

Form 3160-3
(August 2007)

DEC 11 2012

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NMOC DARTESIA

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

OCD Artesia

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

5. Lease Serial No.
NMNM055648

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
CIMAREX ENERGY CO. OF COLORADO

3a. Address
600 N. Marlenfeld St Suite 600, Midland, TX 79701

3b. Phone No. (include area code)
432-571-7800

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FSL & 660' FWL, Unit L, Section 28, T18S-R31E

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

8. Well Name and No.
Keohane ET AL A Federal #2

9. API Well No.
30-015-05621

10. Field and Pool or Exploratory Area
SHUGART; YATES-7R-QN-GB

11. Country or Parish, State
EDDY

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input checked="" type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	P&A LOCATION
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 recomple 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 recompletion 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.)

- Cimarex Energy Company has contracted Talon/LPE to do reclamation activities on the Keohane ET AL A Federal No. 2, a P&A'd location.
- On 10/29/2012 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 from the location and closed drilling pit. The soil samples were sent to Cardinal Laboratories for analysis of total Chlorides via Method SM4500Cl-B, 8015M TPH and 8021B BTEX. The results for the soil samples are attached.
- The visibly impacted soil around the dry hole marker will be excavated to 3-feet deep. The impacted soil from S-7 will be excavated to a depth of 1-foot. The excavated soil will be transported to a NMOC approved solid waste disposal facility.
- The caliche from the location will be removed, 1-foot of caliche will be placed on the unvegetated part of the drilling pit or used as road closure berms. New soil will be transported to the location from a local borrow pit and 2-foot will be placed over a section of drilling pit.
- The location will be cut, ripped, cross-ripped and then windrows will be installed.
- The soil lift will be contoured to match the surrounding terrain and the location will be seeded using the recommended BLM seed mixture for the area.

Seed Mix #2

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

James Tinney

Title

Production Foreman

Signature

James Tinney

Date

11/29/12

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

James R. Brown

Title

SEAS

Date

12-8-12

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

CFD

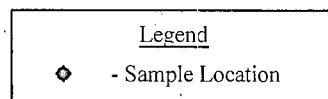
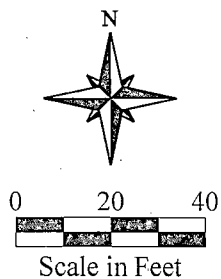
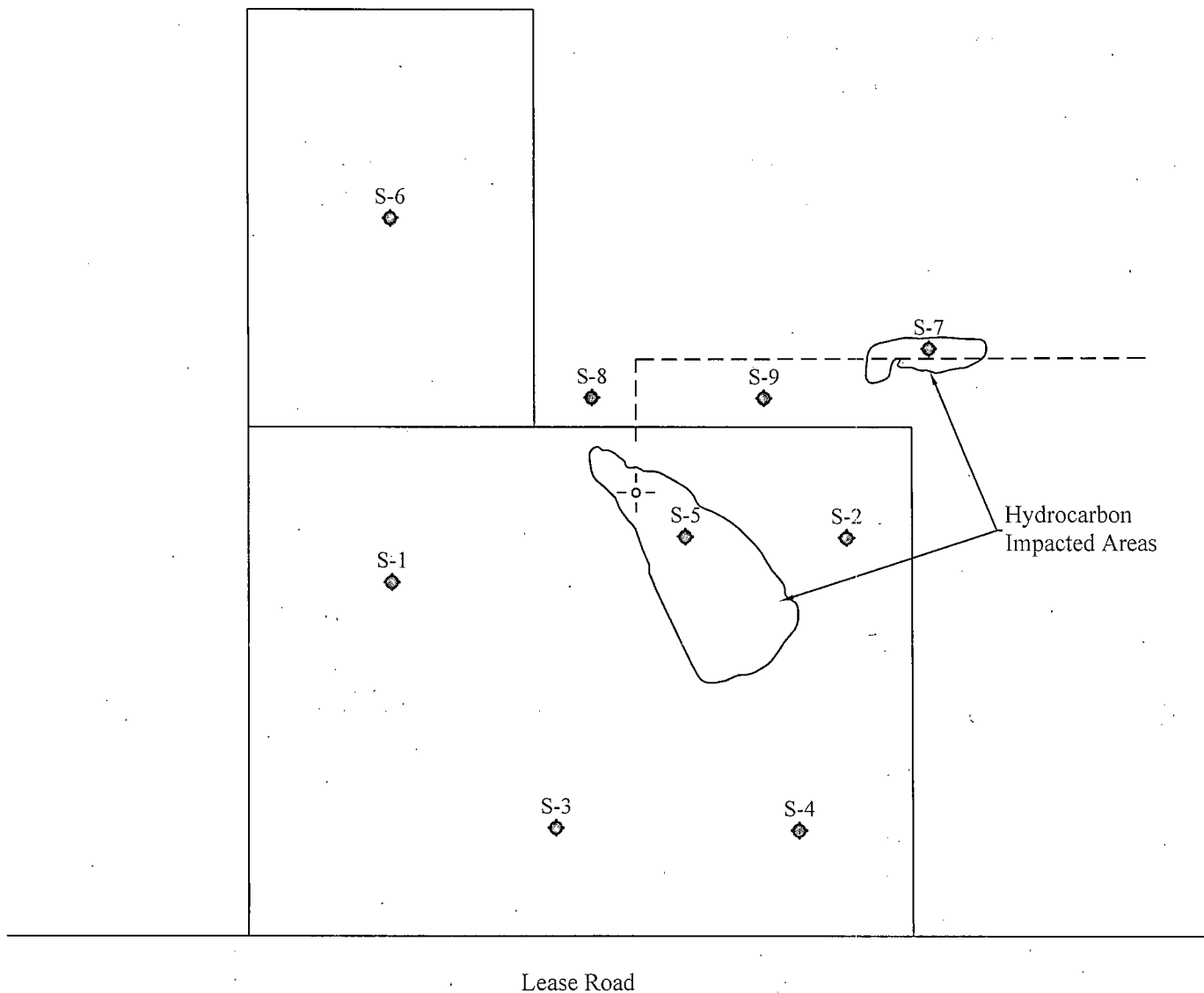
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

Accepted for record

NMOC D

10/12/12



Date: 10/31/2012

Scale: 1" = 40'

Drawn By: TJS

Keohane ETAL A Federal No. 2
 Cimarex Energy Company
 Artesia, New Mexico
 Figure 1 - Site Plan



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

November 02, 2012

MIKE STUBBLEFIELD

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: KEOHANE ETAL A FED. NO. 2

Enclosed are the results of analyses for samples received by the laboratory on 10/30/12 12:45.

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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

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:	10/30/2012	Sampling Date:	10/29/2012
Reported:	11/02/2012	Sampling Type:	Soil
Project Name:	KEOHANE ETAL A FED. NO. 2	Sampling Condition:	Cool & Intact
Project Number:	701162.028.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 28 - T18S - R31E		

Sample ID: S - 1 0' (H202638-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	10/31/2012	ND	432	108	400	3.77	

Sample ID: S - 2 0' (H202638-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/31/2012	ND	432	108	400	3.77	

Sample ID: S - 3 0' (H202638-03)

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	10/31/2012	ND	432	108	400	3.77	

Sample ID: S - 4 0' (H202638-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	784	16.0	10/31/2012	ND	432	108	400	3.77	

Cardinal Laboratories

*=Accredited Analyte

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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:	10/30/2012	Sampling Date:	10/29/2012
Reported:	11/02/2012	Sampling Type:	Soil
Project Name:	KEOHANE ETAL A FED. NO. 2	Sampling Condition:	Cool & Intact
Project Number:	701162.028.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 28 - T18S - R31E		

Sample ID: S - 5 0' (H202638-05)

BTEx 8021B		mg/kg	Analyzed By: AP				S-06		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	11/01/2012	ND	1.92	95.8	2.00	4.85	
Toluene*	0.319	0.200	11/02/2012	ND	2.16	108	2.00	1.81	
Ethylbenzene*	0.457	0.200	11/02/2012	ND	2.20	110	2.00	0.682	
Total Xylenes*	1.39	0.600	11/02/2012	ND	6.76	113	6.00	2.13	
Total BTEX	2.17	1.20	11/02/2012	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 143 % 89.4-126

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM				S-06		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	31200	16.0	10/31/2012	ND	432	108	400	3.77	

TPH 8015M		mg/kg	Analyzed By: MS				S-06		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<200	200	10/30/2012	ND	197	98.6	200	0.0806	
DRO >C10-C28	6360	200	10/30/2012	ND	214	107	200	1.69	

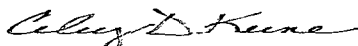
Surrogate: 1-Chlorooctane 106 % 65.2-140

Surrogate: 1-Chlorooctadecane 248 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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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:	10/30/2012	Sampling Date:	10/29/2012
Reported:	11/02/2012	Sampling Type:	Soil
Project Name:	KEOHANE ETAL A FED. NO. 2	Sampling Condition:	Cool & Intact
Project Number:	701162.028.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 28 - T18S - R31E		

Sample ID: S - 5 1' (H202638-06)

BTEX 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/01/2012	ND	1.92	95.8	2.00	4.85	
Toluene*	<0.050	0.050	11/01/2012	ND	2.16	108	2.00	1.81	
Ethylbenzene*	<0.050	0.050	11/01/2012	ND	2.20	110	2.00	0.682	
Total Xylenes*	<0.150	0.150	11/01/2012	ND	6.76	113	6.00	2.13	
Total BTEX	<0.300	0.300	11/01/2012	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1420	16.0	10/31/2012	ND	432	108	400	3.77	

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	10/30/2012	ND	197	98.6	200	0.0806	
DRO >C10-C28	<10.0	10.0	10/30/2012	ND	214	107	200	1.69	

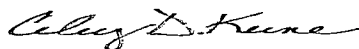
Surrogate: 1-Chlorooctane 87.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 97.1 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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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:	10/30/2012	Sampling Date:	10/29/2012
Reported:	11/02/2012	Sampling Type:	Soil
Project Name:	KEOHANE ETAL A FED. NO. 2	Sampling Condition:	Cool & Intact
Project Number:	701162.028.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 28 - T18S - R31E		

Sample ID: S - 5 2' (H202638-07)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/01/2012	ND	1.92	95.8	2.00	4.85		
Toluene*	<0.050	0.050	11/01/2012	ND	2.16	108	2.00	1.81		
Ethylbenzene*	<0.050	0.050	11/01/2012	ND	2.20	110	2.00	0.682		
Total Xylenes*	<0.150	0.150	11/01/2012	ND	6.76	113	6.00	2.13		
Total BTEX	<0.300	0.300	11/01/2012	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 106 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1820	16.0	10/31/2012	ND	432	108	400	3.77		

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	10/30/2012	ND	197	98.6	200	0.0806		
DRO >C10-C28	<10.0	10.0	10/30/2012	ND	214	107	200	1.69		


Surrogate: 1-Chlorooctane 84.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 93.2 % 63.6-154

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*=Accredited Analyte

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Coley 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:	10/30/2012	Sampling Date:	10/29/2012
Reported:	11/02/2012	Sampling Type:	Soil
Project Name:	KEOHANE ETAL A FED. NO. 2	Sampling Condition:	Cool & Intact
Project Number:	701162.028.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 28 - T18S - R31E		

Sample ID: S - 6 0' (H202638-08)

BTEX 8021B			mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/01/2012	ND	1.92	95.8	2.00	4.85		
Toluene*	<0.050	0.050	11/01/2012	ND	2.16	108	2.00	1.81		
Ethylbenzene*	<0.050	0.050	11/01/2012	ND	2.20	110	2.00	0.682		
Total Xylenes*	<0.150	0.150	11/01/2012	ND	6.76	113	6.00	2.13		
Total BTEX	<0.300	0.300	11/01/2012	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 104 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	15400	16.0	10/31/2012	ND	432	108	400	3.77	

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	10/31/2012	ND	194	97.1	200	5.08	
DRO >C10-C28	41.3	10.0	10/31/2012	ND	215	107	200	7.72	

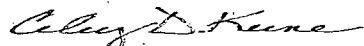
Surrogate: 1-Chlorooctane 75.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 86.5 % 63.6-154

Cardinal Laboratories

* = Accredited Analyte

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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:	10/30/2012	Sampling Date:	10/29/2012
Reported:	11/02/2012	Sampling Type:	Soil
Project Name:	KEOHANE ETAL A FED. NO. 2	Sampling Condition:	Cool & Intact
Project Number:	701162.028.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 28 - T18S - R31E		

Sample ID: S - 6 1' (H202638-09)

BTEX 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/01/2012	ND	1.92	95.8	2.00	4.85	
Toluene*	<0.050	0.050	11/01/2012	ND	2.16	108	2.00	1.81	
Ethylbenzene*	<0.050	0.050	11/01/2012	ND	2.20	110	2.00	0.682	
Total Xylenes*	<0.150	0.150	11/01/2012	ND	6.76	113	6.00	2.13	
Total BTEX	<0.300	0.300	11/01/2012	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 106 % 89.4-126

Chloride, SM4500CI-B			mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	11600	16.0	10/31/2012	ND	432	108	400	3.77		

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	10/31/2012	ND	194	97.1	200	5.08		
DRO >C10-C28	<10.0	10.0	10/31/2012	ND	215	107	200	7.72		

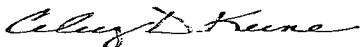
Surrogate: 1-Chlorooctane 70.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 78.7 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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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:	10/30/2012	Sampling Date:	10/29/2012
Reported:	11/02/2012	Sampling Type:	Soil
Project Name:	KEOHANE ETAL A FED. NO. 2	Sampling Condition:	Cool & Intact
Project Number:	701162.028.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 28 - T18S - R31E		

Sample ID: S - 6 . 2' (H202638-10)

BTEX 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/01/2012	ND	1.92	95.8	2.00	4.85	
Toluene*	<0.050	0.050	11/01/2012	ND	2.16	108	2.00	1.81	
Ethylbenzene*	<0.050	0.050	11/01/2012	ND	2.20	110	2.00	0.682	
Total Xylenes*	<0.150	0.150	11/01/2012	ND	6.76	113	6.00	2.13	
Total BTEX	<0.300	0.300	11/01/2012	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 106 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9300	16.0	10/31/2012	ND	432	108	400	3.77	

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	10/31/2012	ND	194	97.1	200	5.08	
DRO >C10-C28	<10.0	10.0	10/31/2012	ND	215	107	200	7.72	

Surrogate: 1-Chlorooctane 72.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 83.7 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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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:	10/30/2012	Sampling Date:	10/29/2012
Reported:	11/02/2012	Sampling Type:	Soil
Project Name:	KEOHANE ETAL A FED. NO. 2	Sampling Condition:	Cool & Intact
Project Number:	701162.028.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 28 - T18S - R31E		

Sample ID: S - 7 0' (H202638-11)

BTEX 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/01/2012	ND	1.92	95.8	2.00	4.85	
Toluene*	<0.050	0.050	11/01/2012	ND	2.16	108	2.00	1.81	
Ethylbenzene*	<0.050	0.050	11/01/2012	ND	2.20	110	2.00	0.682	
Total Xylenes*	<0.150	0.150	11/01/2012	ND	6.76	113	6.00	2.13	
Total BTEX	<0.300	0.300	11/01/2012	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 105 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11000	16.0	10/31/2012	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<100	100	10/31/2012	ND	194	97.1	200	5.08		
DRO >C10-C28	11600	100	10/31/2012	ND	215	107	200	7.72		

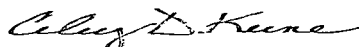
Surrogate: 1-Chlorooctane 70.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 223 % 63.6-154

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* = Accredited Analyte

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Celest 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:	10/30/2012	Sampling Date:	10/29/2012
Reported:	11/02/2012	Sampling Type:	Soil
Project Name:	KEOHANE ETAL A FED. NO. 2	Sampling Condition:	Cool & Intact
Project Number:	701162.028.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 28 - T18S - R31E		

Sample ID: S - 7 1' (H202638-12)

BTEX 8021B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/01/2012	ND	1.92	95.8	2.00	4.85	
Toluene*	<0.050	0.050	11/01/2012	ND	2.16	108	2.00	1.81	
Ethylbenzene*	<0.050	0.050	11/01/2012	ND	2.20	110	2.00	0.682	
Total Xylenes*	<0.150	0.150	11/01/2012	ND	6.76	113	6.00	2.13	
Total BTEX	<0.300	0.300	11/01/2012	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 107 % 89.4-126

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	960	16.0	10/31/2012	ND	432	108	400	3.77	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	32.2	10.0	11/01/2012	ND	194	97.1	200	5.08	
DRO >C10-C28	524	10.0	11/01/2012	ND	215	107	200	7.72	

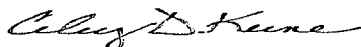
Surrogate: 1-Chlorooctane 90.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 116 % 63.6-154

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*=Accredited Analyte

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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:	10/30/2012	Sampling Date:	10/29/2012
Reported:	11/02/2012	Sampling Type:	Soil
Project Name:	KEOHANE ETAL A FED. NO. 2	Sampling Condition:	Cool & Intact
Project Number:	701162.028.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 28 - T18S - R31E		

Sample ID: S - 7 2' (H202638-13)

BTEx 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/01/2012	ND	1.86	93.2	2.00	4.88	
Toluene*	<0.050	0.050	11/01/2012	ND	2.05	102	2.00	5.31	
Ethylbenzene*	<0.050	0.050	11/01/2012	ND	2.06	103	2.00	6.00	
Total Xylenes*	<0.150	0.150	11/01/2012	ND	5.95	99.1	6.00	5.97	
Total BTEX	<0.300	0.300	11/01/2012	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	10/31/2012	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	11/01/2012	ND	194	97.1	200	5.08	
DRO >C10-C28	1670	50.0	11/01/2012	ND	215	107	200	7.72	

Surrogate: 1-Chlorooctane 92.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 136 % 63.6-154

Sample ID: S - 8 (H202638-14)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/31/2012	ND	432	108	400	3.77	

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	10/30/2012	Sampling Date:	10/29/2012
Reported:	11/02/2012	Sampling Type:	Soil
Project Name:	KEOHANE ETAL A FED. NO. 2	Sampling Condition:	Cool & Intact
Project Number:	701162.028.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 28 - T18S - R31E		

Sample ID: S - 9 (H202638-15)

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	10/31/2012	ND	432	108	400	3.77	

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Celey D. Keene, Lab Director/Quality Manager

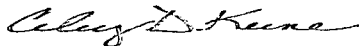
Notes and Definitions

- 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

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Celey D. Keene, Lab Director/Quality Manager



Company Name: Talon/LPE				BILL TO				ANALYSIS REQUEST								
Project Manager: Mike Stuebgenfeld				P.O. #:												
Address: 408 West Tenth Ave.				Company: Talon/LPE												
City: Artesia State: NM Zip: 88210				Attn:												
Phone #: 505-441-2254 Fax #:				Address:												
Project #: 201162-028.01 Project Owner:				City:												
Project Name: Keohane Etal A Fedl No. 2				State: Zip:												
Project Location: sec. 28 - T18S-R31E				Phone #:												
Sampler Name: Mike Stuebgenfeld				Fax #:												
FOR LAB USE ONLY																
Lab I.D.	Sample I.D.	GRAB OR (C)OMP.	# CONTAINERS	MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:	PRESERV. ACID/BASE: ICE / COOL OTHER:	SAMPLING DATE TIME		HPL	GC/MS	Total Chlorides						
H202038																
1	S-1 0'	C		/	/	10/24/12	11:45A									
2	S-2 0'	C		/	/	10/24/12	11:50A									
3	S-3 0'	C		/	/	10/24/12	12:00P									
4	S-4 0'	C		/	/	10/24/12	12:10P									
5	S-5 0'	C		/	/	10/29/12	12:20P	/	/	/						
6	S-5 1'	C		/	/	10/29/12	12:30P	/	/	/						
7	S-5 2'	C		/	/	10/29/12	12:40P	/	/	/						
8	S-6 0'	C		/	/	10/24/12	1:45P	/	/	/						
9	S-6 1'	C		/	/	10/24/12	1:50P	/	/	/						
10	S-6 2'	C		/	/	10/24/12	2:00P	/	/	/						

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Relinquished By: Mike Stuebgenfeld	Date: 10/20/12 Time: 12:45 PM Received By: Heidi Jensen	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No REMARKS:	Add'l Phone #: Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool Intact Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	CHECKED BY: (Initials)	



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>Talon/LPE</u>				BILL TO				ANALYSIS REQUEST															
Project Manager: <u>Mike Stubblefield</u>				P.O. #:																			
Address: <u>408 West Texas Ave.</u>				Company: <u>Talon/LPE</u>																			
City: <u>Ritesia</u> State: <u>NM</u> Zip: <u>88210</u>				Attn:																			
Phone #: <u>575-441-7254</u> Fax #:				Address:																			
Project #: <u>701162-028-01</u> Project Owner:				City:																			
Project Name: <u>Keohane ETal A Federal No. 2</u>				State: Zip:																			
Project Location: <u>sec. 28-T185-R31E</u>				Phone #:																			
Sampler Name: <u>Mike Stubblefield</u>				Fax #:																			
FOR LAB USE ONLY				MATRIX		PRESERV		SAMPLING															
Lab I.D.	Sample I.D.	GRAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME									
<u>H207635</u>																							
<u>11</u>	<u>5-7 0'</u>	<u>5</u>		/						/			<u>10/29/12</u>	<u>2:10 P</u>	<u>80153 TPH</u>	<u>80213 BTEX</u>	<u>Total chlorides</u>						
<u>12</u>	<u>5-7 1'</u>	<u>5</u>		/						/			<u>10/29/12</u>	<u>2:25 P</u>	<u>80153 TPH</u>	<u>80213 BTEX</u>	<u>Total chlorides</u>						
<u>13</u>	<u>5-7 2'</u>	<u>5</u>		/						/			<u>10/29/12</u>	<u>2:30 P</u>	<u>80153 TPH</u>	<u>80213 BTEX</u>	<u>Total chlorides</u>						
<u>14</u>	<u>5-8</u>	<u>5</u>		/						/			<u>10/29/12</u>	<u>2:35 P</u>	<u>80153 TPH</u>	<u>80213 BTEX</u>	<u>Total chlorides</u>						
<u>15</u>	<u>5-9</u>	<u>5</u>		/						/			<u>10/29/12</u>	<u>2:40 P</u>	<u>80153 TPH</u>	<u>80213 BTEX</u>	<u>Total chlorides</u>						

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Relinquished By: <u>Mike Stubblefield</u>		Date: <u>10/29/12</u>		Received By: <u>Jeffie Anderson</u>		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:	
Time: <u>12:45</u>		Date: <u>10/29/12</u>		Received By: <u>Jeffie Anderson</u>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #:	
Relinquished By: <u>Mike Stubblefield</u>		Date: <u>10/29/12</u>		Received By: <u>Jeffie Anderson</u>		REMARKS:	
Time: <u>12:45</u>		Date: <u>10/29/12</u>		Received By: <u>Jeffie Anderson</u>			
Delivered By: (Circle One)		Sample Condition		CHECKED BY:			
Sampler - UPS - Bus - Other:		Cool Intact		(Initials)			
		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<u>JA</u>			

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326