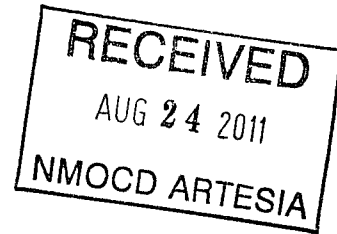




August 22, 2011



Mr. Mike Bratcher  
**NMOCD District 2**  
1301 West Grand Avenue  
Artesia, NM 88210

AMARILLO  
921 North Bivins  
Amarillo, Texas 79107  
Phone 806.467.0607  
Fax 806.467.0622

ARTESIA  
408 West Texas Ave.  
Artesia, New Mexico 88210  
Phone 575.746.8768  
Fax 575.746.8905

AUSTIN  
911 West Anderson Lane  
Suite 202  
Austin, Texas 78757  
Phone 512.989.3428  
Fax 512.989.3487

HOBBS  
318 East Taylor Street  
Hobbs, New Mexico 88240  
Phone 575.393.4261  
Fax 575.393.4658

MIDLAND  
2901 State Hwy 349  
Midland, Texas 79706  
Phone 432.522.2133  
Fax 432.522.2180

SAN ANTONIO  
11 Commercial Place  
Schertz, Texas 78154  
Phone 210.265.8025  
Fax 210.568.2191

TULSA  
525 South Main Street  
Suite 535  
Tulsa, Oklahoma 74103  
Phone 918.742.0871  
Fax 918.382.0232

Subject: **Soil Assessment and Remediation Work Plan**  
Lime Rock Resources II-A, L.P  
Condor 8 Federal No. 001H  
30-015-35829 -- 2RP-853

Dear Mr. Bratcher,

Lime Rock Resources II-A, L.P has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the referenced Condor 8 Federal No. 001H. The results of our soil assessment and proposed remediation activities consist of the following:

#### **Incident Date**

July 28, 2011

#### **Background Information**

The Condor 8 Federal No. 001H is located approximately sixteen (16) miles east of Artesia, New Mexico. The legal location for the site is Section 8, Township 18 South and Range 27 East in Eddy County, New Mexico. More Specifically the latitude and longitude for the release are 32.76464 North and -104.300765 West.

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soil in this area is made up of Gypsum. The local surface and shallow geology, Paleozoic Age sedimentary deposits, is comprised of the Guadeloupien Artesia Group, Tansil and Yates formations which includes silty soils underlain by gypsum and hard caliches. Drainage courses in this area are normally dry. The New Mexico State Engineer web site indicates the nearest ground water data to be in S8-T18S-R27E. The ground water in the area is reported to be at an average of 82' below ground surface (bgs). The referenced groundwater data is presented in Appendix I.

The ranking for this site is 10 based on the as following:

ENVIRONMENTAL CONSULTING  
ENGINEERING  
DRILLING  
CONSTRUCTION  
SPILL MANAGEMENT  
GENERAL CONTRACTING

Depth to ground water	50'-100'
Wellhead Protection Area	>1000'
Distance to surface water body	>1000'

Toll Free: 866.742.0742  
[www.talonlpe.com](http://www.talonlpe.com)

## **Incident Description**

On July 28, 2011 the driver for Great Lakes Transport overflowed his transport truck. Approximately fifteen (15) barrels of oil were released. There were no fluids recovered. The affected area is located on the well location south of the battery and measures approximately 72-feet long by 122-feet wide. A small area located south of the well location was also affected by a minor flow path. A site plan illustration the work area is attached.

## **Actions Taken**

On July 28, 2011 Talon/LPE personnel conducted a preliminary site assessment for the construction of the initial C-141 form.

On August 5, 2011 Talon/LPE mobilized personnel to the site to carry out soil sampling activities for the construction of a work plan. Grab soil samples were collected utilizing a hand auger. The soil samples were collected from the impacted area to a depth of 2-feet below land surface on location (S-1) and off location to a depth of 1-foot below land surface. (S-2)

All soil samples were collected by Talon personnel wearing clean nitrile gloves. The soil samples were placed in laboratory provided sample containers, iced and transported to Cardinal Laboratories in Hobbs, New Mexico for analysis. The samples were tested for TPH (Total Petroleum Hydrocarbons) using EPA Method 8015M, and volatile organics (BTEX) using EPA Method 8021B. The complete laboratory report is attached as Appendix II.

## **Analytical Results**

Analytical results received from Cardinal Laboratories dated August 11, 2011 are summarized below:

<u>Sample, Depth</u>	<u>BTEX</u>	<u>TPH</u>
S-1 0'	<50 mg/kg	53060 mg/kg
S-1 1'	665.2	8730
S-1 2'	<50	375.2
S-2 0'	<50	24897
S-2 1'	<50	2674.4
S-2 2'	*Refusal	

For this site's ranking, New Mexico Oil Conservation District action level criterion for BTEX is 50 mg/kg, Benzene is 10 mg/kg and TPH is 1,000 mg/kg.

## Summary and Conclusion

- Groundwater in the project vicinity is less than 100-feet below land surface per the New Mexico State Engineer Database.
- A number of above ground steel flow lines exist on the location.
- Based upon the results of the laboratory data obtained for this investigation, the vertical impacts of the hydrocarbon release have been documented to extend 1-foot below ground surface in the impacted area.
- Refusal occurred at S-2 when rock was encountered at 1-foot deep.
- Based on the depth to groundwater, it is unlikely that the impacts identified from this release will pose a threat to groundwater after proposed remediation activities are complete.

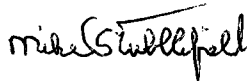
## Proposed Remedial Actions

- Based on the fact that there are a number of above ground steel flow lines located at the site, traditional excavation and disposal methods for the impacted area may not be a feasible option. Because the release consisted solely of crude oil, a spray application of 500 gallons of a bio-remediation agent (Micro Blaze) to treat the impacted area is proposed.
- A follow up 60-day soil sampling event will be done on the area in which Micro Blaze was applied. Should the levels of BTEX and TPH still exceed their respective RRAL's, a second spray application of Micro Blaze and follow up sampling event will be conducted.
- A final report will be provided to the NMOCD Artesia Office utilizing Form C-141.

If we can provide additional information or be of further assistance please contact our office at 575.746.8768.

Respectfully submitted,

TALON/LPE

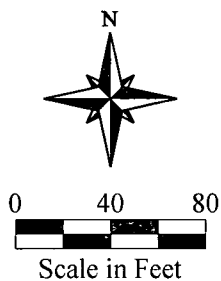
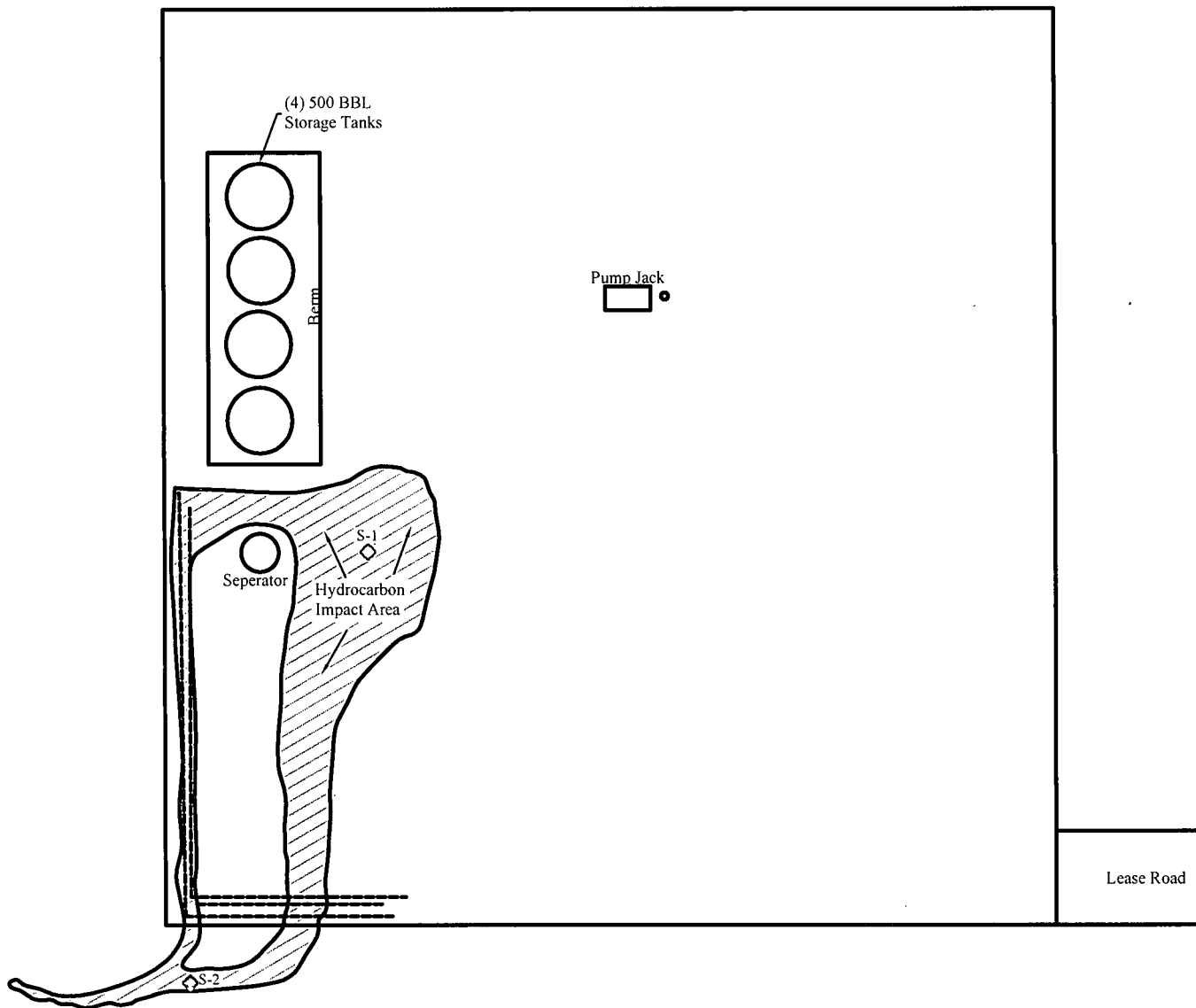


Mike Stubblefield  
Project Manager



David J. Adkins  
District Manager

## **SITE MAP**



Legend	
	- Sample Location
	- Steel Flow Lines



Date: 08/19/2011

Scale: 1" = 80'

Drawn By: TJS

Condor 8 Federal 1H  
Lime Rock Resources  
Eddy County, New Mexico  
Site Plan

**APPENDIX I**  
**GROUNDWATER DATA**  
**INITIAL C-141**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

**Release Notification and Corrective Action**

**OPERATOR**

☒ Initial Report ☐ Final Report

Name of Company : LIME ROCK RESOURCES II-A, L.P	Contact : Jerry Smith	
Address : 1111 Bagby Street Suite 4600, Houston, TX 77002	Telephone No. : 575-748-9724	
Facility Name : Condor 8 Federal #001H	Facility Type: Battery	
Surface Owner : Federal	Mineral Owner	Lease No. : API #30-015-35829

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	8	18S	27E	1770	FNL	2525	FWL	Eddy

Latitude 32.76464 Longitude -104.300765

**NATURE OF RELEASE**

Type of Release : OIL	Volume of Release : 15 bbls	Volume Recovered: -0-
Source of Release : Overflow Oil Transport	Date and Hour of Occurrence: 7/28/11 10:07 am	Date and Hour of Discovery: 7/28/11 10:07 am
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom? Transport Driver	Date and Hour : 7/28/11 10:07 am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*


Describe Cause of Problem and Remedial Action Taken.\*

During loading procedures the driver for Great Lakes Transport overflowed his transport truck.

Describe Area Affected and Cleanup Action Taken.\*

The affected area was located on the well location south of the battery. This area was measured to be approximately 72' long x 122' wide. A small area located south of the well location was affected by a minor flow path. Due to rock and boulders off the edge of location, this area was not able to be measured. Great Lakes Transport was contacted; they will provide equipment for the excavation of release. Talon/LPE was also contacted for the correction of the release.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jerry Smith	Approved by District Supervisor:	
Title: Assistant Production Supervisor	Approval Date:	Expiration Date:
E-mail Address: jsmith@limerockresources.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 8/01/11 Phone: 575-748-9724		

Attach Additional Sheets If Necessary



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
RA 03714	PRO	CH		4	4	2	08	18S	27E	566212	3625253*	1268	381		
RA 05989	PRO	ED		3	2	4	01	18S	26E	562774	3626466*	2378	72	8	64
RA 03661	PRO	ED		3	2	3	32	17S	27E	565186	3628038*	2399	330	140	190
RA 03664	DOM	CH		3	2	3	32	17S	27E	565186	3628038*	2399	400	100	300

Average Depth to Water: **82 feet**

Minimum Depth: **8 feet**

Maximum Depth: **140 feet**

**Record Count: 4**

**UTMNAD83 Radius Search (in meters):**

Easting (X): 565006

Northing (Y): 3625645

Radius: 3000

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



**APPENDIX II**  
**LABORATORY RESULTS**



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

---

August 11, 2011

MIKE STUBBLEFIELD

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: CONDOR BATTERY 8 RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 08/05/11 17:50.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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 (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:**

 TALON LPE  
 MIKE STUBBLEFIELD  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

Received:	08/05/2011	Sampling Date:	08/05/2011
Reported:	08/11/2011	Sampling Type:	Soil
Project Name:	CONDOR BATTERY 8 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	701307.027.01	Sample Received By:	Jodi Henson
Project Location:	SEC.26 - T175 - R28E		

**Sample ID: S-1 0' LOCATION (H101648-01)**

BTX 8021B		mg/kg		Analyzed By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.50	2.50	08/10/2011	ND	1.93	96.6	2.00	0.499	
Toluene*	5.87	2.50	08/10/2011	ND	1.87	93.4	2.00	0.698	
Ethylbenzene*	11.1	2.50	08/10/2011	ND	1.92	96.0	2.00	0.642	
Total Xylenes*	34.4	7.50	08/10/2011	ND	5.79	96.6	6.00	0.856	

Surrogate: 4-Bromofluorobenzene (PIL) 101 % 70-130

TPH 8015M		mg/kg		Analyzed By: ab					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	, RPD	Qualifier	
GRO C6-C10	1860	100	08/10/2011	ND	186	92.9	200	2.28		
DRO >C10-C28	51200	100	08/10/2011	ND	172	86.2	200	1.36		

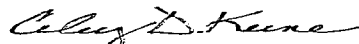
Surrogate: 1-Chlorooctane 159 % 70-130

Surrogate: 1-Chlorooctadecane 86.9 % 70-130

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

**Analytical Results For:**

TALON LPE  
MIKE STUBBLEFIELD  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 08/05/2011  
Reported: 08/11/2011  
Project Name: CONDOR BATTERY 8 RELEASE  
Project Number: 701307.027.01  
Project Location: SEC.26 - T175 - R28E

Sampling Date: 08/05/2011  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-1 1' LOCATION (H101648-02)**

BTEX 8021B		mg/kg		Analyzed By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	33.2	2.50	08/10/2011	ND	1.93	96.6	2.00	0.499	
Toluene*	204	2.50	08/10/2011	ND	1.87	93.4	2.00	0.698	
Ethylbenzene*	129	2.50	08/10/2011	ND	1.92	96.0	2.00	0.642	
Total Xylenes*	299	7.50	08/10/2011	ND	5.79	96.6	6.00	0.856	

Surrogate: 4-Bromofluorobenzene (PIL) 123 % 70-130

TPH 8015M		mg/kg		Analyzed By: ab					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	2790	50.0	08/10/2011	ND	186	92.9	200	2.28	
DRO >C10-C28	5940	50.0	08/10/2011	ND	172	86.2	200	1.36	

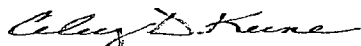
Surrogate: 1-Chlorooctane 105 % 70-130

Surrogate: 1-Chlorooctadecane 125 % 70-130

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

**Analytical Results For:**

TALON LPE  
MIKE STUBBLEFIELD  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received:	08/05/2011	Sampling Date:	08/05/2011
Reported:	08/11/2011	Sampling Type:	Soil
Project Name:	CONDOR BATTERY 8 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	701307.027.01	Sample Received By:	Jodi Henson
Project Location:	SEC.26 - T175 - R28E		

**Sample ID: S-1 2' LOCATION (H101648-03)**

BTX 8021B		mg/kg		Analyzed By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.299</b>	0.050	08/10/2011	ND	1.93	96.6	2.00	0.499	
<b>Toluene*</b>	<b>1.78</b>	0.050	08/10/2011	ND	1.87	93.4	2.00	0.698	
<b>Ethylbenzene*</b>	<b>1.38</b>	0.050	08/10/2011	ND	1.92	96.0	2.00	0.642	
<b>Total Xylenes*</b>	<b>3.70</b>	0.150	08/10/2011	ND	5.79	96.6	6.00	0.856	

Surrogate: 4-Bromofluorobenzene (PIL) 102 % 70-130

TPH 8015M		mg/kg		Analyzed By: ab					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>19.2</b>	10.0	08/10/2011	ND	186	92.9	200	2.28	
<b>DRO &gt;C10-C28</b>	<b>356</b>	10.0	08/10/2011	ND	172	86.2	200	1.36	

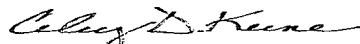
Surrogate: 1-Chlorooctane 116 % 70-130

Surrogate: 1-Chlorooctadecane 123 % 70-130

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

**Analytical Results For:**

TALON LPE  
MIKE STUBBLEFIELD  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received:	08/05/2011	Sampling Date:	08/05/2011
Reported:	08/11/2011	Sampling Type:	Soil
Project Name:	CONDOR BATTERY 8 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	701307.027.01	Sample Received By:	Jodi Henson
Project Location:	SEC.26 - T175 - R28E		

**Sample ID: S-2 0' OFF LOCATION (H101648-04)**

BTX 8021B		mg/kg		Analyzed By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/10/2011	ND	1.93	96.6	2.00	0.499	
Toluene*	0.088	0.050	08/10/2011	ND	1.87	93.4	2.00	0.698	
Ethylbenzene*	0.252	0.050	08/10/2011	ND	1.92	96.0	2.00	0.642	
Total Xylenes*	0.831	0.150	08/10/2011	ND	5.79	96.6	6.00	0.856	

Surrogate: 4-Bromofluorobenzene (PIL) 102 % 70-130

TPH 8015M		mg/kg		Analyzed By: ab					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	197	50.0	08/10/2011	ND	186	92.9	200	2.28	
DRO >C10-C28	24700	50.0	08/10/2011	ND	172	86.2	200	1.36	

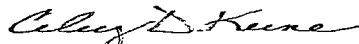
Surrogate: 1-Chlorooctane 119 % 70-130

Surrogate: 1-Chlorooctadecane 106 % 70-130

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

**Analytical Results For:**

 TALON LPE  
 MIKE STUBBLEFIELD  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

Received:	08/05/2011	Sampling Date:	08/05/2011
Reported:	08/11/2011	Sampling Type:	Soil
Project Name:	CONDOR BATTERY 8 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	701307.027.01	Sample Received By:	Jodi Henson
Project Location:	SEC.26 - T175 - R28E		

**Sample ID: S-2 1' OFF LOCATION (H101648-05)**

BTEx 8021B		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/10/2011	ND	1.93	96.6	2.00	0.499		
Toluene*	<0.050	0.050	08/10/2011	ND	1.87	93.4	2.00	0.698		
Ethylbenzene*	<0.050	0.050	08/10/2011	ND	1.92	96.0	2.00	0.642		
<b>Total Xylenes*</b>	<b>0.180</b>	0.150	08/10/2011	ND	5.79	96.6	6.00	0.856		

Surrogate: 4-Bromofluorobenzene (PIL) 96.1 % 70-130

TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>64.4</b>	50.0	08/10/2011	ND	186	92.9	200	2.28		
<b>DRO &gt;C10-C28</b>	<b>2610</b>	50.0	08/10/2011	ND	172	86.2	200	1.36		

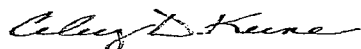
Surrogate: 1-Chlorooctane 125 % 70-130

Surrogate: 1-Chlorooctadecane 123 % 70-130

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

### Notes and Definitions

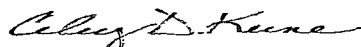
- Z-01 One or more surrogates above historical limits.
- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* 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



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

[illegible]

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 the client for the 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 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:		Date:	Received By:		Phone Result:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Add'l Phone #:
Mike Stubbfield		8/5/11	Jodi Newson		Fax Result:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Add'l Fax #:
Time:		2:??pm.	Time:		REMARKS:			
Relinquished By:		Date:	Received By:					
on		8/5/11	Jodi Newson					
Time:		5:50	Time:					
Delivered By: (Circle One)			Sample Condition	CHECKED BY:				
Sampler - UPS - Bus - Other:			Cool <input type="checkbox"/> Intact <input type="checkbox"/>	(Initials)				
5°C			Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>				