



## **DELINEATION WORKPLAN**

### **OXY – McKITTRICK HILLS CTB**

**(Leak Date: 4/18/17)**

**RP # 2RP-4178**  
**API # 30-015-21010**

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This delineation workplan and remediation proposal addresses the release associated with RP # 2RP-4178.

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:***

***OXY will excavate the spill area as depicted on the following site diagram. The leak area near SP1 and SP2 will be excavated to a depth of 2.5 feet. The leak area near SP3 will be excavated to a depth of 1 foot.***

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.

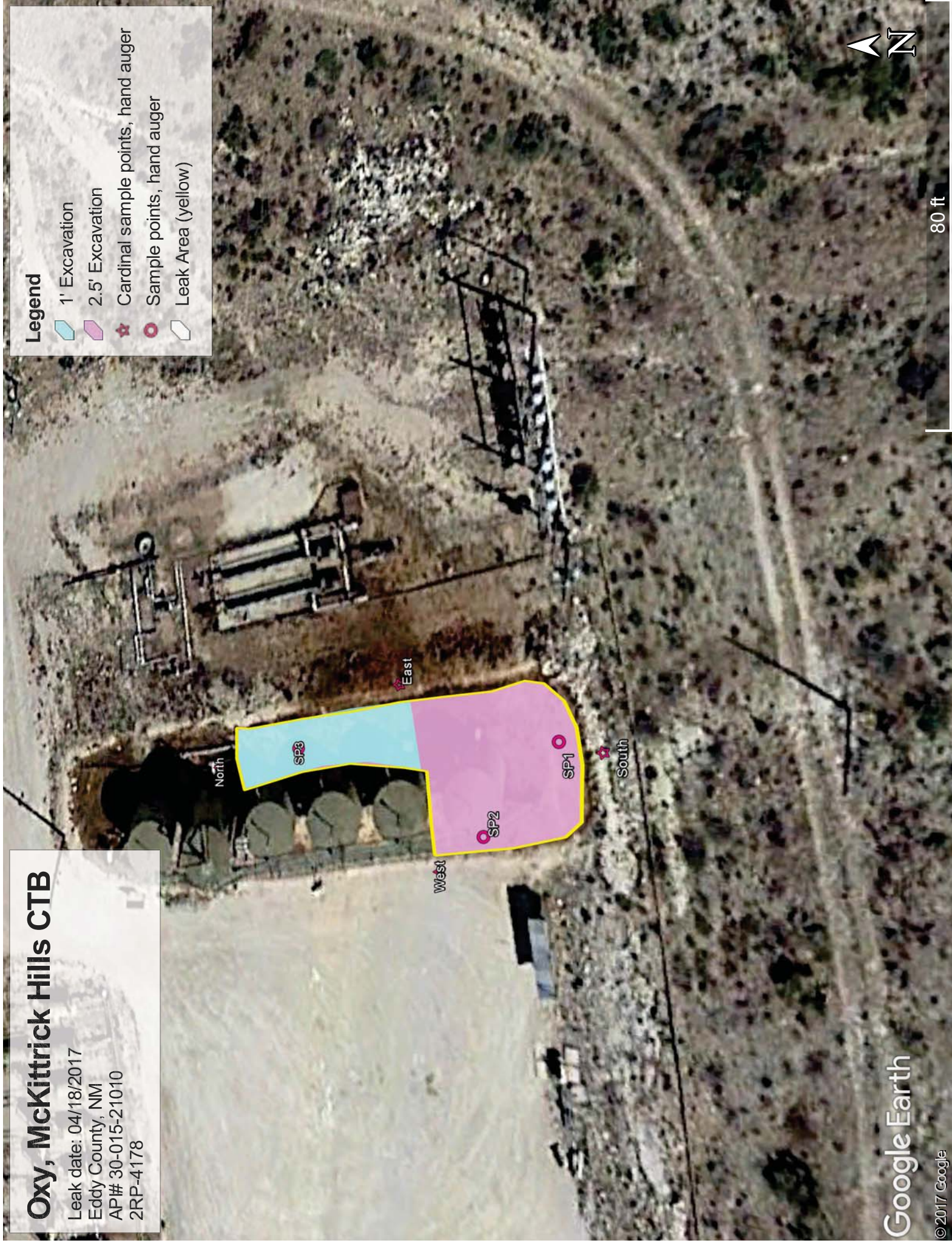


# Oxy, McKittrick Hills CTB

Leak date: 04/18/2017  
Eddy County, NM  
AP# 30-015-21010  
2RP-4178

## Legend

- 1' Excavation
- 2.5' Excavation
- Cardinal sample points, hand auger
- Sample points, hand auger
- Leak Area (yellow)



Oxy, McKittrick Hills CTB

Sample points, hand auger

SP1, N 32.39731 W-104.46090

SP2, N 32.39736 W-104.46097

SP3, N 32.39751 W-104.46091

NORTH, N 32.39758 W-104.46093

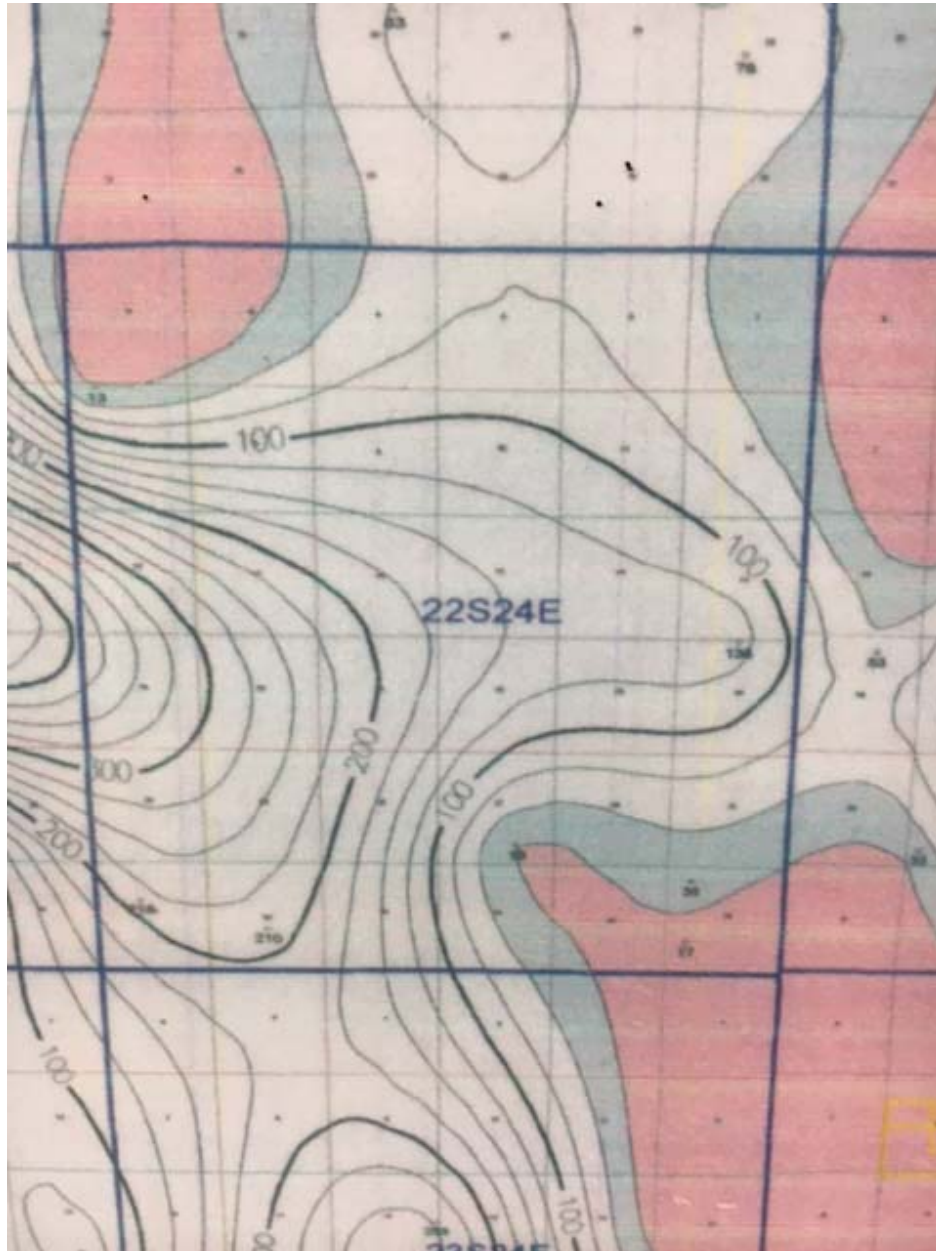
SOUTH, N 32.39728 W-104.46090

EAST, N 32.39743 W-104.46086

WEST, N 32.39739 W-104.46100



**Oxy, McKittrick Hills CTB**  
**U/L H, Section 14, T22S, R24E**  
**Groundwater: 125'**





# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,  
O=orphaned,  
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
<a href="#">C_01403</a>		C	ED	3	2	1	24	22S	24E	551238	3582798*	<input type="text"/>	1483	238	213 25

Average Depth to Water: **213 feet**

Minimum Depth: **213 feet**

Maximum Depth: **213 feet**

**Record Count:** 1

### UTMNAD83 Radius Search (in meters):

**Easting (X):** 550529

**Northing (Y):** 3584101

**Radius:** 1700

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

4/27/17 9:57 AM

WATER COLUMN/ AVERAGE DEPTH TO  
WATER

Public Land Survey System (PLSS)

Q64:

Q16:

SE

Q4:

NE

Sec:

14

Tws:

22S

Rng:

24E

State Plane Coordinate System - NAD27

X:

0

ft

Y:

0

ft

Zone:

State Plane Coordinate System - NAD83

X:

0

ft

Y:

0

ft

Zone:

Degrees/Minutes/Seconds

Longitude (X):

Degrees:

0

°

Minutes:

0

'

Seconds:

0

"

Latitude (Y):

Degrees:

0

°

Minutes:

0

'

Seconds:

0

"

UTM - NAD27

Easting (X):

0

mtrs

Northing (Y):

0

mtrs

Zone:

SUBMIT

All Conversion Results are displayed as NAD 1983 UTM Zone 13

Easting (X):

550529.0

mtrs

Northing (Y):

3584101.0

mtrs

~~ Please keep screen open to copy UTM values for Reports. ~~

**Laboratory Analytical Results Summary  
McKittrick Hills CTB**

		Sample	SP1 @ 1'	SP1 @ 2'	SP1 @ 2.5'
Analyte	Method	Date	5/2/17	5/2/17	5/2/17
			mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<b>1.08</b>	<0.200	<0.050
<b>Toluene</b>	BTEX 8021B		<b>26.4</b>	<b>5.53</b>	<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<b>18.4</b>	<0.200	<0.050
<b>Total Xylenes</b>	BTEX 8021B		<b>158</b>	<b>40.8</b>	<b>0.459</b>
<b>Total BTEX</b>	BTEX 8021B		<b>204</b>	<b>46.3</b>	<b>0.459</b>
<b>Chloride</b>	SM4500Cl-B		<b>32</b>	<b>32</b>	<b>160</b>
<b>GRO</b>	TPH 8015M		<b>7040</b>	<b>1560</b>	<10.0
<b>DRO</b>	TPH 8015M		<b>32000</b>	<b>10900</b>	<b>517</b>

		Sample	SP2 @ 1'	SP2 @ 2'	SP2 @ 2.5'
Analyte	Method	Date	5/2/17	5/2/17	5/2/17
			mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<1.00	<0.200	<0.050
<b>Toluene</b>	BTEX 8021B		<b>25.8</b>	<b>3.74</b>	<b>0.082</b>
<b>Ethylbenzene</b>	BTEX 8021B		<b>17.8</b>	<0.200	<0.050
<b>Total Xylenes</b>	BTEX 8021B		<b>155</b>	<b>30.4</b>	<b>1.34</b>
<b>Total BTEX</b>	BTEX 8021B		<b>199</b>	<b>34.1</b>	<b>1.42</b>
<b>Chloride</b>	SM4500Cl-B		<b>32</b>	<b>48</b>	<b>128</b>
<b>GRO</b>	TPH 8015M		<b>6430</b>	<b>991</b>	<b>21.4</b>
<b>DRO</b>	TPH 8015M		<b>30800</b>	<b>7760</b>	<b>463</b>

		Sample	SP3 @ 1'	SP3 @ 2'	SP3 @ 2.5'
Analyte	Method	Date	5/2/17	5/2/17	5/2/17
			mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	<0.050	<0.050
<b>Toluene</b>	BTEX 8021B		<0.050	<0.050	<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<0.050	<0.050	<b>0.068</b>
<b>Total Xylenes</b>	BTEX 8021B		<b>0.208</b>	<0.150	<b>0.854</b>
<b>Total BTEX</b>	BTEX 8021B		<0.300	<0.300	<b>0.921</b>
<b>Chloride</b>	SM4500Cl-B		<b>224</b>	<b>144</b>	<b>192</b>
<b>GRO</b>	TPH 8015M		<10.0	<10.0	<b>29.7</b>
<b>DRO</b>	TPH 8015M		<b>801</b>	<b>211</b>	<b>577</b>

		Sample	NORTH @ SURFACE
Analyte	Method	Date	5/2/17
			mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050
<b>Toluene</b>	BTEX 8021B		<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<0.050
<b>Total Xylenes</b>	BTEX 8021B		<0.150
<b>Total BTEX</b>	BTEX 8021B		<0.300
<b>Chloride</b>	SM4500Cl-B		<b>32</b>
<b>GRO</b>	TPH 8015M		<10.0
<b>DRO</b>	TPH 8015M		<10.0

		Sample	EAST @ SURFACE
Analyte	Method	Date	5/2/17
			mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050
<b>Toluene</b>	BTEX 8021B		<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<0.050
<b>Total Xylenes</b>	BTEX 8021B		<0.150
<b>Total BTEX</b>	BTEX 8021B		<0.300
<b>Chloride</b>	SM4500Cl-B		<b>32</b>
<b>GRO</b>	TPH 8015M		<10.0
<b>DRO</b>	TPH 8015M		<10.0

		Sample	WEST @ SURFACE
Analyte	Method	Date	5/2/17
			mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050
<b>Toluene</b>	BTEX 8021B		<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<0.050
<b>Total Xylenes</b>	BTEX 8021B		<0.150
<b>Total BTEX</b>	BTEX 8021B		<0.300
<b>Chloride</b>	SM4500Cl-B		<16.0
<b>GRO</b>	TPH 8015M		<10.0
<b>DRO</b>	TPH 8015M		<10.0

		Sample	SOUTH @ SURFACE
Analyte	Method	Date	5/2/17
			mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050
<b>Toluene</b>	BTEX 8021B		<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<0.050
<b>Total Xylenes</b>	BTEX 8021B		<0.150
<b>Total BTEX</b>	BTEX 8021B		<0.300
<b>Chloride</b>	SM4500Cl-B		<b>16</b>
<b>GRO</b>	TPH 8015M		<10.0
<b>DRO</b>	TPH 8015M		<10.0

May 12, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: MCKITTRICK HILLS CTB

Enclosed are the results of analyses for samples received by the laboratory on 05/04/17 16:53.

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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager



**Analytical Results For:**

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

Received:	05/04/2017	Sampling Date:	05/02/2017
Reported:	05/12/2017	Sampling Type:	Soil
Project Name:	MCKITTRICK HILLS CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY COUNTY, NM		

**Sample ID: 1 @ 1 (H701209-01)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>1.08</b>	1.00	05/09/2017	ND	2.12	106	2.00	1.77	
<b>Toluene*</b>	<b>26.4</b>	1.00	05/09/2017	ND	1.95	97.4	2.00	1.70	
<b>Ethylbenzene*</b>	<b>18.4</b>	1.00	05/09/2017	ND	1.91	95.6	2.00	1.62	
<b>Total Xylenes*</b>	<b>158</b>	3.00	05/09/2017	ND	5.39	89.8	6.00	1.89	
<b>Total BTEX</b>	<b>204</b>	6.00	05/09/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 123 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	05/09/2017	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>7040</b>	50.0	05/09/2017	ND	198	98.8	200	1.70		
<b>DRO &gt;C10-C28</b>	<b>32000</b>	50.0	05/09/2017	ND	193	96.4	200	5.15		

Surrogate: 1-Chlorooctane 304 % 28.3-164

Surrogate: 1-Chlorooctadecane 766 % 34.7-157

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	05/04/2017	Sampling Date:	05/02/2017
Reported:	05/12/2017	Sampling Type:	Soil
Project Name:	MCKITTRICK HILLS CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY COUNTY, NM		

**Sample ID: 1 @ 2 (H701209-02)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	05/09/2017	ND	2.12	106	2.00	1.77	
Toluene*	5.53	0.200	05/09/2017	ND	1.95	97.4	2.00	1.70	
Ethylbenzene*	<0.200	0.200	05/09/2017	ND	1.91	95.6	2.00	1.62	
Total Xylenes*	40.8	0.600	05/09/2017	ND	5.39	89.8	6.00	1.89	
Total BTEX	46.3	1.20	05/09/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 156 % 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	32.0	16.0	05/09/2017	ND	448	112	400	3.64		

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	1560	100	05/10/2017	ND	198	98.8	200	1.70		
DRO >C10-C28	10900	100	05/10/2017	ND	193	96.4	200	5.15		

Surrogate: 1-Chlorooctane 148 % 28.3-164

Surrogate: 1-Chlorooctadecane 262 % 34.7-157

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\*=Accredited Analyte

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P.O. Box 805  
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Fax To: (575) 397-0397

Received:	05/04/2017	Sampling Date:	05/02/2017
Reported:	05/12/2017	Sampling Type:	Soil
Project Name:	MCKITTRICK HILLS CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY COUNTY, NM		

**Sample ID: 1 @ 2.5 (H701209-03)**

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	05/09/2017	ND	2.12	106	2.00	1.77	
Toluene*	<0.050	0.050	05/09/2017	ND	1.95	97.4	2.00	1.70	
Ethylbenzene*	<0.050	0.050	05/09/2017	ND	1.91	95.6	2.00	1.62	
Total Xylenes*	0.459	0.150	05/09/2017	ND	5.39	89.8	6.00	1.89	
Total BTX	0.459	0.300	05/09/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 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	160	16.0	05/09/2017	ND	448	112	400	3.64	

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	05/09/2017	ND	198	98.8	200	1.70	
DRO >C10-C28	517	10.0	05/09/2017	ND	193	96.4	200	5.15	

Surrogate: 1-Chlorooctane 76.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 80.5 % 34.7-157

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\*=Accredited Analyte

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Received:	05/04/2017	Sampling Date:	05/02/2017
Reported:	05/12/2017	Sampling Type:	Soil
Project Name:	MCKITTRICK HILLS CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY COUNTY, NM		

**Sample ID: 2 @ 1 (H701209-04)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	05/09/2017	ND	2.12	106	2.00	1.77	
Toluene*	25.8	1.00	05/09/2017	ND	1.95	97.4	2.00	1.70	
Ethylbenzene*	17.8	1.00	05/09/2017	ND	1.91	95.6	2.00	1.62	
Total Xylenes*	155	3.00	05/09/2017	ND	5.39	89.8	6.00	1.89	
Total BTEX	199	6.00	05/09/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 122 % 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	32.0	16.0	05/09/2017	ND	448	112	400	3.64	

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	6430	50.0	05/09/2017	ND	198	98.8	200	1.70	
DRO >C10-C28	30800	50.0	05/09/2017	ND	193	96.4	200	5.15	

Surrogate: 1-Chlorooctane 279 % 28.3-164

Surrogate: 1-Chlorooctadecane 731 % 34.7-157

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Received:	05/04/2017	Sampling Date:	05/02/2017
Reported:	05/12/2017	Sampling Type:	Soil
Project Name:	MCKITTRICK HILLS CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY COUNTY, NM		

**Sample ID: 2 @ 2 (H701209-05)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	05/09/2017	ND	2.12	106	2.00	1.77	
Toluene*	3.74	0.200	05/09/2017	ND	1.95	97.4	2.00	1.70	
Ethylbenzene*	<0.200	0.200	05/09/2017	ND	1.91	95.6	2.00	1.62	
Total Xylenes*	30.4	0.600	05/09/2017	ND	5.39	89.8	6.00	1.89	
Total BTEX	34.1	1.20	05/09/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 147 % 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	48.0	16.0	05/09/2017	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	991	10.0	05/09/2017	ND	198	98.8	200	1.70	
DRO >C10-C28	7760	10.0	05/09/2017	ND	193	96.4	200	5.15	

Surrogate: 1-Chlorooctane 150 % 28.3-164

Surrogate: 1-Chlorooctadecane 179 % 34.7-157

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**Analytical Results For:**

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

Received:	05/04/2017	Sampling Date:	05/02/2017
Reported:	05/12/2017	Sampling Type:	Soil
Project Name:	MCKITTRICK HILLS CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY COUNTY, NM		

**Sample ID: 2 @ 2.5 (H701209-06)**

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	05/09/2017	ND	2.12	106	2.00	1.77	
<b>Toluene*</b>	<b>0.082</b>	0.050	05/09/2017	ND	1.95	97.4	2.00	1.70	
Ethylbenzene*	<0.050	0.050	05/09/2017	ND	1.91	95.6	2.00	1.62	
<b>Total Xylenes*</b>	<b>1.34</b>	0.150	05/09/2017	ND	5.39	89.8	6.00	1.89	
<b>Total BTEX</b>	<b>1.42</b>	0.300	05/09/2017	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
<b>Chloride</b>	<b>128</b>	16.0	05/09/2017	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>21.4</b>	10.0	05/09/2017	ND	198	98.8	200	1.70	
<b>DRO &gt;C10-C28</b>	<b>463</b>	10.0	05/09/2017	ND	193	96.4	200	5.15	

Surrogate: 1-Chlorooctane 69.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 75.0 % 34.7-157

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**Analytical Results For:**

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

Received:	05/04/2017	Sampling Date:	05/02/2017
Reported:	05/12/2017	Sampling Type:	Soil
Project Name:	MCKITTRICK HILLS CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY COUNTY, NM		

**Sample ID: 3 @ 1 (H701209-07)**

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	05/09/2017	ND	2.12	106	2.00	1.77	
Toluene*	<0.050	0.050	05/09/2017	ND	1.95	97.4	2.00	1.70	
Ethylbenzene*	<0.050	0.050	05/09/2017	ND	1.91	95.6	2.00	1.62	
<b>Total Xylenes*</b>	<b>0.208</b>	0.150	05/09/2017	ND	5.39	89.8	6.00	1.89	
Total BTX	<0.300	0.300	05/09/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 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	05/09/2017	ND	448	112	400	3.64	

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	05/09/2017	ND	198	98.8	200	1.70	
DRO >C10-C28	801	10.0	05/09/2017	ND	193	96.4	200	5.15	

Surrogate: 1-Chlorooctane 75.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 90.6 % 34.7-157

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Cliff Brunson  
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Received:	05/04/2017	Sampling Date:	05/02/2017
Reported:	05/12/2017	Sampling Type:	Soil
Project Name:	MCKITTRICK HILLS CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY COUNTY, NM		

**Sample ID: 3 @ 2 (H701209-08)**

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	05/09/2017	ND	2.12	106	2.00	1.77	
Toluene*	<0.050	0.050	05/09/2017	ND	1.95	97.4	2.00	1.70	
Ethylbenzene*	<0.050	0.050	05/09/2017	ND	1.91	95.6	2.00	1.62	
Total Xylenes*	<0.150	0.150	05/09/2017	ND	5.39	89.8	6.00	1.89	
Total BTEX	<0.300	0.300	05/09/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.8 % 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	144	16.0	05/09/2017	ND	448	112	400	3.64	

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	05/09/2017	ND	198	98.8	200	1.70	
DRO >C10-C28	211	10.0	05/09/2017	ND	193	96.4	200	5.15	

Surrogate: 1-Chlorooctane 82.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 86.2 % 34.7-157

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Received:	05/04/2017	Sampling Date:	05/02/2017
Reported:	05/12/2017	Sampling Type:	Soil
Project Name:	MCKITTRICK HILLS CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY COUNTY, NM		

**Sample ID: 3 @ 2.5 (H701209-09)**

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	05/09/2017	ND	2.12	106	2.00	1.77	
Toluene*	<0.050	0.050	05/09/2017	ND	1.95	97.4	2.00	1.70	
Ethylbenzene*	<b>0.068</b>	0.050	05/09/2017	ND	1.91	95.6	2.00	1.62	
Total Xylenes*	<b>0.854</b>	0.150	05/09/2017	ND	5.39	89.8	6.00	1.89	
Total BTX	<b>0.921</b>	0.300	05/09/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 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	<b>192</b>	16.0	05/09/2017	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<b>29.7</b>	10.0	05/10/2017	ND	198	98.8	200	1.70	
DRO >C10-C28	<b>577</b>	10.0	05/10/2017	ND	193	96.4	200	5.15	

Surrogate: 1-Chlorooctane 91.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 91.6 % 34.7-157

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**Analytical Results For:**

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Cliff Brunson  
P.O. Box 805  
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Fax To: (575) 397-0397

Received:	05/04/2017	Sampling Date:	05/02/2017
Reported:	05/12/2017	Sampling Type:	Soil
Project Name:	MCKITTRICK HILLS CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY COUNTY, NM		

**Sample ID: NORTH @ SURFACE (H701209-10)**

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	05/09/2017	ND	2.12	106	2.00	1.77	
Toluene*	<0.050	0.050	05/09/2017	ND	1.95	97.4	2.00	1.70	
Ethylbenzene*	<0.050	0.050	05/09/2017	ND	1.91	95.6	2.00	1.62	
Total Xylenes*	<0.150	0.150	05/09/2017	ND	5.39	89.8	6.00	1.89	
Total BTEx	<0.300	0.300	05/09/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.1 % 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	32.0	16.0	05/09/2017	ND	448	112	400	3.64	

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	05/10/2017	ND	198	98.8	200	1.70	
DRO >C10-C28	<10.0	10.0	05/10/2017	ND	193	96.4	200	5.15	

Surrogate: 1-Chlorooctane 80.6 % 28.3-164

Surrogate: 1-Chlorooctadecane 81.0 % 34.7-157

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**Analytical Results For:**

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

Received:	05/04/2017	Sampling Date:	05/02/2017
Reported:	05/12/2017	Sampling Type:	Soil
Project Name:	MCKITTRICK HILLS CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY COUNTY, NM		

**Sample ID: EAST @ SURFACE (H701209-11)**

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	05/09/2017	ND	2.12	106	2.00	1.77		
Toluene*	<0.050	0.050	05/09/2017	ND	1.95	97.4	2.00	1.70		
Ethylbenzene*	<0.050	0.050	05/09/2017	ND	1.91	95.6	2.00	1.62		
Total Xylenes*	<0.150	0.150	05/09/2017	ND	5.39	89.8	6.00	1.89		
Total BTEx	<0.300	0.300	05/09/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.1 % 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	32.0	16.0	05/09/2017	ND	448	112	400	3.64		

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	05/10/2017	ND	198	98.8	200	1.70	
DRO >C10-C28	<10.0	10.0	05/10/2017	ND	193	96.4	200	5.15	

Surrogate: 1-Chlorooctane 76.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 81.6 % 34.7-157

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

Received:	05/04/2017	Sampling Date:	05/02/2017
Reported:	05/12/2017	Sampling Type:	Soil
Project Name:	MCKITTRICK HILLS CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY COUNTY, NM		

**Sample ID: WEST @ SURFACE (H701209-12)**

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	05/09/2017	ND	2.12	106	2.00	1.77	
Toluene*	<0.050	0.050	05/09/2017	ND	1.95	97.4	2.00	1.70	
Ethylbenzene*	<0.050	0.050	05/09/2017	ND	1.91	95.6	2.00	1.62	
Total Xylenes*	<0.150	0.150	05/09/2017	ND	5.39	89.8	6.00	1.89	
Total BTEx	<0.300	0.300	05/09/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.4 % 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	05/09/2017	ND	448	112	400	3.64		

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	05/10/2017	ND	198	98.8	200	1.70	
DRO >C10-C28	<10.0	10.0	05/10/2017	ND	193	96.4	200	5.15	

Surrogate: 1-Chlorooctane 80.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 82.1 % 34.7-157

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BBC International, Inc.  
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Hobbs NM, 88241  
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Received:	05/04/2017	Sampling Date:	05/02/2017
Reported:	05/12/2017	Sampling Type:	Soil
Project Name:	MCKITTRICK HILLS CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY COUNTY, NM		

**Sample ID: SOUTH @ SURFACE (H701209-13)**

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	05/09/2017	ND	2.12	106	2.00	1.77	
Toluene*	<0.050	0.050	05/09/2017	ND	1.95	97.4	2.00	1.70	
Ethylbenzene*	<0.050	0.050	05/09/2017	ND	1.91	95.6	2.00	1.62	
Total Xylenes*	<0.150	0.150	05/09/2017	ND	5.39	89.8	6.00	1.89	
Total BTX	<0.300	0.300	05/09/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.9 % 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	16.0	16.0	05/09/2017	ND	448	112	400	3.64	

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	05/08/2017	ND	175	87.7	200	2.62	
DRO >C10-C28	<10.0	10.0	05/08/2017	ND	181	90.6	200	4.90	

Surrogate: 1-Chlorooctane 75.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 76.0 % 34.7-157

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### 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 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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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 April 3, 2017

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

## Release Notification and Corrective Action

### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	OXY USA WTP LP	Contact	CASEY L SUMMERS
Address	PO BOX 4294; HOUSTON, TX 77210	Telephone No.	575-513-8289
Facility Name	MCKITTRICK HILLS CTB	Facility Type	CENTRAL TANK BATTERY
Surface Owner	STATE	Mineral Owner	STATE
		API No.	30-015-21010

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	14	22S	24E	2390	NORTH	830	EAST	EDDY

Latitude\_32.3916512\_ Longitude\_-104.4632568\_ NAD83

### NATURE OF RELEASE

Type of Release	OIL & PRODUCED WATER	Volume of Release	85 bbls OIL - 10 bbls PW	Volume Recovered	80 bbls
Source of Release	WATER TANKS SPILLED OVER	Date and Hour of Occurrence	4-18-2017	Date and Hour of Discovery	4-19-2017
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	MIKE BRATCHER-NMOCD; CRYSTAL WEAVER-NMOCD; SHELLY TUCKER-BLM		
By Whom?	CASEY SUMMERS	Date and Hour	4-19-2017	9:54AM	
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

Spill was caused by water tanks spilling over due to the injection pumps not running properly. Pumps and alarm were repaired and check to prevent future release. 80 bbls of free fluid was recovered by vacuum truck.

Describe Area Affected and Cleanup Action Taken.\*

The affected area is approximately 80' X 40' on location (measurements are subject to change with future GPS track) . Remediation will be completed in accordance with a remediation plan approved by the NMOCD and BLM.

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:	<u>OIL CONSERVATION DIVISION</u>		
Printed Name: CASEY L SUMMERS	Approved by Environmental Specialist:		
Title: ENVIRONMENTAL ADVISOR	Approval Date:	Expiration Date:	
E-mail Address: casey_summers@oxy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 4-19-17	Phone: 575-513-8289		

\* Attach Additional Sheets If Necessary