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By JKeyes at 3:38 pm, Apr 04, 2016



**APPROVED**

# Triste Draw 36 State Battery

## CLOSURE REPORT

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Release Date: 12/14/2015

U/L D, Sec 36, T23S, R32E, Lea County NM

API # 30-025-40184

NMOCD Case #: 1R-4022

**April 4, 2016**

**Prepared by:**

Michael Burton, Environmental Operations Manager  
Environmental Department  
Diversified Field Service, Inc.  
206 West Snyder  
Hobbs, NM 88240  
Phone: (575)964-8394  
Fax: (575)393-8396

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# Cimarex Triste Draw 36 State Battery

## 1 INTRODUCTION

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Cimarex has retained Diversified Environmental (DFSI) to address environmental issues for the site detailed herein.

The site is located west of Jal, NM, in Lea County. On December 14, 2015, the spill site resulted from a failure of a 2" check valve, allowing fluids to overflow low case and exit 1" vent lines. Approximately 20 bbls of produced water was released, with 12 bbls of recovered. The impacted area a fenced area around the compressor and treaters, the pad and a small area of the pasture. An initial C-141 was submitted to the NMOCD and approved on December 16, 2015 (Appendix I).

## 2 SITE ACTIVITIES

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On December 18, 2015, DFSI personnel on site to obtain samples within the leak area (Appendix II). Six samples were obtained and field sampled for chloride levels, as well as BTEX. The BTEX samples were performed using a Mini Rae Photoionization Detector (PID). Clean field samples were obtained and submitted for laboratory analysis at Cardinal Laboratories of Hobbs, NM for confirmation (Appendix III).

A work plan was submitted to NMOCD on January 4, 2016, and approved on January 6, 2016. Beginning February 2, 2016, DFSI personnel were on site to remove soil surrounding the compressor area by hand to 1' bgs. The pad and pasture area were excavated to 1' bgs, with the exception of SP-4, which was excavated to 3' bgs. Sidewall samples were collected within the 3' excavation area and submitted to a commercial laboratory for analysis (Appendix IV). The pad and compressor excavated areas were backfilled with caliche. The pasture excavated area was backfilled with clean, imported topsoil to ground surface and contoured to the surrounding area (Appendix V). Contaminated soil was properly disposed of at an NMOCD approved facility. The pasture area of the site was seeded with a BLM #2 (Appendix VI).

## 3 CONCLUSION

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According to the ConocoPhillips depth to groundwater map, depth to groundwater in the area averages 400 ft. bgs. Based on the report and work completed, any remaining chloride and BTEX components in the vadose zone will not affect groundwater beneath this site, with vegetation expected to return to normal; therefore, DFSI, on behalf of Cimarex, submits the final C-141 (Appendix VII) and respectfully requests the closure of this regulatory file.

# Appendix I

INITIAL C-141

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Diversified Field Service, Inc.  
206 W. Snyder  
Hobbs, NM 88240  
(575) 964-8394

**RECEIVED****By JKeyes at 8:59 am, Dec 16, 2015**

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

State of New Mexico  
Energy Minerals and Natural Resources

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

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

**Release Notification and Corrective Action****OPERATOR** Initial Report  Final Report

Name of Company Cimarex Energy	Contact Christine Alderman
Address 600 N Marienfeld Ste 600 Midland TX	Telephone No. 432-853-7059
Facility Name Triste Draw 36 State #1	Facility Type production

Surface Owner	Mineral Owner	API No. 30-025-40184
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	36	23S	32E	330	N	375	W	Lea

Latitude 32.2675 Longitude -103.6356

**NATURE OF RELEASE**

Type of Release produced water	Volume of Release 20 bbls	Volume Recovered 12 bbls
Source of Release valve	Date and Hour of Occurrence 12/14/15	Date and Hour of Discovery 12/14/15
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom? Christine Alderman	Date and Hour 12/16/15 9:30am	
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.\*  
A 2" check valve failed and allowed fluids to overflow blow case and come out the 1" vent lines.

Describe Area Affected and Cleanup Action Taken.\*  
Approx 150'x30' on pad, and approx. 20'x3' into pasture area. Release will be delineated, and a work plan will be developed.

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>Christine Alderman</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Christine Alderman	Approved by Environmental Specialist: <i>Jani Keyes</i>	
Title: ESH Supervisor	Approval Date: 12/16/2015	Expiration Date: 02/16/2016
E-mail Address: calderman@cimarex.com	Conditions of Approval: Discrete site samples required. Delineate and remediate per NMOCD guidelines. Geotagged photos recommended.	Attached <input type="checkbox"/>
Date: Phone: 432-853-7059		IRP4022 nJXK1535032176 pJXK1535032270

\* Attach Additional Sheets If Necessary

# Appendix II

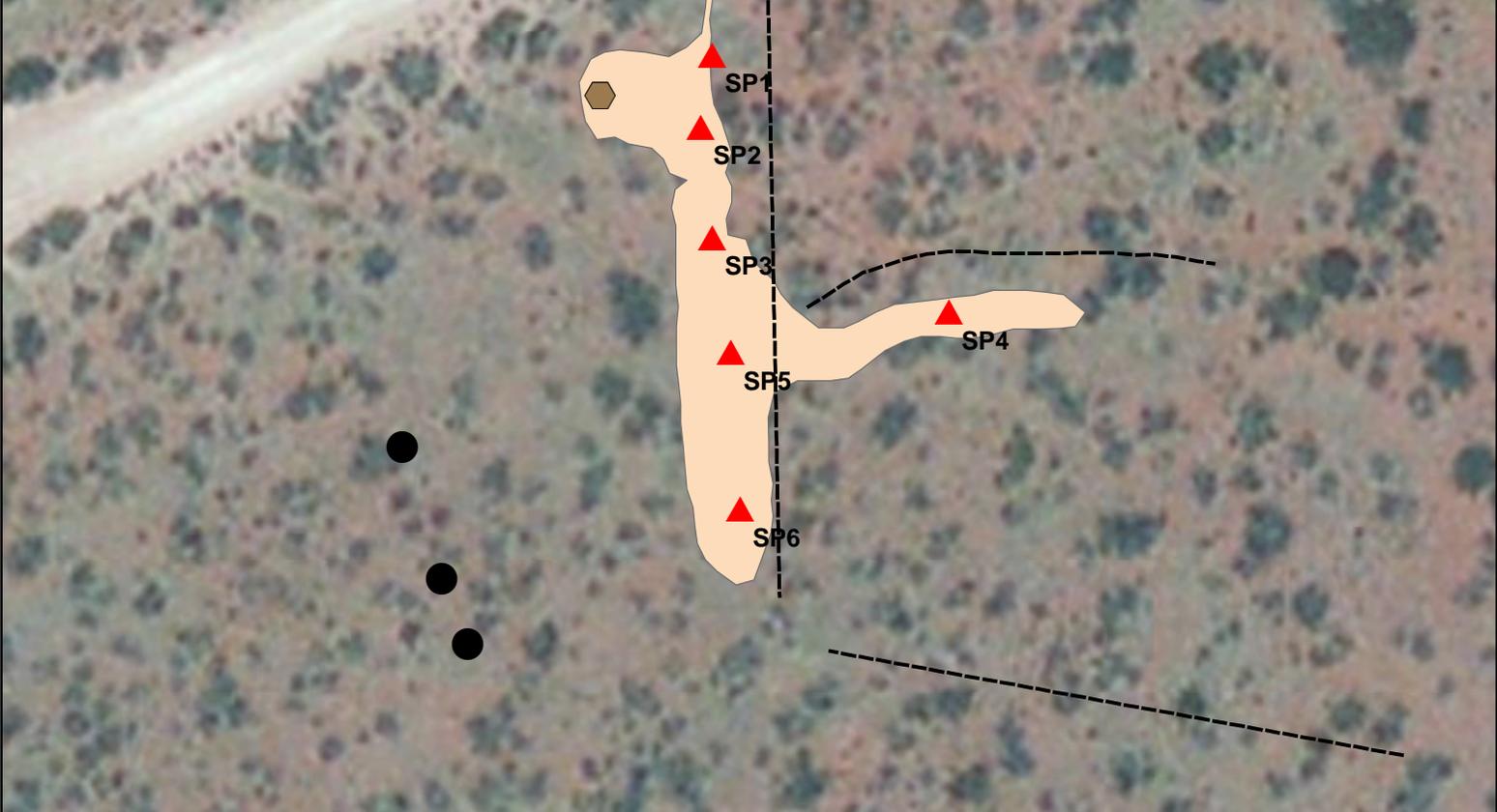
## SITE MAP

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Diversified Field Service, Inc.  
206 W. Snyder  
Hobbs, NM 88240  
(575) 964-8394

# Site Diagram

SP1										SP4									
Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X	Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X
SS	20771	3.1								SS	10537	3.2							
1'	164	3.1	144	<10	<10	<0.05	<0.05	<0.05	<0.05	1'	235	2							
2'	110	1	96	<10	<10	<0.05	<0.05	<0.05	<0.05	2'	4470	3.8							
SP2										SP5									
Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X	Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X
SS	21731	20.1								SS	23091	70.1							
1'	518	1.5	352	<10	<10	<0.05	<0.05	<0.05	<0.05	1'	379	15.1	528	<10	<10	<0.05	<0.05	<0.05	<0.05
2'	260	0.9	224	<10	<10	<0.05	<0.05	<0.05	<0.05	2'	173	9.5	160	<10	<10	<0.05	<0.05	<0.05	<0.05
SP3										SP6									
Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X	Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X
SS	21432	87.4								SS	113	0.6							
1'	344	1.9	80	<10	<10	<0.05	<0.05	<0.05	<0.05	1'	90	0.7	<16	<10	<10	<0.05	<0.05	<0.05	<0.05
2'	255	1.8	112	<10	<10	<0.05	<0.05	<0.05	<0.05	2'			<16	<10	<10	<0.05	<0.05	<0.05	<0.05



### Legend

- Tanks
- Compressor
- Sample Points
- Buried Line
- Oil and Produced Water (4,273 sq ft)

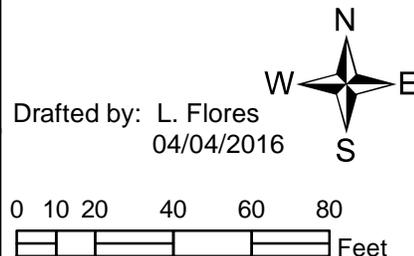
### Wall Samples @ 3'

Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X
North	417	1.5	336	<10	<10	<0.05	<0.05	<0.05	<0.05
South	300	0.7	32	<10	<10	<0.05	<0.05	<0.05	<0.05
East	200	1.3	<16	<10	<10	<0.05	<0.05	<0.05	<0.05

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



**Cimarex**  
**Triste Draw 36 State Battery**  
**Unit Letter D, Sec. 36, T23S, R312**  
**Lea County, NM**  
**API #: 30-025-10184**  
**NMOCD Case #: 1R-4022**



# Appendix III

## SOIL DELINEATION LABORATORY ANALYSIS

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Diversified Field Service, Inc.  
206 W. Snyder  
Hobbs, NM 88240  
(575) 964-8394

December 23, 2015

ED LOCKE

CIMAREX

2020 W. BENDER

HOBBS, NM 88240

RE: TRISTE DRAW 36 ST. #1

Enclosed are the results of analyses for samples received by the laboratory on 12/18/15 15:50.

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

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX  
 ED LOCKE  
 2020 W. BENDER  
 HOBBS NM, 88240  
 Fax To: ?

Received:	12/18/2015	Sampling Date:	12/18/2015
Reported:	12/23/2015	Sampling Type:	Soil
Project Name:	TRISTE DRAW 36 ST. #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SAMPLE PT. 1 @ 1' (H503297-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/21/2015	ND	2.20	110	2.00	1.51	
Toluene*	<0.050	0.050	12/21/2015	ND	2.25	113	2.00	1.29	
Ethylbenzene*	<0.050	0.050	12/21/2015	ND	2.06	103	2.00	2.62	
Total Xylenes*	<0.150	0.150	12/21/2015	ND	6.56	109	6.00	1.77	
Total BTEX	<0.300	0.300	12/21/2015	ND					

*Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.6-140*

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>144</b>	16.0	12/21/2015	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/21/2015	ND	179	89.3	200	3.51	
DRO >C10-C28	<10.0	10.0	12/21/2015	ND	179	89.7	200	1.86	

*Surrogate: 1-Chlorooctane 99.9 % 35-147*
*Surrogate: 1-Chlorooctadecane 101 % 28-171*

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX  
 ED LOCKE  
 2020 W. BENDER  
 HOBBS NM, 88240  
 Fax To: ?

Received:	12/18/2015	Sampling Date:	12/18/2015
Reported:	12/23/2015	Sampling Type:	Soil
Project Name:	TRISTE DRAW 36 ST. #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SAMPLE PT. 1 @ 2' (H503297-02)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/21/2015	ND	2.20	110	2.00	1.51		
Toluene*	<0.050	0.050	12/21/2015	ND	2.25	113	2.00	1.29		
Ethylbenzene*	<0.050	0.050	12/21/2015	ND	2.06	103	2.00	2.62		
Total Xylenes*	<0.150	0.150	12/21/2015	ND	6.56	109	6.00	1.77		
Total BTEX	<0.300	0.300	12/21/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	12/21/2015	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	12/21/2015	ND	179	89.3	200	3.51		
DRO >C10-C28	<10.0	10.0	12/21/2015	ND	179	89.7	200	1.86		

Surrogate: 1-Chlorooctane 94.4 % 35-147

Surrogate: 1-Chlorooctadecane 94.3 % 28-171

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX  
 ED LOCKE  
 2020 W. BENDER  
 HOBBS NM, 88240  
 Fax To: ?

Received:	12/18/2015	Sampling Date:	12/18/2015
Reported:	12/23/2015	Sampling Type:	Soil
Project Name:	TRISTE DRAW 36 ST. #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SAMPLE PT. 2 @ 1' (H503297-03)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/22/2015	ND	2.11	105	2.00	0.0249	
Toluene*	<0.050	0.050	12/22/2015	ND	2.14	107	2.00	0.928	
Ethylbenzene*	<0.050	0.050	12/22/2015	ND	1.95	97.6	2.00	1.06	
Total Xylenes*	<0.150	0.150	12/22/2015	ND	6.25	104	6.00	0.148	
Total BTEX	<0.300	0.300	12/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.9 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>352</b>	16.0	12/21/2015	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/21/2015	ND	179	89.3	200	3.51	
DRO >C10-C28	<10.0	10.0	12/21/2015	ND	179	89.7	200	1.86	

Surrogate: 1-Chlorooctane 106 % 35-147

Surrogate: 1-Chlorooctadecane 104 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX  
 ED LOCKE  
 2020 W. BENDER  
 HOBBS NM, 88240  
 Fax To: ?

Received:	12/18/2015	Sampling Date:	12/18/2015
Reported:	12/23/2015	Sampling Type:	Soil
Project Name:	TRISTE DRAW 36 ST. #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SAMPLE PT. 2 @ 2' (H503297-04)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/22/2015	ND	2.11	105	2.00	0.0249	
Toluene*	<0.050	0.050	12/22/2015	ND	2.14	107	2.00	0.928	
Ethylbenzene*	<0.050	0.050	12/22/2015	ND	1.95	97.6	2.00	1.06	
Total Xylenes*	<0.150	0.150	12/22/2015	ND	6.25	104	6.00	0.148	
Total BTEX	<0.300	0.300	12/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.7 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	12/21/2015	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/21/2015	ND	179	89.3	200	3.51	
DRO >C10-C28	<10.0	10.0	12/21/2015	ND	179	89.7	200	1.86	

Surrogate: 1-Chlorooctane 106 % 35-147

Surrogate: 1-Chlorooctadecane 107 % 28-171

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX  
 ED LOCKE  
 2020 W. BENDER  
 HOBBS NM, 88240  
 Fax To: ?

Received:	12/18/2015	Sampling Date:	12/18/2015
Reported:	12/23/2015	Sampling Type:	Soil
Project Name:	TRISTE DRAW 36 ST. #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SAMPLE PT. 3 @ 1' (H503297-05)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/22/2015	ND	2.11	105	2.00	0.0249	
Toluene*	<0.050	0.050	12/22/2015	ND	2.14	107	2.00	0.928	
Ethylbenzene*	<0.050	0.050	12/22/2015	ND	1.95	97.6	2.00	1.06	
Total Xylenes*	<0.150	0.150	12/22/2015	ND	6.25	104	6.00	0.148	
Total BTEX	<0.300	0.300	12/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 73.6-140

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	12/21/2015	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/21/2015	ND	179	89.3	200	3.51	
DRO >C10-C28	<10.0	10.0	12/21/2015	ND	179	89.7	200	1.86	

Surrogate: 1-Chlorooctane 107 % 35-147

Surrogate: 1-Chlorooctadecane 109 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX  
 ED LOCKE  
 2020 W. BENDER  
 HOBBS NM, 88240  
 Fax To: ?

Received:	12/18/2015	Sampling Date:	12/18/2015
Reported:	12/23/2015	Sampling Type:	Soil
Project Name:	TRISTE DRAW 36 ST. #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SAMPLE PT. 3 @ 2' (H503297-06)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/22/2015	ND	2.11	105	2.00	0.0249	
Toluene*	<0.050	0.050	12/22/2015	ND	2.14	107	2.00	0.928	
Ethylbenzene*	<0.050	0.050	12/22/2015	ND	1.95	97.6	2.00	1.06	
Total Xylenes*	<0.150	0.150	12/22/2015	ND	6.25	104	6.00	0.148	
Total BTEX	<0.300	0.300	12/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	12/21/2015	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/21/2015	ND	179	89.3	200	3.51	
DRO >C10-C28	<10.0	10.0	12/21/2015	ND	179	89.7	200	1.86	

Surrogate: 1-Chlorooctane 105 % 35-147

Surrogate: 1-Chlorooctadecane 108 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX  
 ED LOCKE  
 2020 W. BENDER  
 HOBBS NM, 88240  
 Fax To: ?

Received:	12/18/2015	Sampling Date:	12/18/2015
Reported:	12/23/2015	Sampling Type:	Soil
Project Name:	TRISTE DRAW 36 ST. #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SAMPLE PT. 4 @ 3' (H503297-07)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/22/2015	ND	2.11	105	2.00	0.0249	
Toluene*	<0.050	0.050	12/22/2015	ND	2.14	107	2.00	0.928	
Ethylbenzene*	<0.050	0.050	12/22/2015	ND	1.95	97.6	2.00	1.06	
Total Xylenes*	<0.150	0.150	12/22/2015	ND	6.25	104	6.00	0.148	
Total BTEX	<0.300	0.300	12/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 73.6-140

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	12/21/2015	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/21/2015	ND	179	89.3	200	3.51	
DRO >C10-C28	<10.0	10.0	12/21/2015	ND	179	89.7	200	1.86	

Surrogate: 1-Chlorooctane 100 % 35-147

Surrogate: 1-Chlorooctadecane 105 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX  
 ED LOCKE  
 2020 W. BENDER  
 HOBBS NM, 88240  
 Fax To: ?

Received:	12/18/2015	Sampling Date:	12/18/2015
Reported:	12/23/2015	Sampling Type:	Soil
Project Name:	TRISTE DRAW 36 ST. #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SAMPLE PT. 5 @ 1' (H503297-08)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/22/2015	ND	2.11	105	2.00	0.0249	
Toluene*	<0.050	0.050	12/22/2015	ND	2.14	107	2.00	0.928	
Ethylbenzene*	<0.050	0.050	12/22/2015	ND	1.95	97.6	2.00	1.06	
Total Xylenes*	<0.150	0.150	12/22/2015	ND	6.25	104	6.00	0.148	
Total BTEX	<0.300	0.300	12/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 73.6-140

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	12/21/2015	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/21/2015	ND	179	89.3	200	3.51	
DRO >C10-C28	<10.0	10.0	12/21/2015	ND	179	89.7	200	1.86	

Surrogate: 1-Chlorooctane 95.1 % 35-147

Surrogate: 1-Chlorooctadecane 97.5 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX  
 ED LOCKE  
 2020 W. BENDER  
 HOBBS NM, 88240  
 Fax To: ?

Received:	12/18/2015	Sampling Date:	12/18/2015
Reported:	12/23/2015	Sampling Type:	Soil
Project Name:	TRISTE DRAW 36 ST. #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SAMPLE PT. 5 @ 2' (H503297-09)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/22/2015	ND	2.11	105	2.00	0.0249	
Toluene*	<0.050	0.050	12/22/2015	ND	2.14	107	2.00	0.928	
Ethylbenzene*	<0.050	0.050	12/22/2015	ND	1.95	97.6	2.00	1.06	
Total Xylenes*	<0.150	0.150	12/22/2015	ND	6.25	104	6.00	0.148	
Total BTEX	<0.300	0.300	12/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.2 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	12/21/2015	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	12/22/2015	ND	188	93.9	200	0.715	
DRO >C10-C28	<10.0	10.0	12/22/2015	ND	176	88.2	200	5.36	

Surrogate: 1-Chlorooctane 103 % 35-147

Surrogate: 1-Chlorooctadecane 100 % 28-171

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX  
 ED LOCKE  
 2020 W. BENDER  
 HOBBS NM, 88240  
 Fax To: ?

Received:	12/18/2015	Sampling Date:	12/18/2015
Reported:	12/23/2015	Sampling Type:	Soil
Project Name:	TRISTE DRAW 36 ST. #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SAMPLE PT. 6 @ 1' (H503297-10)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/22/2015	ND	2.11	105	2.00	0.0249	
Toluene*	<0.050	0.050	12/22/2015	ND	2.14	107	2.00	0.928	
Ethylbenzene*	<0.050	0.050	12/22/2015	ND	1.95	97.6	2.00	1.06	
Total Xylenes*	<0.150	0.150	12/22/2015	ND	6.25	104	6.00	0.148	
Total BTEX	<0.300	0.300	12/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.6 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/21/2015	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	12/22/2015	ND	188	93.9	200	0.715	
DRO >C10-C28	<10.0	10.0	12/22/2015	ND	176	88.2	200	5.36	

Surrogate: 1-Chlorooctane 102 % 35-147

Surrogate: 1-Chlorooctadecane 102 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX  
 ED LOCKE  
 2020 W. BENDER  
 HOBBS NM, 88240  
 Fax To: ?

Received:	12/18/2015	Sampling Date:	12/18/2015
Reported:	12/23/2015	Sampling Type:	Soil
Project Name:	TRISTE DRAW 36 ST. #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SAMPLE PT. 6 @ 2' (H503297-11)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/22/2015	ND	2.11	105	2.00	0.0249	
Toluene*	<0.050	0.050	12/22/2015	ND	2.14	107	2.00	0.928	
Ethylbenzene*	<0.050	0.050	12/22/2015	ND	1.95	97.6	2.00	1.06	
Total Xylenes*	<0.150	0.150	12/22/2015	ND	6.25	104	6.00	0.148	
Total BTEX	<0.300	0.300	12/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.2 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/21/2015	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	12/22/2015	ND	188	93.9	200	0.715	
DRO >C10-C28	<10.0	10.0	12/22/2015	ND	176	88.2	200	5.36	

Surrogate: 1-Chlorooctane 103 % 35-147

Surrogate: 1-Chlorooctadecane 98.0 % 28-171

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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



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>Cimarex</u>		<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																						
Project Manager: <u>Ed Locke</u>		P.O. #:																										
Address:		Company:																										
City: State: Zip:		Attn:																										
Phone #: Fax #:		Address:																										
Project #: Project Owner:		City:																										
Project Name: <u>Cimarex</u>		State: Zip:																										
Project Location: <u>Triste Draw 36 St #1</u>		Phone #:																										
Sampler Name: <u>Chris Flores</u>		Fax #:																										
FOR LAB USE ONLY				MATRIX		PRESERV.		SAMPLING																				
Lab I.D.		Sample I.D.		(G)IRAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME												
<u>H503797</u>		<u>Sample Point 6 @ 2</u>		<u>G</u>	<u>1</u>			<u>✓</u>					<u>✓</u>		<u>12/18/2015</u>	<u>1:30 PM</u>	<u>Chloride</u>	<u>X</u>	<u>X</u>	<u>X</u>								

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <u>Chris Flores</u>	Date: <u>12/18/2015</u>	Received By: <u>Jodi Henson</u>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Time: <u>3:50</u>	Received By:	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One)	Date:	Sample Condition	REMARKS: <u>email to: krenshaw@diversifiedtsi.com</u>	
Sampler - UPS - Bus - Other:	Time:	Cool Intact	<u>malves</u>	
	<u>4.42</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>m.burton@</u>	
		<input type="checkbox"/> No <input type="checkbox"/> No	<u>mpatterson@</u>	
		CHECKED BY: <u>JH</u>	<u>cflores@</u>	

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

#54

# Appendix IV

## EXCAVATION SIDEWALLS LABORATORY ANALYSIS

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Diversified Field Service, Inc.  
206 W. Snyder  
Hobbs, NM 88240  
(575) 964-8394

February 11, 2016

ED LOCKE

CIMAREX ENERGY CO.-MIDLAND

600 N. MARIENFELD ST, SUITE 600

MIDLAND, TX 79701

RE: TRISTE DRAW 36 STATE BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 02/10/16 11:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX ENERGY CO.-MIDLAND  
 ED LOCKE  
 600 N. MARIENFELD ST, SUITE 600  
 MIDLAND TX, 79701  
 Fax To: UNK-NOWN

Received:	02/10/2016	Sampling Date:	02/09/2016
Reported:	02/11/2016	Sampling Type:	Soil
Project Name:	TRISTE DRAW 36 STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	NOT GIVEN		

**Sample ID: 3' DIG NORTH WALL (H600298-01)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2016	ND	2.00	100	2.00	6.96		
Toluene*	<0.050	0.050	02/11/2016	ND	1.97	98.5	2.00	7.49		
Ethylbenzene*	<0.050	0.050	02/11/2016	ND	1.79	89.6	2.00	8.13		
Total Xylenes*	<0.150	0.150	02/11/2016	ND	5.49	91.6	6.00	8.12		
Total BTEX	<0.300	0.300	02/11/2016	ND						

*Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.6-140*

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>336</b>	16.0	02/11/2016	ND	416	104	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	02/10/2016	ND	226	113	200	1.04		
DRO >C10-C28	<10.0	10.0	02/10/2016	ND	215	108	200	0.440		

*Surrogate: 1-Chlorooctane 88.8 % 35-147*
*Surrogate: 1-Chlorooctadecane 100 % 28-171*

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX ENERGY CO.-MIDLAND  
 ED LOCKE  
 600 N. MARIENFELD ST, SUITE 600  
 MIDLAND TX, 79701  
 Fax To: UNK-NOWN

Received:	02/10/2016	Sampling Date:	02/09/2016
Reported:	02/11/2016	Sampling Type:	Soil
Project Name:	TRISTE DRAW 36 STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	NOT GIVEN		

**Sample ID: 3' DIG SOUTH WALL (H600298-02)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2016	ND	2.00	100	2.00	6.96		
Toluene*	<0.050	0.050	02/11/2016	ND	1.97	98.5	2.00	7.49		
Ethylbenzene*	<0.050	0.050	02/11/2016	ND	1.79	89.6	2.00	8.13		
Total Xylenes*	<0.150	0.150	02/11/2016	ND	5.49	91.6	6.00	8.12		
Total BTEX	<0.300	0.300	02/11/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 73.6-140

Chloride, SM4500CI-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	02/11/2016	ND	416	104	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	02/10/2016	ND	226	113	200	1.04		
DRO >C10-C28	<10.0	10.0	02/10/2016	ND	215	108	200	0.440		

Surrogate: 1-Chlorooctane 85.6 % 35-147

Surrogate: 1-Chlorooctadecane 92.9 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX ENERGY CO.-MIDLAND  
 ED LOCKE  
 600 N. MARIENFELD ST, SUITE 600  
 MIDLAND TX, 79701  
 Fax To: UNK-NOWN

Received:	02/10/2016	Sampling Date:	02/09/2016
Reported:	02/11/2016	Sampling Type:	Soil
Project Name:	TRISTE DRAW 36 STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	NOT GIVEN		

**Sample ID: 3' DIG EAST WALL (H600298-03)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2016	ND	2.00	100	2.00	6.96		
Toluene*	<0.050	0.050	02/11/2016	ND	1.97	98.5	2.00	7.49		
Ethylbenzene*	<0.050	0.050	02/11/2016	ND	1.79	89.6	2.00	8.13		
Total Xylenes*	<0.150	0.150	02/11/2016	ND	5.49	91.6	6.00	8.12		
Total BTEX	<0.300	0.300	02/11/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.6-140

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	02/11/2016	ND	416	104	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	02/11/2016	ND	226	113	200	1.04		
DRO >C10-C28	<10.0	10.0	02/11/2016	ND	215	108	200	0.440		

Surrogate: 1-Chlorooctane 98.4 % 35-147

Surrogate: 1-Chlorooctadecane 98.0 % 28-171

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



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Celey D. Keene, Lab Director/Quality Manager

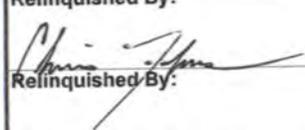
RUSH

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>Cimax</u>				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>															
Project Manager: <u>Ed Locke</u>				P.O. #:																			
Address:				Company:																			
City:		State:		Zip:		Attn:																	
Phone #:		Fax #:		Address:																			
Project #:		Project Owner:		City:																			
Project Name: <u>Cimax</u>				State:				Zip:															
Project Location: <u>Triste Draw 30 State Battery</u>				Phone #:																			
Sampler Name: <u>Chris Flores</u>				Fax #:																			
FOR LAB USE ONLY																							
Lab I.D.		Sample I.D.		G	RAB OR (C)OMP.	# CONTAINERS	MATRIX				PRESERV.		SAMPLING										
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chloride	TPH	BTEX						
<u>H600298</u>		<u>3' Dig North Wall</u>		G	I	1							<u>2/9/2016</u>	<u>6:50 PM</u>	X	X	X						
<u>01</u>		<u>3' Dig South Wall</u>		G	I	1							<u>6:20 PM</u>		X	X	X						
<u>02</u>		<u>3' Dig East Wall</u>		G	I	1							<u>6:50 PM</u>		X	X	X						
<u>03</u>																							

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Relinquished By: 		Date: <u>2/10/2016</u>		Received By: 		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:	
Relinquished By:		Time: <u>11:35</u>		Received By:		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #:	
Delivered By: (Circle One)		Sample Condition		CHECKED BY: (Initials)		REMARKS:			
Sampler - UPS - Bus - Other:		Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<u>2.4°C</u> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<u>email to: krenshaw@diversifiedfsi.com</u> <u>mvalves@</u> <u>mburton@</u> <u>mpatterson@</u> <u>cflores@</u>			

# Appendix V

## SITE PHOTOS

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# Triste Draw 36 State Battery

## PHOTO PAGE



Site prior, facing southwest 12/18/2015



Site prior, facing north 12/18/2015



Collecting auger samples, facing northeast 12/18/2015



Testing for BTEX by PID, facing east 12/18/2015



Spotting lines, facing north 2/8/2016



Removing soil around compressor area by hand, facing north 2/8/2016



Removing soil around compressor area by hand, facing northeast 2/8/2016



Exporting soil, facing northeast 2/18/2016



Importing base coarse, facing northeast 2/9/2016



Removing soil by hand, facing west 2/9/2016



Removing soil by hand, facing northeast 2/9/2016



Backfilling excavated area surrounding compressor, facing west 2/9/2016



Completed 3' bgs excavation, facing west 2/9/2016



Backfilling area surrounding wellhead, facing northwest 2/10/2016



Completed backfill, facing northeast 2/10/2016



Importing topsoil, facing southwest 2/10/2016



Backfilling by hand, facing east 2/10/2016



Backfilling 3' excavation, facing southwest 2/12/2016



Backfilling 3' excavation, facing northwest 2/12/2016



Preparing soil for seeding, facing northeast 2/12/2016



Seeding site, facing east 2/12/2016



Site completed, facing southwest 2/12/2016

# Appendix VI

## SEEDING REPORT

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Diversified Field Service, Inc.  
206 W. Snyder  
Hobbs, NM 88240  
(575) 964-8394

**DIVERSIFIED FIELD SERVICES, INC.**

Project: Triste Draw 36 State #1

Date Started: 2/2/16

Seed and lbs used: 2.53 BLM #2

Date Completed: 2/12/16

**Curtis and Curtis, Inc.**

4500 North Prince  
Clovis, NM 88101  
Phone: (575) 762-1759  
www.curtisseed.com

Diversified Construction  
1/4 Acre BLM #2, Broadcast Rate  
1 - 1/4 Acre Bag @ 9.53 Bulk Pounds Each  
Job: Cimarex Tristy Draw 36 State #1

Lot#: M-13461

<u>Item</u>	<u>Origin</u>	<u>Purity</u>	<u>Germ</u>	<u>Dormant</u>	<u>Total Germination</u>	<u>Test Date</u>	<u>Total PLS Pounds</u>
Sand Dropseed VNS	New Mexico	10.93%	23.00%	73.00%	96.00%	11/15	1.00
Sand Bluestem Chet	Kansas	16.23%	96.00%	1.00%	97.00%	11/15	1.50
Little Bluestem Aldous	Texas	16.56%	62.00%	33.00%	95.00%	01/16	1.50
Coreopsis Plains	Colorado	11.66%	84.00%	6.00%	90.00%	09/15	1.00
Plains Bristlegrass VNS	Texas	31.61%	83.00%	0.00%	83.00%	09/15	2.50
Other Crop:	0.46%						
Weed Seed:	0.19%						
Inert Matter:	12.36%						
There Are 1 Bags For This Mix This Bag Weighs 9.53 Bulk Pounds Use This Bag For 1/4X Acres							Total Bulk Pounds: 10

Supervisor: 

# Appendix VI

FINAL C-141

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Diversified Field Service, Inc.  
206 W. Snyder  
Hobbs, NM 88240  
(575) 964-8394

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

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

Form C-141  
Revised August 8, 2011

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

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company: Cimarex Energy	Contact: Christine Alderman
Address: 600 N Marienfeld, Ste 600, Midland, TX	Telephone No. 432-853-7059
Facility Name: Triste Draw 36 State #1	Facility Type: Production
Surface Owner:	Mineral Owner:
API No. 30-025-40184	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from	East/West Line	County
D	36	23S	32E	330	N	375	W	Lea

Latitude: 32.2675 Longitude: -103.6356

**NATURE OF RELEASE**

Type of Release: Produced Water	Volume of Release: 20 bbls	Volume Recovered: 12 bbls
Source of Release: Valve	Date and Hour of Occurrence 12/14/15	Date and Hour of Discovery 12/14/15
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher/Randy Pair	
By Whom? Christine Alderman	Date and Hour: 12/16/15 9:30 am	
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.\*

A 2" check valve failed and allowed fluids to overflow blow case and come out the 1" vent lines. Approx 150'x30' on pad, and approx.. 20'x3' into pasture area.

Describe Area Affected and Cleanup Action Taken.

On December 18, 2015, DFSI personnel on site to obtain samples within the leak area. Six samples were obtained and field sampled for chloride levels, as well as BTEX. The BTEX samples were performed using a Mini Rae Photoionization Detector (PID). Clean field samples were obtained and submitted for laboratory analysis at Cardinal Laboratories of Hobbs, NM for confirmation. A work plan was submitted to NMOCD on January 4, 2016, and approved on January 6, 2016. Beginning February 2, 2016, DFSI personnel were on site to remove soil surrounding the compressor area by hand to 1' bgs. The pad and pasture area were excavated to 1' bgs, with the exception of SP-4, which was excavated to 3' bgs. Sidewall samples were collected within the 3' excavation area and submitted to a commercial laboratory for analysis. The pad and compressor excavated areas were backfilled with caliche. The pasture excavated area was backfilled with clean, imported topsoil to ground surface and contoured to the surrounding area. Contaminated soil was properly disposed of at an NMOCD approved facility. The pasture area of the site was seeded with a BLM #2.

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

Signature: <i>Christine Alderman</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Christine Alderman	Approved by Environmental Specialist: <i>Janet Hoyer</i>	
Title: ESH Supervisor	Approval Date: 04/04/2016	Expiration Date: ///
E-mail Address: calderman@cimarex.com	Conditions of Approval: ///	Attached <input type="checkbox"/> IRP 4022
Date: 3-10-2016 Phone: 432-853-7059		

\* Attach Additional Sheets If Necessary