

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

NM 23006

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1. Type of Well

☐ Oil Well

☐ Gas Well

☒ Other Reserve Drilling Pit

2. Name of Operator

EGL Resources, Inc.

3a. Address

PO Box 10886 Midland, TX 79702

3b. Phone No. (include area code)

(432) 687-6560

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No.

Lusk "31" Federal Well #3

9. API Well No.

3002539593

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1880 FSL & 2080 FEL, Township 18 South, Range 32 East, Section 31, Unit J

11. Country or Parish, State

Lea Co., NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☒ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Re-seeding
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	of Drilling Reserve Pit
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

On November 22, 2011 a letter was sent to the Carlsbad BLM office to provided surface owner notification concerning the proposed closure of the drilling reserve pit. On April 16, 2012 the site was re-seeded with 46 lbs of BLM Mix No. 2 seed. Prior to seeding the area was disked, then seeded, followed by a final disking to provide the best opportunity for seed germination. Weather on the day of seeding was clear, approximately 70° F, with light winds. Photographs that document the seeding activity are provided as an attachment.

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)

Dale Littlejohn (dale@rthicksconsult.com)

Title Environmental Consultant

Signature

Dale Littlejohn

Date

7-6-12

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

July 19, 2012

Mr. Geoffrey Leking
NMOCD District
1625 French Drive
Hobbs, NM 88240
Via E-Mail

HOBBS OCD
AUG 07 2012
RECEIVED

RE: Lusk 31 Federal #3, EGL Resources, Closure Report

Dear Geoffrey:

Please find enclosed the information required.

- | | |
|--|-----------------------|
| • Proof of Closure Notice (surface owner and division) | Attachment 1 |
| • Proof of Deed Notice (required for on-site closure) | Federal Land- No deed |
| • Plot Plan (for on-site closures and temporary pits) | Attachment 2 |
| • Confirmation Sampling Analytical Results (if applicable) | Attachment 3 |
| • Waste Material Sampling Analytical Results | Attachment 4 |
| • Disposal Facility Name and Permit Number | Not Applicable |
| • Soil Backfilling and Cover Installation | Attachment 5 |
| • Re-vegetation Application Rates and Seeding Technique | Attachment 6 |
| • Site Reclamation (Photo Documentation) | Submit in 12 months |

On-site Closure Location:

Latitude 32.702464 Longitude -103.804039 NAD: ☐ 1927 ☒ 1983 (Google Earth)

As you know, the NMOCC is currently hearing arguments regarding revisions to the Pit Rule. One proposed revision is the elimination of a surface marker for the pit. Therefore, we propose to install any required surface marker after the seeds have had a chance to re-vegetate the site. We understand that OCD cannot formally release the site under the current Rule until we document re-vegetation. BLM cannot release the site from surveillance until such re-vegetation occurs. As shown above, please expect photos of re-vegetation in 12 months if required by Rules.

Sincerely,
R.T. Hicks Consultants, Ltd.



Randall T. Hicks
President

Copy: John Stark, EGL Resources

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

November 22, 2011

US Bureau of Land Management
Trisha Bad Bear
Jim Amos
620 E. Green Street
Carlsbad, NM 88220

RE: EGL Lusk 31 Federal #3, API 3002539593
Drilling Pit Closure Notice

HOBBS OCD

AUG 07 2012

RECEIVED

Ms. Bad Bear and Mr. Amos,

On September 2, 2011, NMOCD approved the revised closure plan for the drilling pit at the above-referenced well. We recently received laboratory analyses confirming that the residual drilling mud and cuttings at the above-referenced drilling pit meet the NMOCD standards for on-site trench burial. NMOCD Rules state:

- (1) The operator shall notify the surface owner by certified mail, return receipt requested, that the operator plans to close a temporary pit, a permanent pit, a below-grade tank or where the operator has approval for on-site closure. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance with this requirement.

The purpose of this letter is to meet the mandate of the above Rule by informing BLM that we intend to begin closing this pit on or about November 29, 2011. The closure will require several days. I plan to be at the site on November 24 or 25 to collect confirmatory samples and inspect the site. If this schedule changes, we will provide you with advance notice.

Sincerely,
R.T. Hicks Consultants, Ltd.



Randall T. Hicks
Principal

CC: John Stark, EGL Resources
Geoffrey Leking, NMOCD, Hobbs

Attachment 2 – Plan showing location of burial trench



Google Earth image 7/24/2011



In lieu of a plot plan, the Google Earth image 3/2/2012 with location of burial trench identified provides a better representation of the trench location.

Attachment 3 – Confirmation sampling results

December 17, 2011

JUSTIN ROBERTS

DIAMONDBACK DISPOSAL SERVICE INC.

P. O. BOX 2491

HOBBS, NM 88241

RE: LUSK 31 #13

Enclosed are the results of analyses for samples received by the laboratory on 12/14/11 10:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC.
JUSTIN ROBERTS
P. O. BOX 2491
HOBBS NM, 88241
Fax To: (575) 392-9376

Received: 12/14/2011
Reported: 12/17/2011
Project Name: LUSK 31 #13
Project Number: NONE GIVEN
Project Location: NONE GIVEN

Sampling Date: 12/12/2011
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: LUSK 31 #13 (H102682-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/14/2011	ND	2.02	101	2.00	1.23	
Toluene*	<0.050	0.050	12/14/2011	ND	1.90	95.1	2.00	0.630	
Ethylbenzene*	<0.050	0.050	12/14/2011	ND	2.15	107	2.00	0.633	
Total Xylenes*	<0.150	0.150	12/14/2011	ND	6.14	102	6.00	0.343	

Surrogate: 4-Bromofluorobenzene (PIL) 109 % 64.4-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	12/15/2011	ND	432	108	400	3.77	

TPH 418.1		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	328	100	12/17/2011	ND	1240	113	1090	0.565	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/15/2011	ND	206	103	200	1.05	
DRO >C10-C28	<10.0	10.0	12/15/2011	ND	168	84.1	200	1.48	

Surrogate: 1-Chlorooctane 70.2 % 55.5-154

Surrogate: 1-Chlorooctadecane 76.7 % 57.6-158

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

SPLP Analysis (multi-compound)				SPLP Analysis (detections only)					
GRO+DRO (mg/kg)	C28-C35 (mg/kg)	Total (8015) (mg/kg)	TPH (418.1) (mg/kg)	RAM's (pCi/L)	PAH's (mg/L)	PCB's (mg/L)	Fluoride (mg/L)	Chloride (mg/L)	Nitrate (mg/L)
401	151	552						191	
333	140	473						1,245	
312	133	445						248	
477	264	741						262	
125	50.2	176						194	
100	52.7	153						565	
309	124	433						6,620	
<15	<15	<15						1.29	
			2,260	ND (all)	<0.012 (all)	<0.0006 (all)	2.20	1,810	2.6
500	--	--	2,500	--	--	--	--	1,000	--
--	--	--	2,500	--	--	--	--	3,000	--
--	--	--	--	30	0.03	0.001	1.6	--	10

Barium (mg/L)	Toluene (mg/L)	Xylenes (mg/L)
------------------	-------------------	-------------------

0.026	0.00673	0.00553
-------	---------	---------

1.0	0.75	0.62
-----	------	------

Analytical Report 427727
for
RT Hicks Consultants Ltd. (Midland)

Project Manager: Dale Littlejohn

EGL: Lusk Federal "31" # 3

L-195-0911

08-NOV-11

Collected By: Client



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)

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08-NOV-11

Project Manager: **Dale Littlejohn**
RT Hicks Consultants Ltd. (Midland)
P.O. Box 7624

Midland, TX 79708

Reference: XENCO Report No: **427727**
EGL: Lusk Federal "31" # 3
Project Address: Lea Co., New Mexico

Dale Littlejohn:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 427727. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 427727 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron II

Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

**RT Hicks Consultants Ltd. (Midland), Midland, TX**

EGL: Lusk Federal "31" # 3

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Outer Shoe "A"	S	09-13-11 17:16		427727-001
Outer Shoe "B"	S	09-13-11 17:28		427727-002
Outer Shoe "C"	S	09-13-11 17:50		427727-003
Outer Shoe "D"	S	09-13-11 18:01		427727-004
Outer Shoe "E"	S	09-13-11 18:12		427727-005
Outer Shoe "F"	S	09-13-11 18:19		427727-006
Brine Cell	S	09-13-11 17:40		427727-007
Stockpile Soil	S	09-13-11 18:00		427727-008
Composite Drilling Pit	S	09-13-11 18:00		427727-009
Composite Drilling Pit	W	09-13-11 18:00		427727-009



CASE NARRATIVE

Client Name: RT Hicks Consultants Ltd. (Midland)

Project Name: EGL: Lusk Federal "31" # 3



Project ID: L-195-0911

Work Order Number: 427727

Report Date: 08-NOV-11

Date Received: 09/15/2011

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-870354 Anions by E300

RPD recovered outside QC limits between the sample and sample duplicate.

Batch: LBA-870512 TPH by SW8015 Mod

SW8015MOD_NM

Batch 870512, o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are: 611650-1-BKS, 611650-1-BLK, 427727-005, 427727-006, 427727-007, 427727-008, 427727-002, 427727-003.

Batch: LBA-870630 BTEX by EPA 8021B

SW8021BM

Batch 870630, Benzene, Toluene RPD was outside QC limits.

Samples affected are: 427727-001, -002, -004, -006, -005, -003, -008

SW8021BM

Batch 870630, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 427727-006.

SW8021BM

Batch 870630, Benzene, Ethylbenzene, Toluene, m_p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.

Samples affected are: 427727-001, -002, -004, -006, -005, -003, -008.

The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene, m_p-Xylenes , o-Xylene is within laboratory Control Limits



CASE NARRATIVE

Client Name: RT Hicks Consultants Ltd. (Midland)

Project Name: EGL: Lusk Federal "31" # 3



Project ID: L-195-0911

Work Order Number: 427727

Report Date: 08-NOV-11

Date Received: 09/15/2011

*Batch: LBA-871576 SPLP PCBs by EPA 8082
SW8082*

*Batch 871576, PCB-1016 RPD was outside laboratory control limits.
Samples affected are: 427727-009*

The BKS/BSD %RPD is outside of QC limits; however, the BKS/BSD recoveries are within control.

*Batch: LBA-871623 SPLP Cyanide by EPA 335.4
E335.4*

*Batch 871623, Cyanide, Total recovered below QC limits in the Matrix Spike.
Samples affected are: 427727-009.*

The Laboratory Control Sample for Cyanide, Total is within laboratory Control Limits

*Batch: LBA-871699 SPLP Metals by SW 6020A
SW6020*

Batch 871699, Beryllium recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.

Samples affected are: 427727-009.

The Laboratory Control Sample for Beryllium is within laboratory Control Limits

*Batch: LBA-872283 VOAs by SW-846 8260B
SW8260B*

*Batch 872283, Methyl ethyl ketone recovered below QC limits in the Matrix Spike. Methyl Chloride, Tetrahydrofuran recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Vinyl Chloride recovered below QC limits in the Matrix Spike Duplicate.
Samples affected are: 427727-009.*

The Laboratory Control Sample for Methyl Chloride, Methyl ethyl ketone, Tetrahydrofuran, Vinyl Chloride is within laboratory Control Limits



CASE NARRATIVE

Client Name: RT Hicks Consultants Ltd. (Midland)

Project Name: EGL: Lusk Federal "31" # 3



Project ID: L-195-0911

Work Order Number: 427727

Report Date: 08-NOV-11

Date Received: 09/15/2011

*Batch: LBA-874197 SPLP Anions by E300
E300MI*

Batch 874197, Nitrate as N, Sulfate recovered below QC limits in the Matrix Spike.

Samples affected are: 427727-009.

The Laboratory Control Sample for Nitrate as N, Sulfate is within laboratory Control Limits

Certificate of Analysis Summary 427727

RT Hicks Consultants Ltd. (Midland), Midland, TX



Project Id: L-195-0911
Contact: Dale Littlejohn
Project Location: Lea Co., New Mexico
Date Received in Lab: Thu Sep-15-11 01:18 pm
Report Date: 08-NOV-11
Project Manager: Brent Barron II

	Analysis Requested					
	Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	
	427727-001	Outer Shoe "A"	SOIL	SOIL	SOIL	427727-006
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	RL	RL	RL	RL	RL	RL
	3820	840	24900	420	4960	11300
	Sep-13-11 17:16	Sep-13-11 17:28	Sep-13-11 17:50	Sep-13-11 18:01	Sep-13-11 18:12	Sep-13-11 18:19
	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:
	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:
	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:
Chloride	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	3820	840	24900	420	4960	11300
	Sep-13-11 17:16	Sep-13-11 17:28	Sep-13-11 17:50	Sep-13-11 18:01	Sep-13-11 18:12	Sep-13-11 18:19
	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:
	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:
	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:
BTEX by EPA 8021B	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	0.190	0.0992	0.0389	0.0198	0.0551	0.00193
	1.69	0.198	0.0901	0.0397	0.0834	0.00200
	1.64	0.0992	0.213	0.0198	0.285	0.0200
	3.35	0.198	0.530	0.0397	0.271	0.0401
	1.14	0.0992	0.130	0.0198	0.0749	0.0200
	4.49	0.0992	0.660	0.0198	0.346	0.0200
	8.01	0.0992	1.00	0.0198	0.769	0.0200
	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:
	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:
	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:
Percent Moisture	%	%	%	%	%	%
	26.3	1.00	33.4	1.00	33.2	1.00
	Sep-16-11 10:30	Sep-16-11 10:30	Sep-16-11 10:30	Sep-16-11 10:30	Sep-16-11 10:30	Sep-16-11 10:30
	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:
	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:
	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:
TPH By SW8015 Mod	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	58.0	14.9	37.8	15.0	52.1	15.0
	343	14.9	295	15.0	425	15.0
	151	14.9	140	15.0	264	15.0
	552	14.9	473	15.0	741	15.0
	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:
	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:
	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:
C6-C12 Gasoline Range Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	343	14.9	295	15.0	425	15.0
	151	14.9	140	15.0	264	15.0
	552	14.9	473	15.0	741	15.0
	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:
	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:
	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:
C12-C28 Diesel Range Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	343	14.9	295	15.0	425	15.0
	151	14.9	140	15.0	264	15.0
	552	14.9	473	15.0	741	15.0
	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:
	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:
	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:
C28-C35 Oil Range Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	343	14.9	295	15.0	425	15.0
	151	14.9	140	15.0	264	15.0
	552	14.9	473	15.0	741	15.0
	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:
	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:
	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:
Total TPH	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	343	14.9	295	15.0	425	15.0
	151	14.9	140	15.0	264	15.0
	552	14.9	473	15.0	741	15.0
	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:	Extracted:
	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:	Analyzed:
	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:
	343	14.9	295	15.0	425	15.0
	151	14.9	140	15.0	264	15.0
	552	14.9	473	15.0	741	15.0

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Brent Barron II
 Odessa Laboratory Manager



Certificate of Analysis Summary 427727

RT Hicks Consultants Ltd. (Midland), Midland, TX



Project Id: L-195-0911

Contact: Dale Littlejohn

Project Location: Lea Co., New Mexico

Date Received in Lab: Thu Sep-15-11 01:18 pm

Report Date: 08-NOV-11

Project Manager: Brent Barron II

Project Name: EGL: Lusk Federal "31" # 3

Analysis Requested	Lab Id:	427727-007	427727-008	427727-009	
	Field Id:	Brine Cell	Stockpile Soil	Composite Drilling Pit	
	Depth:				
	Matrix:	SOIL	SOIL	SOIL	
	Sampled:	Sep-13-11 17:40	Sep-13-11 18:00	Sep-13-11 18:00	
SPLP BTEX-MTBE by EPA 8021B	Extracted:	Sep-20-11 11:30			
	Analyzed:	Sep-20-11 21:18			
	Units/RL:	mg/L RL			
		ND 0.00100			
Benzene	Extracted:				
	Analyzed:	Sep-22-11 16:52			
	Units/RL:	mg/L RL			
SPLP Inorganic Anions by EPA 300/300.1		6620			
		40.0			
Chloride					

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Brent Barron II
Odessa Laboratory Manager



Certificate of Analysis Summary 427727
RT Hicks Consultants Ltd. (Midland), Midland, TX



Project Id: L-195-0911
Contact: Dale Littlejohn
Project Location: Lea Co., New Mexico

Date Received in Lab: Thu Sep-15-11 01:18 pm
Report Date: 08-NOV-11
Project Manager: Brent Barron II

Project Name: EGL: Lusk Federal "31" # 3

Analysis Requested		Lab Id: Field Id: Depth: Matrix: Sampled:	427727-007 Brine Cell SOIL Sep-13-11 17:40	427727-008 Stockpile Soil SOIL Sep-13-11 18:00	427727-009 Composite Drilling Pit SOIL Sep-13-11 18:00		
Anions by E300		Extracted: Analyzed: Units/RL:		Sep-19-11 17:22 mg/kg RL 25.7 4.20			
Chloride							
BTEx by EPA 8021B		Extracted: Analyzed: Units/RL:		Sep-20-11 15:15 Sep-21-11 19:06 mg/kg RL ND 0.000994			
Benzene				ND 0.00199			
Toluene				ND 0.000994			
Ethylbenzene				ND 0.00199			
m_p-Xylenes				ND 0.000994			
o-Xylene				ND 0.000994			
Total Xylenes				ND 0.000994			
Total BTEx				ND 0.000994			
RAM analysis by E901.1M		Extracted: Analyzed: Units/RL:			Oct-07-11 16:36 pCi/L RL ND 0.00905		
Cesium-137					ND 1.53		
Lead-210					ND 0.0270		
Iron-59					ND 0.0102		
Cobalt-60					ND 3.86		
Thorium-230					ND 0.217		
Radium-226					ND 0.0476		
Actinium 228							

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Brent Barron II
Odessa Laboratory Manager



Project Id: L-195-0911
Contact: Dale Littlejohn
Project Location: Lea Co., New Mexico

Date Received in Lab: Thu Sep-15-11 01:18 pm
Report Date: 08-NOV-11
Project Manager: Brent Barron II

Project Name: EGL: Lusk Federal "31" # 3

<i>Analysis Requested</i>		Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	427727-007	427727-008	427727-009	
							Brine Cell	Stockpile Soil	Composite Drilling Pit	
							SOIL	SOIL	SOIL	
							Sep-13-11 17:40	Sep-13-11 18:00	Sep-13-11 18:00	
SPLP Anions by E300		<i>Extracted:</i>								
		<i>Analyzed:</i>								
		<i>Units/RL:</i>								
Fluoride										
Nitrate as N										
SPLP Anions by E300		<i>Extracted:</i>								
		<i>Analyzed:</i>								
		<i>Units/RL:</i>								
Chloride										
SPLP Cyanide by EPA 335.4		<i>Extracted:</i>								
		<i>Analyzed:</i>								
		<i>Units/RL:</i>								
Cyanide, Total										
SPLP Metals by SW 6020A		<i>Extracted:</i>								
		<i>Analyzed:</i>								
		<i>Units/RL:</i>								
Antimony										
Arsenic										
Barium										
Cadmium										
Chromium										
Lead										
Mercury										
Selenium										
Silver										
Uranium										

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Brent Barron II
Odessa Laboratory Manager



Project Id: L-195-0911
 Contact: Dale Littlejohn
 Project Location: Lea Co., New Mexico

Project Name: EGL: Lusk Federal "31" # 3

Date Received in Lab: Thu Sep-15-11 01:18 pm
 Report Date: 08-NOV-11
 Project Manager: Brent Barron II

Analysis Requested	Lab Id:	427727-007	427727-008	427727-009	
	Field Id: Depth: Matrix: Sampled:	Brine Cell Sep-13-11 17:40 SOIL	Stockpile Soil Sep-13-11 18:00 SOIL	Composite Drilling Pit Sep-13-11 18:00 SOIL	
SPLP PAHs by EPA 8270C	Extracted: Analyzed: Units/RL:			mg/L RL Oct-01-11 11:03 Oct-05-11 00:25	
Acenaphthene				ND 0.0116	
Acenaphthylene				ND 0.0116	
Anthracene				ND 0.0116	
Benzo(a)anthracene				ND 0.0116	
Benzo(a)pyrene				ND 0.0116	
Benzo(b)fluoranthene				ND 0.0116	
Benzo(k)fluoranthene				ND 0.0116	
Benzo(g,h,i)perylene				ND 0.0116	
Chrysene				ND 0.0116	
Dibenz(a,h)anthracene				ND 0.0116	
Fluoranthene				ND 0.0116	
Fluorene				ND 0.0116	
Indeno(1,2,3-c,d)Pyrene				ND 0.0116	
1-Methylnaphthalene				ND 0.00581	
2-Methylnaphthalene				ND 0.0116	
Naphthalene				ND 0.0116	
Phenanthrene				ND 0.0116	
Pyrene				ND 0.0116	

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Brent Barron II
 Odessa Laboratory Manager



Project Id: L-195-0911
Contact: Dale Littlejohn
Project Location: Lea Co., New Mexico

Project Name: EGL: Lusk Federal "31" # 3

Date Received in Lab: Thu Sep-15-11 01:18 pm
Report Date: 08-NOV-11
Project Manager: Brent Barron II

Analysis Requested	Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	427727-007	427727-008	427727-009	
	Extracted:	Analyzed:	Units/RL:			Brine Cell	Stockpile Soil	Composite Drilling Pit	
SPLP PCBs by EPA 8082 SUB: E871002						Sep-13-11 17:40	Sep-13-11 18:00	Sep-13-11 18:00	
PCB-1016								SOIL	
PCB-1221								ug/L RL	
PCB-1232								ND 0.562	
PCB-1242								ND 0.562	
PCB-1248								ND 0.562	
PCB-1254								ND 0.562	
PCB-1260								ND 0.562	

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Brent Barron II
Odessa Laboratory Manager



Project Id: L-195-0911
Contact: Dale Littlejohn
Project Location: Lea Co., New Mexico

Date Received in Lab: Thu Sep-15-11 01:18 pm
Report Date: 08-NOV-11
Project Manager: Brent Barron II

<i>Analysis Requested</i>		Lab Id: Field Id: Depth: Matrix: Sampled:	427727-007 Brine Cell SOIL Sep-13-11 17:40	427727-008 Stockpile Soil SOIL Sep-13-11 18:00	427727-009 Composite Drilling Pit SOIL Sep-13-11 18:00	
SPLP Volatiles by EPA 8260B		Extracted: Analyzed: Units/RL:			Oct-12-11 11:20 Oct-12-11 12:36 mg/L RL	
Benzene					ND 0.00500	
Bromobenzene					ND 0.00500	
Bromochloromethane					ND 0.00500	
Bromodichloromethane					ND 0.00500	
Bromoform					ND 0.00500	
Methyl bromide					ND 0.00500	
Methyl ethyl ketone					ND 0.0500	
MTBE					ND 0.00500	
n-Butylbenzene					ND 0.00500	
Sec-Butylbenzene					ND 0.00500	
tert-Butylbenzene					ND 0.00500	
Carbon Tetrachloride					ND 0.00500	
Chlorobenzene					ND 0.00500	
Chloroethane					ND 0.0100	
Chloroform					ND 0.00500	
Methyl Chloride					ND 0.0100	
2-Chlorotoluene					ND 0.00500	
4-Chlorotoluene					ND 0.00500	
p-Cymene (p-Isopropyltoluene)					ND 0.00500	
Dibromochloromethane					ND 0.00500	
1,2-Dibromo-3-Chloropropane					ND 0.00500	
1,2-Dibromoethane					ND 0.00500	
Methylene bromide					ND 0.00500	
1,2-Dichlorobenzene					ND 0.00500	
1,3-Dichlorobenzene					ND 0.00500	

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Project Id: L-195-0911
Contact: Dale Littlejohn
Project Location: Lea Co., New Mexico

Project Name: EGL: Lusk Federal "31" # 3

Date Received in Lab: Thu Sep-15-11 01:18 pm
Report Date: 08-NOV-11
Project Manager: Brent Barron II

<i>Analysis Requested</i>		Lab Id:	427727-007	427727-008	427727-009	
		Field Id:	Brine Cell	Stockpile Soil	Composite Drilling Pit	
		Depth:				
		Matrix:	SOIL	SOIL	SOIL	
		Sampled:	Sep-13-11 17:40	Sep-13-11 18:00	Sep-13-11 18:00	
SPLP Volatiles by EPA 8260B		Extracted:				
		Analyzed:				
		Units/RL:				
1,4-Dichlorobenzene					ND 0.00500	
Dichlorodifluoromethane					ND 0.00500	
1,1-Dichloroethane					ND 0.00500	
1,2-Dichloroethane					ND 0.00500	
1,1-Dichloroethene					ND 0.00500	
cis-1,2-Dichloroethylene					ND 0.00500	
trans-1,2-dichloroethylene					ND 0.00500	
1,2-Dichloropropane					ND 0.00500	
1,3-Dichloropropane					ND 0.00500	
2,2-Dichloropropane					ND 0.00500	
1,1-Dichloropropene					ND 0.00500	
cis-1,3-Dichloropropene					ND 0.00500	
trans-1,3-dichloropropene					ND 0.00500	
Ethylbenzene					ND 0.00500	
Hexachlorobutadiene					ND 0.00500	
Isopropylbenzene					ND 0.00500	
Methylene Chloride					ND 0.00500	
Naphthalene					ND 0.0100	
n-Propylbenzene					ND 0.00500	
Styrene					ND 0.00500	
1,1,1,2-Tetrachloroethane					ND 0.00500	
1,1,2,2-Tetrachloroethane					ND 0.00500	
Tetrachloroethylene					ND 0.00500	
Tetrahydrofuran					ND 0.0100	
Toluene					0.00673 0.00500	

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Brent Barron II
Odessa Laboratory Manager



Project Id: L-195-0911
Contact: Dale Littlejohn
Project Location: Lea Co., New Mexico

Project Name: EGL: Lusk Federal "31" # 3

Date Received in Lab: Thu Sep-15-11 01:18 pm

Report Date: 08-NOV-11

Project Manager: Brent Barron II

Analysis Requested	Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	427727-007	427727-008	427727-009	
	Brine Cell	SOIL	Sep-13-11 17:40	SOIL	Sep-13-11 18:00	Composite Drilling Pit	SOIL	SOIL	
SPLP Volatiles by EPA 8260B									
1,2,3-Trichlorobenzene									
1,2,4-Trichlorobenzene									
1,1,1-Trichloroethane									
1,1,2-Trichloroethane									
Trichloroethylene									
Trichlorofluoromethane									
1,2,3-Trichloropropane									
1,2,4-Trimethylbenzene									
1,3,5-Trimethylbenzene									
o-Xylene									
m,p-Xylenes									
Vinyl Chloride									
TPH By SW8015 Mod									
C6-C12 Gasoline Range Hydrocarbons									
C12-C28 Diesel Range Hydrocarbons									
C28-C35 Oil Range Hydrocarbons									
Total TPH									

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Brent Barron II
 Odessa Laboratory Manager



Certificate of Analysis Summary 427727

RT Hicks Consultants Ltd. (Midland), Midland, TX



Project Id: L-195-0911
Contact: Dale Littlejohn
Project Location: Lea Co., New Mexico

Project Name: EGL: Lusk Federal "31" # 3

Date Received in Lab: Thu Sep-15-11 01:18 pm
Report Date: 08-NOV-11
Project Manager: Brent Barron II

Analysis Requested	Lab Id:		427727-007		427727-008		427727-009	
	Field Id:	Depth:	Brine Cell	Stockpile Soil	Composite Drilling Pit	SOIL	SOIL	SOIL
			Sep-13-11 17:40	Sep-13-11 18:00	Sep-13-11 18:00			
Percent Moisture	Extracted:		Sep-16-11 10:30	Sep-16-11 10:30	Oct-04-11 12:30	%	%	%
	Analyzed:					RL	RL	RL
	Units/RL:		12.0	16.5	37.0	1.00	1.00	1.00
TPH by EPA 418.1	Extracted:							
	Analyzed:				Oct-04-11 13:33	mg/kg		
	Units/RL:				2260	79.4		
TPH, Total Petroleum Hydrocarbons								

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Brent Barron II
Odessa Laboratory Manager

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

^ NELAC or State program does not offer Accreditation at this time.

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(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: EGL: Lusk Federal "31" # 3

Work Orders : 427727,

Project ID: L-195-0911

Lab Batch #: 870619

Sample: 427727-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/L

Date Analyzed: 09/20/11 21:18

SURROGATE RECOVERY STUDY

SPLP BTEX-MTBE by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 870512

Sample: 427727-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 09:40

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	109	99.5	110	70-135	
o-Terphenyl	65.0	49.8	131	70-135	

Lab Batch #: 870512

Sample: 427727-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 10:03

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	107	99.9	107	70-135	
o-Terphenyl	71.3	50.0	143	70-135	**

Lab Batch #: 870512

Sample: 427727-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 10:26

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	68.3	50.1	136	70-135	**

Lab Batch #: 870512

Sample: 427727-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 10:49

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	111	99.9	111	70-135	
o-Terphenyl	66.2	50.0	132	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: EGL: Lusk Federal "31" # 3

Work Orders : 427727,

Project ID: L-195-0911

Lab Batch #: 870512

Sample: 427727-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 11:12

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.8	99.8	100	70-135	
o-Terphenyl	74.8	49.9	150	70-135	**

Lab Batch #: 870512

Sample: 427727-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 11:36

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.9	102	70-135	
o-Terphenyl	69.9	50.0	140	70-135	**

Lab Batch #: 870512

Sample: 427727-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 12:00

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.9	105	70-135	
o-Terphenyl	72.5	50.0	145	70-135	**

Lab Batch #: 870512

Sample: 427727-008 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 12:47

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	70.4	50.1	141	70-135	**

Lab Batch #: 870630

Sample: 427727-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 12:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: EGL: Lusk Federal "31" # 3

Work Orders : 427727,

Project ID: L-195-0911

Lab Batch #: 870630

Sample: 427727-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 13:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0248	0.0300	83	80-120	
4-Bromofluorobenzene	0.0270	0.0300	90	80-120	

Lab Batch #: 870630

Sample: 427727-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 14:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 870630

Sample: 427727-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 17:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0217	0.0300	72	80-120	**
4-Bromofluorobenzene	0.0262	0.0300	87	80-120	

Lab Batch #: 870630

Sample: 427727-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 18:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0328	0.0300	109	80-120	

Lab Batch #: 870630

Sample: 427727-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 18:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0327	0.0300	109	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: EGL: Lusk Federal "31" # 3

Work Orders : 427727,

Project ID: L-195-0911

Lab Batch #: 870630

Sample: 427727-008 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 19:06

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0265	0.0300	88	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 871576

Sample: 427727-009 / SMP

Batch: 1 Matrix: Soil

Units: ug/L

Date Analyzed: 10/03/11 16:06

SURROGATE RECOVERY STUDY

SPLP PCBs by EPA 8082	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Tetrachloro-m-xylene	0.618	1.12	55	50-125	

Lab Batch #: 871576

Sample: 427727-009 / SMP

Batch: 1 Matrix: Soil

Units: ug/L

Date Analyzed: 10/03/11 16:06

SURROGATE RECOVERY STUDY

SPLP PCBs by EPA 8082	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Tetrachloro-m-xylene	0.674	1.12	60	50-125	

Lab Batch #: 871559

Sample: 427727-009 / SMP

Batch: 1 Matrix: Soil

Units: mg/L

Date Analyzed: 10/05/11 00:25

SURROGATE RECOVERY STUDY

SPLP PAHs by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	0.0399	0.0581	69	43-116	
2-Fluorophenol	0.0261	0.0581	45	21-100	
Nitrobenzene-d5	0.0399	0.0581	69	35-114	
Phenol-d6	0.0184	0.0581	32	10-94	
Terphenyl-D14	0.0459	0.0581	79	33-141	
2,4,6-Tribromophenol	0.0387	0.0581	67	10-123	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: EGL: Lusk Federal "31" # 3

Work Orders : 427727,

Project ID: L-195-0911

Lab Batch #: 872283

Sample: 427727-009 / SMP

Batch: 1 **Matrix:** Soil

Units: mg/L

Date Analyzed: 10/12/11 12:36

SURROGATE RECOVERY STUDY

SPLP Volatiles by EPA 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0476	0.0500	95	74-124	
Dibromofluoromethane	0.0434	0.0500	87	75-131	
1,2-Dichloroethane-D4	0.0462	0.0500	92	63-144	
Toluene-D8	0.0494	0.0500	99	80-117	

Lab Batch #: 870619

Sample: 611708-1-BLK / BLK

Batch: 1 **Matrix:** Water

Units: mg/L

Date Analyzed: 09/20/11 18:37

SURROGATE RECOVERY STUDY

SPLP BTEX-MTBE by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 870512

Sample: 611650-1-BLK / BLK

Batch: 1 **Matrix:** Solid

Units: mg/kg

Date Analyzed: 09/21/11 07:21

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	68.7	50.1	137	70-135	**

Lab Batch #: 870630

Sample: 611714-1-BLK / BLK

Batch: 1 **Matrix:** Solid

Units: mg/kg

Date Analyzed: 09/21/11 11:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: EGL: Lusk Federal "31" # 3

Work Orders : 427727,

Project ID: L-195-0911

Lab Batch #: 871576

Sample: 612075-1-BLK / BLK

Batch: 1 **Matrix:** Water

Units: ug/L

Date Analyzed: 10/03/11 13:01

SURROGATE RECOVERY STUDY

SPLP PCBs by EPA 8082	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Tetrachloro-m-xylene	0.610	1.00	61	50-125	

Lab Batch #: 871576

Sample: 612075-1-BLK / BLK

Batch: 1 **Matrix:** Water

Units: ug/L

Date Analyzed: 10/03/11 13:01

SURROGATE RECOVERY STUDY

SPLP PCBs by EPA 8082	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Tetrachloro-m-xylene	0.590	1.00	59	50-125	

Lab Batch #: 871559

Sample: 612126-1-BLK / BLK

Batch: 1 **Matrix:** Water

Units: mg/L

Date Analyzed: 10/03/11 21:04

SURROGATE RECOVERY STUDY

SPLP PAHs by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	0.0405	0.0500	81	43-116	
2-Fluorophenol	0.0385	0.0500	77	21-100	
Nitrobenzene-d5	0.0383	0.0500	77	35-114	
Phenol-d6	0.0403	0.0500	81	10-94	
Terphenyl-D14	0.0441	0.0500	88	33-141	
2,4,6-Tribromophenol	0.0417	0.0500	83	10-123	

Lab Batch #: 872283

Sample: 612648-1-BLK / BLK

Batch: 1 **Matrix:** Water

Units: mg/L

Date Analyzed: 10/12/11 12:14

SURROGATE RECOVERY STUDY

SPLP Volatiles by EPA 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0475	0.0500	95	74-124	
Dibromofluoromethane	0.0453	0.0500	91	75-131	
1,2-Dichloroethane-D4	0.0485	0.0500	97	63-144	
Toluene-D8	0.0484	0.0500	97	80-117	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: EGL: Lusk Federal "31" # 3

Work Orders : 427727,

Project ID: L-195-0911

Lab Batch #: 870619

Sample: 611708-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/20/11 17:06

SURROGATE RECOVERY STUDY

SPLP BTEX-MTBE by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 870512

Sample: 611650-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 09/21/11 07:44

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	128	99.8	128	70-135	
o-Terphenyl	80.0	49.9	160	70-135	**

Lab Batch #: 870630

Sample: 611714-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 09/21/11 09:54

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 871576

Sample: 612075-1-BKS / BKS

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 10/03/11 13:51

SURROGATE RECOVERY STUDY

SPLP PCBs by EPA 8082	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Tetrachloro-m-xylene	0.700	1.00	70	50-125	

Lab Batch #: 871576

Sample: 612075-1-BKS / BKS

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 10/03/11 13:51

SURROGATE RECOVERY STUDY

SPLP PCBs by EPA 8082	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Tetrachloro-m-xylene	0.660	1.00	66	50-125	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: EGL: Lusk Federal "31" # 3

Work Orders : 427727,

Project ID: L-195-0911

Lab Batch #: 871559

Sample: 612126-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 10/03/11 21:52

SURROGATE RECOVERY STUDY

SPLP PAHs by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	0.0436	0.0500	87	43-116	
2-Fluorophenol	0.0426	0.0500	85	21-100	
Nitrobenzene-d5	0.0412	0.0500	82	35-114	
Phenol-d6	0.0458	0.0500	92	10-94	
Terphenyl-D14	0.0485	0.0500	97	33-141	
2,4,6-Tribromophenol	0.0485	0.0500	97	10-123	

Lab Batch #: 872283

Sample: 612648-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 10/12/11 18:27

SURROGATE RECOVERY STUDY

SPLP Volatiles by EPA 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0454	0.0500	91	74-124	
Dibromofluoromethane	0.0475	0.0500	95	75-131	
1,2-Dichloroethane-D4	0.0448	0.0500	90	63-144	
Toluene-D8	0.0478	0.0500	96	80-117	

Lab Batch #: 870619

Sample: 611708-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/20/11 17:29

SURROGATE RECOVERY STUDY

SPLP BTEX-MTBE by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 870630

Sample: 611714-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 09/21/11 10:17

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: EGL: Lusk Federal "31" # 3

Work Orders : 427727,

Project ID: L-195-0911

Lab Batch #: 871576

Sample: 612075-1-BSD / BSD

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 10/03/11 14:07

SURROGATE RECOVERY STUDY

SPLP PCBs by EPA 8082	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Tetrachloro-m-xylene	0.600	1.00	60	50-125	

Lab Batch #: 871576

Sample: 612075-1-BSD / BSD

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 10/03/11 14:07

SURROGATE RECOVERY STUDY

SPLP PCBs by EPA 8082	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Tetrachloro-m-xylene	0.570	1.00	57	50-125	

Lab Batch #: 871559

Sample: 612126-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 10/03/11 22:16

SURROGATE RECOVERY STUDY

SPLP PAHs by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	0.0436	0.0500	87	43-116	
2-Fluorophenol	0.0426	0.0500	85	21-100	
Nitrobenzene-d5	0.0409	0.0500	82	35-114	
Phenol-d6	0.0446	0.0500	89	10-94	
Terphenyl-D14	0.0477	0.0500	95	33-141	
2,4,6-Tribromophenol	0.0485	0.0500	97	10-123	

Lab Batch #: 870619

Sample: 427804-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/21/11 08:45

SURROGATE RECOVERY STUDY

SPLP BTEX-MTBE by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0321	0.0300	107	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: EGL: Lusk Federal "31" # 3

Work Orders : 427727,

Project ID: L-195-0911

Lab Batch #: 870512

Sample: 427602-007 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 13:10

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	99.8	104	70-135	
o-Terphenyl	64.6	49.9	129	70-135	

Lab Batch #: 870630

Sample: 427730-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 15:16

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

Lab Batch #: 871559

Sample: 428391-001 S / MS

Batch: 1 Matrix: Product

Units: mg/L

Date Analyzed: 10/03/11 23:05

SURROGATE RECOVERY STUDY

SPLP PAHs by EPA 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.216	0.250	86	43-116	
2-Fluorophenol	0.188	0.250	75	21-100	
Nitrobenzene-d5	0.202	0.250	81	35-114	
Phenol-d6	0.172	0.250	69	10-94	
Terphenyl-D14	0.231	0.250	92	33-141	
2,4,6-Tribromophenol	0.240	0.250	96	10-123	

Lab Batch #: 872283

Sample: 428923-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 10/12/11 13:20

SURROGATE RECOVERY STUDY

SPLP Volatiles by EPA 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0466	0.0500	93	74-124	
Dibromofluoromethane	0.0472	0.0500	94	75-131	
1,2-Dichloroethane-D4	0.0465	0.0500	93	63-144	
Toluene-D8	0.0478	0.0500	96	80-117	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: EGL: Lusk Federal "31" # 3

Work Orders : 427727,

Project ID: L-195-0911

Lab Batch #: 870619

Sample: 427804-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/21/11 09:08

SURROGATE RECOVERY STUDY

SPLP BTEX-MTBE by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 870512

Sample: 427602-007 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 13:34

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	99.4	99.8	100	70-135	
o-Terphenyl	57.5	49.9	115	70-135	

Lab Batch #: 870630

Sample: 427730-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/21/11 15:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0331	0.0300	110	80-120	

Lab Batch #: 872283

Sample: 428923-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 10/12/11 13:42

SURROGATE RECOVERY STUDY

SPLP Volatiles by EPA 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0467	0.0500	93	74-124	
Dibromofluoromethane	0.0483	0.0500	97	75-131	
1,2-Dichloroethane-D4	0.0477	0.0500	95	63-144	
Toluene-D8	0.0486	0.0500	97	80-117	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Project Name: EGL: Lusk Federal "31" # 3

Work Order #: 427727

Project ID:

L-195-0911

Lab Batch #: 871699

Sample: 612133-1-BKS

Matrix: Water

Date Analyzed: 10/03/2011

Date Prepared: 09/30/2011

Analyst: RGF

Reporting Units: mg/L

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

SPLP Metals by SW 6020A	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
Antimony	<0.00200	0.200	0.191	96	80-120	
Arsenic	<0.00200	0.200	0.179	90	80-120	
Barium	<0.00200	0.200	0.200	100	80-120	
Cadmium	<0.000600	0.200	0.188	94	80-120	
Chromium	<0.00300	0.200	0.184	92	80-120	
Lead	<0.00200	0.200	0.220	110	80-120	
Selenium	<0.00200	0.200	0.176	88	80-120	
Silver	<0.00100	0.100	0.0965	97	80-120	

Blank Spike Recovery [D] = $100 * [C] / [B]$

All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit



Project Name: EGL: Lusk Federal "31" # 3

Work Order #: 427727

Project ID:

L-195-0911

Lab Batch #: 872283

Sample: 612648-1-BKS

Matrix: Water

Date Analyzed: 10/12/2011

Date Prepared: 10/12/2011

Analyst: CYE

Reporting Units: mg/L

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

SPLP Volatiles by EPA 8260B	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
Benzene	<0.00500	0.0500	0.0489	98	66-142	
Bromobenzene	<0.00500	0.0500	0.0511	102	75-125	
Bromochloromethane	<0.00500	0.0500	0.0485	97	73-125	
Bromodichloromethane	<0.00500	0.0500	0.0506	101	75-125	
Bromoform	<0.00500	0.0500	0.0462	92	75-125	
Methyl bromide	<0.00500	0.0500	0.0528	106	70-130	
Methyl ethyl ketone	<0.0500	0.500	0.346	69	60-140	
MTBE	<0.00500	0.0500	0.0500	100	65-135	
n-Butylbenzene	<0.00500	0.0500	0.0514	103	75-125	
Sec-Butylbenzene	<0.00500	0.0500	0.0525	105	75-125	
tert-Butylbenzene	<0.00500	0.0500	0.0535	107	75-125	
Carbon Tetrachloride	<0.00500	0.0500	0.0535	107	62-125	
Chlorobenzene	<0.00500	0.0500	0.0527	105	60-133	
Chloroethane	<0.0100	0.0500	0.0475	95	70-130	
Chloroform	<0.00500	0.0500	0.0463	93	74-125	
Methyl Chloride	<0.0100	0.0500	0.0416	83	70-130	
2-Chlorotoluene	<0.00500	0.0500	0.0524	105	73-125	
4-Chlorotoluene	<0.00500	0.0500	0.0496	99	74-125	
p-Cymene (p-Isopropyltoluene)	<0.00500	0.0500	0.0546	109	75-125	
Dibromochloromethane	<0.00500	0.0500	0.0523	105	73-125	
1,2-Dibromo-3-Chloropropane	<0.00500	0.0500	0.0402	80	59-125	
1,2-Dibromoethane	<0.00500	0.0500	0.0475	95	73-125	
Methylene bromide	<0.00500	0.0500	0.0466	93	69-127	
1,2-Dichlorobenzene	<0.00500	0.0500	0.0513	103	75-125	
1,3-Dichlorobenzene	<0.00500	0.0500	0.0526	105	75-125	
1,4-Dichlorobenzene	<0.00500	0.0500	0.0527	105	75-125	
Dichlorodifluoromethane	<0.00500	0.0500	0.0519	104	70-130	
1,1-Dichloroethane	<0.00500	0.0500	0.0473	95	72-125	
1,2-Dichloroethane	<0.00500	0.0500	0.0477	95	68-127	
1,1-Dichloroethene	<0.00500	0.0500	0.0528	106	59-172	
cis-1,2-Dichloroethylene	<0.00500	0.0500	0.0492	98	75-125	
trans-1,2-dichloroethylene	<0.00500	0.0500	0.0509	102	75-125	
1,2-Dichloropropane	<0.00500	0.0500	0.0466	93	74-125	

Blank Spike Recovery [D] = 100*[C]/[B]

All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit



Project Name: EGL: Lusk Federal "31" # 3

Work Order #: 427727

Project ID:

L-195-0911

Lab Batch #: 872283

Sample: 612648-1-BKS

Matrix: Water

Date Analyzed: 10/12/2011

Date Prepared: 10/12/2011

Analyst: CYE

Reporting Units: mg/L

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

SPLP Volatiles by EPA 8260B	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
1,3-Dichloropropane	<0.00500	0.0500	0.0472	94	75-125	
2,2-Dichloropropane	<0.00500	0.0500	0.0536	107	75-125	
1,1-Dichloropropene	<0.00500	0.0500	0.0492	98	75-125	
cis-1,3-Dichloropropene	<0.00500	0.0500	0.0526	105	74-125	
trans-1,3-dichloropropene	<0.00500	0.0500	0.0502	100	66-125	
Ethylbenzene	<0.00500	0.0500	0.0525	105	75-125	
Hexachlorobutadiene	<0.00500	0.0500	0.0517	103	75-125	
Isopropylbenzene	<0.00500	0.0500	0.0544	109	75-125	
Methylene Chloride	0.00650	0.0500	0.0461	92	75-125	
Naphthalene	<0.0100	0.0500	0.0519	104	75-125	
n-Propylbenzene	<0.00500	0.0500	0.0542	108	75-125	
Styrene	<0.00500	0.0500	0.0554	111	75-125	
1,1,1,2-Tetrachloroethane	<0.00500	0.0500	0.0576	115	72-125	
1,1,2,2-Tetrachloroethane	<0.00500	0.0500	0.0425	85	74-125	
Tetrachloroethylene	<0.00500	0.0500	0.0567	113	71-125	
Toluene	<0.00500	0.0500	0.0514	103	59-139	
1,2,3-Trichlorobenzene	<0.00500	0.0500	0.0515	103	75-137	
1,2,4-Trichlorobenzene	<0.00500	0.0500	0.0529	106	75-135	
1,1,1-Trichloroethane	<0.00500	0.0500	0.0512	102	75-125	
1,1,2-Trichloroethane	<0.00500	0.0500	0.0476	95	75-127	
Trichloroethylene	<0.00500	0.0500	0.0536	107	62-137	
Trichlorofluoromethane	<0.00500	0.0500	0.0527	105	67-125	
1,2,3-Trichloropropane	<0.00500	0.0500	0.0421	84	75-125	
1,2,4-Trimethylbenzene	<0.00500	0.0500	0.0521	104	75-125	
1,3,5-Trimethylbenzene	<0.00500	0.0500	0.0535	107	70-125	
o-Xylene	<0.00500	0.0500	0.0549	110	75-125	
m,p-Xylenes	<0.0100	0.100	0.109	109	75-125	
Vinyl Chloride	<0.00200	0.0500	0.0479	96	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]

All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit



Project Name: EGL: Lusk Federal "31" # 3

Work Order #: 427727

Project ID:

L-195-0911

Lab Batch #: 871551

Sample: 871551-1-BKS

Matrix: Solid

Date Analyzed: 10/04/2011

Date Prepared: 10/04/2011

Analyst: BRB

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

TPH by EPA 418.1	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
TPH, Total Petroleum Hydrocarbons	<1.00	180	162	90	65-135	

Lab Batch #: 870512

Sample: 611650-1-BKS

Matrix: Solid

Date Analyzed: 09/21/2011

Date Prepared: 09/16/2011

Analyst: JAH

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

TPH By SW8015 Mod	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
C6-C12 Gasoline Range Hydrocarbons	<15.0	998	1000	100	70-135	
C12-C28 Diesel Range Hydrocarbons	<15.0	998	1100	110	70-135	

Lab Batch #: 871623

Sample: 871623-1-BKS

Matrix: Water

Date Analyzed: 10/06/2011

Date Prepared: 10/06/2011

Analyst: JSO

Reporting Units: mg/L

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

SPLP Cyanide by EPA 335.4	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
Cyanide, Total	<0.0100	0.200	0.175	88	80-120	

Blank Spike Recovery [D] = 100*[C]/[B]

All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Project Name: EGL: Lusk Federal "31" # 3

Work Order #: 427727

Analyst: ASA

Lab Batch ID: 870630

Date Prepared: 09/20/2011

Sample: 611714-1-BKS

Project ID: L-195-0911

Date Analyzed: 09/21/2011

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blank Spike Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
BTEX by EPA 8021B											
Benzene	<0.00100	0.100	0.104	104	0.100	0.0976	98	6	70-130	35	
Toluene	<0.00200	0.100	0.104	104	0.100	0.0976	98	6	70-130	35	
Ethylbenzene	<0.00100	0.100	0.107	107	0.100	0.100	100	7	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.211	106	0.200	0.198	99	6	70-135	35	
o-Xylene	<0.00100	0.100	0.109	109	0.100	0.102	102	7	71-133	35	

Analyst: BRB

Lab Batch ID: 870354

Sample: 870354-1-BKS

Date Prepared: 09/19/2011

Batch #: 1

Date Analyzed: 09/19/2011

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blank Spike Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.840	20.0	22.0	110	20.0	21.8	109	1	75-125	20	

Relative Percent Difference RPD = $200 * [(C-F)/(C+F)]$
Blank Spike Recovery [D] = $100 * (C/[B])$
Blank Spike Duplicate Recovery [G] = $100 * (F/[E])$
All results are based on MDL and Validated for QC Purposes

Project Name: EGL: Lusk Federal "31" # 3

Work Order #: 427727

Analyst: BRB

Lab Batch ID: 873144

Sample: 873144-1-BKS

Date Prepared: 10/25/2011

Batch #: 1

Project ID: L-195-0911

Date Analyzed: 10/25/2011

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
SPLP Anions by E300		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Fluoride		<0.200	2.50	2.55	102	2.50	2.87	115	12	80-120	20	
Nitrate as N		<0.0500	2.25	2.42	108	2.25	2.44	108	1	80-120	20	

Analyst: BRB

Lab Batch ID: 874197

Sample: 874197-1-BKS

Date Prepared: 11/07/2011

Batch #: 1

Date Analyzed: 11/07/2011

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
SPLP Anions by E300		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		<0.500	10.0	11.2	112	10.0	11.1	111	1	80-120	20	

Analyst: EZB

Lab Batch ID: 871576

Sample: 612075-1-BKS

Date Prepared: 09/30/2011

Batch #: 1

Date Analyzed: 10/03/2011

Matrix: Water

Units: ug/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
SPLP PCBs by EPA 8082		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Col Analytes												
1 PCB-1016		<0.500	5.00	3.91	78	5.00	3.12	62	22	54-125	20	F
1 PCB-1260		<0.500	5.00	4.10	82	5.00	3.35	67	20	41-126	20	

Relative Percent Difference RPD = $200 * [(C-F)/(C+F)]$

Blank Spike Recovery [D] = $100 * (C/[B])$

Blank Spike Duplicate Recovery [G] = $100 * (F/[E])$

All results are based on MDL and Validated for QC Purposes

Project Name: EGL: Lusk Federal "31" # 3

Work Order #: 427727

Analyst: ASA

Lab Batch ID: 870619

Sample: 611708-1-BKS

Date Prepared: 09/20/2011

Batch #: 1

Project ID: L-195-0911

Date Analyzed: 09/20/2011

Matrix: Water

Units: mg/L

BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

SPLP BTEX-MTBE by EPA 8021B		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blank Spike Duplicate %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Benzene		<0.00100	0.100	0.101	101	0.100	0.102	102	1	70-125	25	

Analyst: BRB

Lab Batch ID: 870739

Sample: 870739-1-BKS

Date Prepared: 09/22/2011

Batch #: 1

Date Analyzed: 09/22/2011

Matrix: Water

Units: mg/L

BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

SPLP Inorganic Anions by EPA 300/300.1		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blank Spike Duplicate %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		<0.200	10.0	10.1	101	10.0	10.1	101	0	80-120	20	

Relative Percent Difference RPD = $200 * [(C-F)/(C+F)]$

Blank Spike Recovery [D] = $100 * (C/[B])$

Blank Spike Duplicate Recovery [G] = $100 * (F/[E])$

All results are based on MDL and Validated for QC Purposes

Project Name: EGL: Lusk Federal "31" # 3

Work Order #: 427727

Analyst: ZHO

Lab Batch ID: 871559

Sample: 612126-1-BKS

Date Prepared: 10/01/2011

Batch #: 1

Project ID: L-195-0911

Date Analyzed: 10/03/2011

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk. Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
SPLP PAHs by EPA 8270C											
Acenaphthene	<0.0100	0.0500	0.0415	83	0.0500	0.0433	87	4	27-132	31	
Acenaphthylene	<0.0100	0.0500	0.0425	85	0.0500	0.0442	88	4	46-108	25	
Anthracene	<0.0100	0.0500	0.0429	86	0.0500	0.0455	91	6	47-145	25	
Benzo(a)anthracene	<0.0100	0.0500	0.0444	89	0.0500	0.0463	93	4	33-143	25	
Benzo(a)pyrene	<0.0100	0.0500	0.0428	86	0.0500	0.0443	89	3	65-135	25	
Benzo(b)fluoranthene	<0.0100	0.0500	0.0379	76	0.0500	0.0410	82	8	24-159	25	
Benzo(k)fluoranthene	<0.0100	0.0500	0.0443	89	0.0500	0.0424	85	4	25-125	25	
Benzo(g,h,i)perylene	<0.0100	0.0500	0.0398	80	0.0500	0.0414	83	4	65-135	25	
Chrysene	<0.0100	0.0500	0.0438	88	0.0500	0.0453	91	3	65-135	25	
Dibenz(a,h)anthracene	<0.0100	0.0500	0.0414	83	0.0500	0.0430	86	4	50-125	25	
Fluoranthene	<0.0100	0.0500	0.0454	91	0.0500	0.0473	95	4	47-125	25	
Fluorene	<0.0100	0.0500	0.0437	87	0.0500	0.0453	91	4	48-139	25	
Indeno(1,2,3-c,d)Pyrene	<0.0100	0.0500	0.0415	83	0.0500	0.0429	86	3	27-160	25	
1-Methylnaphthalene	<0.00500	0.0500	0.0431	86	0.0500	0.0446	89	3	25-175	25	
2-Methylnaphthalene	<0.0100	0.0500	0.0425	85	0.0500	0.0443	89	4	25-175	25	
Naphthalene	<0.0100	0.0500	0.0416	83	0.0500	0.0431	86	4	26-175	25	
Phenanthrene	<0.0100	0.0500	0.0420	84	0.0500	0.0441	88	5	65-135	25	
Pyrene	<0.0100	0.0500	0.0444	89	0.0500	0.0459	92	3	23-152	31	

Relative Percent Difference RPD = $200 * [(C-F)/(C+F)]$

Blank Spike Recovery [D] = $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes


Project Name: EGL: Lusk Federal "31" # 3
Work Order #: 427727

Lab Batch #: 870354

Date Analyzed: 09/19/2011

QC- Sample ID: 427727-004 S

Reporting Units: mg/kg

Date Prepared: 09/19/2011

Batch #: 1

Project ID: L-195-0911

Analyst: BRB

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	5240	2000	7310	104	75-125	

Lab Batch #: 870354

Date Analyzed: 09/19/2011

QC- Sample ID: 427760-001 S

Reporting Units: mg/kg

Date Prepared: 09/19/2011

Batch #: 1

Analyst: BRB

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	5.60	100	104	98	75-125	

Lab Batch #: 873144

Date Analyzed: 10/25/2011

QC- Sample ID: 430032-001 S

Reporting Units: mg/L

Date Prepared: 10/25/2011

Batch #: 1

Analyst: BRB

Matrix: Ground Water

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Fluoride	<0.200	2.50	2.34	94	80-120	
Nitrate as N	1.05	2.25	3.13	92	80-120	

Lab Batch #: 874197

Date Analyzed: 11/07/2011

QC- Sample ID: 430882-002 S

Reporting Units: mg/L

Date Prepared: 11/07/2011

Batch #: 1

Analyst: BRB

Matrix: Water

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	196	200	410	107	80-120	

Matrix Spike Percent Recovery [D] = $100 \times (C-A)/B$
 Relative Percent Difference [E] = $200 \times (C-A)/(C+B)$
 All Results are based on MDL and Validated for QC Purposes

3RL - Below Reporting Limit



Project Name: EGL: Lusk Federal "31" # 3

Work Order #: 427727

Lab Batch #: 874197

Date Analyzed: 11/07/2011

QC- Sample ID: 430996-001 S

Reporting Units: mg/L

Date Prepared: 11/07/2011

Batch #: 1

Project ID: L-195-0911

Analyst: BRB

Matrix: Water

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	21.0	100	130	109	80-120	

Lab Batch #: 870739

Date Analyzed: 09/22/2011

QC- Sample ID: 427791-003 S

Reporting Units: mg/L

Date Prepared: 09/22/2011

Batch #: 1

Analyst: BRB

Matrix: Water

MATRIX / MATRIX SPIKE RECOVERY STUDY						
SPLP Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	177	100	287	110	80-120	

atri S ike er ent Re o er 100 C- /B
 elati e er ent i eren e 200 C- /C B
 ll Results are ased on L and alidated or C ur oses

3RL - Belo Re orting Limit



Project Name: EGL: Lusk Federal "31" # 3

Work Order #: 427727

Lab Batch #: 871559

Project ID: L-195-0911

Date Analyzed: 10/03/2011

Date Prepared: 10/01/2011

Analyst:

QC- Sample ID: 428391-001 S

Batch #: 1

Matrix: rodut

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY						
SPLP PAHs by EPA 8270C	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
benzofluoranthene	<0.0500	0.250	0.206	82	27-132	
benzofluoranthene	<0.0500	0.250	0.125	50	46-108	
benzofluoranthene	<0.0500	0.250	0.212	85	47-145	
benzofluoranthene	<0.0500	0.250	0.216	86	33-143	
benzofluoranthene	<0.0500	0.250	0.209	84	65-135	
benzofluoranthene	<0.0500	0.250	0.191	76	24-159	
benzofluoranthene	<0.0500	0.250	0.206	82	25-125	
benzofluoranthene	<0.0500	0.250	0.195	78	65-135	
benzofluoranthene	<0.0500	0.250	0.211	84	65-135	
benzofluoranthene	<0.0500	0.250	0.204	82	50-125	
fluoranthene	<0.0500	0.250	0.222	89	47-125	
fluorene	<0.0500	0.250	0.218	87	48-139	
indeno 1,2,3-benzofluoranthene	<0.0500	0.250	0.204	82	27-160	
1-methylanthracene	<0.0250	0.250	0.215	86	25-175	
2-methylanthracene	<0.0500	0.250	0.211	84	25-175	
anthracene	<0.0500	0.250	0.213	85	26-175	
phenanthrene	<0.0500	0.250	0.207	83	65-135	
pyrene	<0.0500	0.250	0.212	85	23-152	

Lab Batch #: 871623

Date Analyzed: 10/06/2011

Date Prepared: 10/06/2011

Analyst: S

QC- Sample ID: 427727-009 S

Batch #: 1

Matrix: Soil

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Total Cyanide by EPA 335.4	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Cyanide total	<0.0100	0.200	0.131	66	80-120	

atri Spike er ent Re o er 100 C- /B
 elati e er ent i eren e 200 C- /C B
 ll Results are ased on L and alidated or C ur uses

3RL - Belo Re orting Limit

Work Order #: 427727

Lab Batch ID: 870630

Date Analyzed: 09/21/2011

Reporting Units: mg/kg

Project ID: L-195-0911

QC- Sample ID: 427730-001 S

Batch #: 1 Matrix: Soil

Date Prepared: 09/20/2011

Analyst: S

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY												
Reporting Units: mg/kg	BTEX by EPA 8021B	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Ben ene		<0.00107	0.107	0.00294	3	0.107	0.00700	7	82	70-130	35	F
oluene		<0.00214	0.107	0.00757	7	0.107	0.0137	13	58	70-130	35	F
th l en ene		<0.00107	0.107	0.0503	47	0.107	0.0510	48	1	71-129	35	
m - lenes		<0.00214	0.214	0.0786	37	0.214	0.0873	41	10	70-135	35	
o- lene		<0.00107	0.107	0.0424	40	0.107	0.0474	44	11	71-133	35	

Lab Batch ID: 870619

Date Analyzed: 09/21/2011

Reporting Units: mg/L

QC- Sample ID: 427804-001 S

Batch #: 1 Matrix: Water

Date Prepared: 09/20/2011

Analyst: S

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY													
Reporting Units: mg/L	SPLP BTEX-MTBE by EPA 8021B	Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag

atri S ike er ent Re o er 100 C- /B
Relati e er ent i eren e R 200 C-F / C F
N Not ete ted resent Belo Re oring Limit B resent in Blank NR Not Re uested nter eren e N Not
li a leN See Narrati e L stimated quantitation Limit

Work Order #: 427727

Lab Batch ID: 871699

Date Analyzed: 10/03/2011

Reporting Units: mg/L

Project ID: L-195-0911

QC-Sample ID: 427727-009 S

Batch #: 1 Matrix: Soil

Date Prepared: 09/30/2011

Analyst: RGF

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY												
SPLP Metals by SW 6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
ntimon		<0.00200	0.200	0.183	92	0.200	0.178	89	3	75-125	25	
rseni		<0.00200	0.200	0.173	87	0.200	0.168	84	3	75-125	25	
Barium		0.0260	0.200	0.226	100	0.200	0.220	97	3	75-125	25	
Cadmium		<0.000600	0.200	0.172	86	0.200	0.167	84	3	75-125	25	
Chromium		<0.00300	0.200	0.172	86	0.200	0.168	84	2	75-125	25	
Lead		<0.00200	0.200	0.221	111	0.200	0.216	108	2	75-125	25	
Selenium		<0.00200	0.200	0.161	81	0.200	0.157	79	3	75-125	25	
Sil er		<0.00100	0.100	0.0880	88	0.100	0.0848	85	4	75-125	25	

atri S like er ent Re o er 100 C- /B
 Relati e er ent i eren e R 200 C-F / C F
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Work Order #: 427727

Lab Batch ID: 872283

Date Analyzed: 10/12/2011

Reporting Units: mg/L

Project ID: L-195-0911

QC- Sample ID: 428923-001 S

Date Prepared: 10/12/2011

Batch #: 1 Matrix: Water

Analyst: C

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY												
Reporting Units: mg/L	SPLP Volatiles by EPA 8260B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Ben ene	<0.00500	0.0500	0.0514	103	0.0500	0.0508	102	1	66-142	21	
	Bromo en ene	<0.00500	0.0500	0.0533	107	0.0500	0.0548	110	3	75-125	20	
	Bromo hlromethane	<0.00500	0.0500	0.0527	105	0.0500	0.0556	111	5	73-125	20	
	Bromodi hlromethane	<0.00500	0.0500	0.0569	114	0.0500	0.0569	114	0	75-125	20	
	Bromo orm	0.00534	0.0500	0.0599	109	0.0500	0.0654	120	9	75-125	20	
	eth l romide	<0.00500	0.0500	0.0421	84	0.0500	0.0415	83	1	70-130	20	
	eth l eth l ketone	<0.0500	0.500	0.290	58	0.500	0.327	65	12	60-140	20	
	B	<0.00500	0.0500	0.0588	118	0.0500	0.0626	125	6	65-135	20	
	n-But l en ene	<0.00500	0.0500	0.0554	111	0.0500	0.0532	106	4	75-125	20	
	Se -But l en ene	<0.00500	0.0500	0.0570	114	0.0500	0.0554	111	3	75-125	20	
	tert-But l en ene	<0.00500	0.0500	0.0575	115	0.0500	0.0568	114	1	75-125	20	
	Car on etra chloride	<0.00500	0.0500	0.0565	113	0.0500	0.0576	115	2	62-125	20	
	Chloro en ene	<0.00500	0.0500	0.0554	111	0.0500	0.0552	110	0	60-133	21	
	Chloroethane	<0.0100	0.0500	0.0382	76	0.0500	0.0377	75	1	70-130	20	
	Chloro orm	<0.00500	0.0500	0.0508	102	0.0500	0.0505	101	1	74-125	20	
	eth l Chloride	<0.0100	0.0500	0.0308	62	0.0500	0.0299	60	3	70-130	20	
	2-Chlorotoluene	<0.00500	0.0500	0.0567	113	0.0500	0.0555	111	2	73-125	20	
	4-Chlorotoluene	<0.00500	0.0500	0.0529	106	0.0500	0.0524	105	1	74-125	20	
	-C mene - so ro ltoluene	<0.00500	0.0500	0.0583	117	0.0500	0.0575	115	1	75-125	20	
	i romo hlromethane	<0.00500	0.0500	0.0591	118	0.0500	0.0625	125	6	73-125	20	
	l 2- i romo-3-Chloro ro ane	<0.00500	0.0500	0.0473	95	0.0500	0.0543	109	14	59-125	28	
	l 2- i romoethane	<0.00500	0.0500	0.0510	102	0.0500	0.0560	112	9	73-125	20	
	eth lene romide	<0.00500	0.0500	0.0528	106	0.0500	0.0541	108	2	69-127	23	

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Project Name: EGL: Lusk Federal "31" # 3

Work Order #: 427727

Lab Batch ID: 872283

Date Analyzed: 10/12/2011

Reporting Units: mg/L

Project ID: L-195-0911

QC- Sample ID: 428923-001 S

Date Prepared: 10/12/2011

Batch #: 1 Matrix: Water

Analyst: C

SPLP Volatiles by EPA 8260B		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
1 2- i hlono ene		<0.00500	0.0500	0.0552	110	0.0500	0.0553	111	0	75-125	20	
1 3- i hlono ene		<0.00500	0.0500	0.0563	113	0.0500	0.0564	113	0	75-125	20	
1 4- i hlono ene		<0.00500	0.0500	0.0566	113	0.0500	0.0564	113	0	75-125	20	
i hlordi luoromethane		<0.00500	0.0500	0.0370	74	0.0500	0.0348	70	6	70-130	23	
1 1- i hlonoethane		<0.00500	0.0500	0.0528	106	0.0500	0.0527	105	0	72-125	20	
1 2- i hlonoethane		<0.00500	0.0500	0.0520	104	0.0500	0.0533	107	2	68-127	20	
1 1- i hlonoethene		<0.00500	0.0500	0.0519	104	0.0500	0.0532	106	2	59-172	22	
is-1 2- i hlonoeth lene		<0.00500	0.0500	0.0527	105	0.0500	0.0533	107	1	75-125	20	
trans-1 2-di hlonoeth lene		<0.00500	0.0500	0.0516	103	0.0500	0.0520	104	1	75-125	20	
1 2- i hlono ro ane		<0.00500	0.0500	0.0501	100	0.0500	0.0479	96	4	74-125	20	
1 3- i hlono ro ane		<0.00500	0.0500	0.0526	105	0.0500	0.0539	108	2	75-125	20	
2 2- i hlono ro ane		<0.00500	0.0500	0.0548	110	0.0500	0.0573	115	4	75-125	20	
1 1- i hlono ro ene		<0.00500	0.0500	0.0518	104	0.0500	0.0522	104	1	75-125	20	
is-1 3- i hlono ro ene		<0.00500	0.0500	0.0575	115	0.0500	0.0579	116	1	74-125	20	
trans-1 3-di hlono ro ene		<0.00500	0.0500	0.0545	109	0.0500	0.0580	116	6	66-125	20	
th l en ene		<0.00500	0.0500	0.0540	108	0.0500	0.0533	107	1	75-125	20	
e a hlono utadiene		<0.00500	0.0500	0.0572	114	0.0500	0.0551	110	4	75-125	20	
so ro l en ene		<0.00500	0.0500	0.0552	110	0.0500	0.0552	110	0	75-125	20	
eth lene Chloride		<0.00500	0.0500	0.0489	98	0.0500	0.0502	100	3	75-125	35	
Na hthalene		<0.0100	0.0500	0.0584	117	0.0500	0.0615	123	5	75-125	20	
n- ro l en ene		<0.00500	0.0500	0.0577	115	0.0500	0.0568	114	2	75-125	20	
St rene		<0.00500	0.0500	0.0564	113	0.0500	0.0571	114	1	75-125	51	
1 1 1 2- etra hlonoethane		<0.00500	0.0500	0.0605	121	0.0500	0.0619	124	2	72-125	20	

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Work Order #: 427727

Lab Batch ID: 872283

Date Analyzed: 10/12/2011

Reporting Units: mg/L

Project ID: L-195-0911

QC-Sample ID: 428923-001 S

Batch #: 1 Matrix: Water

Date Prepared: 10/12/2011

Analyst: C

SPLP Volatiles by EPA 8260B		Analytes										Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
1 1 2 2- etha	chloroethane	<0.00500	0.0500	0.0480	96	0.0500	0.0520	104	8	74-125	31											
etra	chloroeth lene	<0.00500	0.0500	0.0576	115	0.0500	0.0576	115	0	71-125	20											
oluene		<0.00500	0.0500	0.0541	108	0.0500	0.0530	106	2	59-139	21											
1 2 3- ri	hloro en ene	<0.00500	0.0500	0.0564	113	0.0500	0.0576	115	2	75-137	20											
1 2 4- ri	hloro en ene	<0.00500	0.0500	0.0570	114	0.0500	0.0568	114	0	75-135	20											
1 1 1- ri	chloroethane	<0.00500	0.0500	0.0543	109	0.0500	0.0547	109	1	75-125	20											
1 1 2- ri	chloroethane	<0.00500	0.0500	0.0513	103	0.0500	0.0536	107	4	75-127	20											
ri	chloroeth lene	<0.00500	0.0500	0.0554	111	0.0500	0.0536	107	3	62-137	24											
ri	hloro luoromethane	<0.00500	0.0500	0.0460	92	0.0500	0.0442	88	4	67-125	20											
1 2 3- ri	hloro ro ane	<0.00500	0.0500	0.0488	98	0.0500	0.0519	104	6	75-125	20											
1 2 4- rimeth	l en ene	<0.00500	0.0500	0.0564	113	0.0500	0.0558	112	1	75-125	20											
1 3 5- rimeth	l en ene	<0.00500	0.0500	0.0573	115	0.0500	0.0565	113	1	70-125	20											
o- lene		<0.00500	0.0500	0.0582	116	0.0500	0.0585	117	1	75-125	20											
m - lenes		<0.0100	0.100	0.113	113	0.100	0.113	113	0	75-125	20											
in l	Chloride	<0.00200	0.0500	0.0376	75	0.0500	0.0366	73	3	75-125	20											

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 Relati e er ent i eren e R 200 C-F / C F
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Work Order #: 427727

Lab Batch ID: 870512

Date Analyzed: 09/21/2011

Reporting Units: mg/kg

Project ID: L-195-0911

QC- Sample ID: 427602-007 S

Batch #: 1 Matrix: Soil

Date Prepared: 09/16/2011

Analyst:

Reporting Units: mg/kg												
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY												
TPH By SW8015 Mod		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
C6-C12 Gasoline Range	dro ar ons	<15.7	1040	943	91	1040	760	73	21	70-135	35	
C12-C28 Diesel Range	dro ar ons	<15.7	1040	1020	98	1040	929	89	9	70-135	35	

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 Relati e er ent i eren e R 200 C-F / C F
 N Not ete ted resent Belo Re orting Limit B resent in Blank NR Not Re uested
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Project Name: EGL: Lusk Federal "31" # 3

Work Order #: 427727

Lab Batch #: 870354

Project ID: L-195-0911

Date Analyzed: 09/19/2011 17 22

Date Prepared: 09/19/2011

Analyst: BRB

QC- Sample ID: 427760-001

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	5.60	4.31	26	20	F

Lab Batch #: 870207

Date Analyzed: 09/16/2011 10 30

Date Prepared: 09/16/2011

Analyst: BRB

QC- Sample ID: 427727-001

Batch #: 1

Matrix: Soil

Reporting Units:

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	26.3	29.9	13	20	

Lab Batch #: 871639

Date Analyzed: 10/04/2011 12 30

Date Prepared: 10/04/2011

Analyst: BRB

QC- Sample ID: 428841-001

Batch #: 1

Matrix: Soil

Reporting Units:

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	7.32	7.00	4	20	

Lab Batch #: 873144

Date Analyzed: 10/25/2011 14 59

Date Prepared: 10/25/2011

Analyst: BRB

QC- Sample ID: 430032-001

Batch #: 1

Matrix: Ground Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY					
SPLP Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Fluoride	<0.200	<0.200	0	20	
Nitrate as N	1.05	1.05	0	20	

Size Relative Difference 200 B- / B

If Results are based on L and validated or C uses.

BRL - Below Reporting Limit

Project Name: EGL: Lusk Federal "31" # 3

Work Order #: 427727

Lab Batch #: 874197

Project ID: L-195-0911

Date Analyzed: 11/07/2011 20 39

Date Prepared: 11/07/2011

Analyst: BRB

QC- Sample ID: 430996-001

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY					
SPLP Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	21.0	22.0	5	20	

Lab Batch #: 871623

Date Analyzed: 10/06/2011 16 10

Date Prepared: 10/06/2011

Analyst: S

QC- Sample ID: 427727-009

Batch #: 1

Matrix: Soil

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY					
SPLP Cyanide by EPA 335.4	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Cyanide total	<0.0100	<0.0100	0	20	

Lab Batch #: 870739

Date Analyzed: 09/22/2011 16 52

Date Prepared: 09/22/2011

Analyst: BRB

QC- Sample ID: 427791-003

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY					
SPLP Inorganic Anions by EPA 300/300.1	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	177	179	1	20	

Lab Batch #: 871551

Date Analyzed: 10/04/2011 13 33

Date Prepared: 10/04/2011

Analyst: BRB

QC- Sample ID: 427727-009

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
TPH by EPA 418.1	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
total petroleum hydrocarbons	2260	2560	12	35	

Statistical Relative Difference (RPD) = 200 - B / B

If Results are based on L and validated or C uses.

BRL - Below Reporting Limit

Permit Information:

Well Name: Black Bear 36 State No. 2H

Location:

SL: 220' FSL & 1310' FEL, Section 36, T-25-S, R-33-E, Lea Co., N.M.

BHL: 330' FNL & 1040' FEL, Section 36, T-25-S, R-33-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0 - 985'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0-4000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4000' - 5100'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0'-14,253'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /ft	Slurry Description
985'	575	13.5	1.73	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	250	14.8	1.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
5,100'	1325	12.7	2.22	Class 'C' + 1.50% R-3 + 0.25 lb/sk Cello-Flake + 2.0% Sodium Metasilicate + 10% Salt + 0.005 lb/sk Static Free
	200	14.8	1.32	Tail: Class 'C' + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
14,253'	250	10.8	3.67	60:40:0 Class C + 15.0 pps BA-90 + 4% MPA-5 + 3.0% SMS + 5.0% A-10 + 1.0% BA-10A + 0.80% ASA-301 + 2.55% R-21 + 8.0 pps LCM-1
	550	11.8	2.38	50:50:10 Class H + 0.80% FL-52 + 0.30% ASA-301 + 0.40% SMS + 2.0% Salt + 0.30% R-21 + 3.0 pps LCM-1 + 0.25 pps Celloflake
	1200	14.2	1.28	50:50:2 Class H + 0.65% FL-52 + 0.45% CD-32 + 0.10% SMS + 2.0% Salt

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 985'	Fresh - Gel	8.6-8.8	28-34	N/c
1000' - 5,100'	Brine	10.0-10.2	28-34	N/c
5,100' - 9,078'	Cut Brine	8.4-9.0	28-34	N/c
KOP - 14,253' Lateral	Cut Brine	9.0-9.5	40-42	8-10

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Dale Littlejohn

Project Name: EGL: Lusk Federal "31" #3

Company Name RT Hicks Consultants Ltd

Project #: L-195-0911

Company Address: P O Box 7624

Project Loc: Lea Co., New Mexico

City/State/Zip: Midland, Texas 79708

PO#:

Telephone No: (432) 528-3878

Fax No: (432) 689-4578 (Fax)

Sampler Signature:

Dale T. Hutter - ~~Shelby~~

[illegible]

Relinquished by:

Date	Time
6/15/11	1318

Received by:

Date	Time
------	------

Relinquished by:

Date	Time
------	------

Received by EL07:

Date	Time
------	------

Andrea Elam

9.15.11 13.18

4oz glass

**XENCO Laboratories**

Atlanta, Boca Raton, Corpus Christi, Dallas
Houston, Miami, Odessa, Philadelphia
Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist

Document No.: SYS-SRC

Revision/Date: No. 01, 5/27/2010

Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client:

Date/Time:

Lab ID #:

Initials:

RT HICKS

9.15.11 13:18

427727

UE

Sample Receipt Checklist

1. Samples on ice?	Blue	Water	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	<u>N/A</u>	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	Yes	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	Yes	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	No	<u>N/A</u>	
17. VOC sample have zero head space?	<u>Yes</u>	No	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs 1.0 °C	lbs °C	lbs °C	lbs °C	lbs °C

Nonconformance Documentation

Contact:

Contacted by:

Date/Time:

Regarding:

Corrective Action Taken:

Check all that apply: ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
☐ Initial and Backup Temperature confirm out of temperature conditions
☐ Client understands and would like to proceed with analysis

COVER LETTER

Thursday, December 29, 2011

Randall Hicks
R.T. Hicks Consultants, LTD
901 Rio Grande Blvd. NW
Suite F-142
Albuquerque, NM 87104

TEL: (505) 266-5004

FAX (505) 266-0745

RE: EGL Lusk Pit

Order No.: 1112410

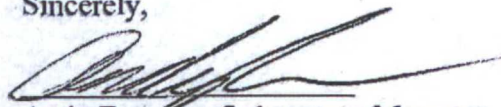
Dear Randall Hicks:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 12/7/2011 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,



Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682

Hall Environmental Analysis Laboratory, Inc.

Date: 29-Dec-11

Analytical Report

CLIENT: R.T. Hicks Consultants, LTD

Client Sample ID: F (fluoride)

Lab Order: 1112410

Collection Date: 12/14/2011

Project: EGL Lusk Pit

Date Received: 12/7/2011

Lab ID: 1112410-01

Matrix: LEACHATE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: BRM
Fluoride	0.97	0.50		mg/L	5	12/20/2011 7:36:11 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Estimated value
J Analyte detected below quantitation limits
NC Non-Chlorinated
PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
MCL Maximum Contaminant Level
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: R.T. Hicks Consultants, LTD
Project: EGL Lusk Pit

Work Order: 1112410

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions											
Sample ID: MB		MBLK									
Fluoride	ND	mg/L	0.10								
Sample ID: MB		MBLK									
Fluoride	ND	mg/L	0.10								
Sample ID: LCS		LCS									
Fluoride	0.4770	mg/L	0.10	0.5	0	95.4	90	110			
Sample ID: LCS		LCS									
Fluoride	0.4999	mg/L	0.10	0.5	0	100	90	110			

Qualifiers:

E Estimated value
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
 NC Non-Chlorinated
 R RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name RT HICKS

Date Received:

12/7/2011

Work Order Number 1112410

Received by: AT

Checklist completed by:

Signature

Date

Sample ID labels checked by:

Initials

Matrix:

Carrier name Client drop-off

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present ☐

Not Shipped ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

N/A ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☒

Yes ☐

No ☐

Water - Preservation labels on bottle and cap match?

Yes ☐

No ☐

N/A ☒

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Container/Temp Blank temperature?

14.9°

<6° C Acceptable

If given sufficient time to cool.

Number of preserved bottles checked for pH:

<2 >12 unless noted below.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding:

Comments:

Corrective Action

Attachment 5 – Soil backfilling and cover installation

We followed the Soil Cover Design Plan approved by NMOCD, which is reproduced below.

Soil Cover Design Plan

If the operator removes the pit contents or remediates any contaminated soil to the division's satisfaction the soil cover will consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.

The soil cover for the in-place burial or trench burial will consist of a minimum of four feet of compacted, non-waste containing, earthen material. The soil cover will include either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.

The operator will construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.

The photograph below shows the topsoil (dune sand) on the left edge. The clean earth (red pile) excavated from below the dune sand is behind the pit in the center of the photograph



The photograph below shows the location of the trench relative to the pit.



The photograph below shows the restored surface. The earth material removed from the trench was employed as the soil cover over the lined trench. The red earth material excavated during pit construction was employed to fill the former pit excavation. The dune sand was placed over the filled pit and trench pursuant to NMOCD Rules and the approved permit.



The photograph below shows dune sand encroaching upon the restored surface



The photograph below shows the seeding effort. We employed the seed mixture required by the surface owner, BLM.



7010 3990 0001 8516 4351
1544 9158 1000 0606 0102

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

12 ¹⁰	Postage	\$0.45	7/6/12 Postmark Here Sundry Notice Lusk Pit Re-seeding
	Certified Fee		
	Return Receipt Fee (Endorsement Required)		
	Restricted Delivery Fee (Endorsement Required)		
	Total Postage & Fees	\$5.30	

Sent To	James Amos
Street, Apt. No., or PO Box No.	BLM
City, State, ZIP+4	Carlsbad, NM

PS Form 3800, August 2005

See Reverse for Instructions

Re-Seeding Photographs
April 16, 2012



Initial discing of site



Seed spreading



Final discing



Site Overview