



INFORMATION ONLY

PO Box 301 | Lovington, NM 88260 | Phone 575.396.2378

July 31, 2017

Attn. Olivia Yu

Environmental Specialists, District 1
Oil Conservation Division, EMNRD
1625 N. French Drive
Hobbs, NM 88240

**RE: Corrective Action Plan
Black Mountain Operating, LLC
State K #2
UL/A sec. 2 T10S R33E
1RP – 4675-0**

Ms. Yu:

Black Mountain Operating, LLC (Black Mountain) has retained Basin Environmental Service Technologies (Basin) to address potential environmental concerns at the above-referenced site.

Background and Previous Work

The site is located approximately eleven and one-half (11.5) miles southwest of Crossroads, New Mexico at Unit Letter A of Section 2 in Township 10 South of Range 33 East. The global positioning coordinates are 32.48127, -103.53265. This site is located in an area where groundwater is not anticipated to be found at any depth below ground surface (bgs).

Around April 8th, 2017, Black Mountain discovered a release of approximately one-hundred seventy (170) barrels (bbls) of crude oil and produced water when a seal failed and allowed the liquid to escape from the pump. Approximately twenty (20) bbls were recovered. It is estimated that twelve-thousand two-hundred forty-four (12,244) square feet (ft²) of battery pad, pasture, road, and an additional battery pad was impacted. New Mexico Oil Conservation Division (NMOCD) was notified of the release on April 8th, 2017, and an initial C-141 was submitted to NMOCD on April 10th, 2017, for approval.

Basin personnel were on site beginning April 24th, 2017, to begin delineation and sampling activities (another company had started remediation activities prior). Eleven (11) sample points within the release area were established. The sample points, (Floor 1, Floor 2, Floor 3, Floor 4, Floor 5, Floor 6, Floor 7, Floor 8, Floor 9, Floor 10, Floor 11) from the release area were discretely collected and submitted to a NMOCD approved and certified laboratory. Chloride, gasoline Range organics (GRO) and diesel range organics (DRO) were analyzed. In addition, sample points Floor 3 and Floor 9 were analyzed for Benzene, Toluene, Ethyl-benzene, and xylenes (BTEX).

Corrective Action Plan

Areas around sample points Floor 1 and Floor 4 will be excavated in one (1) foot increments until total petroleum hydrocarbons (TPH) vertical delineation is achieved. Further horizontal delineation is required for the areas around Floor 1 NW, Floor 5 EW, Floor 7 EW, Floor 8 EW, and Floor 10 SW. The excavation will be expanded in 1-foot increments until horizontal delineation is achieved. Floor 1 WW and Floor 2 WW will be addressed at time of abandonment as they are beneath the secondary containment of the pad. All other sample areas are fully delineated and below the recommended remediation action levels (RRAL) as set forth by the NMOCD.

Once horizontal and vertical delineation is achieved through verification of a certified laboratory, all soils that exhibit a concentration above the RRAL will be removed and disposed at an NMOCD facility. The excavated area will then be backfilled with clean, non-impacted material and contoured to the surrounding area. The road and pad areas will be reconstructed with gypsum rock (caliche) while the impacted area of pasture will be backfilled with top soil.

The pasture area will then be seeded utilizing a drill or broadcast method with a blend of native vegetation free from noxious and invasive species that has been approved by the land owner. The State Mix #2 seeds will then be sowed with a disc, rake or other appropriate method to ensure germination. Reseeding will take place at a time conducive to germination. If noxious or invasive species arise from the reseeded process, the noxious and/or invasive species will be removed either from the application of a herbicide designed to eliminate the noxious and/or invasive plants, or by physical extraction. Thus, this will ensure that no noxious and/or invasive species will be allowed to produce in the reseeded area.

The supporting documentation for this Corrective Action Plan is attached.

Basin appreciates the opportunity to work with you on this project. Please contact me if you have any questions or wish to discuss the site.

Sincerely,



Robbie Runnels
Project Manager
Basin Environmental Service Technologies
(575) 393-2967

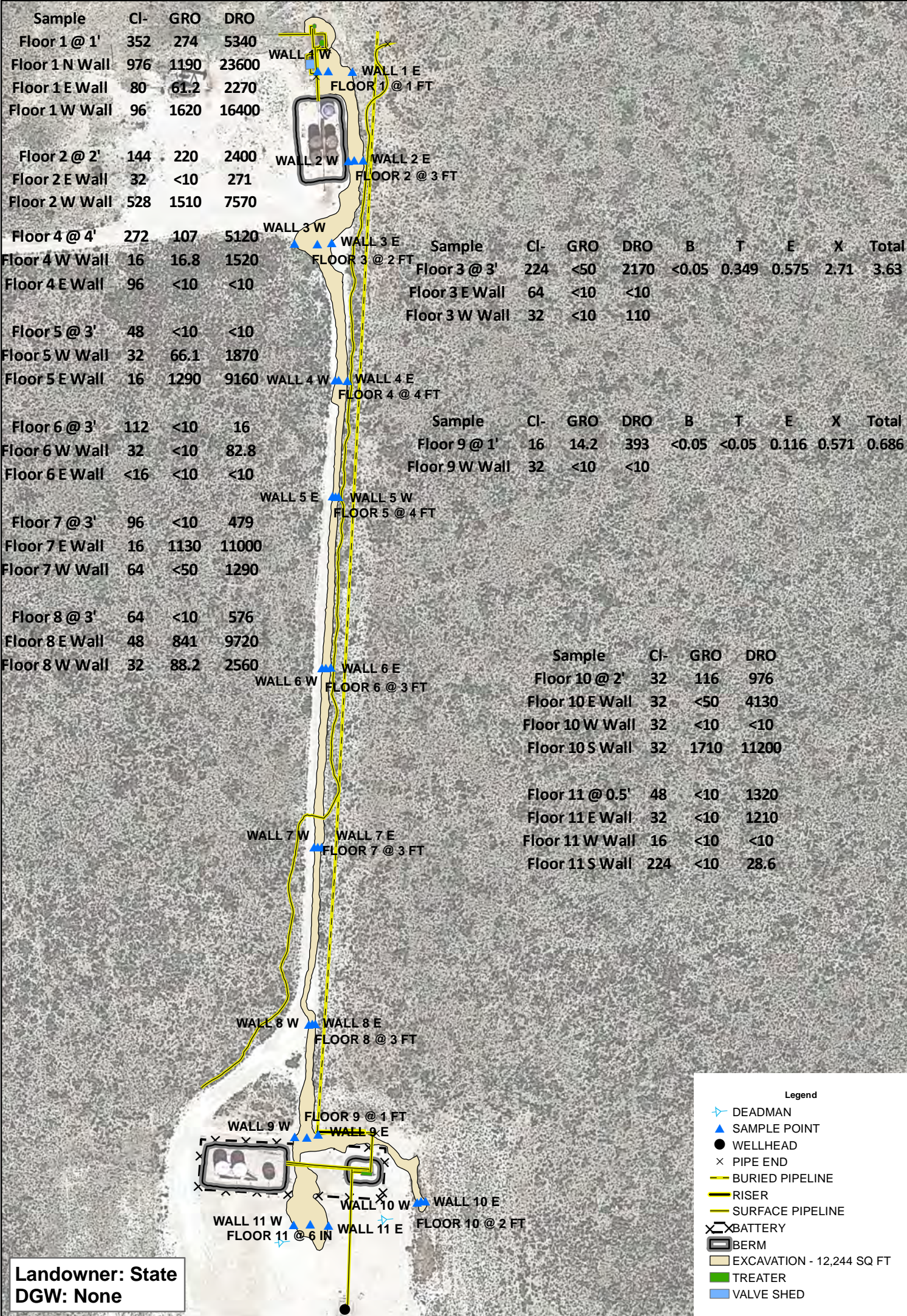
Attachments:

Figure - Initial Sampling Data
Appendix A – Initial C-141
Appendix B – Laboratory Analysis
Appendix C – Photo Documentation

FIGURE 1

Initial Sampling

Initial Sampling



BLACK MOUNTAIN RESOURCES STATE K #2

UL A & H SECTION 2
T-10-S R-33-E
LEA COUNTY, NM

Underground facilities are spatially projected and need to be field verified.

GPS: 33.481374 -103.532198

0 50 100 Feet

GPS date: 4/24/17 TG
Drawing date: 4/25/17
Drafted by: T. Grieco

APPENDICES

APPENDIX A

C-141

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Black Mountain Operating, LLC	Contact: John Wierzowiecki	
Address 500 Main St, Suite 500, Fort Worth, TX, 76102	Telephone No. (817) 529-9488	
Facility Name: State K #2	Facility Type: Oil Production Battery	
Surface Owner: Justin Johnson	Mineral Owner: State of NM	API No. 30-025-00977

LOCATION OF RELEASE

Unit Letter A	Section 02	Township 10S	Range 33E	Feet from the 660'	FNL	Feet from the 660	FEL	County Eddy
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Latitude 32.48127 Longitude -103.53265

NATURE OF RELEASE

Type of Release: Oil and produced fluids	Volume of Release: 170 bbl	Volume Recovered 20 bbl
Source of Release: Circulating Pump Seals	4/8/17	4/8/17
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Maxey Brown	
By Whom? John Wierzowiecki	4/8/17 @ 12:00 hrs	
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.*

RECEIVED

By Olivia Yu at 11:48 am, Apr 10, 2017

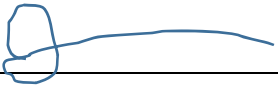

Describe Cause of Problem and Remedial Action Taken.*

A circulating pump was being used to work bottoms from oil tank. At some point it is believed that solids in the fluids caused the seals to fail allowing fluid to be released from the pump.

Describe Area Affected and Cleanup Action Taken.*

Area around the separators was affected by the release. This area is about 20' x 20'. Some fluid then flowed ~500 yards down the ruts in the lease road to a nearby location and pooled there. This area is about 10' x 20'. A vacuum truck was able to recover 20 bbl of liquid and all contaminated soil was removed and taken to an approved disposal. Basin Environmental was contacted and we will schedule testing to ensure all contamination has been removed.

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: John Wierzowiecki	Approved by Environmental Specialist: 	
Title: Operations Manager	Approval Date: 4/10/2017	Expiration Date:
E-mail Address: john.wierzowiecki@blackmtn.com	Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
Date: 4/3/17	Phone: (817) 529-9488	

* Attach Additional Sheets If Necessary

1RP-4675

nOY1710042657

pOY1710042935

APPENDIX B

Laboratory Analysis

May 02, 2017

ROBBIE RUNNELS

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: STATE K

Enclosed are the results of analyses for samples received by the laboratory on 04/25/17 15:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	04/25/2017	Sampling Date:	04/24/2017
Reported:	05/02/2017	Sampling Type:	Soil
Project Name:	STATE K	Sampling Condition:	Cool & Intact
Project Number:	#2	Sample Received By:	Tamara Oldaker
Project Location:	BLACK MOUNTAIN - LEA CO		

Sample ID: FLOOR 1 @ 1' (H701098-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	04/27/2017	ND	448	112	400	11.3	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	274	50.0	04/26/2017	ND	217	108	200	3.51	
DRO >C10-C28	5340	50.0	04/26/2017	ND	233	117	200	4.68	
Surrogate: 1-Chlorooctane									
	123 %	28.3-164							
Surrogate: 1-Chlorooctadecane									
	138 %	34.7-157							

Sample ID: FLOOR 1 NW (H701098-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	976	16.0	04/27/2017	ND	448	112	400	11.3		
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	1190	50.0	04/26/2017	ND	217	108	200	3.51		
DRO >C10-C28	23600	50.0	04/26/2017	ND	233	117	200	4.68		
Surrogate: 1-Chlorooctane	191 %	28.3-164								
Surrogate: 1-Chlorooctadecane	530 %	34.7-157								

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 04/25/2017
Reported: 05/02/2017
Project Name: STATE K
Project Number: #2
Project Location: BLACK MOUNTAIN - LEA CO

Sampling Date: 04/24/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: FLOOR 1 EW (H701098-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	04/27/2017	ND	448	112	400	11.3		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	61.2	50.0	04/26/2017	ND	217	108	200	3.51		
DRO >C10-C28	2270	50.0	04/26/2017	ND	233	117	200	4.68		

Surrogate: 1-Chlorooctane 75.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 102 % 34.7-157

Sample ID: FLOOR 1 WW (H701098-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	04/27/2017	ND	448	112	400	11.3		
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	1620	50.0	04/27/2017	ND	217	108	200	3.51		
DRO >C10-C28	16400	50.0	04/27/2017	ND	233	117	200	4.68		

Surrogate: 1-Chlorooctane 175 % 28.3-164

Surrogate: 1-Chlorooctadecane 374 % 34.7-157

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P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 04/25/2017
Reported: 05/02/2017
Project Name: STATE K
Project Number: #2
Project Location: BLACK MOUNTAIN - LEA CO

Sampling Date: 04/24/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: FLOOR 2 @ 2' (H701098-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	04/27/2017	ND	448	112	400	11.3		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	220	50.0	04/27/2017	ND	217	108	200	3.51		
DRO >C10-C28	2400	50.0	04/27/2017	ND	233	117	200	4.68		

Surrogate: 1-Chlorooctane 99.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 106 % 34.7-157

Sample ID: FLOOR 2 EW (H701098-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	04/27/2017	ND	448	112	400	11.3		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/27/2017	ND	217	108	200	3.51		
DRO >C10-C28	271	10.0	04/27/2017	ND	233	117	200	4.68		

Surrogate: 1-Chlorooctane 85.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 87.7 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 ROBBIE RUNNELS
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	04/25/2017	Sampling Date:	04/24/2017
Reported:	05/02/2017	Sampling Type:	Soil
Project Name:	STATE K	Sampling Condition:	Cool & Intact
Project Number:	#2	Sample Received By:	Tamara Oldaker
Project Location:	BLACK MOUNTAIN - LEA CO		

Sample ID: FLOOR 2 WW (H701098-07)

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	04/27/2017	ND	448	112	400	11.3	
TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1510	50.0	04/27/2017	ND	217	108	200	3.51	
DRO >C10-C28	7570	50.0	04/27/2017	ND	233	117	200	4.68	

Surrogate: 1-Chlorooctane	160 %	28.3-164
Surrogate: 1-Chlorooctadecane	169 %	34.7-157

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P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	04/25/2017	Sampling Date:	04/24/2017
Reported:	05/02/2017	Sampling Type:	Soil
Project Name:	STATE K	Sampling Condition:	Cool & Intact
Project Number:	#2	Sample Received By:	Tamara Oldaker
Project Location:	BLACK MOUNTAIN - LEA CO		

Sample ID: FLOOR 3 @ 3' (H701098-08)

BTX 8021B			mg/kg		Analyzed By: BF				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/29/2017	ND	1.87	93.4	2.00	0.114	
Toluene*	0.349	0.050	04/29/2017	ND	1.93	96.5	2.00	0.819	
Ethylbenzene*	0.575	0.050	04/29/2017	ND	1.94	97.1	2.00	0.802	
Total Xylenes*	2.71	0.150	04/29/2017	ND	5.79	96.5	6.00	0.883	
Total BTX	3.63	0.300	04/29/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 131 % 72-148

Chloride, SM4500CI-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	04/27/2017	ND	448	112	400	11.3	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	04/27/2017	ND	217	108	200	3.51	
DRO >C10-C28	2170	50.0	04/27/2017	ND	233	117	200	4.68	

Surrogate: 1-Chlorooctane 83.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 104 % 34.7-157

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*=Accredited Analyte

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ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 04/25/2017
Reported: 05/02/2017
Project Name: STATE K
Project Number: #2
Project Location: BLACK MOUNTAIN - LEA CO

Sampling Date: 04/24/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: FLOOR 3 EW (H701098-09)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	04/27/2017	ND	448	112	400	11.3	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/27/2017	ND	217	108	200	3.51	
DRO >C10-C28	<10.0	10.0	04/27/2017	ND	233	117	200	4.68	
Surrogate: 1-Chlorooctane	82.6 %	28.3-164							
Surrogate: 1-Chlorooctadecane	81.8 %	34.7-157							

Sample ID: FLOOR 3 WW (H701098-10)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/27/2017	ND	448	112	400	11.3	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/27/2017	ND	217	108	200	3.51	
DRO >C10-C28	110	10.0	04/27/2017	ND	233	117	200	4.68	
Surrogate: 1-Chlorooctane	94.5 %	28.3-164							
Surrogate: 1-Chlorooctadecane	96.8 %	34.7-157							

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 ROBBIE RUNNELS
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 04/25/2017
 Reported: 05/02/2017
 Project Name: STATE K
 Project Number: #2
 Project Location: BLACK MOUNTAIN - LEA CO

 Sampling Date: 04/24/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: FLOOR 4 @ 4' (H701098-11)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	04/27/2017	ND	448	112	400	11.3		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	107	50.0	04/27/2017	ND	217	108	200	3.51		
DRO >C10-C28	5120	50.0	04/27/2017	ND	233	117	200	4.68		

Surrogate: 1-Chlorooctane 103 % 28.3-164

Surrogate: 1-Chlorooctadecane 134 % 34.7-157

Sample ID: FLOOR 4 WW (H701098-12)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	04/27/2017	ND	448	112	400	11.3	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	16.8	10.0	04/26/2017	ND	222	111	200	0.615	
DRO >C10-C28	1520	10.0	04/26/2017	ND	225	112	200	0.492	QM-07

Surrogate: 1-Chlorooctane 96.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 106 % 34.7-157

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Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 04/25/2017
Reported: 05/02/2017
Project Name: STATE K
Project Number: #2
Project Location: BLACK MOUNTAIN - LEA CO

Sampling Date: 04/24/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: FLOOR 4 EW (H701098-13)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	04/27/2017	ND	448	112	400	11.3	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/26/2017	ND	222	111	200	0.615	
DRO >C10-C28	<10.0	10.0	04/26/2017	ND	225	112	200	0.492	
Surrogate: 1-Chlorooctane	82.2 %	28.3-164							
Surrogate: 1-Chlorooctadecane	82.3 %	34.7-157							

Sample ID: FLOOR 5 @ 3' (H701098-14)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	04/27/2017	ND	448	112	400	11.3	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/26/2017	ND	222	111	200	0.615	
DRO >C10-C28	<10.0	10.0	04/26/2017	ND	225	112	200	0.492	
Surrogate: 1-Chlorooctane		91.2 %	28.3-164						
Surrogate: 1-Chlorooctadecane		93.0 %	34.7-157						

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ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 04/25/2017
Reported: 05/02/2017
Project Name: STATE K
Project Number: #2
Project Location: BLACK MOUNTAIN - LEA CO

Sampling Date: 04/24/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: FLOOR 5 WW (H701098-15)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/27/2017	ND	416	104	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	66.1	50.0	04/26/2017	ND	222	111	200	0.615	
DRO >C10-C28	1870	50.0	04/26/2017	ND	225	112	200	0.492	

Surrogate: 1-Chlorooctane 108 % 28.3-164

Surrogate: 1-Chlorooctadecane 114 % 34.7-157

Sample ID: FLOOR 5 EW (H701098-16)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	04/27/2017	ND	416	104	400	7.41		
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	1290	50.0	04/26/2017	ND	222	111	200	0.615		
DRO >C10-C28	9160	50.0	04/26/2017	ND	225	112	200	0.492		

Surrogate: 1-Chlorooctane 220 % 28.3-164

Surrogate: 1-Chlorooctadecane 83.5 % 34.7-157

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 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 04/25/2017
 Reported: 05/02/2017
 Project Name: STATE K
 Project Number: #2
 Project Location: BLACK MOUNTAIN - LEA CO

 Sampling Date: 04/24/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: FLOOR 6 @ 3' (H701098-17)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	04/27/2017	ND	416	104	400	7.41		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/26/2017	ND	222	111	200	0.615		
DRO >C10-C28	16.0	10.0	04/26/2017	ND	225	112	200	0.492		

Surrogate: 1-Chlorooctane 84.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 85.0 % 34.7-157

Sample ID: FLOOR 6 WW (H701098-18)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/27/2017	ND	416	104	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/26/2017	ND	222	111	200	0.615	
DRO >C10-C28	82.8	10.0	04/26/2017	ND	225	112	200	0.492	

Surrogate: 1-Chlorooctane 88.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 91.5 % 34.7-157

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 Fax To: (575) 396-1429

 Received: 04/25/2017
 Reported: 05/02/2017
 Project Name: STATE K
 Project Number: #2
 Project Location: BLACK MOUNTAIN - LEA CO

 Sampling Date: 04/24/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: FLOOR 6 EW (H701098-19)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/27/2017	ND	416	104	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/26/2017	ND	222	111	200	0.615	
DRO >C10-C28	<10.0	10.0	04/26/2017	ND	225	112	200	0.492	
Surrogate: 1-Chlorooctane	91.0 %	28.3-164							
Surrogate: 1-Chlorooctadecane	92.4 %	34.7-157							

Sample ID: FLOOR 7 @ 3' (H701098-20)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	04/27/2017	ND	416	104	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/26/2017	ND	222	111	200	0.615	
DRO >C10-C28	479	10.0	04/26/2017	ND	225	112	200	0.492	
Surrogate: 1-Chlorooctane									
	86.3 %	28.3-164							
Surrogate: 1-Chlorooctadecane									
	92.3 %	34.7-157							

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ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 04/25/2017
Reported: 05/02/2017
Project Name: STATE K
Project Number: #2
Project Location: BLACK MOUNTAIN - LEA CO

Sampling Date: 04/24/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: FLOOR 7 EW (H701098-21)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	04/27/2017	ND	416	104	400	7.41		
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	1130	50.0	04/26/2017	ND	222	111	200	0.615		
DRO >C10-C28	11000	50.0	04/26/2017	ND	225	112	200	0.492		

Surrogate: 1-Chlorooctane 232 % 28.3-164

Surrogate: 1-Chlorooctadecane 83.4 % 34.7-157

Sample ID: FLOOR 7 WW (H701098-22)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	04/27/2017	ND	416	104	400	7.41		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<50.0	50.0	04/26/2017	ND	222	111	200	0.615		
DRO >C10-C28	1290	50.0	04/26/2017	ND	225	112	200	0.492		

Surrogate: 1-Chlorooctane 102 % 28.3-164

Surrogate: 1-Chlorooctadecane 99.0 % 34.7-157

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P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 04/25/2017
Reported: 05/02/2017
Project Name: STATE K
Project Number: #2
Project Location: BLACK MOUNTAIN - LEA CO

Sampling Date: 04/24/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: FLOOR 8 @ 3' (H701098-23)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	04/27/2017	ND	416	104	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/26/2017	ND	222	111	200	0.615	
DRO >C10-C28	576	10.0	04/26/2017	ND	225	112	200	0.492	
Surrogate: 1-Chlorooctane	91.1 %	28.3-164							
Surrogate: 1-Chlorooctadecane	87.4 %	34.7-157							

Sample ID: FLOOR 8 EW (H701098-24)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	04/27/2017	ND	416	104	400	7.41		
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	841	50.0	04/26/2017	ND	222	111	200	0.615		
DRO >C10-C28	9720	50.0	04/26/2017	ND	225	112	200	0.492		
Surrogate: 1-Chlorooctane	215 %	28.3-164								
Surrogate: 1-Chlorooctadecane	81.8 %	34.7-157								

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ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 04/25/2017
Reported: 05/02/2017
Project Name: STATE K
Project Number: #2
Project Location: BLACK MOUNTAIN - LEA CO

Sampling Date: 04/24/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: FLOOR 8 WW (H701098-25)

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	04/27/2017	ND	416	104	400	7.41		
TPH 8015M			mg/kg							
			Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	88.2	10.0	04/26/2017	ND	222	111	200	0.615		
DRO >C10-C28	2560	10.0	04/26/2017	ND	225	112	200	0.492		

Surrogate: 1-Chlorooctane 102 % 28.3-164

Surrogate: 1-Chlorooctadecane 114 % 34.7-157

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P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	04/25/2017	Sampling Date:	04/24/2017
Reported:	05/02/2017	Sampling Type:	Soil
Project Name:	STATE K	Sampling Condition:	Cool & Intact
Project Number:	#2	Sample Received By:	Tamara Oldaker
Project Location:	BLACK MOUNTAIN - LEA CO		

Sample ID: FLOOR 9 @ 1' (H701098-26)

BTX 8021B		mg/kg		Analyzed By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/29/2017	ND	1.87	93.4	2.00	0.114	
Toluene*	<0.050	0.050	04/29/2017	ND	1.93	96.5	2.00	0.819	
Ethylbenzene*	0.116	0.050	04/29/2017	ND	1.94	97.1	2.00	0.802	
Total Xylenes*	0.571	0.150	04/29/2017	ND	5.79	96.5	6.00	0.883	
Total BTX	0.686	0.300	04/29/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 135 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	04/27/2017	ND	416	104	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	14.2	10.0	04/26/2017	ND	222	111	200	0.615	
DRO >C10-C28	393	10.0	04/26/2017	ND	225	112	200	0.492	

Surrogate: 1-Chlorooctane 86.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 86.5 % 34.7-157

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 Fax To: (575) 396-1429

 Received: 04/25/2017
 Reported: 05/02/2017
 Project Name: STATE K
 Project Number: #2
 Project Location: BLACK MOUNTAIN - LEA CO

 Sampling Date: 04/24/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: FLOOR 9 WW (H701098-27)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/27/2017	ND	416	104	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/27/2017	ND	222	111	200	0.615	
DRO >C10-C28	<10.0	10.0	04/27/2017	ND	225	112	200	0.492	
Surrogate: 1-Chlorooctane	92.3 %	28.3-164							
Surrogate: 1-Chlorooctadecane	87.2 %	34.7-157							

Sample ID: FLOOR 10 @ 2' (H701098-28)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/27/2017	ND	416	104	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	116	10.0	04/27/2017	ND	192	95.9	200	7.61	
DRO >C10-C28	976	10.0	04/27/2017	ND	207	103	200	11.0	QM-07
Surrogate: 1-Chlorooctane		101 %	28.3-164						
Surrogate: 1-Chlorooctadecane		106 %	34.7-157						

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	04/25/2017	Sampling Date:	04/24/2017
Reported:	05/02/2017	Sampling Type:	Soil
Project Name:	STATE K	Sampling Condition:	Cool & Intact
Project Number:	#2	Sample Received By:	Tamara Oldaker
Project Location:	BLACK MOUNTAIN - LEA CO		

Sample ID: FLOOR 10 EW (H701098-29)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	04/27/2017	ND	416	104	400	7.41		
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	<50.0	50.0	04/27/2017	ND	192	95.9	200	7.61		
DRO >C10-C28	4130	50.0	04/27/2017	ND	207	103	200	11.0		

Surrogate: 1-Chlorooctane 88.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 158 % 34.7-157

Sample ID: FLOOR 10 WW (H701098-30)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/27/2017	ND	416	104	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/27/2017	ND	192	95.9	200	7.61	
DRO >C10-C28	<10.0	10.0	04/27/2017	ND	207	103	200	11.0	

Surrogate: 1-Chlorooctane 86.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 98.0 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 ROBBIE RUNNELS
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 04/25/2017
 Reported: 05/02/2017
 Project Name: STATE K
 Project Number: #2
 Project Location: BLACK MOUNTAIN - LEA CO

 Sampling Date: 04/24/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: FLOOR 10 SW (H701098-31)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	04/27/2017	ND	416	104	400	7.41		
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	1710	50.0	04/27/2017	ND	192	95.9	200	7.61		
DRO >C10-C28	11200	50.0	04/27/2017	ND	207	103	200	11.0		

Surrogate: 1-Chlorooctane 177 % 28.3-164

Surrogate: 1-Chlorooctadecane 254 % 34.7-157

Sample ID: FLOOR 11 @ 0.5' (H701098-32)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	04/27/2017	ND	416	104	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/27/2017	ND	192	95.9	200	7.61	
DRO >C10-C28	1320	10.0	04/27/2017	ND	207	103	200	11.0	

Surrogate: 1-Chlorooctane 103 % 28.3-164

Surrogate: 1-Chlorooctadecane 133 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 04/25/2017
Reported: 05/02/2017
Project Name: STATE K
Project Number: #2
Project Location: BLACK MOUNTAIN - LEA CO

Sampling Date: 04/24/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: FLOOR 11 EW (H701098-33)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	04/27/2017	ND	416	104	400	7.41		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/27/2017	ND	192	95.9	200	7.61		
DRO >C10-C28	1210	10.0	04/27/2017	ND	207	103	200	11.0		

Surrogate: 1-Chlorooctane 88.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 103 % 34.7-157

Sample ID: FLOOR 11 WW (H701098-34)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	04/27/2017	ND	416	104	400	7.41		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/27/2017	ND	192	95.9	200	7.61		
DRO >C10-C28	<10.0	10.0	04/27/2017	ND	207	103	200	11.0		

Surrogate: 1-Chlorooctane 77.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 93.3 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 04/25/2017
Reported: 05/02/2017
Project Name: STATE K
Project Number: #2
Project Location: BLACK MOUNTAIN - LEA CO

Sampling Date: 04/24/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: FLOOR 11 SW (H701098-35)

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	224	16.0	04/27/2017	ND	400	100	400	7.69		
TPH 8015M			mg/kg							
			Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/27/2017	ND	192	95.9	200	7.61		
DRO >C10-C28	28.6	10.0	04/27/2017	ND	207	103	200	11.0		
<hr/>										
Surrogate: 1-Chlorooctane	62.1 %	28.3-164								
Surrogate: 1-Chlorooctadecane	67.6 %	34.7-157								

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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.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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



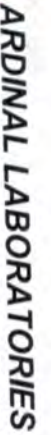
Celey D. Keene, Lab Director/Quality Manager



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

BILL TO

[illegible]



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

(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Basin Environmental Service Technologies, LLC Project Manager: Robbie Runnels Address: P.O. Box 301 City: Lovington Phone #: (575)396-2378 Project #: Project Name: State K #2 Project Location: Lea Sampler Name: Robbie Runnels				P.O. #: Company: Black Mountain Attn: Address: City: State: NM Zip: Phone #: Fax #:			
FOR LAB USE ONLY				BILL TO			
Lab I.D.				Sample I.D.			
#201098				DATE			
11 Floor 4 @ 4'				TIME			
12 Floor 4 WW				10:17			
13 Floor 4 EW				10:21			
14 Floor 5 @ 3'				10:24			
15 Floor 5 WW				10:27			
16 Floor 5 EW				10:30			
17 Floor 6 @ 3'				10:33			
18 Floor 6 WW				10:36			
19 Floor 6 EW				10:39			
20 Floor 7 @ 3'				10:42			
21 Floor 7 @ 3'				10:45			
22 Floor 7 @ 3'				10:48			
23 Floor 7 @ 3'				10:51			
24 Floor 7 @ 3'				10:54			
25 Floor 7 @ 3'				10:57			
26 Floor 7 @ 3'				11:00			
27 Floor 7 @ 3'				11:03			
28 Floor 7 @ 3'				11:06			
29 Floor 7 @ 3'				11:09			
30 Floor 7 @ 3'				11:12			
31 Floor 7 @ 3'				11:15			
32 Floor 7 @ 3'				11:18			
33 Floor 7 @ 3'				11:21			
34 Floor 7 @ 3'				11:24			
35 Floor 7 @ 3'				11:27			
36 Floor 7 @ 3'				11:30			
37 Floor 7 @ 3'				11:33			
38 Floor 7 @ 3'				11:36			
39 Floor 7 @ 3'				11:39			
40 Floor 7 @ 3'				11:42			
41 Floor 7 @ 3'				11:45			
42 Floor 7 @ 3'				11:48			
43 Floor 7 @ 3'				11:51			
44 Floor 7 @ 3'				11:54			
45 Floor 7 @ 3'				11:57			
46 Floor 7 @ 3'				12:00			
47 Floor 7 @ 3'				12:03			
48 Floor 7 @ 3'				12:06			
49 Floor 7 @ 3'				12:09			
50 Floor 7 @ 3'				12:12			
51 Floor 7 @ 3'				12:15			
52 Floor 7 @ 3'				12:18			
53 Floor 7 @ 3'				12:21			
54 Floor 7 @ 3'				12:24			
55 Floor 7 @ 3'				12:27			
56 Floor 7 @ 3'				12:30			
57 Floor 7 @ 3'				12:33			
58 Floor 7 @ 3'				12:36			
59 Floor 7 @ 3'				12:39			
60 Floor 7 @ 3'				12:42			
61 Floor 7 @ 3'				12:45			
62 Floor 7 @ 3'				12:48			
63 Floor 7 @ 3'				12:51			
64 Floor 7 @ 3'				12:54			
65 Floor 7 @ 3'				12:57			
66 Floor 7 @ 3'				1:00			
67 Floor 7 @ 3'				1:03			
68 Floor 7 @ 3'				1:06			
69 Floor 7 @ 3'				1:09			
70 Floor 7 @ 3'				1:12			
71 Floor 7 @ 3'				1:15			
72 Floor 7 @ 3'				1:18			
73 Floor 7 @ 3'				1:21			
74 Floor 7 @ 3'				1:24			
75 Floor 7 @ 3'				1:27			
76 Floor 7 @ 3'				1:30			
77 Floor 7 @ 3'				1:33			
78 Floor 7 @ 3'				1:36			
79 Floor 7 @ 3'				1			



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Basin Environmental Service Technologies, LLC Project Manager: Robbie Runnels Address: P.O. Box 301 City: Lovington State: NM Zip: 88260 Phone #: (575) 396-2378 Fax #: (575) 396-1429 Project #: Project Name: State K #2 Project Location: Lea Sampler Name: Robbie Runnels		P.O. #: Company: Black Mountain Attn: Address: City: State: NM Zip: Phone #: Fax #:		BILL TO		ANALYSIS REQUEST																							
FOR LAB USE ONLY		Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER :		PRESERV ACID/BASE: ICE / COOL OTHER :		SAMPLING		Chloride TPH (8015M) BTEX (8021B)													
DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME															
21		Floor 7 EW		9		1		X		X		4/24/17		11:50		X		X											
22		Floor 7 WW		9		1		X		X		4/24/17		11:55		X		X											
23		Floor 8 @ 3'		9		1		X		X		4/24/17		11:00		X		X											
24		Floor 8 EW		9		1		X		X		4/24/17		11:10		X		X											
25		Floor 8 WW		9		1		X		X		4/24/17		11:15		X		X											
26		Floor 9 @ 1'		9		1		X		X		4/24/17		11:40		X		X											
27		Floor 9 EW		9		1		X		X		4/24/17		11:45		X		X											
28		Floor 9 WW		9		1		X		X		4/24/17		11:50		X		X											
29		Floor 10 @ 2'		9		1		X		X		4/24/17		11:45		X		X											
30		Floor 10 EW		9		1		X		X		4/24/17		11:45		X		X											

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Relinquished By: _____ Date: _____ Received By: _____ Date: _____
 Relinquished By: _____ Date: _____ Received By: _____ Date: _____

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

FORM-006
 Revision 1.0

+ Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

Please email results to pm@basinenr.com

REMARKS:

Phone Result: ☐ Yes ☐ No Add'l Phone #: _____
 Fax Result: ☐ Yes ☐ No Add'l Fax #: _____



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

July 23, 2017

ROBBIE RUNNELS

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: STATE K

Enclosed are the results of analyses for samples received by the laboratory on 07/14/17 15:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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:

 Basin Environmental Service
 ROBBIE RUNNELS
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 07/14/2017
 Reported: 07/23/2017
 Project Name: STATE K
 Project Number: #2
 Project Location: XTO - LEA CO

 Sampling Date: 07/13/2017
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: FLOOR 1 @ 3' (H701831-01)

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	07/19/2017	ND	1.89	94.3	2.00	2.20	
Toluene*	<0.050	0.050	07/19/2017	ND	1.88	94.0	2.00	1.21	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.07	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.09	102	6.00	0.563	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

Sample ID: FLOOR 2 @ 2' (H701831-02)

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	07/19/2017	ND	1.89	94.3	2.00	2.20	
Toluene*	0.097	0.050	07/19/2017	ND	1.88	94.0	2.00	1.21	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.07	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.09	102	6.00	0.563	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: FLOOR 4 @ 4' (H701831-03)

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	07/19/2017	ND	1.89	94.3	2.00	2.20	
Toluene*	<0.050	0.050	07/19/2017	ND	1.88	94.0	2.00	1.21	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.07	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.09	102	6.00	0.563	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 72-148

Sample ID: FLOOR 5 @ 3' (H701831-04)

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	07/19/2017	ND	1.89	94.3	2.00	2.20	
Toluene*	0.055	0.050	07/19/2017	ND	1.88	94.0	2.00	1.21	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.07	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.09	102	6.00	0.563	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 72-148

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Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: FLOOR 6 @ 3' (H701831-05)

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	07/19/2017	ND	1.89	94.3	2.00	2.20	
Toluene*	0.128	0.050	07/19/2017	ND	1.88	94.0	2.00	1.21	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.07	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.09	102	6.00	0.563	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Sample ID: FLOOR 7 @ 3' (H701831-06)

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	07/19/2017	ND	1.89	94.3	2.00	2.20	
Toluene*	<0.050	0.050	07/19/2017	ND	1.88	94.0	2.00	1.21	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.07	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.09	102	6.00	0.563	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 72-148

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Fax To: (575) 396-1429

Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: FLOOR 8 @ 3' (H701831-07)

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	07/19/2017	ND	1.89	94.3	2.00	2.20	
Toluene*	0.082	0.050	07/19/2017	ND	1.88	94.0	2.00	1.21	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.07	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.09	102	6.00	0.563	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

Sample ID: FLOOR 10 @ 2' (H701831-08)

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	07/19/2017	ND	1.89	94.3	2.00	2.20	
Toluene*	<0.050	0.050	07/19/2017	ND	1.88	94.0	2.00	1.21	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.07	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.09	102	6.00	0.563	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 72-148

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 Fax To: (575) 396-1429

 Received: 07/14/2017
 Reported: 07/23/2017
 Project Name: STATE K
 Project Number: #2
 Project Location: XTO - LEA CO

 Sampling Date: 07/13/2017
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: FLOOR 11 @ 0.5' (H701831-09)

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	07/19/2017	ND	1.78	89.1	2.00	0.408	
Toluene*	0.141	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 72-148

Sample ID: SP1 NW (H701831-10)

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	07/19/2017	ND	1.78	89.1	2.00	0.408	
Toluene*	<0.050	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

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Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: SP1 EW (H701831-11)

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	07/19/2017	ND	1.78	89.1	2.00	0.408	
Toluene*	0.090	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Sample ID: SP1 WW (H701831-12)

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	07/19/2017	ND	1.78	89.1	2.00	0.408	
Toluene*	<0.050	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

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Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: SP2 EW (H701831-13)

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	07/19/2017	ND	1.78	89.1	2.00	0.408	
Toluene*	0.050	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 72-148

Sample ID: SP2 WW (H701831-14)

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	07/19/2017	ND	1.78	89.1	2.00	0.408	
Toluene*	0.246	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11	
Ethylbenzene*	0.103	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62	
Total Xylenes*	0.762	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74	
Total BTEX	1.11	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 72-148

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Lovington NM, 88260
Fax To: (575) 396-1429

Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: SP3 EW (H701831-15)

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	07/19/2017	ND	1.78	89.1	2.00	0.408	
Toluene*	<0.050	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

Sample ID: SP3 WW (H701831-16)

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	07/19/2017	ND	1.78	89.1	2.00	0.408	
Toluene*	<0.050	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 72-148

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P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: SP4 EW (H701831-17)

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	07/19/2017	ND	1.78	89.1	2.00	0.408		
Toluene*	0.194	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11		
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62		
Total Xylenes*	0.175	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74		
Total BTEX	0.369	0.300	07/19/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 72-148

Sample ID: SP4 WW (H701831-18)

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	07/19/2017	ND	1.78	89.1	2.00	0.408	
Toluene*	0.060	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 72-148

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Lovington NM, 88260
Fax To: (575) 396-1429

Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: SP5 EW (H701831-19)

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	07/19/2017	ND	1.78	89.1	2.00	0.408		
Toluene*	0.068	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11		
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62		
Total Xylenes*	<0.150	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74		
Total BTEX	<0.300	0.300	07/19/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 72-148

Sample ID: SP5 WW (H701831-20)

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	07/19/2017	ND	1.78	89.1	2.00	0.408	
Toluene*	0.183	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62	
Total Xylenes*	0.160	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74	
Total BTEX	0.343	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 72-148

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Fax To: (575) 396-1429

Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: SP6 EW (H701831-21)

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	07/19/2017	ND	1.78	89.1	2.00	0.408	
Toluene*	0.151	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62	
Total Xylenes*	0.166	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74	
Total BTEX	0.317	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 72-148

Sample ID: SP6 WW (H701831-22)

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	07/19/2017	ND	1.78	89.1	2.00	0.408	
Toluene*	0.137	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 72-148

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: SP7 EW (H701831-23)

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	07/19/2017	ND	1.78	89.1	2.00	0.408		
Toluene*	0.062	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11		
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62		
Total Xylenes*	<0.150	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74		
Total BTEX	<0.300	0.300	07/19/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 72-148

Sample ID: SP7 WW (H701831-24)

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	07/19/2017	ND	1.78	89.1	2.00	0.408		
Toluene*	0.094	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11		
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62		
Total Xylenes*	<0.150	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74		
Total BTEX	<0.300	0.300	07/19/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 72-148

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Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: SP8 EW (H701831-25)

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	07/19/2017	ND	1.78	89.1	2.00	0.408	
Toluene*	0.139	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 72-148

Sample ID: SP8 WW (H701831-26)

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	07/19/2017	ND	1.78	89.1	2.00	0.408	
Toluene*	0.074	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 72-148

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Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: SP9 WW (H701831-27)

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	07/19/2017	ND	1.78	89.1	2.00	0.408	
Toluene*	<0.050	0.050	07/19/2017	ND	1.80	89.9	2.00	1.11	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	1.95	97.3	2.00	1.62	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	5.82	97.0	6.00	1.74	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

Sample ID: SP10 EW (H701831-28)

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	07/20/2017	ND	1.93	96.5	2.00	0.942	
Toluene*	<0.050	0.050	07/20/2017	ND	1.95	97.6	2.00	1.07	
Ethylbenzene*	<0.050	0.050	07/20/2017	ND	2.12	106	2.00	1.32	
Total Xylenes*	<0.150	0.150	07/20/2017	ND	6.30	105	6.00	1.08	
Total BTEX	<0.300	0.300	07/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

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Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: SP10 WW (H701831-29)

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	07/20/2017	ND	1.93	96.5	2.00	0.942	
Toluene*	<0.050	0.050	07/20/2017	ND	1.95	97.6	2.00	1.07	
Ethylbenzene*	<0.050	0.050	07/20/2017	ND	2.12	106	2.00	1.32	
Total Xylenes*	<0.150	0.150	07/20/2017	ND	6.30	105	6.00	1.08	
Total BTEX	<0.300	0.300	07/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 72-148

Sample ID: SP10 SW (H701831-30)

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	07/20/2017	ND	1.93	96.5	2.00	0.942	
Toluene*	<0.050	0.050	07/20/2017	ND	1.95	97.6	2.00	1.07	
Ethylbenzene*	<0.050	0.050	07/20/2017	ND	2.12	106	2.00	1.32	
Total Xylenes*	<0.150	0.150	07/20/2017	ND	6.30	105	6.00	1.08	
Total BTEX	<0.300	0.300	07/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

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Analytical Results For:

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ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: SP11 EW (H701831-31)

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	07/20/2017	ND	1.93	96.5	2.00	0.942		
Toluene*	<0.050	0.050	07/20/2017	ND	1.95	97.6	2.00	1.07		
Ethylbenzene*	<0.050	0.050	07/20/2017	ND	2.12	106	2.00	1.32		
Total Xylenes*	<0.150	0.150	07/20/2017	ND	6.30	105	6.00	1.08		
Total BTEX	<0.300	0.300	07/20/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

Sample ID: SP11 WW (H701831-32)

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	07/20/2017	ND	1.93	96.5	2.00	0.942	
Toluene*	<0.050	0.050	07/20/2017	ND	1.95	97.6	2.00	1.07	
Ethylbenzene*	<0.050	0.050	07/20/2017	ND	2.12	106	2.00	1.32	
Total Xylenes*	<0.150	0.150	07/20/2017	ND	6.30	105	6.00	1.08	
Total BTEX	<0.300	0.300	07/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

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Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: SP11 SW (H701831-33)

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	07/20/2017	ND	1.93	96.5	2.00	0.942		
Toluene*	0.100	0.050	07/20/2017	ND	1.95	97.6	2.00	1.07		
Ethylbenzene*	<0.050	0.050	07/20/2017	ND	2.12	106	2.00	1.32		
Total Xylenes*	<0.150	0.150	07/20/2017	ND	6.30	105	6.00	1.08		
Total BTEX	<0.300	0.300	07/20/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

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Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: PILE NORTH (H701831-34)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/20/2017	ND	1.93	96.5	2.00	0.942	
Toluene*	0.105	0.050	07/20/2017	ND	1.95	97.6	2.00	1.07	
Ethylbenzene*	<0.050	0.050	07/20/2017	ND	2.12	106	2.00	1.32	
Total Xylenes*	<0.150	0.150	07/20/2017	ND	6.30	105	6.00	1.08	
Total BTX	<0.300	0.300	07/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/17/2017	ND	416	104	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	07/18/2017	ND	199	99.5	200	4.26	
DRO >C10-C28	152	10.0	07/18/2017	ND	214	107	200	3.63	

Surrogate: 1-Chlorooctane 83.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 93.2 % 34.7-157

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Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received: 07/14/2017
Reported: 07/23/2017
Project Name: STATE K
Project Number: #2
Project Location: XTO - LEA CO

Sampling Date: 07/13/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: PILE SOUTH (H701831-35)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/20/2017	ND	1.93	96.5	2.00	0.942	
Toluene*	0.249	0.050	07/20/2017	ND	1.95	97.6	2.00	1.07	
Ethylbenzene*	0.055	0.050	07/20/2017	ND	2.12	106	2.00	1.32	
Total Xylenes*	0.309	0.150	07/20/2017	ND	6.30	105	6.00	1.08	
Total BTX	0.613	0.300	07/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/17/2017	ND	416	104	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	07/18/2017	ND	199	99.5	200	4.26	
DRO >C10-C28	158	10.0	07/18/2017	ND	214	107	200	3.63	

Surrogate: 1-Chlorooctane 85.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 95.3 % 34.7-157

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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



CARDINAL LABORATORIES

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Basin Environmental Service Technologies, LLC

Project Manager: Robbie Runnels

Address: P.O. Box 301

City: Lovington

Phone #: (575)396-2378

Project #:

Project Name: State K #2

Project Location: Lea

Sampler Name: Karanja Lewis

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

H7D1831

Floor 1 @ 3'	Floor 2 @ 2'	Floor 4 @ 4'	Floor 5 @ 3'	Floor 6 @ 3'	Floor 7 @ 3'	Floor 8 @ 3'	Floor 10 @ 2'	Floor 11 @ 0.5'	SP1 NW
g	g	g	g	g	g	g	g	g	g
1	1	1	1	1	1	1	1	1	1
X	X	X	X	X	X	X	X	X	X
7/13/17	7/13/17	7/13/17	7/13/17	7/13/17	7/13/17	7/13/17	7/13/17	7/13/17	7/13/17
9:50	9:55	10:00	10:05	10:10	10:15	10:20	10:25	10:30	10:35
X	X	X	X	X	X	X	X	X	X

Relinquished By:

Relinquished By:

Delivered By: (Circle One) 5.98

Sampler - UPS - Bus - Other: Corrected 6.152

BILL TO

P.O. #:

Company: Black Mountain

Attn:

Address:

City:

State: NM

Phone #:

Fax #:

Project Name:

Project Location:

Project #:

Project Name:

Project Location:

Project #:

Project Name:

Project Location:

Project #:

Project Name:

Project Location:

Project #:

Project Name:

Project Location:

Project #:

Project Name:

Project Location:

Project #:

Project Name:

Project Location:

Project #:

Project Name:

Project Location:

Project #:

Project Name:

ANALYSIS REQUEST

Chloride

TPH (8015M)

BTEX (8021B)

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:

REMARKS:

Please email results to pm@basinenv.com, amy_ruth@xtoenergy.com

ORDINAL LABORATORIES

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

3

Company Name: Basin Environmental Service Technologies, LLC

Project Manager: Robbie Runnels

Address: P.O. Box 301

City: Lovington State: NM Zip: 88260

Phone #: (575)396-2378 Fax #: (575)396-1429

Project #: Project Owner: XTO Energy

Project Name: State K #2 City: Address: State: NM Zip: 88260

Project Location: Lea Phone #: Fax #:

Sampler Name: Karanja Lewis

BILL TO

P.O. #: Company: Black Mountain

Attn: Address:

City: State: NM Zip: 88260

Phone #: Fax #:

ANALYSIS REQUEST

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS REQUEST									
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			Chloride	TPH (8015M)	BTEX (8021B)							
H101831	21	SP6 EW	g	1	X						7/13/17	11:30	X								
	22	SP6 WW	g	1	X						7/13/17	11:35	X								
	23	SP7 EW	g	1	X						7/13/17	11:40	X								
	24	SP7 WW	g	1	X						7/13/17	11:45	X								
	25	SP8 EW	g	1	X						7/13/17	11:50	X								
	26	SP8 WW	g	1	X						7/13/17	11:55	X								
	27	SP9 EW WW	g	1	X						7/13/17	12:00	X								
	28	SP10 EW	g	1	X						7/13/17	12:05	X								
	29	SP10 WW	g	1	X						7/13/17	12:10	X								
	30	SP10 SW	g	1	X						7/13/17	12:15	X								

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 causes whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Date: 7/14/17 Received By: [Signature]

Relinquished By: [Signature] Date: 7/14/17 Received By: [Signature]

Delivered By: (Circle One) 5:42 15:30 Received By: [Signature]

Sampler - UPS - Bus - Other: [Signature] Date: 6:52

Sample Condition: Cool ☐ Intact ☐ Yes ☐ No ☐ Yes ☐ No

CHECKED BY: [Signature]

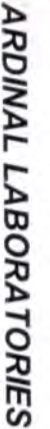
REMARKS: Please email results to pm@basinenr.com, amy_ruth@xtoenergy.com

Phone Result: ☐ Yes ☐ No Add'l Phone #: ☐ Yes ☐ No Add'l Fax #: ☐ Yes ☐ No

FORM-006

Revision 1.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476



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APPENDIX C

Photo Documentation

Black Mountain Operating, LLC – State K #2

Unit Letter A, Section 2, T10S, R33E



Point of Release, facing south

4/24/17



Excavated area, facing south

4/24/17



Excavated area, facing south

4/24/17



Excavated area, facing northwest

4/24/17

Black Mountain Operating, LLC – State K #2

Unit Letter A, Section 2, T10S, R33E



Source of leak

4/8/17



Source of leak

4/8/17



Initial release area, facing northeast

4/8/17



Initial release, facing north

4/8/17