lab ID:** 1111465-10  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>CES</b>
Arsenic	9.5		0.99	mg/Kg-dry	2	11/16/2011 12:02 AM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
Moisture	17		0.050	% of sample	1	11/14/2011 03:04 PM

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

**ALS Group USA, Corp****Date:** 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** BKGD 3  
**Collection Date:** 11/11/2011 01:05 PM

**Work Order:** 1111465  
**Lab ID:** 1111465-11  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>						
Arsenic	11		SW6020A 1.1	mg/Kg-dry	Prep Date: 11/14/2011 2	Analyst: CES 11/16/2011 12:07 AM
<b>SUBCONTRACTED ANALYSES</b>						
Subcontracted Analyses	Rcvd 11/18/11		SUBCONTRACT as noted		1	Analyst: A&LGL 11/18/2011
<b>MOISTURE</b>						
Moisture	17		A2540 G 0.050	% of sample	1	Analyst: CG 11/14/2011 03:04 PM
<b>PH</b>						
pH	8.27		SW9045D s.u.		1	Analyst: JJG 11/15/2011 07:35 AM

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

Report Number: F11319-0613

Account Number: 91000

# A & L GREAT LAKES LABORATORIES, INC.

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

www.algreatlakes.com • lab@algreatlakes.com



**QUALITY ANALYSES FOR INFORMED DECISIONS**

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

RE: 1111465

DATE RECEIVED: 11/15/2011

DATE REPORTED: 11/18/2011

PAGE: 1

P.O. NUMBER: 20-122011221

ATTN: ANN PRESTON

## REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
52721	01B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.69	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	63	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	29	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	166	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	4.3	-	USDA Handbook 60
52722	02B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.87	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	89	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	41	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	173	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	3.8	-	USDA Handbook 60
52723	03B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.83	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	86	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	39	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	155	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	3.5	-	USDA Handbook 60
52724	04B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.79	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	86	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	38	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	126	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	2.8	-	USDA Handbook 60

Report Number: F11319-0613

Account Number: 91000

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3352 128TH AVE  
HOLLAND, MI 49424-9263

RE: 1111465

DATE RECEIVED: 11/15/2011

DATE REPORTED: 11/18/2011

PAGE: 2

P.O. NUMBER: 20-122011221

ATTN: ANN PRESTON

## REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
52725	05B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.74	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	71	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	30	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	154	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	3.9	-	USDA Handbook 60
52726	06B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.87	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	85	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	38	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	237	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	5.4	-	USDA Handbook 60
52727	07B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.46	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	31	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	20	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	135	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	4.6	-	USDA Handbook 60
52728	08B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.35	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	31	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	16	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	51	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	1.9	-	USDA Handbook 60

Report Number: F11319-0613

Account Number: 91000

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RE: 1111465

DATE RECEIVED: 11/15/2011

DATE REPORTED: 11/18/2011

PAGE: 3

P.O. NUMBER: 20-122011221

ATTN: ANN PRESTON

## REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
52729	11B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.25	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	36	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	7	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	26	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	1.0	-	USDA Handbook 60

# ALS Group USA, Corp

Date: 28-Nov-11

Client: HRL Compliance Solutions

## QC BATCH REPORT

Work Order: 1111465

Project: Williams Juhan 14-26 11/11/11

Batch ID: 37526

Instrument ID GC8

Method: SW8015M

<b>MBLK</b>		Sample ID: <b>DBLKS1-37526-37526</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/18/2011 05:54 PM</b>		
Client ID:		Run ID: <b>GC8_111118A</b>				SeqNo: <b>1830261</b>		Prep Date: <b>11/17/2011</b>		DF: <b>1</b>
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			

<b>LCS</b>		Sample ID: <b>DLCSS1-37526-37526</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/18/2011 04:46 PM</b>		
Client ID:		Run ID: <b>GC8_111118A</b>				SeqNo: <b>1830258</b>		Prep Date: <b>11/17/2011</b>		DF: <b>1</b>
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			

<b>LCSD</b>		Sample ID: <b>DLCSDS1-37526-37526</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/18/2011 05:09 PM</b>		
Client ID:		Run ID: <b>GC8_111118A</b>				SeqNo: <b>1830237</b>		Prep Date: <b>11/17/2011</b>		DF: <b>1</b>
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	

<b>MS</b>		Sample ID: <b>1111465-01A MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/18/2011 05:09 PM</b>		
Client ID: <b>East Wall - Surface</b>		Run ID: <b>GC8_111118A</b>				SeqNo: <b>1830259</b>		Prep Date: <b>11/17/2011</b>		DF: <b>1</b>
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			

<b>MSD</b>		Sample ID: <b>1111465-01A MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/18/2011 05:32 PM</b>		
Client ID: <b>East Wall - Surface</b>		Run ID: <b>GC8_111118A</b>				SeqNo: <b>1830238</b>		Prep Date: <b>11/17/2011</b>		DF: <b>1</b>
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:

1111465-02A	1111465-03A	1111465-04A
1111465-05A	1111465-06A	1111465-07A
1111465-08A		

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



**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **37643** Instrument ID **GC8** Method: **SW8015M**

<b>MBLK</b>	Sample ID: <b>DBLKS1-37643-37643</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/22/2011 03:18 AM</b>		
Client ID:	Run ID: <b>GC8_111121A</b>				SeqNo: <b>1834571</b>		Prep Date: <b>11/21/2011</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
<i>Surr: 4-Terphenyl-d14</i>	1.003	0	1.667	0	60.2	39-115	0			

<b>LCS</b>	Sample ID: <b>DLCSS1-37643-37643</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/22/2011 02:12 AM</b>		
Client ID:	Run ID: <b>GC8_111121A</b>				SeqNo: <b>1834568</b>		Prep Date: <b>11/21/2011</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	159.3	4.2	166.7	0	95.6	60-130	0			
<i>Surr: 4-Terphenyl-d14</i>	1.043	0	1.667	0	62.6	39-115	0			

<b>LCSD</b>	Sample ID: <b>DLCSDS1-37643-37643</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/22/2011 02:12 AM</b>		
Client ID:	Run ID: <b>GC8_111121A</b>				SeqNo: <b>1834578</b>		Prep Date: <b>11/21/2011</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	176.8	4.2	166.7	0	106	60-130	159.3	10.4	30	
<i>Surr: 4-Terphenyl-d14</i>	1.28	0	1.667	0	76.8	39-115	1.043	20.4	30	

<b>MS</b>	Sample ID: <b>1111699-05A MS</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/22/2011 02:34 AM</b>		
Client ID:	Run ID: <b>GC8_111121A</b>				SeqNo: <b>1834569</b>		Prep Date: <b>11/21/2011</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	450.1	12	490.1	36.34	84.4	60-130	0			
<i>Surr: 4-Terphenyl-d14</i>	3.171	0	4.901	0	64.7	39-115	0			

<b>MSD</b>	Sample ID: <b>1111699-05A MSD</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/22/2011 02:34 AM</b>		
Client ID:	Run ID: <b>GC8_111121A</b>				SeqNo: <b>1834579</b>		Prep Date: <b>11/21/2011</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	481.2	12	487.3	36.34	91.3	60-130	450.1	6.67	30	
<i>Surr: 4-Terphenyl-d14</i>	3.482	0	4.873	0	71.5	39-115	3.171	9.34	30	

The following samples were analyzed in this batch: 1111465-01A

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **R97932** Instrument ID **GC10** Method: **SW8015**

<b>MBLK</b>		Sample ID: <b>MBLK-R97932-R97932</b>				Units: <b>µg/L</b>		Analysis Date: <b>11/17/2011 07:13 PM</b>		
Client ID:		Run ID: <b>GC10_111117B</b>				SeqNo: <b>1825893</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
<i>Surr: Toluene-d8</i>	100	0	100	0	100	70-130	0			

<b>LCS</b>		Sample ID: <b>LCS-R97932-R97932</b>				Units: <b>µg/L</b>		Analysis Date: <b>11/17/2011 05:58 PM</b>		
Client ID:		Run ID: <b>GC10_111117B</b>				SeqNo: <b>1825890</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	27980	200	25000	0	112	70-130	0			
<i>Surr: Toluene-d8</i>	94.72	0	100	0	94.7	70-130	0			

<b>LCSD</b>		Sample ID: <b>LCSD-R97932-R97932</b>				Units: <b>µg/L</b>		Analysis Date: <b>11/17/2011 06:23 PM</b>		
Client ID:		Run ID: <b>GC10_111117B</b>				SeqNo: <b>1825891</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	26840	200	25000	0	107	70-130	27980	4.13	30	
<i>Surr: Toluene-d8</i>	96.05	0	100	0	96	70-130	94.72	1.39	30	

<b>MS</b>		Sample ID: <b>1111492-08A MS</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>11/18/2011 03:49 AM</b>		
Client ID:		Run ID: <b>GC10_111117B</b>				SeqNo: <b>1825920</b>		Prep Date:		DF: <b>50</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1394000	2,500	1250000	0	112	70-130	0			
<i>Surr: Toluene-d8</i>	4786	0	5000	0	95.7	50-150	0			

<b>MSD</b>		Sample ID: <b>1111492-08A MSD</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>11/18/2011 04:14 AM</b>		
Client ID:		Run ID: <b>GC10_111117B</b>				SeqNo: <b>1825922</b>		Prep Date:		DF: <b>50</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1351000	2,500	1250000	0	108	70-130	1394000	3.17	30	
<i>Surr: Toluene-d8</i>	4932	0	5000	0	98.6	50-150	4786	3.01	30	

The following samples were analyzed in this batch:

1111465-01A	1111465-02A	1111465-03A
1111465-04A	1111465-05A	1111465-06A
1111465-07A	1111465-08A	

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

Client: HRL Compliance Solutions  
 Work Order: 1111465  
 Project: Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **37413** Instrument ID **HG1** Method: **SW7471**

<b>MBLK</b>	Sample ID: <b>MBLK-37413-37413</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/15/2011 01:56 PM</b>		
Client ID:	Run ID: <b>HG1_111115A</b>				SeqNo: <b>1821263</b>		Prep Date: <b>11/14/2011</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury ND 0.020

<b>LCS</b>	Sample ID: <b>LCS-37413-37413</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/15/2011 03:30 PM</b>		
Client ID:	Run ID: <b>HG1_111115A</b>				SeqNo: <b>1821373</b>		Prep Date: <b>11/14/2011</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1699 0.020 0.1665 0 102 80-120 0

<b>LCSD</b>	Sample ID: <b>LCSD-37413-37413</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/15/2011 03:32 PM</b>		
Client ID:	Run ID: <b>HG1_111115A</b>				SeqNo: <b>1821374</b>		Prep Date: <b>11/14/2011</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1785 0.020 0.1665 0 107 80-120 0.1699 4.93 20

<b>MS</b>	Sample ID: <b>1111465-08AMS</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/15/2011 03:34 PM</b>		
Client ID: <b>Pit Bottom West Half - Surface</b>	Run ID: <b>HG1_111115A</b>				SeqNo: <b>1821375</b>		Prep Date: <b>11/14/2011</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1899 0.019 0.1609 0.02885 100 75-125 0

<b>MSD</b>	Sample ID: <b>1111465-08AMSD</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/15/2011 03:36 PM</b>		
Client ID: <b>Pit Bottom West Half - Surface</b>	Run ID: <b>HG1_111115A</b>				SeqNo: <b>1821377</b>		Prep Date: <b>11/14/2011</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.204 0.020 0.1699 0.02885 103 75-125 0.1899 7.14 35

The following samples were analyzed in this batch:

1111465-01A	1111465-02A	1111465-03A
1111465-04A	1111465-05A	1111465-06A
1111465-07A	1111465-08A	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

# QC BATCH REPORT

Batch ID: **37406** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK		Sample ID: <b>MBLK-37406-37406</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/15/2011 01:22 PM</b>		
Client ID:		Run ID: <b>ICPMS1_111115A</b>				SeqNo: <b>1821213</b>		Prep Date: <b>11/14/2011</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.10								
Chromium	0.00619	0.25								J
Copper	ND	0.25								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	0.05685	0.50								J

LCS		Sample ID: <b>LCS-37406-37406</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/15/2011 01:28 PM</b>		
Client ID:		Run ID: <b>ICPMS1_111115A</b>				SeqNo: <b>1821214</b>		Prep Date: <b>11/14/2011</b>		DF: <b>2</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	5.06	0.50	5	0	101	80-120	0			
Barium	5.258	0.50	5	0	105	80-120	0			
Cadmium	5.453	0.20	5	0	109	80-120	0			
Chromium	5.339	0.50	5	0	107	80-120	0			
Copper	5.337	0.50	5	0	107	80-120	0			
Lead	5.247	0.50	5	0	105	80-120	0			
Nickel	5.268	0.50	5	0	105	80-120	0			
Selenium	4.848	0.50	5	0	97	80-120	0			
Silver	4.794	0.50	5	0	95.9	80-120	0			
Zinc	5.102	1.0	5	0	102	80-120	0			

LCSD		Sample ID: <b>LCSD-37406-37406</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>11/15/2011 01:33 PM</b>		
Client ID:		Run ID: <b>ICPMS1_111115A</b>				SeqNo: <b>1821215</b>		Prep Date: <b>11/14/2011</b>		DF: <b>2</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	5.104	0.50	5	0	102	80-120	5.06	0.866	20	
Barium	5.322	0.50	5	0	106	80-120	5.258	1.21	20	
Cadmium	5.479	0.20	5	0	110	80-120	5.453	0.476	20	
Chromium	5.399	0.50	5	0	108	80-120	5.339	1.12	20	
Copper	5.375	0.50	5	0	108	80-120	5.337	0.709	20	
Lead	5.323	0.50	5	0	106	80-120	5.247	1.44	20	
Nickel	5.382	0.50	5	0	108	80-120	5.268	2.14	20	
Selenium	4.848	0.50	5	0	97	80-120	4.848	0	20	
Silver	4.901	0.50	5	0	98	80-120	4.794	2.21	20	
Zinc	5.201	1.0	5	0	104	80-120	5.102	1.92	20	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

# QC BATCH REPORT

Batch ID: **37406** Instrument ID **ICPMS1** Method: **SW6020A**

MS Sample ID: 1111444-08BMS				Units: mg/Kg			Analysis Date: 11/15/2011 02:05 PM			
Client ID:		Run ID: ICPMS1_111115A		SeqNo: 1821221		Prep Date: 11/14/2011		DF: 4		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	64.87	1.4	7.042	35.86	412	80-120	0			SO
Barium	40.99	1.4	7.042	36.91	57.9	80-120	0			SO
Cadmium	7.885	0.56	7.042	0.22	109	80-120	0			
Chromium	12.77	1.4	7.042	7.44	75.8	80-120	0			S
Copper	19	1.4	7.042	9.922	129	80-120	0			S
Lead	11.9	1.4	7.042	5.216	94.9	80-120	0			
Nickel	16.07	1.4	7.042	12.09	56.5	80-120	0			S
Selenium	8.327	1.4	7.042	1.229	101	80-120	0			
Silver	6.448	1.4	7.042	0.03817	91	80-120	0			
Zinc	33.94	2.8	7.042	25.08	126	80-120	0			S

MSD Sample ID: 1111444-08BMSD				Units: mg/Kg			Analysis Date: 11/15/2011 02:10 PM			
Client ID:		Run ID: ICPMS1_111115A		SeqNo: 1821222		Prep Date: 11/14/2011		DF: 4		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	44.91	1.4	6.784	35.86	133	80-120	64.87	36.4	25	SRO
Barium	41.95	1.4	6.784	36.91	74.3	80-120	40.99	2.33	25	SO
Cadmium	7.954	0.54	6.784	0.22	114	80-120	7.885	0.876	25	
Chromium	13.8	1.4	6.784	7.44	93.7	80-120	12.77	7.71	25	
Copper	16.81	1.4	6.784	9.922	102	80-120	19	12.2	25	
Lead	12.33	1.4	6.784	5.216	105	80-120	11.9	3.57	25	
Nickel	23.4	1.4	6.784	12.09	167	80-120	16.07	37.2	25	SR
Selenium	8.095	1.4	6.784	1.229	101	80-120	8.327	2.82	25	
Silver	6.366	1.4	6.784	0.03817	93.3	80-120	6.448	1.27	25	
Zinc	33.57	2.7	6.784	25.08	125	80-120	33.94	1.11	25	S

The following samples were analyzed in this batch:

1111465-01A	1111465-02A	1111465-03A
1111465-04A	1111465-05A	1111465-06A
1111465-07A	1111465-08A	1111465-09A
1111465-10A	1111465-11A	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

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

MBLK		Sample ID: <b>SBLKS1-37525-37525</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>11/18/2011 10:08 AM</b>		
Client ID:		Run ID: <b>SVMS7_111118A</b>				SeqNo: <b>1826696</b>		Prep Date: <b>11/17/2011</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	ND	160								
1,2-Dichlorobenzene	ND	160								
1,3-Dichlorobenzene	ND	160								
1,4-Dichlorobenzene	ND	160								
2,4,5-Trichlorophenol	ND	160								
2,4,6-Trichlorophenol	ND	160								
2,4-Dichlorophenol	ND	160								
2,4-Dimethylphenol	ND	330								
2,4-Dinitrophenol	ND	660								
2,4-Dinitrotoluene	ND	160								
2,6-Dinitrotoluene	ND	160								
2-Chloronaphthalene	ND	80								
2-Chlorophenol	ND	160								
2-Methylnaphthalene	ND	80								
2-Methylphenol	ND	160								
2-Nitroaniline	ND	660								
2-Nitrophenol	ND	160								
3,3'-Dichlorobenzidine	ND	660								
3-Nitroaniline	ND	660								
4,6-Dinitro-2-methylphenol	ND	330								
4-Bromophenyl phenyl ether	ND	160								
4-Chloro-3-methylphenol	ND	160								
4-Chloroaniline	ND	660								
4-Chlorophenyl phenyl ether	ND	160								
4-Methylphenol	ND	160								
4-Nitroaniline	ND	660								
4-Nitrophenol	ND	660								
Acenaphthene	ND	30								
Acenaphthylene	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								
Bis(2-chloroethoxy)methane	ND	160								
Bis(2-chloroethyl)ether	ND	160								
Bis(2-chloroisopropyl)ether	ND	160								
Bis(2-ethylhexyl)phthalate	ND	330								
Butyl benzyl phthalate	ND	160								
Carbazole	ND	160								
Chrysene	ND	30								

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: <b>37525</b>		Instrument ID <b>SVMS7</b>		Method: <b>SW8270</b>				
Dibenzo(a,h)anthracene	ND	30						
Dibenzofuran	ND	160						
Diethyl phthalate	ND	330						
Dimethyl phthalate	ND	330						
Di-n-butyl phthalate	ND	330						
Di-n-octyl phthalate	ND	160						
Fluoranthene	ND	30						
Fluorene	ND	30						
Hexachlorobenzene	ND	160						
Hexachlorobutadiene	ND	160						
Hexachlorocyclopentadiene	ND	330						
Hexachloroethane	ND	160						
Indeno(1,2,3-cd)pyrene	ND	30						
Isophorone	ND	160						
Naphthalene	ND	30						
Nitrobenzene	ND	160						
N-Nitrosodi-n-propylamine	ND	160						
N-Nitrosodiphenylamine	ND	160						
Pentachlorophenol	ND	330						
Phenanthrene	ND	30						
Phenol	ND	160						
Pyrene	ND	30						
Pyridine	ND	160						
<i>Surr: 2,4,6-Tribromophenol</i>	<i>1338</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>80.3</i>	<i>34-140</i>	<i>0</i>	
<i>Surr: 2-Fluorobiphenyl</i>	<i>1062</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>63.7</i>	<i>12-100</i>	<i>0</i>	
<i>Surr: 2-Fluorophenol</i>	<i>1255</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>75.3</i>	<i>33-117</i>	<i>0</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>1209</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>72.5</i>	<i>25-137</i>	<i>0</i>	
<i>Surr: Nitrobenzene-d5</i>	<i>1171</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>70.2</i>	<i>37-107</i>	<i>0</i>	
<i>Surr: Phenol-d6</i>	<i>1278</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>76.7</i>	<i>40-106</i>	<i>0</i>	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

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

LCS Sample ID: <b>SLCSS1-37525-37525</b>				Units: <b>µg/Kg</b>			Analysis Date: <b>11/18/2011 10:37 AM</b>			
Client ID:		Run ID: <b>SVMS7_111118A</b>		SeqNo: <b>1826697</b>		Prep Date: <b>11/17/2011</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	1003	160	1333	0	75.2	45-110	0			
1,2-Dichlorobenzene	977.7	160	1333	0	73.3	45-95	0			
1,3-Dichlorobenzene	985.3	160	1333	0	73.9	40-100	0			
1,4-Dichlorobenzene	1006	160	1333	0	75.4	35-105	0			
2,4,5-Trichlorophenol	1039	160	1333	0	77.9	50-110	0			
2,4,6-Trichlorophenol	1047	160	1333	0	78.6	45-110	0			
2,4-Dichlorophenol	1035	160	1333	0	77.6	45-110	0			
2,4-Dimethylphenol	961.7	330	1333	0	72.1	30-105	0			
2,4-Dinitrophenol	662	660	1333	0	49.7	15-130	0			
2,4-Dinitrotoluene	1133	160	1333	0	85	50-115	0			
2,6-Dinitrotoluene	1097	160	1333	0	82.3	50-110	0			
2-Chloronaphthalene	1030	80	1333	0	77.2	45-105	0			
2-Chlorophenol	1005	160	1333	0	75.4	45-105	0			
2-Methylnaphthalene	1029	80	1333	0	77.2	45-105	0			
2-Methylphenol	1077	160	1333	0	80.8	40-105	0			
2-Nitroaniline	1178	660	1333	0	88.4	45-120	0			
2-Nitrophenol	1082	160	1333	0	81.2	40-110	0			
3-Nitroaniline	1299	660	1333	0	97.4	25-150	0			
4-Bromophenyl phenyl ether	1037	160	1333	0	77.8	45-115	0			
4-Chloro-3-methylphenol	1063	160	1333	0	79.8	45-115	0			
4-Chloroaniline	1061	660	1333	0	79.6	15-110	0			
4-Chlorophenyl phenyl ether	1113	160	1333	0	83.5	45-110	0			
4-Methylphenol	951.7	160	1333	0	71.4	40-105	0			
4-Nitroaniline	1267	660	1333	0	95	35-150	0			
4-Nitrophenol	947	660	1333	0	71	15-140	0			
Acenaphthene	1026	30	1333	0	76.9	45-110	0			
Acenaphthylene	1045	30	1333	0	78.4	45-105	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			
Bis(2-chloroethoxy)methane	1060	160	1333	0	79.5	45-110	0			
Bis(2-chloroethyl)ether	1054	160	1333	0	79.1	40-105	0			
Bis(2-chloroisopropyl)ether	907.3	160	1333	0	68.1	20-115	0			
Bis(2-ethylhexyl)phthalate	1232	330	1333	0	92.4	45-125	0			
Butyl benzyl phthalate	1228	160	1333	0	92.1	50-125	0			
Carbazole	1596	160	1333	0	120	50-150	0			
Chrysene	1031	30	1333	0	77.3	55-110	0			
Dibenzo(a,h)anthracene	1153	30	1333	0	86.5	40-125	0			
Dibenzofuran	999	160	1333	0	74.9	50-105	0			

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



**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: <b>37525</b>		Instrument ID <b>SVMS7</b>		Method: <b>SW8270</b>				
Diethyl phthalate	1081	330	1333	0	81.1	50-115	0	
Dimethyl phthalate	1071	330	1333	0	80.4	50-110	0	
Di-n-butyl phthalate	1101	330	1333	0	82.6	55-110	0	
Di-n-octyl phthalate	1236	160	1333	0	92.7	40-130	0	
Fluoranthene	1040	30	1333	0	78	55-115	0	
Fluorene	1106	30	1333	0	82.9	50-110	0	
Hexachlorobenzene	1100	160	1333	0	82.5	45-120	0	
Hexachlorobutadiene	1032	160	1333	0	77.4	40-115	0	
Hexachlorocyclopentadiene	952.7	330	1333	0	71.5	40-115	0	
Hexachloroethane	1041	160	1333	0	78.1	35-110	0	
Indeno(1,2,3-cd)pyrene	1159	30	1333	0	86.9	40-120	0	
Isophorone	1113	160	1333	0	83.5	45-110	0	
Naphthalene	1006	30	1333	0	75.5	40-105	0	
Nitrobenzene	1049	160	1333	0	78.7	40-115	0	
N-Nitrosodi-n-propylamine	996	160	1333	0	74.7	40-115	0	
N-Nitrosodiphenylamine	1073	160	1333	0	80.5	50-115	0	
Pentachlorophenol	934.7	330	1333	0	70.1	25-120	0	
Phenanthrene	1050	30	1333	0	78.7	50-110	0	
Phenol	965	160	1333	0	72.4	40-100	0	
Pyrene	1128	30	1333	0	84.6	45-125	0	
<i>Surr: 2,4,6-Tribromophenol</i>	<i>1375</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>82.5</i>	<i>34-140</i>	<i>0</i>	
<i>Surr: 2-Fluorobiphenyl</i>	<i>1116</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>66.9</i>	<i>12-100</i>	<i>0</i>	
<i>Surr: 2-Fluorophenol</i>	<i>1255</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>75.3</i>	<i>33-117</i>	<i>0</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>1295</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>77.7</i>	<i>25-137</i>	<i>0</i>	
<i>Surr: Nitrobenzene-d5</i>	<i>1271</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>76.3</i>	<i>37-107</i>	<i>0</i>	
<i>Surr: Phenol-d6</i>	<i>1230</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>73.8</i>	<i>40-106</i>	<i>0</i>	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

# QC BATCH REPORT

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

LCSD      Sample ID: <b>SLCSDS1-37525-37525</b>				Units: <b>µg/Kg</b>			Analysis Date: <b>11/18/2011 11:06 AM</b>			
Client ID:		Run ID: <b>SVMS7_111118A</b>		SeqNo: <b>1826698</b>		Prep Date: <b>11/17/2011</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	990.3	160	1333	0	74.3	45-110	1003	1.27	25	
1,2-Dichlorobenzene	975.3	160	1333	0	73.2	45-95	977.7	0.239	25	
1,3-Dichlorobenzene	979	160	1333	0	73.4	40-100	985.3	0.645	25	
1,4-Dichlorobenzene	1001	160	1333	0	75.1	35-105	1006	0.432	25	
2,4,5-Trichlorophenol	1065	160	1333	0	79.9	50-110	1039	2.47	25	
2,4,6-Trichlorophenol	1052	160	1333	0	78.9	45-110	1047	0.413	25	
2,4-Dichlorophenol	1044	160	1333	0	78.3	45-110	1035	0.93	25	
2,4-Dimethylphenol	992.3	330	1333	0	74.4	30-105	961.7	3.14	25	
2,4-Dinitrophenol	587	660	1333	0	44	15-130	662	0	25	J
2,4-Dinitrotoluene	1134	160	1333	0	85	50-115	1133	0.0882	25	
2,6-Dinitrotoluene	1100	160	1333	0	82.5	50-110	1097	0.243	25	
2-Chloronaphthalene	1030	80	1333	0	77.3	45-105	1030	0.0647	25	
2-Chlorophenol	1009	160	1333	0	75.7	45-105	1005	0.43	25	
2-Methylnaphthalene	1028	80	1333	0	77.1	45-105	1029	0.0648	25	
2-Methylphenol	1076	160	1333	0	80.7	40-105	1077	0.031	25	
2-Nitroaniline	1180	660	1333	0	88.5	45-120	1178	0.141	25	
2-Nitrophenol	1087	160	1333	0	81.6	40-110	1082	0.461	25	
3-Nitroaniline	1262	660	1333	0	94.6	25-110	1299	2.92	25	
4-Bromophenyl phenyl ether	1052	160	1333	0	78.9	45-115	1037	1.4	25	
4-Chloro-3-methylphenol	1076	160	1333	0	80.7	45-115	1063	1.22	25	
4-Chloroaniline	1062	660	1333	0	79.7	15-110	1061	0.0942	25	
4-Chlorophenyl phenyl ether	1124	160	1333	0	84.3	45-110	1113	0.954	25	
4-Methylphenol	962	160	1333	0	72.2	40-105	951.7	1.08	25	
4-Nitroaniline	1230	660	1333	0	92.3	35-150	1267	2.94	25	
4-Nitrophenol	1004	660	1333	0	75.3	15-140	947	5.81	25	
Acenaphthene	1032	30	1333	0	77.4	45-110	1026	0.583	25	
Acenaphthylene	1050	30	1333	0	78.7	45-105	1045	0.477	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	
Bis(2-chloroethoxy)methane	1056	160	1333	0	79.2	45-110	1060	0.347	25	
Bis(2-chloroethyl)ether	1060	160	1333	0	79.5	40-105	1054	0.536	25	
Bis(2-chloroisopropyl)ether	906.7	160	1333	0	68	20-115	907.3	0.0735	25	
Bis(2-ethylhexyl)phthalate	1246	330	1333	0	93.4	45-125	1232	1.08	25	
Butyl benzyl phthalate	1234	160	1333	0	92.6	50-125	1228	0.542	25	
Carbazole	1545	160	1333	0	116	50-150	1596	3.27	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	
Dibenzofuran	1007	160	1333	0	75.6	50-105	999	0.831	25	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: <b>37525</b>		Instrument ID <b>SVMS7</b>		Method: <b>SW8270</b>					
Diethyl phthalate	1091	330	1333	0	81.9	50-115	1081	0.982	25
Dimethyl phthalate	1077	330	1333	0	80.8	50-110	1071	0.497	25
Di-n-butyl phthalate	1115	330	1333	0	83.6	55-110	1101	1.23	25
Di-n-octyl phthalate	1226	160	1333	0	91.9	40-130	1236	0.813	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
Hexachlorobenzene	1111	160	1333	0	83.3	45-120	1100	0.965	25
Hexachlorobutadiene	1027	160	1333	0	77	40-115	1032	0.486	25
Hexachlorocyclopentadiene	982	330	1333	0	73.7	40-115	952.7	3.03	25
Hexachloroethane	1041	160	1333	0	78.1	35-110	1041	0	25
Indeno(1,2,3-cd)pyrene	1167	30	1333	0	87.5	40-120	1159	0.659	25
Isophorone	1106	160	1333	0	82.9	45-110	1113	0.661	25
Naphthalene	1001	30	1333	0	75.1	40-105	1006	0.465	25
Nitrobenzene	1040	160	1333	0	78	40-115	1049	0.861	25
N-Nitrosodi-n-propylamine	1006	160	1333	0	75.4	40-115	996	0.966	25
N-Nitrosodiphenylamine	1075	160	1333	0	80.6	50-115	1073	0.217	25
Pentachlorophenol	995	330	1333	0	74.6	25-120	934.7	6.25	25
Phenanthrene	1054	30	1333	0	79.1	50-110	1050	0.412	25
Phenol	983.3	160	1333	0	73.8	40-100	965	1.88	25
Pyrene	1130	30	1333	0	84.7	45-125	1128	0.177	25
<i>Surr: 2,4,6-Tribromophenol</i>	<i>1419</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>85.1</i>	<i>34-140</i>	<i>1375</i>	<i>3.15</i>	<i>40</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>1130</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>67.8</i>	<i>12-100</i>	<i>1116</i>	<i>1.28</i>	<i>40</i>
<i>Surr: 2-Fluorophenol</i>	<i>1263</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>75.8</i>	<i>33-117</i>	<i>1255</i>	<i>0.662</i>	<i>40</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>1312</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>78.7</i>	<i>25-137</i>	<i>1295</i>	<i>1.25</i>	<i>40</i>
<i>Surr: Nitrobenzene-d5</i>	<i>1265</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>75.9</i>	<i>37-107</i>	<i>1271</i>	<i>0.447</i>	<i>40</i>
<i>Surr: Phenol-d6</i>	<i>1258</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>75.5</i>	<i>40-106</i>	<i>1230</i>	<i>2.28</i>	<i>40</i>

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

# 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: East Wall - Surface				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
1,2,4-Trichlorobenzene	852.7	160	1317	0	64.8	45-110	0			
1,2-Dichlorobenzene	810.2	160	1317	0	61.5	45-95	0			
1,3-Dichlorobenzene	804.6	160	1317	0	61.1	40-100	0			
1,4-Dichlorobenzene	816.8	160	1317	0	62	35-105	0			
2,4,5-Trichlorophenol	946.9	160	1317	0	71.9	50-110	0			
2,4,6-Trichlorophenol	989.3	160	1317	0	75.1	45-110	0			
2,4-Dichlorophenol	968.6	160	1317	0	73.6	45-110	0			
2,4-Dimethylphenol	771.4	330	1317	0	58.6	30-105	0			
2,4-Dinitrophenol	391.8	650	1317	0	29.8	15-130	0			J
2,4-Dinitrotoluene	1063	160	1317	0	80.8	50-115	0			
2,6-Dinitrotoluene	1011	160	1317	0	76.8	50-110	0			
2-Chloronaphthalene	655.2	79	1317	0	49.8	45-105	0			
2-Chlorophenol	847.8	160	1317	0	64.4	45-105	0			
2-Methylnaphthalene	1442	79	1317	163.2	97.1	45-105	0			
2-Methylphenol	926.8	160	1317	0	70.4	40-105	0			
2-Nitroaniline	1096	650	1317	17.88	81.9	45-120	0			
2-Nitrophenol	966.3	160	1317	0	73.4	40-110	0			
3-Nitroaniline	1005	650	1317	0	76.4	25-110	0			
4-Bromophenyl phenyl ether	976.2	160	1317	0	74.1	45-115	0			
4-Chloro-3-methylphenol	1016	160	1317	0	77.2	45-115	0			
4-Chloroaniline	822.4	650	1317	0	62.5	15-110	0			
4-Chlorophenyl phenyl ether	1055	160	1317	0	80.1	45-110	0			
4-Methylphenol	867.5	160	1317	0	65.9	40-105	0			
4-Nitroaniline	902.4	650	1317	0	68.5	35-150	0			
4-Nitrophenol	943.9	650	1317	19.2	70.2	15-140	0			
Acenaphthene	965.6	30	1317	0	73.3	45-110	0			
Acenaphthylene	976.8	30	1317	0	74.2	45-105	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			
Bis(2-chloroethoxy)methane	922.8	160	1317	0	70.1	45-110	0			
Bis(2-chloroethyl)ether	907.4	160	1317	39.73	65.9	40-105	0			
Bis(2-chloroisopropyl)ether	744.7	160	1317	0	56.6	20-115	0			
Bis(2-ethylhexyl)phthalate	1084	330	1317	318.1	58.2	45-125	0			
Butyl benzyl phthalate	1205	160	1317	0	91.5	50-125	0			
Carbazole	1506	160	1317	0	114	50-150	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			
Dibenzofuran	965	160	1317	0	73.3	50-105	0			

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: <b>37525</b>		Instrument ID <b>SVMS7</b>		Method: <b>SW8270</b>				
Diethyl phthalate	944.2	330	1317	0	71.7	50-115	0	
Dimethyl phthalate	888.9	330	1317	0	67.5	50-110	0	
Di-n-butyl phthalate	1015	330	1317	179.1	63.5	55-110	0	
Di-n-octyl phthalate	1094	160	1317	0	83.1	40-130	0	
Fluoranthene	1009	30	1317	0	76.6	55-115	0	
Fluorene	999.9	30	1317	0	75.9	50-110	0	
Hexachlorobenzene	989.3	160	1317	0	75.1	45-120	0	
Hexachlorobutadiene	883.7	160	1317	0	67.1	40-115	0	
Hexachlorocyclopentadiene	311.8	330	1317	0	23.7	40-115	0	JS
Hexachloroethane	773	160	1317	0	58.7	35-110	0	
Indeno(1,2,3-cd)pyrene	911.3	30	1317	0	69.2	40-120	0	
Isophorone	977.2	160	1317	0	74.2	45-110	0	
Naphthalene	1305	30	1317	137.1	88.7	40-105	0	
Nitrobenzene	912	160	1317	0	69.3	40-115	0	
N-Nitrosodi-n-propylamine	890.9	160	1317	0	67.7	40-115	0	
N-Nitrosodiphenylamine	1048	160	1317	21.19	78	50-115	0	
Pentachlorophenol	821.4	330	1317	0	62.4	25-120	0	
Phenanthrene	994.3	30	1317	0	75.5	50-110	0	
Phenol	833.9	160	1317	0	63.3	40-100	0	
Pyrene	1057	30	1317	0	80.3	45-125	0	
<i>Surr: 2,4,6-Tribromophenol</i>	<i>1191</i>	<i>0</i>	<i>1646</i>	<i>0</i>	<i>72.4</i>	<i>34-140</i>	<i>0</i>	
<i>Surr: 2-Fluorobiphenyl</i>	<i>997.2</i>	<i>0</i>	<i>1646</i>	<i>0</i>	<i>60.6</i>	<i>12-100</i>	<i>0</i>	
<i>Surr: 2-Fluorophenol</i>	<i>1026</i>	<i>0</i>	<i>1646</i>	<i>0</i>	<i>62.3</i>	<i>33-117</i>	<i>0</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>1252</i>	<i>0</i>	<i>1646</i>	<i>0</i>	<i>76.1</i>	<i>25-137</i>	<i>0</i>	
<i>Surr: Nitrobenzene-d5</i>	<i>1058</i>	<i>0</i>	<i>1646</i>	<i>0</i>	<i>64.3</i>	<i>37-107</i>	<i>0</i>	
<i>Surr: Phenol-d6</i>	<i>1071</i>	<i>0</i>	<i>1646</i>	<i>0</i>	<i>65.1</i>	<i>40-106</i>	<i>0</i>	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## 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: East Wall - Surface			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	
1,2,4-Trichlorobenzene	937.2	160	1327	0	70.6	45-110	852.7	9.44	30		
1,2-Dichlorobenzene	886.8	160	1327	0	66.8	45-95	810.2	9.02	30		
1,3-Dichlorobenzene	884.4	160	1327	0	66.6	40-100	804.6	9.45	30		
1,4-Dichlorobenzene	900	160	1327	0	67.8	35-105	816.8	9.69	30		
2,4,5-Trichlorophenol	988	160	1327	0	74.4	50-110	946.9	4.25	30		
2,4,6-Trichlorophenol	1086	160	1327	0	81.8	45-110	989.3	9.34	30		
2,4-Dichlorophenol	1044	160	1327	0	78.7	45-110	968.6	7.5	30		
2,4-Dimethylphenol	832	330	1327	0	62.7	30-105	771.4	7.56	30		
2,4-Dinitrophenol	228.7	660	1327	0	17.2	15-130	391.8	0	30	J	
2,4-Dinitrotoluene	1122	160	1327	0	84.5	50-115	1063	5.34	30		
2,6-Dinitrotoluene	1059	160	1327	0	79.8	50-110	1011	4.6	30		
2-Chloronaphthalene	641.5	80	1327	0	48.3	45-105	655.2	2.11	30		
2-Chlorophenol	937.5	160	1327	0	70.6	45-105	847.8	10.1	30		
2-Methylnaphthalene	1495	80	1327	163.2	100	45-105	1442	3.61	30		
2-Methylphenol	997.3	160	1327	0	75.1	40-105	926.8	7.33	30		
2-Nitroaniline	1180	660	1327	17.88	87.6	45-120	1096	7.36	30		
2-Nitrophenol	1054	160	1327	0	79.4	40-110	966.3	8.72	30		
3-Nitroaniline	1230	660	1327	0	92.7	25-110	1005	20.1	30		
4-Bromophenyl phenyl ether	1037	160	1327	0	78.2	45-115	976.2	6.09	30		
4-Chloro-3-methylphenol	1066	160	1327	0	80.3	45-115	1016	4.83	30		
4-Chloroaniline	945.8	660	1327	0	71.3	15-110	822.4	14	30		
4-Chlorophenyl phenyl ether	1117	160	1327	0	84.2	45-110	1055	5.79	30		
4-Methylphenol	927.6	160	1327	0	69.9	40-105	867.5	6.69	30		
4-Nitroaniline	1155	660	1327	0	87	35-150	902.4	24.5	30		
4-Nitrophenol	1015	660	1327	19.2	75	15-140	943.9	7.21	30		
Acenaphthene	1043	30	1327	0	78.6	45-110	965.6	7.68	30		
Acenaphthylene	1070	30	1327	0	80.6	45-105	976.8	9.1	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		
Bis(2-chloroethoxy)methane	996.9	160	1327	0	75.1	45-110	922.8	7.72	30		
Bis(2-chloroethyl)ether	981	160	1327	39.73	70.9	40-105	907.4	7.8	30		
Bis(2-chloroisopropyl)ether	811.1	160	1327	0	61.1	20-115	744.7	8.53	30		
Bis(2-ethylhexyl)phthalate	1126	330	1327	318.1	60.9	45-125	1084	3.82	30		
Butyl benzyl phthalate	1277	160	1327	0	96.2	50-125	1205	5.75	30		
Carbazole	1603	160	1327	0	121	50-150	1506	6.26	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		
Dibenzofuran	1026	160	1327	0	77.3	50-105	965	6.15	30		

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: <b>37525</b>		Instrument ID <b>SVMS7</b>		Method: <b>SW8270</b>					
Diethyl phthalate	1008	330	1327	0	75.9	50-115	944.2	6.49	30
Dimethyl phthalate	939.9	330	1327	0	70.8	50-110	888.9	5.57	30
Di-n-butyl phthalate	1044	330	1327	179.1	65.2	55-110	1015	2.82	30
Di-n-octyl phthalate	1120	160	1327	0	84.4	40-130	1094	2.38	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
Hexachlorobenzene	1059	160	1327	0	79.8	45-120	989.3	6.77	30
Hexachlorobutadiene	965.8	160	1327	0	72.8	40-115	883.7	8.88	30
Hexachlorocyclopentadiene	150.3	330	1327	0	11.3	40-115	311.8	0	30 JS
Hexachloroethane	760.7	160	1327	0	57.3	35-110	773	1.61	30
Indeno(1,2,3-cd)pyrene	884.4	30	1327	0	66.6	40-120	911.3	2.99	30
Isophorone	1068	160	1327	0	80.5	45-110	977.2	8.91	30
Naphthalene	1332	30	1327	137.1	90	40-105	1305	2.08	30
Nitrobenzene	1000	160	1327	0	75.4	40-115	912	9.24	30
N-Nitrosodi-n-propylamine	948.2	160	1327	0	71.4	40-115	890.9	6.23	30
N-Nitrosodiphenylamine	1135	160	1327	21.19	83.9	50-115	1048	7.95	30
Pentachlorophenol	834	330	1327	0	62.8	25-120	821.4	1.52	30
Phenanthrene	1045	30	1327	0	78.8	50-110	994.3	5.01	30
Phenol	900	160	1327	0	67.8	40-100	833.9	7.62	30
Pyrene	1113	30	1327	0	83.9	45-125	1057	5.22	30
<i>Surr: 2,4,6-Tribromophenol</i>	<i>1226</i>	<i>0</i>	<i>1659</i>	<i>0</i>	<i>73.9</i>	<i>34-140</i>	<i>1191</i>	<i>2.85</i>	<i>40</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>1097</i>	<i>0</i>	<i>1659</i>	<i>0</i>	<i>66.1</i>	<i>12-100</i>	<i>997.2</i>	<i>9.54</i>	<i>40</i>
<i>Surr: 2-Fluorophenol</i>	<i>1141</i>	<i>0</i>	<i>1659</i>	<i>0</i>	<i>68.8</i>	<i>33-117</i>	<i>1026</i>	<i>10.7</i>	<i>40</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>1293</i>	<i>0</i>	<i>1659</i>	<i>0</i>	<i>77.9</i>	<i>25-137</i>	<i>1252</i>	<i>3.22</i>	<i>40</i>
<i>Surr: Nitrobenzene-d5</i>	<i>1156</i>	<i>0</i>	<i>1659</i>	<i>0</i>	<i>69.7</i>	<i>37-107</i>	<i>1058</i>	<i>8.83</i>	<i>40</i>
<i>Surr: Phenol-d6</i>	<i>1153</i>	<i>0</i>	<i>1659</i>	<i>0</i>	<i>69.5</i>	<i>40-106</i>	<i>1071</i>	<i>7.31</i>	<i>40</i>

The following samples were analyzed in this batch:

1111465-01A	1111465-02A	1111465-03A
1111465-04A	1111465-05A	1111465-06A
1111465-07A	1111465-08A	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **37642**      Instrument ID **SVMS7**      Method: **SW8270**

MBLK		Sample ID: <b>SBLKS1-37642-37642</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>11/21/2011 01:55 PM</b>		
Client ID:		Run ID: <b>SVMS7_111121A</b>				SeqNo: <b>1828898</b>		Prep Date: <b>11/21/2011</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	ND	160								
1,2-Dichlorobenzene	ND	160								
1,3-Dichlorobenzene	ND	160								
1,4-Dichlorobenzene	ND	160								
2,4,5-Trichlorophenol	ND	160								
2,4,6-Trichlorophenol	ND	160								
2,4-Dichlorophenol	ND	160								
2,4-Dimethylphenol	ND	330								
2,4-Dinitrophenol	ND	660								
2,4-Dinitrotoluene	ND	160								
2,6-Dinitrotoluene	ND	160								
2-Chloronaphthalene	ND	80								
2-Chlorophenol	ND	160								
2-Methylnaphthalene	ND	80								
2-Methylphenol	ND	160								
2-Nitroaniline	ND	660								
2-Nitrophenol	ND	160								
3,3'-Dichlorobenzidine	ND	660								
3-Nitroaniline	ND	660								
4,6-Dinitro-2-methylphenol	ND	330								
4-Bromophenyl phenyl ether	ND	160								
4-Chloro-3-methylphenol	ND	160								
4-Chloroaniline	ND	660								
4-Chlorophenyl phenyl ether	ND	160								
4-Methylphenol	ND	160								
4-Nitroaniline	ND	660								
4-Nitrophenol	ND	660								
Acenaphthene	ND	30								
Acenaphthylene	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								
Bis(2-chloroethoxy)methane	ND	160								
Bis(2-chloroethyl)ether	ND	160								
Bis(2-chloroisopropyl)ether	ND	160								
Bis(2-ethylhexyl)phthalate	ND	330								
Butyl benzyl phthalate	ND	160								
Carbazole	ND	160								
Chrysene	ND	30								

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



**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: <b>37642</b>		Instrument ID <b>SVMS7</b>		Method: <b>SW8270</b>				
Dibenzo(a,h)anthracene	ND	30						
Dibenzofuran	ND	160						
Diethyl phthalate	ND	330						
Dimethyl phthalate	ND	330						
Di-n-butyl phthalate	ND	330						
Di-n-octyl phthalate	ND	160						
Fluoranthene	ND	30						
Fluorene	ND	30						
Hexachlorobenzene	ND	160						
Hexachlorobutadiene	ND	160						
Hexachlorocyclopentadiene	ND	330						
Hexachloroethane	ND	160						
Indeno(1,2,3-cd)pyrene	ND	30						
Isophorone	ND	160						
Naphthalene	ND	30						
Nitrobenzene	ND	160						
N-Nitrosodi-n-propylamine	ND	160						
N-Nitrosodiphenylamine	ND	160						
Pentachlorophenol	ND	330						
Phenanthrene	ND	30						
Phenol	ND	160						
Pyrene	ND	30						
Pyridine	ND	160						
<i>Surr: 2,4,6-Tribromophenol</i>	<i>1205</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>72.3</i>	<i>34-140</i>	<i>0</i>	
<i>Surr: 2-Fluorobiphenyl</i>	<i>1121</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>67.2</i>	<i>12-100</i>	<i>0</i>	
<i>Surr: 2-Fluorophenol</i>	<i>1301</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>78</i>	<i>33-117</i>	<i>0</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>1278</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>76.7</i>	<i>25-137</i>	<i>0</i>	
<i>Surr: Nitrobenzene-d5</i>	<i>1234</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>74</i>	<i>37-107</i>	<i>0</i>	
<i>Surr: Phenol-d6</i>	<i>1321</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>79.3</i>	<i>40-106</i>	<i>0</i>	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **37642**      Instrument ID **SVMS7**      Method: **SW8270**

LCS Sample ID: <b>SLCSS1-37642-37642</b>				Units: <b>µg/Kg</b>			Analysis Date: <b>11/21/2011 02:24 PM</b>			
Client ID:		Run ID: <b>SVMS7_111121A</b>		SeqNo: <b>1828899</b>		Prep Date: <b>11/21/2011</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	977	160	1333	0	73.3	45-110	0			
1,2-Dichlorobenzene	967.7	160	1333	0	72.6	45-95	0			
1,3-Dichlorobenzene	970	160	1333	0	72.8	40-100	0			
1,4-Dichlorobenzene	987.7	160	1333	0	74.1	35-105	0			
2,4,5-Trichlorophenol	1147	160	1333	0	86.1	50-110	0			
2,4,6-Trichlorophenol	1102	160	1333	0	82.7	45-110	0			
2,4-Dichlorophenol	1049	160	1333	0	78.7	45-110	0			
2,4-Dimethylphenol	1006	330	1333	0	75.5	30-105	0			
2,4-Dinitrophenol	1026	660	1333	0	76.9	15-130	0			
2,4-Dinitrotoluene	1216	160	1333	0	91.2	50-115	0			
2,6-Dinitrotoluene	1155	160	1333	0	86.6	50-110	0			
2-Chloronaphthalene	1056	80	1333	0	79.2	45-105	0			
2-Chlorophenol	1017	160	1333	0	76.3	45-105	0			
2-Methylnaphthalene	1040	80	1333	0	78	45-105	0			
2-Methylphenol	1091	160	1333	0	81.9	40-105	0			
2-Nitroaniline	1230	660	1333	0	92.2	45-120	0			
2-Nitrophenol	1098	160	1333	0	82.4	40-110	0			
3-Nitroaniline	1418	660	1333	0	106	25-150	0			
4-Bromophenyl phenyl ether	1119	160	1333	0	83.9	45-115	0			
4-Chloro-3-methylphenol	1130	160	1333	0	84.8	45-115	0			
4-Chloroaniline	1138	660	1333	0	85.3	15-110	0			
4-Chlorophenyl phenyl ether	1166	160	1333	0	87.5	45-110	0			
4-Methylphenol	1004	160	1333	0	75.3	40-105	0			
4-Nitroaniline	1403	660	1333	0	105	35-150	0			
4-Nitrophenol	1157	660	1333	0	86.8	15-140	0			
Acenaphthene	1063	30	1333	0	79.8	45-110	0			
Acenaphthylene	1081	30	1333	0	81.1	45-105	0			
Anthracene	1128	30	1333	0	84.6	55-105	0			
Benzo(a)anthracene	1130	30	1333	0	84.8	50-110	0			
Benzo(a)pyrene	1161	30	1333	0	87.1	50-110	0			
Benzo(b)fluoranthene	1172	30	1333	0	87.9	45-115	0			
Benzo(g,h,i)perylene	1081	30	1333	0	81.1	40-125	0			
Benzo(k)fluoranthene	1018	30	1333	0	76.4	45-115	0			
Bis(2-chloroethoxy)methane	1045	160	1333	0	78.4	45-110	0			
Bis(2-chloroethyl)ether	1072	160	1333	0	80.4	40-105	0			
Bis(2-chloroisopropyl)ether	894.7	160	1333	0	67.1	20-115	0			
Bis(2-ethylhexyl)phthalate	1212	330	1333	0	90.9	45-125	0			
Butyl benzyl phthalate	1416	160	1333	0	106	50-125	0			
Carbazole	1915	160	1333	0	144	50-150	0			
Chrysene	1109	30	1333	0	83.2	55-110	0			
Dibenzo(a,h)anthracene	1045	30	1333	0	78.4	40-125	0			
Dibenzofuran	1044	160	1333	0	78.3	50-105	0			

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: <b>37642</b>		Instrument ID <b>SVMS7</b>		Method: <b>SW8270</b>			
Diethyl phthalate	1080	330	1333	0	81	50-115	0
Dimethyl phthalate	1124	330	1333	0	84.3	50-110	0
Di-n-butyl phthalate	1211	330	1333	0	90.8	55-110	0
Di-n-octyl phthalate	1238	160	1333	0	92.9	40-130	0
Fluoranthene	1129	30	1333	0	84.7	55-115	0
Fluorene	1081	30	1333	0	81.1	50-110	0
Hexachlorobenzene	1145	160	1333	0	85.9	45-120	0
Hexachlorobutadiene	1006	160	1333	0	75.5	40-115	0
Hexachlorocyclopentadiene	606.3	330	1333	0	45.5	40-115	0
Hexachloroethane	980.3	160	1333	0	73.5	35-110	0
Indeno(1,2,3-cd)pyrene	1041	30	1333	0	78.1	40-120	0
Isophorone	1134	160	1333	0	85.1	45-110	0
Naphthalene	1004	30	1333	0	75.3	40-105	0
Nitrobenzene	1045	160	1333	0	78.4	40-115	0
N-Nitrosodi-n-propylamine	1049	160	1333	0	78.7	40-115	0
N-Nitrosodiphenylamine	1147	160	1333	0	86	50-115	0
Pentachlorophenol	1124	330	1333	0	84.3	25-120	0
Phenanthrene	1099	30	1333	0	82.5	50-110	0
Phenol	1044	160	1333	0	78.3	40-100	0
Pyrene	1208	30	1333	0	90.6	45-125	0
<i>Surr: 2,4,6-Tribromophenol</i>	<i>1408</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>84.5</i>	<i>34-140</i>	<i>0</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>1150</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>69</i>	<i>12-100</i>	<i>0</i>
<i>Surr: 2-Fluorophenol</i>	<i>1259</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>75.5</i>	<i>33-117</i>	<i>0</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>1409</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>84.5</i>	<i>25-137</i>	<i>0</i>
<i>Surr: Nitrobenzene-d5</i>	<i>1247</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>74.8</i>	<i>37-107</i>	<i>0</i>
<i>Surr: Phenol-d6</i>	<i>1228</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>73.7</i>	<i>40-106</i>	<i>0</i>

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **37642**      Instrument ID **SVMS7**      Method: **SW8270**

LCSD      Sample ID: <b>SLCSDS1-37642-37642</b>				Units: <b>µg/Kg</b>			Analysis Date: <b>11/21/2011 02:54 PM</b>			
Client ID:		Run ID: <b>SVMS7_111121A</b>		SeqNo: <b>1828900</b>		Prep Date: <b>11/21/2011</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	811.3	160	1333	0	60.9	45-110	977	18.5	25	
1,2-Dichlorobenzene	811	160	1333	0	60.8	45-95	967.7	17.6	25	
1,3-Dichlorobenzene	804.7	160	1333	0	60.4	40-100	970	18.6	25	
1,4-Dichlorobenzene	828	160	1333	0	62.1	35-105	987.7	17.6	25	
2,4,5-Trichlorophenol	947	160	1333	0	71	50-110	1147	19.1	25	
2,4,6-Trichlorophenol	900	160	1333	0	67.5	45-110	1102	20.2	25	
2,4-Dichlorophenol	864.3	160	1333	0	64.8	45-110	1049	19.3	25	
2,4-Dimethylphenol	817.3	330	1333	0	61.3	30-105	1006	20.7	25	
2,4-Dinitrophenol	745.7	660	1333	0	55.9	15-130	1026	31.6	25	R
2,4-Dinitrotoluene	1044	160	1333	0	78.3	50-115	1216	15.2	25	
2,6-Dinitrotoluene	976.3	160	1333	0	73.2	50-110	1155	16.7	25	
2-Chloronaphthalene	859.7	80	1333	0	64.5	45-105	1056	20.5	25	
2-Chlorophenol	839	160	1333	0	62.9	45-105	1017	19.1	25	
2-Methylnaphthalene	863	80	1333	0	64.7	45-105	1040	18.6	25	
2-Methylphenol	896.7	160	1333	0	67.3	40-105	1091	19.6	25	
2-Nitroaniline	1032	660	1333	0	77.4	45-120	1230	17.5	25	
2-Nitrophenol	913.7	160	1333	0	68.5	40-110	1098	18.4	25	
3-Nitroaniline	1167	660	1333	0	87.6	25-110	1418	19.4	25	
4-Bromophenyl phenyl ether	946	160	1333	0	71	45-115	1119	16.7	25	
4-Chloro-3-methylphenol	946.3	160	1333	0	71	45-115	1130	17.7	25	
4-Chloroaniline	946	660	1333	0	71	15-110	1138	18.4	25	
4-Chlorophenyl phenyl ether	997	160	1333	0	74.8	45-110	1166	15.6	25	
4-Methylphenol	823.7	160	1333	0	61.8	40-105	1004	19.7	25	
4-Nitroaniline	1093	660	1333	0	82	35-150	1403	24.8	25	
4-Nitrophenol	948.3	660	1333	0	71.1	15-140	1157	19.8	25	
Acenaphthene	897	30	1333	0	67.3	45-110	1063	17	25	
Acenaphthylene	913.3	30	1333	0	68.5	45-105	1081	16.8	25	
Anthracene	989.3	30	1333	0	74.2	55-105	1128	13.1	25	
Benzo(a)anthracene	967.3	30	1333	0	72.6	50-110	1130	15.5	25	
Benzo(a)pyrene	988.7	30	1333	0	74.2	50-110	1161	16	25	
Benzo(b)fluoranthene	954.7	30	1333	0	71.6	45-115	1172	20.4	25	
Benzo(g,h,i)perylene	918.3	30	1333	0	68.9	40-125	1081	16.3	25	
Benzo(k)fluoranthene	898.3	30	1333	0	67.4	45-115	1018	12.5	25	
Bis(2-chloroethoxy)methane	860	160	1333	0	64.5	45-110	1045	19.4	25	
Bis(2-chloroethyl)ether	893.3	160	1333	0	67	40-105	1072	18.2	25	
Bis(2-chloroisopropyl)ether	744.3	160	1333	0	55.8	20-115	894.7	18.3	25	
Bis(2-ethylhexyl)phthalate	1053	330	1333	0	79	45-125	1212	14.1	25	
Butyl benzyl phthalate	1170	160	1333	0	87.7	50-125	1416	19	25	
Carbazole	1552	160	1333	0	116	50-150	1915	20.9	25	
Chrysene	972.3	30	1333	0	72.9	55-110	1109	13.1	25	
Dibenzo(a,h)anthracene	896.3	30	1333	0	67.2	40-125	1045	15.3	25	
Dibenzofuran	892.3	160	1333	0	66.9	50-105	1044	15.6	25	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: <b>37642</b>		Instrument ID <b>SVMS7</b>		Method: <b>SW8270</b>						
Diethyl phthalate	912.3	330	1333	0	68.4	50-115	1080	16.8	25	
Dimethyl phthalate	944.7	330	1333	0	70.9	50-110	1124	17.3	25	
Di-n-butyl phthalate	1023	330	1333	0	76.7	55-110	1211	16.8	25	
Di-n-octyl phthalate	1071	160	1333	0	80.3	40-130	1238	14.5	25	
Fluoranthene	975.7	30	1333	0	73.2	55-115	1129	14.6	25	
Fluorene	946.3	30	1333	0	71	50-110	1081	13.3	25	
Hexachlorobenzene	981.7	160	1333	0	73.6	45-120	1145	15.4	25	
Hexachlorobutadiene	841	160	1333	0	63.1	40-115	1006	17.9	25	
Hexachlorocyclopentadiene	484.3	330	1333	0	36.3	40-115	606.3	22.4	25	S
Hexachloroethane	825	160	1333	0	61.9	35-110	980.3	17.2	25	
Indeno(1,2,3-cd)pyrene	885.7	30	1333	0	66.4	40-120	1041	16.1	25	
Isophorone	922.7	160	1333	0	69.2	45-110	1134	20.6	25	
Naphthalene	840.7	30	1333	0	63.1	40-105	1004	17.7	25	
Nitrobenzene	868.7	160	1333	0	65.2	40-115	1045	18.4	25	
N-Nitrosodi-n-propylamine	865.3	160	1333	0	64.9	40-115	1049	19.2	25	
N-Nitrosodiphenylamine	981	160	1333	0	73.6	50-115	1147	15.6	25	
Pentachlorophenol	928.3	330	1333	0	69.6	25-120	1124	19	25	
Phenanthrene	963	30	1333	0	72.2	50-110	1099	13.2	25	
Phenol	868.3	160	1333	0	65.1	40-100	1044	18.4	25	
Pyrene	1037	30	1333	0	77.8	45-125	1208	15.3	25	
<i>Surr: 2,4,6-Tribromophenol</i>	<i>1187</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>71.2</i>	<i>34-140</i>	<i>1408</i>	<i>17.1</i>	<i>40</i>	
<i>Surr: 2-Fluorobiphenyl</i>	<i>947.7</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>56.9</i>	<i>12-100</i>	<i>1150</i>	<i>19.3</i>	<i>40</i>	
<i>Surr: 2-Fluorophenol</i>	<i>1021</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>61.2</i>	<i>33-117</i>	<i>1259</i>	<i>20.9</i>	<i>40</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>1203</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>72.2</i>	<i>25-137</i>	<i>1409</i>	<i>15.7</i>	<i>40</i>	
<i>Surr: Nitrobenzene-d5</i>	<i>1031</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>61.8</i>	<i>37-107</i>	<i>1247</i>	<i>19</i>	<i>40</i>	
<i>Surr: Phenol-d6</i>	<i>1008</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>60.5</i>	<i>40-106</i>	<i>1228</i>	<i>19.7</i>	<i>40</i>	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **37642**      Instrument ID **SVMS7**      Method: **SW8270**

MS				Sample ID: <b>1111699-05A MS</b>			Units: <b>µg/Kg</b>		Analysis Date: <b>11/21/2011 07:58 PM</b>	
Client ID:				Run ID: <b>SVMS7_111121A</b>			SeqNo: <b>1830350</b>		Prep Date: <b>11/21/2011</b>	
							DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	2665	470	3919	0	68	45-110	0			
1,2-Dichlorobenzene	2513	470	3919	0	64.1	45-95	0			
1,3-Dichlorobenzene	2512	470	3919	0	64.1	40-100	0			
1,4-Dichlorobenzene	2556	470	3919	0	65.2	35-105	0			
2,4,5-Trichlorophenol	3229	470	3919	0	82.4	50-110	0			
2,4,6-Trichlorophenol	3217	470	3919	0	82.1	45-110	0			
2,4-Dichlorophenol	3023	470	3919	0	77.2	45-110	0			
2,4-Dimethylphenol	2944	970	3919	0	75.1	30-105	0			
2,4-Dinitrophenol	2206	1,900	3919	0	56.3	15-130	0			
2,4-Dinitrotoluene	3248	470	3919	0	82.9	50-115	0			
2,6-Dinitrotoluene	3167	470	3919	0	80.8	50-110	0			
2-Chloronaphthalene	2943	240	3919	0	75.1	45-105	0			
2-Chlorophenol	2668	470	3919	0	68.1	45-105	0			
2-Methylnaphthalene	2894	240	3919	0	73.9	45-105	0			
2-Methylphenol	3003	470	3919	0	76.6	40-105	0			
2-Nitroaniline	3280	1,900	3919	0	83.7	45-120	0			
2-Nitrophenol	3024	470	3919	0	77.2	40-110	0			
3-Nitroaniline	2337	1,900	3919	0	59.6	25-110	0			
4-Bromophenyl phenyl ether	3089	470	3919	0	78.8	45-115	0			
4-Chloro-3-methylphenol	3132	470	3919	0	79.9	45-115	0			
4-Chloroaniline	2018	1,900	3919	0	51.5	15-110	0			
4-Chlorophenyl phenyl ether	3240	470	3919	0	82.7	45-110	0			
4-Methylphenol	2977	470	3919	307.8	68.1	40-105	0			
4-Nitroaniline	2317	1,900	3919	0	59.1	35-150	0			
4-Nitrophenol	2403	1,900	3919	0	61.3	15-140	0			
Acenaphthene	2934	88	3919	0	74.9	45-110	0			
Acenaphthylene	3004	88	3919	0	76.7	45-105	0			
Anthracene	2990	88	3919	0	76.3	55-105	0			
Benzo(a)anthracene	2984	88	3919	0	76.2	50-110	0			
Benzo(a)pyrene	3038	88	3919	0	77.5	50-110	0			
Benzo(b)fluoranthene	3413	88	3919	0	87.1	45-115	0			
Benzo(g,h,i)perylene	3444	88	3919	0	87.9	40-125	0			
Benzo(k)fluoranthene	2590	88	3919	0	66.1	45-115	0			
Bis(2-chloroethoxy)methane	2874	470	3919	0	73.4	45-110	0			
Bis(2-chloroethyl)ether	3011	470	3919	0	76.8	40-105	0			
Bis(2-chloroisopropyl)ether	2370	470	3919	0	60.5	20-115	0			
Bis(2-ethylhexyl)phthalate	3284	970	3919	0	83.8	45-125	0			
Butyl benzyl phthalate	3742	470	3919	0	95.5	50-125	0			
Carbazole	5012	470	3919	0	128	50-150	0			
Chrysene	3041	88	3919	41.88	76.5	55-110	0			
Dibenzo(a,h)anthracene	2841	88	3919	0	72.5	40-125	0			
Dibenzofuran	2918	470	3919	0	74.5	50-105	0			

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: <b>37642</b>		Instrument ID <b>SVMS7</b>		Method: <b>SW8270</b>					
Diethyl phthalate	2877	970	3919	0	73.4	50-115	0		
Dimethyl phthalate	3057	970	3919	0	78	50-110	0		
Di-n-butyl phthalate	3160	970	3919	0	80.6	55-110	0		
Di-n-octyl phthalate	3772	470	3919	0	96.3	40-130	0		
Fluoranthene	3019	88	3919	60.39	75.5	55-115	0		
Fluorene	2977	88	3919	0	76	50-110	0		
Hexachlorobenzene	3138	470	3919	0	80.1	45-120	0		
Hexachlorobutadiene	2708	470	3919	0	69.1	40-115	0		
Hexachlorocyclopentadiene	974.8	970	3919	0	24.9	40-115	0		S
Hexachloroethane	2279	470	3919	0	58.2	35-110	0		
Indeno(1,2,3-cd)pyrene	2890	88	3919	0	73.8	40-120	0		
Isophorone	3046	470	3919	0	77.7	45-110	0		
Naphthalene	2752	88	3919	0	70.2	40-105	0		
Nitrobenzene	2809	470	3919	0	71.7	40-115	0		
N-Nitrosodi-n-propylamine	2818	470	3919	0	71.9	40-115	0		
N-Nitrosodiphenylamine	2945	470	3919	0	75.2	50-115	0		
Pentachlorophenol	3285	970	3919	0	83.8	25-120	0		
Phenanthrene	2958	88	3919	0	75.5	50-110	0		
Phenol	2695	470	3919	0	68.8	40-100	0		
Pyrene	3295	88	3919	41.88	83	45-125	0		
<i>Surr: 2,4,6-Tribromophenol</i>	<i>3960</i>	<i>0</i>	<i>4899</i>	<i>0</i>	<i>80.8</i>	<i>34-140</i>	<i>0</i>		
<i>Surr: 2-Fluorobiphenyl</i>	<i>3168</i>	<i>0</i>	<i>4899</i>	<i>0</i>	<i>64.7</i>	<i>12-100</i>	<i>0</i>		
<i>Surr: 2-Fluorophenol</i>	<i>3129</i>	<i>0</i>	<i>4899</i>	<i>0</i>	<i>63.9</i>	<i>33-117</i>	<i>0</i>		
<i>Surr: 4-Terphenyl-d14</i>	<i>3825</i>	<i>0</i>	<i>4899</i>	<i>0</i>	<i>78.1</i>	<i>25-137</i>	<i>0</i>		
<i>Surr: Nitrobenzene-d5</i>	<i>3262</i>	<i>0</i>	<i>4899</i>	<i>0</i>	<i>66.6</i>	<i>37-107</i>	<i>0</i>		
<i>Surr: Phenol-d6</i>	<i>3259</i>	<i>0</i>	<i>4899</i>	<i>0</i>	<i>66.5</i>	<i>40-106</i>	<i>0</i>		

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

# QC BATCH REPORT

Batch ID: **37642**      Instrument ID **SVMS7**      Method: **SW8270**

MSD				Sample ID: 1111699-05A MSD			Units: µg/Kg		Analysis Date: 11/21/2011 08:27 PM		
Client ID:			Run ID: SVMS7_111121A			SeqNo: 1830351		Prep Date: 11/21/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
1,2,4-Trichlorobenzene	3053	470	3920	0	77.9	45-110	2665	13.6	30		
1,2-Dichlorobenzene	2710	470	3920	0	69.1	45-95	2513	7.54	30		
1,3-Dichlorobenzene	2738	470	3920	0	69.9	40-100	2512	8.62	30		
1,4-Dichlorobenzene	2782	470	3920	0	71	35-105	2556	8.45	30		
2,4,5-Trichlorophenol	3824	470	3920	0	97.6	50-110	3229	16.9	30		
2,4,6-Trichlorophenol	3654	470	3920	0	93.2	45-110	3217	12.7	30		
2,4-Dichlorophenol	3319	470	3920	0	84.7	45-110	3023	9.31	30		
2,4-Dimethylphenol	3022	970	3920	0	77.1	30-105	2944	2.6	30		
2,4-Dinitrophenol	1610	1,900	3920	0	41.1	15-130	2206	0	30	J	
2,4-Dinitrotoluene	3499	470	3920	0	89.3	50-115	3248	7.45	30		
2,6-Dinitrotoluene	3468	470	3920	0	88.5	50-110	3167	9.05	30		
2-Chloronaphthalene	3052	240	3920	0	77.9	45-105	2943	3.64	30		
2-Chlorophenol	2781	470	3920	0	70.9	45-105	2668	4.14	30		
2-Methylnaphthalene	2984	240	3920	0	76.1	45-105	2894	3.07	30		
2-Methylphenol	3039	470	3920	0	77.5	40-105	3003	1.21	30		
2-Nitroaniline	3109	1,900	3920	0	79.3	45-120	3280	5.36	30		
2-Nitrophenol	3219	470	3920	0	82.1	40-110	3024	6.22	30		
3-Nitroaniline	2527	1,900	3920	0	64.5	25-110	2337	7.82	30		
4-Bromophenyl phenyl ether	3610	470	3920	0	92.1	45-115	3089	15.5	30		
4-Chloro-3-methylphenol	3399	470	3920	0	86.7	45-115	3132	8.17	30		
4-Chloroaniline	2199	1,900	3920	0	56.1	15-110	2018	8.59	30		
4-Chlorophenyl phenyl ether	3824	470	3920	0	97.6	45-110	3240	16.5	30		
4-Methylphenol	2941	470	3920	307.8	67.2	40-105	2977	1.22	30		
4-Nitroaniline	2529	1,900	3920	0	64.5	35-150	2317	8.73	30		
4-Nitrophenol	2647	1,900	3920	0	67.5	15-140	2403	9.66	30		
Acenaphthene	2977	88	3920	0	75.9	45-110	2934	1.43	30		
Acenaphthylene	3112	88	3920	0	79.4	45-105	3004	3.53	30		
Anthracene	3132	88	3920	0	79.9	55-105	2990	4.65	30		
Benzo(a)anthracene	3181	88	3920	0	81.2	50-110	2984	6.4	30		
Benzo(a)pyrene	3245	88	3920	0	82.8	50-110	3038	6.59	30		
Benzo(b)fluoranthene	3586	88	3920	0	91.5	45-115	3413	4.94	30		
Benzo(g,h,i)perylene	3326	88	3920	0	84.9	40-125	3444	3.46	30		
Benzo(k)fluoranthene	2449	88	3920	0	62.5	45-115	2590	5.6	30		
Bis(2-chloroethoxy)methane	2823	470	3920	0	72	45-110	2874	1.82	30		
Bis(2-chloroethyl)ether	3446	470	3920	0	87.9	40-105	3011	13.5	30		
Bis(2-chloroisopropyl)ether	2142	470	3920	0	54.6	20-115	2370	10.1	30		
Bis(2-ethylhexyl)phthalate	3234	970	3920	0	82.5	45-125	3284	1.52	30		
Butyl benzyl phthalate	3460	470	3920	0	88.3	50-125	3742	7.83	30		
Carbazole	5202	470	3920	0	133	50-150	5012	3.72	30		
Chrysene	3119	88	3920	41.88	78.5	55-110	3041	2.52	30		
Dibenzo(a,h)anthracene	2918	88	3920	0	74.4	40-125	2841	2.66	30		
Dibenzofuran	3111	470	3920	0	79.4	50-105	2918	6.41	30		

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



**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: <b>37642</b>		Instrument ID <b>SVMS7</b>		Method: <b>SW8270</b>					
Diethyl phthalate	3069	970	3920	0	78.3	50-115	2877	6.43	30
Dimethyl phthalate	3279	970	3920	0	83.7	50-110	3057	7.03	30
Di-n-butyl phthalate	3261	970	3920	0	83.2	55-110	3160	3.15	30
Di-n-octyl phthalate	3146	470	3920	0	80.3	40-130	3772	18.1	30
Fluoranthene	3303	88	3920	60.39	82.7	55-115	3019	9	30
Fluorene	3229	88	3920	0	82.4	50-110	2977	8.12	30
Hexachlorobenzene	3913	470	3920	0	99.8	45-120	3138	22	30
Hexachlorobutadiene	3354	470	3920	0	85.6	40-115	2708	21.3	30
Hexachlorocyclopentadiene	697.8	970	3920	0	17.8	40-115	974.8	0	30 JS
Hexachloroethane	1984	470	3920	0	50.6	35-110	2279	13.8	30
Indeno(1,2,3-cd)pyrene	2981	88	3920	0	76.1	40-120	2890	3.11	30
Isophorone	2937	470	3920	0	74.9	45-110	3046	3.63	30
Naphthalene	2882	88	3920	0	73.5	40-105	2752	4.6	30
Nitrobenzene	2947	470	3920	0	75.2	40-115	2809	4.81	30
N-Nitrosodi-n-propylamine	2703	470	3920	0	69	40-115	2818	4.15	30
N-Nitrosodiphenylamine	3065	470	3920	0	78.2	50-115	2945	3.99	30
Pentachlorophenol	4039	970	3920	0	103	25-120	3285	20.6	30
Phenanthrene	3139	88	3920	0	80.1	50-110	2958	5.95	30
Phenol	2562	470	3920	0	65.4	40-100	2695	5.07	30
Pyrene	3313	88	3920	41.88	83.4	45-125	3295	0.543	30
<i>Surr: 2,4,6-Tribromophenol</i>	<i>5182</i>	<i>0</i>	<i>4901</i>	<i>0</i>	<i>106</i>	<i>34-140</i>	<i>3960</i>	<i>26.7</i>	<i>40</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>3375</i>	<i>0</i>	<i>4901</i>	<i>0</i>	<i>68.9</i>	<i>12-100</i>	<i>3168</i>	<i>6.33</i>	<i>40</i>
<i>Surr: 2-Fluorophenol</i>	<i>3260</i>	<i>0</i>	<i>4901</i>	<i>0</i>	<i>66.5</i>	<i>33-117</i>	<i>3129</i>	<i>4.09</i>	<i>40</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>4109</i>	<i>0</i>	<i>4901</i>	<i>0</i>	<i>83.8</i>	<i>25-137</i>	<i>3825</i>	<i>7.15</i>	<i>40</i>
<i>Surr: Nitrobenzene-d5</i>	<i>3290</i>	<i>0</i>	<i>4901</i>	<i>0</i>	<i>67.1</i>	<i>37-107</i>	<i>3262</i>	<i>0.847</i>	<i>40</i>
<i>Surr: Phenol-d6</i>	<i>3383</i>	<i>0</i>	<i>4901</i>	<i>0</i>	<i>69</i>	<i>40-106</i>	<i>3259</i>	<i>3.76</i>	<i>40</i>

The following samples were analyzed in this batch: 1111465-01A

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

Client: HRL Compliance Solutions  
 Work Order: 1111465  
 Project: Williams Juhan 14-26 11/11/11

# QC BATCH REPORT

Batch ID: **R97906** Instrument ID **VMS6** Method: **SW8260**

<b>MBLK</b>		Sample ID: <b>VBLKW2-111117-R97906</b>				Units: <b>µg/L</b>		Analysis Date: <b>11/18/2011 04:55 AM</b>		
Client ID:		Run ID: <b>VMS6_111117A</b>				SeqNo: <b>1825029</b>		Prep Date:		DF: <b>1</b>
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	100.4	0	100	0	100	70-120	0			
Surr: 4-Bromofluorobenzene	98.29	0	100	0	98.3	75-120	0			
Surr: Dibromofluoromethane	101.1	0	100	0	101	85-115	0			
Surr: Toluene-d8	101.1	0	100	0	101	85-120	0			

<b>LCS</b>		Sample ID: <b>VLCSW1-111117-R97906</b>				Units: <b>µg/L</b>		Analysis Date: <b>11/18/2011 03:35 AM</b>		
Client ID:		Run ID: <b>VMS6_111117A</b>				SeqNo: <b>1825026</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.05	1.0	20	0	100	80-120	0			
Ethylbenzene	22.97	1.0	20	0	115	75-125	0			
m,p-Xylene	46.98	2.0	40	0	117	75-130	0			
o-Xylene	22.79	1.0	20	0	114	80-120	0			
Toluene	22.84	1.0	20	0	114	75-120	0			
Xylenes, Total	69.77	3.0	60	0	116	75-130	0			
Surr: 1,2-Dichloroethane-d4	103.7	0	100	0	104	70-120	0			
Surr: 4-Bromofluorobenzene	99.98	0	100	0	100	75-120	0			
Surr: Dibromofluoromethane	100.8	0	100	0	101	85-115	0			
Surr: Toluene-d8	105.1	0	100	0	105	85-120	0			

<b>LCSD</b>		Sample ID: <b>VLCSW1-111117-R97906</b>				Units: <b>µg/L</b>		Analysis Date: <b>11/18/2011 04:00 AM</b>		
Client ID:		Run ID: <b>VMS6_111117A</b>				SeqNo: <b>1825028</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.86	1.0	20	0	109	80-120	20.05	8.64	30	
Ethylbenzene	21.95	1.0	20	0	110	75-125	22.97	4.54	30	
m,p-Xylene	45.34	2.0	40	0	113	75-130	46.98	3.55	30	
o-Xylene	22.03	1.0	20	0	110	80-120	22.79	3.39	30	
Toluene	22.49	1.0	20	0	112	75-120	22.84	1.54	30	
Xylenes, Total	67.37	3.0	60	0	112	75-130	69.77	3.5	30	
Surr: 1,2-Dichloroethane-d4	99.14	0	100	0	99.1	70-120	103.7	4.49	30	
Surr: 4-Bromofluorobenzene	99.85	0	100	0	99.8	75-120	99.98	0.13	30	
Surr: Dibromofluoromethane	101.3	0	100	0	101	85-115	100.8	0.455	30	
Surr: Toluene-d8	100.4	0	100	0	100	85-120	105.1	4.53	30	

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

Client: HRL Compliance Solutions  
 Work Order: 1111465  
 Project: Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **R97906** Instrument ID **VMS6** Method: **SW8260**

MS Sample ID: 1111460-03A MS				Units: µg/L		Analysis Date: 11/18/2011 01:38 PM				
Client ID:		Run ID: VMS6_111117A		SeqNo: 1825773		Prep Date:		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	2010	100	2000	0	100	80-120	0			
Ethylbenzene	2056	100	2000	0	103	75-125	0			
m,p-Xylene	4253	200	4000	0	106	75-130	0			
o-Xylene	2092	100	2000	0	105	80-120	0			
Toluene	2089	100	2000	0	104	75-120	0			
Xylenes, Total	6345	300	6000	0	106	75-130	0			
Surr: 1,2-Dichloroethane-d4	9965	0	10000	0	99.6	70-120	0			
Surr: 4-Bromofluorobenzene	10240	0	10000	0	102	75-120	0			
Surr: Dibromofluoromethane	10100	0	10000	0	101	85-115	0			
Surr: Toluene-d8	9742	0	10000	0	97.4	85-120	0			

MSD Sample ID: 1111460-03A MSD				Units: µg/L		Analysis Date: 11/18/2011 02:03 PM				
Client ID:		Run ID: VMS6_111117A		SeqNo: 1825774		Prep Date:		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	2085	100	2000	0	104	80-120	2010	3.66	30	
Ethylbenzene	2124	100	2000	0	106	75-125	2056	3.25	30	
m,p-Xylene	4315	200	4000	0	108	75-130	4253	1.45	30	
o-Xylene	2135	100	2000	0	107	80-120	2092	2.03	30	
Toluene	2169	100	2000	0	108	75-120	2089	3.76	30	
Xylenes, Total	6450	300	6000	0	108	75-130	6345	1.64	30	
Surr: 1,2-Dichloroethane-d4	9936	0	10000	0	99.4	70-120	9965	0.291	30	
Surr: 4-Bromofluorobenzene	9961	0	10000	0	99.6	75-120	10240	2.75	30	
Surr: Dibromofluoromethane	10400	0	10000	0	104	85-115	10100	2.9	30	
Surr: Toluene-d8	10010	0	10000	0	100	85-120	9742	2.69	30	

The following samples were analyzed in this batch:

1111465-01A

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

Client: HRL Compliance Solutions  
 Work Order: 1111465  
 Project: Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **R97964A** Instrument ID **VMS5** Method: **SW8260**

<b>MBLK</b>		Sample ID: <b>VBLKW2-111119-R97964A</b>				Units: <b>µg/L</b>		Analysis Date: <b>11/19/2011 09:59 PM</b>		
Client ID:		Run ID: <b>VMS5_111119B</b>				SeqNo: <b>1826723</b>		Prep Date:		DF: <b>1</b>
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	102	0	100	0	102	70-120	0			
Surr: 4-Bromofluorobenzene	93.22	0	100	0	93.2	75-120	0			
Surr: Dibromofluoromethane	101.8	0	100	0	102	85-115	0			
Surr: Toluene-d8	97.84	0	100	0	97.8	85-120	0			

<b>LCS</b>		Sample ID: <b>VLCSW2-111119-R97964A</b>				Units: <b>µg/L</b>		Analysis Date: <b>11/19/2011 08:38 PM</b>		
Client ID:		Run ID: <b>VMS5_111119B</b>				SeqNo: <b>1826721</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.4	1.0	20	0	107	80-120	0			
Ethylbenzene	21.09	1.0	20	0	105	75-125	0			
m,p-Xylene	43	2.0	40	0	108	75-130	0			
o-Xylene	21.16	1.0	20	0	106	80-120	0			
Toluene	20.38	1.0	20	0	102	75-120	0			
Xylenes, Total	64.16	3.0	60	0	107	75-130	0			
Surr: 1,2-Dichloroethane-d4	97.58	0	100	0	97.6	70-120	0			
Surr: 4-Bromofluorobenzene	98.45	0	100	0	98.4	75-120	0			
Surr: Dibromofluoromethane	100.7	0	100	0	101	85-115	0			
Surr: Toluene-d8	99.42	0	100	0	99.4	85-120	0			

<b>LCSD</b>		Sample ID: <b>VLCSDW2-111119-R97964A</b>				Units: <b>µg/L</b>		Analysis Date: <b>11/19/2011 09:05 PM</b>		
Client ID:		Run ID: <b>VMS5_111119B</b>				SeqNo: <b>1826722</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.32	1.0	20	0	102	80-120	21.4	5.18	30	
Ethylbenzene	19.71	1.0	20	0	98.6	75-125	21.09	6.76	30	
m,p-Xylene	40.54	2.0	40	0	101	75-130	43	5.89	30	
o-Xylene	19.98	1.0	20	0	99.9	80-120	21.16	5.74	30	
Toluene	19.14	1.0	20	0	95.7	75-120	20.38	6.28	30	
Xylenes, Total	60.52	3.0	60	0	101	75-130	64.16	5.84	30	
Surr: 1,2-Dichloroethane-d4	100.3	0	100	0	100	70-120	97.58	2.73	30	
Surr: 4-Bromofluorobenzene	99.26	0	100	0	99.3	75-120	98.45	0.819	30	
Surr: Dibromofluoromethane	101	0	100	0	101	85-115	100.7	0.278	30	
Surr: Toluene-d8	99.38	0	100	0	99.4	85-120	99.42	0.0402	30	

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

Client: HRL Compliance Solutions  
 Work Order: 1111465  
 Project: Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **R97964A** Instrument ID **VMS5** Method: **SW8260**

MS					Sample ID: 1111542-03A MS			Units: µg/L			Analysis Date: 11/20/2011 06:49 AM			
Client ID:				Run ID: VMS5_111119B				SeqNo: 1827283			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Benzene	22.39	1.0	20	0	112	80-120	0							
Ethylbenzene	21.81	1.0	20	0	109	75-125	0							
m,p-Xylene	44.89	2.0	40	0	112	75-130	0							
o-Xylene	21.45	1.0	20	0	107	80-120	0							
Toluene	21.06	1.0	20	0	105	75-120	0							
Xylenes, Total	66.34	3.0	60	0	111	75-130	0							
Surr: 1,2-Dichloroethane-d4	101.6	0	100	0	102	70-120	0							
Surr: 4-Bromofluorobenzene	100.8	0	100	0	101	75-120	0							
Surr: Dibromofluoromethane	102.6	0	100	0	103	85-115	0							
Surr: Toluene-d8	98.78	0	100	0	98.8	85-120	0							

MSD				Sample ID: 1111542-03A MSD			Units: µg/L		Analysis Date: 11/20/2011 07:15 AM		
Client ID:			Run ID: VMS5_111119B			SeqNo: 1827284		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	19.94	1.0	20	0	99.7	80-120	22.39	11.6	30		
Ethylbenzene	19.18	1.0	20	0	95.9	75-125	21.81	12.8	30		
m,p-Xylene	39.5	2.0	40	0	98.8	75-130	44.89	12.8	30		
o-Xylene	19.24	1.0	20	0	96.2	80-120	21.45	10.9	30		
Toluene	18.67	1.0	20	0	93.4	75-120	21.06	12	30		
Xylenes, Total	58.74	3.0	60	0	97.9	75-130	66.34	12.2	30		
Surr: 1,2-Dichloroethane-d4	98.67	0	100	0	98.7	70-120	101.6	2.9	30		
Surr: 4-Bromofluorobenzene	100.1	0	100	0	100	75-120	100.8	0.726	30		
Surr: Dibromofluoromethane	100	0	100	0	100	85-115	102.6	2.59	30		
Surr: Toluene-d8	98.39	0	100	0	98.4	85-120	98.78	0.396	30		

The following samples were analyzed in this batch:

1111465-07A 1111465-08A

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

Client: HRL Compliance Solutions  
 Work Order: 1111465  
 Project: Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **R97965** Instrument ID **VMS8** Method: **SW8260**

<b>MBLK</b>		Sample ID: <b>VBLKW2-111119-R97965</b>				Units: <b>µg/L</b>		Analysis Date: <b>11/20/2011 02:43 AM</b>		
Client ID:		Run ID: <b>VMS8_111119B</b>				SeqNo: <b>1826726</b>		Prep Date:		DF: <b>1</b>
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	101.6	0	100	0	102	70-120	0			
Surr: 4-Bromofluorobenzene	99.81	0	100	0	99.8	75-120	0			
Surr: Dibromofluoromethane	102.5	0	100	0	103	85-115	0			
Surr: Toluene-d8	101.8	0	100	0	102	85-120	0			

<b>LCS</b>		Sample ID: <b>VLCSW2-111119-R97965</b>				Units: <b>µg/L</b>		Analysis Date: <b>11/20/2011 01:20 AM</b>		
Client ID:		Run ID: <b>VMS8_111119B</b>				SeqNo: <b>1826724</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.99	1.0	20	0	110	80-120	0			
Ethylbenzene	21.86	1.0	20	0	109	75-125	0			
m,p-Xylene	43.87	2.0	40	0	110	75-130	0			
o-Xylene	21.46	1.0	20	0	107	80-120	0			
Toluene	22.32	1.0	20	0	112	75-120	0			
Xylenes, Total	65.33	3.0	60	0	109	75-130	0			
Surr: 1,2-Dichloroethane-d4	99.4	0	100	0	99.4	70-120	0			
Surr: 4-Bromofluorobenzene	100.4	0	100	0	100	75-120	0			
Surr: Dibromofluoromethane	100.5	0	100	0	100	85-115	0			
Surr: Toluene-d8	99.88	0	100	0	99.9	85-120	0			

<b>LCSD</b>		Sample ID: <b>VLCSDW2-111119-R97965</b>				Units: <b>µg/L</b>		Analysis Date: <b>11/20/2011 01:48 AM</b>		
Client ID:		Run ID: <b>VMS8_111119B</b>				SeqNo: <b>1826725</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.77	1.0	20	0	109	80-120	21.99	1.01	30	
Ethylbenzene	22.21	1.0	20	0	111	75-125	21.86	1.59	30	
m,p-Xylene	44.65	2.0	40	0	112	75-130	43.87	1.76	30	
o-Xylene	21.87	1.0	20	0	109	80-120	21.46	1.89	30	
Toluene	22.57	1.0	20	0	113	75-120	22.32	1.11	30	
Xylenes, Total	66.52	3.0	60	0	111	75-130	65.33	1.81	30	
Surr: 1,2-Dichloroethane-d4	99.4	0	100	0	99.4	70-120	99.4	0	30	
Surr: 4-Bromofluorobenzene	101.3	0	100	0	101	75-120	100.4	0.863	30	
Surr: Dibromofluoromethane	100.4	0	100	0	100	85-115	100.5	0.11	30	
Surr: Toluene-d8	101.9	0	100	0	102	85-120	99.88	1.96	30	

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

Client: HRL Compliance Solutions  
 Work Order: 1111465  
 Project: Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **R97965** Instrument ID **VMS8** Method: **SW8260**

MS Sample ID: 1111465-06A MS				Units: µg/Kg		Analysis Date: 11/20/2011 10:56 AM				
Client ID: North Wall, East Half - Surface		Run ID: VMS8_111119B		SeqNo: 1827307		Prep Date:		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	2158	100	2000	0	108	75-125	0			
Ethylbenzene	2212	200	2000	47	108	75-125	0			
m,p-Xylene	5049	200	4000	750	107	80-125	0			
o-Xylene	2285	100	2000	174	106	75-125	0			
Toluene	2385	150	2000	198	109	70-125	0			
Xylenes, Total	7334	300	6000	924	107	75-125	0			
Surr: 1,2-Dichloroethane-d4	10050	0	10000	0	100	70-120	0			
Surr: 4-Bromofluorobenzene	9912	0	10000	0	99.1	75-120	0			
Surr: Dibromofluoromethane	10050	0	10000	0	100	85-115	0			
Surr: Toluene-d8	10050	0	10000	0	101	85-115	0			

MSD Sample ID: 1111465-06A MSD				Units: µg/Kg		Analysis Date: 11/20/2011 11:22 AM				
Client ID: North Wall, East Half - Surface		Run ID: VMS8_111119B		SeqNo: 1827308		Prep Date:		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	2206	100	2000	0	110	75-125	2158	2.2	30	
Ethylbenzene	2262	200	2000	47	111	75-125	2212	2.24	30	
m,p-Xylene	5160	200	4000	750	110	80-125	5049	2.17	30	
o-Xylene	2320	100	2000	174	107	75-125	2285	1.52	30	
Toluene	2420	150	2000	198	111	70-125	2385	1.46	30	
Xylenes, Total	7480	300	6000	924	109	75-125	7334	1.97	30	
Surr: 1,2-Dichloroethane-d4	10040	0	10000	0	100	70-120	10050	0.0498	30	
Surr: 4-Bromofluorobenzene	9868	0	10000	0	98.7	75-120	9912	0.445	30	
Surr: Dibromofluoromethane	10110	0	10000	0	101	85-115	10050	0.625	30	
Surr: Toluene-d8	10170	0	10000	0	102	85-115	10050	1.18	30	

The following samples were analyzed in this batch:

1111465-02A	1111465-03A	1111465-04A
1111465-05A	1111465-06A	

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

Client: HRL Compliance Solutions  
 Work Order: 1111465  
 Project: Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **37500** Instrument ID **WETCHEM** Method: **SW7196A**

<b>MBLK</b>	Sample ID: <b>MBLK-37500-37500</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/16/2011 04:00 PM</b>		
Client ID:	Run ID: <b>WETCHEM_111116I</b>				SeqNo: <b>1823414</b>		Prep Date: <b>11/15/2011</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.50

<b>LCS</b>	Sample ID: <b>LCS-37500-37500</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/16/2011 04:00 PM</b>		
Client ID:	Run ID: <b>WETCHEM_111116I</b>				SeqNo: <b>1823415</b>		Prep Date: <b>11/15/2011</b>		DF: <b>1</b>	
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 0

<b>LCSD</b>	Sample ID: <b>LCSD-37500-37500</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/16/2011 04:00 PM</b>		
Client ID:	Run ID: <b>WETCHEM_111116I</b>				SeqNo: <b>1823431</b>		Prep Date: <b>11/15/2011</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2.032 0.50 2 0 102 75-110 1.98 2.59 20

<b>MS</b>	Sample ID: <b>1111507-07A MS</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/16/2011 04:00 PM</b>		
Client ID:	Run ID: <b>WETCHEM_111116I</b>				SeqNo: <b>1823428</b>		Prep Date: <b>11/15/2011</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.224 0.49 1.961 0 62.4 60-130 0

<b>MSD</b>	Sample ID: <b>1111507-07A MSD</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>11/16/2011 04:00 PM</b>		
Client ID:	Run ID: <b>WETCHEM_111116I</b>				SeqNo: <b>1823429</b>		Prep Date: <b>11/15/2011</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.05 0.48 1.931 0 54.4 60-130 1.224 15.2 30 S

The following samples were analyzed in this batch:

1111465-01A	1111465-02A	1111465-03A
1111465-04A	1111465-05A	1111465-06A
1111465-07A	1111465-08A	

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



**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **R97649** Instrument ID **WETCHEM** Method: **SW9045D**

LCS				Sample ID: WLCSS1-111113-R97649				Units: s.u.			Analysis Date: 11/13/2011 11:30 AM			
Client ID:				Run ID: WETCHEM_111113A				SeqNo: 1818182			Prep Date:		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
pH		4.41	0	4.4	0	100	90-110	0						

DUP					Sample ID: 1111465-01A DUP				Units: s.u.			Analysis Date: 11/13/2011 11:30 AM			
Client ID: East Wall - Surface					Run ID: WETCHEM_111113A				SeqNo: 1818184		Prep Date:			DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
pH		8.82	0	0	0	0	0-0	8.82	0	20					

The following samples were analyzed in this batch:

1111465-01A	1111465-02A	1111465-03A
1111465-04A	1111465-05A	1111465-06A
1111465-07A	1111465-08A	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1111465  
**Project:** Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **R97749**      Instrument ID **MOIST**      Method: **A2540 G**

<b>MBLK</b>		Sample ID: <b>WBLKS1-R97749</b>				Units: % of sample			Analysis Date: <b>11/14/2011 03:04 PM</b>		
Client ID:		Run ID: <b>MOIST_111114A</b>				SeqNo: <b>1820790</b>			Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture      ND      0.050

<b>LCS</b>		Sample ID: <b>LCS-R97749-R97749</b>				Units: % of sample			Analysis Date: <b>11/14/2011 03:04 PM</b>		
Client ID:		Run ID: <b>MOIST_111114A</b>				SeqNo: <b>1820921</b>			Prep Date:		DF: <b>1</b>
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

<b>DUP</b>		Sample ID: <b>1111465-07ADUP</b>				Units: % of sample			Analysis Date: <b>11/14/2011 03:04 PM</b>		
Client ID: <b>Pit Bottom East Half - Surface</b>		Run ID: <b>MOIST_111114A</b>				SeqNo: <b>1820770</b>			Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture      5.52      0.050      0      0      0      0-0      5.53      0.181      20

<b>DUP</b>		Sample ID: <b>1111481-01ADUP</b>				Units: % of sample			Analysis Date: <b>11/14/2011 03:04 PM</b>		
Client ID:		Run ID: <b>MOIST_111114A</b>				SeqNo: <b>1820778</b>			Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture      6.66      0.050      0      0      0      0-0      6.63      0.451      20

The following samples were analyzed in this batch:

1111465-01A	1111465-02A	1111465-03A
1111465-04A	1111465-05A	1111465-06A
1111465-07A	1111465-08A	1111465-09A
1111465-10A	1111465-11A	

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

Client: HRL Compliance Solutions  
 Work Order: 1111465  
 Project: Williams Juhan 14-26 11/11/11

## QC BATCH REPORT

Batch ID: **R97786** Instrument ID **WETCHEM** Method: **A4500-H B**

LCS		Sample ID: LCS-R97786-R97786					Units: s.u.		Analysis Date: 11/15/2011 07:35 AM	
Client ID:			Run ID: WETCHEM_111115I			SeqNo: 1821644		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 4.37 0 4.4 0 99.3 90-110 0

LCS		Sample ID: LCS-R97786-R97786					Units: s.u.		Analysis Date: 11/15/2011 07:35 AM		
Client ID:			Run ID: WETCHEM_111115I			SeqNo: 1821650		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

pH 4.37 0 4.4 0 99.3 90-110 0

DUP				Sample ID: 1111496-04A DUP				Units: s.u.			Analysis Date: 11/15/2011 07:35 AM			
Client ID:				Run ID: WETCHEM_111115I				SeqNo: 1821649			Prep Date:		DF: 1	
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		

pH 6.61 0 0 0 0 0-0 6.61 0 20 H

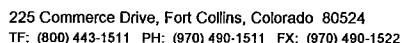
DUP					Sample ID: 1111465-11A DUP					Units: s.u.			Analysis Date: 11/15/2011 07:35 AM				
Client ID: BKGD 3					Run ID: WETCHEM_111115I					SeqNo: 1821652			Prep Date:			DF: 1	
Analyte		Result		PQL	SPK Val		SPK Ref Value		%REC	Control Limit	RPD Ref Value		%RPD	RPD Limit	Qual		

pH 8.27 0 0 0 0 0-0 8.27 0 20

The following samples were analyzed in this batch:



1111465-11A

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



111465

Form 202r8

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Dan Pinegar	11/11/2011	5:00 PM
RECEIVED BY		Kerry W. Frenck	11/12/11	1135
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				



**Environmental**

**Subcontractor:**

A & L Great Lakes Agricultural La  
3505 Conestoga Dr

Ft. Wayne, IN 46808

TEL: (260) 483-4759

FAX: (260) 483-5274

Acct #: 91000

# CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Date: **14-Nov-11**

COC ID: **3301**

Due Da **18-Nov-11**

Salesperson

Debbie Fazio

Customer Information		Project Information		Parameter/Method Request for Analysis											
Purchase Order	20-122011221	Project Name	1111465	A	Subcontracted Analyses (SUBCONTRACT) <b>SAR-EC</b>										
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
1111465-01B	Soil	11/Nov/2011 11:05	(1) MISC	X									
1111465-02B	Soil	11/Nov/2011 11:15	(1) MISC	X									
1111465-03B	Soil	11/Nov/2011 11:25	(1) MISC	X									
1111465-04B	Soil	11/Nov/2011 11:35	(1) MISC	X									
1111465-05B	Soil	11/Nov/2011 11:45	(1) MISC	X									
1111465-06B	Soil	11/Nov/2011 11:55	(1) MISC	X									
1111465-07B	Soil	11/Nov/2011 12:05	(1) MISC	X									
1111465-08B	Soil	11/Nov/2011 12:15	(1) MISC	X									
1111465-11B	Soil	11/Nov/2011 13:05	(1) MISC	X									

**Comments:**

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

Relinquished by: 

Date/Time: 11/14/11 11:20

Received by:

Date/Time

Cooler IDs

Report/QC Level

Std

Relinquished by:

Date/Time

Received by:

Date/Time

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 12-Nov-11 11:35

Work Order: 1111465

Received by: KRW

Checklist completed by Keith Wurenga 12-Nov-11  
eSignature Date

Reviewed by: Alex Csaszar 14-Nov-11  
eSignature Date

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>1.2 C</u>		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:			
Login Notes:			

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

# Terms And Conditions Summary

For the current FedEx Service Guide, which contains the complete Terms and Conditions, go to [fedex.com](http://fedex.com).

**On this Airbill, "we," "our," "us," and "FedEx"** refer to FedEx Corporation, its employees, and agents, the sender, its employees, and agents.

By giving us your package to deliver, this Airbill and in the current FedEx Service Guide, which is available at [fedex.com](http://fedex.com) or at those terms on behalf of any package. If there is a conflict between this Airbill, the Service Guide and this Airbill, the Service Guide controls. No one is authorized to change the terms of our Agreement.

**Completing Airbill** You must complete your goods and the number of packages. The weight will be based on the weight we received as shown on the label.

**Insurable Value** The maximum declared value for each package is \$500,000. For packages with a declared value greater than \$500,000, the maximum declared value is \$500,000. The maximum declared value for each package is \$500,000. For packages with a declared value greater than \$500,000, the maximum declared value is \$500,000.

**Incidental Damages** In the event of loss or damage to your package, we will not be liable for incidental damages, including lost profits, lost income, or lost business, unless you have purchased additional insurance.

- We won't be liable:
  - for your acts or omissions, including but not limited to improper or insufficient packing, securing, marking, or addressing, or those of the recipient or anyone else with an interest in the package.
  - if you or the recipient violates any of the terms of our Agreement.
  - for loss of or damage to shipments of prohibited items.
  - for loss, damage, or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, acts of public enemies, strikes, civil commotions, or acts of public authorities.

**Declared Value** The maximum declared value for each package is \$500,000. For packages with a declared value greater than \$500,000, the maximum declared value is \$500,000.

**Prohibited Shipments** We do not accept shipments containing hazardous materials, flammable liquids, flammable solids, flammable gases, flammable aerosols, flammable pastes, flammable powders, flammable resins, flammable rubbers, flammable plastics, flammable adhesives, flammable inks, flammable dyes, flammable pigments, flammable fillers, flammable extenders, flammable solvents, flammable diluents, flammable carriers, flammable dispersants, flammable emulsifiers, flammable stabilizers, flammable preservatives, flammable antioxidants, flammable UV absorbers, flammable flame retardants, flammable fire retardants, flammable smoke retardants, flammable odor retardants, flammable taste retardants, flammable touch retardants, flammable sound retardants, flammable light retardants, flammable heat retardants, flammable cold retardants, flammable shock retardants, flammable vibration retardants, flammable noise retardants, flammable electromagnetic retardants, flammable radio frequency retardants, flammable microwave retardants, flammable infrared retardants, flammable ultraviolet retardants, flammable visible light retardants, flammable X-ray retardants, flammable gamma ray retardants, flammable neutron retardants, flammable alpha particle retardants, flammable beta particle retardants, flammable positron retardants, flammable electron retardants, flammable proton retardants, flammable neutron retardants, flammable alpha particle retardants, flammable beta particle retardants, flammable positron retardants, flammable electron retardants, flammable proton retardants.

**Liability Limit** The maximum declared value for each package is \$500,000. For packages with a declared value greater than \$500,000, the maximum declared value is \$500,000.

**Filing A Claim** YOU MUST MAKE ALL CLAIMS IN WRITING or online at [fedex.com](http://fedex.com) and notify us of your claim within strict time limits set out in the current FedEx Service Guide.

You may call our Customer Service department at 1.800.GoFedEx 1.800.463.3339 to file a claim. You must still file a claim with us to act on any claim charges.



**Right Of Rejection** We reserve the right to reject a shipment when such shipment would be likely to cause delay or damage to other shipments, equipment, or personnel; or if the shipment is prohibited by law; or if the shipment would violate any terms of our Airbill or the current FedEx Service Guide.


**C.O.D. Services** C.O.D. SERVICE IS NOT AVAILABLE WITH THIS AIRBILL. If C.O.D. Service is required, please use a FedEx C.O.D. Airbill.

**Air Transportation Tax Included** A federal excise tax when required by the Internal Revenue Code on the air transportation portion of this service, if any, is paid by us.

**Money-Back Guarantee** In the event of untimely delivery, FedEx will, at your request and with some limitations, refund or credit all transportation charges. See the current FedEx Service Guide for more information.

Part 163135/163136 • Rev. Date 11/10

Part 163135/163136 • Rev. Date 11/10



# SDR

## FedEx® Saturday Delivery

151967 REV 1004

PLACE THIS LABEL ON PACKAGE NEXT TO THE SHIPPING LABEL

**Declared Value Limits** The maximum declared value for each package is \$500,000. For packages with a declared value greater than \$500,000, the maximum declared value is \$500,000.

**Prohibited Shipments** We do not accept shipments containing hazardous materials, flammable liquids, flammable solids, flammable gases, flammable aerosols, flammable pastes, flammable powders, flammable resins, flammable rubbers, flammable plastics, flammable adhesives, flammable inks, flammable dyes, flammable pigments, flammable fillers, flammable extenders, flammable solvents, flammable diluents, flammable carriers, flammable dispersants, flammable emulsifiers, flammable stabilizers, flammable preservatives, flammable antioxidants, flammable UV absorbers, flammable flame retardants, flammable fire retardants, flammable smoke retardants, flammable odor retardants, flammable taste retardants, flammable touch retardants, flammable sound retardants, flammable light retardants, flammable heat retardants, flammable cold retardants, flammable shock retardants, flammable vibration retardants, flammable noise retardants, flammable electromagnetic retardants, flammable radio frequency retardants, flammable microwave retardants, flammable infrared retardants, flammable ultraviolet retardants, flammable visible light retardants, flammable X-ray retardants, flammable gamma ray retardants, flammable neutron retardants, flammable alpha particle retardants, flammable beta particle retardants, flammable positron retardants, flammable electron retardants, flammable proton retardants.

**Responsibility For Packaging And Completing Airbill** You are responsible for adequately packaging your goods and properly filling out this Airbill. If you omit the number of packages and/or weight per package, our billing will be based on our best estimate of the number of packages we received and/or an estimated "default" weight per package as determined by us.

**Responsibility For Payment** Even if you give us different payment instructions, you will always be primarily responsible for all delivery costs, as well as any cost we incur in either returning your package to you or warehousing it pending disposition.

**Limitations On Our Liability And Liabilities** Unless a higher value is declared and paid for, our liability for each package is limited to US\$100 of declared value. The charge for each additional US\$100 of declared value. The declared value does not constitute, nor do we provide, cargo liability insurance.

**Not Assumed** In any event, we will not be liable for any damage, whether direct, incidental, special, or consequential, in excess of the declared value of a shipment, whether or not FedEx had knowledge that such damages might be incurred, including but not limited to loss of income or profits.



For the current FedEx Service Guide, which contains the complete Terms and Conditions, go to [fedex.com](http://fedex.com).

Terms And Conditions Summary

From **11-11-11** Sender's FedEx  
Date Account Number

Sender's Name **Dan P. Meyer** Phone **970 243-3271**

Company **HESI**

Address **744 Horizon Ct., Suite 140** Dept./Floor/Suite/Room

City **Grand Jet.** State **CO** ZIP **81506**

**Your Internal Billing Reference**

To Recipient's Name **Ann Preston** Phone **616 399-6670**

Company **ALS Group**

Address **3352 128th Ave** 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**



8769 1479 5614

**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
- ☐ 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

Total Packages Total Weight Credit Card Auth.

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

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From **11-11-11** Sender's FedEx  
Date Account Number

Sender's Name **Dan P. Meyer** Phone **970 243-3271**

Company **HESI**

Address **744 Horizon Ct., Suite 140** Dept./Floor/Suite/Room

City **Grand Jet.** State **CO** ZIP **81506**

**Your Internal Billing Reference**

To Recipient's Name **Ann Preston** Phone **616 399-6670**

Company **ALS Group**

Address **3352 128th Ave** 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**



**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
- ☐ 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

Total Packages Total Weight Credit Card Auth.

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

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## **Appendix 2: Post Excavation of West Wall Raw Analytical Results**



13-Dec-2011

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

Re: **Williams Juhan Pit Closure 12/9/11**

Work Order: **1112362**

Dear Kris,

ALS Environmental received 1 sample on 10-Dec-2011 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 10.

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

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Alex Cszasz

Ann Preston  
Project Manager



Certificate No: IL100452

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

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

Environmental A small icon of the ALS Environmental logo, featuring a blue triangle with a yellow flame.

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

---

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan Pit Closure 12/9/11  
**Work Order:** 1112362

**Work Order Sample Summary**

---

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1112362-01	West Wall @ 2 FT	Soil		12/9/2011 10:00	12/10/2011 11:30	<input type="checkbox"/>

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan Pit Closure 12/9/11  
**WorkOrder:** 1112362

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
SQL	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

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

**ALS Group USA, Corp**

Date: 13-Dec-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan Pit Closure 12/9/11  
**Sample ID:** West Wall @ 2 FT  
**Collection Date:** 12/9/2011 10:00 AM

**Work Order:** 1112362  
**Lab ID:** 1112362-01  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		53	µg/Kg-dry	50	12/11/2011 07:09 AM
Surr: 1,2-Dichloroethane-d4	99.5		70-120	%REC	50	12/11/2011 07:09 AM
Surr: 4-Bromofluorobenzene	99.6		75-120	%REC	50	12/11/2011 07:09 AM
Surr: Dibromofluoromethane	91.4		85-115	%REC	50	12/11/2011 07:09 AM
Surr: Toluene-d8	100		85-115	%REC	50	12/11/2011 07:09 AM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>ED</b>
Moisture	5.4		0.050	% of sample	1	12/10/2011 03:00 PM

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

# ALS Group USA, Corp

Date: 13-Dec-11

Client: HRL Compliance Solutions

Work Order: 1112362

Project: Williams Juhan Pit Closure 12/9/11

## QC BATCH REPORT

Batch ID: **R98830A** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: <b>VBLKW2-111210-R98830A</b>				Units: <b>µg/L</b>		Analysis Date: <b>12/11/2011 02:13 AM</b>		
Client ID:		Run ID: <b>VMS6_111210B</b>				SeqNo: <b>1846968</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Surr: 1,2-Dichloroethane-d4	99.08	0	100	0	99.1	70-120	0			
Surr: 4-Bromofluorobenzene	97.17	0	100	0	97.2	75-120	0			
Surr: Dibromofluoromethane	101.2	0	100	0	101	85-115	0			
Surr: Toluene-d8	99.32	0	100	0	99.3	85-120	0			

LCS		Sample ID: <b>VLCSW3-111210-R98830A</b>				Units: <b>µg/L</b>		Analysis Date: <b>12/11/2011 12:58 PM</b>		
Client ID:		Run ID: <b>VMS6_111210B</b>				SeqNo: <b>1846969</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.14	1.0	20	0	101	80-120	0			
Surr: 1,2-Dichloroethane-d4	99.72	0	100	0	99.7	70-120	0			
Surr: 4-Bromofluorobenzene	97.62	0	100	0	97.6	75-120	0			
Surr: Dibromofluoromethane	103.4	0	100	0	103	85-115	0			
Surr: Toluene-d8	99.13	0	100	0	99.1	85-120	0			

LCSD		Sample ID: <b>VLCSDW3-111210-R98830A</b>				Units: <b>µg/L</b>		Analysis Date: <b>12/11/2011 01:23 AM</b>		
Client ID:		Run ID: <b>VMS6_111210B</b>				SeqNo: <b>1846967</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.31	1.0	20	0	91.6	80-120	20.14	9.52	30	
Surr: 1,2-Dichloroethane-d4	98.77	0	100	0	98.8	70-120	99.72	0.957	30	
Surr: 4-Bromofluorobenzene	96.91	0	100	0	96.9	75-120	97.62	0.73	30	
Surr: Dibromofluoromethane	101.4	0	100	0	101	85-115	103.4	1.95	30	
Surr: Toluene-d8	98.69	0	100	0	98.7	85-120	99.13	0.445	30	

MS		Sample ID: <b>1112200-01A MS</b>				Units: <b>µg/L</b>		Analysis Date: <b>12/11/2011 10:54 AM</b>		
Client ID:		Run ID: <b>VMS6_111210B</b>				SeqNo: <b>1847243</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.43	1.0	20	0	97.2	80-120	0			
Surr: 1,2-Dichloroethane-d4	103	0	100	0	103	70-120	0			
Surr: 4-Bromofluorobenzene	97.05	0	100	0	97	75-120	0			
Surr: Dibromofluoromethane	101.7	0	100	0	102	85-115	0			
Surr: Toluene-d8	99.2	0	100	0	99.2	85-120	0			

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1112362  
**Project:** Williams Juhan Pit Closure 12/9/11

## QC BATCH REPORT

Batch ID: **R98830A** Instrument ID **VMS6** Method: **SW8260**

<b>MSD</b>		Sample ID: <b>1112200-01A MSD</b>				Units: <b>µg/L</b>		Analysis Date: <b>12/11/2011 11:19 AM</b>		
Client ID:		Run ID: <b>VMS6_111210B</b>				SeqNo: <b>1847244</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.96	1.0	20	0	94.8	80-120	19.43	2.45	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>102.3</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>102</i>	<i>70-120</i>	<i>103</i>	<i>0.672</i>	<i>30</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>96.53</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>96.5</i>	<i>75-120</i>	<i>97.05</i>	<i>0.537</i>	<i>30</i>	
<i>Surr: Dibromofluoromethane</i>	<i>101.1</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>101</i>	<i>85-115</i>	<i>101.7</i>	<i>0.542</i>	<i>30</i>	
<i>Surr: Toluene-d8</i>	<i>98.27</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>98.3</i>	<i>85-120</i>	<i>99.2</i>	<i>0.942</i>	<i>30</i>	

The following samples were analyzed in this batch:

1112362-01A

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1112362  
**Project:** Williams Juhan Pit Closure 12/9/11

# QC BATCH REPORT

Batch ID: **R98848**      Instrument ID **MOIST**      Method: **A2540 G**

<b>MBLK</b>		Sample ID: <b>WBLKW1-111210-R98848</b>				Units: % of sample		Analysis Date: <b>12/10/2011 03:00 PM</b>		
Client ID:		Run ID: <b>MOIST_111210A</b>				SeqNo: <b>1847351</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture      ND      0.050

<b>LCS</b>		Sample ID: <b>WLCSW1-111210-R98848</b>				Units: % of sample		Analysis Date: <b>12/10/2011 03:00 PM</b>		
Client ID:		Run ID: <b>MOIST_111210A</b>				SeqNo: <b>1847352</b>		Prep Date:		DF: <b>1</b>
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

<b>DUP</b>		Sample ID: <b>1112364-02A DUP</b>				Units: % of sample		Analysis Date: <b>12/10/2011 03:00 PM</b>		
Client ID:		Run ID: <b>MOIST_111210A</b>				SeqNo: <b>1847358</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture      19.27      0.050      0      0      0      0-0      19.43      0.827      20

The following samples were analyzed in this batch:

1112362-01A

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





Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **10-Dec-11 00:00**

Work Order: **1112362**

Received by: **JB**

Checklist completed by Jessica Bacon  
eSignature

10-Dec-11  
Date

Reviewed by: Alex Csaszar  
eSignature

12-Dec-11  
Date

Matrices: soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>2.0 C</u>		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

2.000

**FedEx** NEW Package  
Express US Airbill

FedEx  
Tracking  
Number

8769 1479 3107

0200 Form  
ID No.

**FedEx Retrieval Copy**

1 From

Date

Sender's  
Name

Sender's FedEx  
Account Number

Company

Phone

Address

City

State

ZIP

Dept./Floor/Suite/Room

2 Your Internal Billing Reference

3 To  
Recipient's  
Name

Company

Address

We cannot deliver to P.O. boxes

Address

Use this line for the HOLD tag

City

EVY DR

841232502

266-6200

BILL SEVER

At your shipping address

Dept./Floor/Suite/Room

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

State

ZIP

6 Special Handling and Delivery Signature Options

03 ☒ **SATURDAY DELIVERY**

☐ No Signature Required  
Package may be left without  
obtaining a signature for delivery

Does this shipment contain dangerous goods?  
☒ No ☐ Yes  
If Yes, attach  
Shipper's Declaration  
or place in a FedEx Express container

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.

7 Payment

Sender's  
FedEx Account No.

Enter FedEx Acct. No. or Credit Card No. below

Obtain recip.  
Acct. No.

5 ☐ Cash/Check

Quality Environment  
1-800-255-8950 1-800-255-8900

### **Appendix 3: Background Sample Raw Analytical**

## ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** BKGD 1  
**Collection Date:** 11/11/2011 12:45 PM

**Work Order:** 1111465  
**Lab ID:** 1111465-09  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>CES</b>
Arsenic	14		0.97	mg/Kg-dry	2	11/15/2011 11:57 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
Moisture	20		0.050	% of sample	1	11/14/2011 03:04 PM

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

## ALS Group USA, Corp

Date: 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** BKGD 2  
**Collection Date:** 11/11/2011 01:05 PM

**Work Order:** 1111465  
**Lab ID:** 1111465-10  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: <b>11/14/2011</b>	Analyst: <b>CES</b>
Arsenic	9.5		0.99	mg/Kg-dry	2	11/16/2011 12:02 AM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
Moisture	17		0.050	% of sample	1	11/14/2011 03:04 PM

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

**ALS Group USA, Corp****Date:** 28-Nov-11

**Client:** HRL Compliance Solutions  
**Project:** Williams Juhan 14-26 11/11/11  
**Sample ID:** BKGD 3  
**Collection Date:** 11/11/2011 01:05 PM

**Work Order:** 1111465  
**Lab ID:** 1111465-11  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>						
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: 11/14/2011	Analyst: <b>CES</b>
Arsenic	11		1.1	mg/Kg-dry	2	11/16/2011 12:07 AM
<b>SUBCONTRACTED ANALYSES</b>			<b>SUBCONTRACT</b>			Analyst: <b>A&amp;LGL</b>
Subcontracted Analyses	Rcvd 11/18/11		as noted		1	11/18/2011
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
Moisture	17		0.050	% of sample	1	11/14/2011 03:04 PM
<b>PH</b>			<b>SW9045D</b>			Analyst: <b>JJG</b>
pH	8.27			s.u.	1	11/15/2011 07:35 AM

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

Report Number: F11319-0613

Account Number: 91000

# A & L GREAT LAKES LABORATORIES, INC.

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

www.algreatlakes.com • lab@algreatlakes.com



**QUALITY ANALYSES FOR INFORMED DECISIONS**

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

RE: 1111465

DATE RECEIVED: 11/15/2011

DATE REPORTED: 11/18/2011

PAGE: 3

P.O. NUMBER: 20-122011221

ATTN: ANN PRESTON

## REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
52729	11B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.25	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	36	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	7	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	26	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	1.0	-	USDA Handbook 60



## **Appendix 4**

### **Sundry Notice Pertaining to Background Arsenic**

State of Colorado  
Oil and Gas Conservation Commission

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



SUNDRY NOTICE

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

1. OGCC Operator Number: 96850	4. Contact Name: Karolina Blaney	Complete the Attachment Checklist OP OGCC
2. Name of Operator: Williams Production RMT Company	Phone: 970-683-2295	
3. Address: 1058 County Road 215 City: Parachute State: CO Zip: 81635	Fax: 970-285-9573	
5. API Number 05- N/A	OGCC Facility ID Number 414574	Survey Plat
6. Well/Facility Name: Juhan 14-26H	7. Well/Facility Number Juhan 14-26H	Directional Survey
8. Location (Qtr/Qtr, Sec, Twp, Rng, Meridian): SESW, Sec 26, T6S, R94W, 6th PM		Surface Eqpm Diagram
9. County: Garfield	10. Field Name: South Rulison	Technical Info Page <input checked="" type="checkbox"/>
11. Federal, Indian or State Lease Number:		Other

REN # 6236

General Notice

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

Technical Engineering/Environmental Notice

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

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

Signed: Karolina Blaney Date: 12/14/2011 Email: Karolina.Blaney@williams.com  
Print Name: Karolina Blaney Title: Environmental Specialist

COGCC Approved:   
CONDITIONS OF APPROVAL IF ANY:

Title: FOR Date: 01/26/2012  
Chris Canfield  
EPS NW Region

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 # 414574  
3. Well/Facility Name: Juhan 14-26H Well/Facility Number: Juhan 14-26H  
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SESW, Sec 26, T6S, R94W, 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 Juhan 14-26H well pad relative to production pit closure at the subject facility in accordance with footnote 1 to the COGCC Table 9101-1.

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

Eight (8) grab samples were collected from locations within the pit footprint at depths of approximately 20' to 20.6' below pad grade to ascertain the arsenic concentrations of the facility.

Pit Bottom - East Half - 5.3 mg/kg  
Pit Bottom - West Half - 5.6 mg/kg  
East Wall - 7.9 mg/kg  
South Wall - East Half - 9.0 mg/kg  
South Wall - West Half - 8.1 mg/kg  
West Wall - 13 mg/kg  
North Wall - East Half - 7.2 mg/kg  
North Wall - West Half - 7.9 mg/kg

Average Concentration: 8.0 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 - 14 mg/kg  
BKGD 2 - 9.5 mg/kg  
BKGD 3 - 11 mg/kg

Average Concentration: 11.5 mg/kg

Williams is requesting this approval in order to proceed with closure and reclamation of the production pit on the Juhan 14-26H well pad.