

HOBBS OCD

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

APR 10 2014 Form C-141  
Revised August 8, 2011

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

RECEIVED

## Release Notification and Corrective Action

## OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	ConocoPhillips Company	Contact	
Address	3300 North A St. Bldg 6, Midland, TX 79705	Telephone No.	
Facility Name	MCA Well #357	Facility Type	Oil and Gas
Surface Owner	Federal	Mineral Owner	Federal
		API No.	300252584900

## LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
S	28	17S	32E					Eddy

Latitude 32 47' 0.84" N Longitude 103 46' 41.34" W

## NATURE OF RELEASE

Type of Release	Crude Oil	Volume of Release	8.3 bbls	Volume Recovered	3 bbls
Source of Release	Hole in a 2 inch steel surface flow line	Date and Hour of Occurrence	10/11/12 0600	Date and Hour of Discovery	10/11/12 1100
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? BLM & NMOCD			
By Whom?	Roman Salazar	Date and Hour	10/11/12 1210		
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.\*

Describe Cause of Problem and Remedial Action Taken.\*

Agency reportable release from two holes in a 2" steel surface flow line due to a suspected internal/external corrosion.

Describe Area Affected and Cleanup Action Taken.\*

The released covered a total of 3,765 sq ft of pasture land. RECS personnel were on site beginning on November 1<sup>st</sup>, 2013 to assess the site. Two points throughout the release were sampled at the surface and at depth. The samples were field tested for chlorides and organic vapors using a PID meter. Representative samples were taken to a commercial laboratory for analysis. A Corrective Action Plan (CAP) was submitted to BLM and NMOCD on December 9<sup>th</sup>, 2013, subsequently followed by an Addendum on December 16<sup>th</sup>, 2013. Per a meeting with BLM at the site on December 9<sup>th</sup>, 2013, BLM would like an abandoned lease road north of the facility to be sampled to determine chloride and hydrocarbon levels. If the levels are within regulatory standards, the road would be removed and packed into the base of the excavation as an additional infiltration barrier. BLM approved the CAP on December 9<sup>th</sup>, 2013 and NMOCD approved the CAP on December 11<sup>th</sup>, 2013. Beginning on December 20<sup>th</sup>, 2013, RECS personnel were on site to begin the CAP work by excavating the site to a depth of 4 ft bgs. Once the excavation was completed, final wall samples were taken to confirm that the horizontal contamination in the top four feet of the vadose zone was removed. At the base of the excavation, a vertical at Point 1 was installed, with soil samples being collected at 4.5 ft and 5 ft. The caliche road was scraped down to use as backfill and a sample was collected from the scraped soil. The samples were taken to a commercial laboratory, and all samples returned chloride values below 250 mg/kg and GRO and DRO values of non-detect. Because excavation chloride and TPH values were below standards, a liner installation was not warranted. Excavated soils were evaluated for use as backfill and soils that had chloride values higher than 500 mg/kg and a field PID higher than 100 ppm were taken to a NMOCD approved facility for disposal. A total of 877 yards of soil was taken to a NMOCD approved facility for disposal. The excavation was backfilled with 2 ft of compacted caliche from the lease road. The remaining excavation was then backfilled with imported soil. A sample of the imported soil was taken to a commercial laboratory for analysis and returned a chloride result of non-detect. The site was backfilled to ground surface and contoured to the surrounding location. The site was seeded with BLM mix #2 on February 26<sup>th</sup>, 2014. Vegetation will also provide an infiltration barrier for the site, since plants capture water through their roots thereby reducing the amount of water traveling through the vadose zone to groundwater.

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.

Signature: <i>Sean Robinson</i>	OIL CONSERVATION DIVISION	
Printed Name: SEAN ROBINSON	Approved by Environmental Specialist <i>Sebastian Serrano</i>	
Title: OPERATIONS SUPERVISOR	Approval Date: 4/10/14	Expiration Date: —
E-mail Address: Sean.T.Robinson@Cp.com	Conditions of Approval: —	Attached <input type="checkbox"/>
Date: 3-19-14 Phone: 575-880-8873	IRP-06-13-2927	

\* Attach Additional Sheets If Necessary



HOBBS OCD

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

OCT 17 2012

Form C-141  
Revised October 10, 2003

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

RECEIVED

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

## Release Notification and Corrective Action

## OPERATOR

☒ Initial Report ☐ Final Report

Name of Company <b>ConocoPhillips Company</b>	Contact <b>John W. Gates</b>
Address <b>3300 North A St. Bldg 6, Midland, TX 79705-5406</b>	Telephone No. <b>505.391.3158</b>
Facility Name <b>MCA Well #357</b>	Facility Type <b>Oil and Gas</b>
Surface Owner <b>Federal</b>	Mineral Owner <b>Federal</b>
Lease No <b>300252584900</b>	

## LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<b>S</b> <b>M</b>	<b>28</b>	<b>T 17</b>	<b>32</b>					<b>Lea</b>

Latitude **32 47'.84" N** Longitude **103 46' 41.34" W**

DTW = 145'

## NATURE OF RELEASE

Type of Release <b>Crude Oil</b>	Volume of Release <b>8.3bbl (8.3oil, 0water)</b>	Volume Recovered <b>(3oil, 0water)</b>
Source of Release <b>Holes in a 2 inch steel surface flow line</b>	Date and Hour of Occurrence <b>10/11/12 0600</b>	Date and Hour of Discovery <b>10/11/12 1100</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>BLM &amp; NMOCD</b>	
By Whom? <b>Roman Salazar</b>	Date and Hour <b>10/11/12 1210</b>	
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.\*

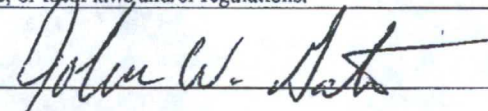

Describe Cause of Problem and Remedial Action Taken.\*

Agency Reportable Release from two holes in a 2" steel surface flow line due to suspected internal/external corrosion.

Describe Area Affected and Cleanup Action Taken.\*

The affected area is a 56' X 80' X 2" area of pasture land. A vacuum truck was called and ~3 bbls of oil was recovered.

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.

Signature: 	OIL CONSERVATION DIVISION  Approved by District Supervisor <b>Environmental Specialist</b>	
Printed Name: <b>John W. Gates</b>	Approval Date: <b>10/17/12</b>	Expiration Date: <b>12/17/12</b>
Title: <b>HSER Lead</b>	Conditions of Approval: <b>DELINEATE AND REMEDIATE PER OCD GUIDELINES</b>	
E-mail Address: <b>John.W.Gates@conocophillips.com</b>	Attached <input type="checkbox"/>	
Date: <b>10/17/12</b> Phone: <b>505.391.3158</b>	<b>IRP-6-13-2927</b>	

- Attach Additional Sheets If Necessary

**SUBMIT FINAL C-141 BY 12/17/12**



District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

### Release Notification and Corrective Action

#### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company ConocoPhillips Company	Contact John W. Gates
Address 3300 North A St. Bldg 6, Midland, TX 79705-5406	Telephone No. 505.391.3158
Facility Name MCA Well #357	Facility Type Oil and Gas
Surface Owner Federal	Mineral Owner Federal
Lease No 300252584900	

#### LOCATION OF RELEASE

Unit Letter S	Section 28	Township T 17	Range 32	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
------------------	---------------	------------------	-------------	---------------	------------------	---------------	----------------	---------------

Latitude 32 47'.84" N Longitude 103 46' 41.34" W

#### NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 8.3bbl (8.3oil, 0water)	Volume Recovered (3oil, 0water)
Source of Release Holes in a 2 inch steel surface flow line	Date and Hour of Occurrence 10/11/12 0600	Date and Hour of Discovery 10/11/12 1100
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? BLM & NMOCD	
By Whom? Roman Salazar	Date and Hour 10/11/12 1210	
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.\*

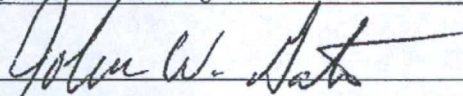
Describe Cause of Problem and Remedial Action Taken.\*

Agency Reportable Release from two holes in a 2" steel surface flow line due to suspected internal/external corrosion.

Describe Area Affected and Cleanup Action Taken.\*

The affected area is a 56' X 80' X 2" area of pasture land. A vacuum truck was called and ~3 bbls of oil was recovered.

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.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: John W. Gates	Approved by District Supervisor:	
Title: HSER Lead	Approval Date:	Expiration Date:
E-mail Address: John.W.Gates@conocophillips.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 10/17/12 Phone: 505.391.3158		

- Attach Additional Sheets If Necessary





HOBBS OCD

APR 10 2014

**CONOCOPHILLIPS**

RECEIVED

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

**MCA Well #357**  
(1RP-06-13-2927)

---

**CAP Report & Termination  
Request**

API No. 300252584900

Release Date: October 11<sup>th</sup>, 2012

Unit Letter M, Section 28, Township 17S, Range 32E



## Rice Environmental Consulting & Safety

P.O. Box 2948, Hobbs, NM 88241

Phone 575.393.2967

**March 28<sup>th</sup>, 2014**

### **Geoffrey Leking**

New Mexico Energy, Minerals, & Natural Resources

Oil Conservation Division, Environmental Bureau – District 1

1625 N. French Dr.

Hobbs, NM 88240-9273

**RE: Corrective Action Plan Report & Termination Request  
ConocoPhillips – MCA Well #357 (1RP-06-13-2927)  
UL/M sec. 28 T17S R32E  
API No. 300252584900**

Mr. Leking:

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 4 miles south of Maljamar, New Mexico at UL/M sec. 28 T17S R32E. NM OSE records indicate that groundwater will likely be encountered at a depth of approximately 65 +/- feet.

On October 11<sup>th</sup>, 2012, CoP discovered a release of crude oil from a 2 inch steel surface flow line. The line broke due to corrosion. The line released a total of 8.3 bbls of oil over 3,765 sq ft of pasture land. A vacuum truck was called to the site and recovered 3 bbls of oil. An initial C-141 dated October 17<sup>th</sup>, 2012 was submitted to NMOCD and BLM (Appendix A).

RECS personnel were on site beginning on November 1<sup>st</sup>, 2013 to assess the site. Two points throughout the release were sampled at the surface and at depth (Figure 1). The samples were field tested for chlorides and organic vapors using a PID meter. Representative samples were taken to a commercial laboratory for analysis (Appendix B).

### **Corrective Action Plan**

A Corrective Action Plan (CAP) was submitted to BLM and NMOCD on December 9<sup>th</sup>, 2013, subsequently followed by an Addendum on December 16<sup>th</sup>, 2013. The release would be excavated to a depth of 4 ft bgs. The excavated soil would be taken to a NMOCD approved facility for disposal. At 4 ft bgs, the side walls and bottom of the excavation would be sampled. The samples would be taken to a commercial laboratory to make sure that all soil constituents are below regulatory standards. Once the excavation was completed, the extent of the vertical contamination would be determined by



installing a vertical at the base of the excavation. Representative samples would be taken to a commercial laboratory to confirm chloride values below 250 mg/kg at the base of the vertical.

If the laboratory sampling of the bottom of the excavation showed chloride levels above 500 mg/kg, a 20 mil reinforced poly liner would be installed and properly seated at the base of the excavation. The liner would be padded with clean, imported soil to prevent punctures.

Per a meeting with BLM at the site on December 9<sup>th</sup>, 2013, BLM would like an abandoned lease road north of the facility to be sampled to determine chloride and hydrocarbon levels. If the levels are within regulatory standards, the road would be removed and packed into the base of the excavation as an additional infiltration barrier. The site would then be backfilled with clean, imported soil, and contoured to the surrounding location. Soil amendments would be added as necessary and the site will be seeded with a blend of native vegetation. BLM approved the CAP on December 9<sup>th</sup>, 2013 and NMOCD approved the CAP on December 11<sup>th</sup>, 2013.

### **Corrective Action Plan Report**

Beginning on December 20<sup>th</sup>, 2013, RECS personnel were on site to begin the CAP work by excavating the site to a depth of 4 ft bgs. Once the excavation was completed, final wall samples were taken to confirm that the horizontal contamination in the top four feet of the vadose zone was removed. At the base of the excavation, a vertical at Point 1 was installed, with soil samples being collected at 4.5 ft and 5 ft. The caliche road was scraped down to use as backfill and a sample was collected from the scraped soil. The samples were taken to a commercial laboratory, and all samples returned chloride values below 250 mg/kg and GRO and DRO values of non-detect (Appendix B). Because chloride and TPH values were below standards in the excavation, a liner installation was not warranted. Excavated soils were evaluated for use as backfill and soils that had chloride values higher than 500 mg/kg and a field PID higher than 100 ppm were taken to a NMOCD approved facility for disposal. A total of 877 yards of soil was taken to a NMOCD approved facility for disposal.

The excavation was backfilled with 2 ft of compacted caliche from the lease road. A sample of the lease road was taken to a commercial laboratory for analysis and returned a result of 96 mg/kg. The remaining excavation was then backfilled with imported soil. A sample of the imported soil was taken to a commercial laboratory for analysis and returned a chloride result of non-detect (Appendix C). The site was backfilled to ground surface and contoured to the surrounding location. The site was seeded with BLM mix #2 on February 26<sup>th</sup>, 2014. Vegetation will also provide an infiltration barrier for the site, since plants capture water through their roots thereby reducing the amount of water traveling through the vadose zone to groundwater.

Photo documentation for these activities can be found in Appendix D.



Given that the contaminated soil was removed from the site and replaced with clean, imported soil, Conoco Phillips respectfully requests 'remediation termination' and site closure. A final C-141 for the site can be found in Appendix E.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-2967 or me if you have any questions or wish to discuss the site.

Sincerely,



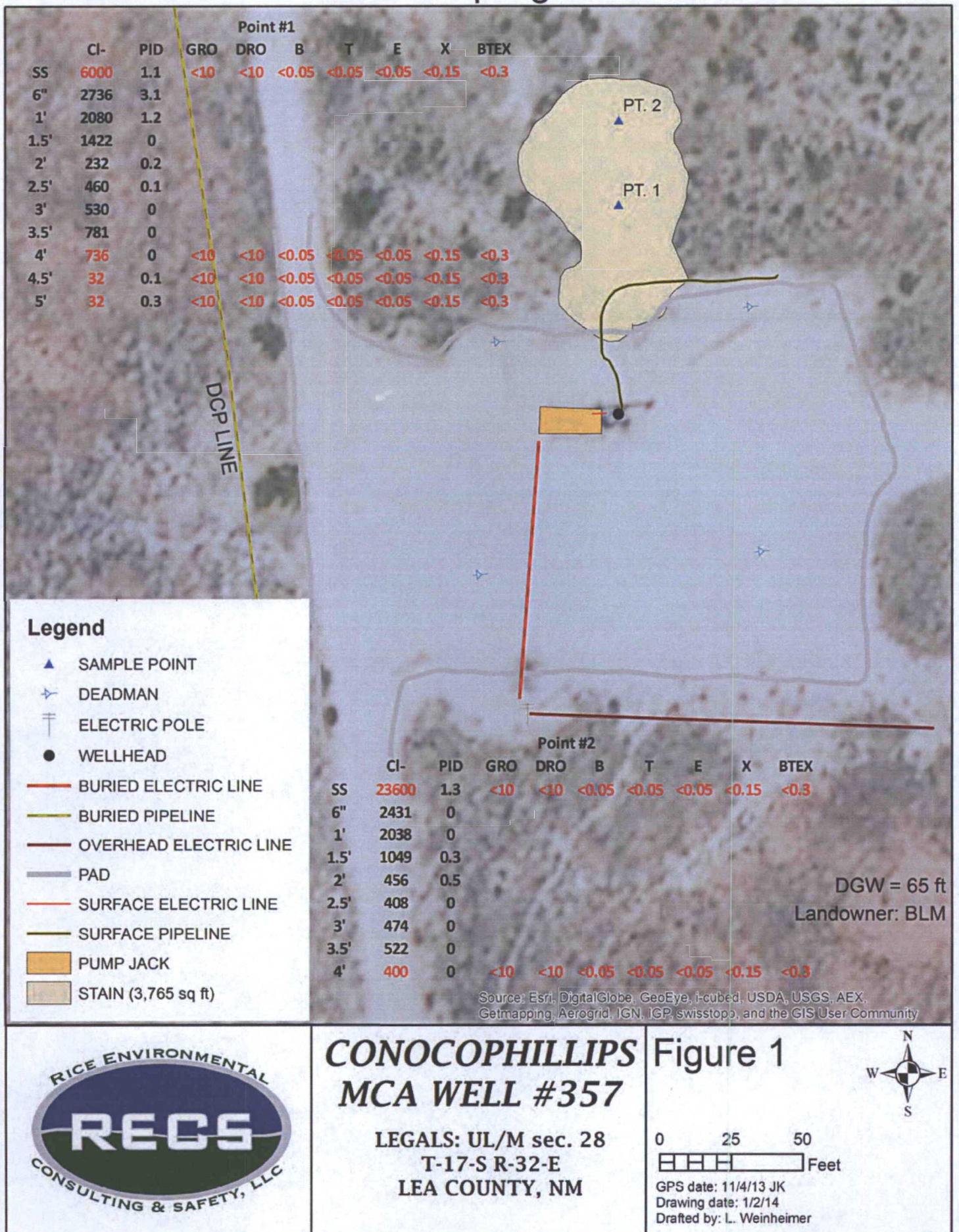
Lara Weinheimer  
Project Scientist  
RECS  
(575) 441-0431

Attachments:

- Figure 1 – Initial Sampling Data
- Figure 2 – Excavation Data
- Appendix A – Initial C-141
- Appendix B – Vertical Installation, Final Bottom and Wall Samples, Caliche Road Sampling Labs
- Appendix C – Imported Soil Lab
- Appendix D – Photo Documentation
- Appendix E – Final C-141

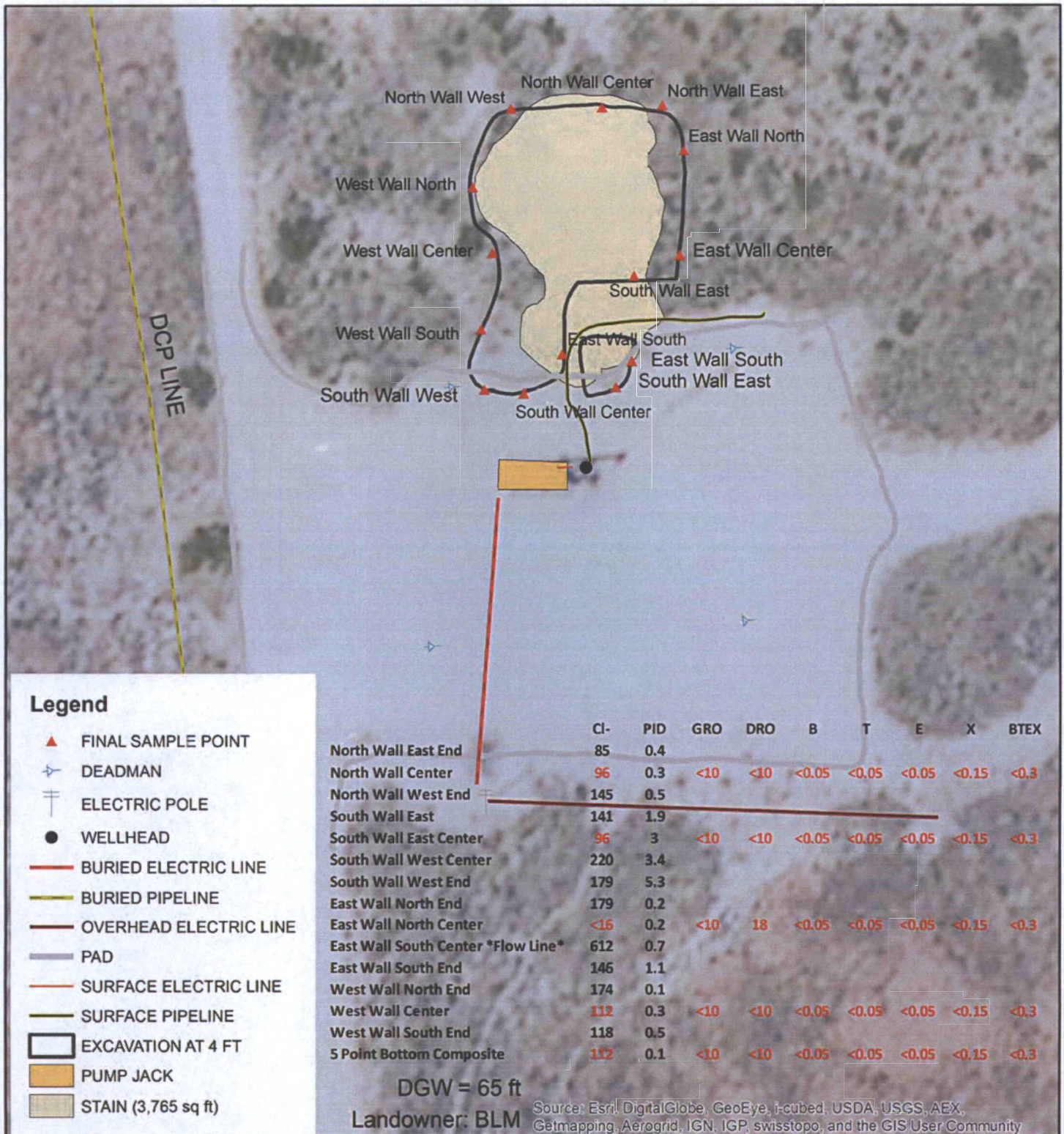


## Initial Sampling Data





## Excavation Data



## CONOCOPHILLIPS MCA WELL #357

LEGALS: UL/M sec. 28  
T-17-S R-32-E  
LEA COUNTY, NM

Figure 2



0 25 50  
Feet

GPS date: 11/4/13 JK  
Drawing date: 11/12/13  
Drafted by: L. Weinheimer





---

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

---

December 31, 2013

JACOB KAMPLAIN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: WELL #357

Enclosed are the results of analyses for samples received by the laboratory on 12/30/13 13:45.

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,

A handwritten signature in dark ink, reading "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" being more prominent.

Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 12/30/2013  
 Reported: 12/31/2013  
 Project Name: WELL #357  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 12/27/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: NORTH WALL CENTER (H303151-01)**

BTEX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2013	ND	1.77	88.5	2.00	3.75	
Toluene*	<0.050	0.050	12/30/2013	ND	1.76	87.9	2.00	3.39	
Ethylbenzene*	<0.050	0.050	12/30/2013	ND	1.73	86.5	2.00	3.04	
Total Xylenes*	<0.150	0.150	12/30/2013	ND	5.08	84.6	6.00	2.87	
Total BTEX	<0.300	0.300	12/30/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 89.4-126

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	12/31/2013	ND	416	104	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	12/30/2013	ND	175	87.7	200	7.64	
DRO >C10-C28	<10.0	10.0	12/30/2013	ND	184	92.2	200	7.36	

Surrogate: 1-Chlorooctane 102 % 65.2-140

Surrogate: 1-Chlorooctadecane 98.3 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 12/30/2013  
 Reported: 12/31/2013  
 Project Name: WELL #357  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 12/27/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SOUTH WALL EAST CENTER (H303151-02)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/30/2013	ND	1.77	88.5	2.00	3.75		
Toluene*	<0.050	0.050	12/30/2013	ND	1.76	87.9	2.00	3.39		
Ethylbenzene*	<0.050	0.050	12/30/2013	ND	1.73	86.5	2.00	3.04		
Total Xylenes*	<0.150	0.150	12/30/2013	ND	5.08	84.6	6.00	2.87		
Total BTEX	<0.300	0.300	12/30/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 103 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	12/31/2013	ND	416	104	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	12/30/2013	ND	175	87.7	200	7.64		
DRO >C10-C28	<10.0	10.0	12/30/2013	ND	184	92.2	200	7.36		

Surrogate: 1-Chlorooctane 109 % 65.2-140

Surrogate: 1-Chlorooctadecane 105 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 12/30/2013  
 Reported: 12/31/2013  
 Project Name: WELL #357  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 12/27/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: EAST WALL NORTH CENTER (H303151-03)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2013	ND	1.77	88.5	2.00	3.75	
Toluene*	<0.050	0.050	12/30/2013	ND	1.76	87.9	2.00	3.39	
Ethylbenzene*	<0.050	0.050	12/30/2013	ND	1.73	86.5	2.00	3.04	
Total Xylenes*	<0.150	0.150	12/30/2013	ND	5.08	84.6	6.00	2.87	
Total BTX	<0.300	0.300	12/30/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 89.4-126

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	12/31/2013	ND	416	104	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	12/30/2013	ND	175	87.7	200	7.64	
DRO >C10-C28	18.0	10.0	12/30/2013	ND	184	92.2	200	7.36	

Surrogate: 1-Chlorooctane 97.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 96.4 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 12/30/2013  
 Reported: 12/31/2013  
 Project Name: WELL #357  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 12/27/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: WEST WALL CENTER (H303151-04)**

BTEX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2013	ND	1.77	88.5	2.00	3.75	
Toluene*	<0.050	0.050	12/30/2013	ND	1.76	87.9	2.00	3.39	
Ethylbenzene*	<0.050	0.050	12/30/2013	ND	1.73	86.5	2.00	3.04	
Total Xylenes*	<0.150	0.150	12/30/2013	ND	5.08	84.6	6.00	2.87	
Total BTEX	<0.300	0.300	12/30/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 89.4-126

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	12/31/2013	ND	416	104	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	12/30/2013	ND	175	87.7	200	7.64	
DRO >C10-C28	<10.0	10.0	12/30/2013	ND	184	92.2	200	7.36	

Surrogate: 1-Chlorooctane 99.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 98.0 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 12/30/2013  
 Reported: 12/31/2013  
 Project Name: WELL #357  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 12/30/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: 5 PT BOTTOM COMP (H303151-05)**

BTEX 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/30/2013	ND	1.77	88.5	2.00	3.75		
Toluene*	<0.050	0.050	12/30/2013	ND	1.76	87.9	2.00	3.39		
Ethylbenzene*	<0.050	0.050	12/30/2013	ND	1.73	86.5	2.00	3.04		
Total Xylenes*	<0.150	0.150	12/30/2013	ND	5.08	84.6	6.00	2.87		
Total BTEX	<0.300	0.300	12/30/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	12/31/2013	ND	416	104	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	12/30/2013	ND	175	87.7	200	7.64		
DRO >C10-C28	<10.0	10.0	12/30/2013	ND	184	92.2	200	7.36		

Surrogate: 1-Chlorooctane 87.1 % 65.2-140

Surrogate: 1-Chlorooctadecane 86.6 % 63.6-154

**Sample ID: CALICHE ROAD (H303151-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	12/31/2013	ND	416	104	400	0.00		

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 12/30/2013  
 Reported: 12/31/2013  
 Project Name: WELL #357  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 12/30/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: PT. 1 @ 4.5' (H303151-07)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2013	ND	1.77	88.5	2.00	3.75	
Toluene*	<0.050	0.050	12/30/2013	ND	1.76	87.9	2.00	3.39	
Ethylbenzene*	<0.050	0.050	12/30/2013	ND	1.73	86.5	2.00	3.04	
Total Xylenes*	<0.150	0.150	12/30/2013	ND	5.08	84.6	6.00	2.87	
Total BTEX	<0.300	0.300	12/30/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/31/2013	ND	416	104	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	12/31/2013	ND	175	87.7	200	7.64	
DRO >C10-C28	<10.0	10.0	12/31/2013	ND	184	92.2	200	7.36	

Surrogate: 1-Chlorooctane 96.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 98.8 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 12/30/2013  
 Reported: 12/31/2013  
 Project Name: WELL #357  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 12/30/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: PT. 1 @ 5' (H303151-08)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/30/2013	ND	1.77	88.5	2.00	3.75		
Toluene*	<0.050	0.050	12/30/2013	ND	1.76	87.9	2.00	3.39		
Ethylbenzene*	<0.050	0.050	12/30/2013	ND	1.73	86.5	2.00	3.04		
Total Xylenes*	<0.150	0.150	12/30/2013	ND	5.08	84.6	6.00	2.87		
Total BTEX	<0.300	0.300	12/30/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	12/31/2013	ND	416	104	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	12/30/2013	ND	175	87.7	200	7.64		
DRO >C10-C28	<10.0	10.0	12/30/2013	ND	184	92.2	200	7.36		

Surrogate: 1-Chlorooctane 68.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 67.0 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager





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

**Notes and Definitions**

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

Cardinal Laboratories

\*=Accredited Analyte

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

A handwritten signature in cursive script, reading "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager









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

January 14, 2014

JACOB KAMPLAIN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: MCA #357

Enclosed are the results of analyses for samples received by the laboratory on 01/08/14 16:35.

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,

A handwritten signature in dark ink, reading "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 01/08/2014  
 Reported: 01/14/2014  
 Project Name: MCA #357  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/07/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: IMPORTED SOIL (H400070-01)**

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	01/09/2014	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	01/12/2014	ND	170	84.8	200	9.62		
DRO >C10-C28	<10.0	10.0	01/12/2014	ND	170	84.8	200	13.1		
Surrogate: 1-Chlorooctane	101 %	65.2-140								
Surrogate: 1-Chlorooctadecane	112 %	63.6-154								

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager





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

**Notes and Definitions**

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

Cardinal Laboratories

\*=Accredited Analyte

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

A handwritten signature in dark ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



Page 4 of 4

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST****ARDINAL 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

Company Name: RECS		BILL TO										ANALYSIS REQUEST																			
Project Manager: Jacob Kamplain		P.O. #:		Company:		Attn:		Address:		City:		State:		Zip:		Phone #:		Fax #:		Chlorides		TPH 8015 M		BTX		Texas TPH		Complete Cations/Anions		TDS	
Address:		City: Hobbs		State: NM		Zip: 88240		Fax #:		Project Owner:		Project Name: Conoco Phillips		Project Location: MCA well #357		Sampler Name: Chris Flores		Matrix		PRESERV		SAMPLING		DATE		TIME					
FOR LAB USE ONLY		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER:		ACID/BASE:		ICE / COOL		OTHER:													
Lab I.D.		(G) RAB OR (COMP.		# CONTAINERS																											
Huddell		C 1																													
L		Imported Soil																													

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: <i>Kyle Schwardt</i>	Date: 4/6/14	Received By: <i>Jodi Benson</i>	Date: 4/3/14	Time: 4:35	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:	Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	Date:	Time:	REMARKS:			
					email results hcondor@ jkamplain@ knorman@ lukeheimer@flores@			
Delivered By: (Circle One)	Sample Condition	Cool	Intact	Checked By: (Initials)				
Sampler - UPS - Bus - Other:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>				

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476 #54



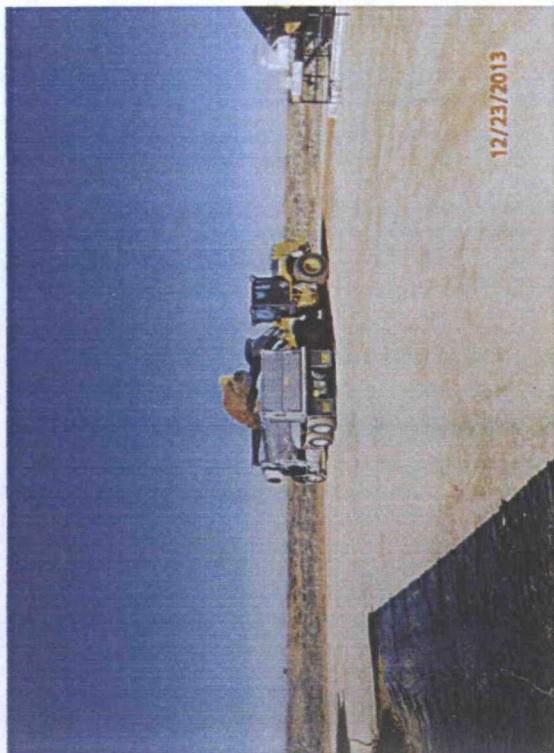
## ConocoPhillips MCA Well #357

Unit Letter M, Section 28, T17S, R32E



Site prior, facing southwest

12/20/2013



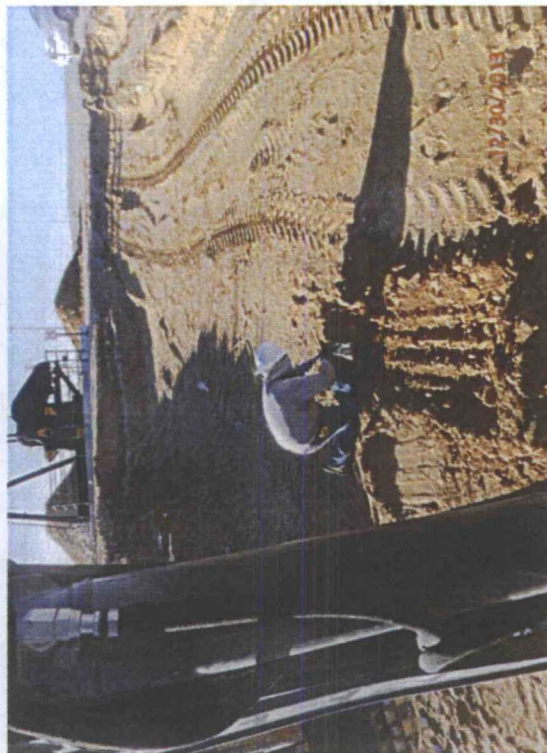
Exporting soil, facing northwest

12/23/2013



Excavating site, facing southeast

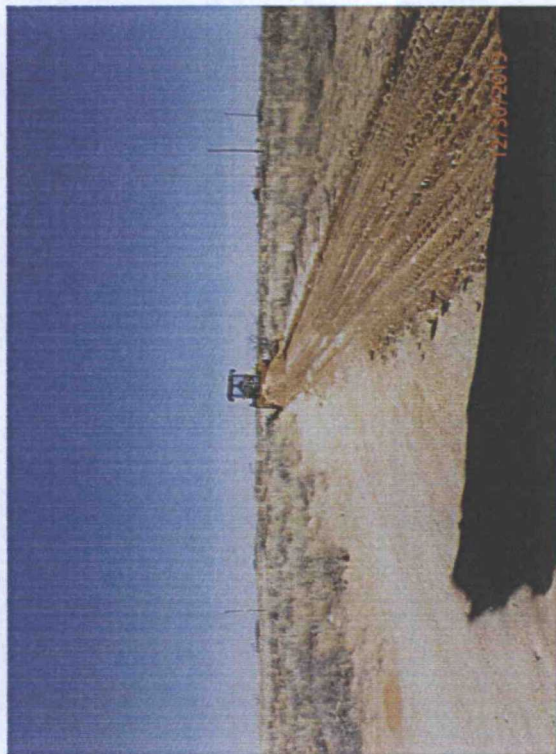
12/26/2013



Collecting sample, facing south

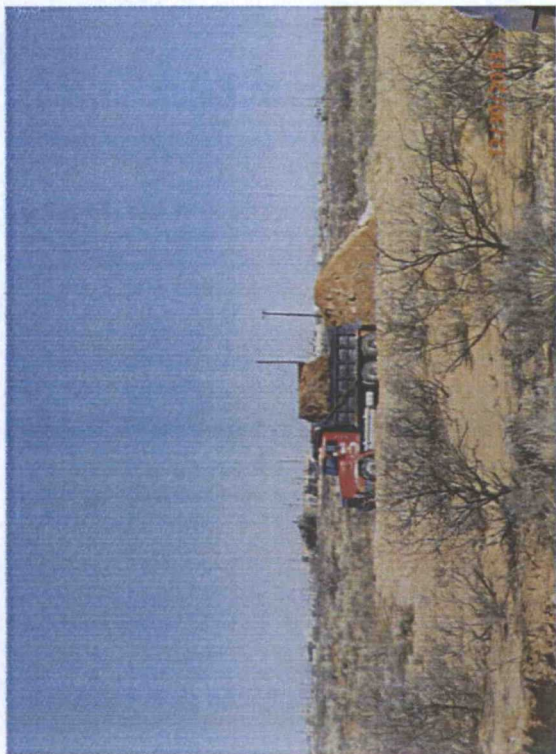
12/30/2013





Scraping caliche road, facing northeast

12/30/2013



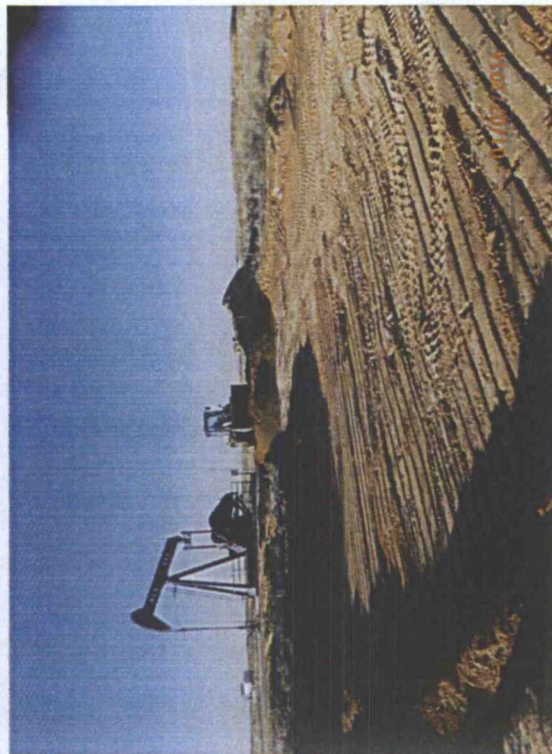
Importing caliche to site, facing north

12/30/2013



Backfilling base of excavation with caliche, facing south

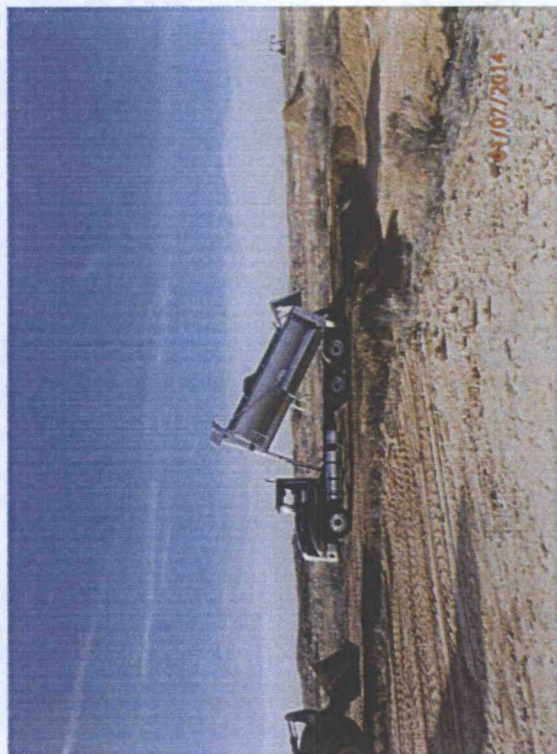
1/6/2014



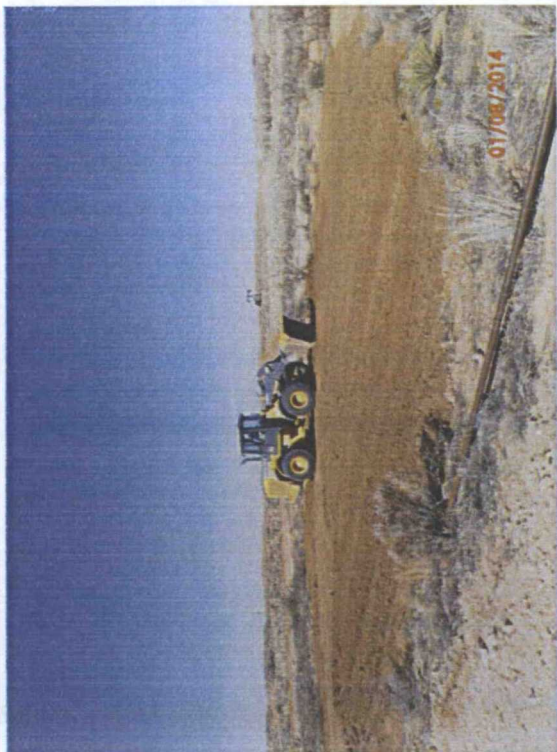
Excavation packed with caliche, facing southwest

1/7/2014





Importing top soil, facing northwest 1/7/2014



Backfilling excavation with top soil, facing northwest 1/8/2014

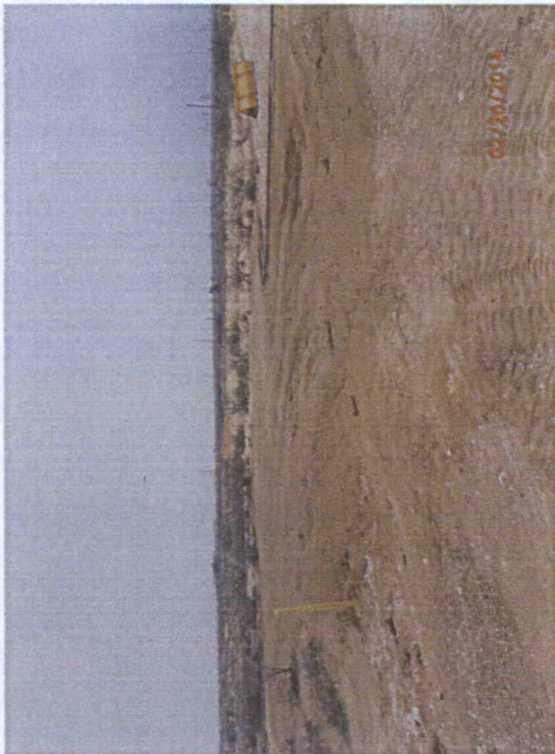


Backfilling completed, facing southwest 1/8/2014



Seeding site, facing west 2/26/2014





Site completed, facing northeast

2/26/2014



Site completed, facing southeast

2/26/2014



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	ConocoPhillips Company	Contact
Address	3300 North A St. Bldg 6, Midland, TX 79705	Telephone No.
Facility Name	MCA Well #357	Facility Type
		Oil and Gas

Surface Owner	Federal	Mineral Owner	Federal	API No.	300252584900
---------------	---------	---------------	---------	---------	--------------

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
S	28	17S	32E					Eddy

Latitude 32 47' 0.84" N Longitude 103 46' 41.34" W

#### NATURE OF RELEASE

Type of Release	Crude Oil	Volume of Release	8.3 bbls	Volume Recovered	3 bbls
Source of Release	Hole in a 2 inch steel surface flow line	Date and Hour of Occurrence	10/11/12 0600	Date and Hour of Discovery	10/11/12 1100
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? BLM & NMOCD			
By Whom?	Roman Salazar	Date and Hour	10/11/12 1210		
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.\*

Describe Cause of Problem and Remedial Action Taken.\*

Agency reportable release from two holes in a 2" steel surface flow line due to a suspected internal/external corrosion.

Describe Area Affected and Cleanup Action Taken.\*

The released covered a total of 3,765 sq ft of pasture land. RECS personnel were on site beginning on November 1<sup>st</sup>, 2013 to assess the site. Two points throughout the release were sampled at the surface and at depth. The samples were field tested for chlorides and organic vapors using a PID meter. Representative samples were taken to a commercial laboratory for analysis. A Corrective Action Plan (CAP) was submitted to BLM and NMOCD on December 9<sup>th</sup>, 2013, subsequently followed by an Addendum on December 16<sup>th</sup>, 2013. Per a meeting with BLM at the site on December 9<sup>th</sup>, 2013, BLM would like an abandoned lease road north of the facility to be sampled to determine chloride and hydrocarbon levels. If the levels are within regulatory standards, the road would be removed and packed into the base of the excavation as an additional infiltration barrier. BLM approved the CAP on December 9<sup>th</sup>, 2013 and NMOCD approved the CAP on December 11<sup>th</sup>, 2013. Beginning on December 20<sup>th</sup>, 2013, RECS personnel were on site to begin the CAP work by excavating the site to a depth of 4 ft bgs. Once the excavation was completed, final wall samples were taken to confirm that the horizontal contamination in the top four feet of the vadose zone was removed. At the base of the excavation, a vertical at Point 1 was installed, with soil samples being collected at 4.5 ft and 5 ft. The caliche road was scraped down to use as backfill and a sample was collected from the scraped soil. The samples were taken to a commercial laboratory, and all samples returned chloride values below 250 mg/kg and GRO and DRO values of non-detect. Because excavation chloride and TPH values were below standards, a liner installation was not warranted. Excavated soils were evaluated for use as backfill and soils that had chloride values higher than 500 mg/kg and a field PID higher than 100 ppm were taken to a NMOCD approved facility for disposal. A total of 877 yards of soil was taken to a NMOCD approved facility for disposal. The excavation was backfilled with 2 ft of compacted caliche from the lease road. The remaining excavation was then backfilled with imported soil. A sample of the imported soil was taken to a commercial laboratory for analysis and returned a chloride result of non-detect. The site was backfilled to ground surface and contoured to the surrounding location. The site was seeded with BLM mix #2 on February 26<sup>th</sup>, 2014. Vegetation will also provide an infiltration barrier for the site, since plants capture water through their roots thereby reducing the amount of water traveling through the vadose zone to groundwater.

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.

Signature: <i>Sean Robinson</i>	OIL CONSERVATION DIVISION	
Printed Name: SEAN ROBINSON	Approved by Environmental Specialist <i>Jeffrey Seking</i>	
Title: OPERATIONS SUPERVISOR	Approval Date: 4/10/14	Expiration Date: —
E-mail Address: Sean.T.Robinson@cp.com	Conditions of Approval: —	Attached <input type="checkbox"/>
Date: 3-19-14 Phone: 575-390-8873	1AP-06-13-2927	

\* Attach Additional Sheets If Necessary



**Leking, Geoffrey R, EMNRD**

---

**From:** Leking, Geoffrey R, EMNRD  
**Sent:** Friday, June 07, 2013 10:11 AM  
**To:** 'Wright, Justin (PAC)'  
**Subject:** RE: MCA #357

Justin

If sampling has been performed already, then please provide sample data.

If no sampling has been performed, then:

Depth to water is approximately 145'. Delineate to 250 ppm for chlorides. RRALs are Benzene = 10 ppm, BTEX = 50 ppm, TPH = 5000 ppm and chlorides = 1000 ppm. You can follow the plan you have provided and collect confirmation samples. You can collect fields as you excavate. Over the old pit – excavate as deep **as the deepest excavation to clean on the pad** and then emplace clay (6" to a 1' with a foot being preferred if the excavation goes that deep) and then the sand. Please contact me if you have any questions. Thank you.

Geoffrey Leking  
Environmental Specialist  
NMOCD-Hobbs  
1625 N. French Drive  
Hobbs, NM 88240  
Office: (575) 393-6161 Ext. 113  
Cell: (575) 399-2990  
email: [geoffreyr.leking@state.nm.us](mailto:geoffreyr.leking@state.nm.us)

---

**From:** Wright, Justin (PAC) [<mailto:Justin.Wright@contractor.conocophillips.com>]  
**Sent:** Wednesday, June 05, 2013 6:46 AM  
**To:** Leking, Geoffrey R, EMNRD; Bad Bear, Trishia  
**Subject:** FW: MCA #357

Here's the C-141 for the leak I ask about yesterday.

---

**From:** Wright, Justin (PAC)  
**Sent:** Tuesday, June 04, 2013 7:52 AM  
**To:** 'Leking, Geoffrey R, EMNRD'; 'Bad Bear, Trishia'  
**Subject:** FW: MCA #357

Could we get approval to proceed with work?

---

**From:** [Candacemcnabb@aol.com](mailto:Candacemcnabb@aol.com) [<mailto:Candacemcnabb@aol.com>]  
**Sent:** Tuesday, May 28, 2013 5:30 PM  
**To:** Wright, Justin (PAC)  
**Subject:** [EXTERNAL]MCA #357







# McNabb Services

P O Box 5753  
Hobbs, New Mexico 88241  
575.318.9726 (O) 575.391.8484 (F)

HOBBS OCD

JUN 04 2013

RECEIVED

May 28, 2013

McNabb Services  
P O Box 5753  
Hobbs, NM 88241

Re: Remediation Project  
MCA #357  
S28 T17S R32E

The following proposal is to bring the above referenced area up to NMOCD-BLM guidelines.

The well head had a product release of 8.3bbls of oil; which 3.0bbls were recovered.  
The oil was contained primarily in the old drill pit and caliche pad at the MCA #357 location.

It appears to have run across the surface and stayed within a depth of 2" - 4" of the surface.  
The total surface area is 56' x 80'.

The recommended remediation would not disturb the old drill pit.  
Approximately 4" - 6" in depth of the stained/contaminated area will be removed.  
This would be replaced with 60 - 100yds of new, clean sand in the pit area. New caliche would then be added over the pad location.

Pit area will then be seeded with BLM #2 seed mixture.

If there are any questions or comments, please feel free to call.

Sincerely,  
MCNABB SERVICES  
*Woody McNabb*



HOBBS OCD

**From:** [Whitlock, Jerald](#)  
**To:** [Lara Weinheimer](#)  
**Cc:** [Justin Wright](#); [Hack Conder](#)  
**Subject:** Re: ConocoPhillips MCA Well #357 Corrective Action Plan  
**Date:** Monday, December 09, 2013 3:40:00 PM

DEC 11 2013

RECEIVED

This plan is approved as per our meeting on location and phone conversation with Justin Wright. Justin will work with contractors to get soil material from locations in the area.  
Thanks Duncan

On Mon, Dec 9, 2013 at 1:45 PM, Lara Weinheimer <[lweinheimer@rice-ecs.com](mailto:lweinheimer@rice-ecs.com)> wrote:

Duncan, per your meeting with RECS and CoP representatives on Monday, December 09, 2013, attached is the updated Corrective Action Plan for your approval. If you have any questions, please let us know.

Thanks!

Lara Weinheimer

Rice Environmental Consulting & Safety

Project Scientist

419 West Cain

Hobbs, NM 88240

(575) 441-0431

--

Confidentiality Warning: This message along with any attachments are intended only for use of the individual or entity to which it is addressed and may contain information that is privileged or confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient or the employee or agent responsible for delivering this message to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately.

Jerald "Duncan" Whitlock, Jr.  
Bureau of Land Management



Carlsbad Field Office  
Environmental Protection Specialist  
620 East Greene Street  
Carlsbad, NM. 88220  
Office: (575) 234-5926  
Fax: (575) 234-5927  
Cell: (575) 361-2630  
E-mail: [dwhitloc@blm.gov](mailto:dwhitloc@blm.gov)



**Leking, Geoffrey R, EMNRD****DEC 16 2013**

**From:** Lara Weinheimer <lweinheimer@rice-ecs.com>  
**Sent:** Monday, December 16, 2013 1:44 PM  
**To:** Duncan Whitlock; Leking, Geoffrey R, EMNRD  
**Cc:** 'Hack Conder'; 'Justin Wright'; 'Kyle Norman'  
**Subject:** ConocoPhillips MCA Well #357 (1RP-06-13-2927) Corrective Action Plan and Addendum

**RECEIVED**

Duncan and Geoff, after meeting with NMOCD on Wednesday, December 11<sup>th</sup>, 2013, NMOCD requested an Addendum to the Corrective Action Plan for the ConocoPhillips MCA Well #357 (1RP-06-13-2927).

The following paragraph is blue lettering will replace the Corrective Action Plan (Page 1 and 2), text in red lettering marked with a strike-through.

### **Corrective Action Plan**

The release will be excavated to a depth of 4 ft bgs. The excavated soil will be taken to a NMOCD approved facility for disposal. At 4 ft bgs, the side walls and bottom of the excavation will be sampled. The samples will be taken to a commercial laboratory to make sure that all soil constituents are below regulatory standards. Once the excavation is completed, the extent of the vertical contamination will be determined by installing a vertical at the base of the excavation. Representative samples will be taken to a commercial laboratory to confirm chloride values below 250 mg/kg at the base of the vertical.

If the laboratory sampling of the bottom of the excavation shows chloride levels above 500 mg/kg, a 20 mil reinforced poly liner will be installed and properly seated at the base of the excavation. The liner will be padded with clean, imported soil to prevent punctures.

Per a meeting with BLM at the site on December 9<sup>th</sup>, 2013, BLM would like an abandoned lease road north of the facility to be sampled to determine chloride and hydrocarbon levels. If the levels are within regulatory standards, the road will be removed and packed into the base of the excavation as an additional infiltration barrier. The site will then be backfilled with clean, imported soil, and contoured to the surrounding location. Soil amendments will be added as necessary and the site will be seeded with a blend of native vegetation.

### **~~Corrective Action Plan~~**

~~The release will be excavated to a depth of 4 ft bgs. The excavated soil will be taken to a NMOCD approved facility for disposal. At 4 ft bgs, the side walls and bottom of the excavation will be sampled. The samples will be taken to a commercial laboratory to make sure that all soil constituents are below regulatory standards. Once the excavation is completed, the extent of the vertical contamination will be determined by installing a vertical at the base of the excavation. Representative samples will be taken to a commercial laboratory to confirm chloride values below 250 mg/kg at the base of the vertical. Per a meeting with BLM at the site on December 9<sup>th</sup>, 2013, BLM would like an abandoned lease road north of the facility to be sampled to determine chloride and~~



~~hydrocarbon levels. If the levels are within regulatory standards, the road will be removed and packed into the base of the excavation as an infiltration barrier. The site will then be backfilled with clean, imported soil, and contoured to the surrounding location. Soil amendments will be added as necessary and the site will be seeded with a blend of native vegetation.~~

Lara Weinheimer  
Rice Environmental Consulting & Safety  
Project Scientist  
419 West Cain  
Hobbs, NM 88240  
(575) 441-0431



**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS  
  
Action 209959

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 209959
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Historical document upload. Closure approved 4/10/2014.	4/26/2023