

LINN ENERGY

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

H.E. West B #53

Closure Report

2RP-1230

API 30-015-27148

BLM Event No. NU12157TG

Release Date: July 3, 2012

Unit Letter H, Section 9, Township 17S, Range 31E

Rice Environmental Consulting & Safety

P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

November 29, 2012

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

**RE: TERMINATION REQUEST
Linn Energy – H.E. West B #053 AD
UL/B sec. 9 T17S R31E
API No. 30-015-27148
2RP-1230
BLM Event No. NU12157TG**

Mr. Bratcher:

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

Background and Previous Work

The site is an accidental discharge of crude oil and produced water associated with the H.E. West B #053. A surface poly line ruptured at a seam and released fluids onto pasture land. The line was repaired and an initial form C-141 was submitted by Linn Energy on July 13, 2012 (Appendix A). The site is located approximately 7 miles east of Loco Hills, in unit letter 'B' of section 9, T17S, R31E in Eddy County, New Mexico. Groundwater in the area is approximately 188 ft. below ground surface (bgs).

On August 3, 2012, RECS personnel collected samples at depth from Vertical #1 located in a central position within the leak area (Figure 1). The samples were field tested for chloride and hydrocarbons. The samples were submitted to a commercial laboratory for chloride and TPH (GRO/DRO) analyses (Appendix C).

On August 27, 2012, a Corrective Action Plan (CAP) was submitted to NMOCD District 2 and BLM. In the plan, RECS proposed to excavate the impacted area to chloride values less than or equal to 1,000 mg/kg or 3 ft bgs. Final grab samples taken from the excavation bottom and sidewalls would be submitted to a commercial laboratory for chloride and TPH confirmation. Impacted soils would be removed to a NMOCD approved disposal facility, and the excavation would be backfilled with clean, imported soil. The area would be contoured to the surrounding landscape and would be re-seeded with the appropriate BLM seed mixture.

On September 11, 2012, BLM responded by email to the CAP with stipulations (Appendix D). The stipulations stated that the leak area would need to be excavated to 3 ft bgs, and further vertical delineation would be required. In addition, the previous vertical trench would need to be re-excavated and backfilled with clean soil.

The previous trench, Vertical #1, was re-excavated on October 1, 2012. A soil sample was collected from the bottom of the trench at 9 ft. 6 in. bgs and field tested to confirm that all previously excavated soils were removed. The trench was backfilled with clean, imported soil. The bottom vertical sample and a sample of the imported soil were submitted to a laboratory for chloride and TPH analyses (Appendix C).

The leak area was excavated to 3 ft bgs, and Vertical #2 was advanced within the excavation to 16 ft bgs (Figure 2). Samples were collected at 1 ft. intervals and submitted to a commercial laboratory for chloride, TPH and BTEX analyses (Appendix C). The excavated soils were removed to a NMOCD approved disposal facility.

On October 16, 2012, an amended CAP was submitted to NMOCD and BLM. In the amended plan, RECS proposed to excavate the impacted area to 5 ft. bgs. The excavation side wall samples would not exceed 1,000 mg/kg chloride. Final grab samples taken from the excavation bottom and sidewalls would be submitted to a laboratory for chloride and TPH confirmation. Excavated soils would be removed to a NMOCD approved disposal facility. The excavation would be backfilled with clean, imported soil and the top 2 ft. of the excavation would be backfilled with topsoil similar to the native terrain. The site would be contoured to the surrounding landscape with erosion controls. The entire area would then be re-seeded with BLM seed mix #2 and #4 in a 50/50 mix.

On October 25, 2012, BLM responded by email to the amended CAP (Appendix D). The response stated that, based on the more recent sample data, the excavation should be completed to a depth of 4 ft. bgs or until chloride dropped below 1,000 mg/kg and TPH dropped below 1,000 mg/kg. The response also stated the need to address a historical leak overlapping and surrounding the current leak site.

The current leak area was excavated to 4 ft. bgs (Figure 3). On November 12, 2012, grab samples from the excavation bottom and side walls were collected and submitted to a laboratory for chloride, TPH, and BTEX confirmation (Appendix C). Chloride and TPH levels were well below 1,000 mg/kg each, and BTEX levels were non-detect.

Sections of the historical leak area were also excavated from 6 in. to 1 ft. bgs based on results of field testing (Figure 3). Representative grab samples from the excavation bottoms and sidewalls were submitted to a laboratory for chloride, TPH, and BTEX confirmation (Appendix C).

Impacted soils were removed to a NMOCD approved disposal facility. The excavations were backfilled with clean, imported soil similar to the native terrain. The site was contoured to the surrounding landscape with erosion controls installed. The site will be seeded with BLM seed mix #2 and #4 in a 50/50 mix. See Appendix B for photographs of field activities.

Conclusion

Due to the removal of impacted soils and the absence of groundwater in the area, RECS, on behalf of Linn Energy, submits the final Form C-141, and respectfully requests the closure of the regulatory file for this site.

RECS appreciates the opportunity to work with you on this project. Please call me at the number below if you have any questions or comments.

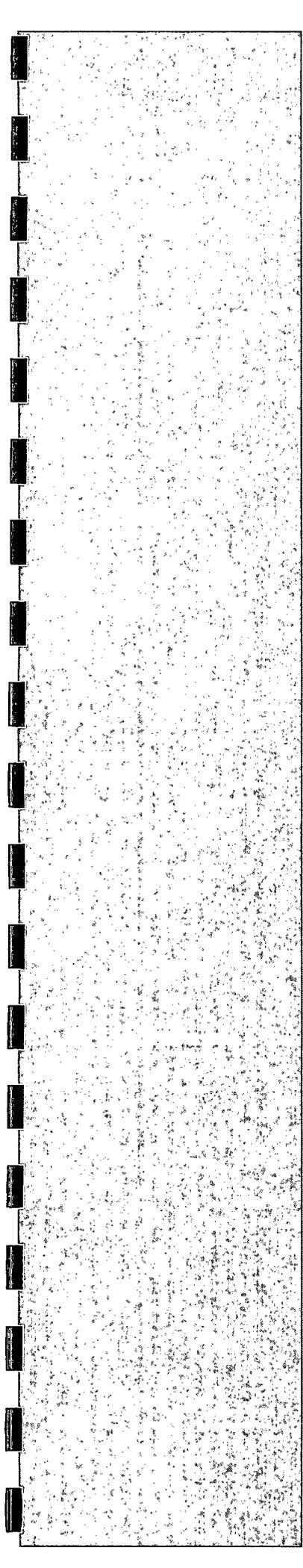
Sincerely,



Bruce Baker
Head Foreman
RECS
(575) 631-5157

Attachments:

- Figure 1: Site Plat with Vertical #1 Lab Data
- Figure 2: Site Plat with Vertical #2 Lab Data
- Figure 3: Site Plat with Excavation Lab Data
- Appendix A: Initial Form C-141
- Appendix B: Site Photographs
- Appendix C: Laboratory Results
- Appendix D: BLM Correspondences
- Appendix E: Final Form C-141



Figures

RICE Environmental Consulting and Safety (RECS)
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

Vertical Lab Data

Vertical #1

Sample Description	Cl-	PID	Lab Cl-	GRO	DRO
surface	6,680	4.4	11,800	<100	23,500
1'	837	4.4			
2'	772	26.8			
3'	377	8			
4'	930	5.8			
5'	3,049	4.7			
6'	1,155	3.2			
7'	405	3.2			
8'	116	2.2	80	<10	26
9'	114	2	32	<10	<10



Legend

- ▲ VERTICAL 1
- × SOURCE
- ABOVE GROUND POLY LINE
- STAIN (647 sq ft)

DGW = 188 ft

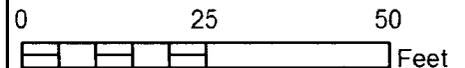
Landowner = BLM



LINN ENERGY
H.E. WEST B #053

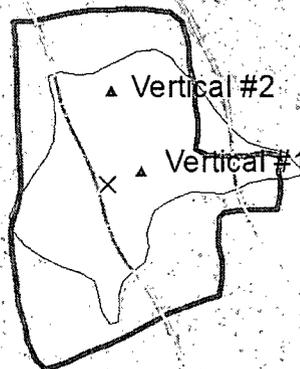
LEGALS: UL/B sec. 9
 T-17-S R-31-E
 EDDY COUNTY, NM

Figure 1



GPS date: 8/3/12 DH
 Drawing date: 8/13/12
 Drafted by: L. Weinheimer

Vertical Lab Data



Vertical #2 Lab Data							
Sample Description	Lab Cl-	GRO	DRO	B	T	E	X
3'	720	272	4,890	<0.05	<0.05	0.185	1.11
4'	576	322	9,020	<0.2	<0.2	0.452	2.19
5'	512	<10	<10	<0.05	<0.05	<0.05	<0.15
6'	640	<10	<10	<0.05	<0.05	<0.05	<0.15
7'	432	<10	<10	<0.05	<0.05	<0.05	<0.15
8'	720	<10	<10	<0.05	<0.05	<0.05	<0.15
9'	384	<10	13.8	<0.05	<0.05	<0.05	<0.15
10'	976	<10	<10	<0.05	<0.05	<0.05	<0.15
11'	1,720	<10	<10	<0.05	<0.05	<0.05	<0.15
12'	1,380	<10	<10	<0.05	<0.05	<0.05	<0.15
13'	272	<10	<10	<0.05	<0.05	<0.05	<0.15
14'	528	<10	<10	<0.05	<0.05	<0.05	<0.15
15'	432	<10	<10	<0.05	<0.05	<0.05	<0.15
16'	160	<10	<10	<0.05	<0.05	<0.05	<0.15

Legend

- ▲ VERTICALS
- × SOURCE
- ABOVE GROUND POLY LINE
- STAIN (647 sq ft)
- SCRAPE AT 3 FT BGS

DGW = 188 ft

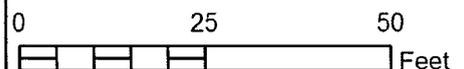
Landowner = BLM



LINN ENERGY
H.E. WEST B #053

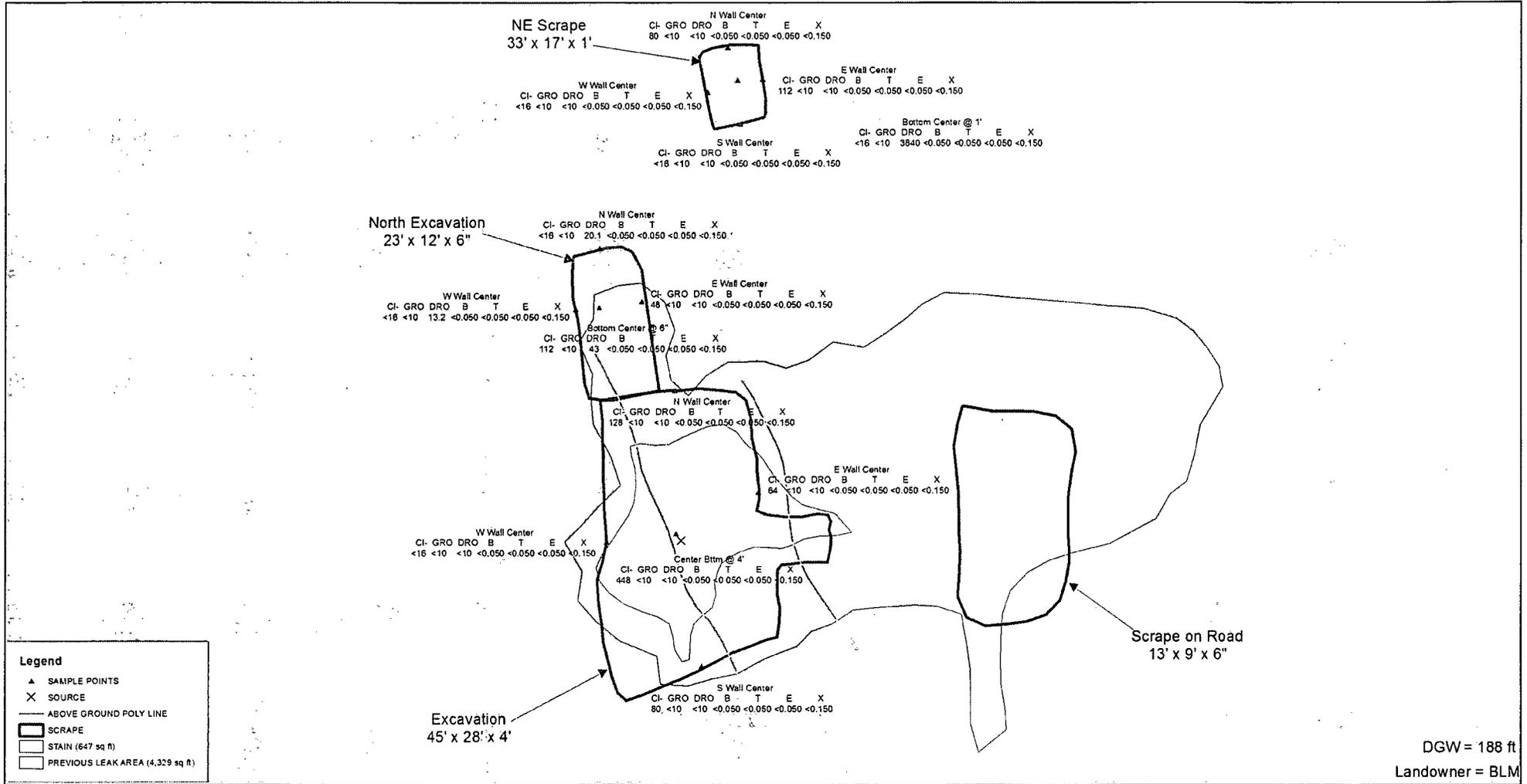
LEGALS: UL/B sec. 9
T-17-S R-31-E
EDDY COUNTY, NM

Figure 2



GPS date: 10/3/12 DH
Drawing date: 10/12/12
Drafted by: L. Weinheimer

Excavation Lab Data



Legend

- ▲ SAMPLE POINTS
- × SOURCE
- ABOVE GROUND POLY LINE
- ▭ SCRAPE
- ▭ STAIN (647 sq ft)
- ▭ PREVIOUS LEAK AREA (4,329 sq ft)

DGW = 188 ft
Landowner = BLM



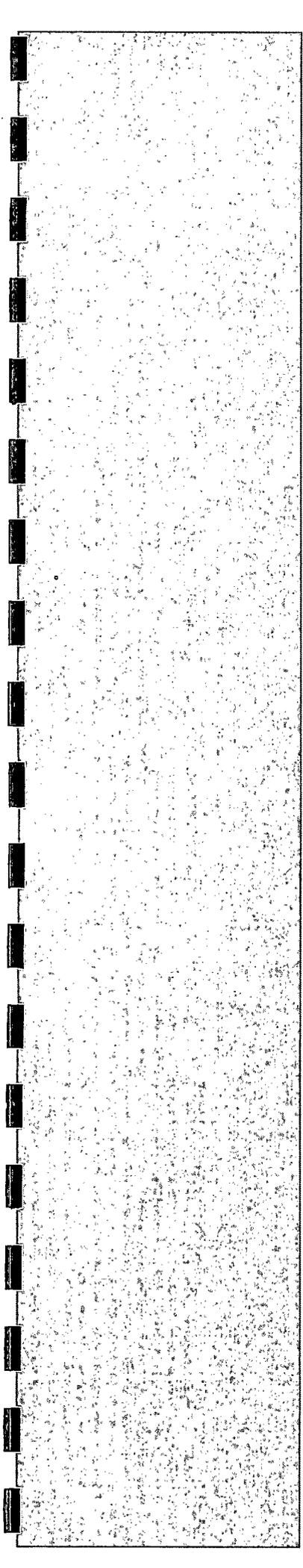
LINN ENERGY
H.E. WEST B #053

LEGALS: UL/B sec. 9
T-17-S R-31-E
EDDY COUNTY, NM

Figure 3

0 9 18 Feet

GPS date: 10/31/12 JK
Drawing date: 11/5/12
Drafted by: L. Weinheimer



Appendix A

Initial Form C-141

RICE Environmental Consulting and Safety (RECS)
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

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

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

RECEIVED
JUL 13 2012
NMOCD ARTESIA

Form C-141
Revised October 10, 2003
This report is appropriate District Office in accordance with 19 15.29 NMAC

Release Notification and Corrective Action

nJM/W1220955726 OPERATOR Initial Report Final Report

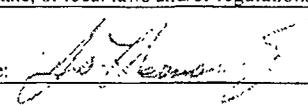
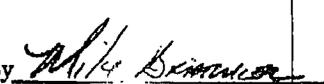
Name of Company: Linn Operating 269324	Contact: Joe Hernandez
Address: 2130 W. Bender Hobbs, NM 88240	Telephone No.: 575-738-1739
Facility Name: H.E. West B #53	Facility Type: Oil
Surface Owner: Federal	Mineral Owner: Federal
API No.: 3001527148	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	9	17S	31E	1350	North	1250	East	Eddy

Latitude: 32.85266 Longitude: -103.86957

NATURE OF RELEASE

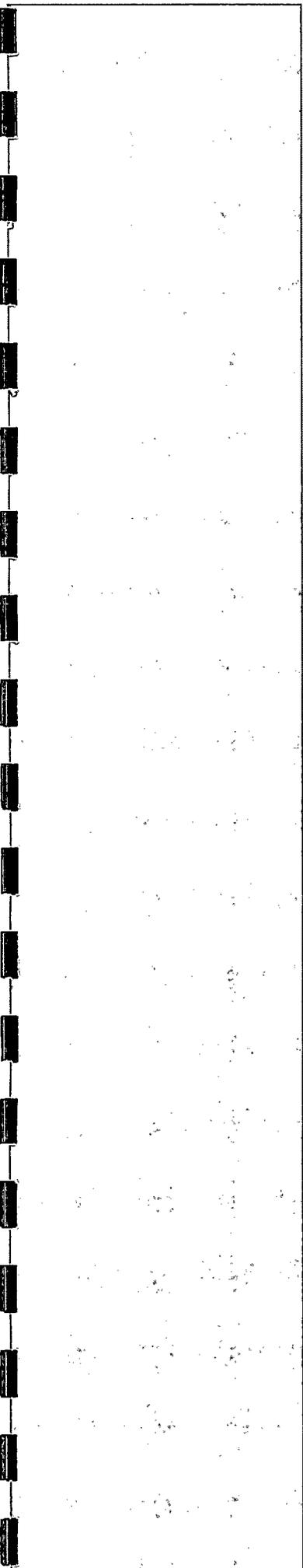
Type of Release: Oil / Produced Water	Volume of Release: 7 gals / 3gals	Volume Recovered: 0 / 0
Source of Release: Pipeline	Date and Hour of Occurrence: 07/03/2012 2:30pm	Date and Hour of Discovery: 07/03/2012 3pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? M. Bratcher -NM OCD Terry Gregston-BLM	
By Whom? Joe Hernandez	Date and Hour 07/05/2012 1pm	
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.*: 3" poly flow line at a seam come apart causing the leak.		
Describe Area Affected and Cleanup Action Taken.*: 10' x 10' area 300' North of wellhead. Remedial action pending....		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Joe Hernandez	Approved by District Supervisor: JUL 27 2012	Signed By 
Title: Production Foreman	Approval Date:	Expiration Date:
E-mail Address: jhernandez@linenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 07/13/2012 Phone: 575-942-9492		

* Attach Additional Sheets If Necessary

Remediation per OCD Rules & Guidelines. **SUBMIT REMEDIATION PROPOSAL NOT LATER THAN:**

8/27/12

2RP-1230



Appendix B

Site Photographs

RICE Environmental Consulting and Safety (RECS)
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

Appendix C

Laboratory Results

RICE Environmental Consulting and Safety (RECS)
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

August 11, 2012

BRUCE BAKER

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

112 W. TAYLOR

HOBBS, NM 88240

RE: WEST B #053 AD

Enclosed are the results of analyses for samples received by the laboratory on 08/08/12 9:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	08/08/2012	Sampling Date:	08/03/2012
Reported:	08/11/2012	Sampling Type:	Soil
Project Name:	WEST B #053 AD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: VERTICAL #1 SURFACE (H201833-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11800	16.0	08/08/2012	ND	384	96.0	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<100	100	08/08/2012	ND	181	90.5	200	4.00	
DRO >C10-C28	23500	100	08/08/2012	ND	181	90.3	200	4.45	

Surrogate: 1-Chlorooctane 86.8 % 65.2-140
 Surrogate: 1-Chlorooctadecane 338 % 63.6-154

Sample ID: VERTICAL #1 @ 8' (H201833-02)

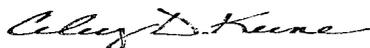
Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/08/2012	ND	384	96.0	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/08/2012	ND	181	90.5	200	4.00	
DRO >C10-C28	26.0	10.0	08/08/2012	ND	181	90.3	200	4.45	

Surrogate: 1-Chlorooctane 88.0 % 65.2-140
 Surrogate: 1-Chlorooctadecane 87.8 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	08/08/2012	Sampling Date:	08/03/2012
Reported:	08/11/2012	Sampling Type:	Soil
Project Name:	WEST B #053 AD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: VERTICAL #1 @ 9' (H201833-03)

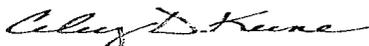
Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/08/2012	ND	384	96.0	400	0.00		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/08/2012	ND	181	90.5	200	4.00		
DRO >C10-C28	<10.0	10.0	08/08/2012	ND	181	90.3	200	4.45		

<i>Surrogate: 1-Chlorooctane</i>	90.8 %	65.2-140
<i>Surrogate: 1-Chlorooctadecane</i>	88.7 %	63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Celest D. Keene, Lab Director/Quality Manager

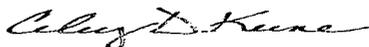
Notes and Definitions

- 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.
- QM-4X The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
- 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

October 05, 2012

BRUCE BAKER

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

112 W. TAYLOR

HOBBS, NM 88240

RE: WEST B #053 AD

Enclosed are the results of analyses for samples received by the laboratory on 10/02/12 16:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	10/02/2012	Sampling Date:	10/01/2012
Reported:	10/05/2012	Sampling Type:	Soil
Project Name:	WEST B #053 AD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: VERTICAL #1 @ 9' 6" (H202402-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	10/05/2012	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	10/04/2012	ND	190	94.9	200	0.855		
DRO >C10-C28	21.4	10.0	10/04/2012	ND	186	93.1	200	1.39		
<i>Surrogate: 1-Chlorooctane</i>	<i>89.4 %</i>	<i>65.2-140</i>								
<i>Surrogate: 1-Chlorooctadecane</i>	<i>90.1 %</i>	<i>63.6-154</i>								

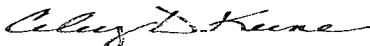
Sample ID: IMPORTED SOIL (H202402-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/05/2012	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	10/04/2012	ND	190	94.9	200	0.855		
DRO >C10-C28	<10.0	10.0	10/04/2012	ND	186	93.1	200	1.39		
<i>Surrogate: 1-Chlorooctane</i>	<i>92.1 %</i>	<i>65.2-140</i>								
<i>Surrogate: 1-Chlorooctadecane</i>	<i>91.2 %</i>	<i>63.6-154</i>								

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

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Celey D. Keene, Lab Director/Quality Manager

October 11, 2012

BRUCE BAKER

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

112 W. TAYLOR

HOBBS, NM 88240

RE: H. E. WEST B #53

Enclosed are the results of analyses for samples received by the laboratory on 10/05/12 10:19.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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.

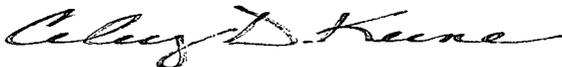
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	10/05/2012	Sampling Date:	10/03/2012
Reported:	10/11/2012	Sampling Type:	Soil
Project Name:	H. E. WEST B #53	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Hope S. Moreno
Project Location:	EVENT NUMBER NU12157TG		

Sample ID: VERTICAL #2 @ 3' (H202427-01)

BTEX 8021B		mg/kg		Analyzed By: AP				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2012	ND	2.32	116	2.00	9.62		
Toluene*	<0.050	0.050	10/09/2012	ND	2.07	103	2.00	9.58		
Ethylbenzene*	0.185	0.050	10/09/2012	ND	2.09	105	2.00	9.25		
Total Xylenes*	1.11	0.150	10/09/2012	ND	6.12	102	6.00	9.28		

Surrogate: 4-Bromofluorobenzene (PIL) 228 % 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	720	16.0	10/09/2012	ND	400	100	400	3.92		

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	272	50.0	10/06/2012	ND	210	105	200	4.24		
DRO >C10-C28	4890	50.0	10/06/2012	ND	209	105	200	7.91		

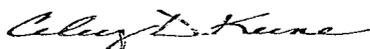
Surrogate: 1-Chlorooctane 152 % 65.2-140

Surrogate: 1-Chlorooctadecane 159 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	10/05/2012	Sampling Date:	10/03/2012
Reported:	10/11/2012	Sampling Type:	Soil
Project Name:	H. E. WEST B #53	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Hope S. Moreno
Project Location:	EVENT NUMBER NU12157TG		

Sample ID: VERTICAL #2 @ 4' (H202427-02)

BTEX 8021B		mg/kg		Analyzed By: AP				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.200	0.200	10/09/2012	ND	2.32	116	2.00	9.62		
Toluene*	<0.200	0.200	10/09/2012	ND	2.07	103	2.00	9.58		
Ethylbenzene*	0.452	0.200	10/09/2012	ND	2.09	105	2.00	9.25		
Total Xylenes*	2.19	0.600	10/09/2012	ND	6.12	102	6.00	9.28		

Surrogate: 4-Bromofluorobenzene (PIE) 179 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP				S-06		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	576	16.0	10/09/2012	ND	400	100	400	3.92		

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	322	50.0	10/06/2012	ND	210	105	200	4.24		
DRO >C10-C28	9020	50.0	10/06/2012	ND	209	105	200	7.91		

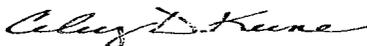
Surrogate: 1-Chlorooctane 182 % 65.2-140

Surrogate: 1-Chlorooctadecane 161 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

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 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	10/05/2012	Sampling Date:	10/03/2012
Reported:	10/11/2012	Sampling Type:	Soil
Project Name:	H. E. WEST B #53	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Hope S. Moreno
Project Location:	EVENT NUMBER NU12157TG		

Sample ID: VERTICAL #2 @ 5' (H202427-03)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2012	ND	2.32	116	2.00	9.62		
Toluene*	<0.050	0.050	10/09/2012	ND	2.07	103	2.00	9.58		
Ethylbenzene*	<0.050	0.050	10/09/2012	ND	2.09	105	2.00	9.25		
Total Xylenes*	<0.150	0.150	10/09/2012	ND	6.12	102	6.00	9.28		

Surrogate: 4-Bromofluorobenzene (PIC) 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	512	16.0	10/09/2012	ND	400	100	400	3.92		

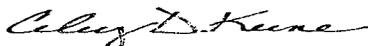
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	10/06/2012	ND	210	105	200	4.24		
DRO >C10-C28	<10.0	10.0	10/06/2012	ND	209	105	200	7.91		

Surrogate: 1-Chlorooctane 88.0 % 65.2-140
Surrogate: 1-Chlorooctadecane 89.4 % 63.6-154

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Celest D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	10/05/2012	Sampling Date:	10/03/2012
Reported:	10/11/2012	Sampling Type:	Soil
Project Name:	H. E. WEST B #53	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Hope S. Moreno
Project Location:	EVENT NUMBER NU12157TG		

Sample ID: VERTICAL #2 @ 6' (H202427-04)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2012	ND	2.32	116	2.00	9.62		
Toluene*	<0.050	0.050	10/09/2012	ND	2.07	103	2.00	9.58		
Ethylbenzene*	<0.050	0.050	10/09/2012	ND	2.09	105	2.00	9.25		
Total Xylenes*	<0.150	0.150	10/09/2012	ND	6.12	102	6.00	9.28		

Surrogate: 4-Bromofluorobenzene (PIC) 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	640	16.0	10/09/2012	ND	400	100	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	10/06/2012	ND	210	105	200	4.24		
DRO >C10-C28	<10.0	10.0	10/06/2012	ND	209	105	200	7.91		

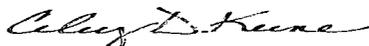
Surrogate: 1-Chlorooctane 89.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 90.8 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	10/05/2012	Sampling Date:	10/03/2012
Reported:	10/11/2012	Sampling Type:	Soil
Project Name:	H. E. WEST B #53	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Hope S. Moreno
Project Location:	EVENT NUMBER NU12157TG		

Sample ID: VERTICAL #2 @ 7' (H202427-05)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2012	ND	2.32	116	2.00	9.62		
Toluene*	<0.050	0.050	10/09/2012	ND	2.07	103	2.00	9.58		
Ethylbenzene*	<0.050	0.050	10/09/2012	ND	2.09	105	2.00	9.25		
Total Xylenes*	<0.150	0.150	10/09/2012	ND	6.12	102	6.00	9.28		

Surrogate: 4-Bromofluorobenzene (PIE) 108 % 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	432	16.0	10/09/2012	ND	400	100	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	10/08/2012	ND	194	96.9	200	3.67		
DRO >C10-C28	<10.0	10.0	10/08/2012	ND	198	98.9	200	4.31		

Surrogate: 1-Chlorooctane 80.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 83.0 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

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 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	10/05/2012	Sampling Date:	10/03/2012
Reported:	10/11/2012	Sampling Type:	Soil
Project Name:	H. E. WEST B #53	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Hope S. Moreno
Project Location:	EVENT NUMBER NU12157TG		

Sample ID: VERTICAL #2 @ 8' (H202427-06)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2012	ND	2.32	116	2.00	9.62		
Toluene*	<0.050	0.050	10/09/2012	ND	2.07	103	2.00	9.58		
Ethylbenzene*	<0.050	0.050	10/09/2012	ND	2.09	105	2.00	9.25		
Total Xylenes*	<0.150	0.150	10/09/2012	ND	6.12	102	6.00	9.28		

Surrogate: 4-Bromofluorobenzene (PIE) 107 % 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	720	16.0	10/09/2012	ND	400	100	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	10/08/2012	ND	194	96.9	200	3.67		
DRO >C10-C28	<10.0	10.0	10/08/2012	ND	198	98.9	200	4.31		

Surrogate: 1-Chlorooctane 83.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 88.6 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

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 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	10/05/2012	Sampling Date:	10/03/2012
Reported:	10/11/2012	Sampling Type:	Soil
Project Name:	H. E. WEST B #53	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Hope S. Moreno
Project Location:	EVENT NUMBER NU12157TG		

Sample ID: VERTICAL #2 @ 9' (H202427-07)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2012	ND	2.32	116	2.00	9.62		
Toluene*	<0.050	0.050	10/09/2012	ND	2.07	103	2.00	9.58		
Ethylbenzene*	<0.050	0.050	10/09/2012	ND	2.09	105	2.00	9.25		
Total Xylenes*	<0.150	0.150	10/09/2012	ND	6.12	102	6.00	9.28		

Surrogate: 4-Bromofluorobenzene (PIE) 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	384	16.0	10/09/2012	ND	400	100	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	10/08/2012	ND	194	96.9	200	3.67		
DRO >C10-C28	13.8	10.0	10/08/2012	ND	198	98.9	200	4.31		

Surrogate: 1-Chlorooctane 83.7 % 65.2-140
Surrogate: 1-Chlorooctadecane 89.2 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	10/05/2012	Sampling Date:	10/03/2012
Reported:	10/11/2012	Sampling Type:	Soil
Project Name:	H. E. WEST B #53	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Hope S. Moreno
Project Location:	EVENT NUMBER NU12157TG		

Sample ID: VERTICAL #2 @ 10' (H202427-08)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2012	ND	2.32	116	2.00	9.62		
Toluene*	<0.050	0.050	10/09/2012	ND	2.07	103	2.00	9.58		
Ethylbenzene*	<0.050	0.050	10/09/2012	ND	2.09	105	2.00	9.25		
Total Xylenes*	<0.150	0.150	10/09/2012	ND	6.12	102	6.00	9.28		

Surrogate: 4-Bromofluorobenzene (PIE) 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	976	16.0	10/09/2012	ND	400	100	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	10/08/2012	ND	194	96.9	200	3.67		
DRO >C10-C28	<10.0	10.0	10/08/2012	ND	198	98.9	200	4.31		

Surrogate: 1-Chlorooctane 78.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 82.7 % 63.6-154

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	10/05/2012	Sampling Date:	10/03/2012
Reported:	10/11/2012	Sampling Type:	Soil
Project Name:	H. E. WEST B #53	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Hope S. Moreno
Project Location:	EVENT NUMBER NU12157TG		

Sample ID: VERTICAL #2 @ 11' (H20427-09)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2012	ND	2.32	116	2.00	9.62		
Toluene*	<0.050	0.050	10/09/2012	ND	2.07	103	2.00	9.58		
Ethylbenzene*	<0.050	0.050	10/09/2012	ND	2.09	105	2.00	9.25		
Total Xylenes*	<0.150	0.150	10/09/2012	ND	6.12	102	6.00	9.28		

Surrogate: 4-Bromofluorobenzene (PII) 107 % 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	1720	16.0	10/09/2012	ND	400	100	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	10/08/2012	ND	194	96.9	200	3.67		
DRO >C10-C28	<10.0	10.0	10/08/2012	ND	198	98.9	200	4.31		

Surrogate: 1-Chlorooctane 77.0 % 65.2-140
Surrogate: 1-Chlorooctadecane 79.1 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	10/05/2012	Sampling Date:	10/03/2012
Reported:	10/11/2012	Sampling Type:	Soil
Project Name:	H. E. WEST B #53	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Hope S. Moreno
Project Location:	EVENT NUMBER NU12157TG		

Sample ID: VERTICAL #2 @ 12' (H202427-10)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2012	ND	2.32	116	2.00	9.62		
Toluene*	<0.050	0.050	10/09/2012	ND	2.07	103	2.00	9.58		
Ethylbenzene*	<0.050	0.050	10/09/2012	ND	2.09	105	2.00	9.25		
Total Xylenes*	<0.150	0.150	10/09/2012	ND	6.12	102	6.00	9.28		

Surrogate: 4-Bromofluorobenzene (PIC) 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	1380	16.0	10/09/2012	ND	400	100	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	10/08/2012	ND	194	96.9	200	3.67		
DRO >C10-C28	<10.0	10.0	10/08/2012	ND	198	98.9	200	4.31		

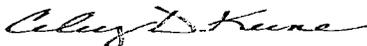
Surrogate: 1-Chlorooctane 81.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 81.8 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	10/05/2012	Sampling Date:	10/03/2012
Reported:	10/11/2012	Sampling Type:	Soil
Project Name:	H. E. WEST B #53	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Hope S. Moreno
Project Location:	EVENT NUMBER NU12157TG		

Sample ID: VERTICAL #2 @ 13' (H202427-11)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2012	ND	2.32	116	2.00	9.62		
Toluene*	<0.050	0.050	10/09/2012	ND	2.07	103	2.00	9.58		
Ethylbenzene*	<0.050	0.050	10/09/2012	ND	2.09	105	2.00	9.25		
Total Xylenes*	<0.150	0.150	10/09/2012	ND	6.12	102	6.00	9.28		

Surrogate: 4-Bromofluorobenzene (PIC) 108 % 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	272	16.0	10/09/2012	ND	400	100	400	3.92		

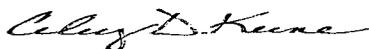
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	10/08/2012	ND	194	96.9	200	3.67		
DRO >C10-C28	<10.0	10.0	10/08/2012	ND	198	98.9	200	4.31		

Surrogate: 1-Chlorooctane 75.9 % 65.2-140
Surrogate: 1-Chlorooctadecane 77.0 % 63.6-154

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Celest D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	10/05/2012	Sampling Date:	10/03/2012
Reported:	10/11/2012	Sampling Type:	Soil
Project Name:	H. E. WEST B #53	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Hope S. Moreno
Project Location:	EVENT NUMBER NU12157TG		

Sample ID: VERTICAL #2 @ 14' (H202427-12)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2012	ND	2.32	116	2.00	9.62		
Toluene*	<0.050	0.050	10/09/2012	ND	2.07	103	2.00	9.58		
Ethylbenzene*	<0.050	0.050	10/09/2012	ND	2.09	105	2.00	9.25		
Total Xylenes*	<0.150	0.150	10/09/2012	ND	6.12	102	6.00	9.28		

Surrogate: 4-Bromofluorobenzene (PIE) 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	528	16.0	10/09/2012	ND	400	100	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	10/08/2012	ND	194	96.9	200	3.67		
DRO >C10-C28	<10.0	10.0	10/08/2012	ND	198	98.9	200	4.31		

Surrogate: 1-Chlorooctane 76.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 79.3 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

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 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	10/05/2012	Sampling Date:	10/03/2012
Reported:	10/11/2012	Sampling Type:	Soil
Project Name:	H. E. WEST B #53	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Hope S. Moreno
Project Location:	EVENT NUMBER NU12157TG		

Sample ID: VERTICAL #2 @ 15' (H202427-13)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2012	ND	2.32	116	2.00	9.62		
Toluene*	<0.050	0.050	10/09/2012	ND	2.07	103	2.00	9.58		
Ethylbenzene*	<0.050	0.050	10/09/2012	ND	2.09	105	2.00	9.25		
Total Xylenes*	<0.150	0.150	10/09/2012	ND	6.12	102	6.00	9.28		

Surrogate: 4-Bromofluorobenzene (PID) 108 % 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	432	16.0	10/09/2012	ND	400	100	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	10/08/2012	ND	194	96.9	200	3.67		
DRO >C10-C28	<10.0	10.0	10/08/2012	ND	198	98.9	200	4.31		

Surrogate: 1-Chlorooctane 80.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 83.0 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	10/05/2012	Sampling Date:	10/03/2012
Reported:	10/11/2012	Sampling Type:	Soil
Project Name:	H. E. WEST B #53	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Hope S. Moreno
Project Location:	EVENT NUMBER NU12157TG		

Sample ID: VERTICAL #2 @ 16' (H202427-14)

BTEX #021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2012	ND	2.32	116	2.00	9.62		
Toluene*	<0.050	0.050	10/09/2012	ND	2.07	103	2.00	9.58		
Ethylbenzene*	<0.050	0.050	10/09/2012	ND	2.09	105	2.00	9.25		
Total Xylenes*	<0.150	0.150	10/09/2012	ND	6.12	102	6.00	9.28		

Surrogate: 4-Bromofluorobenzene (PIL) 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	160	16.0	10/09/2012	ND	400	100	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	10/08/2012	ND	194	96.9	200	3.67		
DRO >C10-C28	<10.0	10.0	10/08/2012	ND	198	98.9	200	4.31		

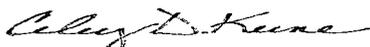
Surrogate: 1-Chlorooctane 72.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 76.6 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

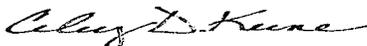
Notes and Definitions

- 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.
- QM-4X The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

November 26, 2012

BRUCE BAKER

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

112 W. TAYLOR

HOBBS, NM 88240

RE: WEST B #053

Enclosed are the results of analyses for samples received by the laboratory on 11/14/12 16:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 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
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	11/14/2012	Sampling Date:	11/14/2012
Reported:	11/26/2012	Sampling Type:	Soil
Project Name:	WEST B #053	Sampling Condition:	Cool & Intact
Project Number:	EVENT NO. NU12157TG	Sample Received By:	Jodi Henson
Project Location:	EXCAVATION @ 4'		

Sample ID: W. WALL CENTER (H202766-01)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/16/2012	ND	1.81	90.3	2.00	2.11		
Toluene*	<0.050	0.050	11/16/2012	ND	2.15	108	2.00	2.72		
Ethylbenzene*	<0.050	0.050	11/16/2012	ND	2.24	112	2.00	3.54		
Total Xylenes*	<0.150	0.150	11/16/2012	ND	6.76	113	6.00	4.14		
Total BTEX	<0.300	0.300	11/16/2012	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 118 % 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	11/16/2012	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	11/15/2012	ND	195	97.7	200	1.85		
DRO >C10-C28	<10.0	10.0	11/15/2012	ND	211	105	200	3.20		

Surrogate: 1-Chlorooctane 81.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 88.5 % 63.6-154

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Celestine D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	11/14/2012	Sampling Date:	11/14/2012
Reported:	11/26/2012	Sampling Type:	Soil
Project Name:	WEST B #053	Sampling Condition:	Cool & Intact
Project Number:	EVENT NO. NU12157TG	Sample Received By:	Jodi Henson
Project Location:	EXCAVATION @ 4'		

Sample ID: E. WALL CENTER (H202766-02)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/16/2012	ND	1.81	90.3	2.00	2.11		
Toluene*	<0.050	0.050	11/16/2012	ND	2.15	108	2.00	2.72		
Ethylbenzene*	<0.050	0.050	11/16/2012	ND	2.24	112	2.00	3.54		
Total Xylenes*	<0.150	0.150	11/16/2012	ND	6.76	113	6.00	4.14		
Total BTEX	<0.300	0.300	11/16/2012	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 120 % 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	64.0	16.0	11/16/2012	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	11/15/2012	ND	195	97.7	200	1.85		
DRO >C10-C28	<10.0	10.0	11/15/2012	ND	211	105	200	3.20		

Surrogate: 1-Chlorooctane 83.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 92.7 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Celestine D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	11/14/2012	Sampling Date:	11/14/2012
Reported:	11/26/2012	Sampling Type:	Soil
Project Name:	WEST B #053	Sampling Condition:	Cool & Intact
Project Number:	EVENT NO. NU12157TG	Sample Received By:	Jodi Henson
Project Location:	EXCAVATION @ 4'		

Sample ID: N. WALL CENTER (H202766-03)

BTEX 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/16/2012	ND	1.81	90.3	2.00	2.11	
Toluene*	<0.050	0.050	11/16/2012	ND	2.15	108	2.00	2.72	
Ethylbenzene*	<0.050	0.050	11/16/2012	ND	2.24	112	2.00	3.54	
Total Xylenes*	<0.150	0.150	11/16/2012	ND	6.76	113	6.00	4.14	
Total BTEX	<0.300	0.300	11/16/2012	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 119 % 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	11/16/2012	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	11/15/2012	ND	195	97.7	200	1.85	
DRO >C10-C28	<10.0	10.0	11/15/2012	ND	211	105	200	3.20	

Surrogate: 1-Chlorooctane 81.1 % 65.2-140

Surrogate: 1-Chlorooctadecane 89.9 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	11/14/2012	Sampling Date:	11/14/2012
Reported:	11/26/2012	Sampling Type:	Soil
Project Name:	WEST B #053	Sampling Condition:	Cool & Intact
Project Number:	EVENT NO. NU12157TG	Sample Received By:	Jodi Henson
Project Location:	EXCAVATION @ 4'		

Sample ID: S. WALL CENTER (H202766-04)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/16/2012	ND	1.81	90.3	2.00	2.11		
Toluene*	<0.050	0.050	11/16/2012	ND	2.15	108	2.00	2.72		
Ethylbenzene*	<0.050	0.050	11/16/2012	ND	2.24	112	2.00	3.54		
Total Xylenes*	<0.150	0.150	11/16/2012	ND	6.76	113	6.00	4.14		
Total BTEX	<0.300	0.300	11/16/2012	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 119 % 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	80.0	16.0	11/16/2012	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	11/15/2012	ND	195	97.7	200	1.85		
DRO >C10-C28	<10.0	10.0	11/15/2012	ND	211	105	200	3.20		

Surrogate: 1-Chlorooctane 80.3 % 65.2-140
Surrogate: 1-Chlorooctadecane 89.3 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	11/14/2012	Sampling Date:	11/14/2012
Reported:	11/26/2012	Sampling Type:	Soil
Project Name:	WEST B #053	Sampling Condition:	Cool & Intact
Project Number:	EVENT NO. NU12157TG	Sample Received By:	Jodi Henson
Project Location:	EXCAVATION @ 4'		

Sample ID: CENTER BTM @ 4' (H202766-05)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/16/2012	ND	1.81	90.3	2.00	2.11		
Toluene*	<0.050	0.050	11/16/2012	ND	2.15	108	2.00	2.72		
Ethylbenzene*	<0.050	0.050	11/16/2012	ND	2.24	112	2.00	3.54		
Total Xylenes*	<0.150	0.150	11/16/2012	ND	6.76	113	6.00	4.14		
Total BTEX	<0.300	0.300	11/16/2012	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 119 % 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	448	16.0	11/16/2012	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	11/15/2012	ND	195	97.7	200	1.85		
DRO >C10-C28	<10.0	10.0	11/15/2012	ND	211	105	200	3.20		

Surrogate: 1-Chlorooctane 83.5 % 65.2-140
Surrogate: 1-Chlorooctadecane 91.1 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

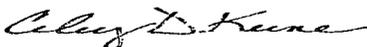
Notes and Definitions

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

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Celey D. Keene, Lab Director/Quality Manager

November 16, 2012

BRUCE BAKER

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

112 W. TAYLOR

HOBBS, NM 88240

RE: WEST B #053

Enclosed are the results of analyses for samples received by the laboratory on 11/14/12 16:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	11/14/2012	Sampling Date:	11/14/2012
Reported:	11/16/2012	Sampling Type:	Soil
Project Name:	WEST B #053	Sampling Condition:	Cool & Intact
Project Number:	EVENT NO. NU12157TG	Sample Received By:	Jodi Henson
Project Location:	NE SCRAPE @ 1'		

Sample ID: N. WALL CENTER (H202767-01)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/16/2012	ND	1.81	90.3	2.00	2.11		
Toluene*	<0.050	0.050	11/16/2012	ND	2.15	108	2.00	2.72		
Ethylbenzene*	<0.050	0.050	11/16/2012	ND	2.24	112	2.00	3.54		
Total Xylenes*	<0.150	0.150	11/16/2012	ND	6.76	113	6.00	4.14		
Total BTEX	<0.300	0.300	11/16/2012	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 122 % 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	80.0	16.0	11/16/2012	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	11/15/2012	ND	195	97.7	200	1.85		
DRO >C10-C28	<10.0	10.0	11/15/2012	ND	211	105	200	3.20		

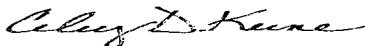
Surrogate: 1-Chlorooctane 85.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 95.1 % 63.6-154

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	11/14/2012	Sampling Date:	11/14/2012
Reported:	11/16/2012	Sampling Type:	Soil
Project Name:	WEST B #053	Sampling Condition:	Cool & Intact
Project Number:	EVENT NO. NU12157TG	Sample Received By:	Jodi Henson
Project Location:	NE SCRAPE @ 1'		

Sample ID: E. WALL CENTER (H202767-02)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/16/2012	ND	1.81	90.3	2.00	2.11		
Toluene*	<0.050	0.050	11/16/2012	ND	2.15	108	2.00	2.72		
Ethylbenzene*	<0.050	0.050	11/16/2012	ND	2.24	112	2.00	3.54		
Total Xylenes*	<0.150	0.150	11/16/2012	ND	6.76	113	6.00	4.14		
Total BTEX	<0.300	0.300	11/16/2012	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	11/16/2012	ND	432	108	400	3.77		

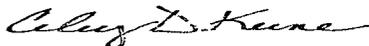
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	11/15/2012	ND	195	97.7	200	1.85		
DRO >C10-C28	<10.0	10.0	11/15/2012	ND	211	105	200	3.20		

Surrogate: 1-Chlorooctane 89.0 % 65.2-140
Surrogate: 1-Chlorooctadecane 98.2 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	11/14/2012	Sampling Date:	11/14/2012
Reported:	11/16/2012	Sampling Type:	Soil
Project Name:	WEST B #053	Sampling Condition:	Cool & Intact
Project Number:	EVENT NO. NU12157TG	Sample Received By:	Jodi Henson
Project Location:	NE SCRAPE @ 1'		

Sample ID: W. WALL CENTER (H202767-03)

BTEX 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/16/2012	ND	1.81	90.3	2.00	2.11	
Toluene*	<0.050	0.050	11/16/2012	ND	2.15	108	2.00	2.72	
Ethylbenzene*	<0.050	0.050	11/16/2012	ND	2.24	112	2.00	3.54	
Total Xylenes*	<0.150	0.150	11/16/2012	ND	6.76	113	6.00	4.14	
Total BTEX	<0.300	0.300	11/16/2012	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 120 % 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	11/16/2012	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	11/16/2012	ND	195	97.7	200	1.85	
DRO >C10-C28	<10.0	10.0	11/16/2012	ND	211	105	200	3.20	

Surrogate: 1-Chlorooctane 82.3 % 65.2-140
Surrogate: 1-Chlorooctadecane 91.1 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	11/14/2012	Sampling Date:	11/14/2012
Reported:	11/16/2012	Sampling Type:	Soil
Project Name:	WEST B #053	Sampling Condition:	Cool & Intact
Project Number:	EVENT NO. NU12157TG	Sample Received By:	Jodi Henson
Project Location:	NE SCRAPE @ 1'		

Sample ID: S. WALL CENTER (H202767-04)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/16/2012	ND	1.81	90.3	2.00	2.11		
Toluene*	<0.050	0.050	11/16/2012	ND	2.15	108	2.00	2.72		
Ethylbenzene*	<0.050	0.050	11/16/2012	ND	2.24	112	2.00	3.54		
Total Xylenes*	<0.150	0.150	11/16/2012	ND	6.76	113	6.00	4.14		
Total BTEX	<0.300	0.300	11/16/2012	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 118 % 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	11/16/2012	ND	432	108	400	3.77		

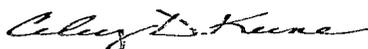
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	11/16/2012	ND	195	97.7	200	1.85		
DRO >C10-C28	<10.0	10.0	11/16/2012	ND	211	105	200	3.20		

Surrogate: 1-Chlorooctane 85.1 % 65.2-140
Surrogate: 1-Chlorooctadecane 94.2 % 63.6-154

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	11/14/2012	Sampling Date:	11/14/2012
Reported:	11/16/2012	Sampling Type:	Soil
Project Name:	WEST B #053	Sampling Condition:	Cool & Intact
Project Number:	EVENT NO. NU12157TG	Sample Received By:	Jodi Henson
Project Location:	NE SCRAPE @ 1'		

Sample ID: BOTTOM CENTER @ 1' (H202767-05)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/16/2012	ND	1.81	90.3	2.00	2.11		
Toluene*	<0.050	0.050	11/16/2012	ND	2.15	108	2.00	2.72		
Ethylbenzene*	<0.050	0.050	11/16/2012	ND	2.24	112	2.00	3.54		
Total Xylenes*	<0.150	0.150	11/16/2012	ND	6.76	113	6.00	4.14		
Total BTEX	<0.300	0.300	11/16/2012	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 123 % 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	11/16/2012	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS							S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<10.0	10.0	11/16/2012	ND	195	97.7	200	1.85			
DRO >C10-C28	3840	10.0	11/16/2012	ND	211	105	200	3.20			

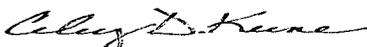
Surrogate: 1-Chlorooctane 88.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 159 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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 SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

November 19, 2012

BRUCE BAKER

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

112 W. TAYLOR

HOBBS, NM 88240

RE: WEST B #053

Enclosed are the results of analyses for samples received by the laboratory on 11/14/12 16:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	11/14/2012	Sampling Date:	11/14/2012
Reported:	11/19/2012	Sampling Type:	Soil
Project Name:	WEST B #053	Sampling Condition:	Cool & Intact
Project Number:	EVENT NO. NU12157TG	Sample Received By:	Jodi Henson
Project Location:	N EXCAVATION @ 6"		

Sample ID: N. WALL CENTER (H202768-01)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/16/2012	ND	1.81	90.3	2.00	2.11		
Toluene*	<0.050	0.050	11/16/2012	ND	2.15	108	2.00	2.72		
Ethylbenzene*	<0.050	0.050	11/16/2012	ND	2.24	112	2.00	3.54		
Total Xylenes*	<0.150	0.150	11/16/2012	ND	6.76	113	6.00	4.14		
Total BTEX	<0.300	0.300	11/16/2012	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	<16.0	16.0	11/16/2012	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	11/16/2012	ND	195	97.7	200	1.85		
DRO >C10-C28	20.1	10.0	11/16/2012	ND	211	105	200	3.20		

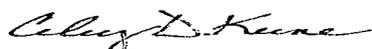
Surrogate: 1-Chlorooctane 86.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 97.1 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	11/14/2012	Sampling Date:	11/14/2012
Reported:	11/19/2012	Sampling Type:	Soil
Project Name:	WEST B #053	Sampling Condition:	Cool & Intact
Project Number:	EVENT NO. NU12157TG	Sample Received By:	Jodi Henson
Project Location:	N EXCAVATION @ 6"		

Sample ID: E. WALL CENTER (H202768-02)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/16/2012	ND	1.66	83.0	2.00	10.7		
Toluene*	<0.050	0.050	11/16/2012	ND	1.96	97.9	2.00	10.7		
Ethylbenzene*	<0.050	0.050	11/16/2012	ND	2.00	100	2.00	11.0		
Total Xylenes*	<0.150	0.150	11/16/2012	ND	6.04	101	6.00	11.2		
Total BTEX	<0.300	0.300	11/16/2012	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 122 % 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	48.0	16.0	11/16/2012	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	11/16/2012	ND	195	97.7	200	1.85		
DRO >C10-C28	<10.0	10.0	11/16/2012	ND	211	105	200	3.20		

Surrogate: 1-Chlorooctane 87.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 98.0 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	11/14/2012	Sampling Date:	11/14/2012
Reported:	11/19/2012	Sampling Type:	Soil
Project Name:	WEST B #053	Sampling Condition:	Cool & Intact
Project Number:	EVENT NO. NU12157TG	Sample Received By:	Jodi Henson
Project Location:	N EXCAVATION @ 6"		

Sample ID: W. WALL CENTER (H202768-03)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/16/2012	ND	1.66	83.0	2.00	10.7		
Toluene*	<0.050	0.050	11/16/2012	ND	1.96	97.9	2.00	10.7		
Ethylbenzene*	<0.050	0.050	11/16/2012	ND	2.00	100	2.00	11.0		
Total Xylenes*	<0.150	0.150	11/16/2012	ND	6.04	101	6.00	11.2		
Total BTEX	<0.300	0.300	11/16/2012	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 120 % 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	11/16/2012	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	11/16/2012	ND	195	97.7	200	1.85		
DRO >C10-C28	13.2	10.0	11/16/2012	ND	211	105	200	3.20		

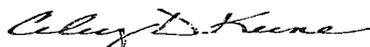
Surrogate: 1-Chlorooctane 85.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 97.5 % 63.6-154

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 RICE ENVIRONMENTAL CONSULTING & SAFETY
 BRUCE BAKER
 112 W. TAYLOR
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	11/14/2012	Sampling Date:	11/14/2012
Reported:	11/19/2012	Sampling Type:	Soil
Project Name:	WEST B #053	Sampling Condition:	Cool & Intact
Project Number:	EVENT NO. NU12157TG	Sample Received By:	Jodi Henson
Project Location:	N EXCAVATION @ 6"		

Sample ID: BOTTOM CENTER @ 6" (H202768-04)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/16/2012	ND	1.66	83.0	2.00	10.7		
Toluene*	<0.050	0.050	11/16/2012	ND	1.96	97.9	2.00	10.7		
Ethylbenzene*	<0.050	0.050	11/16/2012	ND	2.00	100	2.00	11.0		
Total Xylenes*	<0.150	0.150	11/16/2012	ND	6.04	101	6.00	11.2		
Total BTEX	<0.300	0.300	11/16/2012	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	11/16/2012	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	11/16/2012	ND	195	97.7	200	1.85		
DRO >C10-C28	43.0	10.0	11/16/2012	ND	211	105	200	3.20		

Surrogate: 1-Chlorooctane 89.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 101 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

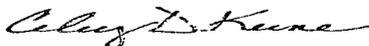
Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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Celestine D. Keene, Lab Director/Quality Manager

From: [Gregston, Terry G](mailto:Gregston.Terry.G)
To: dflick@linenergy.com; rragland@linenergy.com; jhernandez@linenergy.com; gawink@linenergy.com; mike.bratcher@state.nm.us
Cc: hconder@rice-ecs.com; bbaker@rice-ecs.com
Subject: Undesirable Event: NU12157TG, H E West B 53: Cleanup plan approval stips
Date: Tuesday, September 11, 2012 2:39:23 PM
Attachments: [H E West B 53-070312 spill map 2-070612.jpg](#)

Gentlemen,

This notification is in regard to the following location and undesirable events, which occurred one atop the other (see attached spill map):

Event Number: NU12157TG
Event Date: 7/3/2012
Event Name: H E West B 53
Legals: T17S/R31E, sec. 9, SENE

Event Number: 11NU064TG
Event Date: 03/28/11
Event Name: H E West B 53
Legals: T17S/R31E, sec. 9, SENE

The submitted cleanup plan for the above location is approved with the following conditions of approval:

Special Stipulations:

1. Large discrepancies exist between field screen analysis and lab analysis. The submitted plan has insufficient delineation data verified by a third party lab to make a proper assessment of whether or not the submitted cleanup plan appropriately addresses the spill impacts from this undesirable event. Three feet of contaminated soil should be removed from the spill site according to the attached stipulations. When the excavation reaches 3 feet in depth, further vertical delineation of the spill site will be required along with lab analysis that verifies the level of contaminants. The second delineation lab analysis and an amended plan will be submitted for the remainder of the excavation and/or closure of the site.
2. A backhoe was used to vertically define the spill site; however, clean material was not put back in the backhoe excavation after the delineation. The contaminated soils placed into the backhoe excavation will be removed to the depth of the original excavation.
3. The original backhoe delineation site cannot be used for the second delineation of the site.

Notification Stipulations:

1. A copy of the cleanup plan and conditions of approval must be given to the contractor or site work personnel and be present on the location during all cleanup operations.
2. The authorized officer must be notified at the following phases of cleanup or conditions:
 - a. Prior to moving equipment on location for cleanup
 - b. When the excavation is nearing completion and a BLM inspection of the excavation or witnessing of sampling is required by the cleanup plan COA's.
 - c. When the cleanup work is nearing completion and to schedule a final onsite prior to removal of equipment.
 - d. Three days before the site is seeded.

- e. Any time that a variance of the approved plan or conditions of approval is required.
 - f. In the event that you encounter excavation difficulties, unexpected void areas, or archeological artifacts the Authorized Officer must be contacted immediately. An onsite may be required to assess the situation.
3. The authorized officer on this undesirable event case is:

Terry Gregston
(575) 361-2635
tgregsto@blm.gov

-
Archeology Stipulations:

1. There are no known archeological issues on this location.
- In the event that archeological artifacts are discovered during cleanup operations, contact the authorized officer on this case immediately. An onsite will be required to assess the situation.

Road Cleanup Stipulations:

1. The BLM requires horizontal cleanup of the spill impacted areas in addition to vertical cleanup/mitigation measures.
2. The BLM may wish to inspect the excavation once it reaches cleanup depth/width. Confirmation samples of excavation bottom, sidewalls and any visibly affected areas outside of the excavation trench will be required; the BLM may witness the sampling. Contact the authorized officer to schedule.
3. Lab analysis of the confirmation sampling must be forwarded to the authorized officer for final approval before backfilling. Based on the sampling results, additional cleanup may be required or the site may be approved for closure.
4. Once final approval of cleanup is given, the excavation can be backfilled with clean soil to the level of the original native contour plus enough loft to accommodate the settling and compaction of unconsolidated fill soils.
5. Road areas should be resurfaced with 6" of clean caliche on top of the backfill material.

Pasture Impacted Areas:

1. The BLM requires horizontal cleanup of the spill impacted areas in addition to vertical cleanup/mitigation measures.
2. The BLM may wish to inspect the excavation once it reaches cleanup depth/width. Confirmation samples of excavation bottoms, sidewalls and any visibly affected areas outside of the excavation trench will be required; the BLM may witness the sampling. Contact the authorized officer to schedule.
3. Lab analysis of the confirmation sampling must be forwarded to the authorized officer for final approval before backfilling. Based on the sampling results, additional cleanup may be required or the site may be approved for closure.
4. Once final approval of cleanup is given, the excavation can be backfilled with clean soil to the level of the original native contour plus enough loft to accommodate the settling and compaction of unconsolidated fill soils.
5. The top 2 feet of the backfill material must be topsoil similar to that in the surrounding native terrain.
6. If pastures are not contaminated but are impacted by cleanup operations, the impacts to the pasture areas will be mitigated by recontouring the impacted areas and restoring the surface as listed in items 7 through 9 of this section.
7. Install erosion control measures in the pasture-affected areas to prevent the unconsolidated reclamation materials from washing or blowing away until reclaimed areas settle and begin to revegetate.
8. Rip and seed reclaimed and equipment-impacted pasture areas with BLM seed mix #2 and #4, 50/50 mix.
9. Barricade entrance to reclaimed pasture areas with fencing or an earthen barrier sufficient

to prevent vehicular access.

10. Continue to monitor spill reclamation area to ensure impacted pasture areas revegetate and that erosion issues do not develop.

Other Stipulations:

1. At the time of the final onsite for this location, the production facilities, well pad, access road, and the surrounding pasture areas must be in a condition that will pass a routine inspection.
2. All household trash, debris, disconnected pipe and equipment must be removed from the area and the surrounding pasture and hauled to an authorized landfill. Do not bury cleanup trash, equipment debris, or household garbage in the cleanup excavation.

BLM approval of this proposal does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health, or the environment, or if the location fails to reclaim properly. In such an event that location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state, or local laws/regulations.

Thank you for your attention to this matter,

Terry Gregston
Environmental Protection Specialist
Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220
Office (575) 234-5958
Cell (575) 361-2635
Fax (575) 234-5927

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Lara Weinheimer

From: Bruce Baker [bbaker@rice-ecs.com]
Sent: Thursday, October 25, 2012 4:53 PM
To: lweinheimer@rice-ecs.com
Subject: Fwd: Undesirable Event NU12157TG: H E West B 53: Amended plan stipulations

Sent from my iPhone

Begin forwarded message:

From: "Gregston, Terry G" <tgregsto@blm.gov>
Date: October 25, 2012, 10:21:53 AM MDT
To: Bruce Baker <bbaker@rice-ecs.com>
Cc: "dferrick@linenergy.com" <dferrick@linenergy.com>, "rragland@linenergy.com" <rragland@linenergy.com>, "jhernandez@linenergy.com" <jhernandez@linenergy.com>, "gawink@linenergy.com" <gawink@linenergy.com>, "mike.bratcher@state.nm.us" <mike.bratcher@state.nm.us>
Subject: Undesirable Event NU12157TG: H E West B 53: Amended plan stipulations

Gentlemen,

This notification is in regard to the following location and undesirable events, which occurred one atop the other (see attached spill map):

Event Number: NU12157TG
Event Date: 7/3/2012
Event Name: H E West B 53
Legals: T17S/R31E, sec. 9, SENE

Event Number: 11NU064TG
Event Date: 03/28/11
Event Name: H E West B 53
Legals: T17S/R31E, sec. 9, SENE

The amended cleanup plan for the above location is approved with the following conditions of approval:

Special Stipulations:

1. The lab analysis for the delineation of this spill event varies from the originally submitted plan. Based on the resubmitted sample analysis, contaminated material will be removed to a depth of 4 feet or until combined GRO and DRO readings drop below 1,000 ppm and chlorides drop below 1,000ppm. The attached stipulations that were appended to the originally submitted plan will be followed.
2. It should also be noted that the sampled areas only encompass a small portion of the original spill footprints. Two spills have occurred on this site and the older spill is aged to the extent that it is not as readily seen on the surface. (see attached spill map) The entire area of both combined spills should be surveyed and cleaned up to ensure that both spills are mitigated, and the disturbed surface of both combined spills will be reclaimed according to the following conditions of approval.

Notification Stipulations:

1. A copy of the cleanup plan and conditions of approval must be given to the contractor or site work personnel and be present on the location during all cleanup operations.
2. The authorized officer must be notified at the following phases of cleanup or conditions:
 - a. Prior to moving equipment on location for cleanup
 - b. When the excavation is nearing completion and a BLM inspection of the excavation or witnessing of sampling is required by the cleanup plan COA's.
 - c. When the cleanup work is nearing completion and to schedule a final onsite prior to removal of equipment.
 - d. Three days before the site is seeded.
 - e. Any time that a variance of the approved plan or conditions of approval is required.
 - f. In the event that you encounter excavation difficulties, unexpected void areas, or archeological artifacts the Authorized Officer must be contacted immediately. An onsite may be required to assess the situation.
3. The authorized officer on this undesirable event case is:

Terry Gregston
(575) 361-2635
tgregsto@blm.gov

Archeology Stipulations:

1. There are no known archeological issues on this location.
- In the event that archeological artifacts are discovered during cleanup operations, contact the authorized officer on this case immediately. An onsite will be required to assess the situation.

Road Cleanup Stipulations:

1. The BLM requires horizontal cleanup of the spill impacted areas in addition to vertical cleanup/mitigation measures.
2. The BLM may wish to inspect the excavation once it reaches cleanup depth/width. Confirmation samples of excavation bottom, sidewalls and any visibly affected areas outside of the excavation trench will be required; the BLM may witness the sampling. Contact the authorized officer to schedule.
3. Lab analysis of the confirmation sampling must be forwarded to the authorized officer for final approval before backfilling. Based on the sampling results, additional cleanup may be required or the site may be approved for closure.
4. Once final approval of cleanup is given, the excavation can be backfilled with clean soil to the level of the original native contour plus enough loft to accommodate the settling and compaction of unconsolidated fill soils.
5. Road areas should be resurfaced with 6" of clean caliche on top of the backfill material.

Pasture Impacted Areas:

1. The BLM requires horizontal cleanup of the spill impacted areas in addition to vertical cleanup/mitigation measures.
2. The BLM may wish to inspect the excavation once it reaches cleanup depth/width. Confirmation samples of excavation bottoms, sidewalls and any visibly affected areas outside of the excavation trench will be required; the BLM may witness the sampling. Contact the authorized officer to schedule.
3. Lab analysis of the confirmation sampling must be forwarded to the authorized officer for final approval before backfilling. Based on the sampling results, additional cleanup may be required or the site may be approved for closure.
4. Once final approval of cleanup is given, the excavation can be backfilled with clean soil to the level of the original native contour plus enough loft to accommodate the settling and compaction of unconsolidated fill soils.
5. The top 2 feet of the backfill material must be topsoil similar to that in the surrounding native terrain.
6. If pastures are not contaminated but are impacted by cleanup operations, the impacts to the pasture areas will be mitigated by recontouring the impacted areas and restoring the surface as listed in items 7 through 9 of this section.

7. Install erosion control measures in the pasture-affected areas to prevent the unconsolidated reclamation materials from washing or blowing away until reclaimed areas settle and begin to revegetate.
8. Rip and seed reclaimed and equipment-impacted pasture areas with BLM seed mix #2 and #4, 50/50 mix.
9. Barricade entrance to reclaimed pasture areas with fencing or an earthen barrier sufficient to prevent vehicular access.
10. Continue to monitor spill reclamation area to ensure impacted pasture areas revegetate and that erosion issues do not develop.

Other Stipulations:

1. At the time of the final onsite for this location, the production facilities, well pad, access road, and the surrounding pasture areas must be in a condition that will pass a routine inspection.
2. All household trash, debris, disconnected pipe and equipment must be removed from the area and the surrounding pasture and hauled to an authorized landfill. Do not bury cleanup trash, equipment debris, or household garbage in the cleanup excavation.

BLM approval of this proposal does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health, or the environment, or if the location fails to reclaim properly. In such an event that location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state, or local laws/regulations.

Terry Gregston
Environmental Protection Specialist
Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220
Office (575) 234-5958
Cell (575) 361-2635
Fax (575) 234-5927

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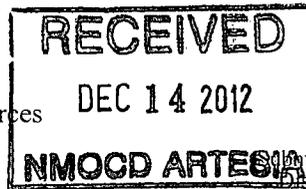
Appendix E

Final Form C-141

RICE Environmental Consulting and Safety (RECS)
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

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

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



Form C-141
Revised October 10, 2003
2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company	Linn Energy	Contact	Gary Wink
Address	2310 W. Bender, Hobbs, NM 88240	Telephone No.	575-738-1739 ext. 1218
Facility Name	H.E. West B #53	Facility Type	Injection Well
Surface Owner	Federal	Mineral Owner	Federal
		Lease No.	30-015-27148

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	9	17S	31E	1350	FNL	1250	FEL	Eddy

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release	Oil/Produced Water	Volume of Release	7 bbl / 3 bbl	Volume Recovered	0 / 0
Source of Release	Pipeline	Date and Hour of Occurrence	07/3/2012 2:30 pm	Date and Hour of Discovery	07/3/2012 3 pm
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	M. Bratcher - NMOCD T. Gregston - BLM		
By Whom?	Joe Hernandez	Date and Hour	07/5/2012 1 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.*
3" poly line came apart at a seam causing the leak.

Describe Area Affected and Cleanup Action Taken.*
The leak affected 647 square feet of pasture land located about 300 ft. north of the injection well. Samples were collected from throughout the leak area at surface and at depth. The leak area was excavated to 4 ft. below ground surface. Soil samples from the excavation bottom and sidewalls were submitted to a commercial laboratory for confirmation. Impacted soils were removed to a NMOCD approved disposal facility. The excavation was backfilled with clean imported soil and the site was re-seeded.

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

Signature: <i>Gary W. Wink</i>	OIL CONSERVATION DIVISION		
Printed Name: Gary Wink	Approved by District Supervisor:		
Title: Production Foreman	Approval Date:	Expiration Date:	
E-mail Address: <u>gawink@linnenergy.com</u>	Conditions of Approval:		Attached <input type="checkbox"/>
Date: <u>12/13/12</u> Phone: (575) 738-1739 ext. 1218			

* Attach Additional Sheets If Necessary