



2057 Commerce Drive  
Midland, TX 79703

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www.TRCsolutions.com

**RECEIVED**

**By JKeyes at 3:08 pm, Oct 14, 2015**

**APPROVED**

**By JKeyes at 3:08 pm, Oct 14, 2015**

*Janet Keyes*

September 24, 2015

Kellie Jones  
Environmental Specialist  
New Mexico Oil Conservation Division – District 1  
1625 N. French Drive  
Hobbs, New Mexico 88240

Re: Remediation Summary and Site Closure Request  
Three Rivers Operating Company, LLC  
Eagle 2 State 6H Release Site  
NMOCD Reference 1RP-3567  
Unit Letter "O", Section 2, Township 20 South, Range 34 East, NMPM  
Lea County, New Mexico

Dear Ms. Jones,

TRC Solutions (TRC), on behalf of Three Rivers Operating Company, LLC (3ROC) is pleased to present the New Mexico Oil Conservation Division (NMOCD), with this Remediation Summary and Site Closure Request for the crude oil and produced water release which occurred at the Eagle 2 State 6H well site. The Eagle 2 State 6H well site is located approximately sixteen (16) miles west of Monument in Lea County, New Mexico. The release site is located in Unit Letter "O", Section 2, Township 20 South, Range 34 East. The GPS coordinates for the site are N 32.5958° and W 103.5287°. The property landowner is The State of New Mexico Land Trust. A Site Location Map is provided as Figure 1.

On February 16, 2015, a crude oil and produced water release occurred at the Eagle 2 State 6H Well site. According to a 3ROC representative, "An offset operator frac'd into our well and caused a small stuffing box leak which led to a release at the battery inside the containment with plastic liner. Location (Well site) had 1 bbl of oil and 30 bbls of water at well and 10 bbls of oil and 220 bbls of water at the battery inside the containment." Please note, according to 3ROC, the Eagle 2 State 3 Release (1RP-3566) and the Eagle 2 State 6H Release (1RP-3567) are attributed to a single incident. According to 3ROC, approximately eleven (11) bbls of crude oil were released and recovered at the Eagle 2 State 6H well site and placed in the crude oil storage tanks. In addition, approximately thirty (30) bbls of produced water were released and transported to a Salt Water Disposal (SWD) facility. For reference, attached Figure 2 depicts the impacted area and the soil sample locations at the 3ROC Eagle 2 State 6H well site Release Site. The NMOCD Form C-141 (Release Notification and Corrective Action) is attached.

A database maintained by the New Mexico Office of the State Engineer did not identify any registered water wells in Section 2, Township 20 South, Range 34 East. A reference map utilized by the New

Mexico Oil Conservation Division (NMOCD) Hobbs District Office, indicates groundwater should be encountered at approximately ninety (90) feet below ground surface (bgs). No water wells or surface water was observed within one thousand (1,000) feet of the release. Based on the NMOCD Site Classification criteria, the Release Site remediation levels are 10 mg/Kg for benzene, 50 mg/Kg for benzene, toluene, ethylbenzene, and toluene (BTEX) and 1,000 mg/Kg for total petroleum hydrocarbons (TPH). Generally, the NMOCD approves leaving chloride concentrations less than 500 mg/Kg in place if the depth to groundwater in the release area is less than one hundred (100) bgs and greater than fifty (50) feet bgs, provided vertical delineation to 250 mg/Kg is achieved.

According to 3ROC, "field staff cleaned inside the tank battery and scraped up the dirt that was affected at the wellhead and hauled off". On March 30, 2015, TRC collected two (2) soil samples (S1 @ 3" and S2 @ 3") and submitted the soil samples to Permian Basin Environmental Lab, LP in Midland, Texas. Soil samples were analyzed for concentrations of BTEX using Method SW846-8021B, TPH using Method SW846-8015M, and chloride using Method E300.0.

The analytical results indicated, benzene concentrations ranged from 0.0167 mg/Kg for soil sample S2 @ 3" to 0.861 mg/Kg for soil sample S1 @ 3". BTEX concentrations ranged from 0.5857 mg/Kg for soil sample S2 @ 3" to 20.461 mg/Kg for soil sample S1 @ 3". TPH concentrations ranged from 14,540 mg/Kg for soil sample S1 @ 3" to 19,110 mg/Kg for soil sample S2 @ 3". Chloride concentrations ranged from 368 mg/Kg for soil sample S2 @ 3" to 4,270 for soil sample S1 @ 3". Please reference Figure 2 for soil sample locations. A table summarizing Benzene, BTEX, TPH, and Chloride Concentrations in Soil is provided as Table 1. Laboratory analytical data is provided.

Based on the analytical results, additional remediation and vertical delineation was warranted at the release site. According to 3ROC, a roustabout crew scraped approximately three (3) inches of soil from the impacted area.

On May 18, 2015, TRC collected two (2) soil samples (S1a @ 6" and S2a @ 1') and the soil samples were submitted to the laboratory for analysis. The analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL for all soil samples. TPH concentrations ranged from less than the laboratory MDL of 26.6 mg/Kg for soil sample S2a @ 1' to 982 mg/Kg for soil sample S1a @ 6". Chloride concentrations ranged from less than the laboratory MDL of 1.06 mg/Kg for soil sample S2a @ 1' to 280 mg/Kg for soil sample S1a @ 6". Please reference Figure 2 for soil sample locations.

Based on the analytical results, additional remediation and vertical delineation of chloride impact was warranted in the area represented by soil sample S1a @ 6".

On June 12, 2015, a hand auger was utilized to vertically delineate the area represented by soil sample S1a @ 6". Soil samples were collected at nine (9) inches (S1b @ 9") and twelve (12) inches bgs (S1c @ 12") and submitted to the laboratory for chloride analysis. The analytical results indicated, chloride concentrations ranged from 6.99 mg/Kg for soil sample S1c @ 12" to 23.3 mg/Kg for soil sample S1b @ 9".

Based on the analytical results, 3ROC requests the NMOCD approve Site Closure Status for the Eagle 2 State 6H Release Site.



TRC has prepared this Remediation Summary and Site Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended.

TRC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. TRC has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and the information provided in documents or statements is true and accurate. TRC has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. TRC also notes the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

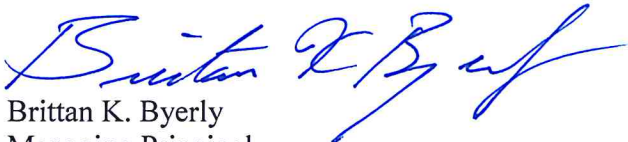
This report has been prepared for the benefit of Three Rivers Operating Company, LLC. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of TRC and/or Three Rivers Operating Company, LLC.

If you have any questions, or if additional information is needed, please feel free to call me at 432-520-7720 (office) or 432-559-3296 (cell).

Thank you,



Curt D. Stanley  
Senior Project Manager  
TRC Solutions, Inc.

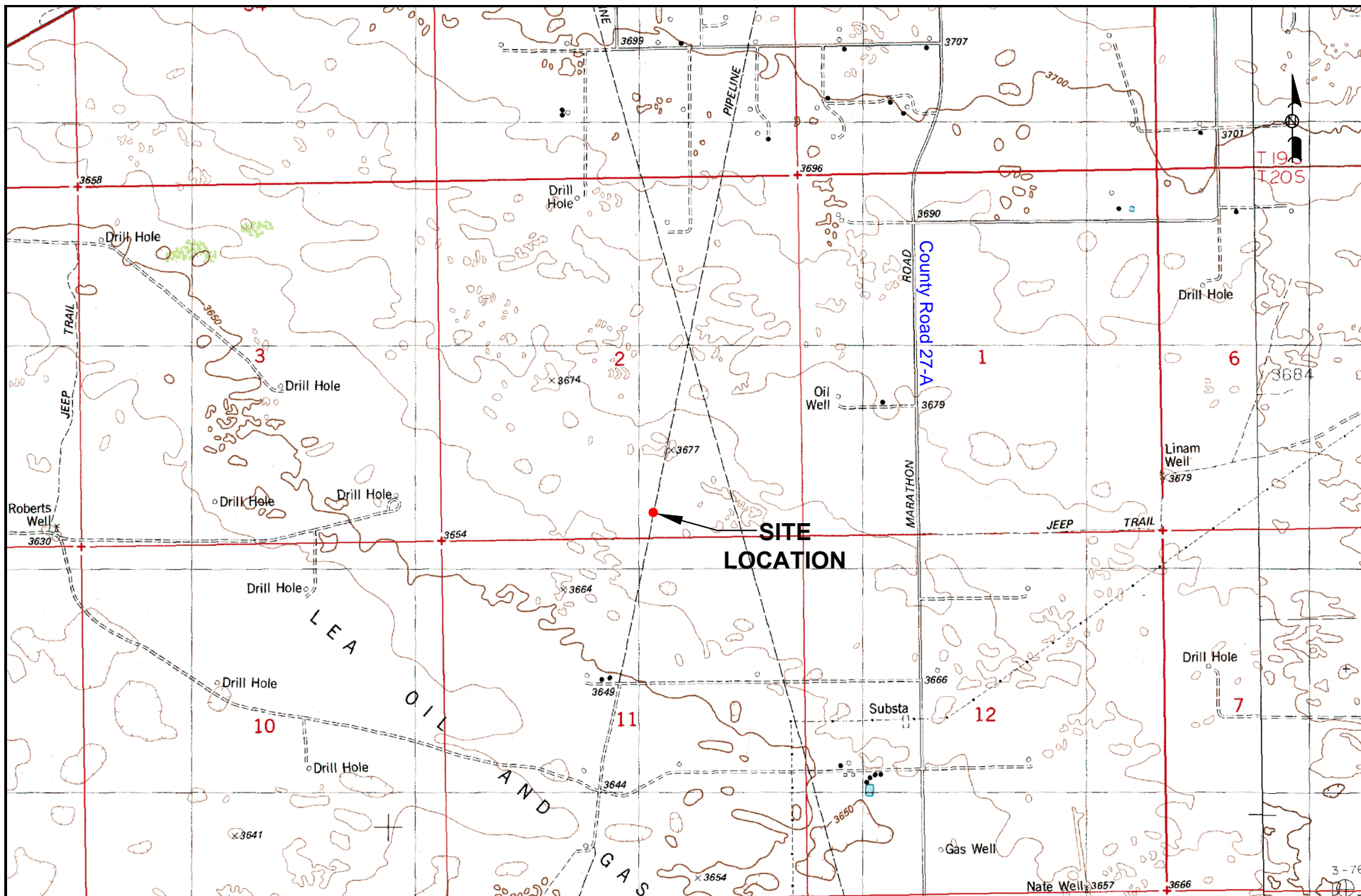


Brittan K. Byerly  
Managing Principal  
TRC Solutions, Inc.

**Attachments:**

Figure 1 - Site Location Map  
Figure 2 - Site Details Schematic and Soil Sample Locations Map  
Table 1 – Benzene, BTEX, TPH, and Chloride Concentrations in Soil  
Laboratory Analytical Reports  
NMOCD Form C-141

cc: Three Rivers Operating Company, LLC.  
file



LEGEND:

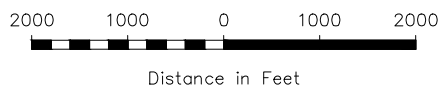


Figure 1

Site Location Map  
Three Rivers Operating Company LLC  
Eagle 2 State 6H  
Lea County, NM

Scale: 1" = 2000'

CAD By: TA

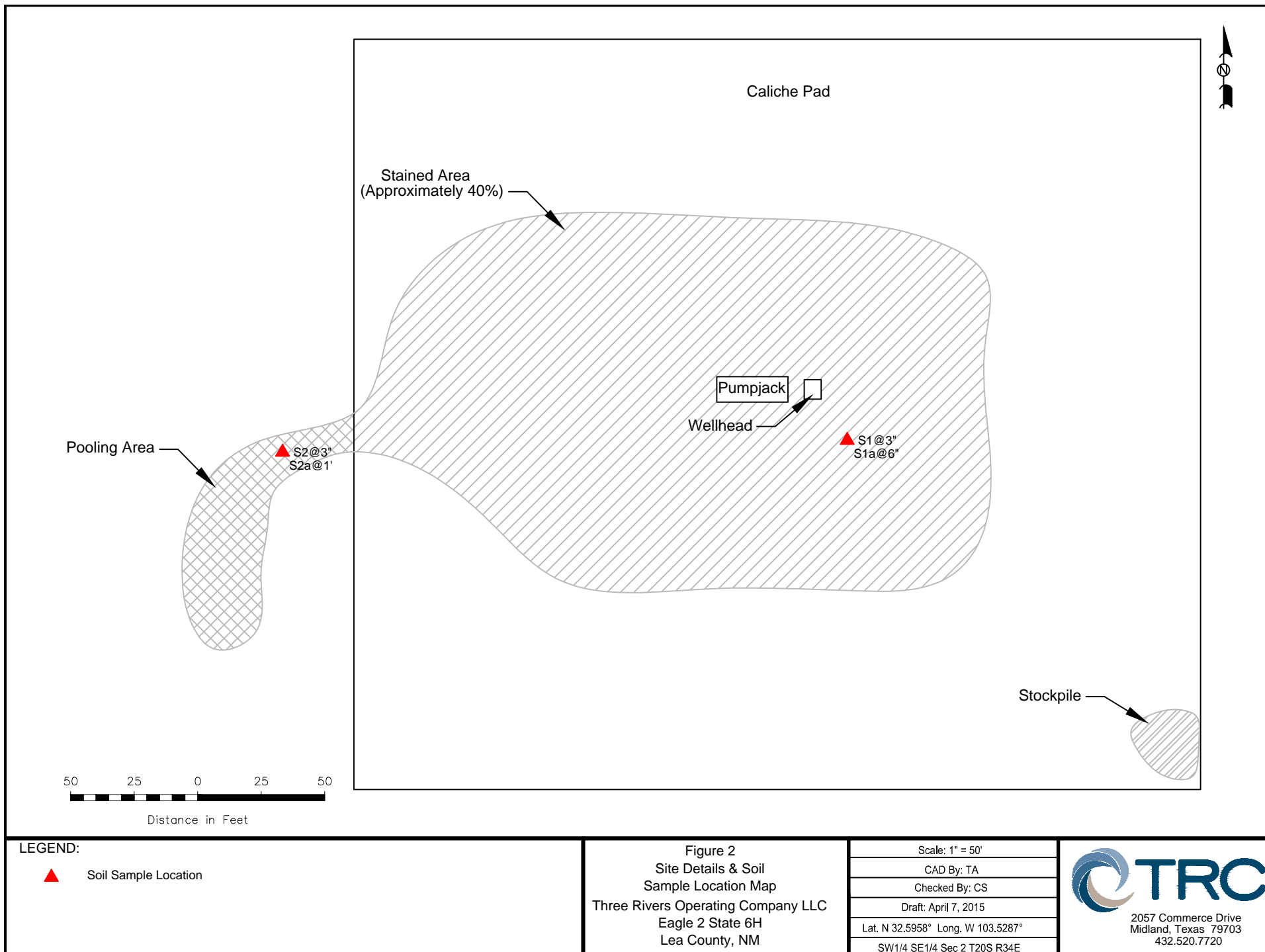
Checked By: CS

Draft: April 7, 2015

Lat. N 32.5958° Long. W 103.5287°

SW1/4 SE1/4 Sec 2 T20S R34E





**TABLE 1**  
**BENZENE, BTEX, TPH AND CHLORIDE CONCENTRATIONS IN SOIL**  
**THREE RIVERS OPERATING**  
**EAGLE 2 STATE 6H (WELL #6)**  
**LEA COUNTY, NEW MEXICO**

*All Concentrations are reported in mg/Kg*

SAMPLE DATE	SAMPLE LOCACTION	SAMPLE DEPTH	EPA SW 846-8015M				EPA SW 846-8021B, 5030						E 300.1
			GRO C6-C12 mg/Kg	DRO C12-C28 mg/Kg	ORO C28-C35 mg/Kg	TPH C <sub>6</sub> -C <sub>35</sub>	BENZENE	TOLUENE	ETHYL-BENZENE	m, p -XYLENES	o -XYLENES	BTEX	CHLORIDE
NMOCD REGULATORY GUIDELINE		-	-	-	-	1,000	10	-	-	-	-	50	500
03/30/15	S1 @ 3"	3"	2,130	11,000	1,410	14,540	0.861	5.05	3.85	10.7	3.75	20.461	4,270
05/18/15	S1a @ 6"	6"	<28.4	835	147	982	<0.00114	<0.00227	<0.00114	<0.00227	<0.00114	<0.00227	280
03/30/15	S2 @ 3"	3"	1,660	15,800	1,650	19,110	0.0167	0.0631	0.0819	0.424	0.101	0.5857	368
05/18/15	S2a @ 1'	1'	<26.6	<26.6	<26.6	<26.6	<0.00106	<0.00213	<0.00106	<0.00213	<0.00106	<0.00213	<1.06

**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
10014 SCR 1213  
Midland, TX 79706**



# Analytical Report

**Prepared for:**

Curt Stanley  
TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland, TX 79703

Project: Three Rivers Eagle 2 State 6H (Well #6)

Project Number: 234320

Location: Lea County, NM

Lab Order Number: 5C31006



**NELAP/TCEQ # T104704156-13-3**

Report Date: 04/06/15

TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H (Well #6)  
Project Number: 234320  
Project Manager: Curt Stanley

Fax: (432) 520-7701

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S1 @ 3"	5C31006-01	Soil	03/30/15 11:00	03-31-2015 12:03
S2 @ 3"	5C31006-02	Soil	03/30/15 11:10	03-31-2015 12:03



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2057 Commerce Street  
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Project Number: 234320  
Project Manager: Curt Stanley

Fax: (432) 520-7701

**S1 @ 3"**  
**5C31006-01 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Organics by GC**

<b>Benzene</b>	<b>0.861</b>	0.0215	mg/kg dry	20	P5D0203	04/01/15	04/01/15	EPA 8021B
<b>Toluene</b>	<b>5.05</b>	0.0430	mg/kg dry	20	P5D0203	04/01/15	04/01/15	EPA 8021B
<b>Ethylbenzene</b>	<b>3.85</b>	0.0215	mg/kg dry	20	P5D0203	04/01/15	04/01/15	EPA 8021B
<b>Xylene (p/m)</b>	<b>10.7</b>	0.0430	mg/kg dry	20	P5D0203	04/01/15	04/01/15	EPA 8021B
<b>Xylene (o)</b>	<b>3.75</b>	0.0215	mg/kg dry	20	P5D0203	04/01/15	04/01/15	EPA 8021B
<i>Surrogate: 4-Bromofluorobenzene</i>		102 %	75-125		P5D0203	04/01/15	04/01/15	EPA 8021B
<i>Surrogate: 1,4-Difluorobenzene</i>		103 %	75-125		P5D0203	04/01/15	04/01/15	EPA 8021B

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>4270</b>	26.9	mg/kg dry	25	P5D0301	03/31/15	03/31/15	EPA 300.0
<b>% Moisture</b>	<b>7.0</b>	0.1	%	1	P5D0105	04/01/15	04/01/15	% calculation

**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M**

<b>C6-C12</b>	<b>2130</b>	134	mg/kg dry	5	P5D0107	03/31/15	03/31/15	TPH 8015M
<b>&gt;C12-C28</b>	<b>11000</b>	134	mg/kg dry	5	P5D0107	03/31/15	03/31/15	TPH 8015M
<b>&gt;C28-C35</b>	<b>1410</b>	134	mg/kg dry	5	P5D0107	03/31/15	03/31/15	TPH 8015M
<i>Surrogate: 1-Chlorooctane</i>		116 %	70-130		P5D0107	03/31/15	03/31/15	TPH 8015M
<i>Surrogate: o-Terphenyl</i>		116 %	70-130		P5D0107	03/31/15	03/31/15	TPH 8015M
<b>Total Petroleum Hydrocarbon C6-C35</b>	<b>14500</b>	134	mg/kg dry	5	[CALC]	03/31/15	03/31/15	calc

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**S2 @ 3"**  
**5C31006-02 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Organics by GC**

<b>Benzene</b>	<b>0.0167</b>	0.00104	mg/kg dry	1	P5D0203	04/01/15	04/01/15	EPA 8021B	
<b>Toluene</b>	<b>0.0631</b>	0.00208	mg/kg dry	1	P5D0203	04/01/15	04/01/15	EPA 8021B	
<b>Ethylbenzene</b>	<b>0.0819</b>	0.00104	mg/kg dry	1	P5D0203	04/01/15	04/01/15	EPA 8021B	
<b>Xylene (p/m)</b>	<b>0.424</b>	0.00208	mg/kg dry	1	P5D0203	04/01/15	04/01/15	EPA 8021B	
<b>Xylene (o)</b>	<b>0.101</b>	0.00104	mg/kg dry	1	P5D0203	04/01/15	04/01/15	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>		102 %	75-125		P5D0203	04/01/15	04/01/15	EPA 8021B	
<i>Surrogate: 1,4-Difluorobenzene</i>		58.7 %	75-125		P5D0203	04/01/15	04/01/15	EPA 8021B	S-GC

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>368</b>	1.04	mg/kg dry	1	P5D0301	03/31/15	03/31/15	EPA 300.0	
<b>% Moisture</b>	<b>4.0</b>	0.1	%	1	P5D0105	04/01/15	04/01/15	% calculation	

**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M**

<b>C6-C12</b>	<b>1660</b>	130	mg/kg dry	5	P5D0107	03/31/15	03/31/15	TPH 8015M	
<b>&gt;C12-C28</b>	<b>15800</b>	130	mg/kg dry	5	P5D0107	03/31/15	03/31/15	TPH 8015M	
<b>&gt;C28-C35</b>	<b>1650</b>	130	mg/kg dry	5	P5D0107	03/31/15	03/31/15	TPH 8015M	
<i>Surrogate: 1-Chlorooctane</i>		107 %	70-130		P5D0107	03/31/15	03/31/15	TPH 8015M	
<i>Surrogate: o-Terphenyl</i>		110 %	70-130		P5D0107	03/31/15	03/31/15	TPH 8015M	
<b>Total Petroleum Hydrocarbon C6-C35</b>	<b>19100</b>	130	mg/kg dry	5	[CALC]	03/31/15	03/31/15	calc	

TRC Solutions- Midland, Texas  
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Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H (Well #6)  
Project Number: 234320  
Project Manager: Curt Stanley

Fax: (432) 520-7701

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P5D0203 - General Preparation (GC)**

**Blank (P5D0203-BLK1)**

Prepared & Analyzed: 04/01/15

Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00200	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	52.4		ug/kg	60.0		87.3	75-125			
Surrogate: 4-Bromofluorobenzene	66.7		"	60.0		111	75-125			

**LCS (P5D0203-BS1)**

Prepared & Analyzed: 04/01/15

Benzene	0.105	0.00100	mg/kg wet	0.100		105	70-130			
Toluene	0.113	0.00200	"	0.100		113	70-130			
Ethylbenzene	0.111	0.00100	"	0.100		111	70-130			
Xylene (p/m)	0.233	0.00200	"	0.200		116	70-130			
Xylene (o)	0.117	0.00100	"	0.100		117	70-130			
Surrogate: 1,4-Difluorobenzene	60.1		ug/kg	60.0		100	75-125			
Surrogate: 4-Bromofluorobenzene	67.9		"	60.0		113	75-125			

**LCS Dup (P5D0203-BSD1)**

Prepared & Analyzed: 04/01/15

Benzene	0.104	0.00100	mg/kg wet	0.100		104	70-130	1.01	20	
Toluene	0.116	0.00200	"	0.100		116	70-130	2.64	20	
Ethylbenzene	0.110	0.00100	"	0.100		110	70-130	0.190	20	
Xylene (p/m)	0.228	0.00200	"	0.200		114	70-130	2.18	20	
Xylene (o)	0.117	0.00100	"	0.100		117	70-130	0.428	20	
Surrogate: 4-Bromofluorobenzene	66.5		ug/kg	60.0		111	75-125			
Surrogate: 1,4-Difluorobenzene	62.4		"	60.0		104	75-125			

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**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P5D0105 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P5D0105-BLK1)**

Prepared & Analyzed: 04/01/15

% Moisture ND 0.1 %

**Duplicate (P5D0105-DUP1)**

Source: 5C31003-01

Prepared & Analyzed: 04/01/15

% Moisture ND 0.1 % 0.0 20

**Duplicate (P5D0105-DUP2)**

Source: 5C31003-05

Prepared & Analyzed: 04/01/15

% Moisture ND 0.1 % 0.0 20

**Duplicate (P5D0105-DUP3)**

Source: 5C31004-03

Prepared & Analyzed: 04/01/15

% Moisture ND 0.1 % 0.0 20

**Batch P5D0301 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P5D0301-BLK1)**

Prepared & Analyzed: 03/31/15

Chloride ND 1.00 mg/kg wet

**LCS (P5D0301-BS1)**

Prepared & Analyzed: 03/31/15

Chloride 104 1.00 mg/kg wet 100 104 80-120

**LCS Dup (P5D0301-BSD1)**

Prepared & Analyzed: 03/31/15

Chloride 104 1.00 mg/kg wet 100 104 80-120 0.00 20

**Duplicate (P5D0301-DUP1)**

Source: 5C31005-01

Prepared & Analyzed: 03/31/15

Chloride 402 1.09 mg/kg dry 398 0.973 20

**Matrix Spike (P5D0301-MS1)**

Source: 5C31005-01

Prepared & Analyzed: 03/31/15

Chloride 470 1.09 mg/kg dry 109 398 66.2 80-120 QR-01



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**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P5D0107 - TX 1005**

**Blank (P5D0107-BLK1)**

Prepared & Analyzed: 03/31/15

C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	90.9		"	100		90.9	70-130			
Surrogate: o-Terphenyl	53.4		"	50.0		107	70-130			

**LCS (P5D0107-BS1)**

Prepared & Analyzed: 03/31/15

C6-C12	843	25.0	mg/kg wet	1000		84.3	75-125			
>C12-C28	871	25.0	"	1000		87.1	75-125			
Surrogate: 1-Chlorooctane	109		"	100		109	70-130			
Surrogate: o-Terphenyl	50.1		"	50.0		100	70-130			

**LCS Dup (P5D0107-BSD1)**

Prepared & Analyzed: 03/31/15

C6-C12	847	25.0	mg/kg wet	1000		84.7	75-125	0.488	20	
>C12-C28	849	25.0	"	1000		84.9	75-125	2.58	20	
Surrogate: 1-Chlorooctane	108		"	100		108	70-130			
Surrogate: o-Terphenyl	48.7		"	50.0		97.5	70-130			

**Matrix Spike (P5D0107-MS1)**

Source: 5C31007-02

Prepared: 03/31/15 Analyzed: 04/01/15

C6-C12	955	30.5	mg/kg dry	1220		78.3	75-125			
>C12-C28	1080	30.5	"	1220		88.8	75-125			
Surrogate: 1-Chlorooctane	127		"	122		104	70-130			
Surrogate: o-Terphenyl	63.6		"	61.0		104	70-130			

**Matrix Spike Dup (P5D0107-MSD1)**

Source: 5C31007-02

Prepared: 03/31/15 Analyzed: 04/01/15

C6-C12	1030	30.5	mg/kg dry	1220		84.3	75-125	7.35	20	
>C12-C28	1150	30.5	"	1220		94.6	75-125	6.29	20	
Surrogate: 1-Chlorooctane	151		"	122		123	70-130			
Surrogate: o-Terphenyl	68.1		"	61.0		112	70-130			

TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H (Well #6)  
Project Number: 234320  
Project Manager: Curt Stanley

Fax: (432) 520-7701

### Notes and Definitions

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

QR-01 Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:



Date:

4/6/2015

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.



**Phone: 432-661-4184**

Permian Basin Environmental Lab, LP  
10014 S. County Road 1213  
Midland, Texas 79706

**Project Manager:** Curt Stanley

**Company Name** NOVA Safety and Environmental / TRCSolutions

**Company Address:** 2057 Commerce

City/State/Zip: Midland, Texas 79703

Telephone No: 432-520-7720

**Sampler Signature:**

e-mail: [cdstanley@trcsolutions.com](mailto:cdstanley@trcsolutions.com)

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

**PO#:**

**Project Loc:** Lea County, NM

**Project Name:** Three Rivers Eagle 2 State 6H (Well #6)

Project #: 27720

[illegible]

**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
10014 SCR 1213  
Midland, TX 79706**



# Analytical Report

**Prepared for:**

Geoff Leking  
TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland, TX 79703

Project: Three Rivers Eagle 2 State 6H

Project Number: 234320

Location: Lea County, New Mexico

Lab Order Number: 5E19008



NELAP/TCEQ # T104704156-13-3

Report Date: 05/28/15



TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H  
Project Number: 234320  
Project Manager: Geoff Leking

Fax: (432) 520-7701

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S-1a @ 6"	5E19008-01	Soil	05/18/15 11:45	05-19-2015 10:36
S-2a @ 1'	5E19008-02	Soil	05/18/15 12:00	05-19-2015 10:36

TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H  
Project Number: 234320  
Project Manager: Geoff Leking

Fax: (432) 520-7701

**S-1a @ 6"**  
**5E19008-01 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Organics by GC**

Benzene	ND	0.00114	mg/kg dry	1	P5E2802	05/22/15	05/23/15	EPA 8021B	
Toluene	ND	0.00227	mg/kg dry	1	P5E2802	05/22/15	05/23/15	EPA 8021B	
Ethylbenzene	ND	0.00114	mg/kg dry	1	P5E2802	05/22/15	05/23/15	EPA 8021B	
Xylene (p/m)	ND	0.00227	mg/kg dry	1	P5E2802	05/22/15	05/23/15	EPA 8021B	
Xylene (o)	ND	0.00114	mg/kg dry	1	P5E2802	05/22/15	05/23/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		107 %	75-125		P5E2802	05/22/15	05/23/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		125 %	75-125		P5E2802	05/22/15	05/23/15	EPA 8021B	

**General Chemistry Parameters by EPA / Standard Methods**

Chloride	280	1.14	mg/kg dry	1	P5E2107	05/19/15	05/21/15	EPA 300.0	
% Moisture	12.0	0.1	%	1	P5E2001	05/20/15	05/20/15	% calculation	

**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M**

C6-C12	ND	28.4	mg/kg dry	1	P5E2102	05/19/15	05/20/15	TPH 8015M	
>C12-C28	835	28.4	mg/kg dry	1	P5E2102	05/19/15	05/20/15	TPH 8015M	
>C28-C35	147	28.4	mg/kg dry	1	P5E2102	05/19/15	05/20/15	TPH 8015M	
Surrogate: 1-Chlorooctane		55.8 %	70-130		P5E2102	05/19/15	05/20/15	TPH 8015M	S-GC
Surrogate: o-Terphenyl		71.5 %	70-130		P5E2102	05/19/15	05/20/15	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	982	28.4	mg/kg dry	1	[CALC]	05/19/15	05/20/15	calc	

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2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H  
Project Number: 234320  
Project Manager: Geoff Leking

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**S-2a @ 1'**  
**5E19008-02 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Organics by GC**

Benzene	ND	0.00106	mg/kg dry	1	P5E2704	05/26/15	05/26/15	EPA 8021B	
Toluene	ND	0.00213	mg/kg dry	1	P5E2704	05/26/15	05/26/15	EPA 8021B	
Ethylbenzene	ND	0.00106	mg/kg dry	1	P5E2704	05/26/15	05/26/15	EPA 8021B	
Xylene (p/m)	ND	0.00213	mg/kg dry	1	P5E2704	05/26/15	05/26/15	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P5E2704	05/26/15	05/26/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		138 %	75-125		P5E2704	05/26/15	05/26/15	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		88.1 %	75-125		P5E2704	05/26/15	05/26/15	EPA 8021B	

**General Chemistry Parameters by EPA / Standard Methods**

Chloride	ND	1.06	mg/kg dry	1	P5E2107	05/19/15	05/21/15	EPA 300.0	
% Moisture	6.0	0.1	%	1	P5E2001	05/20/15	05/20/15	% calculation	

**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M**

C6-C12	ND	26.6	mg/kg dry	1	P5E2102	05/19/15	05/20/15	TPH 8015M	
>C12-C28	ND	26.6	mg/kg dry	1	P5E2102	05/19/15	05/20/15	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P5E2102	05/19/15	05/20/15	TPH 8015M	
Surrogate: 1-Chlorooctane		116 %	70-130		P5E2102	05/19/15	05/20/15	TPH 8015M	
Surrogate: o-Terphenyl		138 %	70-130		P5E2102	05/19/15	05/20/15	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	05/19/15	05/20/15	calc	

TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H  
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Project Manager: Geoff Leking

Fax: (432) 520-7701

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P5E2704 - TX 1005**

**Blank (P5E2704-BLK1)**

Prepared & Analyzed: 05/26/15

Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00200	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	0.0656		"	0.0500		131	75-125			S-GC
Surrogate: 1,4-Difluorobenzene	0.0472		"	0.0500		94.5	75-125			

**LCS (P5E2704-BS1)**

Prepared & Analyzed: 05/26/15

Benzene	0.0812	0.00100	mg/kg wet	0.100		81.2	70-130			
Toluene	0.0922	0.00200	"	0.100		92.2	70-130			
Ethylbenzene	0.107	0.00100	"	0.100		107	70-130			
Xylene (p/m)	0.212	0.00200	"	0.200		106	70-130			
Xylene (o)	0.107	0.00100	"	0.100		107	70-130			
Surrogate: 4-Bromofluorobenzene	0.0636		"	0.0500		127	75-125			S-GC
Surrogate: 1,4-Difluorobenzene	0.0538		"	0.0500		108	75-125			

**LCS Dup (P5E2704-BSD1)**

Prepared & Analyzed: 05/26/15

Benzene	0.0850	0.00100	mg/kg wet	0.100		85.0	70-130	4.50	20	
Toluene	0.0971	0.00200	"	0.100		97.1	70-130	5.19	20	
Ethylbenzene	0.114	0.00100	"	0.100		114	70-130	6.44	20	
Xylene (p/m)	0.223	0.00200	"	0.200		111	70-130	4.65	20	
Xylene (o)	0.112	0.00100	"	0.100		112	70-130	4.60	20	
Surrogate: 4-Bromofluorobenzene	0.0643		"	0.0500		129	75-125			S-GC
Surrogate: 1,4-Difluorobenzene	0.0542		"	0.0500		108	75-125			

**Batch P5E2802 - TX 1005**

**Blank (P5E2802-BLK1)**

Prepared & Analyzed: 05/22/15

Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00200	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	0.0524		"	0.0500		105	75-125			
Surrogate: 4-Bromofluorobenzene	0.0621		"	0.0500		124	75-125			



TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H  
Project Number: 234320  
Project Manager: Geoff Leking

Fax: (432) 520-7701

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P5E2802 - TX 1005**

**LCS (P5E2802-BS1)**

Prepared & Analyzed: 05/22/15

Benzene	0.0947	0.00100	mg/kg wet	0.100		94.7	70-130			
Toluene	0.108	0.00200	"	0.100		108	70-130			
Ethylbenzene	0.109	0.00100	"	0.100		109	70-130			
Xylene (p/m)	0.213	0.00200	"	0.200		106	70-130			
Xylene (o)	0.104	0.00100	"	0.100		104	70-130			
Surrogate: 1,4-Difluorobenzene	0.0663		"	0.0500		133	75-125			S-GC
Surrogate: 4-Bromofluorobenzene	0.0580		"	0.0500		116	75-125			

**LCS Dup (P5E2802-BSD1)**

Prepared & Analyzed: 05/22/15

Benzene	0.0911	0.00100	mg/kg wet	0.100		91.1	70-130	3.89	20	
Toluene	0.103	0.00200	"	0.100		103	70-130	4.68	20	
Ethylbenzene	0.109	0.00100	"	0.100		109	70-130	0.302	20	
Xylene (p/m)	0.213	0.00200	"	0.200		107	70-130	0.413	20	
Xylene (o)	0.104	0.00100	"	0.100		104	70-130	0.615	20	
Surrogate: 4-Bromofluorobenzene	0.0600		"	0.0500		120	75-125			
Surrogate: 1,4-Difluorobenzene	0.0616		"	0.0500		123	75-125			

TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H  
Project Number: 234320  
Project Manager: Geoff Leking

Fax: (432) 520-7701

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P5E2001 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P5E2001-BLK1)**

Prepared & Analyzed: 05/20/15

% Moisture ND 0.1 %

**Duplicate (P5E2001-DUP1)**

Source: 5E19006-03

Prepared & Analyzed: 05/20/15

% Moisture 4.0 0.1 % 4.0 0.00 20

**Duplicate (P5E2001-DUP2)**

Source: 5E19013-01

Prepared & Analyzed: 05/20/15

% Moisture 29.0 0.1 % 30.0 3.39 20

**Batch P5E2107 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P5E2107-BLK1)**

Prepared: 05/19/15 Analyzed: 05/21/15

Chloride ND 1.00 mg/kg wet

**LCS (P5E2107-BS1)**

Prepared: 05/19/15 Analyzed: 05/21/15

Chloride 105 1.00 mg/kg wet 100 105 80-120

**LCS Dup (P5E2107-BSD1)**

Prepared: 05/19/15 Analyzed: 05/21/15

Chloride 101 1.00 mg/kg wet 100 101 80-120 3.09 20

**Duplicate (P5E2107-DUP1)**

Source: 5E05003-09

Prepared: 05/19/15 Analyzed: 05/21/15

Chloride 187 1.06 mg/kg dry 188 0.550 20

**Matrix Spike (P5E2107-MS1)**

Source: 5E05003-09

Prepared: 05/19/15 Analyzed: 05/21/15

Chloride 286 1.06 mg/kg dry 106 188 91.8 80-120

TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H  
Project Number: 234320  
Project Manager: Geoff Leking

Fax: (432) 520-7701

**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch P5E2102 - TX 1005</b>										
<b>Blank (P5E2102-BLK1)</b>	Prepared & Analyzed: 05/19/15									
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	64.9		"	100		64.9	70-130			S-GC
Surrogate: o-Terphenyl	39.4		"	50.0		78.9	70-130			
<b>LCS (P5E2102-BS1)</b>	Prepared & Analyzed: 05/19/15									
C6-C12	941	25.0	mg/kg wet	1000		94.1	75-125			
>C12-C28	1140	25.0	"	1000		114	75-125			
Surrogate: 1-Chlorooctane	90.4		"	100		90.4	70-130			
Surrogate: o-Terphenyl	46.8		"	50.0		93.6	70-130			
<b>LCS Dup (P5E2102-BSD1)</b>	Prepared & Analyzed: 05/19/15									
C6-C12	899	25.0	mg/kg wet	1000		89.9	75-125	4.62	20	
>C12-C28	1120	25.0	"	1000		112	75-125	1.48	20	
Surrogate: 1-Chlorooctane	88.3		"	100		88.3	70-130			
Surrogate: o-Terphenyl	41.4		"	50.0		82.8	70-130			
<b>Duplicate (P5E2102-DUP1)</b>	<b>Source: 5E19009-02</b>		Prepared: 05/19/15 Analyzed: 05/20/15							
C6-C12	100	28.4	mg/kg dry		90.5			10.1	20	
>C12-C28	2360	28.4	"		2130			10.5	20	
Surrogate: 1-Chlorooctane	74.5		"	114		65.5	70-130			S-GC
Surrogate: o-Terphenyl	46.5		"	56.8		81.9	70-130			

TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H  
Project Number: 234320  
Project Manager: Geoff Leking

Fax: (432) 520-7701

### Notes and Definitions

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:



Date:

5/28/2015

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

**Project Manager:** Geoff Leking

Company Name TRC Solutions, Inc.

**Company Address:** 2057 Commerce Dr.

City/State/Zip: Midland/TX/79703

Telephone No: (432)5207720

Sampler Signature: Jeffrey Johnson

e-mail: [ggleking@trcsolutions.com](mailto:ggleking@trcsolutions.com)

Fax No.: \_\_\_\_\_

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

PO #

**Project Loc:** Lea County, New Mexico

Project#: 2 3 4 3 2 0

**Project Name:** Three Rivers Eagle 2 State 6H

Page 10 of 10

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**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
10014 SCR 1213  
Midland, TX 79706**



# Analytical Report

**Prepared for:**

Geoff Leking  
TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland, TX 79703

Project: Three Rivers Eagle 2 State 6H

Project Number: 234320

Location: Lea County, New Mexico

Lab Order Number: 5F15005



NELAP/TCEQ # T104704156-13-3

Report Date: 06/22/15

TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H  
Project Number: 234320  
Project Manager: Geoff Leking

Fax: (432) 520-7701

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S1b @ 9"	5F15005-01	Soil	06/12/15 09:10	06-15-2015 11:55
S1c @ 12"	5F15005-02	Soil	06/12/15 09:30	06-15-2015 11:55

TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H  
Project Number: 234320  
Project Manager: Geoff Leking

Fax: (432) 520-7701

**S1b @ 9"**  
**5F15005-01 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

Chloride	23.3	1.03	mg/kg dry	1	P5F1804	06/17/15	06/18/15	EPA 300.0
% Moisture	3.0	0.1	%	1	P5F1607	06/16/15	06/16/15	% calculation



TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H  
Project Number: 234320  
Project Manager: Geoff Leking

Fax: (432) 520-7701

**S1c @ 12"**  
**5F15005-02 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>6.99</b>	1.05	mg/kg dry	1	P5F1804	06/17/15	06/18/15	EPA 300.0	
<b>% Moisture</b>	<b>5.0</b>	0.1	%	1	P5F1607	06/16/15	06/16/15	% calculation	

TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H  
Project Number: 234320  
Project Manager: Geoff Leking

Fax: (432) 520-7701

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch P5F1607 - *** DEFAULT PREP ***</b>										
<b>Blank (P5F1607-BLK1)</b>				Prepared & Analyzed: 06/16/15						
% Moisture	ND	0.1	%							
<b>Duplicate (P5F1607-DUP1)</b>				Source: 5F11016-02 Prepared & Analyzed: 06/16/15						
% Moisture	6.0	0.1	%		6.0			0.00	20	
<b>Duplicate (P5F1607-DUP2)</b>				Source: 5F12001-01 Prepared & Analyzed: 06/16/15						
% Moisture	2.0	0.1	%		1.0			66.7	20	
<b>Duplicate (P5F1607-DUP3)</b>				Source: 5F15005-01 Prepared & Analyzed: 06/16/15						
% Moisture	3.0	0.1	%		3.0			0.00	20	
<b>Batch P5F1804 - *** DEFAULT PREP ***</b>										
<b>Blank (P5F1804-BLK1)</b>				Prepared: 06/17/15 Analyzed: 06/18/15						
Chloride	ND	1.00	mg/kg wet							
<b>LCS (P5F1804-BS1)</b>				Prepared: 06/17/15 Analyzed: 06/18/15						
Chloride	104	1.00	mg/kg wet	100		104	80-120			
<b>Duplicate (P5F1804-DUP1)</b>				Source: 5F16002-01 Prepared: 06/17/15 Analyzed: 06/18/15						
Chloride	3920	27.8	mg/kg dry		3940			0.601	20	
<b>Duplicate (P5F1804-DUP2)</b>				Source: 5F10011-11 Prepared: 06/17/15 Analyzed: 06/18/15						
Chloride	4160	28.4	mg/kg dry		4190			0.776	20	
<b>Matrix Spike (P5F1804-MS1)</b>				Source: 5F16002-01 Prepared: 06/17/15 Analyzed: 06/18/15						
Chloride	5580	27.8	mg/kg dry	1670	3940	98.3	80-120			

TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H  
Project Number: 234320  
Project Manager: Geoff Leking

Fax: (432) 520-7701

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:



Date:

6/22/2015

Brent Barron, Laboratory Director/Technical Director

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## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

**Project Manager:** Geoff Leking

Company Name TRC Solutions, Inc.

**Company Address:** 2057 Commerce Dr.

City/State/Zip: Midland/TX/79703

Telephone No: (432) 520 7720

Sampler Signature: Jeffrey Johnson

e-mail: [gleking@trcsolutions.com](mailto:gleking@trcsolutions.com)

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

**PO#:**

**Project Loc:** Lea County, New Mexico

Project #: 2 3 4 3 2 0

**Project Name:** Three Rivers Operating Co. Eagle 2 State 6

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**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
10014 SCR 1213  
Midland, TX 79706**



# Analytical Report

**Prepared for:**

Geoff Leking  
TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland, TX 79703

Project: Three Rivers Eagle 2 State 6H

Project Number: 234320

Location: Lea County, New Mexico

Lab Order Number: 5F15005



NELAP/TCEQ # T104704156-13-3

Report Date: 06/22/15

TRC Solutions- Midland, Texas  
2057 Commerce Street  
Midland TX, 79703

Project: Three Rivers Eagle 2 State 6H  
Project Number: 234320  
Project Manager: Geoff Leking

Fax: (432) 520-7701

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S1b @ 9"	5F15005-01	Soil	06/12/15 09:10	06-15-2015 11:55
S1c @ 12"	5F15005-02	Soil	06/12/15 09:30	06-15-2015 11:55

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**S1b @ 9"**  
**5F15005-01 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>23.3</b>	1.03	mg/kg dry	1	P5F1804	06/17/15	06/18/15	EPA 300.0
<b>% Moisture</b>	<b>3.0</b>	0.1	%	1	P5F1607	06/16/15	06/16/15	% calculation

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**S1c @ 12"**  
**5F15005-02 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>6.99</b>	1.05	mg/kg dry	1	P5F1804	06/17/15	06/18/15	EPA 300.0	
<b>% Moisture</b>	<b>5.0</b>	0.1	%	1	P5F1607	06/16/15	06/16/15	% calculation	



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**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch P5F1607 - *** DEFAULT PREP ***</b>										
<b>Blank (P5F1607-BLK1)</b>				Prepared & Analyzed: 06/16/15						
% Moisture	ND	0.1	%							
<b>Duplicate (P5F1607-DUP1)</b>				Source: 5F11016-02 Prepared & Analyzed: 06/16/15						
% Moisture	6.0	0.1	%		6.0			0.00	20	
<b>Duplicate (P5F1607-DUP2)</b>				Source: 5F12001-01 Prepared & Analyzed: 06/16/15						
% Moisture	2.0	0.1	%		1.0			66.7	20	
<b>Duplicate (P5F1607-DUP3)</b>				Source: 5F15005-01 Prepared & Analyzed: 06/16/15						
% Moisture	3.0	0.1	%		3.0			0.00	20	
<b>Batch P5F1804 - *** DEFAULT PREP ***</b>										
<b>Blank (P5F1804-BLK1)</b>				Prepared: 06/17/15 Analyzed: 06/18/15						
Chloride	ND	1.00	mg/kg wet							
<b>LCS (P5F1804-BS1)</b>				Prepared: 06/17/15 Analyzed: 06/18/15						
Chloride	104	1.00	mg/kg wet	100		104	80-120			
<b>Duplicate (P5F1804-DUP1)</b>				Source: 5F16002-01 Prepared: 06/17/15 Analyzed: 06/18/15						
Chloride	3920	27.8	mg/kg dry		3940			0.601	20	
<b>Duplicate (P5F1804-DUP2)</b>				Source: 5F10011-11 Prepared: 06/17/15 Analyzed: 06/18/15						
Chloride	4160	28.4	mg/kg dry		4190			0.776	20	
<b>Matrix Spike (P5F1804-MS1)</b>				Source: 5F16002-01 Prepared: 06/17/15 Analyzed: 06/18/15						
Chloride	5580	27.8	mg/kg dry	1670	3940	98.3	80-120			

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### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:



Date:

6/22/2015

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

**Project Manager:** Geoff Leking

Company Name TRC Solutions, Inc.

**Company Address:** 2057 Commerce Dr.

City/State/Zip: Midland/TX/79703

Telephone No: (432)5207720

Sampler Signature: Jeffrey Johnson

e-mail: [gleking@trcsolutions.com](mailto:gleking@trcsolutions.com)

Fax No: \_\_\_\_\_

**Report Format:** ☒ Standard ☐ TRRP ☐ NPDES

PO#:

**Project Loc:** Lea County, New Mexico

**Project#:** 2 3 4 3 2 0

**Project Name:** Three Rivers Operating Co. Eagle 2 State 6

Page 7 of 7

[illegible]

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., 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 August 8, 2011

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

### Release Notification and Corrective Action

#### OPERATOR

☒ Initial Report ☒ Final Report

Name of Company	Three Rivers Operating Co LLC	Contact	Anne Maness
Address	5301 Southwest Pkwy #400 Austin, TX 78735	Telephone No.	512-600-3195
Facility Name	Eagle 2 State 6H	Facility Type	Well
Surface Owner	State of New Mexico	Mineral Owner	State of New Mexico
		API No.	30-025-40330

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	2	20S	34E	330	SOUTH	1950	EAST	LEA

Latitude 32.5958N Longitude -103.5287W

#### NATURE OF RELEASE

Type of Release	Oil and Water	Volume of Release	11 bbls oil	Volume Recovered	11 bbls
Source of Release		Date and Hour of Occurrence	2/16/15 10am	Date and Hour of Discovery	2/16/15 same day in the morning
Offset Operator	Frac	Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	N/A
By Whom?		Date and Hour		Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If a Watercourse was Impacted, Describe Fully.*	N/A	If YES, Volume Impacting the Watercourse.	N/A		

**RECEIVED**

By OCD; Dr. Oberding at 1:10 pm, Mar 18, 2015

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

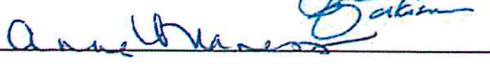
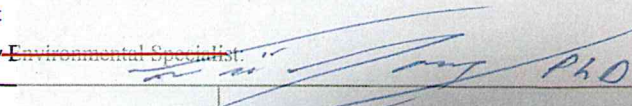


An offset operator frac'd into our well & caused a small stuffing box leak which led to a release at the battery inside the containment with plastic liner. Location had 1 bbl of oil & 30 bbls of water at well and 10 bbls of oil & 220 bbls of water at the battery inside the containment. Vacuum truck was called in to pick up oil and water. Oil was placed back into the tanks & water was hauled off to a SWD facility. Affected dirt was hauled off.

#### Describe Area Affected and Cleanup Action Taken.\*

The caliche pad around the wellhead and the plastic lined containment were the two areas affected. The pool of oil in the containment was picked up with a vacuum truck and put back into the tanks. Water was taken to a SWD facility. Field staff cleaned inside the tank battery and scraped up the dirt that was affected at the wellhead and hauled off.

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

#### OIL CONSERVATION DIVISION

Signature: 	Hydrologist
Printed Name: Anne Maness	Approved by: 
Title: Regulatory Analyst	Approval Date:  Expiration Date: ///
E-mail Address: amaness@3roc.com	Conditions of Approval: 
Date: 3/17/15 Phone: 512-600-3195	Attached <input type="checkbox"/> 1RP-3567 272295

\* Attach Additional Sheets If Necessary

nTO1507751303

pTO1507751509