



**RECEIVED**

By OCD District 1 at 9:27 am, Jul 21, 2015

July 8, 2015

**APPROVED** 5a` Vff[a` S^

By OCD District 1 at 9:27 am, Jul 21, 2015

Ms. Kellie Jones  
NMOCD District 1  
1625 N French Dr.  
Hobbs, NM 88240

- 1. ~~Ensure~~ **Ensure at least two confirmation samples are taken.**
- 2. **Ensure BLM approval/concurrence.**

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

Subject: **Soil Assessment and Remediation Work Plan**  
Raging Bull Oilfield Services  
Trionyx Water Transfer Line

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

Dear Ms. Jones,

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

Raging Bull Oilfield Services (Raging Bull) has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above referenced location. The results of our soil assessment and proposed remediation activities consist of the following.

**Incident Date**

June 18, 2015

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

**Background Information**

The Raging Bull Trionyx Water Transfer Line is located approximately forty-one miles south west of Jal, New Mexico. The legal location for this site is Unit Letter O, Section 6, Township 25 South and Range 32 East in Lea County, New Mexico. More specifically the latitude and longitude for this release are 32.15362 North and -103.713036 West. See site plan in [Appendix I](#).

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

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Services, the soil in this area is made up of Pyote loamy fine sand. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology, Quaternary Age sedimentary deposits, is comprised of alluvium and eolian sands which includes silty soils underlain by dense caliche layers. Drainage courses in this area are normally dry. The New Mexico State Engineer web site indicates the nearest ground water data to be in S11-T22S-R31E. The ground water in Section 11 appears to be dry at a depth of 4911' below ground surface (bgs). The referenced groundwater data is presented in Appendix II.

SAN ANTONIO  
13111 Lookout Way  
San Antonio, Texas 78233  
Phone 210.265.8025  
Fax 210.568.2191

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

ENVIRONMENTAL CONSULTING		
ENGINEERING	Depth to ground water	>100'
DRILLING	Wellhead protection area	>1000'
CONSTRUCTION	Distance to surface water body	>1000'
SPILL MANAGEMENT		
GENERAL CONTRACTING		

## Incident Description

An 8-inch transfer line failed due to stress on the fitting which malfunctioned causing a release of approximately 75 barrels of produced water into the pasture. A vacuum truck was immediately dispatched to the location to recover the standing fluids. Approximately 2 barrels of water were recovered. Talon mobilized personnel to perform an initial site assessment and soil sampling activities.

## Laboratory Results

See [Appendix III](#) for complete report of laboratory results.

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	0'	--	23600	--	--
	1'	--	8400	--	--
	2'	--	4320	--	--
	3'	--	480	--	--
S-2	0'	--	10100	--	--
	1'	--	9100	--	--
	2'	--	7900	--	--
	3'	--	528	--	--
S-3	0'	--	16400	--	--
	1'	--	9100	--	--
	2'	--	7300	--	--
	3'	--	1760	--	--
S-4	0'	--	10200	--	--
	1'	--	8300	--	--
	2'	--	9100	--	--
	3'	--	7300	--	--
Refusal	3.5'	--	11800	--	--

(--) Analyte Not Tested

## Proposed Remedial Actions

- The impacted area in the vicinity of sample locations S-1 and S-2 will be excavated to a depth of 3-feet deep.
- The impacted area in the vicinity of sample location S-3 will be excavated to a depth of 3.5-feet deep with confirmation samples obtained.
- The impacted area in the vicinity of sample location S-4 will be excavated to a depth of 3.5-feet deep due to the rock layer that was encountered during delineation activities.

- All of the excavated material will be hauled to an NMOCD approved solid waste disposal facility.
- Upon approval from the OCD on the confirmation sample, the work area will be backfilled with top soil. Once backfill activities are complete the area will be contoured to match the surrounding location.

Should you have any questions or if further information is required, please do not hesitate to contact our office at (575)-746-8768.

Respectfully submitted,

TALON/LPE



Kimberly Wilson  
Project Manager



David J. Adkins  
District Manager

**APPENDIX I**  
**SITE MAP**

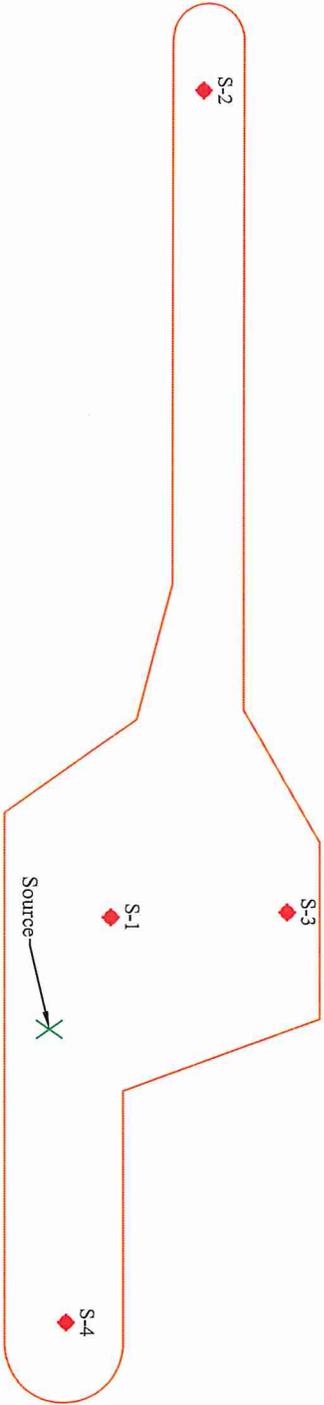


Date: 07/02/2015

Scale: NTS

Drawn By: TJS

Trionyx WTL Spill  
Raging Bull Oilfield Services  
Eddy County, New Mexico  
Figure 1 - Site Plan



**Legend**  
◆ - Sample Location



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



# 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 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water Column
<a href="#">C 02744</a>			ED	3	2	1	11	22S	31E	617374	3586631*	4086	4911	
<a href="#">C 02939</a>	C		LE	3	3	1	19	22S	32E	620234	3583042*	4219	280	
<a href="#">C 03150</a>			ED	2	4	4	14	22S	31E	618412	3584025*	4302	981	

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

**Record Count: 3**

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

**Easting (X):** 621435

**Northing (Y):** 3587087

**Radius:** 5000

\*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 III**  
**LABORATORY RESULTS**

June 26, 2015

KIMBERLY WILSON

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: TRONIXES (WTL)

Enclosed are the results of analyses for samples received by the laboratory on 06/23/15 14:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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  
 KIMBERLY WILSON  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

Received:	06/23/2015	Sampling Date:	06/22/2015
Reported:	06/26/2015	Sampling Type:	Soil
Project Name:	TRONIXES (WTL)	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA		

**Sample ID: S-1, 0' (H501630-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	23600	16.0	06/25/2015	ND	416	104	400	0.00		

**Sample ID: S-1, 1' (H501630-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	8400	16.0	06/25/2015	ND	416	104	400	0.00		

**Sample ID: S-1, 2' (H501630-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4320	16.0	06/25/2015	ND	416	104	400	0.00		

**Sample ID: S-1, 3' (H501630-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	480	16.0	06/25/2015	ND	416	104	400	0.00		

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	06/23/2015	Sampling Date:	06/22/2015
Reported:	06/26/2015	Sampling Type:	Soil
Project Name:	TRONIXES (WTL)	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA		

**Sample ID: S-2, 0' (H501630-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	10100	16.0	06/25/2015	ND	416	104	400	0.00		

**Sample ID: S-2, 1' (H501630-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	9100	16.0	06/25/2015	ND	416	104	400	0.00		

**Sample ID: S-2, 2' (H501630-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	7900	16.0	06/25/2015	ND	416	104	400	0.00		

**Sample ID: S-2, 3' (H501630-08)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	528	16.0	06/25/2015	ND	416	104	400	0.00		

**Sample ID: S-3, 0' (H501630-09)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16400	16.0	06/25/2015	ND	416	104	400	0.00		

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 06/23/2015  
 Reported: 06/26/2015  
 Project Name: TRONIXES (WTL)  
 Project Number: NOT GIVEN  
 Project Location: LEA

 Sampling Date: 06/22/2015  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Jodi Henson

**Sample ID: S-3, 1' (H501630-10)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	9100	16.0	06/25/2015	ND	416	104	400	0.00		

**Sample ID: S-3, 2' (H501630-11)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	7300	16.0	06/25/2015	ND	416	104	400	0.00		

**Sample ID: S-3, 3' (H501630-12)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1760	16.0	06/25/2015	ND	400	100	400	0.00		

**Sample ID: S-4, 0' (H501630-13)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	10200	16.0	06/25/2015	ND	400	100	400	0.00		

**Sample ID: S-4, 1' (H501630-14)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	8300	16.0	06/25/2015	ND	400	100	400	0.00		

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Celey D. Keene, Lab Director/Quality Manager

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

Received:	06/23/2015	Sampling Date:	06/22/2015
Reported:	06/26/2015	Sampling Type:	Soil
Project Name:	TRONIXES (WTL)	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA		

**Sample ID: S-4, 2' (H501630-15)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	9100	16.0	06/25/2015	ND	400	100	400	0.00		

**Sample ID: S-4, 3' (H501630-16)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	7300	16.0	06/25/2015	ND	400	100	400	0.00		

**Sample ID: S4, 3.5'(R) (H501630-17)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	11800	16.0	06/25/2015	ND	400	100	400	0.00		

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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

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Celey D. Keene, Lab Director/Quality Manager



# CARDINAL Laboratories

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

**BILELO**

ANALYSIS REQUEST

Company Name: Talon/LPE  
 Project Manager:  
 Address: 408 W. Texas Ave.  
 City: Atesia State: NM zip: 88210  
 Phone #: 575-746-8768 Fax #: 575-746-8905  
 Project #: Project Owner: Regis Bell  
 Project Name: Tankers (276)  
 Project Location: Len K. Wilson  
 Sampler Name:  
 FOR LAB USE ONLY

P.O. #: Company:  
 Attn: Address:  
 City: State: Zip:  
 Phone #: Fax #:  
 MATRIX PRESERV/ SAMPLING

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER	DATE	TIME						
H50163D		X				X							6.22.15							
	11 S-3, 2'	X				X														
	12 S-3, 3'	X				X														
	13 S-4, 0'	X				X														
	14 S-4, 1'	X				X														
	15 S-4, 2'	X				X														
	16 S-4, 3'	X				X														
	17 S-4, 3.5 (R)	X				X														

Total Chlorides

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Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Delivered By: (Circle One) \_\_\_\_\_  
 Sample - UPG - Bus - Other: \_\_\_\_\_  
 Sample Condition:  Yes  No  
 Coq. Intact:  Yes  No  
 CHECKED BY: \_\_\_\_\_ (Initials)  
 Phone Result:  Yes  No Add'l Phone #: \_\_\_\_\_  
 Fax Result:  Yes  No Add'l Fax #: \_\_\_\_\_

\* Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326 #54