



LINN ENERGY

2130 W. Bender Blvd. Hobbs, NM 88241 Phone 575.738.1739

Linn H E West B 37 (2RP-2150)

Corrective Action Plan

API No. 30-015-26000

Release Date: January 9th, 2014

Unit Letter J, Section 3, Township 17S, Range 31E

Rice Environmental Consulting & Safety

P.O. Box 2948, Hobbs, NM 88241 Phone 575.393.2967

February 4th, 2014

Mike Bratcher

New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau – District 2 811 S. First St. Artesia, NM 88210

> RE: Corrective Action Plan Linn H E West B 37 (2RP-2150) UL/J sec. 3 T17S R31E API No. 30-015-26000

Mr. Bratcher:

Linn Energy (Linn) 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 5.5 miles west of Maljamar, New Mexico at UL/J sec. 2 T17S R31E. This site is in an area of no known groundwater.

On January 9th, 2014, Linn discovered a release of produced water. The #1 and #2 headers at the water station had been shut in due to a loss of pressure. The release was found at the West B #37 injection well. A cow had rubbed against the well head and accidentally pushed open a valve releasing produced water at pressure. The well head released a total of 10 barrels of produced water over 7,188 square feet of lease pad and pasture land. BLM and NMOCD were notified of the release on January 10th, 2014 and an initial C-141 was sent to NMOCD for their approval (Appendix A).

RECS personnel were on site beginning on January 15th, 2014 to assess the release. Four points within the release were sampled at the surface and with depth (Figure 1). Representative samples were taken to a commercial laboratory for analysis (Appendix B). Point 1 returned a laboratory chloride value below regulatory standards at 1.5 ft bgs. Point 2, Point 3 and Point 4 returned a laboratory chloride values below regulatory standards at 6 inches. Gasoline Range Organics (GRO) readings, Diesel Range Organics (DRO) readings and BTEX readings were all below regulatory standards at all sampling points.

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

Corrective Action Plan

Based on the laboratory analysis, the area around Point 2, Point 3 and Point 4 will be scraped to 6 inches bgs. The area around Point 1 will be scraped to 1.5 ft bgs (Figure 2). At the base of each scrape a bottom composite will be taken to a commercial laboratory to verify that all constituents are below 1,000 mg/kg chloride and 1,000 mg/kg TPH. The excavated soil will be taken to a NMOCD approved facility for disposal. The site will be backfilled with clean, imported soil and contoured to the surrounding location. Soil amendments will be added to the pasture area as needed and will be seeded with LPC mix. Vegetation above the liner will also provide a natural infiltration barrier for the site since plants capture water through their roots thereby reducing the volume of water moving through the vadose zone to groundwater.

Once the CAP activities have been completed, a report will be submitted detailing the CAP activities and with a request for 'remediation termination' or similar closure status of the regulatory file.

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

Sincerely,

Lara Weinheimer

Project Scientist

RECS

(575) 441-0431

Attachments:

Figure 1 – Initial Sampling Data

Figure 2 – Proposed Excavation

Appendix A – Initial C-141

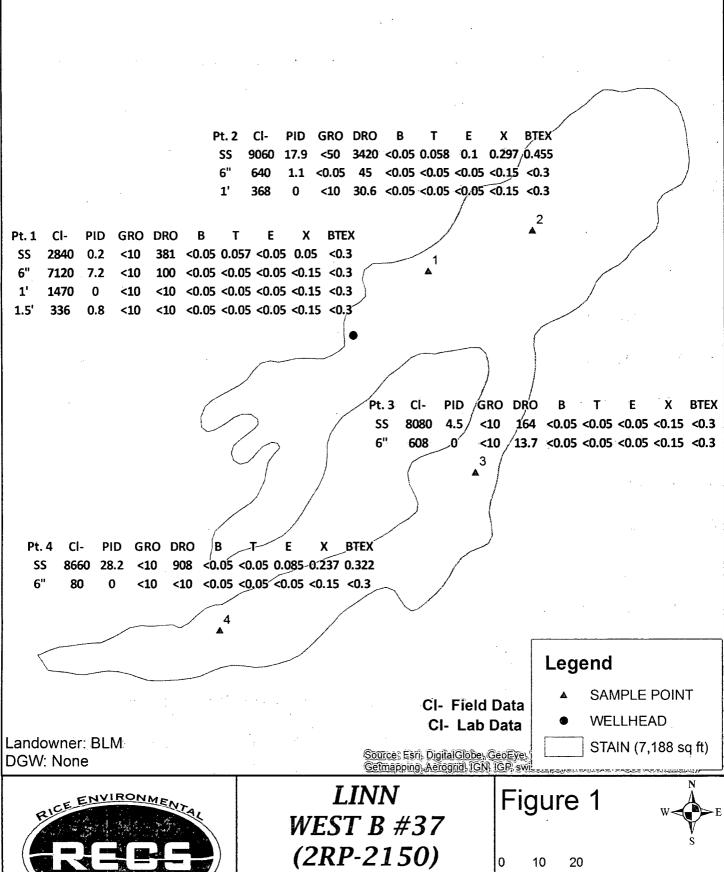
Appendix B – Laboratory Analyses

Appendix C – Photo Documentation

Figures

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

Initial Sampling Data

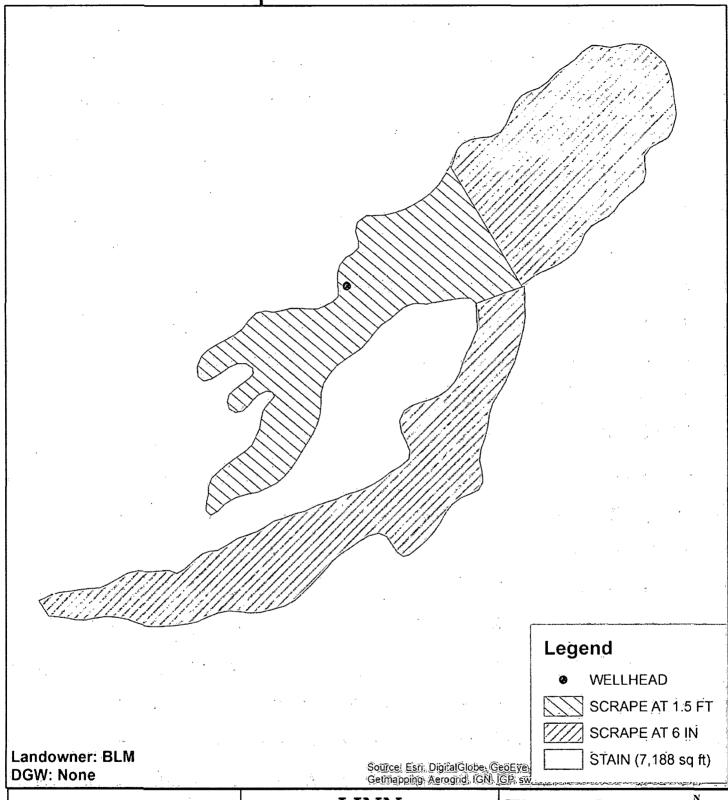




UL J SECTION 3 T-17-S R-31-E EDDY COUNTY, NM

GPS date: 1/15/14 AG Drawing date: 1/23/14 Drafted by: C. Ursanic

Proposed Excavation





LINN WEST B #37 (2RP-2150)

UL J SECTION 3 T-17-S R-31-E EDDY COUNTY, NM

Figure 2



0	10	20
	111	7500

GPS date: 1/15/14 AG Drawing date: 1/31/14 Drafted by: L. Weinheimer Appendix A
Initial C-141

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

State of New Mexico Energy Minerals and Natural Resources ARTESIA

FEB 06 2014

RECEIVED

Form C-141 Revised October 10, 2003

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

Submit-I-Copy to appropriate District Office in accordance with 19.15.29 NMAC

Release Notification and Corrective Action

					OPE	RA7	ΓOR		Initia	l Report		Final Report	
Name of Co	mpany: Li	nn Operating	5		Contact	Contact: Brian Wall							
		nder Hobbs,	NM 882	240		Telephone No.: 575-738-1739							
Facility Nan	ne: H E W	est B 37			Facility	Тур	e: Injection						
Surface Own	ner: Feder	al		Mineral Own	er:				API No	API No.: 30-015-26000			
				LOCATI	ON OF	REI	LEASE		•				
Unit Letter	Section	Township	Range		orth/South L		Feet from the	East/	West Line	County			
J	03	17S	31Ē	1980	·South		1980		East		Eddy	,	
				Latitude: 32.86	183 Long	itude	e: -103.85467						
				NATUI	RE OF R								
Type of Rele							Release: 10 bbls			Recovered: 0			
Source of Re					01/09	/2014		: 		Hour of Dise 4 4:00pm	covery:		
Was Immedia	ate Notice (Yes Γ	No □ Not Requi	i i		Whom? on- BLM						
By Whom? E	trian Wall					and F	lour 01/10/2014			• • • • • • • • • • • • • • • • • • • •			
Was a Water		ched?					olume Impacting t	the Wa	tercourse.				
			Yes 🛚	No			, -						
If a Watercou	irse was Im	pacted, Descri	be Fully.*	•									
due to loss of which line wa	e West B	solated lateral oss of pressur	lines off o	n Taken.*: Found that of injection trunk line ustabout crew to walk vered that cow had ru	and began o out lines in	penii atten	ng lines one at a t npt to find locatio	ime to on of le	find area lea ak. Found le	k would be ak at approx	in. Onc . 4:00p	e finding m on	
removed hand	dle. Deline		Send plan	en.*: Produced water of action to OCD and									
regulations all public health should their cor the environ	If operators or the envi operations be nment. In a	are required to ronment. The nave failed to a	report ar acceptant dequately CD accep	is true and complete nd/or file certain relea se of a C-141 report b investigate and reme stance of a C-141 report	se notification of the NMO diate contains	ons a CD m ninati	nd perform correct arked as "Final Roon that pose a thr	ctive ac Leport" reat to g	tions for rele does not reli ground water	eases which ieve the ope r, surface wa	may en rator of nter, hu	ndanger Tliability man health	
	nO:						OIL CON	SER'	VATION	DIVISIO	<u>N</u>		
Signature:	JB8 ~	4		·									
Printed Name	e: Brian Wa	ıll			Approv	ed by	District Supervis	sor:					
Title: Constr	uction Fore	man II			Approv	al Da	te:		Expiration	piration Date:			
E-mail Addre	ess: bwall@	linnenergy.co	m		Condition	ons o	f Approval:			Attached			

Date: 01/13/2014 Phone
* Attach Additional Sheets If Necessary Phone: 806-367-0645

Appendix B Laboratory Analyses

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



January 23, 2014

JACOB KAMPLAIN
RICE ENVIRONMENTAL CONSULTING & SAFETY LLC
419 W. CAIN
HOBBS, NM 88240

RE: H. E. WEST B #37

Enclosed are the results of analyses for samples received by the laboratory on 01/15/14 16:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accred certif.html.

Cardinal Laboratories is accreditated 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.

Celey D. Keene

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



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To:

(575) 397-1471

Received: Reported:

BTEX 8021B

GRO C6-C10 DRO >C10-C28 01/15/2014

01/23/2014

Project Number:

H. E. WEST B #37 NONE GIVEN

mg/kg

Project Location:

Project Name:

NOT GIVEN

Sampling Date:

01/15/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: PT. 1 @ SURFACE (H400137-01)

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	, RPD	Qualifier
Benzene*	<0.050	0.050	01/20/2014	ND	2.32	116	2.00	1.29	
Toluene*	0.057	0.050	01/20/2014	· ND	2.32	116	2.00	1.51	
Ethylbenzene*	<0.050	0.050	01/20/2014	ND	2.30	115	2.00	1.47	
Total Xylenes*	<0.150	0.150	01/20/2014	ND	6.74	112	6.00	1.49	
Total BTEX	<0.300	0.300	01/20/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	107 5	% 89.4-12	б						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2840	16.0	01/20/2014	ND	416	104	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS.	% Recovery	True Value QC	RPD	Qualifier

ND

ND

46.7

47.4

93.4

94.9

50.0

50.0

3.48

1.97

01/18/2014

01/18/2014

Analyzed By: MS

Surrogate: 1-Chlorooctane	81.9 %	65.2-140
Surrogate: 1-Chlorooctadecane	94.5 %	63.6-154

<10.0

381

10.0

10.0

*=Accredited Analyte Cardinal Laboratories

PLEASE NOTE: Lability and Damages. Cardnal'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 Cardnal be lable 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.

Celeg D. Keene

Celey D. Keene, Lab Director/Quality Manager



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

(575) 397-1471 Fax To:

Received:

01/15/2014

Sampling Date:

01/15/2014

Reported:

01/23/2014

Sampling Type: Sampling Condition: Soil

Project Name:

H. E. WEST B #37

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Project Location:

NOT GIVEN

Jodi Henson

Sample ID: PT. 2 @ SURFACE (H400137-02)

BTEX 8021B	mg/	kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/20/2014	ND	2.32	116	2.00	1.29	
Toluene*	0.058	0.050	01/20/2014	ND .	2.32	116	2.00	1.51	
Ethylbenzene*	0.100	0.050	01/20/2014	ND	2.30	115	2.00	1.47	
Total Xylenes*	0.297	0.150	01/20/2014	ND	6.74	112	6.00	1.49	
Total BTEX	0.455	0.300	01/20/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIE	129 5	% 89.4-12	6						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9060	16.0	01/21/2014	ND	416	104	400	3.92	
TPH 8015M	mg/	'kg	Analyze	d By: ms				•	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	01/18/2014	ND	46.7	93.4	50.0	3.48	
DRO >C10-C28	3420	50.0	01/18/2014	ND	47.4	94.9	50.0	1.97	
Surrogate: 1-Chlorooctane	89.9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	149	% 63.6-15	4						

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 fiable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or 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.

Celeg & Keine



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To:

(575) 397-1471

Received:

01/15/2014

Sampling Date:

01/15/2014

Reported:

01/23/2014

Sampling Type:

Soil

Project Name:

H. E. WEST B #37

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

NOT GIVEN

Sample ID: PT. 3 @ SURFACE (H400137-03)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	< 0.050	0.050	01/21/2014	ND	2.28	114	2.00	0.650	
Toluene*	< 0.050	0.050	01/21/2014	ND	2.23	112	2.00	0.677	
Ethylbenzene*	<0.050	0.050	01/21/2014	ND	2.26	113	2.00	0.431	
Total Xylenes*	<0.150	0.150	01/21/2014	ND	6.61	110	6.00	0.209	•
Total BTEX	<0.300	0.300	01/21/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIE	108 9	6 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP				<u> </u>	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8080	16.0	01/21/2014	ND	416	104	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/18/2014	ND	46.7	93.4	50.0	3.48	
DRO >C10-C28	164	10.0	01/18/2014	ND	47.4	94.9	50.0	1.97	
Surrogate: 1-Chlorooctane	72.6	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	99.4	% 63.6-15	4						

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 fiable 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. Keine



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To:

(575) 397-1471

Received:

01/15/2014

Sampling Date:

01/15/2014

Reported:

Sampling Type:

Soil

01/23/2014

Sampling Condition:

Cool & Intact

Project Name: Project Number: H. E. WEST B #37 NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

NOT GIVEN

Sample ID: PT. 4 @ SURFACE (H400137-04)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2014	ND	2.28	114	2.00	0.650	
Toluene*	<0.050	0.050	01/21/2014	ND	2.23	112	2.00	0.677	•
Ethylbenzene*	0.085	0.050	01/21/2014	ND	2.26	113	2.00	0.431	
Total Xylenes*	0.237	0.150	01/21/2014	ND	6.61	110	6.00	0.209	
Total BTEX	0.322	0.300	01/21/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	117 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8660	16.0	01/21/2014	ND	416	104	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/20/2014	· ND	185	92.3	200	6.86	
DRO >C10-C28	908	10.0	01/20/2014	ND	183	91.3	200	6.89	
Surrogate: 1-Chlorooctane	81.1	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	94.8	% 63.6-15	4						

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 PLEASE NOTE: Liability and comingles. Curronness including and circums excusive termoury per only Curron any other cause with source uses in contract or cort, show or miner to use amounts pair or contract or cort, show or miner to use any other cause whatsoever shall be deemed waived unless made in withing and received by Carrin within thirty (30) days after completion of the applicable service. In no event shall Carrinal be labele 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 Carrinal, 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. Keine



Notes and Definitions

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 SM4500CI-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 claims 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 evereth in full with written approval of Cardinal Laboratories.

Celey D. Keene

ARDI

ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: 2805	BILL TO	ANALYSIS REQUEST
Project Manager; Jacob Kamplain	P.O. #:	
Address:	Company:]
City: Hobbs State: NM ZIp: 88240	Attn:	1 6
Phone #:	Address:	
Project #: Project Owner:	City:],,
Project Name: Linn H.E. West B#3)	State: Zip:	
Project Location:	Phone #:	H 8015 BTEX XAS TP Cation TDS
Sampler Name: PM blv Gybres	Fax #:	
FOR LAB USE ONLY MATR	PRESERV. SAMPLING	
## CONTAINERS GROUNDWATER WASTEWATER SOIL.	SLUDGE OTHER: ACIDIBASE: ICE / COOL OTHER: A HAVE A	Complete
1PH.105	1-6-4 1.30	
2 0+.2Q5 GIIV	1-16-4 1:35	
3 0+3@5 61 V	1-15-14 1:40	
4 9+.4@5	1-15-14 1:45	11/
	·	
		+
- - - - - - - - - - - - - - - -		
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether bosed in analyses. All dalms including those for negligence and any other cause whatsoever shall be deemed walved unless made in w	tract or fort, shall be limited to the amount paid by the client for	or the

PLEASE NOTE: Liability and Damages, Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or lort, shall be limited to the amount-paid by the client for the analyses, All claims including those for negligence and any other cause whatacever shall be deemed waved unless a made in writing and received by Cardinal within 30 days after complation of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its substitiaties, attributes 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: 15-14 Recgive	di Henson	Phone Result: ☐ Yes ☑ No Add'l Phone #: Fax Result: ☐ Yes ☑ No Add'l Fax #: REMARKS:
Relinquished By:	Date: Regelve	od By;	email results knorman@rice-ecs.com hconder@rice-ecs.com; Lweinheimer@rice-ecs.com; kjones@riceswd.com;
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition CHECKEA BY: Cool Intact Lives Lives No No	Lpena@riceswd.com; sedwards@rice-ecs.com agroves@rice-ecs.com

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



January 22, 2014

JACOB KAMPLAIN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: LINN WEST B #37

Enclosed are the results of analyses for samples received by the laboratory on 01/21/14 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/ga/lab accred certif.html.

Cardinal Laboratories is accreditated 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.

Celey & Keine

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



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To:

(575) 397-1471

Received:

01/21/2014

Reported:

01/22/2014

Project Name: Project Number: LINN WEST B #37 NONE GIVEN

Project Location:

T17S R31E

Sampling Date:

01/15/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: POINT 1 @ 6" (H400182-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2014	ND	2.28	114	2.00	0.650	
Toluene*	< 0.050	0.050	01/21/2014	ND	2.23	112	2.00	0.677	
Ethylbenzene*	< 0.050	0.050	01/21/2014	ND	2.26	113	2.00	0.431	
Total Xylenes*	<0.150	0.150	01/21/2014	ND	6.61	110	6.00	0.209	
Total BTEX	<0.300	0.300	01/21/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIC	111 %	6 89.4-12	6					·	
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7120	16.0	01/22/2014	ND	416	104	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/22/2014	ND	210	105	200	6.84	
DRO >C10-C28	100	10.0	01/22/2014	ND	204	102	200	6.75	
Surrogate: 1-Chlorooctane	83.3 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	88.1	63.6-15	4						

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 subclidaries, 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. Keine



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To:

(575) 397-1471

Received:

01/21/2014

Reported:

01/22/2014

Project Name: Project Number: LINN WEST B #37 NONE GIVEN

Project Location:

T17S R31E

Sampling Date:

01/15/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: POINT 1 @ 1' (H400182-02)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2014	ND	2.28	114	2.00	0.650	
Toluene*	<0.050	0.050	01/21/2014	ND	2.23	112	2.00	0.677	
Ethylbenzene*	<0.050	0.050	01/21/2014	ND	2.26	113	2.00	0.431	
Total Xylenes*	<0.150	0.150	01/21/2014	ND	6.61	110	6.00	0.209	
Total BTEX	<0.300	0.300	01/21/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIE	107 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1470	16.0	01/22/2014	ND	416	104	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/22/2014	ND	210	105	200	6.84	
DRO >C10-C28	<10.0	10.0	01/22/2014	ND	204	102	200	6.75	
Surrogate: 1-Chlorooctane	90.3	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	90.0	% 63.6-15	4						

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 whatoever 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 subcidaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. Its report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Kuna

Celey D. Keene, Lab Director/Quality Manager



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To:

(575) 397-1471

Received:

01/21/2014

Reported:

01/22/2014

Project Name: Project Number: LINN WEST B #37 NONE GIVEN

T17S R31E

Sampling Date:

01/15/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Project Location:

Sample ID: POINT 2 @ 6" (H400182-03)

BTEX 8021B	mg,	/kg	Analyze	d By: MS	-				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2014	ND	2.28	114	2.00	0.650	
Toluene*	<0.050	0.050	01/21/2014	ND	2.23	112	2.00	0.677	
Ethylbenzene*	<0.050	0.050	01/21/2014	ND	2,26	113	2.00	0.431	
Total Xylenes*	<0.150	0.150	01/21/2014	ND	6.61	110	6.00	0.209	
Total BTEX	<0.300	0.300	01/21/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIE	. 107	% 89.4-12	6						-
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte .	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	01/22/2014	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: ms			. <u>-</u> .		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/22/2014	ND	210	105	200	6.84	
DRO >C10-C28	45.0	10.0	01/22/2014	ND	. 204	102	200	6.75	
Surrogate: 1-Chlorooctane .	97.8	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	94.6	% 63.6-15	4.						

Cardinal Laboratories

*=Accredited Analyte

All claims, including those for negligence and any other cause whatspeere 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. Keine



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To:

(575) 397-1471

Received:

01/21/2014

Sampling Date:

01/15/2014

Reported:

01/22/2014

Sampling Type:

Soil

Project Name:

LINN WEST B #37

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

T17S R31E

Sample ID: POINT 2 @ 1' (H400182-04)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte ·	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2014	ND	2.28	114	2.00	0.650	
Toluene*	< 0.050	0.050	01/21/2014	ND	2.23	112	2.00	0.677	
Ethylbenzene*	<0.050	0.050	01/21/2014	ND	2.26	113	2.00	0.431	
Total Xylenes*	<0.150	0.150	01/21/2014	ND	6.61	110	6.00	0.209	
Total BTEX	<0.300	0.300	01/21/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	107 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	01/22/2014	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	01/22/2014	ND	210	105	200	6.84	
DRO >C10-C28	30.6	10.0	01/22/2014	ND	204	102	200	6.75	
Surrogate: 1-Chlorooctane	86.6	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	87.2	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's flability and clients 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 whatscever 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. Keena



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To:

(575) 397-1471

Annimas During

Received:

01/21/2014

Sampling Date:

01/15/2014

Reported:

01/22/2014

Sampling Type:

Soil

Project Name:

LINN WEST B #37

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

90.6%

63.6-154

Project Location:

T17S R31E

Sample Received By:

Jodi Henson

Sample ID: POINT 3 @ 6" (H400182-05)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2014	ND	2.28	114	2.00	0.650	
Toluene*	<0.050	0.050	01/21/2014	ND	2.23	112	2.00	0.677	
Ethylbenzene*	<0.050	0.050	01/21/2014	ND	2.26	113	2.00	0.431	
Total Xylenes*	<0.150	0.150	01/21/2014	ND	6.61	110	6.00	0.209	
Total BTEX	<0.300	0.300	01/21/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	107 :	% 89.4-12	6						
Chloride, SM4500CI-B	mg,	'kg	Analyze	d By: AP			·		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	01/22/2014	ND	416	104	400	3.92	
TPH 8015M	mg,	'kg	Analyze	d By: ms					<u> </u>
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/22/2014	ND	210	105	200	6.84	
DRO >C10-C28	13.7	10.0	01/22/2014	ND	204	102	200	6.75	
Surrogate: 1-Chlorooctane	92.0	% 65.2-14	0						

Cardinal Laboratories

Surrogate: 1-Chlorooctadecane

*=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.

Celeg & Keine

Celey D. Keene, Lab Director/Quality Manager



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To:

(575) 397-1471

Received:

01/21/2014

Reported:

01/22/2014

Project Name:

LINN WEST B #37

Project Number:

NONE GIVEN

Sampling Date:

01/15/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Project Location:

T17S R31E

Sample ID: POINT 4 @ 6" (H400182-06)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2014	ND	2.28	114	2.00	0.650	
Toluene*	<0.050	0.050	01/21/2014	ND	2.23	112	2.00	0.677	
Ethylbenzene*	<0.050	0.050	01/21/2014	ND	2.26	113	2.00	0.431	
Total Xylenes*	< 0.150	0.150	01/21/2014	ND	6.61	110	6.00	0.209	
Total BTEX	<0.300	0.300	01/21/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	108 %	6 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	01/22/2014	ND	416	104	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/22/2014	ND	210	105	200	6.84	
DRO >C10-C28	<10.0	10.0	01/22/2014	ND	204	102	200	6.75	
Surrogate: 1-Chlorooctane	93.9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	95.3	63.6-15	4						

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. Keine

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 Client for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Clarim alwithin thirty (30) days after completion of the appelicable 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, is 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



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES

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

Company Name: 26(5)			ANALYSIS REQUEST																			
Project Manager	" Dacob Vampain					Ρ.	O. #:											1				
Address:						Co	mpa	ny:						1	S							
City: Hobbs	State: NM	Zip: 8	8240			At	tn:] -				9		.					٠.
Phone #:	Fax #:	• • • .				Ac	idres	s:]				🖻	'	1					
Project #:	Project Owner	r: ·				Ci	ty:		٠.	١.]	≥			1/8	1						
Project Name:	inn West B#37						ate:		Zip:		Chlorides	5	×	TPH	Cations/Anions				1			
Project Location	1:TI75 R318				_	PI	one	#:]	8015	BTEX	-	atic	LDS						
Sampler Name:	Amber Groves					Fa	x #:			• .] 을	1 2	BI	X X	Ö	F			ľ			
Lab I.D.	Sample I.D.	(Ġ)RAB OR (C)OMP. #ICONTAINERS	GROUNDWATER	WASTEWATER SOIL W	TRIX	LUGGE THER:		ICE / COOL SERV			ō	TPH		Texas	Complete							
11100101	Print 10/10"			> °	0 6	<i>n</i> O	4	= 10	1-15-14		V	1	1	 	 		+	1	†		+ -	$\vdash \vdash$
2	Pointle!	G1	1	V		+-		1.		12:05	1	1	V		 	1	 	1				\vdash
= 3	Printa@6"	61	1	- V			1			2:15	V	~	1							ļ		
4		Ģ		· ·					1-15-1	12:20	V	~	V		<u> </u>							
5	Point 2011 Point 306"	61		√					1-16-16	1 2:30	~	V	V	<u> </u>	ļ							
6	Point 4006"	61	4-		$\vdash \downarrow$	\perp		_	1-16-11	12:40	1	~	/	ļ	<u> </u>		ļ	ļ	 		<u> </u>	<u> </u>
		-		-	-		\vdash		<u> </u>	_	<u> </u>	 	-	-	├	-	-	-	ļ ·	<u> </u>	-	
		 	+		$\vdash \vdash$	- -	+		· ·	·	+-	+	 	 	-	-	 	 	-		+	├──
				+	\vdash	+			1		-	+	 	 	+-	 	 - -	+	╂	-	-	-
analyses. All claims includit service. In no event shall C	GNOVE TIME: 10	deemed wa g without lim Cardinal, reg	nitation, bu pardless of	ss made in usiness into twhether By:	writing : erruption	and rec as, loss	eived by of use, o	Cardinal r loss of	within 30 days profits incurred	after completion of by client, its subsid reasons or otherw Phone Re Fax Resu REMARK	the applications, rise. esult: ult:	□ Ye		No No		Phone Fax #:				· .		
Relinquished By	Date: Time:	Rece	Sample Condition CHECKED BY:					email results Knorman@rice-ecs.com Kjones@riceswd.com; jkamplain@rice-ecs.com hconder@rice-ecs.com; Lweinheimer@rice-ecs.com;														
	: (Circle One) - Bus - Other:			Ooi Yes	Intact		1	N.	KED BY:	sedwa										es@ri	ce-ecs	s.com

† Cardinal cannot accept verbal changes. Please fax written changes to 505-39312476



January 31, 2014

JACOB KAMPLAIN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: WEST B #37

Enclosed are the results of analyses for samples received by the laboratory on 01/29/14 16:30.

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/ga/lab accred certif.html.

Cardinal Laboratories is accreditated 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.

Celey D. Keens

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



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To: (575) 397-1471

Received:

01/29/2014

Sampling Date:

01/29/2014

Reported:

01/31/2014

Sampling Type:

Soil

Project Name:

WEST B #37 NONE GIVEN

Sampling Condition: Sample Received By: Cool & Intact

Project Number: Project Location:

NONE GIVEN

95.2 %

63.6-154

Kathy Perez

Sample ID: PT. 1 @ 1.5' (H400292-01)

BTEX 8021B	(8021B mg/kg		Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/31/2014	ND	2.26	113	2.00	2.91	
Toluene*	< 0.050	0.050	01/31/2014	ND	2.24	112	2.00	2.60	
Ethylbenzene*	<0.050	0.050	01/31/2014	ND	2.23	111	2.00	2.55	
Total Xylenes*	<0.150	0.150	01/31/2014	ND	6.44	107	6.00	3.04	
Total BTEX	<0.300	0.300	01/31/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIE	110 %	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	01/30/2014	ND	416	104	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/31/2014	ND	218	109	200	10.7	
DRO >C10-C28	<10.0	10.0	01/31/2014	ND	225	112	200	14.2	
Surrogate: 1-Chlorooctane	79.9	% 65.2-14	0	•		٧			

Cardinal Laboratories

Surrogate: 1-Chlorooctadecane

*=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 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



ND

Notes and Definitions

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

Analyte NOT DETECTED at or above the reporting limit

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's flaibility and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. At 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 subcidaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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. Kune

ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	RECS					LL TO	an Altaer				- /	NAL	YSIS	RE	QUE	ST		<u> </u>	
Project Manager				P.O. #:														. [
Address:				Compa	ny:	·					.	S					.	`.	i ' '
City: Hobbs	State: NM	Zip: 8824	40	Attn:							- 1	o			·				
Phone #:	Fax #:			Address:								Ţ					1		1
Project #:	Project Owne	r:		City:					Σ		工	//s						1.	•
Project Name:				State:		Zip:		Chlorides	5	×	TH	Cations/Anions						٠.	l ·· ˈ
Project Location	1: West B # 37		·:	Phone	#: ,			늰	801	BTEX	S	atio	TDS				: 1		ŀ . '
Sampler Name:				Fax #:				윤		BT	Texas	Ü	Ξ				· .		
FOR LAB USE ONLY			MATRIX	PRE	SERV.	SAMPL	NG	$\overline{\mathbf{o}}$	ЬH		<u>6</u>	ţe.					ļ		
		OMP S				<u> </u>	<u> </u>		-		[-	Complete	·						'
		(C)	TER								<i>i</i> .	mŗ							1
Lab I.D.	Sample I.D.	(G)RAB OR (C)ON # CONTAINERS	WASTEWATER SOIL OIL	OTHER: ACID/BASE:	OTHER:	•					.	2							
H100292		(G)RAI	WASTEW SOIL OIL	OTHER ACID/BA	기물	DATE	TIMĖ				·)				1	ļ		
Thurs	Doint 1 (2 1.5'	1/1	$0 \leq 0 0 \overline{v}$	OA	2 0	1-29-14	10:10	7	X	X				<u> </u>					
	100 WT 1 (2) 1.3	611	+ 1 1	 	+	1.0)-11	10.10			^		.							<u> </u>
		1 1 1	1. 1	 	+								· · · · ·						
			 	1 1 1	_								<u> </u>	 		<u> </u>			
				111							-			<u> </u>					
																		·	
					1_														
e jet t				1_1_1				<u></u>							L	 	<u> </u>		
	d Damages. Cardinal's liability and client's exclusive remedy for					<u> </u>				<u></u>					<u> </u>				<u></u>

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any draim 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 tee, or loss of profits incurred by citent, its substitutiones, such as the consequential damages in programs of the consequential damages to the consequenti

Relinquished By:	Date A LC R	Received By: \		Phone Result: Yes No Add'l Phone #:
	12011		<i>?</i>	Fax Result: ☐ Yes ☑ No Add'l Fax #:
Kyle SchnaidL	Time 30	Musi		REMARKS:
Relinquished By:	Date:	teceived;By:		email results
	Time:	U	1	Knorman@rice-ecs.com
Delivered By: (Circle One)		Sample Condition	CHECKED BY:	Kjones@riceswd.com; jkamplain@rice-ecs.com
Sampler - UPS - Bus - Other:		Cool Imagt 7	(Initials)	hconder@rice-ecs.com; Lweinheimer@rice-ecs.com Kschnuigt@rice-ecs.com

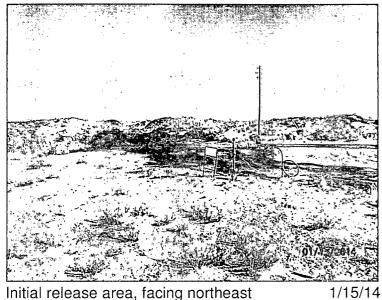
[†] Cardinal cannot accept verbal changes. Please fax written changes to 505-393-247



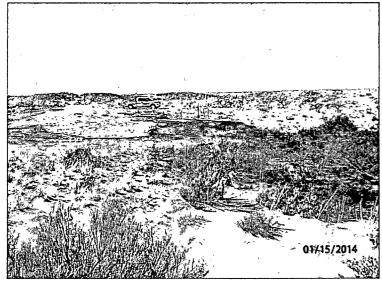
RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948 Hobbs, NM 88241
Phone 575.393.2967

Linn H E West B #37

Unit Letter J, Section 3, T17S, R31E

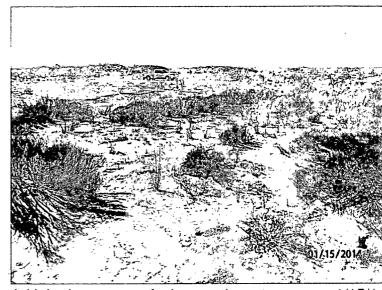


Initial release area, facing northeast



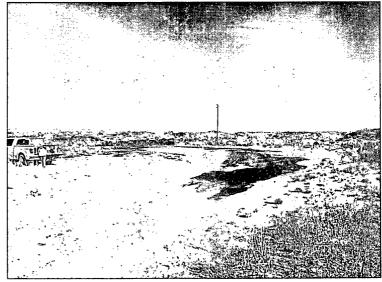
Initial release area, facing west

1/15/14



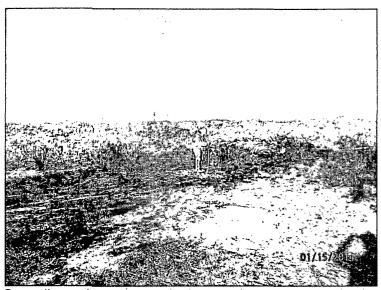
Initial release area, facing southwest

1/15/14



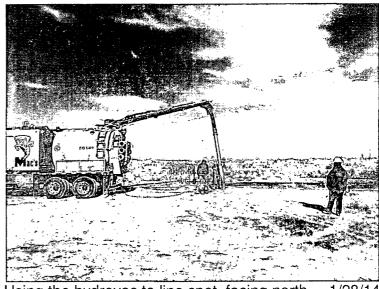
Initial release area, facing northeast

1/15/14



Sampling release area, facing northeast

1/15/14



Using the hydrovac to line spot, facing north 1/28/14