



KOCH EXPLORATION COMPANY LLC

February 27, 2012

Chris Canfield
Colorado Oil and Gas Conservation Commission
707 Wapiti Court, Suite 204
Rifle, CO 81650

Re: Koch Exploration Company LLC,
COGCC Form 15 and Form 27: Federal 6-26 Production Pit Closure
Rio Blanco County, Colorado

Dear Mr. Canfield:

In response to Carlos Lujan's e-mail dated February 24, 2012, Koch Exploration Company, LLC (KEC) is providing the attached Forms 15 and 27 for the KEC Federal 6-26 well pad, located in the SW ¼ NE ¼, of Section 26, T2N, R97W, 6th PM, Rio Blanco County, CO. KEC previously submitted Form 4 and a pit closure report on November 14, 2011. These documents are included as attachments.

Please don't hesitate to contact me at (720) 201-4941 or radinj@kochind.com if you have any questions or require additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jordan K. Radin'.

Jordan K. Radin, PE
Compliance Manager

cc: Attachments

**FORM
15**Rev
10/11**State of Colorado
Oil and Gas Conservation Commission**

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



OGCC RECEPTION

Document Number:
2229056**EARTHEN PIT REPORT / PERMIT**

This form is to be used for both reporting and permitting pits. Rule 903 describes when a Permit with prior approval, or a Report within 30 days is required for pits. Submit required attachments and forms.

Form Type: ☐ PERMIT ☒ REPORT

OGCC PIT NUMBER: _____

NOTE: Operator to provide OGCC Pit Number only if available on an existing pit for pit report

OGCC Operator Number: 49,100

Contact Name: Jordan Radin

Name of Operator: Koch Exploration Company, LLC

Address: 9777 Pyramid Court, Suite 210

Phone: (720) 201-4941

City: Englewood

State: CO

Zip: 80211

Email: radinj@kochind.com

Pit Location Information

Operator's Pit/Facility Name: WRD Federal

Operator's Pit/Facility Number: 6-26

API Number (associated well): 05- 103 10049

OGCC Location ID (associated location): _____

Or Form 2A # _____

Pit Location (QtrQtr, Sec, Twp, Rng, Meridian): SWNE-26 -2N -97W- 6

Latitude: 40.114651

Longitude: -108.242176

County: Rio Blanco

Operation InformationPit Use/Type (Check all that apply): Pit Type: ☐ Lined ☐ Unlined☐ Drilling: (Ancillary, Completion, Flowback, Reserve Pits) ☐ Oil-based Mud; ☐ Salt Sections or High Chloride Mud☒ Production: ☐ Skimming/Settling; ☐ Produced Water Storage; ☐ Percolation; ☒ Evaporation☐ Special Purpose: ☐ Flare; ☐ Emergency; ☐ Blowdown; ☐ Workover; ☐ Plugging; ☐ BS&W/Tank Bottoms☐ Multi-Well Pit: Construction Date: 12/01/2000 Actual or Planned: _____

Method of treatment prior to discharge into pit: _____

Offsite disposal of ☐ Injection; ☐ Commercial; ☐ Reuse/Recycle; ☐ NPDES; Permit Number: _____
pit contents:

Other Information: KEC has no knowledge of how pit was operated by prior operator, Chesapeake Energy.

Site Conditions

Distance (in feet) to the nearest surface water: 7,920

Ground Water (depth): _____

Water Well: _____

Is this location in a Sensitive Area? No

Existing Location? Yes

Pit Design and Construction

Size of Pit (in feet): Length: 12 Width: 12 Depth: 6 Calc. Volume (barrels): 154

Flow Rates (in bbl/day): Inflow: _____ Outflow: _____ Evaporation: _____ Percolation: _____

Primary Liner. Type: _____ Thickness (mil): _____

Secondary Liner (if present): Type: _____ Thickness (mil): _____

Is Pit Fenced? _____ Is Pit Netted? _____ Leak Detection? _____

Other Information: _____

Operator Comments: Pit inherited from prior operator, Chesapeake Energy. KEC immediately disconnected and never used pits.

Certification

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

Signed:

Print Name: Jordan Radin

Title: Compliance Manager

Email: radinj@kochind.com

Date: 02/27/2012

Approval

Signed: _____

Title: _____

Date: _____

ATTACHMENTS

Detailed Site Plan

Design/Cross Sec

Topo Map

Calculations

Sensitive Area Info

Mud Program

Form 2A

Form 26

Water Analysis

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

RECEIVED
02/27/2012

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): _____

OGCC Operator Number: _____	Contact Name and Telephone: _____
Name of Operator: _____	_____
Address: _____	No: _____
City: _____ State: _____ Zip: _____	Fax: _____
API Number: _____	County: _____
Facility Name: _____	Facility Number: _____
Well Name: _____	Well Number: _____
Location: (QtrQtr, Sec, Twp, Rng, Meridian): _____ Latitude: _____ Longitude: _____	

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc.): _____

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.): _____

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: _____

Potential receptors (water wells within 1/4 mi, surface waters, etc.): _____

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

Impacted Media (check):	Extent of Impact:	How Determined:
Soils	_____	_____
Vegetation	_____	_____
Groundwater	_____	_____
Surface Water	_____	_____

REMEDIALTION WORKPLAN

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

Describe how source is to be removed:

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.:

Location ID # 316225

FORM
27
Rev 6/99

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



Tracking Number: _____
Name of Operator: KOCH Exploration
OGCC Operator No: _____
Received Date: _____
Well Name & No: API 103 10049
Facility Name & No: Federal 6-226

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.):

NA

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.

NA - pit is on active production location. Former pit location has been graded to match the well pad..

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 November 2011 closure report.

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

See attached November 2011 closure report.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: <u>10/6/2011</u>	Date Site Investigation Completed: <u>10/6/2011</u>	Date Remediation Plan Submitted: _____
Remediation Start Date: <u>10/6/2011</u>	Anticipated Completion Date: <u>10/6/2011</u>	Actual Completion Date: <u>10/6/2011</u>

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

Print Name: Jordan Radin

Signed: _____

Title: Compliance Manager

Date: 2/27/2012

OGCC Approved: _____

Title: FOR Chris Canfield

Date: 05/30/2012

EPS NW Region

Remediation Workplan &
Pit closure report OK ✓ Cal.



KOCH EXPLORATION COMPANY LLC

November 14, 2011

Chris Canfield
Colorado Oil and Gas Conservation Commission
707 Wapiti Court, Suite 204
Rifle, CO 81650

Re: Koch Exploration Company LLC,
COGCC Form 4: Federal 6-26 Production Pit Closure
Rio Blanco County, Colorado

Dear Mr. Canfield:

Koch Exploration Company, LLC (KEC) is providing the attached Form 4 and closure report for the production pit closure on the KEC Federal 6-26 well pad, located in the SW ¼ NE ¼, of Section 26, T2N, R97W, 6th PM, Rio Blanco County, CO.

Please don't hesitate to contact me at (720) 201-4941 or radinj@kochind.com if you have any questions or require additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jordan K. Radin'.

Jordan K. Radin, PE
Compliance Manager

cc: Bureau of Land Management White River Field Office via WIS
Attachment

Page 1
FORM
4
Rev 12/05State of Colorado
Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)394-2100 Fax: (303)394-2109

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.)

RECEIVED
11/15/2011

1. OGCC Operator Number: 49100	4. Contact Name: Jordan Radin	Complete the Attachment Checklist
2. Name of Operator: Koch Exploration Company LLC	Phone: 720-201-4941	
3. Address: 9777 Pyramid Court Suite 210	Fax: 316-828-9796	OGCC
City: Englewood State: CO Zip: 80112		
5. API Number 05-103-10049	OGCC Facility ID Number: N/A	Survey Plat
6. Well/Facility Name: WRD Federal	7. Well/Facility Number: 6-26	Directional Survey
8. Location (Qtr/Sec, Twp, Rng, Meridian): SWNE, Sec 26, T2N, R97W, 6th PM		Surface Equip Diagram
9. County: Rio Blanco	10. Field Name: White River	Technical Info Page
11. Federal, Indian or State Lease Number: COC0127537		Other

General Notice

<input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface title is substantive and requires a new permit)	
Change of Surface Footage from Exterior Section Lines:	<input type="checkbox"/> FSL/FSL <input type="checkbox"/> FSL/FWL
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/> FSL/FSL <input type="checkbox"/> FSL/FWL
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/> FSL/FSL <input type="checkbox"/> FSL/FWL
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/> FSL/FSL <input type="checkbox"/> FSL/FWL
Bottomhole location 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 data:
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 (8 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 on this form are, to the best of my knowledge, true, correct and complete.

Signed: Jordan Radin Date: 11/9/2011 Email: RADINJ@KOCHIND.COM
Print Name: Jordan Radin Title: Compliance ManagerCOGCC Approved: Chris Canfield Title: FOR Date: 05/30/2012
CONDITIONS OF APPROVAL IF ANY:Chris Canfield
EPS NW RegionLocation ID #
316225
Federal 6-226

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

- | | |
|--|----------------------------|
| 1. OGCC Operator Number: 49100 | API Number: 05-103-10049 |
| 2. Name of Operator: Koch Exploration Company LLC | OGCC Facility ID # N/A |
| 3. Well/Facility Name: WRD Federal | Well/Facility Number: 6-26 |
| 4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SWNE, Sec 26, T2N, R97W, 6th PM | |

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

5. **DESCRIBE PROPOSED OR COMPLETED OPERATIONS**

This COGCC Form 4 is being submitted as a request to consider the background concentration levels for arsenic at the Federal 6-26 well pad relative to bigging/blowdown pit closure at the subject facility in accordance with footnote 1 to the COGCC Table 910-1.

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

One (1) grab sample was collected from with the pit bottom at depths of approximately 11' to 11.6' below pad grade to ascertain the arsenic concentrations of the facility.

Pit Bottom - 3.1mg/kg

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

BKGD 1 - 5.4 mg/kg

BKGD 2 - 2.4 mg/kg

BKGD 3 - 4.1 mg/kg

Attached is a notice of completion report for the successful remediation of the pigging/blowdown pit located on the Federal 6-26 well pad. Pit bottom confirmation anaylsis indicates that soil is below COGCC Table 910-1 allowable standards. In additional to field screening findings, visual representation, and raw analytical analysis, attached are copies of the disposal manifests from Wray Gulch Landfill for the disposal of the impacted soils removed from within the pit.

Koch is requesting this approval in order to proceed with closure and reclamation of the production pit on the Federal 6-26 well pad.

KOCH EXPLORATION COMPANY LLC
RIO BLANCO COUNTY
WRD FEDERAL 6-26 WELL PAD

November 2011

Prepared For:



KOCH EXPLORATION COMPANY, LLC

9777 Pyramid Court Suite 210
Englewood, Colorado 80112

Prepared By:



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

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Appendix 2: Background Raw Analytical Data

Appendix 3: Wray Gulch Landfill Disposal Manifests

Form 27 Attachment

Introduction

The purpose of this notice of completion report– for the closure of the Koch Exploration Company LLC (KEC) Federal 6-26 produced water drain pit (API # 05-103-10049; hereinafter also referred to as Federal 6-26 pit) –is to provide detailed information and findings analysis for the associated closure and potential remediation activities. The pit was constructed around December 2000 by Chesapeake Energy for the purpose of draining produced water from an adjacent production tank. KEC purchased the site in 2011 and took over operations on May 1, 2011. Chesapeake disclosed that fluids hadn't been drained to the pit in several years. Soon after assuming operations, KEC disconnected piping connecting the pit to the production tank and KEC has not drained any production fluids to the pit.

Pit Soil Investigation

Soils, examined within the pit, were inspected visually and through the use of specialized field screening equipment (identified below) to identify areas which may exceed standards set forth in Table 910-1 of the COGCC 900-Series Rule for hydrocarbons within the soil. Soil within the pit contained dark black staining and a strong hydrocarbon odor was present beyond the surface layer.

Field screening of the produced water pit was performed along the east and west side of the pit. Due to the bottom containing residual storm water from the previous day's rain event, the pit bottom was not accessible for surface field screening. Based on visual observations and process knowledge, the pit bottom required remediation.

Table 1 outlines the pit field screening results at various depths using a PetroFlag Hydrocarbon Unit (PetroFlag[®]) and a Photo Ionizing Detection Unit (PID). Figure 1 is a GIS map of the pit outlining the impacted south wall of the pit.

Table 1: PetroFlag Hydrocarbon Screening Results at Various Depths

Sample ID	0-6"	2-3 ft	5-8 ft	10-11 ft
East Wall	>10000	4720	1232	322
West Wall	2320	1833	898	166
Pit Bottom	-	4365	1236	56

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

Facility Name: WRD Federal 6-26
Federal Lease #: COC0127537

Name of Operator: Koch Exploration Company LLC
Latitude: 40.114709 Longitude -108.242797
Location (QtrQty, Sec, Twp, Rng, Meridian): SWNE, Sec 26, T2N, R97W, 6th PM

COGCC Operator # 49100
County: Rio Blanco

Figure 1 GIS Map of Sampling Locations



Field screen results, provided in Table 1, indicated that remediation was required on the eastern and western walls and pit bottom due to TPH concentrations likely being above COGCC Table 910-1 standards.

Remediation Activities

Soil exhibiting dark stains and a hydrocarbon odor were located on all of the pit walls and pit bottom indicating the presence of hydrocarbon contamination. Field screening confirmed TPH concentrations exceeding 500 ppm, triggering the subsequent remediation activities. Excavation of the pit extended vertically approximately 11 feet, where a noticeable change of soil composition and odor was evident. Excavation on the side walls extended horizontally approximately 1-2 feet, where native soil was encountered and discoloration within soil was no longer present at the excavated depth. Field screen results, at the excavated depth, indicated that hydrocarbon concentrations were below 500 ppm.

- One grab sample was collected from the bottom of the pit, which included the low point of the base, to demonstrate compliance in accordance with Rule 905.b.(1).
- A Trimble Geo XT 2008 was used to satisfy requirements outlined in COGCC Rule 215 for collecting GPS locations of each confirmation sample location from the pit bottom.

Confirmation sample analysis confirmed that the soils within the bottom of the pit are below COGCC Table 910-1 allowable standards.

Sample Analysis

See attached Table 2 (additional detail provided in Appendix 1) for summary of pit bottom raw analytical results, and Table 3 (additional detail provided in Appendix 2) which provides raw analytical results for background analytical sampling.

Background Sampling

Three samples were collected from the up-gradient undisturbed hillsides surrounding the pad. All background samples were analyzed for arsenic as well as additional analysis at one location which included inorganic parameters of COGCC Table 910-1(i.e. SAR, EC, pH). Refer to Table 3 and Appendix 2 for background sampling results.

Management of Stockpiled Material

Excavated soils from the pit wall and bottom were placed in a stockpile and profiled for disposal to Wray Gulch Landfill. The stockpiled soils were transported to the landfill on October 28, 2011. See Attachment 3 for signed copies of the disposal manifests.

Facility Name: WRD Federal 6-26
Federal Lease #: COC0127537

Name of Operator: Koch Exploration Company LLC
Latitude: 40.114709 Longitude -108.242797
Location (QtrQty, Sec, Twp, Rng, Meridian): SWNE, Sec 26, T2N, R97W, 6th PM

COGCC Operator # 49100
County: Rio Blanco

Analytical Data Management

See Appendix 1 for post excavated pit bottom confirmation raw analytical data and Appendix 2 for background raw analytical data.

Figures

Figure 2



Visual representation of pit during excavation; depth presented is at 2 feet

Figure 3



Visual representation of the remediated pit; depth presented is at 11 feet

Summary Tables

Table 2: Post Excavation Pit Bottom Analytical Results

	Pit Bottom Confirmation
Post Excavation of Pit	
TEPH (DRO)	14
TVPH (GRO)	ND
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENE TOTAL	ND
ACENAPHTHENE	ND
ACENAPHTHYLENE	ND
ANTHRACENE	ND
BENZO(A)ANTHRACENE	ND
BENZO(A)PYRENE	ND
BENZO(B)FLUORANTHENE	ND
BENZO(G,H,I)PERYLENE	ND
BENZO(K)FLUORANTHENE	ND
CHRYSENE	ND
DIBENZO(A,H)ANTHRACENE	ND
FLUORANTHENE	ND
FLUORENE	ND
INDENO(1,2,3-CD)PYRENE	ND
NAPHTHALENE	ND
PYRENE	ND
ARSENIC	3.1
BARIUM	96
CADMIUM	0.83
CHROMIUM	6.8
CHROMIUM (III)	6.8
CHROMIUM (IV)	ND
COPPER	7.8
LEAD	9.2
NICKEL	13
SELENIUM	ND
SILVER	ND
ZINC	42
Sodium Absorbion Ratio (unitless)	143.1
Electric Conductivity (mmho/cm)	7.91
pH (unitless)	8.88

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

Table 3: Background Analytical Data

	Arsenic	Sodium Absorption Ratio (unitless)	Electro Conductivity (mmhos/cm)
BKGD 1	5.4	2.5	1.47
BKGD 2	2.4		
BKGD 3	4.1		

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

Appendix 1: Pit Bottom Confirmation Raw Analytical Results



20-Oct-2011

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

Re: **Koch Exploration 6-26 Pit Remed 11-261 10/6/11**

Work Order: **1110301**

Dear Kris,

ALS Environmental received 6 samples on 08-Oct-2011 10:30 AM for the analyses presented in the following report.

This is a REVISED REPORT. The Case Narrative provides information discussing the reason for issuing a revised report. The total number of pages in this revision is 41.

If you have any questions regarding these test results, 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

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11
Work Order: 1110301

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>
1110301-01	Pit Bottom Confirmation	Soil		10/6/2011 11:00	10/8/2011 10:30	<input type="checkbox"/>
1110301-02	Stockpile	Soil		10/6/2011 12:00	10/8/2011 10:30	<input type="checkbox"/>
1110301-03	Stockpile TCLP	Tclp Extract		10/6/2011 12:00	10/8/2011 10:30	<input type="checkbox"/>
1110301-04	BKGD 1	Soil		10/6/2011 12:10	10/8/2011 10:30	<input type="checkbox"/>
1110301-05	BKGD 2	Soil		10/6/2011 12:15	10/8/2011 10:30	<input type="checkbox"/>
1110301-06	BKGD 3	Soil		10/6/2011 12:20	10/8/2011 10:30	<input type="checkbox"/>

Client: HRL Compliance Solutions
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11
Work Order: 1110301

Case Narrative

Batches 36332 and 36600 MS/MSD data for Metals is not related to this project's samples.

Batch 36700 MS/MSD data for Hexavalent Chromium is not related to this project's samples.

Batch R95945 MS/MSD data for Volatiles is not related to this project's samples.

This revised report includes Table 910-1 Parameters for sample 1110301-01, and DRO/GRO for sample 1110301-02.

Client: HRL Compliance Solutions
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11
WorkOrder: 1110301

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

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

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
°F	Degrees Fahrenheit
µg/Kg-dry as noted	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: 20-Oct-11

Client: HRL Compliance Solutions

Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

Work Order: 1110301

Sample ID: Pit Bottom Confirmation

Lab ID: 1110301-01

Collection Date: 10/6/2011 11:00 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	14		SW8015M		Prep Date: 10/11/2011	Analyst: RM
			5.0	mg/Kg-dry	1	10/15/2011 01:18 PM
Surr: 4-Terphenyl-d14	85.8		39-115	%REC	1	10/15/2011 01:18 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015			Analyst: RM
			6.0	mg/Kg-dry	100	10/15/2011 08:25 PM
Surr: Toluene-d8	101		50-150	%REC	100	10/15/2011 08:25 PM
MERCURY BY CVAA						
Mercury	0.033		SW7471		Prep Date: 10/14/2011	Analyst: LR
			0.021	mg/Kg-dry	1	10/17/2011 03:07 PM
METALS BY ICP-MS						
Arsenic	3.1		SW6020A		Prep Date: 10/17/2011	Analyst: RH
			0.44	mg/Kg-dry	1	10/17/2011 04:32 PM
Barium	96		0.44	mg/Kg-dry	1	10/17/2011 04:32 PM
Cadmium	0.83		0.18	mg/Kg-dry	1	10/17/2011 04:32 PM
Chromium	6.8		0.44	mg/Kg-dry	1	10/17/2011 04:32 PM
Copper	7.8		0.44	mg/Kg-dry	1	10/17/2011 04:32 PM
Lead	9.2		0.44	mg/Kg-dry	1	10/17/2011 04:32 PM
Nickel	13		0.44	mg/Kg-dry	1	10/17/2011 04:32 PM
Selenium	ND		0.44	mg/Kg-dry	1	10/17/2011 04:32 PM
Silver	ND		0.44	mg/Kg-dry	1	10/17/2011 04:32 PM
Zinc	42		0.88	mg/Kg-dry	1	10/17/2011 04:32 PM
SUBCONTRACTED ANALYSES						
Subcontracted Analyses	Rcvd 10/20/11		SUBCONTRACT			Analyst: A&LGL
			as noted		1	10/20/2011
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	ND		SW8270		Prep Date: 10/11/2011	Analyst: HL
			36	µg/Kg-dry	1	10/17/2011 02:38 PM
Anthracene	ND		36	µg/Kg-dry	1	10/17/2011 02:38 PM
Benzo(a)anthracene	ND		36	µg/Kg-dry	1	10/17/2011 02:38 PM
Benzo(a)pyrene	ND		36	µg/Kg-dry	1	10/17/2011 02:38 PM
Benzo(b)fluoranthene	ND		36	µg/Kg-dry	1	10/17/2011 02:38 PM
Benzo(g,h,i)perylene	ND		36	µg/Kg-dry	1	10/17/2011 02:38 PM
Benzo(k)fluoranthene	ND		36	µg/Kg-dry	1	10/17/2011 02:38 PM
Chrysene	ND		36	µg/Kg-dry	1	10/17/2011 02:38 PM
Dibenzo(a,h)anthracene	ND		36	µg/Kg-dry	1	10/17/2011 02:38 PM
Fluoranthene	ND		36	µg/Kg-dry	1	10/17/2011 02:38 PM
Fluorene	ND		36	µg/Kg-dry	1	10/17/2011 02:38 PM
Indeno(1,2,3-cd)pyrene	ND		36	µg/Kg-dry	1	10/17/2011 02:38 PM
Naphthalene	ND		36	µg/Kg-dry	1	10/17/2011 02:38 PM
Pyrene	ND		36	µg/Kg-dry	1	10/17/2011 02:38 PM
Surr: 2,4,6-Tribromophenol	79.8		34-140	%REC	1	10/17/2011 02:38 PM

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

ALS Group USA, Corp

Date: 20-Oct-11

Client: HRL Compliance Solutions

Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

Work Order: 1110301

Sample ID: Pit Bottom Confirmation

Lab ID: 1110301-01

Collection Date: 10/6/2011 11:00 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: 2-Fluorobiphenyl</i>	69.4		12-100	%REC	1	10/17/2011 02:38 PM
<i>Surr: 2-Fluorophenol</i>	81.5		33-117	%REC	1	10/17/2011 02:38 PM
<i>Surr: 4-Terphenyl-d14</i>	83.9		25-137	%REC	1	10/17/2011 02:38 PM
<i>Surr: Nitrobenzene-d5</i>	74.9		37-107	%REC	1	10/17/2011 02:38 PM
<i>Surr: Phenol-d6</i>	79.9		40-106	%REC	1	10/17/2011 02:38 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: MK
Benzene	ND		120	µg/Kg-dry	100	10/12/2011 06:08 AM
Ethylbenzene	ND		240	µg/Kg-dry	100	10/12/2011 06:08 AM
m,p-Xylene	ND		240	µg/Kg-dry	100	10/12/2011 06:08 AM
o-Xylene	ND		120	µg/Kg-dry	100	10/12/2011 06:08 AM
Toluene	ND		180	µg/Kg-dry	100	10/12/2011 06:08 AM
Xylenes, Total	ND		360	µg/Kg-dry	100	10/12/2011 06:08 AM
<i>Surr: 1,2-Dichloroethane-d4</i>	106		70-120	%REC	100	10/12/2011 06:08 AM
<i>Surr: 4-Bromofluorobenzene</i>	99.2		75-120	%REC	100	10/12/2011 06:08 AM
<i>Surr: Dibromofluoromethane</i>	99.5		85-115	%REC	100	10/12/2011 06:08 AM
<i>Surr: Toluene-d8</i>	97.9		85-115	%REC	100	10/12/2011 06:08 AM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	6.8		0.60	mg/Kg-dry	1	10/20/2011 08:13 AM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 10/19/2011	Analyst: MB
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	10/19/2011 05:00 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	17		0.050	% of sample	1	10/11/2011 12:36 PM

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

ALS Group USA, Corp

Date: 20-Oct-11

Client: HRL Compliance Solutions

Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

Work Order: 1110301

Sample ID: Stockpile

Lab ID: 1110301-02

Collection Date: 10/6/2011 12:00 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	2,400		110	mg/Kg-dry	10	10/19/2011 06:22 PM
Surr: 4-Terphenyl-d14	114		39-115	%REC	10	10/19/2011 06:22 PM
ORGANIC COMPOUNDS BY GC-FID						
Methanol	ND		6.4	mg/Kg-dry	1	10/11/2011 09:06 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	250		6.4	mg/Kg-dry	100	10/20/2011 12:44 PM
Surr: Toluene-d8	108		50-150	%REC	100	10/20/2011 12:44 PM
VOLATILE ORGANIC COMPOUNDS						
Benzene	ND		130	µg/Kg-dry	100	10/12/2011 05:43 AM
Ethylbenzene	1,700		250	µg/Kg-dry	100	10/12/2011 05:43 AM
Hexane	4,300		380	µg/Kg-dry	100	10/12/2011 05:43 AM
m,p-Xylene	19,000		250	µg/Kg-dry	100	10/12/2011 05:43 AM
o-Xylene	5,700		130	µg/Kg-dry	100	10/12/2011 05:43 AM
Toluene	ND		190	µg/Kg-dry	100	10/12/2011 05:43 AM
Xylenes, Total	24,000		380	µg/Kg-dry	100	10/12/2011 05:43 AM
Surr: 1,2-Dichloroethane-d4	113		70-120	%REC	100	10/12/2011 05:43 AM
Surr: 4-Bromofluorobenzene	119		75-120	%REC	100	10/12/2011 05:43 AM
Surr: Dibromofluoromethane	100		85-115	%REC	100	10/12/2011 05:43 AM
Surr: Toluene-d8	99.0		85-115	%REC	100	10/12/2011 05:43 AM
CYANIDE, REACTIVE						
Cyanide, Reactive	ND		51	mg/Kg-dry	1	10/14/2011 08:45 AM
FLASHPOINT, OPEN-CUP						
Flashpoint, Open-cup	>140		D92	°F	1	10/10/2011 10:30 AM
PAINT FILTER (FREE LIQUIDS)						
Free Liquids	Pass		SW9095	none	1	10/10/2011 08:45 AM
MOISTURE						
Moisture	22		A2540 G	% of sample	1	10/10/2011 04:53 PM
PH						
pH	8.88		SW9045D	s.u.	1	10/10/2011 08:50 AM
SULFIDE, REACTIVE						
Sulfide, Reactive	ND		SW7.3.4.2	mg/Kg-dry	1	10/14/2011 08:45 AM

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

ALS Group USA, Corp**Date:** 20-Oct-11**Client:** HRL Compliance Solutions**Project:** Koch Exploration 6-26 Pit Remed 11-261 10/6/11**Work Order:** 1110301**Sample ID:** Stockpile TCLP**Lab ID:** 1110301-03**Collection Date:** 10/6/2011 12:00 PM**Matrix:** TCLP EXTRACT

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>						
TCLP MERCURY BY CVAA			SW7470			
Mercury	ND		0.0020	mg/L	Prep Date: 10/11/2011 1	Analyst: LR 10/11/2011 04:25 PM
TCLP METALS ANALYSIS BY ICP-MS			SW6020A			
Arsenic	0.015		0.010	mg/L	Prep Date: 10/11/2011 1	Analyst: RH 10/11/2011 11:46 PM
Barium	3.2		0.050	mg/L	1	10/11/2011 11:46 PM
Cadmium	ND		0.0020	mg/L	1	10/11/2011 11:46 PM
Chromium	ND		0.020	mg/L	1	10/11/2011 11:46 PM
Lead	ND		0.010	mg/L	1	10/12/2011 06:06 PM
Selenium	ND		0.020	mg/L	1	10/11/2011 11:46 PM
Silver	ND		0.0050	mg/L	1	10/11/2011 11:46 PM

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

ALS Group USA, Corp**Date:** 20-Oct-11**Client:** HRL Compliance Solutions**Project:** Koch Exploration 6-26 Pit Remed 11-261 10/6/11**Work Order:** 1110301**Sample ID:** BKGD 1**Lab ID:** 1110301-04**Collection Date:** 10/6/2011 12:10 PM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS						
Arsenic	5.4		SW6020A 0.98	mg/Kg-dry	2	Prep Date: 10/10/2011 10/13/2011 05:07 PM Analyst: CES
SUBCONTRACTED ANALYSES						
Subcontracted Analyses	Rcvd 10/13/11		SUBCONTRACT as noted		1	Analyst: A&LGL 10/13/2011
MOISTURE						
Moisture	5.0		A2540 G 0.050	% of sample	1	Analyst: CG 10/11/2011 12:36 PM

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

ALS Group USA, Corp

Date: 20-Oct-11

Client: HRL Compliance Solutions

Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

Work Order: 1110301

Sample ID: BKGD 2

Lab ID: 1110301-05

Collection Date: 10/6/2011 12:15 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 10/10/2011	Analyst: CES
Arsenic	2.4		0.88	mg/Kg-dry	2	10/13/2011 05:12 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	1.8		0.050	% of sample	1	10/11/2011 12:36 PM

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

ALS Group USA, Corp

Date: 20-Oct-11

Client: HRL Compliance Solutions

Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

Work Order: 1110301

Sample ID: BKGD 3

Lab ID: 1110301-06

Collection Date: 10/6/2011 12:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 10/10/2011	Analyst: CES
Arsenic	4.1		0.87	mg/Kg-dry	2	10/13/2011 05:18 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	4.9		0.050	% of sample	1	10/11/2011 12:36 PM

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

Report Number: F11291-0691

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: 1110301

DATE RECEIVED: 10/18/2011

DATE REPORTED: 10/20/2011

PAGE: 1

P.O. NUMBER: 20-122011025

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
17256	01A	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	7.91	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	277	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	54	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	9967	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	143.1	-	USDA Handbook 60

Report Number: F11284-0692

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: 1110301

DATE RECEIVED: 10/11/2011

DATE REPORTED: 10/13/2011

PAGE: 1

P.O. NUMBER: 20-122010968

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
51879	04B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	1.47	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	295	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	90	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	195	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	2.5	-	USDA Handbook 60

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1110301

Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

Batch ID: 36358

Instrument ID GC8

Method: SW8015M

MBLK		Sample ID: DBLKS1-36358-36358				Units: mg/Kg		Analysis Date: 10/13/2011 01:41 PM		
Client ID:			Run ID: GC8_111015A		SeqNo: 1780586		Prep Date: 10/11/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	5.0								
Surr: 4-Terphenyl-d14	1.874	0	2	0	93.7	39-115	0			

LCS				Sample ID: DLCSS1-36358-36358				Units: mg/Kg			Analysis Date: 10/15/2011 11:50 AM			
Client ID:				Run ID: GC8_111015A				SeqNo: 1780524			Prep Date: 10/11/2011		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
DRO (C10-C28)		233.4	5.0	200	0	117	60-130	0						
Surr: 4-Terphenyl-d14		1.345	0	2	0	67.2	39-115	0						

LCSD	Sample ID: DLCSDS1-36358-36358					Units: mg/Kg		Analysis Date: 10/15/2011 11:50 AM		
Client ID:			Run ID: GC8_111015A			SeqNo: 1780450		Prep Date: 10/11/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	215.6	5.0	200	0	108	60-130	233.4	7.93	30	
<i>Surr: 4-Terphenyl-d14</i>	1.32	0	2	0	66	39-115	1.345	1.89	30	

The following samples were analyzed in this batch:

1110301-01A

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **R95962** Instrument ID **GC5** Method: **SW8015M**

MBLK	Sample ID: MB-R95962-R95962					Units: mg/L		Analysis Date: 10/11/2011 09:06 PM		
Client ID:	Run ID: GC5_111011A				SeqNo: 1772158		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methanol ND 5.0

MBLK	Sample ID: MB-R95962-R95962					Units: mg/Kg		Analysis Date: 10/11/2011 09:06 PM		
Client ID:	Run ID: GC5_111011A				SeqNo: 1772171		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methanol ND 5.0

LCS	Sample ID: LCS-R95962-R95962					Units: mg/L		Analysis Date: 10/11/2011 09:06 PM		
Client ID:	Run ID: GC5_111011A				SeqNo: 1772159		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methanol 497.5 5.0 500 0 99.5 50-150 0

LCS	Sample ID: LCS-R95962-R95962					Units: mg/Kg		Analysis Date: 10/11/2011 09:06 PM		
Client ID:	Run ID: GC5_111011A				SeqNo: 1772172		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methanol 487.7 5.0 500 0 97.5 50-150 0

LCSD	Sample ID: LCSD-R95962-R95962					Units: mg/L		Analysis Date: 10/11/2011 09:06 PM		
Client ID:	Run ID: GC5_111011A				SeqNo: 1772165		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methanol 488.4 5.0 500 0 97.7 50-150 497.5 1.85 30

LCSD	Sample ID: LCSD-R95962-R95962					Units: mg/Kg		Analysis Date: 10/11/2011 09:06 PM		
Client ID:	Run ID: GC5_111011A				SeqNo: 1772176		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methanol 489.4 5.0 500 0 97.9 50-150 487.7 0.358 30

MS	Sample ID: 1110182-01A MS					Units: mg/L		Analysis Date: 10/11/2011 09:06 PM		
Client ID:	Run ID: GC5_111011A				SeqNo: 1772162		Prep Date:		DF: 2	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methanol 1025 10 1000 40.2 98.4 50-150 0

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **R95962** Instrument ID **GC5** Method: **SW8015M**

MS		Sample ID: 1110301-02C MS				Units: mg/Kg		Analysis Date: 10/11/2011 09:06 PM		
Client ID: Stockpile		Run ID: GC5_111011A				SeqNo: 1772174		Prep Date:		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methanol	962.4	10	1000	0	96.2	50-150	0			
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MSD		Sample ID: 1110182-01A MSD				Units: mg/L		Analysis Date: 10/11/2011 09:06 PM		
Client ID:		Run ID: GC5_111011A				SeqNo: 1772163		Prep Date:		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methanol	1012	10	1000	40.2	97.2	50-150	1025	1.21	30	
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MSD		Sample ID: 1110301-02C MSD				Units: mg/Kg		Analysis Date: 10/11/2011 09:06 PM		
Client ID: Stockpile		Run ID: GC5_111011A				SeqNo: 1772175		Prep Date:		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methanol	968.5	10	1000	0	96.8	50-150	962.4	0.631	30	
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The following samples were analyzed in this batch:

1110301-02C

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **R96169** Instrument ID **GC9** Method: **SW8015**

MBLK		Sample ID: MBLK-R96169-R96169				Units: µg/L		Analysis Date: 10/15/2011 11:47 AM		
Client ID:		Run ID: GC9_111015A				SeqNo: 1777977		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
<i>Surr: Toluene-d8</i>	<i>107.7</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>108</i>	<i>70-130</i>	<i>0</i>			

LCS		Sample ID: LCS-R96169-R96169				Units: µg/L		Analysis Date: 10/15/2011 10:30 AM		
Client ID:		Run ID: GC9_111015A				SeqNo: 1778750		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	22590	200	25000	0	90.4	70-130	0			
<i>Surr: Toluene-d8</i>	<i>91.1</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>91.1</i>	<i>70-130</i>	<i>0</i>			

LCSD		Sample ID: LCSD-R96169-R96169				Units: µg/L		Analysis Date: 10/15/2011 10:56 AM		
Client ID:		Run ID: GC9_111015A				SeqNo: 1778751		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	24780	200	25000	0	99.1	70-130	22590	9.23	30	
<i>Surr: Toluene-d8</i>	<i>100.8</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>91.1</i>	<i>10.1</i>	<i>30</i>	

MS		Sample ID: 1110275-02B MS				Units: µg/Kg		Analysis Date: 10/15/2011 08:51 PM		
Client ID:		Run ID: GC9_111015A				SeqNo: 1778783		Prep Date:		DF: 50
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1282000	2,500	1250000	0	103	70-130	0			
<i>Surr: Toluene-d8</i>	<i>4812</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>96.2</i>	<i>50-150</i>	<i>0</i>			

MSD		Sample ID: 1110275-02B MSD				Units: µg/Kg		Analysis Date: 10/15/2011 09:17 PM		
Client ID:		Run ID: GC9_111015A				SeqNo: 1778784		Prep Date:		DF: 50
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1270000	2,500	1250000	0	102	70-130	1282000	0.896	30	
<i>Surr: Toluene-d8</i>	<i>4914</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>98.3</i>	<i>50-150</i>	<i>4812</i>	<i>2.09</i>	<i>30</i>	

The following samples were analyzed in this batch: | 1110301-01A |

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **R96420** Instrument ID **GC9** Method: **SW8015**

MBLK		Sample ID: MBLK-R96420-R96420				Units: µg/L		Analysis Date: 10/19/2011 03:59 PM		
Client ID:		Run ID: GC9_111019A				SeqNo: 1785128		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
<i>Surr: Toluene-d8</i>	<i>105.2</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>105</i>	<i>70-130</i>	<i>0</i>			

LCS		Sample ID: LCS-R96420-R96420				Units: µg/L		Analysis Date: 10/19/2011 02:39 PM		
Client ID:		Run ID: GC9_111019A				SeqNo: 1785126		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	22940	200	25000	0	91.8	70-130	0			
<i>Surr: Toluene-d8</i>	<i>94.46</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>94.5</i>	<i>70-130</i>	<i>0</i>			

LCSD		Sample ID: LCSD-R96420-R96420				Units: µg/L		Analysis Date: 10/19/2011 03:05 PM		
Client ID:		Run ID: GC9_111019A				SeqNo: 1785127		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	22210	200	25000	0	88.9	70-130	22940	3.24	30	
<i>Surr: Toluene-d8</i>	<i>92.68</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>92.7</i>	<i>70-130</i>	<i>94.46</i>	<i>1.9</i>	<i>30</i>	

MS		Sample ID: 1110529-11A MS				Units: µg/Kg		Analysis Date: 10/20/2011 01:10 AM		
Client ID:		Run ID: GC9_111019A				SeqNo: 1785147		Prep Date:		DF: 50
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1185000	2,500	1250000	0	94.8	70-130	0			
<i>Surr: Toluene-d8</i>	<i>4598</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>92</i>	<i>50-150</i>	<i>0</i>			

MSD		Sample ID: 1110529-11A MSD				Units: µg/Kg		Analysis Date: 10/20/2011 01:36 AM		
Client ID:		Run ID: GC9_111019A				SeqNo: 1785148		Prep Date:		DF: 50
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1185000	2,500	1250000	0	94.8	70-130	1185000	0.0158	30	
<i>Surr: Toluene-d8</i>	<i>4717</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>94.3</i>	<i>50-150</i>	<i>4598</i>	<i>2.57</i>	<i>30</i>	

The following samples were analyzed in this batch: | 1110301-02C |

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **36372** Instrument ID **HG1** Method: **SW7470**

MBLK	Sample ID: MBLK-36372-36372					Units: mg/L		Analysis Date: 10/11/2011 02:53 PM		
Client ID:	Run ID: HG1_111011A				SeqNo: 1770762		Prep Date: 10/11/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury ND 0.00020

LCS	Sample ID: LCS-36372-36372					Units: mg/L		Analysis Date: 10/11/2011 02:56 PM		
Client ID:	Run ID: HG1_111011A				SeqNo: 1770763		Prep Date: 10/11/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.002092 0.00020 0.002 0 105 80-120 0

LCSD	Sample ID: LCSD-36372-36372					Units: mg/L		Analysis Date: 10/11/2011 02:58 PM		
Client ID:	Run ID: HG1_111011A				SeqNo: 1770764		Prep Date: 10/11/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.002118 0.00020 0.002 0 106 80-120 0.002092 1.24 20

MS	Sample ID: 1110290-02AMS					Units: mg/L		Analysis Date: 10/11/2011 03:09 PM		
Client ID:	Run ID: HG1_111011A				SeqNo: 1770769		Prep Date: 10/11/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.002093 0.00020 0.002 -0.000033 106 75-125 0

MSD	Sample ID: 1110290-02AMSD					Units: mg/L		Analysis Date: 10/11/2011 03:11 PM		
Client ID:	Run ID: HG1_111011A				SeqNo: 1770770		Prep Date: 10/11/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.002088 0.00020 0.002 -0.000033 106 75-125 0.002093 0.239 20

The following samples were analyzed in this batch:

1110301-03A

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **36541** Instrument ID **HG1** Method: **SW7471**

MBLK	Sample ID: MBLK-36541-36541					Units: mg/Kg		Analysis Date: 10/17/2011 02:07 PM		
Client ID:	Run ID: HG1_111017A				SeqNo: 1778965		Prep Date: 10/14/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury ND 0.020

LCS	Sample ID: LCS-36541-36541					Units: mg/Kg		Analysis Date: 10/17/2011 02:09 PM		
Client ID:	Run ID: HG1_111017A				SeqNo: 1778967		Prep Date: 10/14/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1752 0.020 0.1665 0 105 80-120 0

LCSD	Sample ID: LCSD-36541-36541					Units: mg/Kg		Analysis Date: 10/17/2011 02:11 PM		
Client ID:	Run ID: HG1_111017A				SeqNo: 1778968		Prep Date: 10/14/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1759 0.020 0.1665 0 106 80-120 0.1752 0.38 20

MS	Sample ID: 1110496-13BMS					Units: mg/Kg		Analysis Date: 10/17/2011 02:48 PM		
Client ID:	Run ID: HG1_111017A				SeqNo: 1778986		Prep Date: 10/14/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1813 0.018 0.1502 0.03126 99.9 75-125 0

MSD	Sample ID: 1110496-13BMSD					Units: mg/Kg		Analysis Date: 10/17/2011 02:50 PM		
Client ID:	Run ID: HG1_111017A				SeqNo: 1778987		Prep Date: 10/14/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1959 0.019 0.1563 0.03126 105 75-125 0.1813 7.77 35

The following samples were analyzed in this batch:

1110301-01B

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **36332** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK	Sample ID: MBLK-36332-36332					Units: mg/Kg		Analysis Date: 10/13/2011 02:47 AM		
Client ID:	Run ID: ICPMS1_111012A				SeqNo: 1773452		Prep Date: 10/10/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic ND 0.25

LCS	Sample ID: LCS-36332-36332					Units: mg/Kg		Analysis Date: 10/13/2011 02:52 AM		
Client ID:	Run ID: ICPMS1_111012A				SeqNo: 1773453		Prep Date: 10/10/2011		DF: 2	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic 4.655 0.50 5 0 93.1 80-120 0

LCSD	Sample ID: LCSD-36332-36332					Units: mg/Kg		Analysis Date: 10/13/2011 02:57 AM		
Client ID:	Run ID: ICPMS1_111012A				SeqNo: 1773454		Prep Date: 10/10/2011		DF: 2	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic 4.563 0.50 5 0 91.3 80-120 4.655 2 20

MS	Sample ID: 1110275-02AMS					Units: mg/Kg		Analysis Date: 10/13/2011 03:39 AM		
Client ID:	Run ID: ICPMS1_111012A				SeqNo: 1773460		Prep Date: 10/10/2011		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic 18.91 1.5 7.541 15.63 43.6 80-120 0 S

MS	Sample ID: 1110278-09BMS					Units: mg/Kg		Analysis Date: 10/13/2011 04:25 PM		
Client ID:	Run ID: ICPMS1_111013A				SeqNo: 1774990		Prep Date: 10/10/2011		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic 15.64 1.6 7.825 7.16 108 80-120 0

MSD	Sample ID: 1110275-02AMSD					Units: mg/Kg		Analysis Date: 10/13/2011 03:44 AM		
Client ID:	Run ID: ICPMS1_111012A				SeqNo: 1773461		Prep Date: 10/10/2011		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic 26.75 1.5 7.645 15.63 145 80-120 18.91 34.3 25 SR

MSD	Sample ID: 1110278-09BMSD					Units: mg/Kg		Analysis Date: 10/13/2011 04:30 PM		
Client ID:	Run ID: ICPMS1_111013A				SeqNo: 1774991		Prep Date: 10/10/2011		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic 15.01 1.6 8.224 7.16 95.5 80-120 15.64 4.07 25

The following samples were analyzed in this batch:

1110301-04A 1110301-05A 1110301-06A

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **36367** Instrument ID **ICPMS2** Method: **SW6020A**

MBLK		Sample ID: MBLK-36367-36367				Units: mg/L		Analysis Date: 10/11/2011 03:40 PM		
Client ID:		Run ID: ICPMS2_111011A				SeqNo: 1771536		Prep Date: 10/11/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.0050								
Barium	ND	0.0050								
Cadmium	ND	0.0020								
Chromium	0.0001378	0.0050								J
Lead	ND	0.0050								
Selenium	ND	0.0050								
Silver	ND	0.0050								

LCS		Sample ID: LCS-36367-36367				Units: mg/L		Analysis Date: 10/11/2011 03:45 PM		
Client ID:		Run ID: ICPMS2_111011A				SeqNo: 1771537		Prep Date: 10/11/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1021	0.0050	0.1	0	102	80-120	0			
Barium	0.106	0.0050	0.1	0	106	80-120	0			
Cadmium	0.1006	0.0020	0.1	0	101	80-120	0			
Chromium	0.1025	0.0050	0.1	0	102	80-120	0			
Lead	0.1051	0.0050	0.1	0	105	80-120	0			
Selenium	0.1023	0.0050	0.1	0	102	80-120	0			
Silver	0.09051	0.0050	0.1	0	90.5	80-120	0			

LCSD		Sample ID: LCSD-36367-36367				Units: mg/L		Analysis Date: 10/11/2011 03:50 PM		
Client ID:		Run ID: ICPMS2_111011A				SeqNo: 1771538		Prep Date: 10/11/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1018	0.0050	0.1	0	102	80-120	0.1021	0.294	20	
Barium	0.1079	0.0050	0.1	0	108	80-120	0.106	1.78	20	
Cadmium	0.1025	0.0020	0.1	0	102	80-120	0.1006	1.87	20	
Chromium	0.1028	0.0050	0.1	0	103	80-120	0.1025	0.292	20	
Lead	0.1079	0.0050	0.1	0	108	80-120	0.1051	2.63	20	
Selenium	0.1038	0.0050	0.1	0	104	80-120	0.1023	1.46	20	
Silver	0.09093	0.0050	0.1	0	90.9	80-120	0.09051	0.463	20	

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **36367** Instrument ID **ICPMS2** Method: **SW6020A**

MS		Sample ID: 1110327-02CMS				Units: mg/L		Analysis Date: 10/11/2011 04:34 PM		
Client ID:		Run ID: ICPMS2_111011A				SeqNo: 1771544		Prep Date: 10/11/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1025	0.0050	0.1	0.0005353	102	80-120	0			
Barium	0.1876	0.0050	0.1	0.07881	109	80-120	0			
Cadmium	0.1003	0.0020	0.1	0.00004137	100	80-120	0			
Chromium	0.103	0.0050	0.1	0.0005621	102	80-120	0			
Lead	0.1055	0.0050	0.1	0.0002353	105	80-120	0			
Selenium	0.1009	0.0050	0.1	0.0002892	101	80-120	0			
Silver	0.08652	0.0050	0.1	0.000004622	86.5	80-120	0			

MSD		Sample ID: 1110327-02CMSD				Units: mg/L		Analysis Date: 10/11/2011 04:39 PM		
Client ID:		Run ID: ICPMS2_111011A				SeqNo: 1771545		Prep Date: 10/11/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1026	0.0050	0.1	0.0005353	102	80-120	0.1025	0.0975	20	
Barium	0.1853	0.0050	0.1	0.07881	106	80-120	0.1876	1.23	20	
Cadmium	0.1001	0.0020	0.1	0.00004137	100	80-120	0.1003	0.2	20	
Chromium	0.1015	0.0050	0.1	0.0005621	101	80-120	0.103	1.47	20	
Lead	0.1068	0.0050	0.1	0.0002353	107	80-120	0.1055	1.22	20	
Selenium	0.1023	0.0050	0.1	0.0002892	102	80-120	0.1009	1.38	20	
Silver	0.08637	0.0050	0.1	0.000004622	86.4	80-120	0.08652	0.174	20	

The following samples were analyzed in this batch: 1110301-03A

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **36600** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK		Sample ID: MBLK-36600-36600				Units: mg/Kg		Analysis Date: 10/18/2011 01:11 AM		
Client ID:		Run ID: ICPMS1_111017A				SeqNo: 1779741		Prep Date: 10/17/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	0.1062	0.25								J
Cadmium	0.00188	0.10								J
Chromium	0.01572	0.25								J
Copper	0.03684	0.25								J
Lead	0.02463	0.25								J
Nickel	0.00913	0.25								J
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	0.1678	0.50								J

LCS		Sample ID: LCS-36600-36600				Units: mg/Kg		Analysis Date: 10/18/2011 01:59 AM		
Client ID:		Run ID: ICPMS1_111017A				SeqNo: 1779746		Prep Date: 10/17/2011		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cadmium	4.038	0.20	5	0	80.8	80-120	0			
Chromium	4.084	0.50	5	0	81.7	80-120	0			
Copper	4.143	0.50	5	0	82.9	80-120	0			
Lead	4.003	0.50	5	0	80.1	80-120	0			
Nickel	4.113	0.50	5	0	82.3	80-120	0			

LCS		Sample ID: LCS-36600-36600				Units: mg/Kg		Analysis Date: 10/18/2011 05:16 PM		
Client ID:		Run ID: ICPMS1_111018A				SeqNo: 1781150		Prep Date: 10/17/2011		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.773	0.50	5	0	95.5	80-120	0			
Barium	4.93	0.50	5	0	98.6	80-120	0			
Selenium	4.646	0.50	5	0	92.9	80-120	0			
Silver	5.196	0.50	5	0	104	80-120	0			
Zinc	4.789	1.0	5	0	95.8	80-120	0			

LCSD		Sample ID: LCSD-36600-36600				Units: mg/Kg		Analysis Date: 10/18/2011 02:04 AM		
Client ID:		Run ID: ICPMS1_111017A				SeqNo: 1779747		Prep Date: 10/17/2011		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cadmium	4.048	0.20	5	0	81	80-120	4.038	0.247	20	
Chromium	4.042	0.50	5	0	80.8	80-120	4.084	1.03	20	
Copper	4.106	0.50	5	0	82.1	80-120	4.143	0.897	20	
Lead	4.019	0.50	5	0	80.4	80-120	4.003	0.399	20	
Nickel	4.079	0.50	5	0	81.6	80-120	4.113	0.83	20	

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **36600** Instrument ID **ICPMS1** Method: **SW6020A**

LCSD		Sample ID: LCSD-36600-36600				Units: mg/Kg		Analysis Date: 10/18/2011 05:21 PM		
Client ID:		Run ID: ICPMS1_111018A				SeqNo: 1781151		Prep Date: 10/17/2011		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.838	0.50	5	0	96.8	80-120	4.773	1.35	20	
Barium	5.127	0.50	5	0	103	80-120	4.93	3.92	20	
Selenium	4.79	0.50	5	0	95.8	80-120	4.646	3.05	20	
Silver	5.35	0.50	5	0	107	80-120	5.196	2.92	20	
Zinc	4.982	1.0	5	0	99.6	80-120	4.789	3.95	20	

MS		Sample ID: 1110529-01BMS				Units: mg/Kg		Analysis Date: 10/18/2011 03:34 AM		
Client ID:		Run ID: ICPMS1_111017A				SeqNo: 1779762		Prep Date: 10/17/2011		DF: 4
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	16.13	1.7	8.46	8.974	84.6	80-120	0			
Barium	62.74	1.7	8.46	53.93	104	80-120	0			O
Cadmium	7.347	0.68	8.46	0.1705	84.8	80-120	0			
Chromium	12.37	1.7	8.46	5.738	78.4	80-120	0			S
Copper	12.4	1.7	8.46	6.006	75.6	80-120	0			S
Lead	13.72	1.7	8.46	7.399	74.7	80-120	0			S
Nickel	12.92	1.7	8.46	6.544	75.3	80-120	0			S
Selenium	7.607	1.7	8.46	0.257	86.9	80-120	0			
Silver	6.748	1.7	8.46	0.007493	79.7	80-120	0			S
Zinc	34.25	3.4	8.46	29.12	60.6	80-120	0			S

MSD		Sample ID: 1110529-01BMSD				Units: mg/Kg		Analysis Date: 10/18/2011 03:39 AM		
Client ID:		Run ID: ICPMS1_111017A				SeqNo: 1779763		Prep Date: 10/17/2011		DF: 4
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	14.96	1.6	8	8.974	74.8	80-120	16.13	7.54	25	S
Barium	60.8	1.6	8	53.93	85.9	80-120	62.74	3.14	25	O
Cadmium	6.995	0.64	8	0.1705	85.3	80-120	7.347	4.9	25	
Chromium	11.96	1.6	8	5.738	77.8	80-120	12.37	3.35	25	S
Copper	12.43	1.6	8	6.006	80.3	80-120	12.4	0.237	25	
Lead	13.1	1.6	8	7.399	71.3	80-120	13.72	4.61	25	S
Nickel	12.41	1.6	8	6.544	73.3	80-120	12.92	4.01	25	S
Selenium	7.04	1.6	8	0.257	84.8	80-120	7.607	7.75	25	
Silver	6.291	1.6	8	0.007493	78.5	80-120	6.748	7	25	S
Zinc	33.82	3.2	8	29.12	58.8	80-120	34.25	1.24	25	S

The following samples were analyzed in this batch:

1110301-01B

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **36357** Instrument ID **SVMS7** Method: **SW8270**

MBLK		Sample ID: SBLKS1-36357-36357				Units: µg/Kg		Analysis Date: 10/12/2011 05:30 PM		
Client ID:		Run ID: SVMS7_111012A				SeqNo: 1773164		Prep Date: 10/11/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	30								
Anthracene	ND	30								
Benzo(a)anthracene	ND	30								
Benzo(a)pyrene	ND	30								
Benzo(b)fluoranthene	ND	30								
Benzo(g,h,i)perylene	ND	30								
Benzo(k)fluoranthene	ND	30								
Chrysene	ND	30								
Dibenzo(a,h)anthracene	ND	30								
Fluoranthene	ND	30								
Fluorene	ND	30								
Indeno(1,2,3-cd)pyrene	ND	30								
Naphthalene	ND	30								
Pyrene	ND	30								
Surr: 2,4,6-Tribromophenol	1257	0	1667	0	75.4	34-140		0		
Surr: 2-Fluorobiphenyl	1264	0	1667	0	75.8	12-100		0		
Surr: 2-Fluorophenol	1368	0	1667	0	82.1	33-117		0		
Surr: 4-Terphenyl-d14	1241	0	1667	0	74.5	25-137		0		
Surr: Nitrobenzene-d5	1260	0	1667	0	75.6	37-107		0		
Surr: Phenol-d6	1385	0	1667	0	83.1	40-106		0		

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **36357** Instrument ID **SVMS7** Method: **SW8270**

LCS		Sample ID: SLCSS1-36357-36357				Units: µg/Kg		Analysis Date: 10/12/2011 05:59 PM		
Client ID:		Run ID: SVMS7_111012A				SeqNo: 1773165		Prep Date: 10/11/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1081	30	1333	0	81.1	45-110	0			
Anthracene	1227	30	1333	0	92.1	55-105	0			
Benzo(a)anthracene	1308	30	1333	0	98.1	50-110	0			
Benzo(a)pyrene	1228	30	1333	0	92.1	50-110	0			
Benzo(b)fluoranthene	1105	30	1333	0	82.9	45-115	0			
Benzo(g,h,i)perylene	1398	30	1333	0	105	40-125	0			
Benzo(k)fluoranthene	1009	30	1333	0	75.7	45-115	0			
Chrysene	1078	30	1333	0	80.8	55-110	0			
Dibenzo(a,h)anthracene	1324	30	1333	0	99.3	40-125	0			
Fluoranthene	1225	30	1333	0	91.9	55-115	0			
Fluorene	1235	30	1333	0	92.6	50-110	0			
Indeno(1,2,3-cd)pyrene	1305	30	1333	0	97.9	40-120	0			
Naphthalene	1171	30	1333	0	87.8	40-105	0			
Pyrene	1112	30	1333	0	83.4	45-125	0			
Surr: 2,4,6-Tribromophenol	1292	0	1667	0	77.5	34-140	0			
Surr: 2-Fluorobiphenyl	1212	0	1667	0	72.7	12-100	0			
Surr: 2-Fluorophenol	1216	0	1667	0	72.9	33-117	0			
Surr: 4-Terphenyl-d14	1342	0	1667	0	80.5	25-137	0			
Surr: Nitrobenzene-d5	1213	0	1667	0	72.8	37-107	0			
Surr: Phenol-d6	1185	0	1667	0	71.1	40-106	0			

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **36357** Instrument ID **SVMS7** Method: **SW8270**

LCSD		Sample ID: SLCSDS1-36357-36357				Units: µg/Kg		Analysis Date: 10/12/2011 06:27 PM		
Client ID:		Run ID: SVMS7_111012A				SeqNo: 1773166		Prep Date: 10/11/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1014	30	1333	0	76.1	45-110	1081	6.43	25	
Anthracene	1191	30	1333	0	89.3	55-105	1227	3.03	25	
Benzo(a)anthracene	1303	30	1333	0	97.8	50-110	1308	0.332	25	
Benzo(a)pyrene	1190	30	1333	0	89.3	50-110	1228	3.12	25	
Benzo(b)fluoranthene	1073	30	1333	0	80.5	45-115	1105	2.91	25	
Benzo(g,h,i)perylene	1342	30	1333	0	101	40-125	1398	4.11	25	
Benzo(k)fluoranthene	978.3	30	1333	0	73.4	45-115	1009	3.05	25	
Chrysene	1067	30	1333	0	80	55-110	1078	0.995	25	
Dibenzo(a,h)anthracene	1279	30	1333	0	95.9	40-125	1324	3.46	25	
Fluoranthene	1192	30	1333	0	89.4	55-115	1225	2.79	25	
Fluorene	1164	30	1333	0	87.3	50-110	1235	5.92	25	
Indeno(1,2,3-cd)pyrene	1258	30	1333	0	94.4	40-120	1305	3.62	25	
Naphthalene	1060	30	1333	0	79.5	40-105	1171	9.95	25	
Pyrene	1096	30	1333	0	82.2	45-125	1112	1.45	25	
<i>Surr: 2,4,6-Tribromophenol</i>	<i>1249</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>74.9</i>	<i>34-140</i>	<i>1292</i>	<i>3.39</i>	<i>40</i>	
<i>Surr: 2-Fluorobiphenyl</i>	<i>1100</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>66</i>	<i>12-100</i>	<i>1212</i>	<i>9.63</i>	<i>40</i>	
<i>Surr: 2-Fluorophenol</i>	<i>1132</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>67.9</i>	<i>33-117</i>	<i>1216</i>	<i>7.16</i>	<i>40</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>1323</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>79.4</i>	<i>25-137</i>	<i>1342</i>	<i>1.38</i>	<i>40</i>	
<i>Surr: Nitrobenzene-d5</i>	<i>1124</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>67.4</i>	<i>37-107</i>	<i>1213</i>	<i>7.62</i>	<i>40</i>	
<i>Surr: Phenol-d6</i>	<i>1098</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>65.9</i>	<i>40-106</i>	<i>1185</i>	<i>7.68</i>	<i>40</i>	

The following samples were analyzed in this batch: | 1110301-01B |

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **R95945** Instrument ID **VMS6** Method: **SW8260**

MBLK Sample ID: VBLKW2-111011-R95945				Units: µg/L			Analysis Date: 10/12/2011 01:58 AM			
Client ID:		Run ID: VMS6_111011B		SeqNo: 1771394		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
Hexane	ND	5.0								
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										
Surr: 4-Bromofluorobenzene										
Surr: Dibromofluoromethane										
Surr: Toluene-d8										

LCS Sample ID: VLCSW2-111011-R95945				Units: µg/L			Analysis Date: 10/12/2011 12:44 PM			
Client ID:		Run ID: VMS6_111011B		SeqNo: 1771395		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.51	1.0	20	0	103	80-120		0		
Ethylbenzene	20.11	1.0	20	0	101	75-125		0		
m,p-Xylene	39.9	2.0	40	0	99.8	75-130		0		
o-Xylene	19.54	1.0	20	0	97.7	80-120		0		
Toluene	20.34	1.0	20	0	102	75-120		0		
Xylenes, Total	59.44	3.0	60	0	99.1	75-130		0		
Surr: 1,2-Dichloroethane-d4										
Surr: 4-Bromofluorobenzene										
Surr: Dibromofluoromethane										
Surr: Toluene-d8										

LCSD Sample ID: VLCSDW2-111011-R95945				Units: µg/L			Analysis Date: 10/12/2011 01:09 AM			
Client ID:		Run ID: VMS6_111011B		SeqNo: 1771393		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.92	1.0	20	0	94.6	80-120	20.51	8.06	30	
Ethylbenzene	18.77	1.0	20	0	93.8	75-125	20.11	6.89	30	
m,p-Xylene	37.8	2.0	40	0	94.5	75-130	39.9	5.41	30	
o-Xylene	18.08	1.0	20	0	90.4	80-120	19.54	7.76	30	
Toluene	18.72	1.0	20	0	93.6	75-120	20.34	8.29	30	
Xylenes, Total	55.88	3.0	60	0	93.1	75-130	59.44	6.17	30	
Surr: 1,2-Dichloroethane-d4										
Surr: 4-Bromofluorobenzene										
Surr: Dibromofluoromethane										
Surr: Toluene-d8										

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **R95945** Instrument ID **VMS6** Method: **SW8260**

MS					Sample ID: 1110322-06A MS			Units: µg/L		Analysis Date: 10/12/2011 10:44 AM	
Client ID:			Run ID: VMS6_111011B			SeqNo: 1772287		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	16.37	1.0	20	0	81.8	80-120	0				
Ethylbenzene	16.58	1.0	20	0	82.9	75-125	0				
m,p-Xylene	32.47	2.0	40	0	81.2	75-130	0				
o-Xylene	15.4	1.0	20	0	77	80-120	0			S	
Toluene	16.56	1.0	20	0	82.8	75-120	0				
Xylenes, Total	47.87	3.0	60	0	79.8	75-130	0				
Surr: 1,2-Dichloroethane-d4	108.5	0	100	0	109	70-120	0				
Surr: 4-Bromofluorobenzene	108.3	0	100	0	108	75-120	0				
Surr: Dibromofluoromethane	105.1	0	100	0	105	85-115	0				
Surr: Toluene-d8	101.4	0	100	0	101	85-120	0				

MSD				Sample ID: 1110322-06A MSD			Units: µg/L		Analysis Date: 10/12/2011 11:09 AM		
Client ID:			Run ID: VMS6_111011B			SeqNo: 1772289		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	19.01	1.0	20	0	95	80-120	16.37	14.9	30		
Ethylbenzene	18.24	1.0	20	0	91.2	75-125	16.58	9.53	30		
m,p-Xylene	36.6	2.0	40	0	91.5	75-130	32.47	12	30		
o-Xylene	17.59	1.0	20	0	88	80-120	15.4	13.3	30		
Toluene	19.29	1.0	20	0	96.4	75-120	16.56	15.2	30		
Xylenes, Total	54.19	3.0	60	0	90.3	75-130	47.87	12.4	30		
Surr: 1,2-Dichloroethane-d4	103.6	0	100	0	104	70-120	108.5	4.6	30		
Surr: 4-Bromofluorobenzene	103.7	0	100	0	104	75-120	108.3	4.33	30		
Surr: Dibromofluoromethane	103	0	100	0	103	85-115	105.1	2.04	30		
Surr: Toluene-d8	102.4	0	100	0	102	85-120	101.4	1.06	30		

The following samples were analyzed in this batch:

1110301-01A 1110301-02C

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **36700** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK	Sample ID: MBLK-36700-36700					Units: mg/Kg		Analysis Date: 10/19/2011 05:00 PM		
Client ID:	Run ID: WETCHEM_111019I				SeqNo: 1782952		Prep Date: 10/19/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.50

LCS	Sample ID: LCS-36700-36700					Units: mg/Kg		Analysis Date: 10/19/2011 05:00 PM		
Client ID:	Run ID: WETCHEM_111019I				SeqNo: 1782950		Prep Date: 10/19/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.82 0.50 2 0 91 75-110 0

LCSD	Sample ID: LCSD-36700-36700					Units: mg/Kg		Analysis Date: 10/19/2011 05:00 PM		
Client ID:	Run ID: WETCHEM_111019I				SeqNo: 1782951		Prep Date: 10/19/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.872 0.50 2 0 93.6 75-110 1.82 2.82 20

MS	Sample ID: 1110496-18B MS					Units: mg/Kg		Analysis Date: 10/19/2011 05:00 PM		
Client ID:	Run ID: WETCHEM_111019I				SeqNo: 1782946		Prep Date: 10/19/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.142 0.49 1.976 0.6429 25.3 60-130 0 S

MSD	Sample ID: 1110496-18B MSD					Units: mg/Kg		Analysis Date: 10/19/2011 05:00 PM		
Client ID:	Run ID: WETCHEM_111019I				SeqNo: 1782947		Prep Date: 10/19/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.245 0.49 1.976 0.6429 30.5 60-130 1.142 8.61 30 S

The following samples were analyzed in this batch:

1110301-01A

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **R95839** Instrument ID **WETCHEM** Method: **D92**

LCS				Sample ID: LCS-R95839-R95839				Units: °F			Analysis Date: 10/10/2011 10:30 AM		
Client ID:				Run ID: WETCHEM_111010D				SeqNo: 1768221		Prep Date:		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Flashpoint, Open-cup		83	0	81	0	102	97-103	0					

The following samples were analyzed in this batch:

1110301-02A

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **R95862** Instrument ID **WETCHEM** Method: **SW9045D**

DUP					Sample ID: 1110301-02B DUP			Units: s.u.			Analysis Date: 10/10/2011 08:50 AM		
Client ID: Stockpile					Run ID: WETCHEM_111010H			SeqNo: 1768929		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
pH	8.88	0	0	0	0	0-0	8.88	0	20				

The following samples were analyzed in this batch:

1110301-02B

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **R95904** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS1-R95904				Units: % of sample			Analysis Date: 10/10/2011 04:53 PM		
Client ID:	Run ID: MOIST_111010E				SeqNo: 1770303			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture ND 0.050

LCS	Sample ID: LCS-R95904				Units: % of sample			Analysis Date: 10/10/2011 04:53 PM		
Client ID:	Run ID: MOIST_111010E				SeqNo: 1770302			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 1110275-02ADUP1				Units: % of sample			Analysis Date: 10/10/2011 04:53 PM		
Client ID:	Run ID: MOIST_111010E				SeqNo: 1770280			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 16.04 0.050 0 0 0 0-0 15.1 6.04 20

DUP	Sample ID: 1110275-02ADUP2				Units: % of sample			Analysis Date: 10/10/2011 04:53 PM		
Client ID:	Run ID: MOIST_111010E				SeqNo: 1770281			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 15.81 0.050 0 0 0 0-0 15.1 4.59 20

DUP	Sample ID: 1110303-01BDUP1				Units: % of sample			Analysis Date: 10/10/2011 04:53 PM		
Client ID:	Run ID: MOIST_111010E				SeqNo: 1770295			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 66.83 0.050 0 0 0 0-0 73.83 9.95 20

DUP	Sample ID: 1110303-01BDUP2				Units: % of sample			Analysis Date: 10/10/2011 04:53 PM		
Client ID:	Run ID: MOIST_111010E				SeqNo: 1770296			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 73.96 0.050 0 0 0 0-0 73.83 0.176 20

The following samples were analyzed in this batch:

1110301-02B

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **R95954** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS1-R95954					Units: % of sample			Analysis Date: 10/11/2011 12:36 PM		
Client ID:		Run ID: MOIST_111011A			SeqNo: 1771977		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture ND 0.050

LCS	Sample ID: LCS-R95954					Units: % of sample			Analysis Date: 10/11/2011 12:36 PM		
Client ID:			Run ID: MOIST_111011A			SeqNo: 1771975		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 1110303-05BDUP1					Units: % of sample			Analysis Date: 10/11/2011 12:36 PM		
Client ID:		Run ID: MOIST_111011A			SeqNo: 1771962		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 58.45 0.050 0 0 0 0-0 57.19 2.18 20

DUP	Sample ID: 1110303-05BDUP2					Units: % of sample		Analysis Date: 10/11/2011 12:36 PM		
Client ID:		Run ID: MOIST_111011A			SeqNo: 1771963		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 58.23 0.050 0 0 0 0-0 57.19 1.8 20

DUP	Sample ID: 1110347-02ADUP					Units: % of sample		Analysis Date: 10/11/2011 12:36 PM		
Client ID:		Run ID: MOIST_111011A			SeqNo: 1771970		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 3.1 0.050 0 0 0 0-0 3.11 0.322 20

The following samples were analyzed in this batch:

1110301-01A	1110301-04A	1110301-05A
1110301-06A		

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **R96037** Instrument ID **WETCHEM** Method: **SW7.3.4.2**

MBLK		Sample ID: WBLKW1-101311-R96037				Units: mg/Kg		Analysis Date: 10/13/2011 01:45 PM		
Client ID:		Run ID: WETCHEM_111013C				SeqNo: 1774223		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide, Reactive	ND	40								

The following samples were analyzed in this batch:

1110301-02B

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

Client: HRL Compliance Solutions
Work Order: 1110301
Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

QC BATCH REPORT

Batch ID: **R96038** Instrument ID **WETCHEM** Method: **SW7.3.3.2**

MBLK		Sample ID: WBLKW1-101311-R96038				Units: mg/Kg		Analysis Date: 10/13/2011 01:45 PM		
Client ID:		Run ID: WETCHEM_111013D				SeqNo: 1774240		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Reactive ND 40

LCS		Sample ID: WLCSW1-101311-R96038				Units: mg/Kg		Analysis Date: 10/13/2011 01:45 PM		
Client ID:		Run ID: WETCHEM_111013D				SeqNo: 1774241		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Reactive 249.6 40 250 0 99.8 75-125 0

LCSD		Sample ID: WLCSDW1-101311-R96038				Units: mg/Kg		Analysis Date: 10/13/2011 01:45 PM		
Client ID:		Run ID: WETCHEM_111013D				SeqNo: 1774246		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Reactive 249.6 40 250 0 99.8 75-125 249.6 0 35

MS		Sample ID: 1110343-02A MS				Units: mg/Kg		Analysis Date: 10/13/2011 01:45 PM		
Client ID:		Run ID: WETCHEM_111013D				SeqNo: 1774244		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Reactive 249.6 40 250 0 99.8 50-150 0

MSD		Sample ID: 1110343-02A MSD				Units: mg/Kg		Analysis Date: 10/13/2011 01:45 PM		
Client ID:		Run ID: WETCHEM_111013D				SeqNo: 1774245		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Reactive 249.6 40 250 0 99.8 50-150 249.6 0 35

The following samples were analyzed in this batch:

1110301-02B

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



ALS Laboratory Group

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

Chain-of-Custody

Form 202r8

WORKORDER
#

1110301

PAGE

1 of 1

PROJECT NAME	Koch Exploration 6-26 Pit Remediation	SAMPLER	KRIS ROWE	DATE	10/7/2011	TURNAROUND	STD	DISPOSAL	By Lab or Return to Client															
PROJECT No.	11-261	SITE ID																						
COMPANY NAME	HRL COMPLIANCE SOLUTIONS Inc.	EDD FORMAT																						
SEND REPORT TO	KRIS ROWE	PURCHASE ORDER																						
ADDRESS	744 HORIZON CT SUITE 140	BILL TO COMPANY																						
CITY / STATE / ZIP	GRAND JUNCTION CO 81506	INVOICE ATTN TO																						
PHONE	970-243-3271	ADDRESS																						
FAX	970-243-3280	CITY / STATE / ZIP																						
E-MAIL	KROWE@HRLCOMP.COM	PHONE																						
		FAX																						
		E-MAIL																						
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	DRO	GRO	910-1 TOTAL MEATLS	SEMI VOLS - PAH	SAR / EC / PH	PAINT FILTER	INGITABILITY	REACTIVITY	CORROSIONITY	TCLP - METALS	TOTAL BTEX	METHANOL	HEXANE	SEMI VOLS - PAH	ARSENIC	
1	Pit Bottom Confirmation	SO	10/6/2011	11:00	2			X	X	X	?	?	?											
2/3	Stockpile	SO	10/6/2011	12:00	5			X	X					X	X	X	X	X	X	X	X	?		
4	BKGD 1	SO	10/6/2011	12:10	2								X										X	
5	BKGD 2	SO	10/6/2011	12:15	1																		X	
6	BKGD 3	SO	10/6/2011	12:20	1																		X	

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

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)
PIT BOTTOM - If DRO + GRO exceeds 500 mg/kg, do NOT run Metals, PAH, SAR / EC / ph. If DRO + GRO is less than 500 mg/kg, complete the remaining analysis.	<input type="checkbox"/> LEVEL II (Standard QC)
	<input type="checkbox"/> LEVEL III (Std QC + forms)
	<input type="checkbox"/> LEVEL IV (Std QC + forms + raw data)
STOCKPILE - IF TPH IS >5000 MG/KG, RUN PAH	
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035	

SIGNATURE	PRINTED NAME	DATE	TIME
<i>[Signature]</i>	Kris Rowe	10/7/2011	17:00
RECEIVED BY <i>[Signature]</i>	<i>[Signature]</i>	10/8/11	1030
RECEIVED BY			
RECEIVED BY			
RECEIVED BY			

3rd C



Environmental

Subcontractor:

A & L Great Lakes Agricultural La
3505 Conestoga Dr

TEL: (260) 483-4759

FAX: (260) 483-5274

Ft. Wayne, IN 46808

Acct #: 91000

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Date: **10-Oct-11**

COC ID: **3188**

Due Date **14-Oct-11**

Salesperson

Debbie Fazio

Customer Information		Project Information		Parameter/Method Request for Analysis										
Purchase Order	20-122010968	Project Name	1110301	A	Subcontracted Analyses (SUBCONTRACT)									
Work Order		Project Number		B										
Company Name	ALS Group USA, Corp	Bill To Company	ALS Group USA, Corp	C										
Send Report To	Ann Preston	Inv Attn	Accounts Payable	D										
Address	3352 128th Avenue	Address	3352 128th Avenue	E										
				F										
City/State/Zip	Holland, Michigan 49424-9263	City/State/Zip	Holland, Michigan 49424-9263	G										
Phone	(616) 399-6070	Phone	(616) 399-6070	H										
Fax	(616) 399-6185	Fax	(616) 399-6185	I										
eMail Address	ann.preston@alsglobal.com	eMail CC		J										
Sample ID	Matrix	Collection Date 24hr	Bottle	A	B	C	D	E	F	G	H	I	J	
1110301-04B (BKGD 1)	Soil	6/Oct/2011 12:10	(1) MISC	X										

Comments:

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

Relinquished by:

Date/Time

Received by:

Date/Time

Cooler IDs

Report/QC Level

Std

Relinquished by:

Date/Time

Received by:

Date/Time

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 08-Oct-11 10:30

Work Order: 1110301

Received by: TBB

Checklist completed by Tom Bramish
eSignature

08-Oct-11
Date

Reviewed by: Alex Csaszar
eSignature

10-Oct-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>3.9 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:

Fe

Fe

CUSTODY SEAL

DATE

SIGNATURE

QEC

Quality Environmental Containers
800-255-3950 • 304-255-3900FedEx **NEW Package**
Express **US Airbill**FedEx
Tracking
Number

8768 1701 9859

0200 Form
ID No.

FedEx Retrieval Copy

1 From Date 10/7/11 Sender's FedEx Account Number 8768 1701 9859

Sender's Name Kris Rane Phone 970 243 3271

Company HBL Compliance Solutions

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

City Grand Junction State CO ZIP 81506

2 Your Internal Billing Reference

3 To Recipient's Name Sample Receiving Phone 616 399 6070

Company AIS Group

Address 3352 128th AVE Dept./Floor/Suite/Room 01

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

Address Holland State MI ZIP 49424

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

4 Express Package Service

* To most locations.

NOTE: Service order has changed. Please select carefully.

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. Fee applies 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.

06 ☐ Dry Ice
Dry Ice, 9 UN 1845 _____ kg

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

☐ Cargo Aircraft Only

7 Payment Bill to:

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

Obtain recip. Acct. No.

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

Total Packages Total Weight

Credit Card Auth.

fedex.com 1.800.GoFedEx 1.800.463.3339

fedex.com 1.800.GoFedEx 1.800.463.3339

Appendix 2: Background Raw Analytical Data

ALS Group USA, Corp**Date:** 20-Oct-11**Client:** HRL Compliance Solutions**Project:** Koch Exploration 6-26 Pit Remed 11-261 10/6/11**Work Order:** 1110301**Sample ID:** BKGD 1**Lab ID:** 1110301-04**Collection Date:** 10/6/2011 12:10 PM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS						
Arsenic	5.4		SW6020A 0.98	mg/Kg-dry	Prep Date: 10/10/2011 2	Analyst: CES 10/13/2011 05:07 PM
SUBCONTRACTED ANALYSES						
Subcontracted Analyses	Rcvd 10/13/11		SUBCONTRACT as noted		1	Analyst: A&LGL 10/13/2011
MOISTURE						
Moisture	5.0		A2540 G 0.050	% of sample	1	Analyst: CG 10/11/2011 12:36 PM

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

ALS Group USA, Corp

Date: 20-Oct-11

Client: HRL Compliance Solutions

Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

Work Order: 1110301

Sample ID: BKGD 2

Lab ID: 1110301-05

Collection Date: 10/6/2011 12:15 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 10/10/2011	Analyst: CES
Arsenic	2.4		0.88	mg/Kg-dry	2	10/13/2011 05:12 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	1.8		0.050	% of sample	1	10/11/2011 12:36 PM

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

ALS Group USA, Corp

Date: 20-Oct-11

Client: HRL Compliance Solutions

Project: Koch Exploration 6-26 Pit Remed 11-261 10/6/11

Work Order: 1110301

Sample ID: BKGD 3

Lab ID: 1110301-06

Collection Date: 10/6/2011 12:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 10/10/2011	Analyst: CES
Arsenic	4.1		0.87	mg/Kg-dry	2	10/13/2011 05:18 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	4.9		0.050	% of sample	1	10/11/2011 12:36 PM

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

Report Number: F11284-0692

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: 1110301

DATE RECEIVED: 10/11/2011

DATE REPORTED: 10/13/2011

PAGE: 1

P.O. NUMBER: 20-122010968

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
51879	04B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	1.47	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	295	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	90	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	195	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	2.5	-	USDA Handbook 60

Attachment 3: Disposal Manifests from Wray Gulch Landfill

RIO BLANCO COUNTY

NON-HAZARDOUS SPECIAL WASTE MANIFEST

13980

(Manifest is to be given to the landfill operator upon delivery of each load.)

GENERATOR

Generator:

Koch Exploration

Load #:

1

Address:

9777 Pyramid Court St 210
Englewood, CO 80112

Site Location:

Federal 6-26 Well Pad (RBC)

Site Address:

Federal 6-26 Well Pad (RBC)

Phone:

720-201-4941

Site Phone:

505-320-7799

Description of Waste	Special Waste ID#	Shipped Qty.	Unit of Measure	Container Type
Hydrocarbon Impacted soil	111027	12 yds	yds	End Dump

I hereby certify that the above-described waste is not a hazardous waste as defined by 40 CFR Part 261 or by any applicable state law. I further certify that the waste has been fully and accurately described, classified, and containerized, and is in proper condition for transportation according to applicable local, state, and federal regulations.

John Clark

Generator Authorized Agent Name (Print)

John Clark

Signature

11-1-2011

Scheduled Delivery Date

TRANSPORTER

Transporter Name:

Cooks Trucking

Address:

36607 Hwy 64
Meeker, CO 81641

phone

675-8716

I hereby acknowledge receipt of the above-described waste for transport from the generator site listed above.

Driver Signature

Shipment Date

Roger Coombs 11/1/11

Driver Name:

Roger Coombs

Truck Number:

D-1

Truck Type:

Dump Truck

I hereby acknowledge that the above-described waste was received from the generator site and was transported without incident to the destination listed below.

Driver Signature

Delivery Date

Roger Coombs 11/1/11

DESTINATION

Site Name:

Phone Number:

Address:

Disposal Location:

I hereby acknowledge receipt of the above-described waste.

Name of Authorized Agent (Print)

Signature

Receipt Date

Dixie Massey

D Massey

11 / 1 / 11

Special Waste Manifest Form (02/05)

RIO BLANCO COUNTY

NON-HAZARDOUS SPECIAL WASTE MANIFEST

13983

(Manifest is to be given to the landfill operator upon delivery of each load.)

GENERATOR

Generator:

Address:

Phone:

Load #:

Site Location:

Site Address:

Site Phone:

Koch Exploration
9757 Pyramid Court Suite 210
Englewood CO 80112
720-201-4941

2
Federal 6-26 Well Pad (RBC)
Federal 6-26 Well Pad (RBC)
505-320-7799

Description of Waste	Special Waste ID#	Shipped Qty.	Unit of Measure	Container Type
Hydrocarbon Impacted Soil	111027	12 yds	yds	End Dump

I hereby certify that the above-described waste is not a hazardous waste as defined by 40 CFR Part 261 or by any applicable state law. I further certify that the waste has been fully and accurately described, classified, and containerized, and is in proper condition for transportation according to applicable local, state, and federal regulations.

John Clark
Generator Authorized Agent Name (Print)

John Clark
Signature
11-1-2011
Scheduled Delivery Date

TRANSPORTER

Transporter Name:

Address:

Mileage:

I hereby acknowledge receipt of the above-described waste for transport from the generator site listed above.

Roger Coombs
Driver Signature
11/1/11
Shipment Date

Driver Name:

Truck Number:

Truck Type:

I hereby acknowledge that the above-described waste was received from the generator site and was transported without incident to the destination listed below.

Roger Coombs
Driver Signature
11/1/11
Delivery Date

DESTINATION

Site Name:

Address:

Disposal Location:

I hereby acknowledge receipt of the above-described waste.

Dixie Massey
Name of Authorized Agent (Print)

Phone Number:

Dixie Massey
Signature
11-1-11
Receipt Date

Special Waste Manifest Form (02/05)

NON-HAZARDOUS SPECIAL WASTE MANIFEST

13986

(Manifest is to be given to the landfill operator upon delivery of each load.)

GENERATOR

Generator: Koch Exploration
 Address: 9777 Pyramid Court Suite 210
Englewood CO 80112
 Phone: 720-201-4941

Load #: 3
 Site Location: Federal 026 Well Pad (RBC)
 Site Address: Federal 026 Well Pad (RBC)
 Site Phone: _____

Description of Waste	Special Waste ID#	Shipped Qty.	Unit of Measure	Container Type
Hydrocarbon Impacted Soil	111027	12 yds	Yds	End Dump

I hereby certify that the above-described waste is not a hazardous waste as defined by 40 CFR Part 261 or by any applicable state law. I further certify that the waste has been fully and accurately described, classified, and containerized, and is in proper condition for transportation according to applicable local, state, and federal regulations.

John Clark
 Generator Authorized Agent Name (Print)

[Signature] 11-1-2011
 Signature Scheduled Delivery Date

TRANSPORTER

Transporter Name: Cooke Trucking
 Address: 36607 Hwy 64
Meeker Co 81641 phone 675-8716

Driver Name: Roger Coomb
 Truck Number: D-1
 Truck Type: Dump tr.

I hereby acknowledge receipt of the above-described waste for transport from the generator site listed above.

Roger Coomb 11/1/11
 Driver Signature Shipment Date

I hereby acknowledge that the above-described waste was received from the generator site and was transported without incident to the destination listed below.

Roger Coomb 11/1/11
 Driver Signature Delivery Date

DESTINATION

Site Name: _____

Phone Number: _____

Address: _____

Disposal Location: _____

I hereby acknowledge receipt of the above-described waste.

Dixie Massey
 Name of Authorized Agent (Print)

[Signature] 11 1 11
 Signature Receipt Date

Special Waste Manifest Form (02/05)

RIO BLANCO COUNTY

NON-HAZARDOUS SPECIAL WASTE MANIFEST

(Manifest is to be given to the landfill operator upon delivery of each load.)

13996

GENERATOR

Generator: Koch ExplorationLoad #: 4Address: 9777 Pyramid Court Suite 210
Englewood Co. 80112Site Location: Federal 6-26 well pad (RBC)Phone: 720-260-4941Site Address: Federal 6-26 well pad (RBC)

Site Phone: _____

Description of Waste	Special Waste ID#	Shipped Qty.	Unit of Measure	Container Type
Hydro Carbon Impacted soil	111027	12	yd.	End Pump

I hereby certify that the above-described waste is not a hazardous waste as defined by 40 CFR Part 261 or by any applicable state law. I further certify that the waste has been fully and accurately described, classified, and containerized, and is in proper condition for transportation according to applicable local, state, and federal regulations.

John Clark
Generator Authorized Agent Name (Print)

[Signature] 11-1-2011
Signature Scheduled Delivery Date

TRANSPORTER

Transporter Name: Cooke TruckingDriver Name: Roger CoombsAddress: 36602 Hwy 64Truck Number: D-1Meeker Co. 81641 phone 675-8716Truck Type: Dump truck

I hereby acknowledge receipt of the above-described waste for transport from the generator site listed above.

I hereby acknowledge that the above-described waste was received from the generator site and was transported without incident to the destination listed below.

Roger Coombs 11/1/11
Driver Signature Shipment Date

Roger Coombs 11/1/11
Driver Signature Delivery Date

DESTINATION

Site Name: _____

Phone Number: _____

Address: _____

Disposal Location: _____

I hereby acknowledge receipt of the above-described waste.

Sixie Massey
Name of Authorized Agent (Print)

[Signature] 11 1 11
Signature Receipt Date

Special Waste Manifest Form (02/05)