

Closure Report

Site Description

Site Name:	South Mattix Federal Fowler SWD
Company:	Oxy USA Inc.
Legal Description:	U/L J, Section 15, T24S, R37E
County:	Lea County, NM
GPS Coordinates:	N 32.21690 W-103.14951

Release Data

Date of Release:	9/19/18
Type of Release:	Oil and produced water
Source of Release:	Lightning strike caused fire and tank spill
Volume of Release:	330 bbls oil, 492 bbls produced water
Volume Recovered:	100 bbls oil, 70 bbls produced water

Remediation Specifications

Remediation Parameters:	Excavate the areas of SP1-SP5 to a depth of 3 feet. Excavate the areas of SP6 & SP7 to a depth of 6 inches. Excavate the areas of SP8-SP11, SP14, & SP15 to a depth of 1 foot. Excavate the areas of SP12 & SP13 to a depth of 2 feet. Obtain bottom confirmation samples. Backfill the site with clean soil.	
Remediation Activities:	8/7/19 to 9/27/19	
Plan Sent to OCD:	2/21/19	Email from Cliff Brunson to NMOCD
OCD Approval of Plan:	2/22/19	Email from Vanessa Fields to Cliff Brunson
Plan Sent to BLM:	2/21/19	Email from Cliff Brunson to Jim Amos
BLM Approval of Plan:	6/10/19	Email from Jim Amos to Cliff Brunson

Supporting Documentation

Initial C-141	Signed 9/25/18
C-141, page 6	Signed and included
Site Diagram	October 2018
Pictures	Remediation photos prior to backfill

Request for Closure

Based on the completion of the remediation plan, BBC International, Inc. requests closure approval from NMOCD.

Cliff Brunson, President, BBC International, Inc.

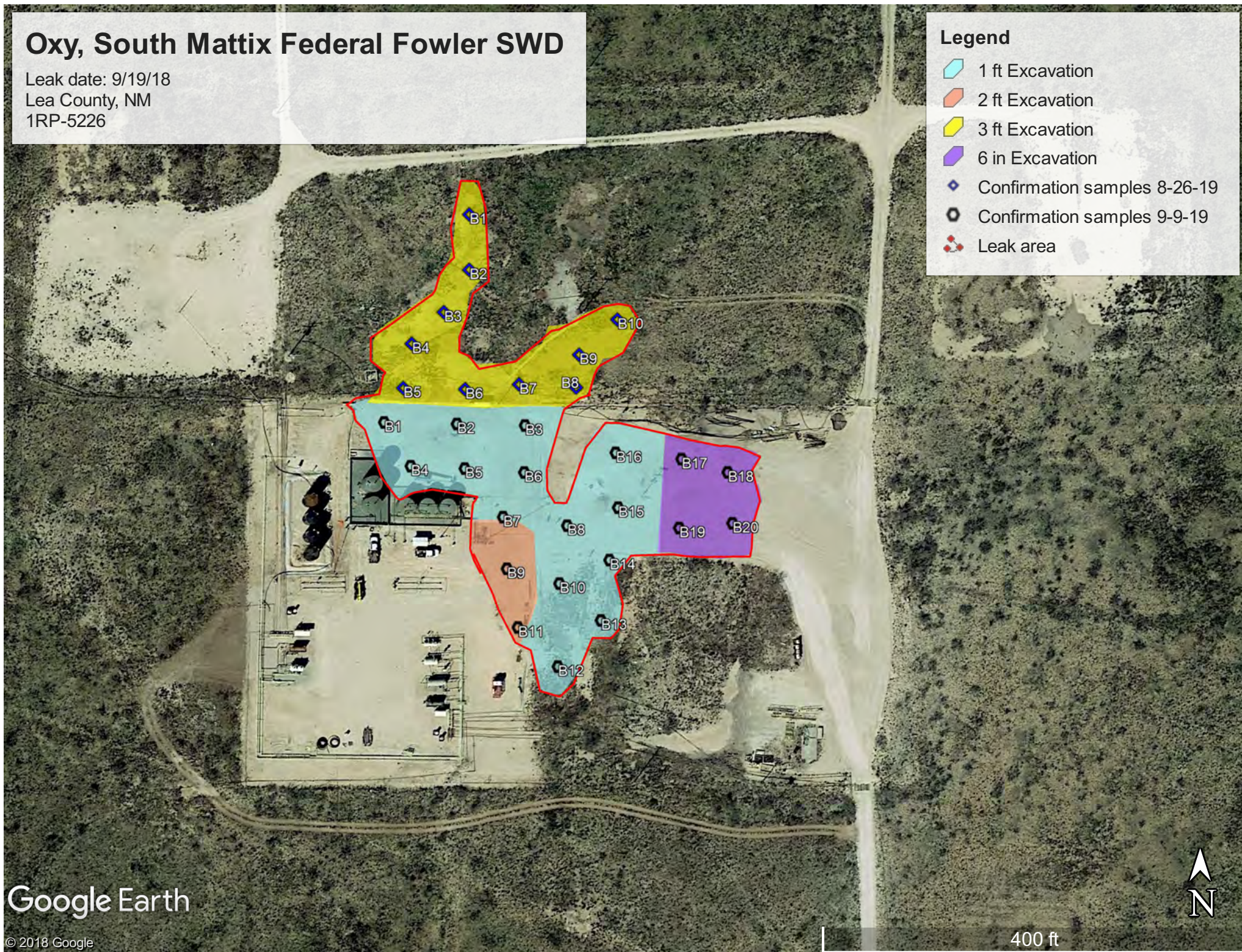
10/29/2019

Oxy, South Mattix Federal Fowler SWD

Leak date: 9/19/18
Lea County, NM
1RP-5226

Legend

- 1 ft Excavation
- 2 ft Excavation
- 3 ft Excavation
- 6 in Excavation
- Confirmation samples 8-26-19
- Confirmation samples 9-9-19
- Leak area



Google Earth

© 2018 Google

400 ft

Oxy, South Mattix Federal Fowler SWD

Confirmation sampling 8/26/19

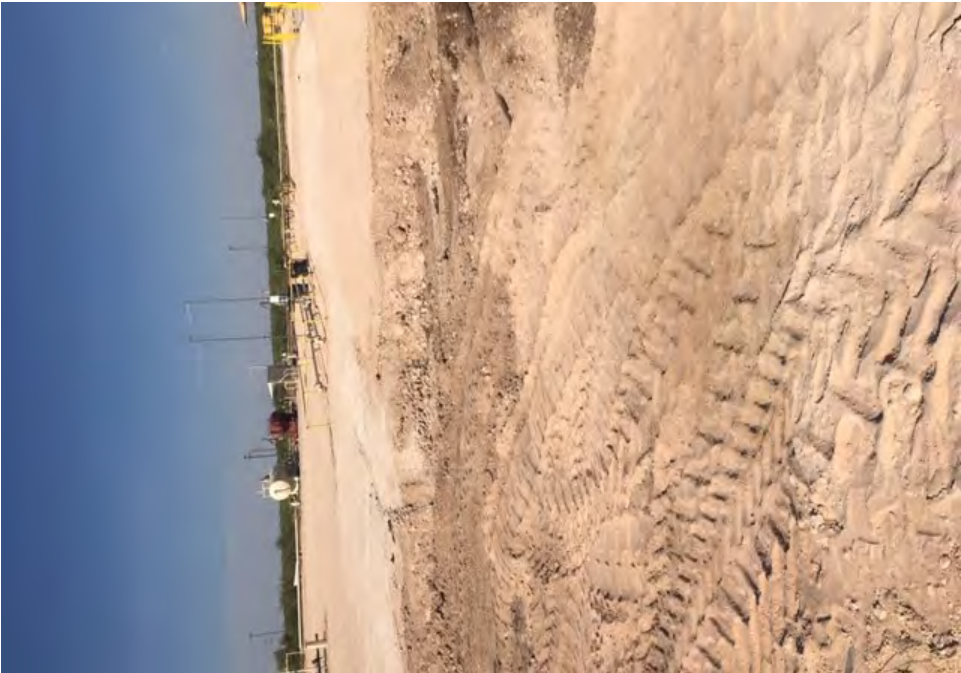
B1, N 32.21790 W-103.14946
B2, N 32.21775 W-103.14946
B3, N 32.21764 W-103.14954
B4, N 32.21756 W-103.14964
B5, N 32.21745 W-103.14966
B6, N 32.21745 W-103.14948
B7, N 32.21746 W-103.14931
B8, N 32.21745 W-103.14914
B9, N 32.21754 W-103.14913
B10, N 32.21763 W-103.14901

Confirmation sampling 9/9/19

B1, N 32.21736 W-103.14972	B14, N 32.21701 W-103.14904
B2, N 32.21736 W-103.14950	B15, N 32.21714 W-103.14901
B3, N 32.21735 W-103.14929	B16, N 32.21728 W-103.14902
B4, N 32.21725 W-103.14964	B17, N 32.21727 W-103.14882
B5, N 32.21724 W-103.14948	B18, N 32.21723 W-103.14868
B6, N 32.21723 W-103.14930	B19, N 32.21709 W-103.14883
B7, N 32.21712 W-103.14936	B20, N 32.21710 W-103.14866
B8, N 32.21710 W-103.14917	
B9, N 32.21699 W-103.14935	
B10, N 32.21695 W-103.14919	
B11, N 32.21684 W-103.14932	
B12, N 32.21674 W-103.14919	
B13, N 32.21685 W-103.14906	











Laboratory Analytical Results Summary
South Mattix Federal Fowler SWD (9/19/18)

Confirmation 1		Sample ID	BOTTOM 1
Analyte	Method	Date	8/26/19
			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
Chloride	SM4500Cl-B		16
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 1		Sample ID	BOTTOM 5
Analyte	Method	Date	8/26/19
			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
Chloride	SM4500Cl-B		16
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 1		Sample ID	BOTTOM 9
Analyte	Method	Date	8/26/19
			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
Chloride	SM4500Cl-B		<16.0
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 1		Sample ID	BOTTOM 2
Analyte	Method	Date	8/26/19
			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
Chloride	SM4500Cl-B		32
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 1		Sample ID	BOTTOM 6
Analyte	Method	Date	8/26/19
			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
Chloride	SM4500Cl-B		32
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 1		Sample ID	BOTTOM 10
Analyte	Method	Date	8/26/19
			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
Chloride	SM4500Cl-B		<16.0
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 1		Sample ID	BOTTOM 3
Analyte	Method	Date	8/26/19
			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
Chloride	SM4500Cl-B		32
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 1		Sample ID	BOTTOM 7
Analyte	Method	Date	8/26/19
			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
Chloride	SM4500Cl-B		32
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 1		Sample ID	BOTTOM 4
Analyte	Method	Date	8/26/19
			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
Chloride	SM4500Cl-B		16
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 1		Sample ID	BOTTOM 8
Analyte	Method	Date	8/26/19
			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
Chloride	SM4500Cl-B		<16.0
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Laboratory Analytical Results Summary
South Mattix Federal Fowler SWD (9/19/18)

Confirmation 2		Sample ID	BOTTOM 13
Analyte	Method	Date	9/9/19
			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
Chloride	SM4500Cl-B		<16.0
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 2		Sample ID	BOTTOM 17
Analyte	Method	Date	9/9/19
			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
Chloride	SM4500Cl-B		<16.0
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 2		Sample ID	BOTTOM 14
Analyte	Method	Date	9/9/19
			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
Chloride	SM4500Cl-B		<16.0
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 2		Sample ID	BOTTOM 18
Analyte	Method	Date	9/9/19
			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
Chloride	SM4500Cl-B		<16.0
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 2		Sample ID	BOTTOM 15
Analyte	Method	Date	9/9/19
			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
Chloride	SM4500Cl-B		<16.0
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 2		Sample ID	BOTTOM 19
Analyte	Method	Date	9/9/19
			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
Chloride	SM4500Cl-B		<16.0
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 2		Sample ID	BOTTOM 16
Analyte	Method	Date	9/9/19
			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
Chloride	SM4500Cl-B		<16.0
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

Confirmation 2		Sample ID	BOTTOM 20
Analyte	Method	Date	9/9/19
			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
Chloride	SM4500Cl-B		<16.0
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

August 29, 2019

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: SOUTH MATTIX FEDERAL FOWLER SWD

Enclosed are the results of analyses for samples received by the laboratory on 08/28/19 14:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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:

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

Received:	08/28/2019	Sampling Date:	08/26/2019
Reported:	08/29/2019	Sampling Type:	Soil
Project Name:	SOUTH MATTIX FEDERAL FOWLER SWD	Sampling Condition:	Cool & Intact
Project Number:	(9/19/18)	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA CO NM		

Sample ID: BOTTOM 1 (H902983-01)

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	08/29/2019	ND	1.75	87.4	2.00	0.199	
Toluene*	<0.050	0.050	08/29/2019	ND	1.94	97.2	2.00	0.911	
Ethylbenzene*	<0.050	0.050	08/29/2019	ND	2.07	103	2.00	0.643	
Total Xylenes*	<0.150	0.150	08/29/2019	ND	6.15	102	6.00	0.501	
Total BTX	<0.300	0.300	08/29/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 89.5 % 73.3-129

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	08/29/2019	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/29/2019	ND	203	102	200	2.69	
DRO >C10-C28*	<10.0	10.0	08/29/2019	ND	205	102	200	0.571	
EXT DRO >C28-C36	<10.0	10.0	08/29/2019	ND					

Surrogate: 1-Chlorooctane 65.4 % 41-142

Surrogate: 1-Chlorooctadecane 80.8 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

Received:	08/28/2019	Sampling Date:	08/26/2019
Reported:	08/29/2019	Sampling Type:	Soil
Project Name:	SOUTH MATTIX FEDERAL FOWLER SWD	Sampling Condition:	Cool & Intact
Project Number:	(9/19/18)	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA CO NM		

Sample ID: BOTTOM 2 (H902983-02)

BTEx 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	08/29/2019	ND	1.62	81.1	2.00	1.90	
Toluene*	<0.050	0.050	08/29/2019	ND	1.81	90.5	2.00	0.851	
Ethylbenzene*	<0.050	0.050	08/29/2019	ND	1.97	98.7	2.00	0.544	
Total Xylenes*	<0.150	0.150	08/29/2019	ND	5.90	98.3	6.00	0.679	
Total BTEX	<0.300	0.300	08/29/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 86.5 % 73.3-129

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	08/29/2019	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/29/2019	ND	208	104	200	5.80	
DRO >C10-C28*	<10.0	10.0	08/29/2019	ND	211	106	200	6.47	
EXT DRO >C28-C36	<10.0	10.0	08/29/2019	ND					

Surrogate: 1-Chlorooctane 116 % 41-142

Surrogate: 1-Chlorooctadecane 124 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

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Received:	08/28/2019	Sampling Date:	08/26/2019
Reported:	08/29/2019	Sampling Type:	Soil
Project Name:	SOUTH MATTIX FEDERAL FOWLER SWD	Sampling Condition:	Cool & Intact
Project Number:	(9/19/18)	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA CO NM		

Sample ID: BOTTOM 3 (H902983-03)

BTEx 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	08/29/2019	ND	1.62	81.1	2.00	1.90		
Toluene*	<0.050	0.050	08/29/2019	ND	1.81	90.5	2.00	0.851		
Ethylbenzene*	<0.050	0.050	08/29/2019	ND	1.97	98.7	2.00	0.544		
Total Xylenes*	<0.150	0.150	08/29/2019	ND	5.90	98.3	6.00	0.679		
Total BTEx	<0.300	0.300	08/29/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 87.3 % 73.3-129

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	08/29/2019	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/29/2019	ND	208	104	200	5.80	
DRO >C10-C28*	<10.0	10.0	08/29/2019	ND	211	106	200	6.47	
EXT DRO >C28-C36	<10.0	10.0	08/29/2019	ND					

Surrogate: 1-Chlorooctane 118 % 41-142

Surrogate: 1-Chlorooctadecane 128 % 37.6-147

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*=Accredited Analyte

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Received:	08/28/2019	Sampling Date:	08/26/2019
Reported:	08/29/2019	Sampling Type:	Soil
Project Name:	SOUTH MATTIX FEDERAL FOWLER SWD	Sampling Condition:	Cool & Intact
Project Number:	(9/19/18)	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA CO NM		

Sample ID: BOTTOM 4 (H902983-04)

BTEx 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	08/29/2019	ND	1.62	81.1	2.00	1.90	
Toluene*	<0.050	0.050	08/29/2019	ND	1.81	90.5	2.00	0.851	
Ethylbenzene*	<0.050	0.050	08/29/2019	ND	1.97	98.7	2.00	0.544	
Total Xylenes*	<0.150	0.150	08/29/2019	ND	5.90	98.3	6.00	0.679	
Total BTEX	<0.300	0.300	08/29/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 87.6 % 73.3-129

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	08/29/2019	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/29/2019	ND	208	104	200	5.80	
DRO >C10-C28*	<10.0	10.0	08/29/2019	ND	211	106	200	6.47	
EXT DRO >C28-C36	<10.0	10.0	08/29/2019	ND					

Surrogate: 1-Chlorooctane 121 % 41-142

Surrogate: 1-Chlorooctadecane 131 % 37.6-147

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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:	08/28/2019	Sampling Date:	08/26/2019
Reported:	08/29/2019	Sampling Type:	Soil
Project Name:	SOUTH MATTIX FEDERAL FOWLER SWD	Sampling Condition:	Cool & Intact
Project Number:	(9/19/18)	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA CO NM		

Sample ID: BOTTOM 5 (H902983-05)

BTEx 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	08/29/2019	ND	1.62	81.1	2.00	1.90	
Toluene*	<0.050	0.050	08/29/2019	ND	1.81	90.5	2.00	0.851	
Ethylbenzene*	<0.050	0.050	08/29/2019	ND	1.97	98.7	2.00	0.544	
Total Xylenes*	<0.150	0.150	08/29/2019	ND	5.90	98.3	6.00	0.679	
Total BTEX	<0.300	0.300	08/29/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 88.1 % 73.3-129

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	08/29/2019	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/29/2019	ND	208	104	200	5.80	
DRO >C10-C28*	<10.0	10.0	08/29/2019	ND	211	106	200	6.47	
EXT DRO >C28-C36	<10.0	10.0	08/29/2019	ND					

Surrogate: 1-Chlorooctane 118 % 41-142

Surrogate: 1-Chlorooctadecane 127 % 37.6-147

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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:	08/28/2019	Sampling Date:	08/26/2019
Reported:	08/29/2019	Sampling Type:	Soil
Project Name:	SOUTH MATTIX FEDERAL FOWLER SWD	Sampling Condition:	Cool & Intact
Project Number:	(9/19/18)	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA CO NM		

Sample ID: BOTTOM 6 (H902983-06)

BTEx 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	08/29/2019	ND	1.62	81.1	2.00	1.90	
Toluene*	<0.050	0.050	08/29/2019	ND	1.81	90.5	2.00	0.851	
Ethylbenzene*	<0.050	0.050	08/29/2019	ND	1.97	98.7	2.00	0.544	
Total Xylenes*	<0.150	0.150	08/29/2019	ND	5.90	98.3	6.00	0.679	
Total BTEX	<0.300	0.300	08/29/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 87.6 % 73.3-129

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	08/29/2019	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/29/2019	ND	208	104	200	5.80	
DRO >C10-C28*	<10.0	10.0	08/29/2019	ND	211	106	200	6.47	
EXT DRO >C28-C36	<10.0	10.0	08/29/2019	ND					

Surrogate: 1-Chlorooctane 113 % 41-142

Surrogate: 1-Chlorooctadecane 122 % 37.6-147

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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:	08/28/2019	Sampling Date:	08/26/2019
Reported:	08/29/2019	Sampling Type:	Soil
Project Name:	SOUTH MATTIX FEDERAL FOWLER SWD	Sampling Condition:	Cool & Intact
Project Number:	(9/19/18)	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA CO NM		

Sample ID: BOTTOM 7 (H902983-07)

BTEx 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	08/29/2019	ND	1.62	81.1	2.00	1.90	
Toluene*	<0.050	0.050	08/29/2019	ND	1.81	90.5	2.00	0.851	
Ethylbenzene*	<0.050	0.050	08/29/2019	ND	1.97	98.7	2.00	0.544	
Total Xylenes*	<0.150	0.150	08/29/2019	ND	5.90	98.3	6.00	0.679	
Total BTEX	<0.300	0.300	08/29/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 88.4 % 73.3-129

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	08/29/2019	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/29/2019	ND	208	104	200	5.80	
DRO >C10-C28*	<10.0	10.0	08/29/2019	ND	211	106	200	6.47	
EXT DRO >C28-C36	<10.0	10.0	08/29/2019	ND					

Surrogate: 1-Chlorooctane 112 % 41-142

Surrogate: 1-Chlorooctadecane 123 % 37.6-147

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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:	08/28/2019	Sampling Date:	08/26/2019
Reported:	08/29/2019	Sampling Type:	Soil
Project Name:	SOUTH MATTIX FEDERAL FOWLER SWD	Sampling Condition:	Cool & Intact
Project Number:	(9/19/18)	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA CO NM		

Sample ID: BOTTOM 8 (H902983-08)

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	08/29/2019	ND	1.62	81.1	2.00	1.90	
Toluene*	<0.050	0.050	08/29/2019	ND	1.81	90.5	2.00	0.851	
Ethylbenzene*	<0.050	0.050	08/29/2019	ND	1.97	98.7	2.00	0.544	
Total Xylenes*	<0.150	0.150	08/29/2019	ND	5.90	98.3	6.00	0.679	
Total BTX	<0.300	0.300	08/29/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 88.5 % 73.3-129

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	08/29/2019	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/29/2019	ND	208	104	200	5.80	
DRO >C10-C28*	<10.0	10.0	08/29/2019	ND	211	106	200	6.47	
EXT DRO >C28-C36	<10.0	10.0	08/29/2019	ND					

Surrogate: 1-Chlorooctane 124 % 41-142

Surrogate: 1-Chlorooctadecane 132 % 37.6-147

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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:	08/28/2019	Sampling Date:	08/26/2019
Reported:	08/29/2019	Sampling Type:	Soil
Project Name:	SOUTH MATTIX FEDERAL FOWLER SWD	Sampling Condition:	Cool & Intact
Project Number:	(9/19/18)	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA CO NM		

Sample ID: BOTTOM 9 (H902983-09)

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	08/29/2019	ND	1.55	77.6	2.00	1.86	
Toluene*	<0.050	0.050	08/29/2019	ND	1.77	88.4	2.00	1.26	
Ethylbenzene*	<0.050	0.050	08/29/2019	ND	1.83	91.3	2.00	1.32	
Total Xylenes*	<0.150	0.150	08/29/2019	ND	5.60	93.3	6.00	1.59	
Total BTX	<0.300	0.300	08/29/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.3-129

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	08/29/2019	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/29/2019	ND	208	104	200	5.80	
DRO >C10-C28*	<10.0	10.0	08/29/2019	ND	211	106	200	6.47	
EXT DRO >C28-C36	<10.0	10.0	08/29/2019	ND					

Surrogate: 1-Chlorooctane 122 % 41-142

Surrogate: 1-Chlorooctadecane 132 % 37.6-147

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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:	08/28/2019	Sampling Date:	08/26/2019
Reported:	08/29/2019	Sampling Type:	Soil
Project Name:	SOUTH MATTIX FEDERAL FOWLER SWD	Sampling Condition:	Cool & Intact
Project Number:	(9/19/18)	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA CO NM		

Sample ID: BOTTOM 10 (H902983-10)

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	08/29/2019	ND	1.55	77.6	2.00	1.86	
Toluene*	<0.050	0.050	08/29/2019	ND	1.77	88.4	2.00	1.26	
Ethylbenzene*	<0.050	0.050	08/29/2019	ND	1.83	91.3	2.00	1.32	
Total Xylenes*	<0.150	0.150	08/29/2019	ND	5.60	93.3	6.00	1.59	
Total BTEX	<0.300	0.300	08/29/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 73.3-129

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	08/29/2019	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/29/2019	ND	208	104	200	5.80	
DRO >C10-C28*	<10.0	10.0	08/29/2019	ND	211	106	200	6.47	
EXT DRO >C28-C36	<10.0	10.0	08/29/2019	ND					

Surrogate: 1-Chlorooctane 123 % 41-142

Surrogate: 1-Chlorooctadecane 132 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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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Celey D. Keene, Lab Director/Quality Manager



ARDINAL LABORATORIES

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1051

Company Name: BBC International, Inc.				BILL TO				ANALYSIS REQUEST			
Project Manager: Cliff Brunson				P.O. #:				Company:			
Address: P.O. Box 805				City: Hobbs				State: NM Zip: 88241			
Phone #: 575-397-6388				Fax #: 575-397-0397				Attn:			
Project #:				Project Owner:				Address:			
Project Name: South Mattix Federal Fowler SWD (9-19-18)				City:				State: Zip:			
Project Location:				Phone #:				Fax #:			
Sampler Name: Roger Hernandez				FOR LAB USE ONLY							

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	TPH Ext	BTEx	CI-
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
1	Bottom 1	C	1							8/26/19	1:00			
2	Bottom 2	C	1							8/26/19	1:10			
3	Bottom 3	C	1							8/26/19	1:20			
4	Bottom 4	C	1							8/26/19	1:30			
5	Bottom 5	C	1							8/26/19	1:40			
6	Bottom 6	C	1							8/26/19	1:50			
7	Bottom 7	C	1							8/26/19	2:00			
8	Bottom 8	C	1							8/26/19	2:10			
9	Bottom 9	C	1							8/26/19	2:20			
10	Bottom 10	C	1							8/26/19	2:30			

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Relinquished By: Date: 8/26/19 Time: 5:00 PM	Received By: Date: 8/26/19 Time: 14:00	Delivered By: (Circle One) -8.6i #197 Corrected -8.2i	Sample Condition Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials)
---	---	--	---	----------------------------------

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

September 11, 2019

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: SOUTH MATTIX FED

Enclosed are the results of analyses for samples received by the laboratory on 09/10/19 16:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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:

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

Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 1 (H903126-01)

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	09/11/2019	ND	2.06	103	2.00	3.82	
Toluene*	<0.050	0.050	09/11/2019	ND	2.07	103	2.00	4.16	
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.08	104	2.00	3.74	
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.21	103	6.00	3.49	
Total BTX	<0.300	0.300	09/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.4 % 73.3-129

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	09/11/2019	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 85.3 % 41-142

Surrogate: 1-Chlorooctadecane 90.6 % 37.6-147

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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: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 2 (H903126-02)

BTEx 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	09/11/2019	ND	2.06	103	2.00	3.82	
Toluene*	<0.050	0.050	09/11/2019	ND	2.07	103	2.00	4.16	
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.08	104	2.00	3.74	
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.21	103	6.00	3.49	
Total BTEx	<0.300	0.300	09/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 91.9 % 73.3-129

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	09/11/2019	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 87.7 % 41-142

Surrogate: 1-Chlorooctadecane 94.2 % 37.6-147

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Fax To: (575) 397-0397

Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 3 (H903126-03)

BTEX 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	09/11/2019	ND	2.06	103	2.00	3.82	
Toluene*	<0.050	0.050	09/11/2019	ND	2.07	103	2.00	4.16	
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.08	104	2.00	3.74	
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.21	103	6.00	3.49	
Total BTEX	<0.300	0.300	09/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.1 % 73.3-129

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	09/11/2019	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 89.5 % 41-142

Surrogate: 1-Chlorooctadecane 95.1 % 37.6-147

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Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 4 (H903126-04)

BTEX 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	09/11/2019	ND	2.06	103	2.00	3.82		
Toluene*	<0.050	0.050	09/11/2019	ND	2.07	103	2.00	4.16		
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.08	104	2.00	3.74		
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.21	103	6.00	3.49		
Total BTEX	<0.300	0.300	09/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 91.8 % 73.3-129

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	09/11/2019	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 87.6 % 41-142

Surrogate: 1-Chlorooctadecane 93.1 % 37.6-147

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Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 5 (H903126-05)

BTEx 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	09/11/2019	ND	2.06	103	2.00	3.82		
Toluene*	<0.050	0.050	09/11/2019	ND	2.07	103	2.00	4.16		
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.08	104	2.00	3.74		
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.21	103	6.00	3.49		
Total BTEx	<0.300	0.300	09/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.2 % 73.3-129

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	09/11/2019	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 83.1 % 41-142

Surrogate: 1-Chlorooctadecane 88.3 % 37.6-147

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Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 6 (H903126-06)

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	09/11/2019	ND	1.98	98.9	2.00	0.722	
Toluene*	<0.050	0.050	09/11/2019	ND	1.96	97.9	2.00	2.85	
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.02	101	2.00	0.247	
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.09	102	6.00	0.208	
Total BTX	<0.300	0.300	09/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 87.3 % 73.3-129

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	09/11/2019	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 83.7 % 41-142

Surrogate: 1-Chlorooctadecane 90.0 % 37.6-147

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

Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 7 (H903126-07)

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	09/11/2019	ND	1.98	98.9	2.00	0.722	
Toluene*	<0.050	0.050	09/11/2019	ND	1.96	97.9	2.00	2.85	
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.02	101	2.00	0.247	
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.09	102	6.00	0.208	
Total BTX	<0.300	0.300	09/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 91.0 % 73.3-129

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	09/11/2019	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 86.0 % 41-142

Surrogate: 1-Chlorooctadecane 90.9 % 37.6-147

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

Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 8 (H903126-08)

BTEx 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	09/11/2019	ND	1.98	98.9	2.00	0.722		
Toluene*	<0.050	0.050	09/11/2019	ND	1.96	97.9	2.00	2.85		
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.02	101	2.00	0.247		
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.09	102	6.00	0.208		
Total BTEX	<0.300	0.300	09/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.5 % 73.3-129

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	09/11/2019	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 86.4 % 41-142

Surrogate: 1-Chlorooctadecane 92.8 % 37.6-147

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Fax To: (575) 397-0397

Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 9 (H903126-09)

BTEx 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	09/11/2019	ND	1.98	98.9	2.00	0.722		
Toluene*	<0.050	0.050	09/11/2019	ND	1.96	97.9	2.00	2.85		
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.02	101	2.00	0.247		
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.09	102	6.00	0.208		
Total BTEX	<0.300	0.300	09/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.6 % 73.3-129

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	09/11/2019	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 85.0 % 41-142

Surrogate: 1-Chlorooctadecane 90.2 % 37.6-147

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Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 10 (H903126-10)

BTEx 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	09/11/2019	ND	1.98	98.9	2.00	0.722		
Toluene*	<0.050	0.050	09/11/2019	ND	1.96	97.9	2.00	2.85		
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.02	101	2.00	0.247		
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.09	102	6.00	0.208		
Total BTEX	<0.300	0.300	09/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.5 % 73.3-129

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	09/11/2019	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 84.8 % 41-142

Surrogate: 1-Chlorooctadecane 90.6 % 37.6-147

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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: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 11 (H903126-11)

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	09/11/2019	ND	1.98	98.9	2.00	0.722		
Toluene*	<0.050	0.050	09/11/2019	ND	1.96	97.9	2.00	2.85		
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.02	101	2.00	0.247		
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.09	102	6.00	0.208		
Total BTX	<0.300	0.300	09/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.3 % 73.3-129

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	09/11/2019	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 85.4 % 41-142

Surrogate: 1-Chlorooctadecane 92.1 % 37.6-147

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Cliff Brunson
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Fax To: (575) 397-0397

Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 12 (H903126-12)

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	09/11/2019	ND	1.98	98.9	2.00	0.722		
Toluene*	<0.050	0.050	09/11/2019	ND	1.96	97.9	2.00	2.85		
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.02	101	2.00	0.247		
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.09	102	6.00	0.208		
Total BTX	<0.300	0.300	09/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.6 % 73.3-129

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	09/11/2019	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 83.5 % 41-142

Surrogate: 1-Chlorooctadecane 88.4 % 37.6-147

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Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 13 (H903126-13)

BTEX 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	09/11/2019	ND	1.98	98.9	2.00	0.722	
Toluene*	<0.050	0.050	09/11/2019	ND	1.96	97.9	2.00	2.85	
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.02	101	2.00	0.247	
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.09	102	6.00	0.208	
Total BTEX	<0.300	0.300	09/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 88.8 % 73.3-129

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	09/11/2019	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 87.5 % 41-142

Surrogate: 1-Chlorooctadecane 93.1 % 37.6-147

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Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 14 (H903126-14)

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	09/11/2019	ND	1.98	98.9	2.00	0.722	
Toluene*	<0.050	0.050	09/11/2019	ND	1.96	97.9	2.00	2.85	
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.02	101	2.00	0.247	
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.09	102	6.00	0.208	
Total BTX	<0.300	0.300	09/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 88.0 % 73.3-129

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	09/11/2019	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	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 86.1 % 41-142

Surrogate: 1-Chlorooctadecane 92.3 % 37.6-147

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Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 15 (H903126-15)

BTEx 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	09/11/2019	ND	1.98	98.9	2.00	0.722		
Toluene*	<0.050	0.050	09/11/2019	ND	1.96	97.9	2.00	2.85		
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.02	101	2.00	0.247		
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.09	102	6.00	0.208		
Total BTEX	<0.300	0.300	09/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.0 % 73.3-129

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	09/11/2019	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	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 86.6 % 41-142

Surrogate: 1-Chlorooctadecane 92.5 % 37.6-147

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

Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 16 (H903126-16)

BTEx 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	09/11/2019	ND	1.98	98.9	2.00	0.722		
Toluene*	<0.050	0.050	09/11/2019	ND	1.96	97.9	2.00	2.85		
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.02	101	2.00	0.247		
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.09	102	6.00	0.208		
Total BTEX	<0.300	0.300	09/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.2 % 73.3-129

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	09/11/2019	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	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 86.5 % 41-142

Surrogate: 1-Chlorooctadecane 91.6 % 37.6-147

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Analytical Results For:

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P.O. Box 805
Hobbs NM, 88241
Fax To: (575) 397-0397

Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 17 (H903126-17)

BTEx 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	09/11/2019	ND	1.98	98.9	2.00	0.722		
Toluene*	<0.050	0.050	09/11/2019	ND	1.96	97.9	2.00	2.85		
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.02	101	2.00	0.247		
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.09	102	6.00	0.208		
Total BTEX	<0.300	0.300	09/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.0 % 73.3-129

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	09/11/2019	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	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 85.0 % 41-142

Surrogate: 1-Chlorooctadecane 89.5 % 37.6-147

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

Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 18 (H903126-18)

BTEx 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	09/11/2019	ND	1.98	98.9	2.00	0.722		
Toluene*	<0.050	0.050	09/11/2019	ND	1.96	97.9	2.00	2.85		
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.02	101	2.00	0.247		
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.09	102	6.00	0.208		
Total BTEX	<0.300	0.300	09/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.0 % 73.3-129

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	09/11/2019	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	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 85.9 % 41-142

Surrogate: 1-Chlorooctadecane 91.4 % 37.6-147

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Received: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 19 (H903126-19)

BTEx 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	09/11/2019	ND	1.98	98.9	2.00	0.722		
Toluene*	<0.050	0.050	09/11/2019	ND	1.96	97.9	2.00	2.85		
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.02	101	2.00	0.247		
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.09	102	6.00	0.208		
Total BTEX	<0.300	0.300	09/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.8 % 73.3-129

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	09/11/2019	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	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 88.1 % 41-142

Surrogate: 1-Chlorooctadecane 93.5 % 37.6-147

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*=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: 09/10/2019
Reported: 09/11/2019
Project Name: SOUTH MATTIX FED
Project Number: NONE GIVEN
Project Location: OXY - LEA CO NM

Sampling Date: 09/09/2019
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BOTTOM 20 (H903126-20)

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	09/11/2019	ND	1.98	98.9	2.00	0.722		
Toluene*	<0.050	0.050	09/11/2019	ND	1.96	97.9	2.00	2.85		
Ethylbenzene*	<0.050	0.050	09/11/2019	ND	2.02	101	2.00	0.247		
Total Xylenes*	<0.150	0.150	09/11/2019	ND	6.09	102	6.00	0.208		
Total BTX	<0.300	0.300	09/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.8 % 73.3-129

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	09/11/2019	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	09/11/2019	ND	202	101	200	3.18	
DRO >C10-C28*	<10.0	10.0	09/11/2019	ND	207	104	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	09/11/2019	ND					

Surrogate: 1-Chlorooctane 87.2 % 41-142

Surrogate: 1-Chlorooctadecane 92.6 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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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Celey D. Keene, Lab Director/Quality Manager



CARDINAL LABORATORIES

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

142

Company Name: BBC International, Inc.				BILL TO				ANALYSIS REQUEST																											
Project Manager: Cliff Brunson				P.O. #:																															
Address: P.O. Box 805				Company:																															
City: Hobbs				Attn:																															
State: NM Zip: 88241				Address:																															
Phone #: 575-397-6388				City:																															
Fax #: 575-397-0397				State:																															
Project #: Project Owner: Oxy				Zip:																															
Project Name: Santa Maria Fed				Phone #:																															
Project Location:				Fax #:																															
Sampler Name: Roger Hernandez																																			
FOR LAB USE ONLY																																			
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER :		ACID/BASE:		ICE / COOL		OTHER :		DATE		TIME		TPH		BTEX		CL	
H9D3126		1		BOTTOM		1		✓		✓		✓		✓		✓		✓		✓		✓		✓		9-9-19		1000		✓		✓		✓	
2		BOTTOM		1		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		9-9-19		1010		✓		✓		✓	
3		BOTTOM		1		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		9-9-19		1020		✓		✓		✓	
4		BOTTOM		1		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		9-9-19		1030		✓		✓		✓	
5		BOTTOM		1		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		9-9-19		1040		✓		✓		✓	
6		BOTTOM		1		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		9-9-19		1050		✓		✓		✓	
7		BOTTOM		1		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		9-9-19		1100		✓		✓		✓	
8		BOTTOM		1		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		9-9-19		1110		✓		✓		✓	
9		BOTTOM		1		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		9-9-19		1120		✓		✓		✓	
10		BOTTOM		1		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		9-9-19		1130		✓		✓		✓	

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Relinquished By: [Signature]	Date: 9-9-19	Received By: Jennifer Gilkey	Date: 9-9-19	Time: 5:00 PM
Relinquished By: [Signature]	Date: 9-10-19	Received By: [Signature]	Date: 9-10-19	Time: 4:25
Delivered By: (Circle One) Jennifer Gilkey	Sample Condition Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>	Checked By: [Signature]	Initials: [Signature]	
Sampler - UPS - Bus - Other: -10:49/-10:57	Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476			

REMARKS: Rush



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

282

Company Name: BBC International, Inc.				BILL TO				ANALYSIS REQUEST			
Project Manager: Cliff Brunson				P.O. #:				Company:			
Address: P.O. Box 805				Attn:				Address:			
City: Hobbs				State: NM				Zip: 88241			
Phone #: 575-397-6388				Fax #: 575-397-0397				City:			
Project #:				Project Owner: OY4				State:			
Project Name: South Matrix Field				City:				Zip:			
Project Location:				Phone #:				Fax #:			
Sample Name: <i>Aggr Hernandez</i>				FOR LAB USE ONLY				SAMPLING			
Lab I.D.				Sample I.D.				DATE			
H903126				11				11/40			
12				Bottom				9-9-19 1150			
13				Bottom				9-9-19 1200			
14				Bottom				9-9-19 1200			
15				Bottom				9-9-19 1200			
16				Bottom				9-9-19 1300			
17				Bottom				9-9-19 1300			
18				Bottom				9-9-19 1500			
19				Bottom				9-9-19 2100			
20				Bottom				9-9-19 2200			

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Relinquished By: <i>Aggr Hernandez</i>	Received By: <i>Jennifer Eddy</i>
Date: 9-9-19 Time: 3:00 pm	Date: 9-10-19 Time: 4:35
Relinquished By: <i>Aggr Hernandez</i>	Received By: <i>Aggr Hernandez</i>
Delivered By: (Circle One) Sampler - UPS - Bus - Other: <i>-10,44/-10,00</i>	Sample Condition: Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>
Sampler - UPS - Bus - Other: <i>-10,44/-10,00</i>	CHECKED BY: <i>Aggr Hernandez</i>
REMARKS: <i>Push</i>	

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

Incident ID	
District RP	1RP-5226
Facility ID	
Application ID	


Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Wade Dittrich Title: Environmental Coordinator
 Signature:  Date: 10-13-19
 email: wade_dittrich@oxy.com Telephone: (575) 390-2828

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____