



October 7, 2013

Mr. Jim Amos  
**BUREAU of LAND MANAGEMENT**

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

620 E Green St.  
Carlsbad, NM 88220

Subject: **Remedial Activities and Closure Report**  
Oxy Permian, LTD  
McKittrick 11 #5 SWD

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

Dear Mr. Amos,

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

Oxy Permian (Oxy) has contracted Talon/LPE (Talon) to perform initial spill response, soil assessment and remediation services at the above referenced location. The incident description, soil sampling results, remediation activities and closure request are submitted herein.

#### Incident Date

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

The release was discovered by Oxy Personnel on February 20, 2013

#### Background Information

OKLAHOMA CITY  
7700 North Hudson Avenue  
Suite 10  
Oklahoma City, Oklahoma 73116  
Phone 405.486.7030  
Fax 806.467.0622

The McKittrick 11 #5 SWD is located approximately twenty-two (22) miles northwest of Carlsbad, New Mexico. The legal location for the site is Unit Letter L, Section 11, Township 22 South, Range 24 East in Eddy County, New Mexico. More specifically the latitude and longitude for the release are 32.40989 North -104.47355 West.

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

According to the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is comprised of the Queen and Grayburg Formation (Guadalupean) consisting of gypsum, anhydrite, salt, dolomite, and siltstone. Drainage courses in this area are normally dry. Ground water in the project vicinity is approximately 100-feet below ground surface (bgs), according to the New Mexico Office of the State Engineer. The referenced groundwater data is presented in Appendix II.

The ranking for this site is 0 based on the following:

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

*Site Ranking  
should be 20*

*Distance to Surface Water  
Body = 2200 = 20 ph*  
*HAP*

ENVIRONMENTAL CONSULTING  
ENGINEERING  
DRILLING  
CONSTRUCTION  
SPILL MANAGEMENT  
GENERAL CONTRACTING

Toll Free: 866.742.0742  
www.talonlpe.com

## **Incident Description**

An 8-inch flowline ruptured causing a release of approximately 3500bbls of produced fluids. The fluids ran from the release point and down a draw for approximately 0.7 miles. Emergency response activities included an immediate shut-in of the flowline and the mobilization of vacuum truck to recover standing fluids within the draw. A total 500bbls were recovered.

## **Remedial Actions**

### **February 20, 2013**

- Vacuum trucks were mobilized to recover standing fluids within the draw (a total of 500bbls were recovered).
- Talon personnel were mobilized to perform an initial site assessment and collect soil and water samples. (See Appendix I for site map of sample locations.)\*
- The soil and water samples were sent to Cardinal Laboratories in Hobbs, New Mexico for analysis. A data table summarizing the results is attached. (See Appendix III for complete laboratory results.)

### **May 2, 2013**

- Two micro-blaze applications were used to correct TPH levels at sample locations S-9, S-10 and S-11, per recommendation from Jim Amos of the Bureau of Land Management (BLM).

### **July 4, 2013**

- After a 60 day interval (as requested by Jim Amos) sample locations S-9, S-10 and S-11 were resampled and analyzed for TPH. (See Appendix III for complete laboratory results.)
- The resulting laboratory analysis has indicated the samples to be below the Recommended Remedial Action Levels (RRAL's) for Total Petroleum Hydrocarbons (TPH)

*\*All soil samples were collected by Talon personnel wearing clean nitrile gloves. The soil samples were placed in laboratory provided sample containers and transported to Cardinal Laboratories in Hobbs, New Mexico for analysis. The samples were tested for a combination TPH (Total Petroleum Hydrocarbons) using EPA Method 8015M, volatile organics (BTEX) using EPA Method 8021B, and total Chloride concentration using Method SM4500CL-B. The complete laboratory reports are attached.*

Analytical Results from sampling activities on February 20, 2013 are summarized below:

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
BG-1	0	ND	ND	ND	ND
S-1	0	ND	480	ND	ND
S-2	0	ND	80	ND	ND
S-3	0	ND	608	ND	ND
S-4	0	ND	1310	ND	ND
S-5	0	ND	2760	ND	ND
S-6	0	ND	576	ND	ND
S-7	0	ND	288	ND	ND
S-8	0	ND	288	ND	ND
S-9	0	21.7	80	339	3230
S-10	0	ND	240	ND	ND
S-11	0	2.69	128	52.8	1110
S-12	0	ND	272	ND	ND
S-13	0	ND	256	ND	ND
S-14	0	ND	288	ND	ND
W/BG-1	0	--	20	--	--
W-1	0	--	1260	--	--
W-2	0	--	1360	--	--
W-3	0	--	1260	--	--
W-4	0	--	1220	--	--
W-5	0	--	1130	--	--
W-6	0	--	1230	--	--
W-7	0	--	1120	--	--
W-8	0	--	1360	--	--
W-9	0	--	1180	--	--

(--) Analyte Not Tested

(ND) Analyte Not Detected

Analytical Results from sampling activities on July 4, 2013 are summarized below:

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-9	0	--	--	ND	2990
S-10	0	--	--	ND	189
S-11	0	--	--	ND	34.1

(--) Analyte Not Tested

(ND) Analyte Not Detected

Based upon the site ranking of 0, NMOCD Recommended Remedial Action Levels (RRAL) are 50 mg/kg for BTEX, 10 mg/kg for Benzene, 5,000 mg/kg for TPH.

## Summary and Conclusions

- Ground water in the project vicinity is approximately 100-feet bgs.
- The produced fluids released were relatively low in chlorides and should cause no impact on vegetation in the area.
- TPH in the micro-blazed area decreased within the 60 day interval and is now below NMOCD Recommended Remedial Action Levels (RRAL's).

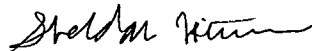
## Closure

On behalf of Oxy Permian we respectfully request that no further actions be required and that closure with regard to this release be granted.

If we can provide additional information or be of further assistance, please contact our office at (575)-746-8768.

Respectfully submitted,

TALON/LPE

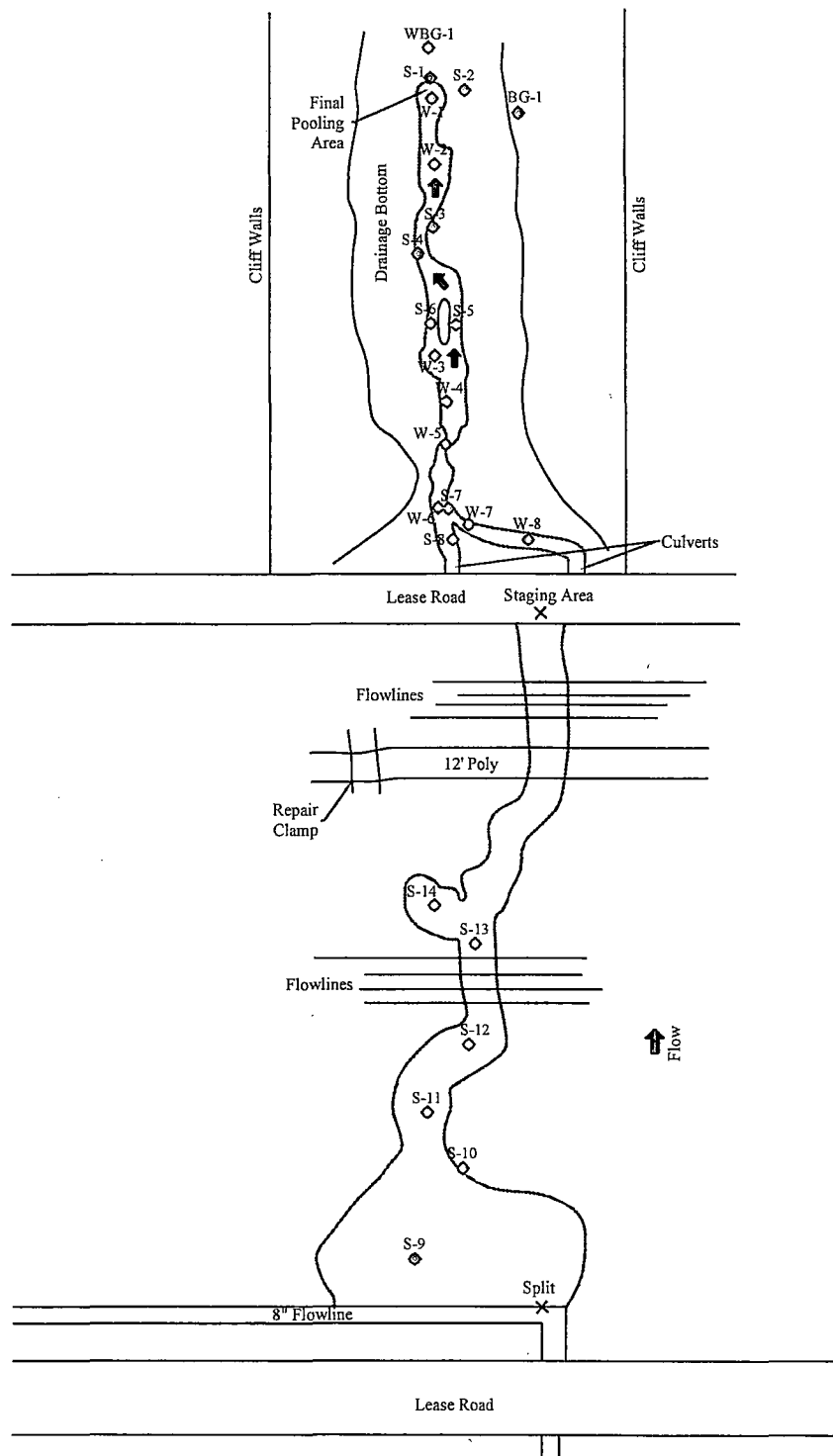


Sheldon Hitchcock  
Environmental Scientist



David J. Adkins  
District Manager

# **SITE PLAN**



Legend	
◇	- Sample Location
~	- Impacted Area
➔	- Flow Direction



Date: 03/08/2013  
Scale: NTS  
Drawn By: TJS

McKittrick 11 #5 SWD  
Oxy USA  
Eddy County, New Mexico  
Figure 1 - Site Plan

# **GROUNDWATER DATA**



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the  
POD suffix indicates the  
POD has been replaced  
& no longer serves a  
water right file.)

(R=POD has  
been replaced,  
O=orphaned,  
C=the file is  
closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q Q Q				Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
				64	16	4	4									
C 02351			ED	3	2	2	15	22S	24E		548817	3584393*	1035	120	100	20
C 02384			ED	3	2	2	15	22S	24E		548817	3584393*	1035	120	100	20
C 02428			ED	4	2	1	12	22S	24E		551426	3586017*	2227	450	400	50

Average Depth to Water: 200 feet

Minimum Depth: 100 feet

Maximum Depth: 400 feet

Record Count: 3

## Basin/County Search:

County: Eddy

## UTMNAD83 Radius Search (in meters):

Easting (X): 549317

Northing (Y): 3585300

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.

10/8/13 9:48 AM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



# **LABORATORY RESULTS**

February 27, 2013

DAVID ADKINS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: MC KITTRICK 11 #5 SWD

Enclosed are the results of analyses for samples received by the laboratory on 02/21/13 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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

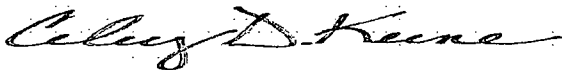
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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:**

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

 Received: 02/21/2013  
 Reported: 02/27/2013  
 Project Name: MC KITTRICK 11 #5 SWD  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 02/20/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: BG - 1 (H300477-01)**

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	02/25/2013	ND	2.25	113	2.00	3.27		
Toluene*	<0.050	0.050	02/25/2013	ND	2.29	115	2.00	0.454		
Ethylbenzene*	<0.050	0.050	02/25/2013	ND	2.26	113	2.00	1.32		
Total Xylenes*	<0.150	0.150	02/25/2013	ND	7.03	117	6.00	3.37		
Total BTEx	<0.300	0.300	02/25/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 110 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/25/2013	ND	416	104	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	02/26/2013	ND	184	91.9	200	12.5	
DRO >C10-C28	<10.0	10.0	02/26/2013	ND	178	88.8	200	14.1	

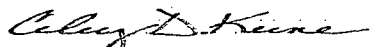
Surrogate: 1-Chlorooctane 89.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 104 % 63.6-154

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  
 DAVID ADKINS  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

Received:	02/21/2013	Sampling Date:	02/20/2013
Reported:	02/27/2013	Sampling Type:	Soil
Project Name:	MC KITTRICK 11 #5 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: S - 1 (H300477-02)**

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	02/25/2013	ND	2.25	113	2.00	3.27		
Toluene*	<0.050	0.050	02/25/2013	ND	2.29	115	2.00	0.454		
Ethylbenzene*	<0.050	0.050	02/25/2013	ND	2.26	113	2.00	1.32		
Total Xylenes*	<0.150	0.150	02/25/2013	ND	7.03	117	6.00	3.37		
Total BTEx	<0.300	0.300	02/25/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 111 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	480	16.0	02/25/2013	ND	416	104	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	02/26/2013	ND	184	91.9	200	12.5		
DRO >C10-C28	<10.0	10.0	02/26/2013	ND	178	88.8	200	14.1		

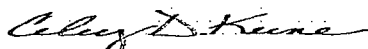
Surrogate: 1-Chlorooctane 85.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 102 % 63.6-154

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  
 DAVID ADKINS  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

 Received: 02/21/2013  
 Reported: 02/27/2013  
 Project Name: MC KITTRICK 11 #5 SWD  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 02/20/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S - 2 (H300477-03)**

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	02/25/2013	ND	2.25	113	2.00	3.27		
Toluene*	<0.050	0.050	02/25/2013	ND	2.29	115	2.00	0.454		
Ethylbenzene*	<0.050	0.050	02/25/2013	ND	2.26	113	2.00	1.32		
Total Xylenes*	<0.150	0.150	02/25/2013	ND	7.03	117	6.00	3.37		
Total BTEX	<0.300	0.300	02/25/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 110 % 89.4-126

Chloride, SM4500Cl-B			mg/kg							Analyzed By: DW	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	80.0	16.0	02/25/2013	ND	416	104	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	02/26/2013	ND	184	91.9	200	12.5			
DRO >C10-C28	<10.0	10.0	02/26/2013	ND	178	88.8	200	14.1			

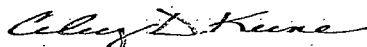
Surrogate: 1-Chlorooctane 85.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 102 % 63.6-154

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  
 DAVID ADKINS  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

Received:	02/21/2013	Sampling Date:	02/20/2013
Reported:	02/27/2013	Sampling Type:	Soil
Project Name:	MC KITTRICK 11 #5 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: S - 3 (H300477-04)**

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	02/25/2013	ND	2.25	113	2.00	3.27		
Toluene*	<0.050	0.050	02/25/2013	ND	2.29	115	2.00	0.454		
Ethylbenzene*	<0.050	0.050	02/25/2013	ND	2.26	113	2.00	1.32		
Total Xylenes*	<0.150	0.150	02/25/2013	ND	7.03	117	6.00	3.37		
Total BTEX	<0.300	0.300	02/25/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 110 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	608	16.0	02/25/2013	ND	416	104	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	02/26/2013	ND	184	91.9	200	12.5		
DRO >C10-C28	<10.0	10.0	02/26/2013	ND	178	88.8	200	14.1		

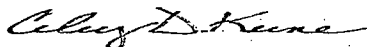
Surrogate: 1-Chlorooctane 93.6 % 63.2-140

Surrogate: 1-Chlorooctadecane 109 % 63.6-154

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  
DAVID ADKINS  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received:	02/21/2013	Sampling Date:	02/20/2013
Reported:	02/27/2013	Sampling Type:	Soil
Project Name:	MC KITTRICK 11 #5 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: S - 4 (H300477-05)**

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	02/25/2013	ND	2.25	113	2.00	3.27	
Toluene*	<0.050	0.050	02/25/2013	ND	2.29	115	2.00	0.454	
Ethylbenzene*	<0.050	0.050	02/25/2013	ND	2.26	113	2.00	1.32	
Total Xylenes*	<0.150	0.150	02/25/2013	ND	7.03	117	6.00	3.37	
Total BTEX	<0.300	0.300	02/25/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 110 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1310	16.0	02/25/2013	ND	416	104	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	02/26/2013	ND	184	91.9	200	12.5	
DRO >C10-C28	<10.0	10.0	02/26/2013	ND	178	88.8	200	14.1	

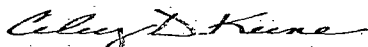
Surrogate: 1-Chlorooctane 89.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 103 % 63.6-154

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  
 DAVID ADKINS  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

 Received: 02/21/2013  
 Reported: 02/27/2013  
 Project Name: MC KITTRICK 11 #5 SWD  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 02/20/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S - 5 (H300477-06)**

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	02/25/2013	ND	2.25	113	2.00	3.27		
Toluene*	<0.050	0.050	02/25/2013	ND	2.29	115	2.00	0.454		
Ethylbenzene*	<0.050	0.050	02/25/2013	ND	2.26	113	2.00	1.32		
Total Xylenes*	<0.150	0.150	02/25/2013	ND	7.03	117	6.00	3.37		
Total BTEX	<0.300	0.300	02/25/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 111 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2760	16.0	02/25/2013	ND	416	104	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	02/26/2013	ND	184	91.9	200	12.5		
DRO >C10-C28	<10.0	10.0	02/26/2013	ND	178	88.8	200	14.1		

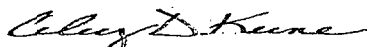
Surrogate: 1-Chlorooctane 90.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 109 % 63.6-154

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  
 DAVID ADKINS  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

Received:	02/21/2013	Sampling Date:	02/20/2013
Reported:	02/27/2013	Sampling Type:	Soil
Project Name:	MC KITTRICK 11 #5 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: S - 6 (H300477-07)**

BTX 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	02/25/2013	ND	2.25	113	2.00	3.27		
Toluene*	<0.050	0.050	02/25/2013	ND	2.29	115	2.00	0.454		
Ethylbenzene*	<0.050	0.050	02/25/2013	ND	2.26	113	2.00	1.32		
Total Xylenes*	<0.150	0.150	02/25/2013	ND	7.03	117	6.00	3.37		
Total BTEX	<0.300	0.300	02/25/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 110 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	576	16.0	02/25/2013	ND	416	104	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	02/26/2013	ND	184	91.9	200	12.5		
DRO >C10-C28	<10.0	10.0	02/26/2013	ND	178	88.8	200	14.1		

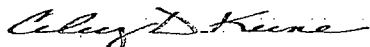
Surrogate: 1-Chlorooctane 85.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 101 % 63.6-154

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  
 DAVID ADKINS  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

 Received: 02/21/2013  
 Reported: 02/27/2013  
 Project Name: MC KITTRICK 11 #5 SWD  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 02/20/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S - 7 (H300477-08)**

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	02/25/2013	ND	2.25	113	2.00	3.27	
Toluene*	<0.050	0.050	02/25/2013	ND	2.29	115	2.00	0.454	
Ethylbenzene*	<0.050	0.050	02/25/2013	ND	2.26	113	2.00	1.32	
Total Xylenes*	<0.150	0.150	02/25/2013	ND	7.03	117	6.00	3.37	
Total BTEX	<0.300	0.300	02/25/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 109 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	02/25/2013	ND	416	104	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	02/26/2013	ND	184	91.9	200	12.5	
DRO >C10-C28	<10.0	10.0	02/26/2013	ND	178	88.8	200	14.1	

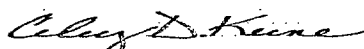
Surrogate: 1-Chlorooctane 88.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 103 % 63.6-154

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  
 DAVID ADKINS  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

 Received: 02/21/2013  
 Reported: 02/27/2013  
 Project Name: MC KITTRICK 11 #5 SWD  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 02/20/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S - 8 (H300477-09)**

BTX 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	02/25/2013	ND	2.25	113	2.00	3.27	
Toluene*	<0.050	0.050	02/25/2013	ND	2.29	115	2.00	0.454	
Ethylbenzene*	<0.050	0.050	02/25/2013	ND	2.26	113	2.00	1.32	
Total Xylenes*	<0.150	0.150	02/25/2013	ND	7.03	117	6.00	3.37	
Total BTX	<0.300	0.300	02/25/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 109 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	02/25/2013	ND	416	104	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	02/26/2013	ND	184	91.9	200	12.5	
DRO >C10-C28	<10.0	10.0	02/26/2013	ND	178	88.8	200	14.1	

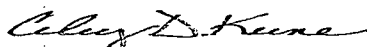
Surrogate: 1-Chlorooctane 84.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 100 % 63.6-154

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



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

**Analytical Results For:**

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

Received: 02/21/2013  
Reported: 02/27/2013  
Project Name: MC KITTRICK 11 #5 SWD  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 02/20/2013  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S - 9 (H300477-10)**

BTEX 8021B		mg/kg	Analyzed By: AP					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.418	0.050	02/25/2013	ND	2.25	113	2.00	3.27	
Toluene*	4.16	0.050	02/25/2013	ND	2.29	115	2.00	0.454	
Ethylbenzene*	1.27	0.050	02/25/2013	ND	2.26	113	2.00	1.32	
Total Xylenes*	15.9	0.150	02/25/2013	ND	7.03	117	6.00	3.37	
Total BTEX	21.7	0.300	02/25/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 208 % 89.4-126

Chloride, SM4500Cl-B		mg/kg	Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	02/25/2013	ND	416	104	400	3.77	

TPH 8015M		mg/kg	Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	339	10.0	02/26/2013	ND	184	91.9	200	12.5	
DRO >C10-C28	3230	10.0	02/26/2013	ND	178	88.8	200	14.1	

Surrogate: 1-Chlorooctane 116 % 65.2-140

Surrogate: 1-Chlorooctadecane 169 % 63.6-154

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  
 DAVID ADKINS  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

 Received: 02/21/2013  
 Reported: 02/27/2013  
 Project Name: MC KITTRICK 11 #5 SWD  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 02/20/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S - 10 (H300477-11)**

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	02/25/2013	ND	2.25	113	2.00	3.27	
Toluene*	<0.050	0.050	02/25/2013	ND	2.29	115	2.00	0.454	
Ethylbenzene*	<0.050	0.050	02/25/2013	ND	2.26	113	2.00	1.32	
Total Xylenes*	<0.150	0.150	02/25/2013	ND	7.03	117	6.00	3.37	
Total BTEX	<0.300	0.300	02/25/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 116 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	02/25/2013	ND	416	104	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	02/26/2013	ND	177	88.3	200	12.4	
DRO >C10-C28	<10.0	10.0	02/26/2013	ND	161	80.7	200	15.8	

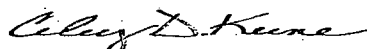
Surrogate: 1-Chlorooctane 83.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 101 % 63.6-154

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  
 DAVID ADKINS  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

Received:	02/21/2013	Sampling Date:	02/20/2013
Reported:	02/27/2013	Sampling Type:	Soil
Project Name:	MC KITTRICK 11 #5 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: S - 11 (H300477-12)**

BTEx 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.067	0.050	02/27/2013	ND	2.25	113	2.00	3.27	
Toluene*	0.682	0.050	02/27/2013	ND	2.29	115	2.00	0.454	
Ethylbenzene*	0.125	0.050	02/27/2013	ND	2.26	113	2.00	1.32	
Total Xylenes*	1.82	0.150	02/27/2013	ND	7.03	117	6.00	3.37	
Total BTEX	2.69	0.300	02/27/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 125 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	02/25/2013	ND	416	104	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	52.8	10.0	02/26/2013	ND	177	88.3	200	12.4	
DRO >C10-C28	1110	10.0	02/26/2013	ND	161	80.7	200	15.8	

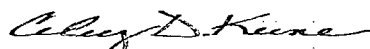
Surrogate: 1-Chlorooctane 77.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 117 % 63.6-154

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  
DAVID ADKINS  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received:	02/21/2013	Sampling Date:	02/20/2013
Reported:	02/27/2013	Sampling Type:	Soil
Project Name:	MC KITTRICK 11 #5 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: S - 12 (H300477-13)**

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	02/26/2013	ND	2.25	113	2.00	3.27		
Toluene*	<0.050	0.050	02/26/2013	ND	2.29	115	2.00	0.454		
Ethylbenzene*	<0.050	0.050	02/26/2013	ND	2.26	113	2.00	1.32		
Total Xylenes*	<0.150	0.150	02/26/2013	ND	7.03	117	6.00	3.37		
Total BTEX	<0.300	0.300	02/26/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 114 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	02/25/2013	ND	416	104	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	02/26/2013	ND	177	88.3	200	12.4		
DRO >C10-C28	<10.0	10.0	02/26/2013	ND	161	80.7	200	15.8		

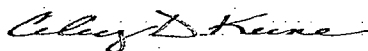
Surrogate: 1-Chlorooctane 77.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 94.0 % 63.6-154

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  
 DAVID ADKINS  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

 Received: 02/21/2013  
 Reported: 02/27/2013  
 Project Name: MC KITTRICK 11 #5 SWD  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 02/20/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S - 13 (H300477-14)**

BTX 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	02/27/2013	ND	2.25	113	2.00	3.27		
Toluene*	<0.050	0.050	02/27/2013	ND	2.29	115	2.00	0.454		
Ethylbenzene*	<0.050	0.050	02/27/2013	ND	2.26	113	2.00	1.32		
Total Xylenes*	<0.150	0.150	02/27/2013	ND	7.03	117	6.00	3.37		
Total BTX	<0.300	0.300	02/27/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 89.4-126

Chloride, SM4500Cl-B			mg/kg		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	02/25/2013	ND	416	104	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	02/26/2013	ND	177	88.3	200	12.4	
DRO >C10-C28	<10.0	10.0	02/26/2013	ND	161	80.7	200	15.8	

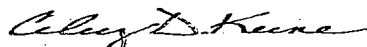
Surrogate: 1-Chlorooctane 66.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 78.0 % 63.6-154

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  
 DAVID ADKINS  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

 Received: 02/21/2013  
 Reported: 02/27/2013  
 Project Name: MC KITTRICK 11 #5 SWD  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 02/20/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S - 14 (H300477-15)**

BTX 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	02/26/2013	ND	2.25	113	2.00	3.27	
Toluene*	<0.050	0.050	02/26/2013	ND	2.29	115	2.00	0.454	
Ethylbenzene*	<0.050	0.050	02/26/2013	ND	2.26	113	2.00	1.32	
Total Xylenes*	<0.150	0.150	02/26/2013	ND	7.03	117	6.00	3.37	
Total BTX	<0.300	0.300	02/26/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 113 % 89.4-126

Chloride, SM4500Cl-B		mg/kg	Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	02/25/2013	ND	416	104	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	02/27/2013	ND	215	108	200	1.75	
DRO >C10-C28	<10.0	10.0	02/27/2013	ND	212	106	200	1.51	

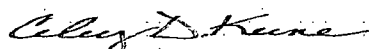
Surrogate: 1-Chlorooctane 89.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 100 % 63.6-154

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

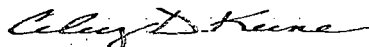
- S-04      The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- ND      Analyte NOT DETECTED at or above the reporting limit
- RPD      Relative Percent Difference
- \*\*      Samples not received at proper temperature of 6°C or below.
- \*\*\*      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]

† Cardinal cannot accept verbal changes. Please fax written changes to 605-393-2476



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Talon/LPE						BILL TO								ANALYSIS REQUEST														
Project Manager: D. Atkins						P.O. #:																						
Address: 409 V. Texas Ave						Company: Talon																						
City: Archa State: NM Zip: 86210						Attn:																						
Phone #: 575-746-8768 Fax #: 1						Address:																						
Project #: Project Owner:						City:																						
Project Name: McRitter II #5 SWD						State: Zip:																						
Project Location:						Phone #:																						
Sampler Name: Sheldon Hitchcock						Fax #:																						
FOR LAB USE ONLY						MATRIX						PRESERV.		SAMPLING														
Lab I.D.		Sample I.D.				(GRAB OR COMPO)	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE	ICE / COOL	OTHER:	DATE	TIME										
H300477						G	1		/					/			2-20-13	4:26P										
12		g-11				G	1		/					/			2-20-13	4:30										
13		g-12				G	1		/					/			2-20-13	4:26										
14		g-13				G	1		/					/			2-20-13	4:30										
15		g-14				G	1		/					/			2-20-13	4:40										

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, 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: 2-2-13	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
Gherda Nenson	Time: 4:31	Miss Stetefeld	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #:
Relinquished By:	Date: 2/2/13	Received By:	REMARKS: please flush
Miss Stetefeld	Time: 4:45	Gherda Nenson	
Delivered By: (Circle One)	Sample Condition	CHECKED BY:	
Sampler - UPS - Bus - Other:	Cool Intact	(Initials)	
	5.5°C <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No		

\* Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



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

---

February 25, 2013

DAVID ADKINS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: MC KITTRICK 11 #5 SWD

Enclosed are the results of analyses for samples received by the laboratory on 02/21/13 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](http://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  
 DAVID ADKINS  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

 Received: 02/21/2013  
 Reported: 02/25/2013  
 Project Name: MC KITTRICK 11 #5 SWD  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 02/20/2013  
 Sampling Type: Water  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: W/BG - 1 (H300478-01)**

Chloride, SM4500Cl-B		mg/L		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	20.0	4.00	02/25/2013	ND	432	108	400	0.00	

**Sample ID: W - 1 (H300478-02)**

Chloride, SM4500Cl-B		mg/L		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	1260	4.00	02/25/2013	ND	108	108	100	0.00	

**Sample ID: W - 2 (H300478-03)**

Chloride, SM4500Cl-B		mg/L		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	1360	4.00	02/25/2013	ND	108	108	100	0.00	

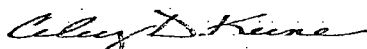
**Sample ID: W - 3 (H300478-04)**

Chloride, SM4500Cl-B		mg/L		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	1260	4.00	02/25/2013	ND	108	108	100	0.00	

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  
 DAVID ADKINS  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

 Received: 02/21/2013  
 Reported: 02/25/2013  
 Project Name: MC KITTRICK 11 #5 SWD  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 02/20/2013  
 Sampling Type: Water  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: W - 4 (H300478-05)**

Chloride, SM4500Cl-B		mg/L		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	1220	4.00	02/25/2013	ND	108	108	100	0.00	

**Sample ID: W - 5 (H300478-06)**

Chloride, SM4500Cl-B		mg/L		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	1130	4.00	02/25/2013	ND	108	108	100	0.00	

**Sample ID: W - 6 (H300478-07)**

Chloride, SM4500Cl-B			mg/L Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	1230	4.00	02/25/2013	ND	108	108	100	0.00	

**Sample ID: W - 7 (H300478-08)**

Chloride, SM4500Cl-B		mg/L		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	1120	4.00	02/25/2013	ND	108	108	100	0.00	

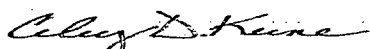
**Sample ID: W - 8 (H300478-09)**

Chloride, SM4500Cl-B			mg/L Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	1200	4.00	02/25/2013	ND	108	108	100	0.00	

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



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

**Analytical Results For:**

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

Received:	02/21/2013	Sampling Date:	02/20/2013
Reported:	02/25/2013	Sampling Type:	Water
Project Name:	MC KITTRICK 11 #5 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: W - 9 (H300478-10)**

Chloride, SM4500Cl-B		mg/L		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	1180	4.00	02/25/2013	ND	108	108	100	0.00		

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.

*Coley D. Keene*

Coley D. Keene, Lab Director/Quality Manager



**Notes and Definitions**

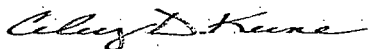
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received 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



# CARDINAL Laboratories

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <b>Talon/LPE</b>				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>															
Project Manager: <b>D. Adams</b>				P.O. #:				Total Chlorides															
Address: <b>408 V. Texas Ave</b>				Company: <b>Talon</b>																			
City: <b>Artesia</b> State: <b>NM</b> Zip: <b>86210</b>				Attn:																			
Phone #: <b>575-746-8768</b> Fax #:				Address:																			
Project #:                      Project Owner:				City:																			
Project Name: <b>McKittick Rd 11 #5 SWD</b>				State:              Zip:																			
Project Location:				Phone #:																			
Sampler Name: <b>Sheldon Hatcher</b>				Fax #:																			
FOR LAB USE ONLY						MATRIX		PRESERV		SAMPLING													
Lab I.D.		Sample I.D.		(GRAB OR (COMP. # CONTAINERS		GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:		ACID/BASE ICE/COOL OTHER:		DATE      TIME													
<b>H300478</b>																							
1		W/B6-1		G						2-20-13 2:30													
2		W-1		G						2-20-13 2:32													
3		W-2		G						2-20-13 2:33													
4		W-3		G						2-20-13 2:35													
5		W-4		G						2-20-13 2:36													
6		W-5		G						2-20-13 2:38													
7		W-6		G						2-20-13 2:40													
8		W-7		G						2-20-13 2:42													
9		W-8		G						2-20-13 2:44													
10		W-9		G						2-20-13 2:47													

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising hereunder 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: <b>2-21-13</b>		Received By: _____		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: _____	
Sheldon Hatcher		Time: <b>9:30</b>		Mica Stappford		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #: _____	
Relinquished By: _____		Date: <b>2/21/13</b>		Received By: _____		REMARKS: <b>please return</b>	
Mica Stappford		Time: <b>12:45</b>		Jodi Benson			
Delivered By: (Circle One)				Sample Condition		CHECKED BY: _____	
Sampler - UPS - Bus - Other:				Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/>		(Initials)	
				Yes <input type="checkbox"/> No <input type="checkbox"/>			

† Cardinal cannot accept verbal changes. Please fax written changes to 605-393-2476



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

July 11, 2013

DAVID ADKINS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: MC KITTRICK 11 #5 SWD

Enclosed are the results of analyses for samples received by the laboratory on 07/05/13 8:05.

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](http://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



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

**Analytical Results For:**

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

Received: 07/05/2013  
Reported: 07/11/2013  
Project Name: MC KITTRICK 11 #5 SWD  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 07/04/2013  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Daniel Wade

**Sample ID: S-9 (H301582-01)**

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	<50.0	50.0	07/10/2013	ND	205	103	200	4.96	
DRO >C10-C28	2990	50.0	07/10/2013	ND	214	107	200	6.93	
<hr/>									
Surrogate: 1-Chlorooctane	86.8 %	65.2-140							
Surrogate: 1-Chlorooctadecane	175 %	63.6-154							

**Sample ID: S-10 (H301582-02)**

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	07/10/2013	ND	205	103	200	4.96	
DRO >C10-C28	189	10.0	07/10/2013	ND	214	107	200	6.93	
<hr/>									
Surrogate: 1-Chlorooctane	84.4 %	65.2-140							
Surrogate: 1-Chlorooctadecane	91.1 %	63.6-154							

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  
DAVID ADKINS  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 07/05/2013  
Reported: 07/11/2013  
Project Name: MC KITTRICK 11 #5 SWD  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 07/04/2013  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Daniel Wade

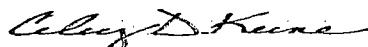
**Sample ID: S-11 (H301582-03)**

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	07/10/2013	ND	205	103	200	4.96	
<b>DRO &gt;C10-C28</b>	<b>34.1</b>	10.0	07/10/2013	ND	214	107	200	6.93	
Surrogate: 1-Chlorooctane	88.4 %	65.2-140							
Surrogate: 1-Chlorooctadecane	90.4 %	63.6-154							

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**

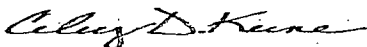
- S-06      The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- ND        Analyte NOT DETECTED at or above the reporting limit
- RPD      Relative Percent Difference
- \*\*        Samples not received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

# CARDINAL Laboratories

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Page 5 of 5

Company Name: <u>Talon/LPE</u>				BILL TO: <u>TALON</u>				ANALYSIS REQUEST																		
Project Manager: <u>D. Adkins</u>				P.O. #:																						
Address: <u>408 W. Texas Ave.</u>				Company: <u>Talon/LPE</u>																						
City: <u>Artesia</u> State: <u>NM</u> Zip: <u>88210</u>				Attn:																						
Phone #: <u>575-746-8768</u> Fax #: <u>575-746-8905</u>				Address:																						
Project #: <u>700608.080.01</u> Project Owner: <u>OKY</u>				City:																						
Project Name: <u>McKittick II #5 SWD</u>				State: Zip:																						
Project Location:				Phone #:																						
Sampler Name: <u>Sweldon Hitchcock</u>				Fax #:																						
FOR LAB USE ONLY				MATRIX		PRESERV		SAMPLING		TPH																
Lab I.D.	Sample I.D.	(GRAB OR COMPOUND)	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:													ACID/BASE:	ICE/COOL	OTHER:	DATE	TIME
<u>4301582</u>																										
<u>1</u>	<u>5-9</u>	<u>6</u>	<u>1</u>																						<u>7-4-13</u>	<u>9:00</u>
<u>2</u>	<u>5-10</u>	<u>6</u>	<u>1</u>																						<u>7-4-13</u>	<u>9:05</u>
<u>3</u>	<u>5-11</u>	<u>6</u>	<u>1</u>																						<u>7-4-13</u>	<u>9:11</u>

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: <u>7/5/13</u>	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
<u>Sweldon Hitchcock</u>	Time: <u>8:05am</u>	<u>P. O. Wade</u>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		
Delivered By: (Circle One)	Sample Condition	CHECKED BY:	
Sampler - UPS - Bus - Other:	Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>	(Initials)	
	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	<u>VP</u>	

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#54

**RECEIVED**

**MAR 25 2013**

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 : Oxy Permian LTD (192463)	Contact : Chris Jones
Address : 1502 W. Commerce, Carlsbad, NM 88220	Telephone No. : 575-628-4121
Facility Name : McKittrick 11-5 SWD Facility	Facility Type: SWD Facility
Surface Owner :	Mineral Owner
	Lease No. : NM 53219 API#: 30-015-33611

### LOCATION OF RELEASE

Unit Letter L	Section 11	Township 22S	Range 24E	Feet from the	North/South Line	Feet from the	East/West Line	County Eddy
------------------	---------------	-----------------	--------------	---------------	------------------	---------------	----------------	-------------

Latitude 32.40989 Longitude 104.47355

### NATURE OF RELEASE

Type of Release : Produced Water	Volume of Release : 3500 bbls	Volume Recovered: 500
Source of Release : 8" Poly line split	Date and Hour of Occurrence: 2/20/2013	Date and Hour of Discovery: 2/20/2013
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Voicemail: OCD & BLM: Jim Amos	
By Whom? CJ Summers (Oxy)	Date and Hour : 2/20/2013	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\* Produced fluids exited location and flowed into Little Water Draw, an ephemeral water course that runs only during precipitous events.

#### Describe Cause of Problem and Remedial Action Taken.\*

An 8" pipeline split at the 45 degree joint causing a release of approximately 3500 bbls of produced fluids. Emergency response included immediate shut-in of the pipeline to stop leak and vac trucks on site to pick up all standing fluids within the draw.

Describe Area Affected and Cleanup Action Taken.\* The area impacted was 3,676-feet down the draw and varied from 18" in some areas to 4-8 feet wide in others. Talon/LPE was contacted to complete the site assessment. Talon collected soil and water samples and the laboratory results are attached. A site map and water data from the State Engineers office are also attached. All standing water down the draw was picked up. Due to the draw being in an archeological site any further remediation will disturb the area. The analytical data came back under the Recommend Remedial Actions Levels. No further actions should be required.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC 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 NMOC 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, NMOC 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.

### OIL CONSERVATION DIVISION

Signature:	Approved by District Supervisor:	
Printed Name: Chris Jones	Approval Date:	Expiration Date:
Title: HES Specialist	Conditions of Approval:	
E-mail Address: Christopher_Jones@ocy.com	Attached <input type="checkbox"/>	
Date: 3/5/2013 Phone: 575-628-4121		

\* Attach Additional Sheets If Necessary