



RECEIVED

By OCD; Dr. Oberding at 8:59 am, Mar 26, 2015

CONOCOPHILLIPS

P.O. Box 2197
Houston, TX 77252-2197
Phone 281.293.1000

Warren Unit Injection Trunkline 1RP-3135

Corrective Action Plan

APPROVED Conditionally

By OCD; Dr. Oberding at 9:25 am, Mar 26, 2015

Conditional approval with the following stipulations:

- 1) Obtain concurrence from the BLM;
- 2) Please delineate to a depth of at least 4 feet in all bottom samples (points 1-3); (based on the depth to groundwater, and the images this appears to be sandy soil, and we want to ensure that no migration of contaminants occurred);
- 3) Add an additional sample/delineation point between 2 and 3 in the larger pooling area (between the surface and buried lines indicated on the map).

API No. 30-025-07878

Release Date June 23, 2014

Unit Letter P, Section 27, Township 20S, Range 38E

March 26, 2015

Dr. Tomáš Oberding, PhD

Environmental Specialist – New Mexico Oil Conservation Division
Energy, Minerals and Natural Resources Department
1625 N. French Dr.
Hobbs, NM 88240

**RE: Corrective Action Plan
ConocoPhillips – Warren Unit ROE (1RP-3135)
UL/P sec. 27 T20S R38E
API No. 3002507878**

Dr. Oberding:

ConocoPhillips (CoP) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site.

Background and Previous Work

The site is located approximately 7.3 miles north of Eunice, New Mexico at UL/P Sec. 27 T20S R38E. NM OSE records indicate that groundwater will likely be encountered at a depth of approximately 65 +/- feet.

On June 23rd, 2014, a leak in the injection trunk line released 45 barrels of produced water over 3,666 sq ft of pasture. A vacuum truck was called to the site and 5 barrels of produced water were recovered. NMOCD was notified of the release on June 23rd, 2014, and an initial C-141 was submitted to NMOCD on June 24th, 2014. NMOCD approved the initial C-141 on July 2nd, 2014 (Appendix A).

RECS personnel were on site June 23rd, 2014, to visually assess the release. The release was mapped and photographed (Figure 1). CoP excavated to 8 ft bgs in order to repair the damaged line, excavating approximately 1,100 cubic yards of contaminated soil. On July 2nd 2014, wall and bottom samples were taken from the completed excavation and sent to a commercial laboratory for analysis. Laboratory analysis confirmed low chloride and hydrocarbon levels (Appendix B).

To further investigate the presence of chlorides and hydrocarbons, 3 sample points were hand augered to six inches bgs on February 11th, 2015. The samples from each vertical were taken to a commercial laboratory for analyses. Laboratory analysis confirmed chloride and hydrocarbon levels below regulatory standards in each vertical (Appendix B).

Photo documentation of these activities can be found in Appendix C.

Corrective Action Plan

Based on the laboratory analysis of the release, the 1,100 yards of excavated soil will be exported to a NMOCD approved facility and clean soil will be imported to the site to serve as backfill. A sample of the imported soil will be taken to a commercial laboratory to confirm that the chloride reading is below regulatory standards. The excavation will be backfilled with the imported soil and contoured to the surrounding location. All disturbed areas in the pasture will be seeded with a blend of native vegetation

Once these activities have been completed, a report will be sent to NMOCD and BLM requesting 'remediation termination' and site closure.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 631-6432 or me if you have any questions or wish to discuss the site.

Sincerely,

A handwritten signature in cursive script that reads "Kyle Norman". The signature is written in dark ink and includes a long, horizontal flourish extending to the right.

Kyle Norman
Project Lead
RECS
(575) 942-8542

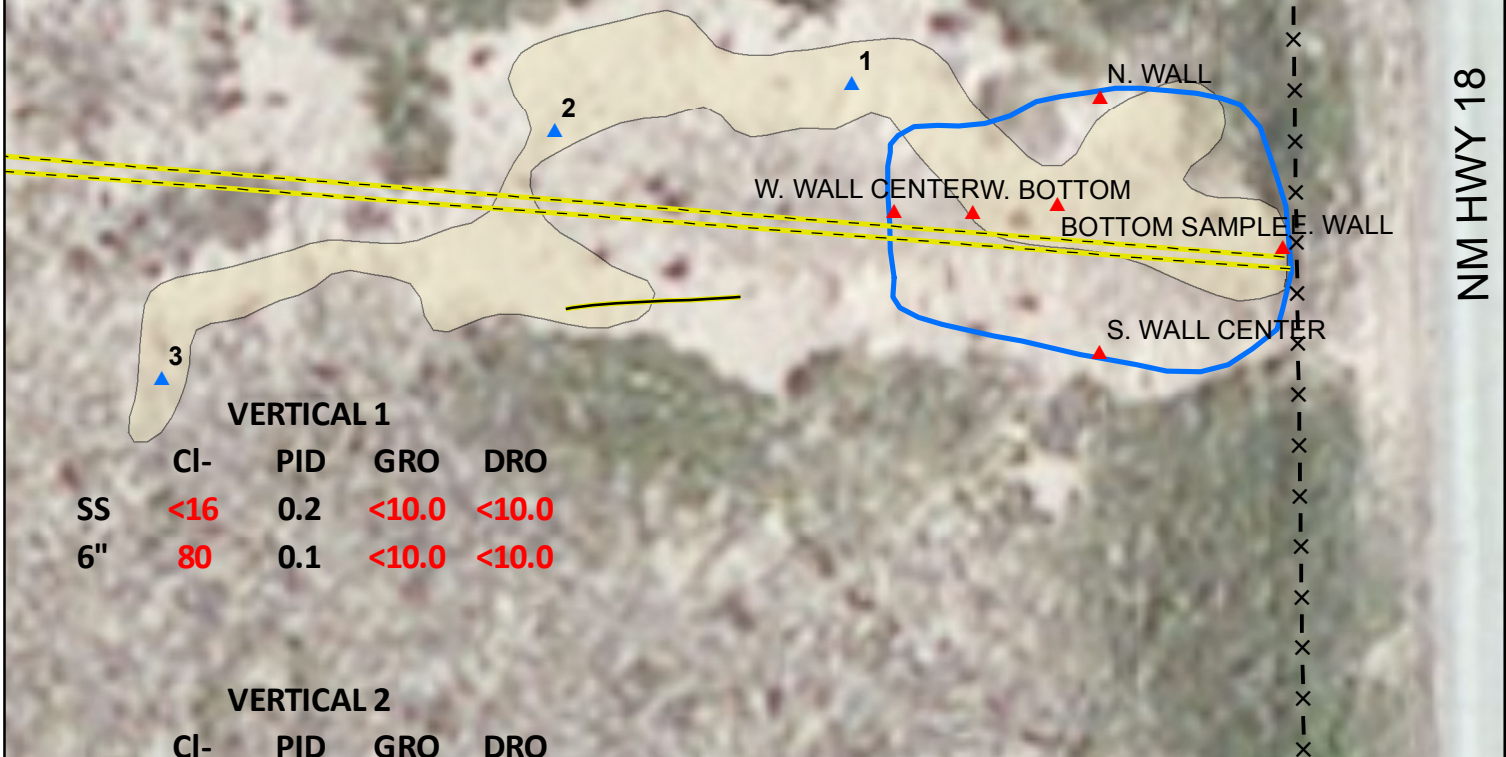
Attachments:

- Figure 1 – Initial Sampling Data
- Appendix A – Initial C-141
- Appendix B – Laboratory Analyses
- Appendix C – Photo Documentation

Figures

Initial Sampling Data

	Cl-	PID	GRO	DRO		Cl-	PID	GRO	DRO
WEST BOTTOM	<16	0.3	<10.0	<10.0	North Wall	<16	1.2	<10	<10
WEST WALL CENTER	<16	0.1	<10.0	<10.0	East Wall	64	1.3	<10	<10
SOUTH WALL CENTER	48	0.3	<10.0	<10.0	Bottom Sample	144	5.7	<10	<10



VERTICAL 1

	Cl-	PID	GRO	DRO
SS	<16	0.2	<10.0	<10.0
6"	80	0.1	<10.0	<10.0

VERTICAL 2

	Cl-	PID	GRO	DRO
SS	<16	0.2	<10.0	<10.0
6"	<16	0.2	<10.0	<10.0

VERTICAL 3

	Cl-	PID	GRO	DRO
SS	80	0.3	<10.0	<10.0
6"	64	0.2	<10.0	<10.0

Landowner: McCasland Ltd Partnership Lea
DGW: 65 FT

Source: Esri, DigitalGlobe, GeoEye, AeroGRID, IGN, etc.

Legend

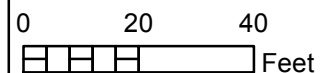
- ▲ SURFACE SAMPLE
- ▲ EXCAVATION SAMPLE
- PAD/ROAD EDGE
- SURFACE PIPELINE
- - - BURIED LINE
- x - x - FENCE
- EXCAVATION 8 FT
- STAIN (3,666 sq ft)



**CONOCOPHILLIPS
WARREN UNIT
INJECTION
TRUNKLINE
1RP-3135**

UL P SECTION 27
T-20-S R-38-E
LEA COUNTY, NM

Figure 1



GPS date: 2/11 & 12/15 KS
Drawing date: 2/12/15
Drafted by: B. Cooper



Appendix A

Initial C-141

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

HOBBS OGD State of New Mexico
Energy Minerals and Natural Resources
JUN 24 2014
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505
RECEIVED

HOBBS OGD

Form C-141
Revised August 8, 2011

JUN 24
Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

RECEIVED

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: ConocoPhillips	Contact: Jose A Zepeda
Address: 1410 N West County Road	Telephone No. 575-391-3165
Facility Name: Warren Unit ROE	Facility Type: Trunk Line

Surface Owner: Fed LSE	Mineral Owner: N/A	API No. LC-031695B
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LOCATION OF RELEASE

30-025-07875 76

Unit Letter P	Section 27	Township T20S	Range 38E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
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Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release: Produce Water	Volume of Release: 45 BBLs	Volume Recovered: 5.0 BBLs
Source of Release: Pipeline	Date and Hour of Occurrence 06/23/2014 ~0430 am	Date and Hour of Discovery 06/23/2014 ~ 0700 am
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Geoffrey Leking	
By Whom? Jose A Zepeda	Date and Hour: 06/23/2014 ~ 1200 am Email	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

N/A

Depth to G.H.O. = 50-75

Describe Cause of Problem and Remedial Action Taken.*

ENV - Agency Reportable - MCBU - Permian - SENM - Hobbs - Warren Unit Trunk Line + ~ 45 bbl. of Produce Water - RR2. On June 23, 2014 @ ~0430 am @ the Warren Unit Trunk Line, there was an accidental release of ~ 45 bbl. of Produce Water. COPC employee was contacted via SCADA of an injection pump that was down. Upon arrival on location COPC employee noticed that the pump was down on low pressure and started driving out injection line and trunk line and found a leak on the injection trunk line on the west side of Hwy 18. COPC employee isolated the trunk line going to the east separators injection header and started pump to check if the valves was holding. COPC employee then contacted vacuum truck to pick up spill; vacuum truck picked up 5 bbl. of produced water, COPC employee then called Supervisor about the leak. A work order will be generated for cleanup and repairs. The spill site will be remediated in accordance with COPC and NMOCD guidelines. An Investigation into the cause of the incident is ongoing.

Describe Area Affected and Cleanup Action Taken.*

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: JOSE A ZEPEDA	Approved by Environmental Specialist:	
Printed Name: Jose A Zepeda	Approval Date:	Expiration Date:
Title: LEAD HSE	Conditions of Approval:	
E-mail Address: Jose. A. Zepeda@conocophillips.com	Attached <input type="checkbox"/>	
Date: 06/23/2014	Phone: 575-391-3158	7-19-3135

* Attach Additional Sheets If Necessary

JUL 02 2014

orig'd 217812
HTO 1418 JS 0241
PTO 1418 JS 0509

Appendix B

Laboratory Analyses

RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948 Hobbs, NM 88241
Phone 575.393.2967



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

July 09, 2014

KYLE NORMAN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: WARREN UNIT INJECTION TRUNKLINE

Enclosed are the results of analyses for samples received by the laboratory on 07/03/14 12:55.

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.

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

RICE ENVIRONMENTAL CONSULTING & SAFETY
KYLE NORMAN
419 W. CAIN
HOBBS NM, 88240
Fax To: (575) 397-1471

Received:	07/03/2014	Sampling Date:	07/02/2014
Reported:	07/09/2014	Sampling Type:	Soil
Project Name:	WARREN UNIT INJECTION TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Kathy Perez
Project Location:	CONOCO PHILLIPS		

Sample ID: NORTH WALL (H402032-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/09/2014	ND	416	104	400	3.92	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/07/2014	ND	177	88.4	200	0.325	
DRO >C10-C28	<10.0	10.0	07/07/2014	ND	192	95.8	200	0.241	
Surrogate: 1-Chlorooctane	118 %	65.2-140							
Surrogate: 1-Chlorooctadecane	127 %	63.6-154							

Sample ID: EAST WALL (H402032-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/09/2014	ND	416	104	400	3.92	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/07/2014	ND	177	88.4	200	0.325	
DRO >C10-C28	<10.0	10.0	07/07/2014	ND	192	95.8	200	0.241	
Surrogate: 1-Chlorooctane	118 %	65.2-140							
Surrogate: 1-Chlorooctadecane	125 %	63.6-154							

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

RICE ENVIRONMENTAL CONSULTING & SAFETY
KYLE NORMAN
419 W. CAIN
HOBBS NM, 88240
Fax To: (575) 397-1471

Received:	07/03/2014	Sampling Date:	07/03/2014
Reported:	07/09/2014	Sampling Type:	Soil
Project Name:	WARREN UNIT INJECTION TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Kathy Perez
Project Location:	CONOCO PHILLIPS		

Sample ID: BOTTOM SAMPLE (H402032-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	07/09/2014	ND	416	104	400	3.92	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/07/2014	ND	177	88.4	200	0.325	
DRO >C10-C28	<10.0	10.0	07/07/2014	ND	192	95.8	200	0.241	
Surrogate: 1-Chlorooctane	118 %	65.2-140							
Surrogate: 1-Chlorooctadecane	128 %	63.6-154							

Cardinal Laboratories

*=Accredited Analyte

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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

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: RECS				BILL TO				ANALYSIS REQUEST																					
Project Manager: Laura Flores, Kyle Norman				P.O. #:				<div style="display: flex; flex-direction: column; align-items: center;"> <div>Chlorides</div> <div>TPH 8015 M</div> <div>BTEX</div> <div>Texas TPH</div> <div>Complete Cations/Anions</div> <div>TDS</div> </div>																					
Address:				Company:																									
City: Hobbs State: NM Zip: 88240				Attn:																									
Phone #: Fax #:				Address:																									
Project #: Project Owner:				City:																									
Project Name: Conoco Phillips				State: Zip:																									
Project Location: Warren Unit Injection Trunkline				Phone #:																									
Sampler Name: Chris Flores				Fax #:																									
FOR LAB USE ONLY																													
Lab I.D.		Sample I.D.		GRAB OR (C)OMP.		# CONTAINERS		MATRIX				PRESERV.		SAMPLING															
								GROUNDWATER																					
								WASTEWATER																					
								SOIL																					
								OIL																					
								SLUDGE																					
								OTHER:																					
								ACID/BASE:																					
								ICE / COOL																					
								OTHER:																					
												DATE		TIME															
H402032				G		1								7-2-2014		4:00 PM		X X											
1 North wall				G		1								7-3-2014		9:35 AM		X X											
2 East wall				G		1								7-3-2014		9:40 AM		X X											
3 Bottom Sample				G		1																							

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:		Date:		Received By:		Phone Result:		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Add'l Phone #:	
Chris Flores		7-3-2014		Dany Perez		Fax Result:		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Add'l Fax #:	
Time:		12:55		Time:		REMARKS:					
Relinquished By:		Date:		Received By:		email: hconder@riceswd.com; lflores@rice-ecs.com; lweinheimer@rice-ecs.com; knorman@rice-ecs.com; jkamplain@rice-ecs.com; sedwards@rice-ecs.com; cursanic@rice-ecs.com Environmental Tech: cflores@rice-ecs.com					
Time:											
Delivered By: (Circle One)											
Sampler - UPS - Bus - Other: <input checked="" type="checkbox"/>				Sample Condition		CHECKED BY:					
				Cool Intact		(Initials)					
				<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes		KP					
				<input type="checkbox"/> No <input type="checkbox"/> No							



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

February 17, 2015

KYLE NORMAN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: WARREN UNIT INJECTION TRUNKLINE

Enclosed are the results of analyses for samples received by the laboratory on 02/16/15 9:10.

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.

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)

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

RICE ENVIRONMENTAL CONSULTING & SAFETY
KYLE NORMAN
419 W. CAIN
HOBBS NM, 88240
Fax To: (575) 397-1471

Received:	02/16/2015	Sampling Date:	02/12/2015
Reported:	02/17/2015	Sampling Type:	Soil
Project Name:	WARREN UNIT INJECTION TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	CONOCO PHILLIPS		

Sample ID: PT. 1 @ SURFACE (H500444-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/16/2015	ND	400	100	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/16/2015	ND	201	101	200	3.26	
DRO >C10-C28	<10.0	10.0	02/16/2015	ND	187	93.5	200	4.78	
Surrogate: 1-Chlorooctane	97.3 %	47.2-157							
Surrogate: 1-Chlorooctadecane	98.6 %	52.1-176							

Sample ID: PT. 1 @ 6" (H500444-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	02/16/2015	ND	400	100	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/16/2015	ND	201	101	200	3.26	
DRO >C10-C28	<10.0	10.0	02/16/2015	ND	187	93.5	200	4.78	
Surrogate: 1-Chlorooctane	118 %	47.2-157							
Surrogate: 1-Chlorooctadecane	115 %	52.1-176							

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

RICE ENVIRONMENTAL CONSULTING & SAFETY
KYLE NORMAN
419 W. CAIN
HOBBS NM, 88240
Fax To: (575) 397-1471

Received:	02/16/2015	Sampling Date:	02/12/2015
Reported:	02/17/2015	Sampling Type:	Soil
Project Name:	WARREN UNIT INJECTION TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	CONOCO PHILLIPS		

Sample ID: PT. 2 @ SURFACE (H500444-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/16/2015	ND	400	100	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/16/2015	ND	201	101	200	3.26	
DRO >C10-C28	<10.0	10.0	02/16/2015	ND	187	93.5	200	4.78	
Surrogate: 1-Chlorooctane	113 %	47.2-157							
Surrogate: 1-Chlorooctadecane	115 %	52.1-176							

Sample ID: PT. 2 @ 6" (H500444-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/16/2015	ND	400	100	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/16/2015	ND	201	101	200	3.26	
DRO >C10-C28	<10.0	10.0	02/16/2015	ND	187	93.5	200	4.78	
Surrogate: 1-Chlorooctane	113 %	47.2-157							
Surrogate: 1-Chlorooctadecane	115 %	52.1-176							

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

RICE ENVIRONMENTAL CONSULTING & SAFETY
KYLE NORMAN
419 W. CAIN
HOBBS NM, 88240
Fax To: (575) 397-1471

Received:	02/16/2015	Sampling Date:	02/12/2015
Reported:	02/17/2015	Sampling Type:	Soil
Project Name:	WARREN UNIT INJECTION TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	CONOCO PHILLIPS		

Sample ID: PT. 3 @ SURFACE (H500444-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	02/16/2015	ND	400	100	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/16/2015	ND	201	101	200	3.26	
DRO >C10-C28	<10.0	10.0	02/16/2015	ND	187	93.5	200	4.78	
Surrogate: 1-Chlorooctane	126 %	47.2-157							
Surrogate: 1-Chlorooctadecane	122 %	52.1-176							

Sample ID: PT. 3 @ 6" (H500444-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/16/2015	ND	400	100	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/16/2015	ND	201	101	200	3.26	
DRO >C10-C28	<10.0	10.0	02/16/2015	ND	187	93.5	200	4.78	
Surrogate: 1-Chlorooctane	117 %	47.2-157							
Surrogate: 1-Chlorooctadecane	114 %	52.1-176							

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Analytical Results For:

RICE ENVIRONMENTAL CONSULTING & SAFETY
KYLE NORMAN
419 W. CAIN
HOBBS NM, 88240
Fax To: (575) 397-1471

Received:	02/16/2015	Sampling Date:	02/12/2015
Reported:	02/17/2015	Sampling Type:	Soil
Project Name:	WARREN UNIT INJECTION TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	CONOCO PHILLIPS		

Sample ID: WEST BOTTOM @ 8' (H500444-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/16/2015	ND	400	100	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/16/2015	ND	201	101	200	3.26	
DRO >C10-C28	<10.0	10.0	02/16/2015	ND	187	93.5	200	4.78	
Surrogate: 1-Chlorooctane	116 %	47.2-157							
Surrogate: 1-Chlorooctadecane	115 %	52.1-176							

Sample ID: WEST WALL CENTER (H500444-08)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/16/2015	ND	400	100	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/16/2015	ND	201	101	200	3.26	
DRO >C10-C28	<10.0	10.0	02/16/2015	ND	187	93.5	200	4.78	
Surrogate: 1-Chlorooctane	116 %	47.2-157							
Surrogate: 1-Chlorooctadecane	114 %	52.1-176							

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Analytical Results For:

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KYLE NORMAN
419 W. CAIN
HOBBS NM, 88240
Fax To: (575) 397-1471

Received:	02/16/2015	Sampling Date:	02/12/2015
Reported:	02/17/2015	Sampling Type:	Soil
Project Name:	WARREN UNIT INJECTION TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	CONOCO PHILLIPS		

Sample ID: SOUTH WALL CENTER (H500444-09)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/16/2015	ND	400	100	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/16/2015	ND	201	101	200	3.26	
DRO >C10-C28	<10.0	10.0	02/16/2015	ND	187	93.5	200	4.78	
Surrogate: 1-Chlorooctane	123 %	47.2-157							
Surrogate: 1-Chlorooctadecane	126 %	52.1-176							

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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



~~★~~ RUSH ~~★~~

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: RECS						BILL TO		ANALYSIS REQUEST																					
Project Manager: Laura Flores, Kyle Neiman						P.O. #:		Chlorides TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS																	
Address:						Company:																							
City: Hobbs State: NM Zip: 88240						Attn:																							
Phone #: Fax #:						Address:																							
Project #: Project Owner:						City:																							
Project Name:						State: Zip:																							
Project Location: Warren Unit Injection Trunk Line						Phone #:																							
Sampler Name: Kyle Schnadt						Fax #:																							
FOR LAB USE ONLY		Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS	MATRIX				PRESERV.	SAMPLING															
									GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME										
H500444																													
1 Point 1 @ surface		C 1								X					X			2-12-15	10:00	X	X								
2 Point 1 @ 6"		C 1								X					X				10:05	X	X								
3 Point 2 @ surface		C 1								X					X				10:10	X	X								
4 Point 2 @ 6"		C 1								X					X				10:15	X	X								
5 Point 3 @ surface		C 1								X					X				10:20	X	X								
6 Point 3 @ 6'		C 1								X					X				10:25	X	X								
7 West Bottom @ 8°		C 1								X					X				10:30	X	X								
8 West Wall Center		C 1								X					X				10:35	X	X								
9 South Wall Center		C 1								X					X				10:40	X	X								

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Relinquished By: <i>Kyle Schnaidt</i>		Date: <i>2-16-15</i>	Received By: <i>Jodi Henson</i>	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
Relinquished By:		Date:	Received By:	Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One)		Time: <i>9:10</i>	Time:	REMARKS: email: hconder@riceswd.com; lflores@rice-ecs.com; lweinheimer@rice-ecs.com; knorman@rice-ecs.com; jkamplain@rice-ecs.com; sedwards@rice-ecs.com; cursanic@rice-ecs.com Environmental Tech: <i>Kschnaidt</i> @rice-ecs.com	
Sampler - UPS - Bus - Other:		Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No		CHECKED BY: (Initials) <i>[Signature]</i>	

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

#54

Appendix C

Photo Documentation

ConocoPhillips Warren Unit Injection Trunkline

Unit Letter P, Section 27, T20S, R38E



Initial release area, facing east

6/23/14



Initial release area, facing west

6/23/14



Initial release area, facing east

6/23/14



Excavating, facing southeast

7/2/14



Excavating, facing northeast

7/2/14



Excavation, facing northeast

7/2/14



Excavation, facing northeast

2/11/15



Excavation, facing southwest

2/11/15