



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

March 08, 2014

HOBBS OCD

**IKE TAVAREZ** 

MAR 1 7 2014

**TETRA TECH** 

1910 N. BIG SPRING STREET

RECEIVED

MIDLAND, TX 79705

RE: SEVEN RIVERS QUEEN WELL #64

Enclosed are the results of analyses for samples received by the laboratory on 03/03/14 14:10.

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

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Mike Snyder

Organic Supervisor

READY FOR COMPLIANCE OFFICER INSPECTION

Service Jekin Environmental Specialist NMOCD-DISTI

3/17/14



TETRA TECH **IKE TAVAREZ** 1910 N. BIG SPRING STREET MIDLAND TX, 79705 (432) 682-3946 Fax To:

Received: Reported: 03/03/2014

03/08/2014

Project Name: Project Number: SEVEN RIVERS QUEEN WELL #64

Project Location:

NONE GIVEN LEA COUNTY, NM Sampling Date:

03/03/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By: Jodi Henson

Sample ID: AH-1 0-1 (H400633-01)

BTEX 8260B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/08/2014	ND	2.14	107	2.00	0.624	
Toluene*	< 0.050	0.050	03/08/2014	ND	2.14	107	2.00	3.61	
Ethylbenzene*	< 0.050	0.050	03/08/2014	ND	2.05	103	2.00	3.71	
Total Xylenes*	<0.150	0.150	03/08/2014	ND	6.26	104	6.00	3.84	
Total BTEX	<0.300	0.300	03/08/2014	ND					
Surrogate: Dibromofluoromethane	93.7	% 61.3-14.	2						
Surrogate: Toluene-d8	105	% 71.3-12	9						
Surrogate: 4-Bromofluorobenzene	100	% 65.7-14	1						
Chloride, SM4500Cl-B	mg/	kg	Analyze	ed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/07/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	ed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/05/2014	ND	208	104	200	5.02	
DRO >C10-C28	<10.0	10.0	03/05/2014	ND	209	105	200	3.45	
EXT DRO >C28-C35	15.2	10.0	03/05/2014	ND					
Surrogate: 1-Chlorooctane	101	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	104	63.6-15	4						

# Cardinal Laboratories

\*=Accredited Analyte

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**TETRA TECH IKE TAVAREZ** 1910 N. BIG SPRING STREET MIDLAND TX, 79705 Fax To: (432) 682-3946

Received:

03/03/2014

Sampling Date:

03/03/2014

Reported:

03/08/2014

Sampling Type:

Soil

Project Name:

SEVEN RIVERS QUEEN WELL #64

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

LEA COUNTY, NM

Sample ID: AH-1 1-1.5 (H400633-02)

Chloride, SM4500Cl-B

Analyte

Analyzed By: AP

% Recovery

True Value QC 400

RPD

Chloride

Chloride

Chloride

Result <16.0

16.0 03/07/2014 Method Blank ND

BS 432

108

108

Qualifier

Sample ID: AH-1 2-2.5 (H400633-03)

Chloride, SM4500Cl-B

Result

48.0

**Analyzed By: AP** 

Analyte

Reporting Limit 16.0

Reporting Limit

Analyzed 03/07/2014

Analyzed

Method Blank ND

BS

432

% Recovery True Value QC

RPD 0.00

0.00

Qualifier

Sample ID: AH-1 3-3.5 (H400633-04)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Result Reporting Limit Analyte 192 16.0

Analyzed 03/07/2014 Method Blank ND

BS 432 % Recovery 108

True Value QC 400

400

**RPD** 0.00 Qualifier

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Mike Snyder, Organic Supervisor

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**TETRA TECH IKE TAVAREZ** 1910 N. BIG SPRING STREET MIDLAND TX, 79705 Fax To: (432) 682-3946

Received:

03/03/2014

Sampling Date:

03/03/2014

Reported:

03/08/2014

Sampling Type:

Soil

Project Name:

SEVEN RIVERS QUEEN WELL #64

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

LEA COUNTY, NM

# Sample ID: AH-2 0-1 (H400633-05)

BTEX 8260B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/08/2014	ND	2.14	107	2.00	0.624	
Toluene*	< 0.050	0.050	03/08/2014	ND	2.14	107	2.00	3.61	
Ethylbenzene*	<0.050	0.050	03/08/2014	ND	2.05	103	2.00	3.71	
Total Xylenes*	<0.150	0.150	03/08/2014	ND	6.26	104	6.00	3.84	
Total BTEX	<0.300	0.300	03/08/2014	ND					
Surrogate: Dibromofluoromethane	95.5	% 61.3-14	2						
Surrogate: Toluene-d8	104 9	% 71.3-12	9						
Surrogate: 4-Bromofluorobenzene	102 9	% 65.7-14	1						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/07/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/05/2014	ND	208	104	200	5.02	
DRO >C10-C28	<10.0	10.0	03/05/2014	ND	209	105	200	3.45	
EXT DRO >C28-C35	<10.0	10.0	03/05/2014	ND					
Surrogate: 1-Chlorooctane	97.0	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	101 9	% 63.6-15	4						

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\*=Accredited Analyte

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**TETRA TECH IKE TAVAREZ** 1910 N. BIG SPRING STREET MIDLAND TX, 79705 Fax To: (432) 682-3946

Received:

03/03/2014

Sampling Date:

03/03/2014

Reported:

03/08/2014

Sampling Type:

Soil

Project Name:

SEVEN RIVERS QUEEN WELL #64

Reporting Limit

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

Analyte

Analyte

Analyte

LEA COUNTY, NM

Sample ID: AH-2 1-1.5 (H400633-06)

Chloride, SM4500Cl-B

Analyzed By: AP

% Recovery

True Value QC

400

**RPD** 

Chloride

Result <16.0

03/07/2014 16.0

Analyzed

Analyzed

Method Blank ND

BS 432

108

Qualifier

Sample ID: AH-2 2-2.5 (H400633-07)

Chloride, SM4500Cl-B

Reporting Limit

Reporting Limit

Analyzed By: AP

108

400

Chloride

Result <16.0

16.0 03/07/2014 Method Blank ND

BS 432

True Value QC % Recovery

RPD 0.00

0.00

Qualifier

Sample ID: AH-2 3-3.5 (H400633-08)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

BS % Recovery True Value QC

**RPD** 

Qualifier

Chloride

Result 16.0

16.0

Analyzed 03/07/2014 Method Blank ND

432

108

400

0.00

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Mike Snyder, Organic Supervisor

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**TETRA TECH IKE TAVAREZ** 1910 N. BIG SPRING STREET MIDLAND TX, 79705 Fax To: (432) 682-3946

Received:

03/03/2014

Sampling Date:

03/03/2014

Reported:

03/08/2014

Sampling Type:

Soil

Project Name:

SEVEN RIVERS QUEEN WELL #64

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

LEA COUNTY, NM

# Sample ID: AH-3 0-1 (H400633-09)

BTEX 8260B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	03/08/2014	ND	2.14	107	2.00	0.624	
Toluene*	<0.050	0.050	03/08/2014	ND	2.14	107	2.00	3.61	
Ethylbenzene*	<0.050	0.050	03/08/2014	ND	2.05	103	2.00	3.71	
Total Xylenes*	<0.150	0.150	03/08/2014	ND	6.26	104	6.00	3.84	
Total BTEX	<0.300	0.300	03/08/2014	ND					
Surrogate: Dibromofluoromethane	97.2	% 61.3-14.	2						
Surrogate: Toluene-d8	104	% 71.3-12	9						
Surrogate: 4-Bromofluorobenzene	101	% 65.7-14	1						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/07/2014	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/05/2014	ND	208	104	200	5.02	
DRO >C10-C28	<10.0	10.0	03/05/2014	ND	209	105	200	3.45	
EXT DRO >C28-C35	<10.0	10.0	03/05/2014	ND					
Surrogate: 1-Chlorooctane	98.3	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	103	% 63.6-15	4						

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**TETRA TECH IKE TAVAREZ** 1910 N. BIG SPRING STREET MIDLAND TX, 79705

Fax To:

(432) 682-3946

Received:

03/03/2014

Sampling Date:

03/03/2014

Reported:

03/08/2014

Sampling Type:

Soil

Project Name:

SEVEN RIVERS QUEEN WELL #64

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

LEA COUNTY, NM

# Sample ID: AH-3 1-1.5 (H400633-10)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/07/2014	ND	432	108	400	0.00	
Sample ID: AH-3 2-2.5 (	H400633-11)								
chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/07/2014	ND	432	108	400	0.00	
Sample ID: AH-3 3-3.5 (	H400633-12)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/07/2014	ND	416	104	400	3.77	

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TETRA TECH **IKE TAVAREZ** 1910 N. BIG SPRING STREET MIDLAND TX, 79705 Fax To: (432) 682-3946

Received:

03/03/2014

Sampling Date:

03/03/2014

Reported:

Sampling Type:

Soil

03/08/2014

Cool & Intact

Project Name: Project Number: SEVEN RIVERS QUEEN WELL #64

Sampling Condition:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

LEA COUNTY, NM

Sample ID: AH-4 0-1 (H400633-13)

BTEX 8260B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	03/08/2014	ND	2.14	107	2.00	0.624	
Toluene*	<0.050	0.050	03/08/2014	ND	2.14	107	2.00	3.61	
Ethylbenzene*	<0.050	0.050	03/08/2014	ND	2.05	103	2.00	3.71	
Total Xylenes*	<0.150	0.150	03/08/2014	ND	6.26	104	6.00	3.84	
Total BTEX	<0.300	0.300	03/08/2014	ND					
Surrogate: Dibromofluoromethane	99.2	% 61.3-14.	2						
Surrogate: Toluene-d8	106	% 71.3-12	9						
Surrogate: 4-Bromofluorobenzene	104	% 65.7-14	1						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/07/2014	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/05/2014	ND	208	104	200	5.02	
DRO >C10-C28	<10.0	10.0	03/05/2014	ND	209	105	200	3.45	
EXT DRO >C28-C35	<10.0	10.0	03/05/2014	ND					
Surrogate: 1-Chlorooctane	94.9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	101	% 63.6-15	4						

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\*=Accredited Analyte

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**TETRA TECH IKE TAVAREZ** 1910 N. BIG SPRING STREET MIDLAND TX, 79705

Fax To:

(432) 682-3946

Received:

03/03/2014

Sampling Date:

03/03/2014

Reported:

03/08/2014

Sampling Type:

Soil

Project Name:

SEVEN RIVERS QUEEN WELL #64

Project Number:

NONE GIVEN

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Project Location:

LEA COUNTY, NM

Sample I	D: AH-4	1-1.5	(H400633-	14)
----------	---------	-------	-----------	-----

mg	kg	Analyze	d By: AP					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<16.0	16.0	03/07/2014	ND	416	104	400	3.77	
1400633-15)								
mg,	/kg	Analyze	d By: AP					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<16.0	16.0	03/07/2014	ND	416	104	400	3.77	
-	/kg	Analyze	d By: AP					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<16.0	16.0	03/07/2014	ND	416	104	400	3.77	
1400633-17)								
1100000 17)								
mg/	/kg	Analyze	d By: AP					
	/kg Reporting Limit	Analyzed Analyzed	d By: AP  Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
	Result <16.0  1400633-15)  Result <16.0  1400633-16)  mg/	<16.0 16.0  1400633-15)  mg/kg  Result Reporting Limit <16.0 16.0  1400633-16)  mg/kg  Result Reporting Limit	Result Reporting Limit Analyzed  <16.0 16.0 03/07/2014  1400633-15)  mg/kg Analyzed  <16.0 16.0 03/07/2014  1400633-16)  mg/kg Analyzed  <16.0 16.0 03/07/2014  Result Reporting Limit Analyzed  <16.0 16.0 03/07/2014	Result         Reporting Limit         Analyzed         Method Blank           <16.0	Result   Reporting Limit   Analyzed   Method Blank   BS	Result   Reporting Limit   Analyzed   Method Blank   BS   % Recovery	Result   Reporting Limit   Analyzed   Method Blank   BS   % Recovery   True Value QC	Result   Reporting Limit   Analyzed   Method Blank   BS   % Recovery   True Value QC   RPD

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TETRA TECH **IKE TAVAREZ** 1910 N. BIG SPRING STREET MIDLAND TX, 79705 Fax To: (432) 682-3946

Received:

03/03/2014

Sampling Date:

03/03/2014

Reported:

03/08/2014

Sampling Type:

Soil

Project Name:

SEVEN RIVERS QUEEN WELL #64

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

LEA COUNTY, NM

# Sample ID: AH-5 0-1 (H400633-18)

BTEX 8260B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	03/08/2014	ND	2.14	107	2.00	0.624	
Toluene*	<0.050	0.050	03/08/2014	ND	2.14	107	2.00	3.61	
Ethylbenzene*	<0.050	0.050	03/08/2014	ND	2.05	103	2.00	3.71	
Total Xylenes*	<0.150	0.150	03/08/2014	ND	6.26	104	6.00	3.84	
Total BTEX	<0.300	0.300	03/08/2014	ND					
Surrogate: Dibromofluoromethane	99.9	% 61.3-14.	2						
Surrogate: Toluene-d8	105	% 71.3-12	9						
Surrogate: 4-Bromofluorobenzene	99.5	% 65.7-14	1						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/07/2014	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/05/2014	ND	208	104	200	5.02	
DRO >C10-C28	<10.0	10.0	03/05/2014	ND	209	105	200	3.45	
EXT DRO >C28-C35	<10.0	10.0	03/05/2014	ND					
Surrogate: 1-Chlorooctane	91.3	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	95.4	% 63.6-15	4						

### **Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed walved 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.

Wite Sough





TETRA TECH IKE TAVAREZ 1910 N. BIG SPRING STREET MIDLAND TX, 79705

Fax To:

(432) 682-3946

Received:

03/03/2014

Sampling Date:

03/03/2014

Reported:

03/08/2014

Sampling Type:

Soil

Project Name:

SEVEN RIVERS QUEEN WELL #64

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

LEA COUNTY, NM

# Sample ID: AH-5 1-1.5 (H400633-19)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/07/2014	ND	416	104	400	3.77	

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Wite Sough



# **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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wite South



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Project Manager: TKO TOVORCE				
	01	Company:		
city: Mudland State: TH	ZIp: 797@5	Attn:		-
Phone #: Fax #:		Address:		
Project #: Project Own	Project Owner: Linn Energy	City:		
ame: Suren Rivers 6	1 #64	State: Zip:		
		Phone #:		
Sampler Name: Adrian Garcia/Marcus K	Κ.	Fax #:		
	MATRIX	PRESERV. SAMPLING		
	RS TER			
Lab I.D. Sample I.D.	RAB OR ONTAINE OUNDWASTEWAT	HER: ID/BASE: I/COOL HER:	TPH BTE Chlor	
1年 (91)	×	× 3/3	×	
	-	1	×	
3 (5.8.6)			~	
4 (3-3.5)		-		
5 AH 2 (0-1)			メメメ	
(0 (1-1.5)				
7 (2-25)			*	
8 (3-3,5)				
9 AH 3(0-1)			× × ×	
10 (1-1.5)	~	*	.)	
PLEASE VOTE: Libibily and Damagas. Cardinal's liability and clearly accusable remarks that the support of the s	r any claim arising whether based in contract or k	act or lort, shall be limited to the amount paid by	ne client for the	

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

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Relinquished By:

Relinquished By:

Hugh Warin

Time: 10

Run deeper sample & Benzene is greater than long,

total GABN is greater than 50mg/kg

☐ Yes ☐ No Add'l Phone #:

email results to ike tawara a tetratech . com

Is greater

than boong/kg

Time:

Page 13 of 14



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

C. 20 CO				ANALTOID ARCORD	_
Project Manager: TKL Tavare 2		P.O. #:			
Address: 4000 N. Big Spring Suite 401	0)	Company:			
city: Mydlord State: TX Zip:	19705	Attn:			_
Phone #: Fax #:		Address:			
Project Owner: Linn Edgyan		City:			
Project Name: Seven Rivers Queen well # 64	6	State: Zip:			
Project Location: Les Co.		Phone #:	<u></u>		-
Sampler Name: Abrion Garcia / Marcus K.		Fax #:	7		
	MATRIX	PRESERV SAMPLING			
-	TER		BT ide.		
Lab I.D. Sample I.D.	UNDWATEWAT	/BASE:	PH		
(G)F	GRO	OTH	R		
AH 3	×	X 3/3			
12 (3-3.5)		-	~		
13 AH 4 (0-1)			XXX		
			<b>→</b>		-
(2-2.5)			~		
(3-3.5)			*		
13 (4-4.5)			*		
18年5/0-1			メメ		,
19 [1-1,5)	£	•	X		
			100 PM		
PLEASE NOTE: Liability and Damages. Cardinath liability and client's exclusive remote for any claim arising whether based in contract or lost, shall be finited to the amount paid by the client for the	n arising whether based in contract	or tort, shall be limited to the amount paid by the client i	or the		

Relinquished By: Relinquished By: Delivered By: (Circle One) Town Down Time: Time: 5.70 Cool Intact

No I No N S

Fax Result: 1965 10 NO LAGRIFTAX TO BENZERO IS greater than 10mg/4 REMARKS:

Run deaper sample it Benzero is greater than 50m/4 enail results to ike tavarez a tetratech .. com or TPH is greater than 100 mg/kg

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

Sampler - UPS - Bus - Other:

Page 14 of 14

Linn Energy Table 1

RECEIVED

Lea County, New Mexico Seven Rivers Queen #64

RECEIVED

	AH-5					AH-4				AH-3				AH-2				AH-1	oanipie io	Sample II
=	3/3/2014	=	=	"	"	3/3/2014	=	=		3/3/2014	=	:	=	3/3/2014	=	=	=	3/3/2014	oanipie pate	Sample Date
1-1.5	0-1	4-4.5	3-3.5	2-2.5	1-1.5	0-1	3-3.5	2-2.5	1-1.5	0-1	3-3.5	2-2.5	1-1.5	0-1	3-3.5	2-2.5	1-1.5	0-1	Depth (ft)	Sample
•												1							Depth (ft)	BEB
×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	In-Situ	Soil
																			Removed	Soil Status
-	<10.0		1	1		<10.0				<10.0		1		<10.0				<10.0	GRO	
1	<10.0		-			<10.0				<10.0	1	1		<10.0		,		15.2	DRO	TPH (mg/kg)
	<10.0					<10.0				<10.0		-	-	<10.0				15.2	Total	g)
-	<0.050					<0.050				<0.050		1		<0.050				<0.050	(mg/kg)	Benzene
ı	<0.050	-				<0.050				<0.050	•	1	ı	<0.050				<0.050	(mg/kg)	Toluene
-	<0.050					<0.050				<0.050		-	-	<0.050				<0.050	(mg/kg)	Ethlybenzene
-	<0.150					<0.150				<0.150		1		<0.150				<0.150	(mg/kg)	Xylene
	<0.300		,			<0.300		,		<0.300				<0.300		1	,	<0.300	(mg/kg)	Total
<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	16.0	16.0	16.0	16.0	16.0	<16.0	<16.0	<16.0	192	48.0	<16.0	<16.0	(mg/kg)	Chloride

(BEB) (-)

Below Excavation Bottom

Not Analyzed

	TETRA TECH	CLIENT Lyn		54		ATE 3/3/14
	Lynn - Sever		en Well	#7 JOB	NUMBER	Lea Co.
SUBJECT .	Injection	n Well		BY	SI	HEET of
	1				7	
					5	
	PA (					A
		5				
	AH I					
	0	5		L	1	
		ASSESSMENT	ACCOUNT OF THE PARTY OF THE PAR			
	H 1 32.33437		, s v 4	AITS 3.	of colliche	103.24211 in stanks open
2-25		//		refus	ial	
~	Fsal 32.33495	103 74752				HOBBS OCD
0-1	Sondy soil	no stan/10	odor			MAR 1 3 2014
2-2.5	11	11				
2-3.5	1°	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				RECEIVED
AH3 32		32				
1-1.5	١١٠٥٥ ١١٥٥ ١١٥٥	stan luo oon				
	"	"				
3-3.5 Cel	resel	"				
		1,				
14-4	32. 3344 3 103.	24215 ctain / no ad				
1-1.5	sondy soil n	II STOURY IS ON		-		
3-3.5	11	1.6				
4-45	**	1.(				
10/1	sal	1				

Table 1 Linn Energy Well #910 Unit A

Lea County, New Mexico

			-														
	AH-5		AH-4				AH-3				AH-2			AH-1	Sample ID	5	
"	3/3/2014	-	3/3/2014	и	п		3/3/2014		:	п	3/3/2014		п	3/3/2014	Sample Date	2	
1-1.5	0-1	1-1.5	0-1	3-3.5	2-2.5	1-1.5	0-1	2-2.5		1-1.5	0-1	2-2.5	1-1.5	0-1	Depth (ft)	Sample	
	ı									ï			-		Depth (ft)	BEB	
×	×	×	×	×	×	×	×	×	:	×	×	×	×	×	in-Situ	Soil	
															Removed	Soil Status	Lea Co
	<10.0	<10.0	<10.0				<10.0				<10.0			<10.0	GRO		unty, N
	<10.0	148	2,790		,		<10.0			ī	<10.0		1	<10.0	DRO	TPH (mg/kg)	Lea County, New Mexico
	<10.0	148	2,790		-	,	<10.0			ı	<10.0			<10.0	Total	g)	ico
	<0.050		<0.050				<0.050				<0.050			<0.050	(mg/kg)	Benzene	
	<0.050		<0.050	-			<0.050			1	<0.050		-	<0.050	(mg/kg)	Toluene	
	<0.050		<0.050				<0.050				<0.050			<0.050	(mg/kg)	Ethlybenzene	R
	<0.150		<0.150				<0.150				<0.150			<0.150	(mg/kg)	Xylene	RECEIVED
	<0.300	,	<0.300		,		<0.300			,	<0.300			<0.300	(mg/kg)	Total	
<16.0	<16.0	<16.0	<16.0	480	80.0	64.0	64.0	<16.0		<16.0	<16.0	576	16.0	48.0	(mg/kg)	Chloride	

÷

(BEB)

Not Analyzed

Below Excavation Bottom

BTITLE Ling (Jell #910. (Jak A		OB NUMBER SHEET	of
-4	BY	SHEET	_ of
		5.7	
TALK THE PARTY OF			
OSIZ FG	3 PA		
	- WELL		
5.		. 1	
,			
41 23 3 4 62 00 05			
4-1 32,70 = 103.09005 -1 SANDY SOTL NO STEIN/NU ODOR			
1.5 " V			
2.6			
anto a			
11-5 35 658 103 2005		HOppe	
-1 SANON SOLL NO STAIN NO OCOR		HOBBS OCD	
		MAR 1 3 2014	
2.5 "		10 2014	
refusal		RECEIVED	
4-3 32,71025 103 07713		CIAED	
sol sand soll Kellon Amil No open			
-15 Sanor Soil No Stan No upor			
3.5 "			
(efuse)			
H-4 32.71026 103.07/2 -1 sandy-soil no stain od od +			
sand soil no stain od od +			
25 110			
a.s refusal			
H 5 32.71013 103.07735			
1-1 sondy sol no stain/ no odor			
refusal			

Linn Energy Table 1

Seven Rivers Queen #32

	Lea County, New Mexico	
Total	RECEIVED	

Sample ID											-				
Sample Date   Sample Depth (ff)   Depth (f											×		2-2.5		
Sample Date   Sample Depth (ff)   Depth (				-	-		69.9	69.9	<10.0		×		1-1.5	"	
Sample Date         Sample Date         BEB Depth (ft)         Soll Status         TPH (mg/kg)         Banzene Total (mg/kg)         Total	ω	$\vdash$	<0.1	<0.050	<0.050	<0.050	6,270	6,270	<10.0		×		0-1	3/3/2014	AH-6
Sample Date   Sample Date   Sample Date   Sample Date   Depth (ft)	1 .	-							,		×		2-2.5	=	
Sample Date   Sample   BEB   Sample Depth (ff)   Depth	١.				ı				1		×		1-1.5	=	
Sample Date         Sample Date Depth (ff)         Sample Depth (ff)         BEB Depth (ff)         Soll Status         TPH (mg/kg)         Benzene (mg/kg)         Toluene (mg/kg)         Ethlybenzene (mg/kg)         Xylene (mg/kg)	130		<0.1	<0.050	<0.050	<0.050	<10.0	<10.0	<10.0		×		0-1	3/3/2014	AH-5
Sample Date         Sample Date Depth (ft)         BEB Depth (ft)         Soll Status         TPH (mg/kg)         Benzene GRO         Toluene GRO         Ethlybenzene (mg/kg)         Xylene	1	-	-								×		3-3.5	-	
Sample Date         Sample Date Depth (ft)         BEB Depth (ft)         Soil Status         TPH (mg/kg)         Benzene Daro         Toluene Toluene (mg/kg)         Ethlybenzene (mg/kg)         Xylene (mg/kg)	Ι.				1		ı.				×	,	2-2.5	:	
Sample Date         Sample Date Depth (ft)         BEB Depth (ft)         Soll Status         TPH (mg/kg)         Benzene GRO         Toluene (mg/kg)         Ethlybenzene (mg/kg)         Xylene (mg/kg)         Xyl					1		,				×		1-1.5	=	
Sample Date         Sample Date         Sample Depth (ft) Depth (ft)         BEB Depth (ft)         Soil Status         TPH (mg/kg)         Popth (mg/kg)         Toluene (mg/kg)         Ethlybenzene (mg/kg)         Xylene (mg/kg)           3/3/2014         0-1         -         X         < 10.0	3		<0.1	<0.050	<0.050	<0.050	<10.0	<10.0	<10.0		×		0-1	3/3/2014	AH-4
Sample Date         Sample Date         Sample Depth (ft)         BEB Depth (ft)         Soil Status         TPH (mg/kg)         Total (mg/kg)         Toluene (mg/kg)         Ethlybenzene (mg/kg)         Xylene (mg/kg)           3/3/2014         0-1         -         X         < 10.0	1										×		2-2.5	=	
Sample Date         Sample Date         Sample Depth (ft)         BEB Depth (ft)         Soil Status         TPH (mg/kg)         Total (mg/kg)         Benzene (mg/kg)         Toluene (mg/kg)         Ethlybenzene (mg/kg)         Xylene (mg/kg)           3/3/2014         0-1         -         X         <10.0					1						×		1-1.5	n n	
Sample Date         Sample Depth (ff)         BEB Depth (ff)         Soil Status         TPH (mg/kg)         Benzene (mg/kg)         Toluene (mg/kg)         Ethlybenzene (mg/kg)         Xylene (mg/kg)           3/3/2014         0-1         -         X         <10.0	8	$\vdash$	<0.1	<0.050	<0.050	<0.050	<10.0	<10.0	<10.0		×		0-1	3/3/2014	AH-3
Sample Date         Sample Depth (ft)         BEB Depth (ft)         Soil Status         TPH (mg/kg)         Benzene (mg/kg)         Toluene (mg/kg)         Ethlybenzene (mg/kg)         Xylene (mg/kg)           3/3/2014         0-1         -         X         <10.0	1	-	,		,	ı			,		×		2-2.5	=	
Sample Date         Sample Depth (ft)         BEB Depth (ft)         Soil Status         TPH (mg/kg)         Benzene (mg/kg)         Toluene (mg/kg)         Ethlybenzene (mg/kg)         Xylene (mg/kg)           3/3/2014         0-1         -         X         <10.0			,								×		1-1.5	"	
Sample Date         Sample Depth (ft)         BEB Depth (ft)         Soil Status         TPH (mg/kg)         Benzene (mg/kg)         Toluene (mg/kg)         Ethlybenzene (mg/kg)         Xylene (mg/kg)           3/3/2014         0-1         -         X         <10.0	8		<0.1	<0.050	<0.050	<0.050	<10.0	<10.0	<10.0		×		0-1	3/3/2014	AH-2
Sample Date         Sample Depth (ft)         BEB Depth (ft)         Soil Status         TPH (mg/kg)         Benzene (mg/kg)         Toluene (mg/kg)         Ethlybenzene (mg/kg)         Xylene (mg/kg)           3/3/2014         0-1         -         X         <10.0	1	_	-  -								×		2-2.5	-	
Sample Date Sample Depth (ft) Depth (ft) Lin-Situ Removed S/3/2014 0-1 - X <a href="Mailto:Analytical marked-left">Soil Status</a> TPH (mg/kg) Benzene Toluene (mg/kg)	1							ı	,		×		1-1.5	=	
Sample Date Sample Depth (ft) Complete Composition (ft) C	30		<0.1	<0.050	<0.050	<0.050	257	257	<10.0		×		0-1	3/3/2014	AH-1
Sample BEB Soil Status TPH (mg/kg) Benzene Toluene Ethlybenzene Xylene	3			(mg/kg)	(mg/kg)	(mg/kg)	Total	DRO	GRO	Removed		Depth (ft)	Depth (ft)	Sample Date	sample ID
	T a			Ethlybenzene	Toluene	Benzene	g)	TPH (mg/k		Status	Soil	BEB	Sample	Sample Date	Sample ID

<sup>-</sup>

(BEB)

Not Analyzed

Below Excavation Bottom

TETRATECH	CLIENT	DATEDATE
OBTITLE 7 rivers Que	U. + Wel # 2 In	JOB NUMBER DOLLA
SUBJECT		BY SHEET of
	2	
I <sup>∨</sup>	×	*7
	6 130	1410
AH-1 32.4751 107 B-1 sondy soil 1-15 2-2.5	ho stan no odor	AH-5 32.34721 103.25229 01. sordy soil no star / no od or 1-15 2-2.5 refusal
AU-2 32. 4725 103.25 0-1 SAMMY SOEL 1-1.5 11 22.5 SAMSY SOEL WOOLS	No Ster-/No open	AN-6 32,34743 103.25 205 0-1 January sort I ruly 100 string the + 0 14.5 11 2-2.5 1
AH-3 32,34731 0-1 sordy soil 1-1.5	103, 25216 no stam/no odd	HOBBS OCD MAR 1 3 2014
744 32.32748 /1 0-1 Jawas sost 1-15 " 2-2.5" " refisal	03. 2 5233 No 3 con ho soon	RECEIVED

1,