Received by OCD: 11/18/2022 10:13:24 AM



[Dakota Neel] [HSE Coordinator]

June 11<sup>th</sup> 2018

Olivia Yu Oil Conservation Division District 1 – Hobbs 1625 N. French Dr. Hobbs, NM 88240

Ryan Mann Field Operation Division New Mexico State Land Office 2827 N. Dal Paso Suite 117 Hobbs, NM 88240

Re: Closure Report Vast State #002H API #: 30-025-42942 RP#: 1RP-4489 Unit Letter P Section 17, Township 26S, Range 33E Lea County, NM

Ms. Yu/Mr. Mann,

COG Operating, LLC (COG) is pleased to submit for your consideration the following closure report for the Vast State #002H. This closure report is in reference to releases that occurred on October 23, 2016. A work plan was submitted to the New Mexico Oil Conservation Division (NMOCD) and the New Mexico State Land Office (NMSLO) on March 23, 2017. The work plan was approved by the NMOCD and the NMSLO on April 13, 2017 and April 24, 2017 respectively.

### BACKGROUND

The release occurred on October 23, 2016, and released approximately seventy (70) barrels (bbls) of oil due to a 3<sup>rd</sup> party trucking company overrunning their truck. A total of fifteen (15) bbls were recovered from the release. This release remained entirely on the well pad.

June 11, 2018

### **REMEDIAL ACTIONS**

- The impacted areas of SP1, SP2, and SP4 were excavated to six (6) inches BGS
- The impacted areas surrounding SP3, SP5, and SP6 were excavated to one (1) foot BGS
- All of the excavated material was hauled to an NMOCD approved solid waste disposal facility.
- The excavation was backfilled with like material and contoured to match the surrounding location.

Based on the information provided, COG Operating LLC, would like to request closure of the RP number 1RP-4489 associated with this release. Please feel free to contact me with any questions or concerns at (432) 215-2783.

Sincerely,

Sabot Real

Dakota Neel HSE Coordinator Dneel2@concho.com

Enclosed:

- 1. C-141 Initial (Copy)
- 2. C-141 Final
- 3. Approved Workplan

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** 

			<b>OPERATOR</b>		Initial Rep	ort 🛛	Final Report
Name of Company:         COG Operating LLC			Contact:	Rob	ert McNeill		
Address: 600 West Illinois Avenue, Midland TX 79701			Telephone No.	432	-683-7443		
Facility Name:	VAST STATE #002	Н	Facility Type:	Tar	nk Battery		
Surface Owner:	State	Mineral Owner	:		API No.	30-025-42	.942

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
Р	17	26S	33E	210'	South	350'	East	Lea

Latitude 32.03682817 Longitude 103.5868833

### NATURE OF RELEASE

Type of Release:	Volume of Release:	Volume Recovered:						
Oil	70bbls	15bbls						
Source of Release:	Date and Hour of Occurrence:	Date and Hour of Discovery:						
Transport Hauler	10/23/2016 5:00 pm	10/23/2016 5:00 pm						
Was Immediate Notice Given?	If YES, To Whom?							
Yes Do Not Required								
By Whom? Robert Grubbs Jr.	Date and Hour: Mo	on 10/24/2016 3:07 PM						
Was a Watercourse Reached?	If YES, Volume Impacting the Wate	rcourse.						
🗌 Yes 🖾 No								
If a Watercourse was Impacted, Describe Fully.*								
Describe Cause of Problem and Remedial Action Taken.*								
This walks are be asked any the word. The walks are served by third area		· · · · · · · · · · · · · · · · · · ·						
This release was located on the pad. The release was caused by third party loading from the battery and failed to open the vent valve causing the transport to pressure up and blow out the hatch.								
to pressure up and blow out the natch.								
Describe Area Affected and Cleanup Action Taken.*								
·								
	This release was contained on the pad. This release has been remediated according to the workplan approved by the NMOCD and NMSLO.							
I hereby certify that the information given above is true and complete to the								
regulations all operators are required to report and/or file certain release n								
public health or the environment. The acceptance of a C-141 report by the								
should their operations have failed to adequately investigate and remediat								
or the environment. In addition, NMOCD acceptance of a C-141 report d	oes not relieve the operator of responsi	bility for compliance with any other						
federal, state, or local laws and/or regulations.								
	OIL CONSERV	ATION DIVISION						
N / LO								
Saboh Real								
Signature:	Approved by Environmental Specialist							
Signature.		Buttan Hall						
Printed Name: Dakota Neel	7	1 Juning I						
Title: HSE Coordinator	Approval Date: 11/18/2022 E	Expiration Date:						
E-mail Address: dneel2@concho.com	Conditions of Approval:	Attached						
Date: June 11, 2018 Phone: 575-746-2010	none							

\* Attach Additional Sheets If Necessary

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

Page 4 of 36

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

**Release Notification and Corrective Action** 

			<b>OPERATOR</b>	$\triangleright$	Initial Repor	t 🗌 Final Report
Name of Company: COG Operating LLC			Contact:	Robe	rt McNeill	
Address: 600 West Illinois Avenue, Midland TX 79701			Telephone No.	432-6	583-7443	
Facility Name: VAST STATE #002H		Facility Type:	Tank	Battery		
Surface Owner:	State	Mineral Owner	••		API No. 30	0-025-42942

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
Р	17	26S	33E	210'	South	350'	East	Lea

Latitude 32.03682817 Longitude 103.5868833

### NATURE OF RELEASE

Type of Release:	Volume of Release:	Volume Recovered:						
Oil	70bbls	15bbls						
Source of Release:	Date and Hour of Occurrence:	Date and Hour of Discovery:						
Transport Hauler	10/23/2016 5:00 pm	10/23/2016 5:00 pm						
Was Immediate Notice Given?	If YES, To Whom?							
🛛 Yes 🗌 No 🗌 Not Required	Kristen Lynch - NM	OCD / Amber Groves - SLO						
By Whom? Robert Grubbs Jr.	Date and Hour: Mon 10/24/2016 3:07 PM							
Was a Watercourse Reached?	If YES, Volume Impacting the Wat	ercourse.						
If a Watercourse was Impacted, Describe Fully.*								
Describe Cause of Problem and Remedial Action Taken.*								
This release was located on the pad. The release was caused by third par		to open the vent valve causing the transport						
to pressure up	to pressure up and blow out the hatch.							
Describe Area Affected and Cleanup Action Taken.*								
This release was contained on the pad. Concho will have the spill site san a remediation work plan to the NMOCD fo								
	approval prior to any significant term	culation work.						
I hereby certify that the information given above is true and complete to								
regulations all operators are required to report and/or file certain release n								
public health or the environment. The acceptance of a C-141 report by the								
should their operations have failed to adequately investigate and remedia								
or the environment. In addition, NMOCD acceptance of a C-141 report of	loes not relieve the operator of respons	sibility for compliance with any other						
federal, state, or local laws and/or regulations.	OH CONGEDI							
Signature:	<u>OIL CONSERV</u>	ATION DIVISION						
Signature.								
Printed Name: Robert Grubbs Jr.	Approved by Environmental Specialis	***						
	Approved by Environmental Specialis	st.						
Title: Senior Environmental Coordinator	Approval Date:	Expiration Date:						
E-mail Address: <u>rgrubbs@concho.com</u>	Conditions of Approval:	Attached						
Date: October 28, 2016 Phone: 432-683-7443								

\* Attach Additional Sheets If Necessary



PHONE (575) 397-6388 • FAX (575) 397- 0397 • 1324 W. MARLAND • P.O. BOX 805 • HOBBS, NM 88241-0805 E-MAIL: cbrunson@bbcinternational.com

### **DELINEATION WORKPLAN**

### COG – VAST STATE #002H (Leak Date: 10/23/16)

### RP # 1RP-4489

This delineation workplan and remediation proposal addresses the release associated with RP # 1 RP-4489.

The following information includes:

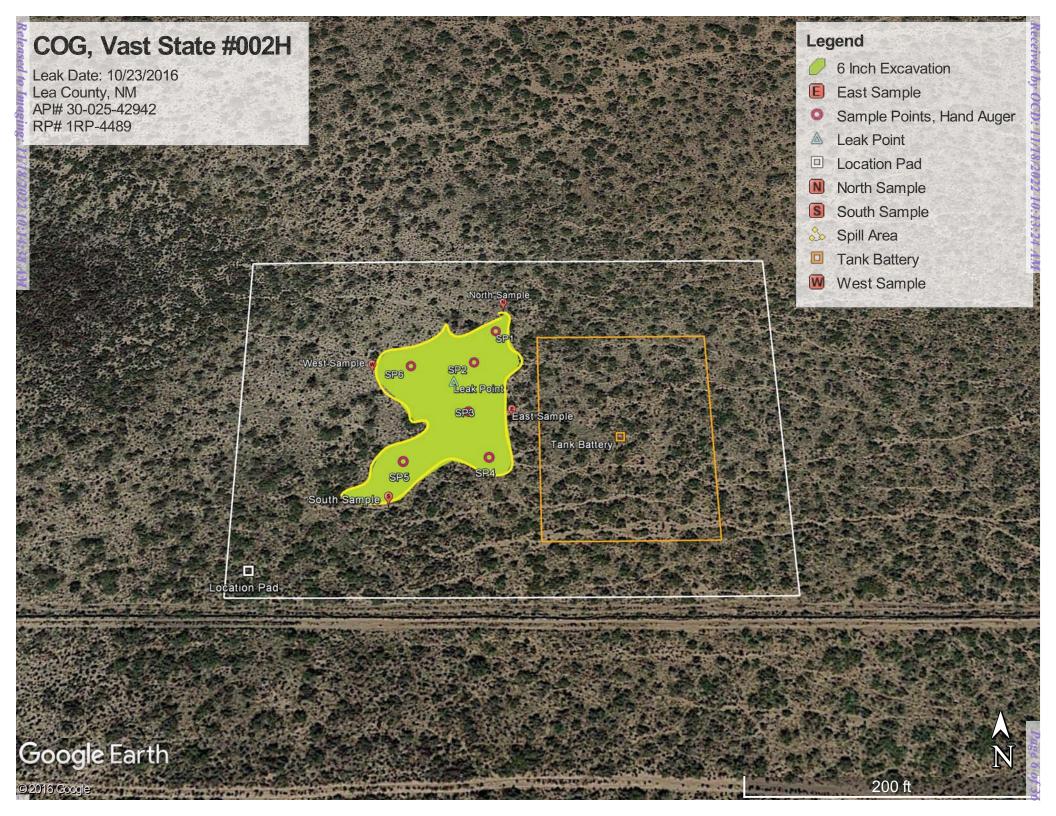
- 1. Scaled digital site map with spill area demarcated and leak point identified along with sample point locations and areas of remediation at appropriate depths.
- 2. GPS information for sample points and sample methodology
- 3. Depth to groundwater information (i.e., pdf of OSE search results and/or copy of Chevron groundwater trend map).
- 4. Laboratory analysis results summary table and original laboratory analysis reports
- 5. A copy of the initial C-141
- 6. Potentially other pertinent information as necessary for site specific purposes.

### Based on the information included in this package and the NMOCD guidelines, the following remediation is proposed:

### COG will excavate the spill area as depicted on the following site diagram. The entire leak area will be excavated to a depth of 6 inches.

The entire site will then be backfilled with clean soil and revegetated (if warranted) to the standards of the appropriate regulatory agency or private surface owner.

All excavated materials will be disposed of at an NMOCD-approved disposal facility.

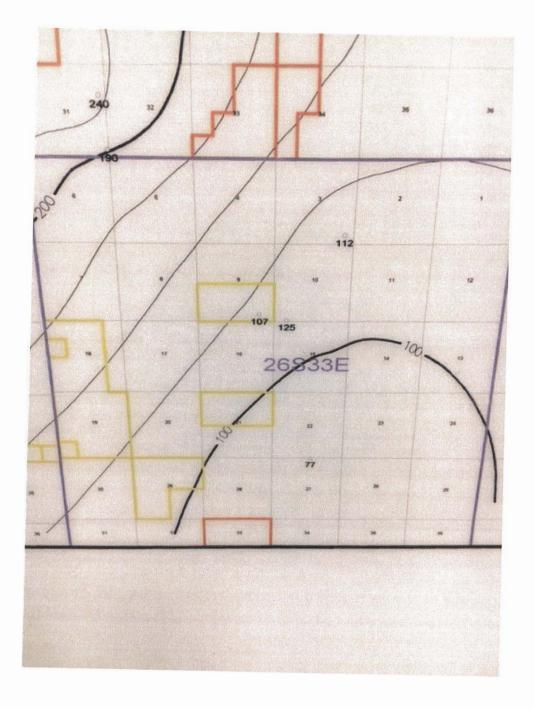


COG, Vast State #002H

Samples, Hand Auger

SP1, GPS point: N 32.03704° W-103.58654°
SP2, GPS point: N 32.03694° W-103.58660°
SP3, GPS point: N 32.03679° W-103.58661°
SP4, GPS point: N 32.03666° W-103.58655°
SP5, GPS point: N 32.03665° W-103.58678°
SP6, GPS point: N 32.03693° W-103.58678°

Samples, Hand Auger North Sample, GPS point: N 32.03712° W-103.58652° South Sample, GPS point: N 32.03654° W-103.58681° East Sample, GPS point: N 32.03678° W-103.58649° West Sample, GPS point: N 32.03692° W-103.58689°



			Nev	v Me	exi	co	Offi	ce of	the S	State	e Engine	er		
	Ν	/at	er C	Colu	In	n	/Α	vera	ige	De	pth to	Wate	er	
(A CLW###### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD replaced, O=orphan C=the file closed)	ned,	n				/ 2=NE : est to larg	3=SW 4=S	E) (NAD83 U	TM in m	neters)	(In feet)		
		POD												
POD Number	Code	Sub- basin	County	Q Q Q 64 16 4	-	Tws	Rng	х		Y	DistanceDept	hWellDepthW		'ater lumn
<u>C 02273</u>			LE	the state was subscription of	21	26S	33E	634549	354513	34*	1273	160	120	40
										Averag	ge Depth to Water	r:	120 feet	t
											Minimum Dept	th:	120 feet	t
											Maximum Dept	h:	120 feet	č
Record Count: 1														
UTMNAD83 Radiu	s Search (in	meters	<u>):</u>											
Easting (X): 633	336		North	ing (Y):	3545	523			Radius:	1700				
*UTM location was derive	d from PLSS	S - see H	elp											
The data is furnished by the the accuracy, completeness,									ng that the C	OSE/ISC r	nake no warranties	, expressed or imp	lied, conc	erning
2/27/17 3:51 PM											WATER COLU	JMN/ AVERAG	E DEPT	H TO

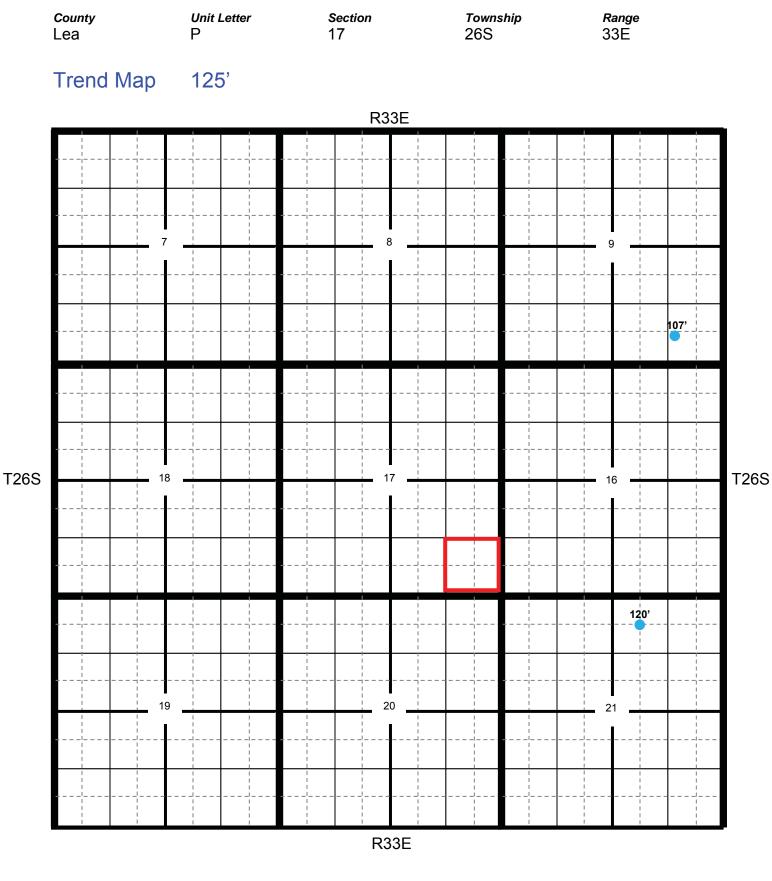
WATER

		Pul	olic Land Sur	vey System (PL	SS)			
۲	Q64: 🗸	Q16: SE 🗸	2 <u></u>	Sec: 17 🗸 Two	5 Marine 2000 - 10 - 10 - 10	Rng: 33E 🗸		
0	<b>x:</b> 0 <b>f</b>	State		nate System - N <sub>Zone:</sub>	IAD27	~		
State Plane Coordinate System - NAD83								
0	<b>X:</b> 0 f	t Y:	) ft	Zone:		~		
Degrees/Minutes/Seconds								
0	Longitude (X):	De	grees: 0 °	Minutes: 0	1	Seconds: 0	"	
	Latitude (Y):	De	grees: 0 •	Minutes: 0		Seconds: 0	n	
			UTM -	NAD27				
0	Easting (X	): 0	mtrs	Northing (Y):	0	mtrs	Zone:	
			(ຣເ	вміт				
All Conversion Results are displayed as <u>NAD 1983 UTM Zone 13</u>								
	Easting (X):	633336.0	mtrs	Northing (Y):	3545523.0	mtrs		
1.070 ·····	~~ Please keep screen open to copy UTM values for Reports. ~~							

Received by OCD: 11/18/2022 10:13:24 AM BBC INTERNATIONAL

Groundwater Plot

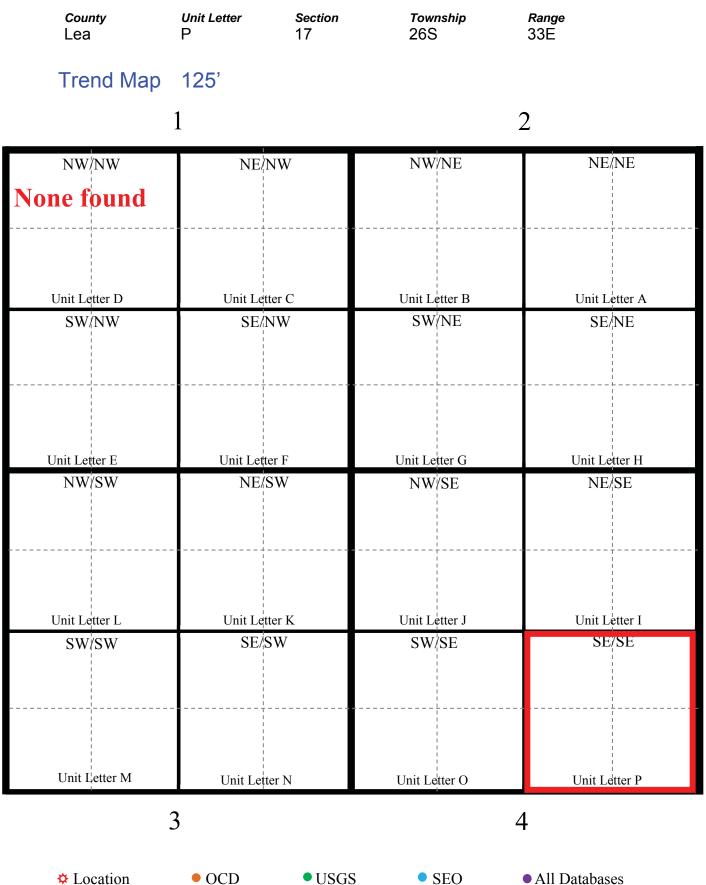
### COG Vast State #002H



USGS

Section Quarters

### COG Vast State #002H





### Laboratory Analytical Results Summary Vast State #002H

		Sample	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'
Analyte	Method	Date	1/30/17	1/30/17	1/30/17
			mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		0.101	<0.050	<0.050
Toluene	BTEX 8021B		4.72	0.179	<0.050
Ethylbenzene	BTEX 8021B		5.97	0.325	<0.050
Total Xylenes	BTEX 8021B		22.2	1.28	<0.150
Total BTEX	BTEX 8021B		33	1.79	<0.300
GRO	TPH 8015M		234	14.9	<10.0
DRO	TPH 8015M		784	123	<10.0

		Sample	SP2 @ 1'	SP2 @ 2'
Analyte	Method	Date	1/30/17	1/30/17
			mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050
Toluene	BTEX 8021B		<0.050	< 0.050
Ethylbenzene	BTEX 8021B		<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150
Total BTEX	BTEX 8021B		< 0.300	<0.300
GRO	TPH 8015M		<10.0	<10.0
DRO	TPH 8015M		35.6	27.8

		Sample	SP3 @ SURFACE	SP3 @ 1'
Analyte	Method	Date	1/30/17	1/30/17
			mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050
Toluene	BTEX 8021B		0.112	<0.050
Ethylbenzene	BTEX 8021B		0.212	<0.050
Total Xylenes	BTEX 8021B		1.32	<0.150
Total BTEX	BTEX 8021B		1.65	<0.300
GRO	TPH 8015M		<100	<10.0
DRO	TPH 8015M		13700	<10.0

		Sample	SP4 @ 1'	SP4 @ 2'
Analyte	Method	Date	1/30/17	1/30/17
			mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.200	<0.050
Toluene	BTEX 8021B		7.98	<0.050
Ethylbenzene	BTEX 8021B		9.26	<0.050
Total Xylenes	BTEX 8021B		37.1	<0.150
Total BTEX	BTEX 8021B		54.3	<0.300
GRO	TPH 8015M		298	<10.0
DRO	TPH 8015M		1260	<10.0

		Sample	SP5@ SURFACE	SP5 @ 1'
Analyte	Method	Date	1/30/17	1/30/17
			mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.200	<0.050
Toluene	BTEX 8021B		4.74	<0.050
Ethylbenzene	BTEX 8021B		3.9	<0.050
Total Xylenes	BTEX 8021B		15.1	<0.150
Total BTEX	BTEX 8021B		23.7	<0.300
GRO	TPH 8015M		241	<10.0
DRO	TPH 8015M		23400	10.5

		Sample	SP6 @ SURFACE	SP6 @ 1'
Analyte	Method	Date	1/30/17	1/30/17
			mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.500	<0.050
Toluene	BTEX 8021B		12.3	< 0.050
Ethylbenzene	BTEX 8021B		16.3	<0.050
Total Xylenes	BTEX 8021B		66.9	<0.150
Total BTEX	BTEX 8021B		95.5	<0.300
GRO	TPH 8015M		698	<10.0
DRO	TPH 8015M		6870	<10.0

		Sample	NORTH @ SURFACE
Analyte	Method	Date	1/30/17
			mg/Kg
Benzene	BTEX 8021B		< 0.050
Toluene	BTEX 8021B		< 0.050
Ethylbenzene	BTEX 8021B		< 0.050
Total Xylenes	BTEX 8021B		<0.150
Total BTEX	BTEX 8021B		< 0.300
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0

		Sample	EAST @ SURFACE
Analyte	Method	Date	1/30/17
			mg/Kg
Benzene	BTEX 8021B		<0.050
Toluene	BTEX 8021B		<0.050
Ethylbenzene	BTEX 8021B		<0.050
<b>Total Xylenes</b>	BTEX 8021B		<0.150
Total BTEX	BTEX 8021B		< 0.300
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0

		Sample	WEST @ SURFACE
Analyte	Method	Date	1/30/17
			mg/Kg
Benzene	BTEX 802'	1B	< 0.050
Toluene	BTEX 8027	1B	< 0.050
Ethylbenz	BTEX 802	1B	< 0.050
Total Xyle	BTEX 802	1B	<0.150
Total BTE	BTEX 8027	1B	< 0.300
GRO	TPH 8015	N	<10.0
DRO	TPH 8015	N	<10.0

		Sample	SOUTH @ SURFACE
Analyte	Method	Date	1/30/17
			mg/Kg
Benzene	BTEX 802	1B	< 0.050
Toluene	BTEX 802	1B	< 0.050
Ethylbenz	BTEX 8027	1B	< 0.050
Total Xyle	BTEX 802	1B	<0.150
Total BTE	BTEX 8027	1B	< 0.300
GRO	TPH 8015	N	<10.0
DRO	TPH 8015	N	<10.0

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February 09, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: VAST STATE #002H

Enclosed are the results of analyses for samples received by the laboratory on 02/02/17 15:00.

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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

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

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

Accreditation applies to public drinking water matrices.

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. Keine

Celey D. Keene Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: SP1 @ 1' (H700256-01)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.101	0.100	02/04/2017	ND	2.19	110	2.00	1.86	
Toluene*	4.72	0.100	02/04/2017	ND	2.15	107	2.00	1.48	
Ethylbenzene*	5.97	0.100	02/04/2017	ND	2.17	108	2.00	1.77	
Total Xylenes*	22.2	0.300	02/04/2017	ND	6.13	102	6.00	1.96	
Total BTEX	33.0	0.600	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	140 9	% 73.6-14	0						
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	234	10.0	02/03/2017	ND	171	85.3	200	0.147	
DRO >C10-C28	784	10.0	02/03/2017	ND	173	86.6	200	5.47	
Surrogate: 1-Chlorooctane	105 9	% 35-147	7						
Surrogate: 1-Chlorooctadecane	110 9	28-171	!						

### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: SP1 @ 2' (H700256-02)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/04/2017	ND	2.19	110	2.00	1.86	
Toluene*	0.179	0.050	02/04/2017	ND	2.15	107	2.00	1.48	
Ethylbenzene*	0.325	0.050	02/04/2017	ND	2.17	108	2.00	1.77	
Total Xylenes*	1.28	0.150	02/04/2017	ND	6.13	102	6.00	1.96	
Total BTEX	1.79	0.300	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	73.6-14	0						
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	14.9	10.0	02/03/2017	ND	171	85.3	200	0.147	
DRO >C10-C28	123	10.0	02/03/2017	ND	173	86.6	200	5.47	
Surrogate: 1-Chlorooctane	81.4	% 35-147	7						
Surrogate: 1-Chlorooctadecane	96.4	% 28-171	,						

### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keene

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: SP1 @ 3' (H700256-03)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/04/2017	ND	2.19	110	2.00	1.86	
Toluene*	<0.050	0.050	02/04/2017	ND	2.15	107	2.00	1.48	
Ethylbenzene*	<0.050	0.050	02/04/2017	ND	2.17	108	2.00	1.77	
Total Xylenes*	<0.150	0.150	02/04/2017	ND	6.13	102	6.00	1.96	
Total BTEX	<0.300	0.300	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	73.6-14	0						
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2017	ND	171	85.3	200	0.147	
DRO >C10-C28	<10.0	10.0	02/03/2017	ND	173	86.6	200	5.47	
Surrogate: 1-Chlorooctane	85.6	% 35-147	,						
Surrogate: 1-Chlorooctadecane	102 9	28-171							

### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keene

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: SP2 @ 1' (H700256-04)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/04/2017	ND	2.19	110	2.00	1.86	
Toluene*	<0.050	0.050	02/04/2017	ND	2.15	107	2.00	1.48	
Ethylbenzene*	<0.050	0.050	02/04/2017	ND	2.17	108	2.00	1.77	
Total Xylenes*	<0.150	0.150	02/04/2017	ND	6.13	102	6.00	1.96	
Total BTEX	<0.300	0.300	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 73.6-14	0						
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2017	ND	171	85.3	200	0.147	
DRO >C10-C28	35.6	10.0	02/03/2017	ND	173	86.6	200	5.47	
Surrogate: 1-Chlorooctane	72.6	% 35-147	7						
Surrogate: 1-Chlorooctadecane	89.4	% 28-171	,						

### **Cardinal Laboratories**

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Celey D. Keene, Lab Director/Quality Manager



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Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: SP2 @ 2' (H700256-05)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/04/2017	ND	2.19	110	2.00	1.86	
Toluene*	<0.050	0.050	02/04/2017	ND	2.15	107	2.00	1.48	
Ethylbenzene*	<0.050	0.050	02/04/2017	ND	2.17	108	2.00	1.77	
Total Xylenes*	<0.150	0.150	02/04/2017	ND	6.13	102	6.00	1.96	
Total BTEX	<0.300	0.300	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 73.6-14	0						
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2017	ND	171	85.3	200	0.147	
DRO >C10-C28	27.8	10.0	02/03/2017	ND	173	86.6	200	5.47	
Surrogate: 1-Chlorooctane	82.3	% 35-147	7						
Surrogate: 1-Chlorooctadecane	99.3	% 28-171							

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Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: SP3 @ SURFACE (H700256-06)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/04/2017	ND	2.19	110	2.00	1.86	
Toluene*	0.112	0.050	02/04/2017	ND	2.15	107	2.00	1.48	
Ethylbenzene*	0.212	0.050	02/04/2017	ND	2.17	108	2.00	1.77	
Total Xylenes*	1.32	0.150	02/04/2017	ND	6.13	102	6.00	1.96	
Total BTEX	1.65	0.300	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 9	73.6-14	0						
TPH 8015M	mg/	'kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<100	100	02/04/2017	ND	172	85.8	200	3.77	
DRO >C10-C28	13700	100	02/04/2017	ND	177	88.7	200	6.70	QM-07
Surrogate: 1-Chlorooctane	94.9	% 35-147	7						
Surrogate: 1-Chlorooctadecane	234 9	28-171							

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Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: SP3 @ 1' (H700256-07)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/04/2017	ND	2.19	110	2.00	1.86	
Toluene*	<0.050	0.050	02/04/2017	ND	2.15	107	2.00	1.48	
Ethylbenzene*	<0.050	0.050	02/04/2017	ND	2.17	108	2.00	1.77	
Total Xylenes*	<0.150	0.150	02/04/2017	ND	6.13	102	6.00	1.96	
Total BTEX	<0.300	0.300	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 73.6-14	0						
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2017	ND	172	85.8	200	3.77	
DRO >C10-C28	<10.0	10.0	02/03/2017	ND	177	88.7	200	6.70	
Surrogate: 1-Chlorooctane	80.9	% 35-147	7						
Surrogate: 1-Chlorooctadecane	86.2	% 28-171	,						

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BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: SP4 @ 1' (H700256-08)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	02/04/2017	ND	2.19	110	2.00	1.86	
Toluene*	7.98	0.200	02/04/2017	ND	2.15	107	2.00	1.48	
Ethylbenzene*	9.26	0.200	02/04/2017	ND	2.17	108	2.00	1.77	
Total Xylenes*	37.1	0.600	02/04/2017	ND	6.13	102	6.00	1.96	
Total BTEX	54.3	1.20	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	126 9	% 73.6-14	0						
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	298	10.0	02/03/2017	ND	172	85.8	200	3.77	
DRO >C10-C28	1260	10.0	02/03/2017	ND	177	88.7	200	6.70	
Surrogate: 1-Chlorooctane	106 9	% 35-147	7						
Surrogate: 1-Chlorooctadecane	133 9	% 28-171	,						

### **Cardinal Laboratories**

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BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: SP4 @ 2' (H700256-09)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/04/2017	ND	2.19	110	2.00	1.86	
Toluene*	<0.050	0.050	02/04/2017	ND	2.15	107	2.00	1.48	
Ethylbenzene*	<0.050	0.050	02/04/2017	ND	2.17	108	2.00	1.77	
Total Xylenes*	<0.150	0.150	02/04/2017	ND	6.13	102	6.00	1.96	
Total BTEX	<0.300	0.300	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 73.6-14	0						
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2017	ND	172	85.8	200	3.77	
DRO >C10-C28	<10.0	10.0	02/03/2017	ND	177	88.7	200	6.70	
Surrogate: 1-Chlorooctane	76.0	% 35-147	7						
Surrogate: 1-Chlorooctadecane	77.8	% 28-171	,						

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BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: SP5 @ SURFACE (H700256-10)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	02/04/2017	ND	2.19	110	2.00	1.86	
Toluene*	4.74	0.200	02/04/2017	ND	2.15	107	2.00	1.48	
Ethylbenzene*	3.90	0.200	02/04/2017	ND	2.17	108	2.00	1.77	
Total Xylenes*	15.1	0.600	02/04/2017	ND	6.13	102	6.00	1.96	
Total BTEX	23.7	1.20	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 %	6 73.6-14	0						
TPH 8015M	mg/	kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	241	50.0	02/03/2017	ND	172	85.8	200	3.77	
DRO >C10-C28	23400	50.0	02/03/2017	ND	177	88.7	200	6.70	
Surrogate: 1-Chlorooctane	134 %	6 35-147	7						
Surrogate: 1-Chlorooctadecane	1900	% 28-171							

### **Cardinal Laboratories**

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Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: SP5 @ 1' (H700256-11)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/04/2017	ND	2.19	110	2.00	1.86	
Toluene*	<0.050	0.050	02/04/2017	ND	2.15	107	2.00	1.48	QM-07
Ethylbenzene*	<0.050	0.050	02/04/2017	ND	2.17	108	2.00	1.77	QM-07
Total Xylenes*	<0.150	0.150	02/04/2017	ND	6.13	102	6.00	1.96	QM-07
Total BTEX	<0.300	0.300	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 73.6-14	0						
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2017	ND	172	85.8	200	3.77	
DRO >C10-C28	10.5	10.0	02/03/2017	ND	177	88.7	200	6.70	
Surrogate: 1-Chlorooctane	92.1	% 35-147	7						
Surrogate: 1-Chlorooctadecane	89.6	% 28-171							

### **Cardinal Laboratories**

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BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: SP6 @ SURFACE (H700256-12)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	02/04/2017	ND	2.19	110	2.00	0.345	
Toluene*	12.3	0.500	02/04/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	16.3	0.500	02/04/2017	ND	2.17	108	2.00	0.194	
Total Xylenes*	66.9	1.50	02/04/2017	ND	6.13	102	6.00	0.335	
Total BTEX	95.5	3.00	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	120 9	% 73.6-14	0						
TPH 8015M	mg/	'kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	698	10.0	02/03/2017	ND	172	85.8	200	3.77	
DRO >C10-C28	6870	10.0	02/03/2017	ND	177	88.7	200	6.70	
Surrogate: 1-Chlorooctane	162 9	35-147	7						
Surrogate: 1-Chlorooctadecane	206 9	28-171							

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Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: SP6 @ 1' (H700256-13)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/04/2017	ND	2.19	110	2.00	0.345	
Toluene*	<0.050	0.050	02/04/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	<0.050	0.050	02/04/2017	ND	2.17	108	2.00	0.194	
Total Xylenes*	<0.150	0.150	02/04/2017	ND	6.13	102	6.00	0.335	
Total BTEX	<0.300	0.300	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 73.6-14	0						
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2017	ND	172	85.8	200	3.77	
DRO >C10-C28	<10.0	10.0	02/03/2017	ND	177	88.7	200	6.70	
Surrogate: 1-Chlorooctane	96.1	% 35-147	7						
Surrogate: 1-Chlorooctadecane	103 9	28-171							

### **Cardinal Laboratories**

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397 02/02/2017 Sampling Date:

Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: NORTH SAMPLE @ SURFACE (H700256-14)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/04/2017	ND	2.19	110	2.00	0.345	
Toluene*	<0.050	0.050	02/04/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	<0.050	0.050	02/04/2017	ND	2.17	108	2.00	0.194	
Total Xylenes*	<0.150	0.150	02/04/2017	ND	6.13	102	6.00	0.335	
Total BTEX	<0.300	0.300	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	73.6-14	0						
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2017	ND	172	85.8	200	3.77	
DRO >C10-C28	<10.0	10.0	02/03/2017	ND	177	88.7	200	6.70	
Surrogate: 1-Chlorooctane	80.7	% 35-147	,						
Surrogate: 1-Chlorooctadecane	84.3	% 28-171							

### **Cardinal Laboratories**

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Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: EAST SAMPLE @ SURFACE (H700256-15)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/04/2017	ND	2.19	110	2.00	0.345	
Toluene*	<0.050	0.050	02/04/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	<0.050	0.050	02/04/2017	ND	2.17	108	2.00	0.194	
Total Xylenes*	<0.150	0.150	02/04/2017	ND	6.13	102	6.00	0.335	
Total BTEX	<0.300	0.300	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	73.6-14	0						
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2017	ND	172	85.8	200	3.77	
DRO >C10-C28	<10.0	10.0	02/03/2017	ND	177	88.7	200	6.70	
Surrogate: 1-Chlorooctane	76.2	% 35-147	7						
Surrogate: 1-Chlorooctadecane	70.1	% 28-171							

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Celey D. Keene, Lab Director/Quality Manager



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Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: WEST SAMPLE @ SURFACE (H700256-16)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/04/2017	ND	2.19	110	2.00	0.345	
Toluene*	<0.050	0.050	02/04/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	<0.050	0.050	02/04/2017	ND	2.17	108	2.00	0.194	
Total Xylenes*	<0.150	0.150	02/04/2017	ND	6.13	102	6.00	0.335	
Total BTEX	<0.300	0.300	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 73.6-14	0						
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2017	ND	172	85.8	200	3.77	
DRO >C10-C28	<10.0	10.0	02/03/2017	ND	177	88.7	200	6.70	
Surrogate: 1-Chlorooctane	68.6	% 35-147	7						
Surrogate: 1-Chlorooctadecane	76.8	% 28-171							

### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keene

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	02/02/2017	Sampling Date:	01/30/2017
Reported:	02/09/2017	Sampling Type:	Soil
Project Name:	VAST STATE #002H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Brittany Feller
Project Location:	LEA COUNTY, NM		

### Sample ID: SOUTH SAMPLE @ SURFACE (H700256-17)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/04/2017	ND	2.19	110	2.00	0.345	
Toluene*	<0.050	0.050	02/04/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	<0.050	0.050	02/04/2017	ND	2.17	108	2.00	0.194	
Total Xylenes*	<0.150	0.150	02/04/2017	ND	6.13	102	6.00	0.335	
Total BTEX	<0.300	0.300	02/04/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	73.6-14	0						
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2017	ND	172	85.8	200	3.77	
DRO >C10-C28	<10.0	10.0	02/03/2017	ND	177	88.7	200	6.70	
Surrogate: 1-Chlorooctane	80.8	% 35-147	7						
Surrogate: 1-Chlorooctadecane	81.5	% 28-171							

### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keene

Celey D. Keene, Lab Director/Quality Manager



### **Notes and Definitions**

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-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 SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

### RDINAL LABORATORIES (505) 393-2326 FAX (505) 393-2476 101 East Marland, Hobbs, NM 88240

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 20 of 21

Company Name:	e: BBC International, Inc.		BIL	BILL TO	Contract of Contra		
Project Manager:			P.O. #:			ANALTSIS REQUEST	
Address: P.O. Box 805	. Box 805		Company:	.70			
city: Hobbs	State: NM	M zip: 88241	2	Mill Consta			
Phone #: 575-397-6388	Fax #:	ပုံ	ess:	ANA CIANA	L		
Project #:	Project Owner:	mer: COG	Citv				
Project Name:	Project Name: VAST STATE #002H			7			
Project Locatio	Project Location: LEA COUNTY, NM		-	Lib:			
Sampler Name:	KELLY LIMAS		Fay #				
FOR LAB USE ONLY		MATRIX	PRESERV.	SAMPLING			
Lab I.D.	Sample I.D.	AB OR (C)OMP NTAINERS UNDWATER TEWATER	IGE IR : IBASE: COOL IR :		PH	TEX	
0	SP1 @ 1'	- #		1/30/17 0-15 AM			
B	SP1 @ 2'	5	2	_		~	-
S	SP1 @ 3'		-				
54	SP2 @ 1'	0	<		-		-
SO	SP2 @ 2'	5			M .		-
90	SP3 @ SURFACE	5	2				-
07	SP3 @ 1'	0	< <sup>1</sup>	_	M .		-
S	SP4 @ 1'	0	<		× •		-
09	SP4 @ 2'	6 - 1	(	_	< < ·		-
0	SP5 @ SURFACE	6 I V	5	1/30/17 1:32 PM	< •		-
nalyses. All claims includin	LEASE NOTE: Lability and Damages. Cardinal's lability and client's exclusive remedy for any claim arking whether based in contract or tort, shall be limited to the amount paid by the client for the matypes. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and modwed by Cardinal within '0 down show control or the	for any claim arising whether based in contra be deemed waived unless made in writing a	ct or fort, shall be limited to the	he amount paid by the clien	t for the		F
filiates or successors arisin	inverse in a verse sum event sum central and the performance of services hereunder by Cardinal, regardless of whether such claim is bareful or or related to the performance of services hereunder by Cardinal, regardless of whether such claim is bareful or or the above stated reasons or otherwise	including without limitation, busipess interruptions der by Cardinal, regardless g/whether such claim	, loss of use, or loss of profits his.bashd-upon any of the ab	e, or loss of profits incurred by client, its subsidiari goon any of the above stated reasons or otherwise	sidiaries, nwise		
11. 11 11	-//~/~/~/~/~/	T NECEMBER BY:		Phone Result:	ult:	Ves No Add'l Phone #	I

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Sampler - UPS - Bus - Other:

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

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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 21 of 21

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† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476	Sampler - UPS - Bus - Other: -A · S · · · · · · · · · · · · · · · · ·		Teyor tales REMARKS:	1	affiliates or successors arising out of or related to the performance of services neuropay, mound with unmation, business intemptions, loss of use, or fost of pofits incurred by client, its subsidiaries, Relinquished By:	ss made in writing an	PLEASE NOTE: Lubility and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract net shall be Search to the		<	SOUTH SAMPLE@SURFACE 6 1 // 1/30/17 4:00 PM / //	VIEST SAMPLE @ SURFACE 0 V 1/30/17 3:35 PM V V		,		G)RAB OR (C)OM CONTAINERS GROUNDWATER VASTEWATER SOIL DIL SLUDGE DTHER : CID/BASE: DE / COOL DTHER :	Fax #:	n: LEACO	1	0/0-39/-6388 Fax #: 575-397-0397 Address:	state: NM Zip: 88241	U. Box 805	P.O. #:	ANALYSIS

- Released to Imaging: 11/18/2022 10:14:38 AM

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District I 1625 N. French Dr., Hobbs, NM 88240 District II			New Mex	ico l Resources			Form C-141		
District II 811 S. First St., Artesia, NM 88210					Submi	t 1 Comu	Revised August 8, 2011 to appropriate District Office in		
District III 1000 Rio Brazos Road, Aztec, NM 87410				Action Division Submit 1 Copy to appropriate Di accordance with 19					
<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505			, NM 875						
Re	lease Notific				ction				
			OPERAT			🛛 Initia	l Report 📋 Final Repo		
Name of Company: COG Opera			Contact:			rt McNe			
Address: 600 West Illinois Avenue, M			Felephone No.     432-683-7443       Facility Type:     Tank Battery						
Facility Name: VAST STATE			гасниу Гур	ie:					
Surface Owner: State	Mineral C	wner:				API No.	. 30-025-42942		
			OF REI				-		
P 17 Zefs Arge	Feet from the 210°		South Line	Feet from the 350'	East/We Ea		County Lea		
·	Latitude 32.03	682817	Longiti	ude 103.586883	3				
			OF REL						
Type of Release:	INAL	UKE	Volume of			Volume	e Recovered:		
Oil Source of Release:			Data and L	70bbls		15bbls Date and Hour of Discovery:			
Transport Hauler				Iour of Occurrenc 23/2016 5:00 pn		10/23/2016 5:00 pm			
Was Immediate Notice Given?	🗌 No 🔲 Not Re	equired	If YES, To Whom?						
By Whom? Robert Grubbs			Date and Hour: Mon 10/24/2016 3:07 PM						
Was a Watercourse Reached?			If YES, Volume Impacting the Watercourse.						
If a Watercourse was Impacted, Describe Fully	/.*								
Describe Cause of Problem and Remedial Act	on Taken *								
This release was located on the pad. The release			y loading fro and blow out		failed to c	open the v	vent valve causing the transport		
	-								
Describe Area Affected and Cleanup Action T	aken.*								
This release was contained on the pad. Conche a remediation we	eate any possible or to any significa								
I hereby certify that the information given abo									
regulations all operators are required to report public health or the environment. The accepta									
should their operations have failed to adequate	ly investigate and r	emediat	e contaminati	ion that pose a thr	eat to grou	ind water	, surface water, human health		
or the environment. In addition, NMOCD acc federal, state, or local laws and/or regulations.		report d	oes not reliev	e the operator of a	responsibi	inty for co	ompliance with any other		
				OIL CON	SERVA	TION	DIVISION		
Signature:									
Printed Name: Robert Grubby	. Ir	1							

orgitature.									
Printed Nar	e: Robert Grubbs Jr.	Approved by Environmental Special	Approved by Environmental Specialist:						
Title:	Senior Environmental Coordinator	Approval Date:	Expiration D	ate:					
E-mail Add	ress: rgrubbs@concho.com	Conditions of Approval:		Attached					
	etober 28, 2016 Phone: 432-683-7443								

\* Attach Additional Sheets If Necessary

**Final Report** 

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

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

CONDITIONS

Operator:	OGRID:
COG OPERATING LLC	229137
600 W Illinois Ave	Action Number:
Midland, TX 79701	160034
	Action Type:
	[IM-SD] Incident File Support Doc (ENV) (IM-BNF)

### CONDITIONS

Created By	Condition	Condition Date
bhall	None	11/18/2022

CONDITIONS

Page 36 of 36

Action 160034