

AMARILLO 92I North Bivins Amarillo. Texas 79107 Phone 806.467.0607 Fax 806.467.0622

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

> AUSTIN 9II West Anderson Lane

Suite 202 Austin, Texas 78757 Phone 512.989.3428 Fax 512.989.3487

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

> MIDLAND 290I State Hwy 349 Midland, Texas 79706 Phone 432.522.2133 Fax 432.522.2180

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

TULSA 525 South Main Street Suite 535 Tulsa, Oklahoma 74103 Phone 918.742.0871 Fax 918.382.0232 January 13, 2012

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

Subject:

**Remediation and Closure Report** Cimarex Energy Corporation Federal 1 Tank Battery Release API # 30-015-25490 – 2RP-747

Dear Mr. Bratcher,

Cimarex Energy has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the referenced Federal 1 Tank Battery release. The incident description, soil sampling results, remediation activities and closure request are submitted herein.

## **Incident Date**

March 9, 2011

## **Background Information**

Depth to ground water

Wellhead Protection Area

Distance to surface water body

The Federal TB No. 1 is located approximately thirty-three (33) miles east of Artesia, New Mexico. The legal location for the site is Section 5, Township 18 South and Range 31 East in Eddy County, New Mexico. More Specifically the latitude and longitude for the release are 32.77444 North and -103.88520 West.

This site lies on undulating plains and low hills consisting of wind worked sandy deposits. Drainage courses in this area are normally dry. The local surface and shallow geology, Quaternary Age sedimentary deposits comprised of alluvium and eolian sands which includes silty soils under lain by sand stone and hard caliches. The New Mexico State Engineer web site indicates the nearest ground water data to be in S4-T18S-R32E. The ground water in Section 4 is reported to be at an average depth of 65' below ground surface (bgs). The referenced groundwater data is presented in Appendix I.

50'-100'

>1000'

>1000'

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

ENVIRONMENTAL CONSULTING ENGINEERING DRILLING CONSTRUCTION SPILL MANAGEMENT GENERAL CONTRACTING

Toll Free: 866.742.0742 www.talonlpe.com



## **Incident Description**

On March 9, 2011 the stock tank at the Federal TB tank battery was discovered to be leaking. The tank was taken out of service, repaired and placed back into service. Two hundred sixty (260) barrels of hydrocarbon fluids were released. A vacuum truck was brought to the location and one hundred thirty-five (135) barrels were recovered. The impacted area was located within the bermed area of the tank battery. The impacted area was measured to be forty-four feet (44') long by fifty-three feet (53') wide.

## **Actions Taken**

On April 21, 2011 Talon mobilized personnel to begin the assessment and soil sampling for the construction of a work plan. Grab soil samples were collected utilizing a backhoe. The soil samples from sample location S-1 were collected from the impacted area located within the bermed area of the tank battery. The soil samples S-2 were collected for back ground chloride analysis from the non-impacted area off the location.

On June 8, 2011 Talon mobilized personnel again to the site for soil sampling at greater depths utilizing a split spoon auger rig. Grab soil samples S-1 were collected from the depth of 10-feet bgs of the impacted area to a depth of 26-feet deep.

Following excavation activities, Talon returned to the site to perform confirmation sampling on the sidewalls and bottom of the excavation on October 19, 2011. Talon personnel return to the site again on November 11, 2011 to take the final confirmation samples after additional excavation work was completed.

All soil samples were collected by Talon personnel wearing clean nitrile gloves. The soil samples were placed in laboratory provided sample containers, iced and transported to Cardinal Laboratories in Hobbs, New Mexico for analysis. The samples were tested for TPH (Total Petroleum Hydrocarbons) using EPA Method 8015M, and volatile organics (BTEX) using EPA Method 8021B. The chlorides were analyzed per SM4500CLB. The complete laboratory report is attached as Appendix II.

## **Analytical Results**

Analytical results received from Cardinal Laboratories are summarized below:

April 27, 2011

Sample	<u>Depth</u>	Chlorides	BTEX	<u>TPH</u> (mg/kg)
S-1	0' 1' 2' 3' 4' 5'	48 3520 1100 432 400 1770	3188 1423 5.484 <50 <50 <50	73500 37800 310.2 44.6 57.5 155.9
A 1 /	6'	3640		38.8

--Analyte not tested

Sample	<u>Depth</u>	Chlorides	BTEX	<u>TPH</u> (mg/kg)
S-1	8'	5760		
	9'	3320		
	10'	5800		
S-2*	0'	16		
	3'	16		

\*Background samples

June 16, 2011

Sample	<u>Depth</u>	<u>Chlorides</u>	<u>BTEX</u>	<u>TPH</u>
S-1	10'	5440		
	15'	2440		
	22'	1120		
	26'	208		

## October 26, 2011

<u>Samp</u>	<ul><li>S-2 East side wall</li><li>S-3 South side wall</li></ul>	Chlorides	BTEX	<u>TPH</u>	
S-1	North side wall	240	0.105	399.7	
S-2	East side wall	80	< 0.150	12.4	
S-3	South side wall	64	< 0.150	112	
S-4	West side wall	224	140.6	22.250	

November 16, 2011

Sample	2	<u>Chlorides</u>	BTEX	<u>TPH</u>
S-5	West side wall		< 0.150	41.1

--Analyte not tested

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

## **Summary and Conclusions**

- Ground water in the project vicinity is greater than 50-feet below land surface per the New Mexico State Engineer Database.
- Based on the depth to groundwater and the installation of a 20 mil liner, it is unlikely that the impacts identified from this release will pose a threat to groundwater.
- The impacted soil from this release was excavated by others to a minimum depth of 2-feet below land surface per the approved work plan. The impacted soil was transported to a NMOCD solid waste facility. The excavation was left open until BLM granted approval for closure.
- The excavated area was backfilled to grade using new material transported from a local borrow pit and then the 20 mil liner was installed at ground surface inside the bermed area of the tank battery.

Therefore, on behalf of Cimarex Energy Corporation, we respectfully request that no further actions be required and that closure with respect 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

mile Sindlefield

Mike Stubblefield Project Manager

David J. Adkins District Manager

## **APPENDIX I**

## **GROUNDWATER DATA**



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

		(quarte	rs a	re 1	=N	IW 2=	=NE 3=	=SW 4=5	SE)				
		(quarte	rs a	re s	ma	allest	to larg	est) (N	AD83 UTM	1 in meters)		(In feet)	
Sub POD Number basin	Use	Çounty	1.	Q 16			Tws	Rng	X	Y		epth Wal VaterColu	
CP 00566	DOM	LE	4	4	1	04	18S	32E	614960	3627280*	133	65	68
CP 00672	STK	LE		4	4	07	18S	32E	612475	3624947*	524	430	94
CP 00677	PRO	LE		1	1	26	18S -	32E	617750	3621373*	700		
									Avera	age Depth t	o Water:	247 feet	
										Minimur	n Depth:	65 feet	
										Maximun	n Depth:	430 feet	
Record Count: 3	*	2834 K*	• •			· ·	•		• • • •		** * .		

## Record Count: 3

## PLSS Search:

Township: 18S

Range: 32E

## \*UTM location was derived from PLSS - see Help

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

## **APPENDIX II**

## LABORATORY RESULTS

,



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

April 27, 2011

MIKE STUBBLEFIELD TALON LPE 408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: FEDERAL T B NO. 1

Enclosed are the results of analyses for samples received by the laboratory on 04/21/11 12:46.

Cardinal Laboratories is accredited through Texas NELAP for:

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

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	04/21/2011	Sampling Date:	04/21/2011
Reported:	04/27/2011	Sampling Type:	Soil
Project Name:	FEDERAL T B NO. 1	Sampling Condition:	Cool & Intact
Project Number:	701162.002.01	Sample Received By:	Jodi Henson
Project Location:	SEC.5.T18S.R31E		

### Sample ID: S - 1 0' (H100822-01)

BTEX 8021B	mg/	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	291	40.0	04/27/2011	ND	2.29	115	2.00	5.71	
Toluene*	1280	40.0	04/27/2011	ND	2.29	115	2.00	5.60	
Ethylbenzene*	734	40.0	04/27/2011	ND	2.29	115	2.00	4.57	
Total Xylenes*	883	120	04/27/2011	ND	6.79	113	6.00	4.75	
Surrogate: 4-Bromofluorobenzene (PIL	66.8	% 70-130	,		·				
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: HM			ĺ			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	04/25/2011	ND	416	104	400	3,77	
TPH 8015M	mg,	/kg	Analyzed By: ck				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	33900	100	04/26/2011	ND	214	107	200	0.572	
DRO >C10-C28	39600	100	04/26/2011	ND	206	103	200	4.93	
Surrogate: 1-Chlorooctane	465	% 70-130	)						
Surrogate: 1-Chlorooctadecane	116	% 70-130   	)						

#### Cardinal Laboratories

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tart, 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 valved 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, whitcher 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 limitston, busines interruptions, loss of use, or loss of profits incidental by client, its subsidiaries, affiliates or successors are successors are 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. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	04/21/2011	Sampling Date:	04/21/2011
Reported:	04/27/2011	Sampling Type:	Soil
Project Name:	FEDERAL T B NO. 1	Sampling Condition:	Cool & Intact
Project Number:	701162.002.01	Sample Received By:	Jodi Henson
Project Location:	SEC.5.T18S.R31E		

### Sample ID: S - 1 1' (H100822-02)

mg	/kg	Analyzed By: CK						
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
179	40.0	04/27/2011	ND	2.29	115	2.00	5.71	
592	40.0	04/27/2011	ND	2.29	115	2.00	5.60	
297	40.0	04/27/2011	ND	2.29	115	2.00	4.57	
355	120	04/27/2011	ND	6.79	113	6.00	4.75	
	Result 179 592 297	179       40.0         592       40.0         297       40.0	Result         Reporting Limit         Analyzed           179         40.0         04/27/2011           592         40.0         04/27/2011           297         40.0         04/27/2011	Result         Reporting Limit         Analyzed         Method Blank           179         40.0         04/27/2011         ND           592         40.0         04/27/2011         ND           297         40.0         04/27/2011         ND	Result         Reporting Limit         Analyzed         Method Blank         BS           179         40.0         04/27/2011         ND         2.29           592         40.0         04/27/2011         ND         2.29           297         40.0         04/27/2011         ND         2.29	Result         Reporting Limit         Analyzed         Method Blank         BS         % Recovery           179         40.0         04/27/2011         ND         2.29         115           592         40.0         04/27/2011         ND         2.29         115           297         40.0         04/27/2011         ND         2.29         115	Result         Reporting Limit         Analyzed         Method Blank         BS         % Recovery         True Value QC           179         40.0         04/27/2011         ND         2.29         115         2.00           592         40.0         04/27/2011         ND         2.29         115         2.00           297         40.0         04/27/2011         ND         2.29         115         2.00	Result         Reporting Limit         Analyzed         Method Blank         BS         % Recovery         True Value QC         RPD           179         40.0         04/27/2011         ND         2.29         115         2.00         5.71           592         40.0         04/27/2011         ND         2.29         115         2.00         5.60           297         40.0         04/27/2011         ND         2.29         115         2.00         4.57

Surrogate: 4-Bromofluorobenzene (PIL 78.2 % 70-130

Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3520	16.0	04/25/2011	ND	416	104	400	3.77	
TPH 8015M	mg,	'kg	Analyze	d By: ck					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	15300	100	04/26/2011	ND	214	107	200	0.572	
DRO >C10-C28	22500	100	04/26/2011	ND	206	103	200	4.93	
Surrogate: 1-Chlorooctane	273	% 70-130							
Surrogate: 1-Chlorooctadecane	116	% 70-130							

#### Cardinal Laboratories

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed valved 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, is 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 on the totherwise.

Celez D. Kune

Celey D. Keene, Lab Director/Quality Manager



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

Received:	04/21/2011	Sampling Date:	04/21/2011
Reported:	04/27/2011	Sampling Type:	Soil
Project Name:	FEDERAL T B NO. 1	Sampling Condition:	Cool & Intact
Project Number:	701162.002.01	Sample Received By:	Jodi Henson
Project Location:	SEC.5.T18S.R31E		

## Sample ID: S - 1 2' (H100822-03)

BTEX 8021B	mg	mg/kg		Analyzed By: CK		·			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.135	0.050	04/26/2011	ND	2.29	115	2.00	5.71	
Toluene*	1.38	0.050	04/26/2011	ND	2.29	115	2.00	5.60	
Ethylbenzene*	1.49	0.050	04/26/2011	ND	2.29	115	2.00	4.57	
Total Xylenes*	2.48	0.150	04/26/2011	ND	6.79	113	6.00	4.75	
									···· •

Surrogate: 4-Bromofluorobenzene (PIL 73.7% 70-130

Chloride, SM4500Cl-B	i mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1100	16.0	04/25/2011	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: ck					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	38.2	10.0	04/26/2011	ND	214	107	200	0.572	
DRO >C10-C28	272	10.0	04/26/2011	ND	206	103	200	4.93	
Surrogate: 1-Chlorooctane	114	% 70-130	)						
Surrogate: 1-Chlorooctadecane	121	% 70-130	)						

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages, Cardinal's liability and dient's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by dient for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed walved 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 vides and the sample side dated above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D.Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	04/21/2011	Sampling Date:	04/21/2011
Reported:	04/27/2011	Sampling Type:	Soil
Project Name:	FEDERAL T B NO. 1	Sampling Condition:	Cool & Intact
Project Number:	701162.002.01	Sample Received By:	Jodi Henson
Project Location:	SEC.5.T18S.R31E		

## Sample ID: S - 1 3' (H100822-04)

.....

BTEX 8021B	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2011	ND	2.29	115	2.00	5.71	
Toluene*	0.073	0.050	04/26/2011	ND	2.29	115	2.00	5.60	
Ethylbenzene*	0.078	0.050	04/26/2011	ND	2.29	115	2.00	4.57	
Total Xylenes*	0.151	0.150	04/26/2011	ND	6.79	113	6.00	4.75	

Surrogate: 4-Bromofluorobenzene (PIL 96.2 % 70-130

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					1
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	04/25/2011	ND	416	104	400	3.77	'
трн 8015м	mg	/kg	Analyze	d By: ck					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/26/2011	ND	214	107	200	0.572	
DR0 >C10-C28	44.6	10.0	04/26/2011	ND	206	103	200	4.93	
Surrogate: 1-Chlorooctane		% 70-130		;					
Surrogate: 1-Chlorooctadecane	129	% 70-130		,					

#### Cardinal Laboratories

### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and clent's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by clent 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 otherwsite. 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.Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	04/21/2011	Sampling Date:	04/21/2011
Reported:	04/27/2011	Sampling Type:	Soil
Project Name:	FEDERAL T B NO. 1	Sampling Condition:	Cool & Intact
Project Number:	701162.002.01	Sample Received By:	Jodi Henson
Project Location:	SEC.5.T18S.R31E		

## Sample ID: S - 1 4' (H100822-05)

BTEX 8021B	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2011	ND ·	2.29	115	2.00	5.71	
Toluene*	0.123	0.050	04/26/2011	ND	2.29	115	2.00	5.60	
Ethylbenzene*	0.225	0.050	04/26/2011	ND	2.29	115	2.00	4.57	
Total Xylenes*	0.373	0.150	04/26/2011	ND	6.79	113	6.00	4.75	
Surrogate: 4-Bromofluorobenzene (PIL	94.1	% 70-130							
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM			1			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	04/25/2011	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: ck					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	13.4	10.0	04/26/2011	ND	216	108	200	1.18	
DRO >C10-C28	44.1	10.0	04/26/2011	ND	211	105	200	4.06	
Surrogate: 1-Chlorooctane	99.2	% 70-130	)						
Surrogate: 1-Chlorooctadecane	106	% 70-130	)						

#### Cardinal Laboratories

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All daims, including those for negligence and any other cause whatsoever shall be deemed valved unless made in writing and received by Cardinal within thiny (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 epprival of Cardinal Liboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

Received:	04/21/2011	Sampling Date:	04/21/2011
Reported:	04/27/2011	Sampling Type:	Soil
Project Name:	FEDERAL T B NO. 1	Sampling Condition:	Cool & Intact
Project Number:	701162.002.01	Sample Received By:	Jodi Henson
Project Location:	SEC.5.T18S.R31E		

#### Sample ID: S - 1 5' (H100822-06)

BTEX 8021B	mg/	/kg	Analyze	d By: CK					<u></u> =
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	04/26/2011	ND	2.29	115	2.00	5.71	
Toluene*	0.317	0.050	04/26/2011	ND	2.29	115	2.00	5.60	
Ethylbenzene*	0.707	0.050	04/26/2011	ND	2.29	115	2.00	4.57	
Total Xylenes*	1.13	0,150	04/26/2011	ND	6,79	113	6.00	4.75	

Surrogate: 4-Bromofluorobenzene (PIL 94.0 % 70-130

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1770	16.0	04/25/2011	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: ck					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	13.9	10.0	04/26/2011	ND	216	108	200	1.18	
DRO >C10-C28	142	10.0	04/26/2011	ND	211	105	200	4.06	
Surrogate: 1-Chlorooctane	98.6	% 70-130	)						
Surrogate: 1-Chlorooctadecane	102	% 70-130	)						

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

7

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 thereunder 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

Celey D. Keene, Lab Director/Quality Manager



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

Received:	04/21/2011	Sampling Date:	04/21/2011
Reported:	04/27/2011	Sampling Type:	Soil
Project Name:	FEDERAL T B NO. 1	Sampling Condition:	Cool & Intact
Project Number:	701162.002.01	Sample Received By:	Jodi Henson
Project Location:	SEC.5.T18S.R31E		

## Sample ID: S - 1 6' (H100822-07)

BTEX 8021B	mg,	kg	Analyze	d By: CK	•				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2011	ND	2.29	115	2.00	5.71	
Toluene*	<0.050	0.050	04/26/2011	ND	2.29	115	2.00	5.60	
Ethylbenzene*	<0.050	0.050	04/26/2011	ND	2.29	115	2.00	4.57	
Total Xylenes*	<0.150	0.150	04/26/2011	ND	6.79	113	6.00	4.75	
Surrogate: 4-Bromofluorobenzene (PIL	95.6	% 70-130							
Chloride, SM4500Cl-B	mg,	'kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3320	16.0	04/25/2011	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: ck					•
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/26/2011	ND	216	108	200	1.18	
DRO >C10-C28	38.8	10.0	04/26/2011	ND	211	105	200	4.06	
Surrogate: 1-Chlorooctane	102	% 70-130							
Surrogate: 1-Chlorooctadecane	105	% 70-130							

## Sample ID: S - 1 7' (H100822-08)

Chloride, SM4500Cl-B mg/kg			Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3640	16.0	04/25/2011	ND	416	104	400	3.77	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

PLEASE NOTE: Uability 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 valved 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, atfiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such client is based unound of the applicable datoratories.

Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



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

Received:	04/21/2011	Sampling Date:	04/21/2011
Reported:	04/27/2011	Sampling Type:	Soil
Project Name:	FEDERAL T B NO. 1	Sampling Condition:	Cool & Intact
Project Number:	701162.002.01	Sample Received By:	Jodi Henson
Project Location:	SEC.5.T18S.R31E		

#### Sample ID: S - 1 8' (H100822-09)

Chloride, SM4500Cl-B mg/kg			Anaiyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5760	16.0	04/25/2011	ND	.416	104	400	3.77	

## Sample ID: S - 1 10' (H100822-10)

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5800	16.0	04/25/2011	ND	416	104	400	3.77	
								;	

## Sample ID: S - 2 0' OFF LOCATION BG CL (H100822-11)

Chloride, SM4500Cl-B	de, 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	04/25/2011	ND	416	104	400	3.77	

#### Sample ID: S-2 3' OFF LOCATION BK CL (H100822-12)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/25/2011	ND	416	104	400	3.77	

## Sample ID: S - 1 9' (H100822-13)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3320	16.0	04/25/2011	ND	416	104	400	3.77	

#### Cardinal Laboratories

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and clent'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, whith the service in the service of the service of the service shall be limited to the service of the service of the service of the service of whether such claims 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 & Keine

Celey D. Keene, Lab Director/Quality Manager



#### **Notes and Definitions**

S-LOW	Low surrogate recovery confirmed as a matrix effect by a second analysis.
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 SM4500CI-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 clein's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by cleint for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed valved 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. Keine

Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUES!

	101 East Wanand, Hobbs, NM 883 (575) 393-2326 FAX (575) 393-247												<u></u>	-11		1 · 2	
Company Name						3	ill to			في المحدثة الم		.+c)\$\$2	41.4819	REQ	<u>jest</u>	و و المنافق المستار م	د بر این مستخصر مشتقد
Project Manage	mike Stusslefield				5	10. #:				į.		•		·			:
Address:	408 W. Teras Ave.				<u></u> [	ompany:	Tulsa/LA	E									•
Gity:	AITERIA State: NM	Zipi		210	<u>/</u> 2	dow:											
Phone #:	575-441-7254 Far #: 576-	746	· 84 0	>5	ļ,	ddress:			-	:	•	:					
Project #:	201162.007.01 Project Chune	c <b>c</b> i	marc	ex Ene	<u> 64 (</u>	Hiy:			<u> </u>	•							
Project Name:	Federal TB No.1				11 1	asie:	Zqs:		-11 -11								с. 1
Project Locado	11: Sec. 5-T185-R31E				1	thone sit							•				
Sampler Name:					5	ax ŵ:			-								
FOR LAB USE ONLY				MAT	<u>RDX</u>	PRESER	SAMPL	ING		,	Sa			•			
Lab I.D.	Sample I.D.	(G)RAE OR (C)OMF.	# CONTAINERS GROUNDWATER	WASTEWATER SOIL	OIL SI UDGE	VITER: ACID/BASE: ICE / COOL DTHER -	DATE	TIME	724 3015	BTEX 8021	Total chlorides						
HID6822-1	5.1 0	4	· · · ·	<u> </u>	• ;	<u> </u>	4 21 2011	10:03 4	1	. <b>.</b>	v						
2	5.11	4		v			4/21/ Con	10:030	<u>v</u>	v,	<b>v</b> ,		- 			-,	
3	5.1 2	G		<u> </u>			4/21/204	10:12A		v	V	·					
<u> </u>	5.1 3	6				<u> </u>		10: 14 A									· · · · · ·
	SILY'	ፍ		1		1	4/21/2011				۲	: •	· .				2
	5.1.5'	ع				<u> </u>	4/21/2011	10.18 A	<u> </u>	<u>×</u>	<b>v</b> ;						
	5.16'	G	;-	1		<b>Y</b>	4/2/2011		- (· • · · · · · · · · · · · · · · · · ·	<b>.</b>	ľ	;		,·- <b>-</b>			······
	5.171	ፍ		<u> </u>			4/21/2011				<b>/</b>						
	5-18'	٩	<u> </u>	~	i-	<i>.</i>		10:374			<b>*</b>		· · · · · · · · -				
	5.1 16'	<b>م</b>		· · · · ·	<u> </u>	<u> </u> - √ .	1/2011	10:58A			r						

PLEAGE NOTE: Lightly and Downges. Containt's Minibitly and clearly activitive review to any claim schlag whigher Essent in control or tot. Statt by finited to the surgent public the death for the analyses. All claims including horse for negligence and any other course whiteoexest and the Jacomet analyses in writing and teacher by Control to Bab days here completion of the applicable springer. In or event that Condinal to Bable a course whiteoexest and the Jacomet analyse many and teacher by Control to Bab days here a completion of the applicable springer. In or event that Condinal to Bable in Inditional or consequented downges, including without homefore, beneficially control to bable in and the first including without applicable.

Service, in the event must be contracted to the performance of convect horizonder by Condinal, remardless of solation and this is based upon any of the above stated response of environments of convection by Condinal, remardless of solation and this is based upon any of the above stated response of environments of convection by Condinal, remardless of solation and the performance of convection by Condinal, remardless of solations and the performance of convection by Condinal, remardless of solation and the performance of convection by Condinal, remardless of solation and the performance of convection by Condinal, remardless of solation and the performance of convection by Condinal, remardless of solation and the performance of convection by Condinal, remardless of solation and the performance of convection by Condinal, remardless of solation and the performance of convection by Condinal, remardless of solation and the performance of convection by Condinal, remardless of solation and the performance of convection by Condinal, remardless of solation and the performance of convection by Condinal, remardless of solation and the performance of convection by Condinal, remardless of solation and the performance of convection by Condinal, remardless of solation and the performance of convection by Condinal, remardless of solation and the performance of convection by Condinal, remardless of solation and the performance of convection by Condinal, remardless of solation and the performance of convection by Condinal, remarked of convection by Condinal, remarked of convection and the performance of convection by Condinal, remarked of convection and the performance of convection by Condinal, remarked of convection by Condinal, remarked of convection by Condinal, remarked of convection by Condina

Relinguished By: Mer Stilligild	121/2011		1912
kolinguished By: N	Date: Time:	Maraivad Ey:	1
Delivered By: (Circle One) Sampler - (198 - Bos - Other:	<u>ت</u>	5.52 Sometic Condition Cool Interr Sign Pres	CHECKED EV:

Phone Result L 762 LL No 12.003 Phone #			
1 Fax Result: Dross Dross (add) Fax 8:	• • •	:	
REGARKS:	• • •	•	•
A.			
 4			
1			
:			
4			

1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1.

-† Cardinal cannot accept verbal changes. Pikase fax written changes to 505-350-2479



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

#### 101 East Mariand, Hobbs, NW 88240 18781 202.9196 FAY 15751 202.9476

	(575) 393-2326 FAX (575) 393-247	76	·																					,
Company Name	Talon/1PE								-91	LL TO					ر در محمد محمد	MA	LVSK		<u>ZEQL</u>	<u>1687</u>	سىرىتىنەي	:		
Project Manage	" mile stublofield						p.	<b>0</b> . 症:					1				1	ł	1	:				
Acidress:	408 W. TERAS AJE						Company: Talon/LPE						f 	•	:									
City:	Retaine State: Non	Zip	<u>. </u> {	2821	0		Aitin:										:						•	
Phone 5:	ane #: 575-441-7254 Fax #: 575- 746-8905						È.t	ddres	<u>s:</u>				;	. i	-							;		
Project #:						C	έγ:						:	,		:								
Project Name:	Fodoral TB No. 1					//	Ś	aite:		Zip:					:									
Project Location	n: see. 5 - T185-R31E						ţ>ţ	ione i	À:										·					
Sampter Name:	mas Sterrefield		-				F	en: 187					ĺ					•						
FOR LADUSE ONLY	· · · · · · · · · · · · · · · · · · ·	٦.			IJ/A	TRIX		PRE	SERV	SAMPL	ING T	ودرداد		;					:					
Lab I.D.	Sample I.D.	GRAB OR (C)OMP	( CONTAINERS	SROUMDWATER		01	SCUPGE OTHER:	ACID/GASE:	DTHER:	DATE	i I I Made	Total chloi			:					:		•		
HIDD:072-11	S. 200ff Location	G	1		1			- ji	/	4/21/2011	11:05 A	1	1		<u> </u>					·		]		
	Back ground chlorides									1		ļ												
12	5.2 2 off Location							<u> </u>				ļ		) 	, ,	· ····	- 			·····.				• .
	Ruokground chlorides			ļ _	_/_/				4	4/20/1011				,			; ;	·						• ••••
13	5-1'9"	G			1				.	<i>ધ ટ</i> મ્  સ	10.47	~	1		-					÷				
	· · · · · · · · · · · · · · · · · · ·		$\left\  - \right\ $								j							·;·	· · · · · · · · · · · · · · · · · · ·		····· •.•·			-
			$\left\  - \right\ $						<b>i</b> -	l	i 	<b>¦</b> ;						., <del>.</del>		j		;·····	······································	• ••
			$\left\{-\right\}$	-						ļ	: 	ļ;			<sup>•</sup>					;				
																				·····		···· ··		
NUR USER TO DEL	 	<u></u>	الل	<u></u>	_	<u>  </u>	<u>!</u>	<u></u>	1	المرد مع مرال مرد مع مرال		<u>il anna a</u>		· ····································	لأروره وإند	<u></u>		·						

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any chain arising whether based is contract or test, shall be limited to the amount paid by the cleant for the analyses. All claims including those for negligenee and any other cause wholeoever shall be deemed writed intest mate in which and readived by Cardon within 30 days area completion of the equivalet service. In no every shall Continue be liable for incidental or consequential damages, including xistions limitation, husiness interruptions, loss of use, or loss of profils insured by client, its subsidiaries,

stilling of suprostant taling and of or related to the performance of captions have independently the superior devices the super-

Kelinguished By:	Date: Received By: ,	Phone Result: D Yes D No (2.66" Phone II:
-	4/21/2011 / 10 /	Fax Result: 🛛 Yes 🗋 No. (Add') Fax 8:
The parts tallfull	12:45 cm Lach Menson.	REMARKS:
Ketinguished By:	Date: Oceived By:	
	Time:	
Delivered By: (Circle One)	Sample Condition ChiECKED Sv:	
Sampler - UPS - Bus - Other:	5.5° Hitaci Hitaci Hitaci Hitaci Hitaci Hitaci	•
† Cardinal cannot accept verb	il changes. Please fax written chonges to 505-393-2476	
	- to the second s	Page 12

#26



ì

June 16, 2011

MIKE STUBBLEFIELD TALON LPE 408 W. TEXAS AVE. ARTESIA, NM 88210

RE: FEDERAL LEASE TB NO. 1

Enclosed are the results of analyses for samples received by the laboratory on 06/14/11 14:00.

Cardinal Laboratories is accredited through Texas NELAP for:

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

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Lope S. Moreno

Hope Moreno Inorganic Technical Director 

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

Received:	06/14/2011	Sampling Date:	06/08/2011
Reported:	06/16/2011	Sampling Type:	Soil
Project Name:	FEDERAL LEASE TB NO. 1	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	5-T18S-R31E		

## Sample ID: S-1 10' (H101236-01)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM		<u>_</u>			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5440	16.0	06/15/2011	ND	464	116	400	0.00	

## Sample ID: S-1 15' (H101236-02)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2440	16.0	06/15/2011	ND	464	116	400	0.00	

#### Sample ID: S-1 22' (H101236-04)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1120	16.0	06/15/2011	ND	464	116	400	0.00	

## Sample ID: S-1 26' (H101236-05)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	06/15/2011	ND	464	116	400	0.00	÷

#### Cardinal Laboratories

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's fability 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 trices 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 incidential or consequential damages, including, without limitation, business interruptions, loss of uses, 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 claims based upon any of the above stated reasons or otherwise. Results relate only the sample demetfield above. This report shall not be reprodued except in full with mitten approval of Cardinal Laboratories.

Hope S. Moreno-

Hope Moreno, Inorganic Technical Director



#### **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 SM4500CI-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 walved unless mace 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 of 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 claims based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Lope S. Moreno

Hope Moreno, Inorganic Technical Director



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

	101 East Marland, H (575) 393-2326 FAX																						
Company Name	" Talon /LPE						BILLTO					ANALYSIS REQUEST										•	
Project Manage	" Mike Stubble	field					P.O. #:						T .							`		Ţ	
Address:	408 W. Tems A.						Company: Jalon/LPE									1							
City:	Arteria	State: NM 2	Zip:	882	10		Ati	:n:				_	[			ł ·			ļ	ł			
Phone #:	575-441. 2254					_	Ad	dres	s:			_											
Project #:		Project Owner:	Ľ	na	ex		Cit	y:		•						l I	l	Į	l				
Project Namez	Ederal Jeas			- · ·			Sta	ite:		Zip:													.
	n: 5-718513						Ph	one	#:			5	j.				1		[				
Sampler Name:	mile SLell al	/						x #:				] · \	1				)	)	)	1	Ċ		
FOR LABUSE ONLY			, i	Τ	MA	RIX		PRE	SERV	SAMPL	ING	- 3							•	1			
Lab I.D. HID1236	Sample I	.D.	(G)RAB OR (C)OMP.	# CONTAINERS GROUNDWATER	WASTEWATER SOIL	OIL St LIDGE	OTHER :	ACID/BASE:	ICE / COOL OTHER :	DATE	TIME	Hata 01											
1	5-1 10'		3							6/8/11	9:43A	$\geq$											
2	5-1 15'		GĽ		$\perp$					6/8/11_	9:51 A		┇			╞		ļ	ļ				
3	Stor		釺	╧╋╧		-+	+	+		6/8/17		,Z	<b>†</b>	No	8	an	ple	<u>k</u>		<b> </b>			<b>_</b>
<u> </u>	5-1 22'		g		/	╞╼┾╸				e/8/1	1 10:28						<b> </b>		·	<u> </u>			
5	5-1 26		G	<u> </u>			+		<u> </u>	6/8/1	10:55	<u> </u>					Į						
			+	_			+-			· ·			┼──-	╂───					<u> </u>				+
						┝╌┟╴	+	·				+	–−	╂───									<u> </u>
	· · · · · · · · · · · · · · · · · · ·			╧	┼-┼	╞╌╌┤╼	+	$\vdash$		<u> </u>	┼	┼	┼──		<u> </u>		┼──					<u> </u>	+
			+			$\vdash$	+	-+					<u> </u>	+				├			·		1
	nd Danages. Cardinal's liability and cli Ing those for negligence and any other												<u></u>	<u> </u>	L	I	<u> </u>		<u> </u>	L			d

Relinquished By:	Date: 6/14/1 Received By:	Phone Result:   Yes  No Add'l Phone #:  Fax Result:  Yes  No Add'l Fax #:								
milessielelfild	Time: 2:10 John Plan	REMARKS: [6] 5/ 11 No sample for #3 as per mike. Ch								
Relinquished By:	Loji4111 Received By:	leloin 105 sumple per #3 no p								
	The apple Denson									
Delivered By: (Circle One)	Sample Condition CHECKED BY:									
Sampler - UPS - Bus - Other:	$220$ $\square$ Yes	· · · · · · · · · · · · · · · · · · ·								
† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476										

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

#26

Page 4 of 4



October 26, 2011

MIKE STUBBLEFIELD TALON LPE 408 W. TEXAS AVE. ARTESIA, NM 88210

RE: FEDERAL TB RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 10/21/11 12:45.

Cardinal Laboratories is accredited through Texas NELAP for:

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

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celez D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	10/21/2011	Sampling Date:	10/19/2011
Reported:	10/26/2011	Sampling Type:	Soil
Project Name:	FEDERAL TB RELEASE	Sampling Condition:	Cool & Intact
Project Number:	701162.002.01	Sample Received By:	Jodi Henson
Project Location:	SEC.4-T18S - R31E		

#### Sample ID: S-1 NORTHSIDE WALL (H102294-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/24/2011	ND	2.14	107	2.00	3.62	
Toluene*	<0.050	0.050	10/24/2011	ND	2.19	109	2.00	7.66	
Ethylbenzene*	0.105	0.050	10/24/2011	ND	2.21	111	2.00	9.58	
Total Xylenes*	<0.150	0.150	10/24/2011	ND	6.64	111	6.00	10.2	
Surrogate: 4-Bromofluorobenzene (PIL	104 9	64.4-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	10/26/2011	ND	384	96.0	400	4.08	
TPH 8015M	mg/	kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	11.7	10.0	10/24/2011	ND	171	85.6	200	1.17	
DRO >C10-C28	388	10.0	10/24/2011	ND	151	75.7	200	6.18	
Surrogate: 1-Chlorooctane	91.3	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	93.7	57.6-15	8						

#### **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 valved 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 values on otherwise. Results relate values on otherwise. Results related values on otherwise. Results related values on the sample identified above. This report shall not be reproduced except in hill with written approval of Cardinal laboratories.

Celez D. Kune

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/21/2011	Sampling Date:	10/19/2011
Reported:	10/26/2011	Sampling Type:	Soil
Project Name:	FEDERAL TB RELEASE	Sampling Condition:	Cool & Intact
Project Number:	701162.002.01	Sample Received By:	Jodi Henson
Project Location:	SEC.4-T18S - R31E		

#### Sample ID: S-2 EASTSIDE WALL (H102294-02)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS.	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/24/2011	ND	2.14	107	2.00	3.62	
Toluene*	<0.050	0.050	10/24/2011	ND	2.19	109	2.00	7.66	
Ethylbenzene*	<0.050	0.050	10/24/2011	ND	2.21	111	2.00	9.58	
Total Xylenes*	<0.150	0.150	10/24/2011	ND	6.64	111	6.00	10.2	
Surrogate: 4-Bromofluorobenzene (PIL	103 9	64.4-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	10/26/2011	ND	384	96.0	400	4.08	
TPH 8015M	mg/	kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/24/2011	ND	171	85.6	200	1.17	
DRO >C10-C28	12.4	10.0	10/24/2011	ND	151	75.7	200	6.18	
Surrogate: 1-Chlorooctane	96.0	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	100 9	6 57.6-15	8						

#### **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 walved 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 incidential 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. Kune

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/21/2011	Sampling Date:	10/19/2011
Reported:	10/26/2011	Sampling Type:	Soil
Project Name:	FEDERAL TB RELEASE	Sampling Condition:	Cool & Intact
Project Number:	701162.002.01	Sample Received By:	Jodi Henson
Project Location:	SEC.4-T18S - R31E		

#### Sample ID: S-3 SOUTHSIDE WALL (H102294-03)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/24/2011	ND	2.14	107	2.00	3.62	
Toluene*	<0.050	0.050	10/24/2011	ND	2.19	109	2.00	7.66	
Ethylbenzene*	<0.050	0.050	10/24/2011	ND	2.21	111	. 2.00	9.58	
Total Xylenes*	<0.150	0.150	10/24/2011	ND	6.64	111	6.00	10.2	
Surrogate: 4-Bromofluorobenzene (PIL	104 \$	% 64.4-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/26/2011	ND	384	96.0	400	4.08	
TPH 8015M	mg/	'kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/24/2011	ND	171	85.6	200	1.17	
DRO >C10-C28	112	10.0	10/24/2011	ND	151	75.7	200	6.18	
Surrogate: 1-Chlorooctane	101 9	55.5-15	4						
Surrogate: 1-Chlorooctadecane	97.8	% 57.6-15	8						

#### **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 walved 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, whotelent limitation, business interruptions, loss of use, or loss of profils 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 claims 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. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/21/2011	Sampling Date:	10/19/2011
Reported:	10/26/2011	Sampling Type:	Soil
Project Name:	FEDERAL TB RELEASE	Sampling Condition:	Cool & Intact
Project Number:	701162.002.01	Sample Received By:	Jodi Henson
Project Location:	SEC.4-T18S - R31E		

### Sample ID: S-4 WESTSIDE WALL (H102294-04)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte .	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	10/25/2011	ND	2.14	107	2.00	3.62	
Toluene*	31.7	1.00	10/25/2011	ND	2.19	109	2.00	7.66	
Ethylbenzene*	47.2	1.00	10/25/2011	ND	2.21	111	2.00	9.58	
Total Xylenes*	60.7	3.00	10/25/2011	ND	6.64	111	6.00	10.2	
Surrogate: 4-Bromofluorobenzene (PIL	117	% 64.4-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	10/26/2011	ND	384	96.0	400	4.08	
TPH 8015M	mg,	/kg	Analyze	d By: AB		<u> </u>			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1350	100	10/25/2011	ND	171	85.6	200	1.17	
DRO >C10-C28	20900	100	10/25/2011	ND	151	75.7	200	6.18	

Cardinal Laboratories

Surrogate: 1-Chlorooctane

Surrogate: 1-Chlorooctadecane

\*=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 profils 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.

Celez D. Kune

Celey D. Keene, Lab Director/Quality Manager

119 %

92.2 %

55.5-154

57.6-158



#### **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 limited to the 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. Kune

Celey D. Keene, Lab Director/Quality Manager

Page 6 of 7



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

#### 101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476 BALL TO Company Name: Talen/LPE ANALYSIS REQUEST Project Manager: P.O. ::: Mike Stuble Field 408 West Texas Ave -Company: ToLoc/LPE Address: State: NM Zip: 88210 City: Artesia Attn: 505 441 7754 Fait #: Phone 🖄 Address: DOILLEZ OCZ CI Project Owner: Cimary Energy Project #: City: Project Name: Federal TB release. State: Zip: Project Location: Sec. 4 - T/85\_R 31 E Phone #: miller Stupplind Sampler Name: Fa:: #: RTEX chloride) FOR LAB USE ONLY MATRIX PRESERV SAMPLING TPH G)RAB OR (C)OMP. GROUNDWATER WASTEWATER SOIL CONTAINERS ε Lab I.D. Sample I.D. OTHER : ACID/BASE: ICE / COOL OTHER : 6015 1-22-1 SLUDGE 8021 H102294 ЫL DATE TIME SI Northside wall 10/14/2011 9:514 ũ v V S Z EASTEIde will 10/19/2011 9:41 9 Ġ. V v ż 3 5-3 Sorthide wall idigizon GigyA J Ĺ. J. ¥ 4 5 4 West Side WALL Ċ. 10 19 201 S1:479 1 1 1 1 v

PLEASE NOTE: Unlikity and Domages, Cardinal's lability and cleant's exclusive remedy for any chilin arising whether have in contract or last, shall be limited to the emount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed wrived unless made in writing and received by Cardinal within 30 days after completion of the applicable

analyses. All claims including lines for regignerse and any other cause schalascere shall be deemed winder duries mode in writing and received by Cantinol within 30 days after composition of the applicate service. In or event shall Cancinal he links for including or consequential datamages, including writinus limitations, luminess literamptications, lass or tupication in clause schalaries.

serves in the event share calculation or labeled in the performance of accentingent increasing and accenting accentent accenting accentent accente

Relinquished By:	Date:	Raceived By:	Pho	one Result:		D No	Add'l Phone #:	
	<u>/6/2////</u> Time:	4-20			] Yes	D No	Add'l Fax #:	
	Time:	VA (15 A	REI	MARKS:				
- milling willing	16:93	A C						
Relinquished By:	Date:	Received By:	1					
		Mal. Maluka	100					H
ĥ	Time:	INNI NOMAD	HA I					(I
		your across	· · ·					
Deliverad By: (Circle One)			HECKED BY:					
		Cool Intact	(initials)					
Sampler - UPS - Sus - Other:		50 Gres Fres						
		JAINONO	Y/N					
			-11					 Dago 7

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



November 16, 2011

MIKE STUBBLEFIELD

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: FEDERAL T B NO. 1

Enclosed are the results of analyses for samples received by the laboratory on 11/11/11 14:30.

Cardinal Laboratories is accredited through Texas NELAP for:

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

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager

Page 1 of 4



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

Received:	11/11/2011	Sampling Date:	11/11/2011	
Reported:	11/16/2011	Sampling Type:	Soil	
Project Name:	FEDERAL T B NO. 1	Sampling Condition:	Cool & Intact	
Project Number:	701162.002.01	Sample Received By:	Jodi Henson	
Project Location:	SEC.5.T18S.R31E			
-				

#### Sample ID: S-5 WESTSIDE WALL (H102456-01)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2011	ND	1.93	96.4	2.00	2.90	
Toluene*	<0.050	0.050	11/14/2011	ND	1.86	92.9	2.00	4.31	
Ethylbenzene*	<0.050	0.050	11/14/2011	ND	2.11	105	2.00	4.96	
Total Xylenes*	<0.150	0.150	11/14/2011	ND	6.10	102	6.00	5.24	
Surrogate: 4-Bromofluorobenzene (PIL	101	% 70.7-11	8	***					
TPH 8015M	mg,	′kg	Analyze	d By: MS			,		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/16/2011	ND	208	104	200	5.33	
DRO >C10-C28	41.1	10.0	11/16/2011	ND	223	111	200	4.11	
Surrogate: 1-Chlorooctane	86.6	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	103	57.6-15	8						

#### **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 whitescever shall be deemed walved unless made in writing and received by Cardinal within bhirty (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 claims tabate upons around state reasons or otherwise. Results relate only to the sample definited above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Kune

Celey 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 whitsoever shall be deemed walved unless made in writing and received by Cardinal within thrity (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidential or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its substantes, 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.

.

Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager

÷

Page 3 of 4



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Talon/LPE							<u>1011</u>			B	11	LTO					į	ANA	LYSIS	S RE	QUE	ST			
Project Manager:	Mike Stublefield							P	.0.	#:														1		
	408 W. Terns Ave.							С	Company: TALDO/ LPF										:							
City:	Artosva State: NM	Zip	: 9	821	0				ttn								1									
Phone #:	575-441-9284 Fax #:							A	dd	ress	:															
Project #:	0001162.002.01 Project Owne	r: Ci	/n :	101	Ē	ne	(g.v	c	ity								1									
Project Name:	Federal TB No. 1 tolence				_		<i></i>		tat				Zip:													
Project Location:	SCI. 4-718 - R31E							Р	ho	ne #	:												İ			
Sampler Name:	mile (simple hill							F	ax	#:									Ì							
FOR LAB USE ONLY		, ·		L,	Λ	ATI	RIX	r	P	RES	ER	V.	SAMPL	NG		5			ŀ							
		OMF	6	α								l			107		1									
Lab I.D.	Sample I.D.	AB OR (C)	ONTAINERS	GROUNDWATER	WASTEWATER		L	UGE ED ·		ACID/BASE:					CALC IN		1									
H102456		(G)R	0 0 #	GRO	MAS	SOIL	5 G		5	L ACIE		5	DATE	TIME	() ()	ς β	ec.									
	S-5 Wartside Wall	G				1				1			11/11/20	12:319	1	1										
			·			_																ļ				
	······································													,	<b> </b>		_									
										, 		.														
																				· ·					· ·	
··												- -					-									···
												-				-										
																·						·				
					_									<b>-</b>		-			<u> </u>			-	· · · · · · · · · · · · · · · · · · ·		·.i.,	

PLEASE NOTE: Liability and Dumages, Curcinal'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 these to meditioned and any other cause whatsoever shall be deemed waived unless made in writing and received by Cordinal within 30 drays after completion of the applicable service. In no event shall Carring to be liable to inclined to a consequential damages, including without initiation, business interruptions, loss or use, or loss of profis inclured by client, its substantics.

Males or successors atising out of or related to the performance of services hereunder by Carcinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.											
Relinguished By:	Date:	Received By:	11	Phone Result:	🖾 Yes	🗆 No	Add'I Phone #:				
	11/17/011	1.0.1.		Fax Result:	🗆 Yes	🗆 No	Add'I Fax #:				
marstullifield	Time: 2.30 P.o	1400U z	Mendon	REMARKS:							
Relinquished By:	Date:	Received By:									
	Time:										
Delivered By: (Circle One)	_1	Sample Condi	tion CHECKED BY:								
Sampler - UPS - Bus - Other:			es (Inițials) Io								
t Cordinal coverat accept verbal	bongoo Dingo	for without the second	EOE 202 2476					_			

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476-4726

# FINIAL FORM C-141

District I 1625 N. French District II 1301 W. Grand						New Mex and Natura	íco 1 Resources	Re		Form C-141 ctober 10, 2003							
District III 1000 Rio Brazo District IV 1220 S. St. Fran	s Road, Azie	c, NM 87410		1220	Sout	rvation Div h St. Franc e, NM 875	is Dr.		Submit 2 C District wi	Copies Office ith Rul	to appropriate in accordance e 116 on back side of form						
<del></del>	میکارمان اور میمان						orrective A	ction			ويحمد برهيد						
						OPERAT		CHUI	-	al Report		Final Repor					
Name of Co				62683)		Contact : James Tinney											
	the second s	and the second se	0, Midla	nd TX 79701		Telephone No. : 575-706-0095 Facility Type: Tank Battery											
Facility Nat							e: Tank Ballery	/									
Surface Ow	mer: BLM	[		Mineral C	)wner	BLM				lo. : NM 1 0-015-254							
				LOCA	<b>NTIO</b>	N OF REI	LEASE										
Unit Letter I	Section 5	Township 18S	Range 31E	Feet from the 2080	North FSL	/South Line	Feet from the 560	East/W FEL	Vest Line	County E	ddy						
			Latitu	de <u>30.77444 r</u>	¥	_ Longitud	e <u>-103.88520 V</u>	w									
				NAT	URE	OFREL											
Type of Rele Source of Re	ase : Crude lease : Con	Oil cosion at tank	connectior	1		Date and H 3/9/11	Release : 260 bbl lour of Occurrenc			lecovered: Hour of Dis		the second s					
Was Immedi	ate Notice (		Yes [	] No 📋 Nót R	equired	-											
By Whom? Was a Water	in a group	nhed?				Date and Hour : Jim Amos on 4/11/11 If YES, Volume Impacting the Watercourse.											
iras a traici	COUI36 1/Ca		Yes 🛛	No -		was - assure with a state of a state of a second som											
Corrosion on	ise of Probl back of fan	em and Reme ik at 3'x4' cor	dial Action	n Taken.* A vacuum truck w			ation to recover al				ected v	vas contained					
Describe Are The impacted excavation w material trans	a Affected l area inside as left open sported from	and Cleanup A e the berm was a until confirm n a local borro	Action Tak s excavate ation samp ow pit. A 2	ten.* d to a depth of 2-h ples were approve 20 mil. liner was a	feet. The subsequ	he impacted so the BLM and ap uently installed	take vertical delin il was transported proval was grante l inside the berm a	to a NM ed to bac and arou	MOCD app skfill the ex and the tank	roved solid acavation to as.	grade	using new					
regulations a public health should their or the environ	Il operators or the envi operations h nment. In a	are required to ronment. The nave failed to a	o report an acceptanc idequately ICD accep	d/or file certain r te of a C-141 repo investigate and r	elease r ort by th emedia	notifications ar ne NMOCD ma te contaminati	knowledge and un ad perform correct arked as "Final Re on that pose a three e the operator of r	tive action port" do pat to gro	ons for rele oes not reli ound water	eases which eve the oper , surface wa	may er ator of ter, hu	ndanger fliability man health					
Signature:	annis	Turin	<b>z</b> `	1/25/12		OIL CONSERVATION DIVISION											
Printednyam	e: James Ti	inney /				Approved by	District Supervise	or:									
Title: Assist	ant Product	ion Foreman				Approval Dat	e;	E	Bxpiration Date:								
E-mail Addr	zs: jtinney	@cimarex.com	<u>n</u>	<del></del>		Conditions of	Approval:		Attached								
Date: 12/29 * Attach Addi			e: 575-70	16-0095								<u></u>					
A ALLON FAULT		I WWW00	•J														

ł