



CONOCOPHILLIPS

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

Ruby Federal #9

Termination Request

API No: 3002540360

Release Date: November 11th, 2013

Unit Letter O, Section 18, Township 17S, Range 32E

October 30th, 2014

Tomas ‘Doc’ Oberding

New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau – District 1
1625 N. French Dr.
Hobbs, NM 88240-9273

**RE: Termination Request
ConocoPhillips – Ruby Federal Well #9
UL/O sec. 18 T17S R32E
API No. 3002540360**

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 3 miles southwest of Maljamar, New Mexico at UL/O sec. 18 T17S R32E. NM OSE and BLM records indicate that groundwater will likely be encountered at a depth of approximately 145 +/- feet.

On November 11th, 2013, the top of a ¼ inch gauge blew out releasing 36 barrels of produced water and 15 barrels of oil over 4,360 square feet of primarily lease pad. A total of 20 barrels of produced water and 10 barrels of oil were recovered. The gauge was replaced and NMOCD and BLM were notified of the release on November 12th, 2013. An initial C-141 was signed on November 12th, 2013 and submitted to NMOCD and BLM for their approval (Appendix A).

RECS personnel were on site beginning on November 14th, 2013 to assess the release. The release was sampled at the surface and with depth (Figure 1). Representative samples from the release were taken to a commercial laboratory for analysis (Appendix B). In all five sampling points, the surface samples showed elevated laboratory chloride levels, Gasoline Range Organics (GRO) readings, Diesel Range Organics (DRO) readings and BTEX readings. As Point 2, Point 3 and Point 5 were sampled with depth, all constituents dropped below regulatory standards between 1.5 ft and 3 ft bgs.

On December 18th, 2013, a Corrective Action Plan (CAP) was submitted to NMOCD and BLM. NMOCD verbally approved the CAP on December 18th, 2013 and BLM approved the CAP on January 9th, 2014. Based on the laboratory analysis of the release, the CAP stated that the areas around Point 1, Point 3 and Point 5 would be scraped down to 1.5 ft

(Figure 2). The area around Point 2 would be excavated to 3 ft bgs. The area around Point 4 would be excavated until samples returned chloride values below regulatory standards.

Once the entire excavation was completed, grab samples would be taken from the walls of the excavation and sent to a commercial laboratory to show that all constituents were below regulatory standards. The excavation on the lease pad would be backfilled with clean, imported caliche and the excavation in the pasture would be backfilled with clean, imported soil. All excavated material would be taken to a NMOCD approved facility for disposal. The area in the pasture would have soil amendments added as necessary and then the area would be seeded.

Corrective action activities began at the site on March 31st, 2014. The site was scraped down as shown in Figure 3. Wall samples were collected and field tested for chlorides and organic vapors. The samples were then taken to a commercial laboratory for analyses and returned constituents below regulatory standards (Appendix C). A total of 270 cubic yards of contaminated soil was taken to a NMOCD approved facility for disposal. A total of 80 cubic yards of top soil and 300 yards of caliche were imported to the site to replace the contaminated soil taken for disposal. A sample of the imported backfill was taken to a commercial laboratory for analysis and returned a chloride result of 288 mg/kg. The lease pad was backfilled with the imported caliche and the pasture area was backfilled with the imported top soil. Both areas were contoured to the surrounding area. On May 7th, 2014, the pasture area was seeded with BLM mix #2.

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

Given that CoP has completed the CAP work as approved by NMOCD, CoP respectfully requests 'remediation termination' and site closure. A final C-141 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,

A handwritten signature in dark ink, appearing to read 'J.C.W.' followed by a stylized flourish.

Lara Weinheimer
Project Scientist
RECS
(575) 441-0431

Attachments:

- Figure 1 – Initial Sampling Data
- Figure 2 – Proposed Excavation Depths
- Figure 3 – Excavation Data

Appendix A – Initial C-141
Appendix B – Initial Laboratory Analyses
Appendix C – Final Laboratory Analyses
Appendix D – Photo Documentation
Appendix E – Final C-141

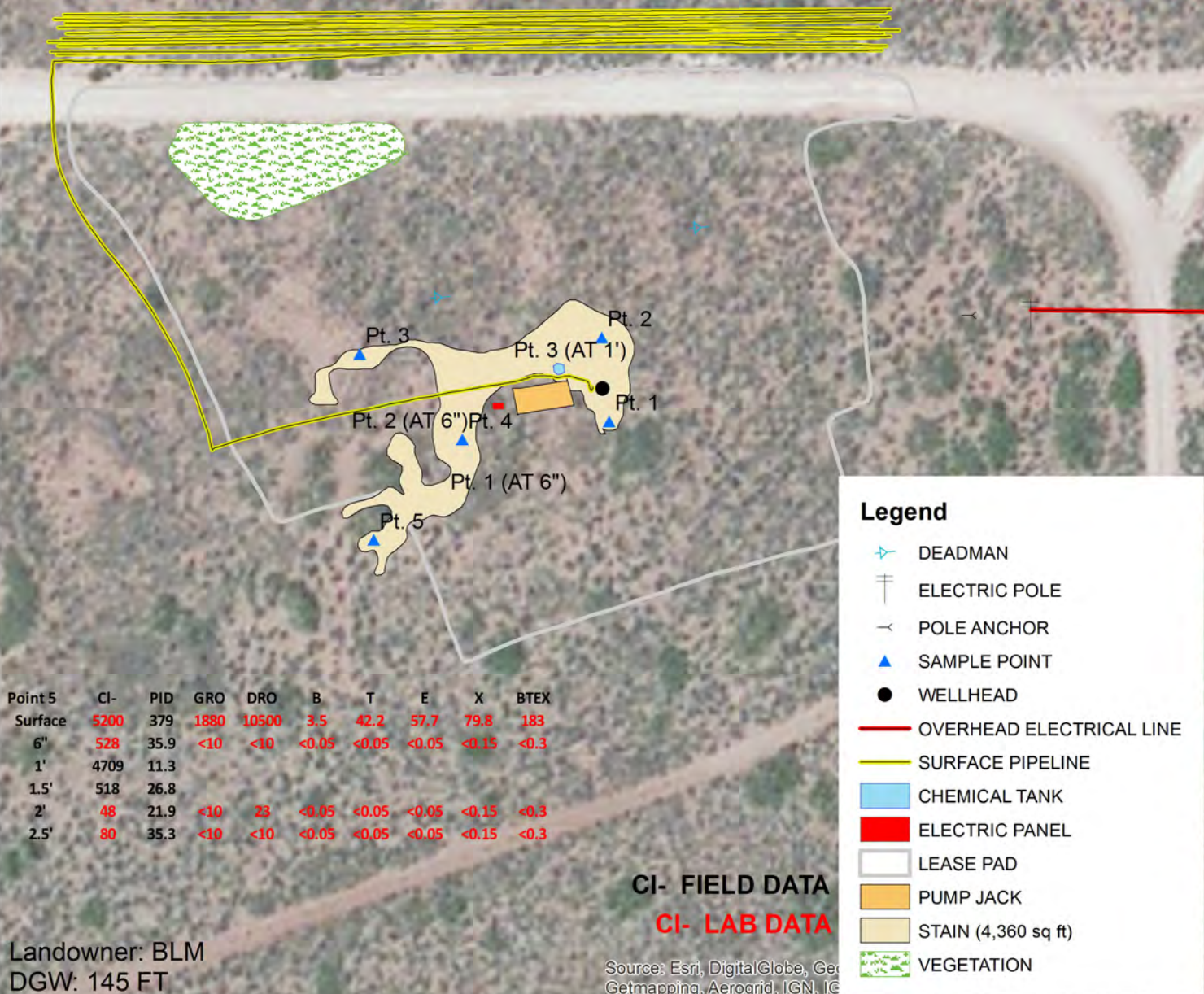
Figures

Initial Sampling Data

Point 1	CI-	PID	GRO	DRO	B	T	E	X	BTEX
Surface	1170	48.3	1590	20800	<2	10.3	35.2	64.7	110
Point 2	CI-	PID	GRO	DRO	B	T	E	X	BTEX
Surface	13300	207	838	7440	4.01	34.6	34.9	42.1	116
6"	11361	7.1							
1'	1120	5.9	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
1.5'	1043	7.2							
2'	440	4.2							
2.5'	1244	10.8							
3'	<16	5	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
3.5'	<16	5.4	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3

Point 3 Surface	Cl-	PID	GRO	DRO	B	T	E	X	BTEX
	9200	257.1	3570	24700	14	77.6	89.6	122	303
6"	1060	466	29.4	569	<0.05	0.079	0.368	0.553	1
1'	328	66.5							
1.5'	<16	38.4	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
2'	<16	34.9	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3

Point 4	Cl-	PID	GRO	DRO	B	T	E	X	BTEX
Surface	17200	70.1	350	3030	<0.5	1.42	5.51	9.38	16.3



Landowner: BLM
DGW: 145 FT

CI- FIELD DATA
CI- LAB DATA

Source: Esri, DigitalGlobe, GeoEye, AeroGRID, IGN, and the GIS User Community



**CONOCOPHILLIPS
RUBY FEDERAL
WELL #9**

**LEGALS: UL/O sec. 18
T-17-S R-32-E
LEA COUNTY, NM**

Figure 1



0 40 80

Feet

GPS date: 11-19-13 KN
Drawing date: 12-4-13
Drafted by: L. Weinheimer

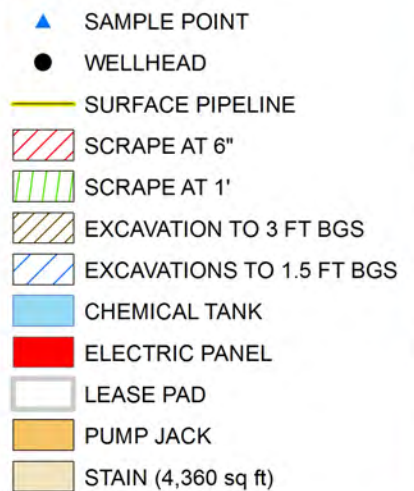
Landowner: BLM
DGW: 145 FT

Source: Esri, DigitalGlobe, GeoEye, IGN, Aerogrid, Getmapping, Aerogrid, IGN, I

Legend

- ▲ SAMPLE POINT
- WELLHEAD
- SURFACE PIPELINE
- ▨ SCRAPE AT 6"
- ▨ SCRAPE AT 1'
- ▨ EXCAVATION TO 3 FT BGS
- ▨ EXCAVATIONS TO 1.5 FT BGS
- CHEMICAL TANK
- ELECTRIC PANEL
- LEASE PAD
- PUMP JACK
- STAIN (4,360 sq ft)

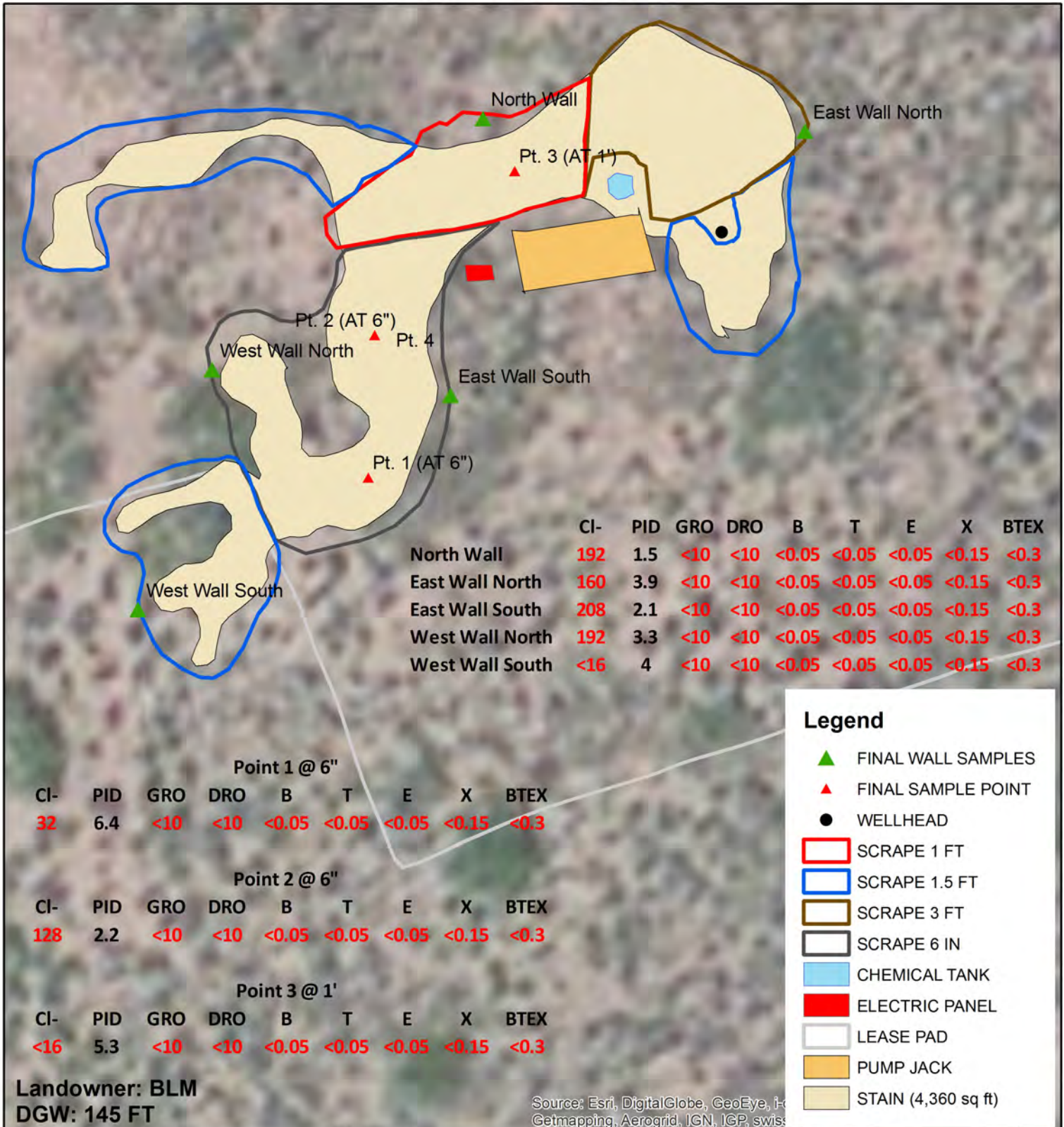
Source: Esri, DigitalGlobe, GeoEye, AeroGRID, IGN, and the GIS User Community



CONOCOPHILLIPS
RUBY FEDERAL
WELL #9
LEGALS: UL/O sec. 18
T-17-S R-32-E
LEA COUNTY, NM

GPS date: 11-19-13 KN
Drawing date: 12-18-13
Drafted by: L. Weinheimer

Excavation Data



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

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	Contact: David May	
Address: 29 Vacuum Complex Lane	Telephone No. 575-391-3106	
Facility Name: Ruby Federal Well #9	Facility Type: Well	
Surface Owner: BLM	Mineral Owner BLM	API No. 3002540360

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	18	17S	32E	480	South	1650	East	LEA

Latitude **32.8286948558908**

Longitude **-103.802651025065**

NATURE OF RELEASE

Type of Release: Spill	Volume of Release: 51 BBLS	Volume Recovered: 30 BBLS
Source of Release: 1/4 inch Gauge	Date and Hour of Occurrence 11/11/13 8:00 am	Date and Hour of Discovery SAME
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Jim Amos/Geoffrey Leking	
By Whom? David May	Date and Hour: 11/12/13 3:50 pm	
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.*

At the Ruby Federal #9 the top of a 1/4 inch gauge had blown out. Spill amount was 36 BPW and 15 BO with 20 BPW and 10 BO recovered. MSO blocked in 1/4 inch valve, removed handle and replaced gauge.

Describe Area Affected and Cleanup Action Taken.*

Effectuated area was 81 Ft X 141 Ft. and will be remediated according to BLM requirements.

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.

		<u>OIL CONSERVATION DIVISION</u>	
Signature:		Approved by Environmental Specialist:	
Printed Name: David May			
Title: LEAD HSE		Approval Date:	Expiration Date:
E-mail Address: david.d.may@conocophillips.com		Conditions of Approval:	
Date: 11/12/13		Attached <input type="checkbox"/>	
Phone: 575-391-3106			

* Attach Additional Sheets If Necessary

Appendix B

Initial 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

December 02, 2013

JACOB KAMPLAIN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: CONOCO RUBY FEDERAL WELL #9

Enclosed are the results of analyses for samples received by the laboratory on 11/21/13 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.

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, flowing style.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

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

Received:	11/21/2013	Sampling Date:	11/14/2013
Reported:	12/02/2013	Sampling Type:	Soil
Project Name:	CONOCO RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 1 SURFACE (H302862-01)

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	11/25/2013	ND	1.95	97.4	2.00	0.491	
Toluene*	10.3	2.00	11/25/2013	ND	1.96	97.8	2.00	0.750	
Ethylbenzene*	35.2	2.00	11/25/2013	ND	1.94	97.1	2.00	2.11	
Total Xylenes*	64.7	6.00	11/25/2013	ND	5.74	95.7	6.00	2.65	
Total BTX	110	12.0	11/25/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 146 % 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	1170	16.0	11/26/2013	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1590	100	11/24/2013	ND	192	96.2	200	3.40	
DRO >C10-C28	20800	100	11/24/2013	ND	197	98.6	200	2.56	

Surrogate: 1-Chlorooctane 211 % 65.2-140

Surrogate: 1-Chlorooctadecane 365 % 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
JACOB KAMPLAIN
419 W. CAIN
HOBBS NM, 88240
Fax To: (575) 397-1471

Received:	11/21/2013	Sampling Date:	11/14/2013
Reported:	12/02/2013	Sampling Type:	Soil
Project Name:	CONOCO RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 2 SURFACE (H302862-02)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	4.01	1.00	11/25/2013	ND	1.95	97.4	2.00	0.491	
Toluene*	34.6	1.00	11/25/2013	ND	1.96	97.8	2.00	0.750	
Ethylbenzene*	34.9	1.00	11/25/2013	ND	1.94	97.1	2.00	2.11	
Total Xylenes*	42.1	3.00	11/25/2013	ND	5.74	95.7	6.00	2.65	
Total BTX	116	6.00	11/25/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 126 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13300	16.0	11/26/2013	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	838	100	11/24/2013	ND	192	96.2	200	3.40		
DRO >C10-C28	7440	100	11/24/2013	ND	197	98.6	200	2.56		

Surrogate: 1-Chlorooctane 163 % 65.2-140

Surrogate: 1-Chlorooctadecane 215 % 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
JACOB KAMPLAIN
419 W. CAIN
HOBBS NM, 88240
Fax To: (575) 397-1471

Received:	11/21/2013	Sampling Date:	11/14/2013
Reported:	12/02/2013	Sampling Type:	Soil
Project Name:	CONOCO RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 3 SURFACE (H302862-03)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	14.0	5.00	11/25/2013	ND	1.95	97.4	2.00	0.491	
Toluene*	77.6	5.00	11/25/2013	ND	1.96	97.8	2.00	0.750	
Ethylbenzene*	89.6	5.00	11/25/2013	ND	1.94	97.1	2.00	2.11	
Total Xylenes*	122	15.0	11/25/2013	ND	5.74	95.7	6.00	2.65	
Total BTEX	303	30.0	11/25/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 119 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9200	16.0	11/26/2013	ND	416	104	400	0.00	
TPH 8015M	mg/kg		Analyzed By: MS						S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	3570	200	11/24/2013	ND	192	96.2	200	3.40	
DRO >C10-C28	24700	200	11/24/2013	ND	197	98.6	200	2.56	

Surrogate: 1-Chlorooctane 241 % 65.2-140

Surrogate: 1-Chlorooctadecane 477 % 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
JACOB KAMPLAIN
419 W. CAIN
HOBBS NM, 88240
Fax To: (575) 397-1471

Received:	11/21/2013	Sampling Date:	11/14/2013
Reported:	12/02/2013	Sampling Type:	Soil
Project Name:	CONOCO RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 4 SURFACE (H302862-04)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	11/25/2013	ND	1.95	97.4	2.00	0.491	
Toluene*	1.42	0.500	11/25/2013	ND	1.96	97.8	2.00	0.750	
Ethylbenzene*	5.51	0.500	11/25/2013	ND	1.94	97.1	2.00	2.11	
Total Xylenes*	9.38	1.50	11/25/2013	ND	5.74	95.7	6.00	2.65	
Total BTX	16.3	3.00	11/25/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 126 % 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	17200	16.0	11/26/2013	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	350	100	11/24/2013	ND	192	96.2	200	3.40	
DRO >C10-C28	3030	100	11/24/2013	ND	197	98.6	200	2.56	

Surrogate: 1-Chlorooctane 140 % 65.2-140

Surrogate: 1-Chlorooctadecane 182 % 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
JACOB KAMPLAIN
419 W. CAIN
HOBBS NM, 88240
Fax To: (575) 397-1471

Received:	11/21/2013	Sampling Date:	11/14/2013
Reported:	12/02/2013	Sampling Type:	Soil
Project Name:	CONOCO RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 5 SURFACE (H302862-05)

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	3.50	2.00	11/25/2013	ND	1.95	97.4	2.00	0.491	
Toluene*	42.2	2.00	11/25/2013	ND	1.96	97.8	2.00	0.750	
Ethylbenzene*	57.7	2.00	11/25/2013	ND	1.94	97.1	2.00	2.11	
Total Xylenes*	79.8	6.00	11/25/2013	ND	5.74	95.7	6.00	2.65	
Total BTX	183	12.0	11/25/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 132 % 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	5200	16.0	11/26/2013	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1880	200	11/25/2013	ND	213	107	200	2.70	
DRO >C10-C28	10500	200	11/25/2013	ND	217	108	200	1.78	

Surrogate: 1-Chlorooctane 189 % 65.2-140

Surrogate: 1-Chlorooctadecane 336 % 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

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by 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.



Celey D. Keene, Lab Director/Quality Manager



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

[illegible]

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 services. All claims, including those for negligence and any other cause whatsoever shall be deemed waived, unless made in writing and resolved 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 interruption, loss of profits, or lost data. Cardinal, its officers, directors, 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>[Signature]</i>		Date: <i>12/1/13</i>		Received By: <i>[Signature]</i>		Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #: _____ Add'l Fax #: _____	
Relinquished By: _____		Date: _____		Received By: _____		REMARKS: email results: ALL	
Delivered By: (Circle One) 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



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

November 27, 2013

JACOB KAMPLAIN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: CONOCO RUBY FEDERAL WELL #9

Enclosed are the results of analyses for samples received by the laboratory on 11/20/13 8:15.

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 "Mike Snyder". The signature is fluid and cursive, with the first name "Mike" and last name "Snyder" clearly distinguishable.

Mike Snyder

Organic Supervisor

Analytical Results For:

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

Received:	11/20/2013	Sampling Date:	11/19/2013
Reported:	11/27/2013	Sampling Type:	Soil
Project Name:	CONOCO RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 2 1' (H302827-01)

BTEX 8260B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/21/2013	ND	1.84	92.1	2.00	1.58	
Toluene*	<0.050	0.050	11/21/2013	ND	1.90	94.9	2.00	0.599	
Ethylbenzene*	<0.050	0.050	11/21/2013	ND	1.96	98.1	2.00	1.54	
Total Xylenes*	<0.150	0.150	11/21/2013	ND	5.76	96.0	6.00	0.240	
Total BTEX	<0.300	0.300	11/21/2013	ND					

Surrogate: Dibromofluoromethane 92.9 % 61.3-142

Surrogate: Toluene-d8 100 % 71.3-129

Surrogate: 4-Bromofluorobenzene 99.2 % 65.7-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1120	16.0	11/25/2013	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	11/21/2013	ND	190	95.0	200	13.1	
DRO >C10-C28	<10.0	10.0	11/21/2013	ND	180	89.8	200	4.80	

Surrogate: 1-Chlorooctane 97.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 107 % 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.



Mike Snyder, Organic Supervisor

Analytical Results For:

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

Received:	11/20/2013	Sampling Date:	11/19/2013
Reported:	11/27/2013	Sampling Type:	Soil
Project Name:	CONOCO RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 2 3' (H302827-02)

BTX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/21/2013	ND	1.84	92.1	2.00	1.58		
Toluene*	<0.050	0.050	11/21/2013	ND	1.90	94.9	2.00	0.599		
Ethylbenzene*	<0.050	0.050	11/21/2013	ND	1.96	98.1	2.00	1.54		
Total Xylenes*	<0.150	0.150	11/21/2013	ND	5.76	96.0	6.00	0.240		
Total BTX	<0.300	0.300	11/21/2013	ND						

Surrogate: Dibromofluoromethane 94.7 % 61.3-142
Surrogate: Toluene-d8 99.9 % 71.3-129
Surrogate: 4-Bromofluorobenzene 103 % 65.7-141

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	11/25/2013	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	11/21/2013	ND	190	95.0	200	13.1		
DRO >C10-C28	<10.0	10.0	11/21/2013	ND	180	89.8	200	4.80		

Surrogate: 1-Chlorooctane 94.2 % 65.2-140
Surrogate: 1-Chlorooctadecane 107 % 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.



Mike Snyder, Organic Supervisor

Analytical Results For:

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

Received:	11/20/2013	Sampling Date:	11/19/2013
Reported:	11/27/2013	Sampling Type:	Soil
Project Name:	CONOCO RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 2 3.5' (H302827-03)

BTX 8260B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/21/2013	ND	1.84	92.1	2.00	1.58	
Toluene*	<0.050	0.050	11/21/2013	ND	1.90	94.9	2.00	0.599	
Ethylbenzene*	<0.050	0.050	11/21/2013	ND	1.96	98.1	2.00	1.54	
Total Xylenes*	<0.150	0.150	11/21/2013	ND	5.76	96.0	6.00	0.240	
Total BTX	<0.300	0.300	11/21/2013	ND					

Surrogate: Dibromofluoromethane 97.1 % 61.3-142
Surrogate: Toluene-d8 99.3 % 71.3-129
Surrogate: 4-Bromofluorobenzene 96.8 % 65.7-141

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	11/25/2013	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	11/21/2013	ND	190	95.0	200	13.1	
DRO >C10-C28	<10.0	10.0	11/21/2013	ND	180	89.8	200	4.80	

Surrogate: 1-Chlorooctane 96.7 % 65.2-140
Surrogate: 1-Chlorooctadecane 113 % 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.



Mike Snyder, Organic Supervisor

Analytical Results For:

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

Received:	11/20/2013	Sampling Date:	11/19/2013
Reported:	11/27/2013	Sampling Type:	Soil
Project Name:	CONOCO RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 3 6" (H302827-04)

BTX 8260B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/21/2013	ND	1.84	92.1	2.00	1.58	
Toluene*	0.079	0.050	11/21/2013	ND	1.90	94.9	2.00	0.599	
Ethylbenzene*	0.368	0.050	11/21/2013	ND	1.96	98.1	2.00	1.54	
Total Xylenes*	0.553	0.150	11/21/2013	ND	5.76	96.0	6.00	0.240	
Total BTX	1.00	0.300	11/21/2013	ND					

Surrogate: Dibromofluoromethane 98.4 % 61.3-142

Surrogate: Toluene-d8 95.6 % 71.3-129

Surrogate: 4-Bromofluorobenzene 130 % 65.7-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1060	16.0	11/25/2013	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	29.4	10.0	11/21/2013	ND	190	95.0	200	13.1	
DRO >C10-C28	569	10.0	11/21/2013	ND	180	89.8	200	4.80	

Surrogate: 1-Chlorooctane 96.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 101 % 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.



Mike Snyder, Organic Supervisor

Analytical Results For:

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

Received:	11/20/2013	Sampling Date:	11/19/2013
Reported:	11/27/2013	Sampling Type:	Soil
Project Name:	CONOCO RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 3 1.5' (H302827-05)

BTX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/21/2013	ND	1.84	92.1	2.00	1.58		
Toluene*	<0.050	0.050	11/21/2013	ND	1.90	94.9	2.00	0.599		
Ethylbenzene*	<0.050	0.050	11/21/2013	ND	1.96	98.1	2.00	1.54		
Total Xylenes*	<0.150	0.150	11/21/2013	ND	5.76	96.0	6.00	0.240		
Total BTX	<0.300	0.300	11/21/2013	ND						

Surrogate: Dibromofluoromethane 97.6 % 61.3-142
Surrogate: Toluene-d8 99.9 % 71.3-129
Surrogate: 4-Bromofluorobenzene 101 % 65.7-141

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	11/25/2013	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	11/21/2013	ND	190	95.0	200	13.1	
DRO >C10-C28	<10.0	10.0	11/21/2013	ND	180	89.8	200	4.80	

Surrogate: 1-Chlorooctane 99.5 % 65.2-140
Surrogate: 1-Chlorooctadecane 107 % 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.



Mike Snyder, Organic Supervisor

Analytical Results For:

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

Received:	11/20/2013	Sampling Date:	11/19/2013
Reported:	11/27/2013	Sampling Type:	Soil
Project Name:	CONOCO RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 3 2' (H302827-06)

BTX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/21/2013	ND	1.84	92.1	2.00	1.58		
Toluene*	<0.050	0.050	11/21/2013	ND	1.90	94.9	2.00	0.599		
Ethylbenzene*	<0.050	0.050	11/21/2013	ND	1.96	98.1	2.00	1.54		
Total Xylenes*	<0.150	0.150	11/21/2013	ND	5.76	96.0	6.00	0.240		
Total BTX	<0.300	0.300	11/21/2013	ND						

Surrogate: Dibromofluoromethane 96.7 % 61.3-142
Surrogate: Toluene-d8 97.6 % 71.3-129
Surrogate: 4-Bromofluorobenzene 96.7 % 65.7-141

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	11/25/2013	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	11/21/2013	ND	190	95.0	200	13.1	
DRO >C10-C28	<10.0	10.0	11/21/2013	ND	180	89.8	200	4.80	

Surrogate: 1-Chlorooctane 97.5 % 65.2-140
Surrogate: 1-Chlorooctadecane 108 % 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.



Mike Snyder, Organic Supervisor

Analytical Results For:

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

Received:	11/20/2013	Sampling Date:	11/19/2013
Reported:	11/27/2013	Sampling Type:	Soil
Project Name:	CONOCO RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 5 6" (H302827-07)

BTX 8260B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/21/2013	ND	1.84	92.1	2.00	1.58	
Toluene*	<0.050	0.050	11/21/2013	ND	1.90	94.9	2.00	0.599	
Ethylbenzene*	<0.050	0.050	11/21/2013	ND	1.96	98.1	2.00	1.54	
Total Xylenes*	<0.150	0.150	11/21/2013	ND	5.76	96.0	6.00	0.240	
Total BTX	<0.300	0.300	11/21/2013	ND					

Surrogate: Dibromofluoromethane 92.0 % 61.3-142
Surrogate: Toluene-d8 97.2 % 71.3-129
Surrogate: 4-Bromofluorobenzene 100 % 65.7-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	11/25/2013	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	11/21/2013	ND	190	95.0	200	13.1	
DRO >C10-C28	<10.0	10.0	11/21/2013	ND	180	89.8	200	4.80	

Surrogate: 1-Chlorooctane 98.9 % 65.2-140
Surrogate: 1-Chlorooctadecane 114 % 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.



Mike Snyder, Organic Supervisor

Analytical Results For:

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

Received:	11/20/2013	Sampling Date:	11/19/2013
Reported:	11/27/2013	Sampling Type:	Soil
Project Name:	CONOCO RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 5 2' (H302827-08)

BTX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/21/2013	ND	1.84	92.1	2.00	1.58		
Toluene*	<0.050	0.050	11/21/2013	ND	1.90	94.9	2.00	0.599		
Ethylbenzene*	<0.050	0.050	11/21/2013	ND	1.96	98.1	2.00	1.54		
Total Xylenes*	<0.150	0.150	11/21/2013	ND	5.76	96.0	6.00	0.240		
Total BTX	<0.300	0.300	11/21/2013	ND						

Surrogate: Dibromofluoromethane 101 % 61.3-142
Surrogate: Toluene-d8 98.3 % 71.3-129
Surrogate: 4-Bromofluorobenzene 98.6 % 65.7-141

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	11/25/2013	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	11/21/2013	ND	190	95.0	200	13.1	
DRO >C10-C28	23.0	10.0	11/21/2013	ND	180	89.8	200	4.80	

Surrogate: 1-Chlorooctane 83.6 % 65.2-140
Surrogate: 1-Chlorooctadecane 97.9 % 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.



Mike Snyder, Organic Supervisor

Analytical Results For:

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

Received:	11/20/2013	Sampling Date:	11/19/2013
Reported:	11/27/2013	Sampling Type:	Soil
Project Name:	CONOCO RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 5 2.5' (H302827-09)

BTX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/21/2013	ND	1.84	92.1	2.00	1.58		
Toluene*	<0.050	0.050	11/21/2013	ND	1.90	94.9	2.00	0.599		
Ethylbenzene*	<0.050	0.050	11/21/2013	ND	1.96	98.1	2.00	1.54		
Total Xylenes*	<0.150	0.150	11/21/2013	ND	5.76	96.0	6.00	0.240		
Total BTX	<0.300	0.300	11/21/2013	ND						

Surrogate: Dibromofluoromethane 99.1 % 61.3-142

Surrogate: Toluene-d8 97.9 % 71.3-129

Surrogate: 4-Bromofluorobenzene 98.2 % 65.7-141

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	11/25/2013	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	11/21/2013	ND	190	95.0	200	13.1	
DRO >C10-C28	<10.0	10.0	11/21/2013	ND	180	89.8	200	4.80	

Surrogate: 1-Chlorooctane 99.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 108 % 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.



Mike Snyder, Organic Supervisor

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.



Mike Snyder, Organic Supervisor



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Page 12 of 12

[illegible]

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 rendered by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <i>Shirley Jones</i>		Date: <i>11-19-13</i>	Received By: <i>Godi Henson</i>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Time: <i>8:15</i>				Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Refiniquished By:		Date:	Received By:	REMARKS: <i>hconder @ riceswd.com</i> <i>lweinheimer @ rice-ecs.com</i> <i>JKamplain @ rice-ecs.com</i> <i>Knorman @ rice-ecs.com</i>	
Time:					
Delivered By: (Circle One)		Sample Condition		CHECKED BY:	
Sampler - UPS - Bus - Other:		Cool	Intact	(Initials) <i>[Signature]</i>	
		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

Appendix C

Final Laboratory Analyses

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

April 04, 2014

KYLE NORMAN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: RUBY FEDERAL WELL #9

Enclosed are the results of analyses for samples received by the laboratory on 04/03/14 13:20.

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,



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:	04/03/2014	Sampling Date:	04/02/2014
Reported:	04/04/2014	Sampling Type:	Soil
Project Name:	RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SEC. 4 PT. 1 @ 6" (H400996-01)

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	04/04/2014	ND	2.59	129	2.00	1.32	
Toluene*	<0.050	0.050	04/04/2014	ND	2.50	125	2.00	0.955	
Ethylbenzene*	<0.050	0.050	04/04/2014	ND	2.47	124	2.00	1.10	
Total Xylenes*	<0.150	0.150	04/04/2014	ND	7.08	118	6.00	0.890	
Total BTEX	<0.300	0.300	04/04/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 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	04/04/2014	ND	432	108	400	7.69	

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	04/04/2014	ND	183	91.4	200	1.10	
DRO >C10-C28	<10.0	10.0	04/04/2014	ND	203	101	200	5.74	

Surrogate: 1-Chlorooctane 104 % 65.2-140

Surrogate: 1-Chlorooctadecane 100 % 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:	04/03/2014	Sampling Date:	04/03/2014
Reported:	04/04/2014	Sampling Type:	Soil
Project Name:	RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SEC. 4 PT. 2 @ 6" (H400996-02)

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	04/04/2014	ND	2.59	129	2.00	1.32	
Toluene*	<0.050	0.050	04/04/2014	ND	2.50	125	2.00	0.955	
Ethylbenzene*	<0.050	0.050	04/04/2014	ND	2.47	124	2.00	1.10	
Total Xylenes*	<0.150	0.150	04/04/2014	ND	7.08	118	6.00	0.890	
Total BTEx	<0.300	0.300	04/04/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 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	128	16.0	04/04/2014	ND	432	108	400	7.69		

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	04/04/2014	ND	183	91.4	200	1.10	
DRO >C10-C28	<10.0	10.0	04/04/2014	ND	203	101	200	5.74	

Surrogate: 1-Chlorooctane 112 % 65.2-140

Surrogate: 1-Chlorooctadecane 108 % 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:	04/03/2014	Sampling Date:	04/03/2014
Reported:	04/04/2014	Sampling Type:	Soil
Project Name:	RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SEC. 4 PT. 3 @ 1' (H400996-03)

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	04/04/2014	ND	2.59	129	2.00	1.32		
Toluene*	<0.050	0.050	04/04/2014	ND	2.50	125	2.00	0.955		
Ethylbenzene*	<0.050	0.050	04/04/2014	ND	2.47	124	2.00	1.10		
Total Xylenes*	<0.150	0.150	04/04/2014	ND	7.08	118	6.00	0.890		
Total BTEx	<0.300	0.300	04/04/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 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	04/04/2014	ND	432	108	400	7.69		

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	04/04/2014	ND	183	91.4	200	1.10	
DRO >C10-C28	<10.0	10.0	04/04/2014	ND	203	101	200	5.74	

Surrogate: 1-Chlorooctane 114 % 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

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.



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

Rush

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 6 of 6

Company Name: <u>RECS</u>				BILL TO				ANALYSIS REQUEST																																					
Project Manager: <u>Kyle Norman</u>				P.O. #:				<div>Chlorides</div> <div>TPH 8015 M</div> <div>BTEX</div> <div>Texas TPH</div> <div>Complete Cations/Anions</div> <div>TDS</div>																																					
Address:				Company:																																									
City: Hobbs State: NM Zip: 88240				Attn:																																									
Phone #: Fax #:				Address:																																									
Project #: Project Owner:				City:																																									
Project Name: <u>Conoco Phillips</u>				State: Zip:																																									
Project Location: <u>Ruby Federal Well #9</u>				Phone #:																																									
Sampler Name: <u>Chris Flores</u>				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															
<u>H400996</u>																																													
		<u>1</u>		<u>Section 4 Point 1 @ 6"</u>		<u>G</u>		<u>1</u>																																					
		<u>2</u>		<u>Section 4 Point 2 @ 6"</u>		<u>G</u>		<u>1</u>																																					
		<u>3</u>		<u>Section 4 Point 3 @ 1'</u>		<u>G</u>		<u>1</u>																																					

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: <u>Chris Flores</u>		Date: <u>4-3-2014</u>	Received By: <u>Jodi Henson</u>		Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
Time: <u>1:20</u>			Time: <u>1:20</u>		Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Relinquished By:		Date:	Received By:		REMARKS:	
Time:					email results	
Delivered By: (Circle One)		Sample Condition		CHECKED BY:	<u>hcondor@</u> <u>iflores@</u>	
Sampler - UPS - Bus - Other:		Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		(Initials) <u>JH</u>	<u>knorman@</u> <u>cflores@</u>	
					<u>lweinheimer@</u>	

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



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

May 19, 2014

LAURA FLORES

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: RUBY FEDERAL WELL #9

Enclosed are the results of analyses for samples received by the laboratory on 05/19/14 12:15.

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, flowing style.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

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

Received:	05/19/2014	Sampling Date:	05/19/2014
Reported:	05/19/2014	Sampling Type:	Soil
Project Name:	RUBY FEDERAL WELL #9	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: IMPORTED BACKFILL (H401524-01)**Chloride, SM4500Cl-B****mg/kg****Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	05/19/2014	ND	416	104	400	3.92	

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

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.



Celey D. Keene, Lab Director/Quality Manager

 Rush 


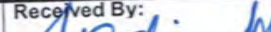

ARDINAL LABORATORIES

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

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: 5-19-2014 Time: 12:15		Received By: 		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) Sampler - UPS - Bus - Other:		Sample Condition Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		CHECKED BY: 		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: cflores @rice-ecs.com	

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

#54



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

May 30, 2014

KYLE NORMAN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: RUBY FEDERAL WELL #9

Enclosed are the results of analyses for samples received by the laboratory on 05/23/14 11:10.

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)

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:	05/23/2014	Sampling Date:	05/23/2014
Reported:	05/30/2014	Sampling Type:	Soil
Project Name:	RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: NORTH WALL (H401584-01)

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	05/29/2014	ND	2.07	103	2.00	3.77	
Toluene*	<0.050	0.050	05/29/2014	ND	2.05	102	2.00	3.01	
Ethylbenzene*	<0.050	0.050	05/29/2014	ND	1.96	98.2	2.00	3.78	
Total Xylenes*	<0.150	0.150	05/29/2014	ND	6.15	102	6.00	3.77	
Total BTX	<0.300	0.300	05/29/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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	192	16.0	05/29/2014	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	05/27/2014	ND	199	99.5	200	1.11	
DRO >C10-C28	<10.0	10.0	05/27/2014	ND	213	107	200	0.0136	

Surrogate: 1-Chlorooctane 125 % 65.2-140

Surrogate: 1-Chlorooctadecane 121 % 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:	05/23/2014	Sampling Date:	05/23/2014
Reported:	05/30/2014	Sampling Type:	Soil
Project Name:	RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: EAST WALL NORTH (H401584-02)

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	05/29/2014	ND	2.07	103	2.00	3.77	
Toluene*	<0.050	0.050	05/29/2014	ND	2.05	102	2.00	3.01	
Ethylbenzene*	<0.050	0.050	05/29/2014	ND	1.96	98.2	2.00	3.78	
Total Xylenes*	<0.150	0.150	05/29/2014	ND	6.15	102	6.00	3.77	
Total BTEx	<0.300	0.300	05/29/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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	160	16.0	05/29/2014	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	05/27/2014	ND	199	99.5	200	1.11	
DRO >C10-C28	<10.0	10.0	05/27/2014	ND	213	107	200	0.0136	

Surrogate: 1-Chlorooctane 117 % 65.2-140

Surrogate: 1-Chlorooctadecane 110 % 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:	05/23/2014	Sampling Date:	05/23/2014
Reported:	05/30/2014	Sampling Type:	Soil
Project Name:	RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: EAST WALL SOUTH (H401584-03)

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	05/29/2014	ND	2.07	103	2.00	3.77		
Toluene*	<0.050	0.050	05/29/2014	ND	2.05	102	2.00	3.01		
Ethylbenzene*	<0.050	0.050	05/29/2014	ND	1.96	98.2	2.00	3.78		
Total Xylenes*	<0.150	0.150	05/29/2014	ND	6.15	102	6.00	3.77		
Total BTEx	<0.300	0.300	05/29/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	208	16.0	05/29/2014	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	05/27/2014	ND	199	99.5	200	1.11	
DRO >C10-C28	<10.0	10.0	05/27/2014	ND	213	107	200	0.0136	

Surrogate: 1-Chlorooctane 119 % 65.2-140

Surrogate: 1-Chlorooctadecane 119 % 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:	05/23/2014	Sampling Date:	05/23/2014
Reported:	05/30/2014	Sampling Type:	Soil
Project Name:	RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: WEST WALL NORTH (H401584-04)

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	05/29/2014	ND	2.07	103	2.00	3.77		
Toluene*	<0.050	0.050	05/29/2014	ND	2.05	102	2.00	3.01		
Ethylbenzene*	<0.050	0.050	05/29/2014	ND	1.96	98.2	2.00	3.78		
Total Xylenes*	<0.150	0.150	05/29/2014	ND	6.15	102	6.00	3.77		
Total BTX	<0.300	0.300	05/29/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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	192	16.0	05/29/2014	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	05/27/2014	ND	199	99.5	200	1.11		
DRO >C10-C28	<10.0	10.0	05/27/2014	ND	213	107	200	0.0136		

Surrogate: 1-Chlorooctane 117 % 65.2-140

Surrogate: 1-Chlorooctadecane 116 % 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:	05/23/2014	Sampling Date:	05/23/2014
Reported:	05/30/2014	Sampling Type:	Soil
Project Name:	RUBY FEDERAL WELL #9	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: WEST WALL SOUTH (H401584-05)

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	05/29/2014	ND	2.07	103	2.00	3.77		
Toluene*	<0.050	0.050	05/29/2014	ND	2.05	102	2.00	3.01		
Ethylbenzene*	<0.050	0.050	05/29/2014	ND	1.96	98.2	2.00	3.78		
Total Xylenes*	<0.150	0.150	05/29/2014	ND	6.15	102	6.00	3.77		
Total BTEx	<0.300	0.300	05/29/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	05/29/2014	ND	432	108	400	3.77		

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	05/27/2014	ND	199	99.5	200	1.11	
DRO >C10-C28	<10.0	10.0	05/27/2014	ND	213	107	200	0.0136	

Surrogate: 1-Chlorooctane 116 % 65.2-140

Surrogate: 1-Chlorooctadecane 115 % 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

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

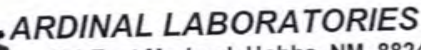
Cardinal Laboratories

*=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.



Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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.

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

#54

Appendix D

Photo Documentation

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

ConocoPhillips Ruby Federal Well #9

Unit Letter O, Section 18, T17S, R32E



Initial release area, facing north

11/14/13



Initial release area, facing NNE

11/14/13



Initial release area, facing east

11/14/13



Initial release area, facing east

11/14/13



Completed auguring for depth, facing northwest
11/19/13



Beginning scraping activities, facing south
4/2/14



Shoveling release around well head, facing north
4/2/14



Excavating area around point 4, facing west
4/2/14



Excavating around point 4, facing west 4/3/14



Excavation final, facing north 4/3/14



Excavation final, facing east 4/3/14



Exporting soil, facing northwest 4/3/14



Backfilling point 1 excavation, facing northeast 4/4/14



Backfilling point 2 excavation, facing southeast 4/4/14



Backdragging point 2 area, facing northeast 4/7/14



Backdragging point 1 area, facing northeast 4/24/14



Completed site, facing north

4/7/14



Completed site, facing southeast

4/7/14



Seeding pasture area, facing northeast

5/7/14



Completed site, facing southeast

5/7/14

Appendix E

Final 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

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	Conoco Phillips	Contact	
Address	29 Vacuum Complex Lane	Telephone No.	
Facility Name	Ruby Federal Well #9	Facility Type	Well
Surface Owner	BLM	Mineral Owner	BLM
		API No.	3002540360

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	18	17S	32E	480	South	1650	East	LEA

Latitude 32.8286948558908 Longitude -103.802651025065

NATURE OF RELEASE


Type of Release: Spill	Volume of Release: 51 BBLs	Volume Recovered: 30 BBLs
Source of Release: 1/4 inch Gauge	Date and Hour of Occurrence 11/11/13 8:00 am	Date and Hour of Discovery Same
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Jim Amos/ Geoffrey Leking	
By Whom? David May	Date and Hour: 11/12/13 3:50 pm	
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.* At the Ruby Federal #9 the top of a 1/4 inch gauge had blown out. Spill amount was 36 BPW and 15 BO with 20 BPW and 10 BO recovered. MSO blocked in 1/4 inch valve, removed handle and replaced gauge.

Describe Area Affected and Cleanup Action Taken.* On November 11th, 2013, the top of a 1/4 inch gauge blew out releasing 36 barrels of produced water and 15 barrels of oil over 4,360 square feet of primarily lease pad. A total of 20 barrels of produced water and 10 barrels of oil were recovered. The gauge was replaced and NMOCD and BLM were notified of the release on November 12th, 2013. An initial C-141 was signed on November 12th, 2013 and submitted to NMOCD and BLM. RECS personnel were on site beginning on November 14th, 2013 to assess the release. The release was sampled at the surface and with depth. Representative samples from the release were taken to a commercial laboratory for analysis. In all five sampling points, the surface samples showed elevated laboratory chloride levels, Gasoline Range Organics (GRO) readings, Diesel Range Organics (DRO) readings and BTEX readings. As Point 2, Point 3 and Point 5 were sampled with depth, all constituents dropped below regulatory standards between 1.5 ft and 3 ft bgs. On December 18th, 2013, a Corrective Action Plan (CAP) was submitted to NMOCD and BLM. NMOCD verbally approved the CAP on December 18th, 2013 and BLM approved the CAP on January 9th, 2014. Corrective action activities began at the site on April 2nd, 2014. The site was scraped down and composite samples for each scrape were taken and field tested for chlorides and organic vapors. The samples were taken to a commercial laboratory for analysis and returned values below regulatory standards. A total of 270 yards of contaminated soil was taken to a NMOCD approved facility for disposal. A total of 80 yards of sand and 300 yards of caliche were imported to the site to replace the contaminated soil taken for disposal. On April 7th, 2014 the site was backfilled and contoured to the surrounding area. On May 7th, 2014, the pasture area was seeded with BLM mix #2.

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: 	<u>OIL CONSERVATION DIVISION</u>		
Printed Name: SEAN ROBINSON	Approved by Environmental Specialist:		
Title: OPERATIONS SUPERVISOR	Approval Date:	Expiration Date:	
E-mail Address: sean.robinson@co. com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 9/2/14	Phone: 505-310-8873		