

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

# DELINEATION/REMEDIATION WORKPLAN

# OXY - MESQUITE MOUTRAY SWD (Leak Date: 6/26/19)

#### RP # 2RP-5575

This delineation workplan and remediation proposal addresses the releases associated with RP # 2RP-5575.

The following information includes:

- 1. Appropriate completed and signed C-141 pages.
- 2. Scaled digital site map with spill area demarcated and leak point identified along with sample point locations and areas of remediation at appropriate depths.
- 3. GPS information for sample points and sample methodology.
- 4. Depth to groundwater information (i.e., pdf of OSE search results, USGS search results, and/or copy of Chevron groundwater trend map).
- 5. Watercourse/features map within 1000 feet.
- 6. BLM Cave Karst map.
- 7. FEMA National Flood map.
- 8. Laboratory analysis results summary table and original laboratory analysis reports.
- 9. Potentially other pertinent information as necessary for site specific purposes.

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

OXY will excavate the spill area as depicted on the following site diagram. The leak near SP1 and SP2 (GREEN shade on diagram) will be excavated to a depth of 3 feet. The leak area near SP3 – SP7 (YELLOW shade on diagram) will be excavated to a depth of 4 feet.

Bottom confirmation samples will be collected every 75 feet.

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.

Form C-141 Page 3

# State of New Mexico Oil Conservation Division

Incident ID		
District RP	2RP-5575	
Facility ID		
Application ID		

# Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	52'(ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ■ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ■ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ■ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ■ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ■ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ■ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ■ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ■ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ■ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	Yes No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ■ No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	■ Yes □ No
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil
Characterization Report Checklist: Each of the following items must be included in the report.	
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well Field data  Data table of soil contaminant concentration data  Depth to water determination  Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release  Boring or excavation logs  Photographs including date and GIS information  Topographic/Aerial maps	ls.
Laboratory data including chain of custody	

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141

Page 4

# State of New Mexico Oil Conservation Division

Incident ID	
District RP	2RP-5575
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release noti public health or the environment. The acceptance of a C-141 report by the C failed to adequately investigate and remediate contamination that pose a thre addition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	fications and perform corrective actions for releases which may endanger DCD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In
Printed Name: Wade Dittrich  Signature: wade_dittrich@oxy.com	Title: Environmental Coordinator  Date:
OCD Only	
Received by:	Date:

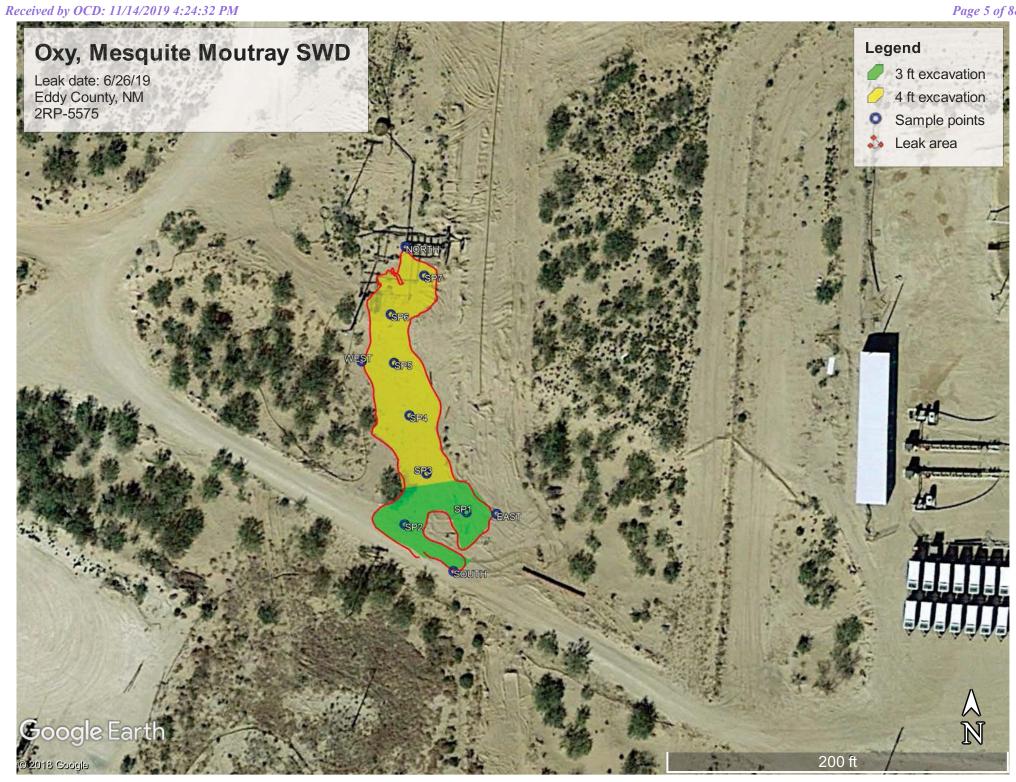
Form C-141 Page 5

# State of New Mexico Oil Conservation Division

Incident ID	
District RP	2RP-5575
Facility ID	
Application ID	

# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be	included in the plan.
Detailed description of proposed remediation technique     Scaled sitemap with GPS coordinates showing delineation points	
Estimated volume of material to be remediated	
Closure criteria is to Table 1 specifications subject to 19.15.29.1	2(C)(4) NMAC
Proposed schedule for remediation (note if remediation plan time	elline is more than 90 days OCD approval is required)
D.C. ID.	
Deferral Requests Only: Each of the following items must be conj	trmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around prodeconstruction.	duction equipment where remediation could cause a major facility
Extents of contamination must be fully delineated.	
Contamination does not cause an imminent risk to human health,	the environment, or groundwater.
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 cowhich may endanger public health or the environment. The acceptant	ce 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 a	cceptance of a C-141 report does not relieve the operator of
responsibility for compliance with any other federal, state, or local la	ws and/or regulations.
Printed Name: Wade Dittrich	Title: Environmental Coordinator
Signature: Wall Side	Date: 11-13-19
email: wade_dittrich@oxy.com	Telephone: (575) 390-2828
email:	Telephone: (3.3) 333 2323
OCD Only	
Danakas I kan	D . 8
Received by:	Date:
Approved Approved with Attached Conditions of A	pproval Denied Deferral Approved
Signature:	Date:



# Oxy, Mesquite Moutray SWD

# Sample points

SP1, N 32.19522 W-103.98536

SP2, N 32.19520 W-103.98548

SP3, N 32.19529 W-103.98544

SP4, N 32.19538 W-103.98547

SP5, N 32.19547 W-103.98550

SP6, N 32.19554 W-103.98550

SP7, N 32.19561 W-103.98544

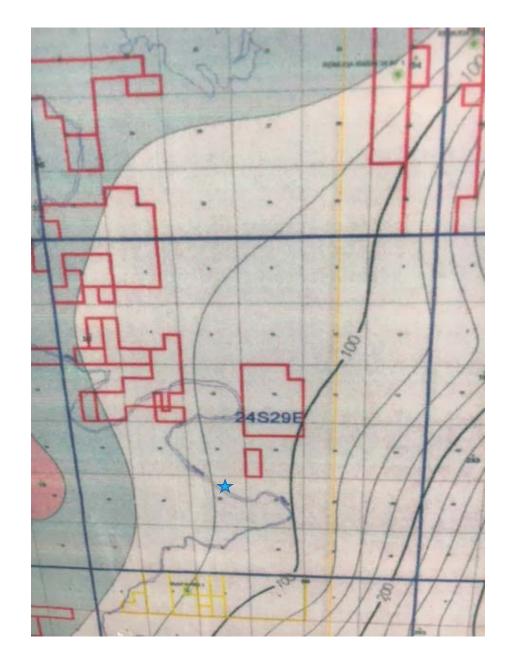
NORTH, N 32.19565 W-103.98547

SOUTH, N 32.19513 W-103.98538

EAST, N 32.19522 W-103.98530

WEST, N 32.19547 W-103.98556

Oxy, Mesquite Moutray SWD U/L B, Section 28, T24S, R29E Groundwater: 75'-100'





USGS Home Contact USGS Search USGS

**National Water Information System: Web Interface** 

**USGS Water Resources** 

Data Category:		Geographic Area:		
Groundwater	$\checkmark$	New Mexico	~	GO

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

#### Search Results -- 1 sites found

Agency code = usgs site\_no list =

• 321355104012001

#### Minimum number of levels = 1

Table of data

Save file of selected sites to local disk for future upload

#### USGS 321355104012001 24S.29E.07.14444

Eddy County, New Mexico Latitude 32°13'55", Longitude 104°01'20" NAD27 Land-surface elevation 2,983 feet above NAVD88 The depth of the well is 160 feet below land surface.

This well is completed in the Castile Formation (312CSTL) local aquifer.

#### **Output formats**

Tab-separa	ated data									
Graph of d	<u>ata</u>									
Reselect pe	eriod									
Date	Time	? Water- level date- time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water- level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurema
1983-02-0	)1	D	47.14			2		ı	J	
1987-10-1	.6	D	51.84			2		ı	J	
1988-02-1	.1	D	52.19			2		1	J	
1992-10-2	20	D	51.78			2		:	S	

Explanation							
Section	Code	Description					
Water-level date-time accuracy	D	Date is accurate to the Day					
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot					
Status		The reported water-level measurement represents a static level					
Method of measurement	S	Steel-tape measurement.					
Method of measurement	U	Unknown method.					
Measuring agency		Not determined					
Source of measurement	U	Source is unknown.					
Water-level approval status	А	Approved for publication Processing and review completed.					

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility Plug-Ins FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for New Mexico: Water Levels

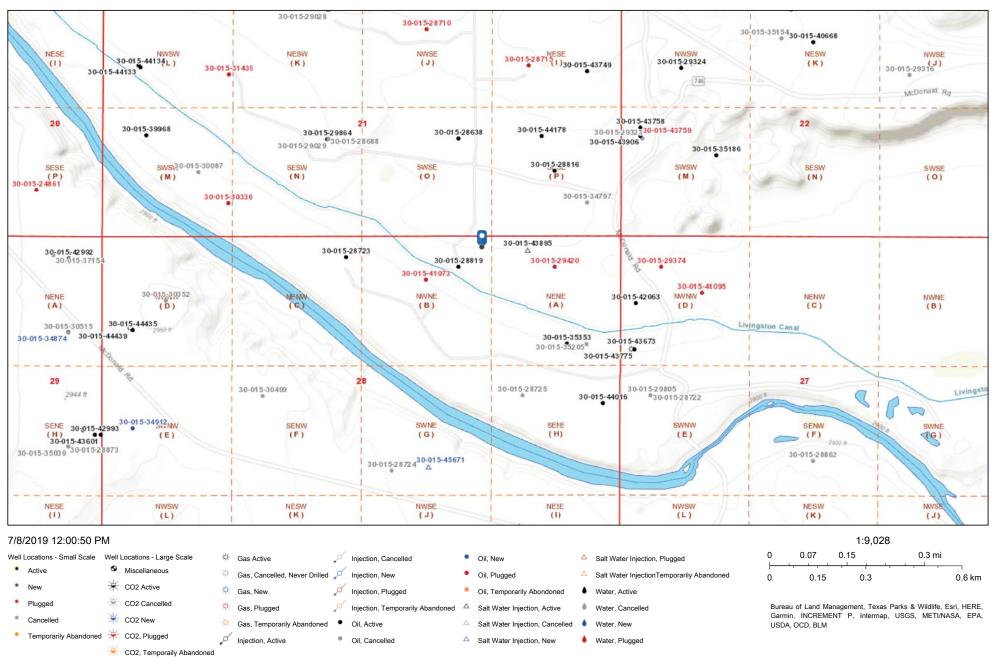
URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: <u>New Mexico Water Data Maintainer</u> Page Last Modified: 2019-07-08 14:10:51 EDT

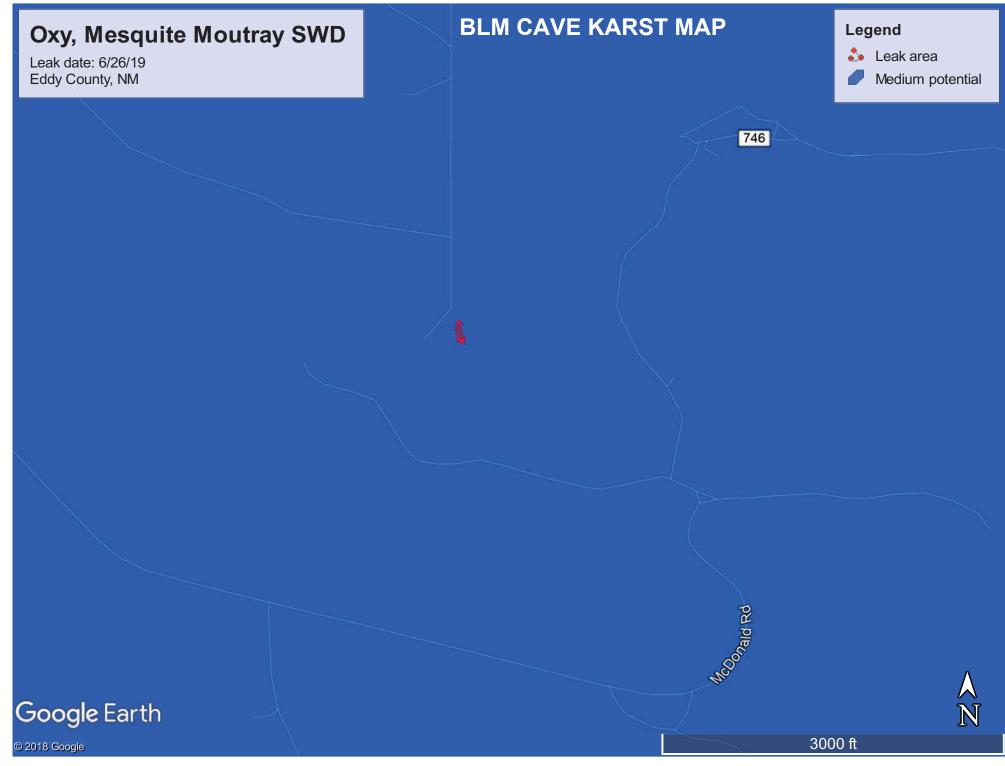
0.5 0.47 nadww01

USA.gov

# Oxy, Mesquite Moutray SWD



New Mexico Oil Conservation Division NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/: New Mexico Oil Conservation Division



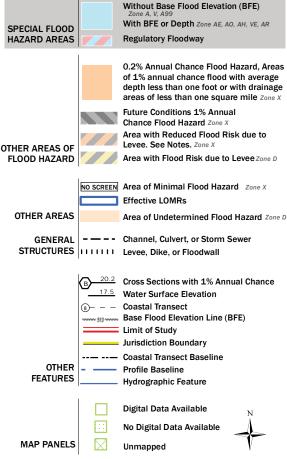
# National Flood Hazard Layer FIRMette





#### Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



9

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/8/2019 at 2:31:12 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

#### Laboratory Analytical Results Summary Mesquite Moutray SWD (6/26/19)

			001.0				
		Sample ID	SP1 @ SURFACE	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'	SP1 @ 4'
Analyte	Method	Date	10/4/19	10/4/19	10/4/19	10/4/19	10/4/19
Allaryto	Metrica	Date					
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		< 0.050	< 0.050	n/a	n/a	n/a
Toluene	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	n/a	n/a	n/a
Chloride	SM4500CI-B		576	2800	1200	112	160
GRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a
DRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a
EXT DRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a

			SP2 @				
		Sample ID	SURFACE	SP2 @ 1'	SP2 @ 2'	SP2 @ 3'	SP2 @ 4'
Analyte	Method	Date	10/4/19	10/4/19	10/4/19	10/4/19	10/4/19
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a
Toluene	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	n/a	n/a	n/a
Chloride	SM4500CI-B		1840	2640	1170	144	144
GRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a
DRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a
EXT DRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a

		Sample ID	SP3 @ SURFACE	SP3 @ 1'	SP3 @ 2'	SP3 @ 3'	SP3 @ 4'	SP3 @ 5'	SP3 @ 6'	SP3 @ 7'	SP3 @ 8'
Analyte	Method	Date	10/4/19	10/4/19	10/4/19	10/4/19	10/4/19	10/4/19	10/4/19	10/4/19	10/4/19
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a						
Toluene	BTEX 8021B		<0.050	<0.050	n/a						
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a						
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a						
Total BTEX	BTEX 8021B		<0.300	<0.300	n/a						
Chloride	SM4500CI-B		1150	3000	4160	3280	5680	5600	1330	32	<16.0
GRO	TPH 8015M		<10.0	<10.0	n/a						
DRO	TPH 8015M		<10.0	<10.0	n/a						
EXT DRO	TPH 8015M		<10.0	<10.0	n/a						

		Sample ID	SP4 @ SURFACE	SP4 @ 1'	SP4 @ 2'	SP4 @ 3'	SP4 @ 4'	SP4 @ 5'	SP4 @ 6'
Analyte	Method	Date	10/4/19	10/4/19	10/4/19	10/4/19	10/9/19	10/9/19	10/9/19
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	n/a	n/a	n/a	n/a
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	n/a	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	n/a	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	n/a	n/a	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	n/a	n/a	n/a	n/a
Chloride	SM4500CI-B		8530	2480	864	2320	1100	32	<16.0
GRO	TPH 8015M		<10.0	<10.0	<10.0	n/a	n/a	n/a	n/a
DRO	TPH 8015M		1420	<10.0	<10.0	n/a	n/a	n/a	n/a
EXT DRO	TPH 8015M		509	<10.0	<10.0	n/a	n/a	n/a	n/a

#### Laboratory Analytical Results Summary Mesquite Moutray SWD (6/26/19)

	1		SP5@						
		Sample ID	_	SP5 @ 1'	SP5 @ 2'	SP5 @ 3'	SP5 @ 4'	SP5 @ 5'	SP5 @ 6'
Analyte	Method	Date	10/9/19	10/9/19	10/9/19	10/9/19	10/9/19	10/9/19	10/9/19
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a	n/a	n/a
Toluene	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a	n/a	n/a	n/a	n/a
Total BTEX	BTEX 8021B		< 0.300	<0.300	n/a	n/a	n/a	n/a	n/a
Chloride	SM4500CI-B		7060	4320	1020	1300	608	32	16
GRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a	n/a	n/a
DRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a	n/a	n/a
EXT DRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a	n/a	n/a

			SP6 @						
		Sample ID	SURFACE	SP6 @ 1'	SP6 @ 2'	SP6 @ 3'	SP6 @ 4'	SP6 @ 5'	SP6 @ 6'
Analyte	Method	Date	10/9/19	10/9/19	10/9/19	10/9/19	10/9/19	10/9/19	10/9/19
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a	n/a	n/a
Toluene	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a	n/a	n/a	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	n/a	n/a	n/a	n/a	n/a
Chloride	SM4500CI-B		7200	2560	3040	1010	1090	16	32
GRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a	n/a	n/a
DRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a	n/a	n/a
EXT DRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a	n/a	n/a

		Sample ID	SP7 @ SURFACE	SP7 @ 1'	SP7 @ 2'	SP7 @ 3'	SP7 @ 4'	SP7 @ 5'	SP7 @ 6'	SP7 @ 7'	SP7 @ 8'	SP7 @ 9'	SP7 @ 10'
Analyte	Method	Date	10/9/19	10/9/19	10/9/19	10/9/19	10/9/19	10/9/19	10/9/19	10/10/19	10/10/19	10/10/19	10/10/19
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a								
Toluene	BTEX 8021B		<0.050	<0.050	n/a								
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a								
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a								
Total BTEX	BTEX 8021B		<0.300	<0.300	n/a								
Chloride	SM4500CI-B		1760	3040	3960	4320	5760	7060	4800	8400	13400	9330	8400
GRO	TPH 8015M		<10.0	<10.0	n/a								
DRO	TPH 8015M		<10.0	<10.0	n/a								
EXT DRO	TPH 8015M		<10.0	<10.0	n/a								

			NORTH @	EAST @	WEST @	SOUTH @
		Sample ID	SURFACE	SURFACE	SURFACE	SURFACE
Analyte	Method	Date	10/10/19	10/10/19	10/10/19	10/10/19
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	< 0.050
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	<0.300
Chloride	SM4500CI-B		32	<16.0	<16.0	<16.0
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
EXT DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0



October 18, 2019

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: MESQUITE MOUTRAY SWD

Enclosed are the results of analyses for samples received by the laboratory on 10/11/19 17:00.

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 <a href="https://www.tceq.texas.gov/field/qa/lab-accred-certif.html">www.tceq.texas.gov/field/qa/lab-accred-certif.html</a>.

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B Total Coliform and E. coli (Colilert MMO-MUG)

Method EPA 524.2 Regulated VOCs and Total Trihalomethanes (TTHM)

Method EPA 552.2 Total Haloacetic Acids (HAA-5)

Celey D. Keene

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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.

Project: MESQUITE MOUTRAY SWD

Reported:

P.O. Box 805

Project Number: 6/26/2019

18-Oct-19 11:44

Hobbs NM, 88241

Project Manager: Cliff Brunson

Fax To: (575) 397-0397

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP 1 @ SURFACE	H903469-01	Soil	04-Oct-19 09:20	11-Oct-19 17:00
SP 1 @ 1'	H903469-02	Soil	04-Oct-19 09:30	11-Oct-19 17:00
SP 1 @ 2'	H903469-03	Soil	04-Oct-19 09:40	11-Oct-19 17:00
SP 1 @ 3'	H903469-04	Soil	04-Oct-19 10:05	11-Oct-19 17:00
SP 1 @ 4'	H903469-05	Soil	04-Oct-19 10:22	11-Oct-19 17:00
SP 2 @ SURFACE	H903469-06	Soil	04-Oct-19 10:30	11-Oct-19 17:00
SP 2 @ 1'	H903469-07	Soil	04-Oct-19 10:40	11-Oct-19 17:00
SP 2 @ 2'	H903469-08	Soil	04-Oct-19 10:55	11-Oct-19 17:00
SP 2 @ 3'	H903469-09	Soil	04-Oct-19 11:11	11-Oct-19 17:00
SP 2 @ 4'	H903469-10	Soil	04-Oct-19 11:30	11-Oct-19 17:00
SP 3 @ SURFACE	H903469-11	Soil	04-Oct-19 11:40	11-Oct-19 17:00
SP 3 @ 1'	H903469-12	Soil	04-Oct-19 11:50	11-Oct-19 17:00
SP 3 @ 2'	H903469-13	Soil	04-Oct-19 11:59	11-Oct-19 17:00
SP 3 @ 3'	H903469-14	Soil	04-Oct-19 12:15	11-Oct-19 17:00
SP 3 @ 4'	H903469-15	Soil	04-Oct-19 13:11	11-Oct-19 17:00
SP 3 @ 5'	H903469-16	Soil	04-Oct-19 13:38	11-Oct-19 17:00
SP 3 @ 6'	H903469-17	Soil	04-Oct-19 13:40	11-Oct-19 17:00
SP 3 @ 7'	H903469-18	Soil	04-Oct-19 13:50	11-Oct-19 17:00
SP 3 @ 8'	H903469-19	Soil	04-Oct-19 13:59	11-Oct-19 17:00
SP 4 @ SURFACE	H903469-20	Soil	04-Oct-19 14:18	11-Oct-19 17:00
SP 4 @ 1'	H903469-21	Soil	04-Oct-19 14:20	11-Oct-19 17:00
SP 4 @ 2'	H903469-22	Soil	04-Oct-19 14:28	11-Oct-19 17:00
SP 4 @ 3'	H903469-23	Soil	04-Oct-19 14:40	11-Oct-19 17:00
SP 4 @ 4'	H903469-24	Soil	09-Oct-19 09:11	11-Oct-19 17:00
SP 4 @ 5'	H903469-25	Soil	09-Oct-19 09:22	11-Oct-19 17:00
SP 4 @ 6'	H903469-26	Soil	09-Oct-19 09:43	11-Oct-19 17:00
SP 5 @ SURFACE	H903469-27	Soil	09-Oct-19 09:59	11-Oct-19 17:00

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Celeg D. Kreene



#### Analytical Results For:

BBC International, Inc. P.O. Box 805 Hobbs NM, 88241		Project Number: Project Manager:		Reported: 18-Oct-19 11:44
SP 5 @ 1'	H903469-28	Soil	09-Oct-19 10:15	11-Oct-19 17:00
SP 5 @ 2'	H903469-29	Soil	09-Oct-19 10:27	11-Oct-19 17:00
SP 5 @ 3'	H903469-30	Soil	09-Oct-19 10:47	11-Oct-19 17:00
SP 5 @ 4'	H903469-31	Soil	09-Oct-19 11:02	11-Oct-19 17:00
SP 5 @ 5'	H903469-32	Soil	09-Oct-19 11:15	11-Oct-19 17:00
SP 5 @ 6'	H903469-33	Soil	09-Oct-19 11:31	11-Oct-19 17:00
SP 6 @ SURFACE	H903469-34	Soil	09-Oct-19 11:40	11-Oct-19 17:00
SP 6 @ 1'	H903469-35	Soil	09-Oct-19 11:50	11-Oct-19 17:00
SP 6 @ 2'	H903469-36	Soil	09-Oct-19 12:12	11-Oct-19 17:00
SP 6 @ 3'	H903469-37	Soil	09-Oct-19 12:52	11-Oct-19 17:00
SP 6 @ 4'	H903469-38	Soil	09-Oct-19 13:01	11-Oct-19 17:00
SP 6 @ 5'	H903469-39	Soil	09-Oct-19 13:11	11-Oct-19 17:00
SP 6 @ 6'	H903469-40	Soil	09-Oct-19 13:22	11-Oct-19 17:00
SP 7 @ SURFACE	H903469-41	Soil	09-Oct-19 13:25	11-Oct-19 17:00
SP 7 @ 1'	H903469-42	Soil	09-Oct-19 13:35	11-Oct-19 17:00
SP 7 @ 2'	H903469-43	Soil	09-Oct-19 13:45	11-Oct-19 17:00
SP 7 @ 3'	H903469-44	Soil	09-Oct-19 14:01	11-Oct-19 17:00
SP 7 @ 4'	H903469-45	Soil	09-Oct-19 14:22	11-Oct-19 17:00
SP 7 @ 5'	H903469-46	Soil	09-Oct-19 14:32	11-Oct-19 17:00
SP 7 @ 6'	H903469-47	Soil	09-Oct-19 14:39	11-Oct-19 17:00
SP 7 @ 7'	H903469-48	Soil	10-Oct-19 09:20	11-Oct-19 17:00
SP 7 @ 8'	H903469-49	Soil	10-Oct-19 09:49	11-Oct-19 17:00
SP 7 @ 9'	H903469-50	Soil	10-Oct-19 10:30	11-Oct-19 17:00
SP 7 @ 10'	H903469-51	Soil	10-Oct-19 10:59	11-Oct-19 17:00
NORTH @ SURFACE	H903469-52	Soil	10-Oct-19 11:28	11-Oct-19 17:00
EAST @ SURFACE	H903469-53	Soil	10-Oct-19 11:49	11-Oct-19 17:00
WEST @ SURFACE	H903469-54	Soil	10-Oct-19 12:59	11-Oct-19 17:00
SOUTH @ SURFACE	H903469-55	Soil	10-Oct-19 13:22	11-Oct-19 17:00

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Celeg D. Kreene

Celey D. Keene, Lab Director/Quality Manager



#### Analytical Results For:

BBC International, Inc.

Project: MESQUITE MOUTRAY SWD

Reported:

P.O. Box 805

Project Number: 6/26/2019

18-Oct-19 11:44

Hobbs NM, 88241

Project Manager: Cliff Brunson Fax To: (575) 397-0397

Client added BTEX & TPH to samples -21 and -22 on 10/17/19. This is the revised report and will replace the one sent on 10/17/19.

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Celey D. Keene, Lab Director/Quality Manager

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#### Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

Reported: 18-Oct-19 11:44

# SP 1 @ SURFACE

#### H903469-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
Inorganic Compounds										
Chloride	576		16.0	mg/kg	4	9101521	AC	16-Oct-19	4500-Cl-B	
Volatile Organic Compounds b	oy EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			98.6 %	73.3	-129	9101404	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by G	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101401	MS	14-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101401	MS	14-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101401	MS	14-Oct-19	8015B	
Surrogate: 1-Chlorooctane			111 %	41-	142	9101401	MS	14-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			112 %	37.6	-147	9101401	MS	14-Oct-19	8015B	

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## **Analytical Results For:**

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397 Reported: 18-Oct-19 11:44

## SP 1 @ 1' H903469-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
Inorganic Compounds										
Chloride	2800		16.0	mg/kg	4	9101521	AC	16-Oct-19	4500-Cl-B	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PIL	0)		97.8 %	73.3	-129	9101404	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101413	MS	15-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101413	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101413	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane			112 %	41-	142	9101413	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			110 %	37.6	-147	9101413	MS	15-Oct-19	8015B	

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#### Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241

**Inorganic Compounds** 

Project: MESQUITE MOUTRAY SWD

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 1 @ 2' H903469-03 (Soil)

Analyte Result MDL Reporting Limit Units Dilution Batch Analyst Analyzed Method Notes

**Cardinal Laboratories** 

Chloride 1200 16.0 mg/kg 4 9101521 AC 16-Oct-19 4500-Cl-B

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#### Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

Reported: 18-Oct-19 11:44

SP 1 @ 3'

H903469-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	tories					
Inorganic Compounds										
Chloride	112		16.0	mg/kg	4	9101521	AC	16-Oct-19	4500-Cl-B	

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#### **Analytical Results For:**

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241

**Inorganic Compounds** 

Project: MESQUITE MOUTRAY SWD

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019

Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 1 @ 4'

H903469-05 (Soil)

Analyte Result MDL Limit Units Dilution Batch Analy	yst Analyzed Method Notes
---	---------------------------

**Cardinal Laboratories** 

9101521 16.0 AC16-Oct-19 4500-Cl-B 160 mg/kg Chloride

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Reported:

18-Oct-19 11:44



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#### Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson

Fax To: (575) 397-0397

## SP 2 @ SURFACE H903469-06 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
Inorganic Compounds										
Chloride	1840		16.0	mg/kg	4	9101521	AC	16-Oct-19	4500-C1-B	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PIL	D)		101 %	73.3	-129	9101404	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101413	MS	15-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101413	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101413	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane			103 %	41-	142	9101413	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			99.8 %	37.6	-147	9101413	MS	15-Oct-19	8015B	

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#### Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

## SP 2 @ 1' H903469-07 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
Inorganic Compounds										
Chloride	2640		16.0	mg/kg	4	9101521	AC	16-Oct-19	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.6 %	73.3	-129	9101404	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane			86.7 %	41-	142	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			91.0 %	37.6	-147	9101501	MS	15-Oct-19	8015B	

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Celey D. Keene, Lab Director/Quality Manager



#### Analytical Results For:

BBC International, Inc.

P.O. Box 805

Hobbs NM, 88241

Project: MESQUITE MOUTRAY SWD

Reported:

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397 18-Oct-19 11:44

SP 2 @ 2'

H903469-08 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes		
Cardinal Laboratories												
Inorganic Compounds												
Chloride	1170		16.0	mg/kg	4	9101521	AC	16-Oct-19	4500-Cl-B			

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Reported:

18-Oct-19 11:44



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#### Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397

SP 2 @ 3'

H903469-09 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
Cardinal Laboratories											
Inorganic Compounds											
Chloride	144		16.0	mg/kg	4	9101521	AC	16-Oct-19	4500-Cl-B		

Cardinal Laboratories \*=Accredited Analyte

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 2 @ 4'

H903469-10 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes		
Cardinal Laboratories												
Inorganic Compounds												
Chloride	144		16.0	mg/kg	4	9101521	AC	16-Oct-19	4500-Cl-B			

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Reported:

18-Oct-19 11:44



#### PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

#### Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson

Fax To: (575) 397-0397

# SP 3 @ SURFACE H903469-11 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
Inorganic Compounds										
Chloride	1150		16.0	mg/kg	4	9101521	AC	16-Oct-19	4500-Cl-B	
Volatile Organic Compounds b	y EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.8 %	73.3	-129	9101404	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane	·		87.6 %	41-	142	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			90.9 %	37.6	-147	9101501	MS	15-Oct-19	8015B	

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#### Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

Reported: 18-Oct-19 11:44

SP 3 @ 1' H903469-12 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
Inorganic Compounds										
Chloride	3000		16.0	mg/kg	4	9101521	AC	16-Oct-19	4500-Cl-B	·
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PIL	7)		101 %	73.3-	-129	9101404	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane			88.7 %	41-	142	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			92.0 %	37.6-	-147	9101501	MS	15-Oct-19	8015B	

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#### Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397 Reported: 18-Oct-19 11:44

SP 3 @ 2'

H903469-13 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes		
Cardinal Laboratories												
Inorganic Compounds												
Chloride	4160		16.0	mg/kg	4	9101521	AC	16-Oct-19	4500-C1-B			

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#### Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397 Reported:

18-Oct-19 11:44

SP 3 @ 3'

H903469-14 (Soil)

	Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes		
	Cardinal Laboratories												
<u>I</u>	norganic Compounds												
C	Chloride	3280		16.0	mg/kg	4	9101521	AC	16-Oct-19	4500-Cl-B			

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5680

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16-Oct-19

## Analytical Results For:

BBC International, Inc.

16.0

Project: MESQUITE MOUTRAY SWD

9101521

Reported:

4500-Cl-B

P.O. Box 805 Hobbs NM, 88241

Chloride

Project Number: 6/26/2019

18-Oct-19 11:44

Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 3 @ 4'

H903469-15 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Inorganic Compounds			Cardina	al Laborat	ories					

mg/kg

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805

Hobbs NM, 88241

Project: MESQUITE MOUTRAY SWD

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019

Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 3 @ 5' H903469-16 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardinal	Laborato	ories					

**Inorganic Compounds** 9101521 16.0 16-Oct-19 4500-Cl-B 5600 mg/kg Chloride

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#### Analytical Results For:

BBC International, Inc.

P.O. Box 805

Hobbs NM, 88241

Project: MESQUITE MOUTRAY SWD

Reported:

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397 18-Oct-19 11:44

SP 3 @ 6'

H903469-17 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
Cardinal Laboratories													
Inorganic Compounds													
Chloride	1330		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-Cl-B	QM-07			

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

Reported: 18-Oct-19 11:44

SP 3 @ 7'

H903469-18 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
Cardinal Laboratories											
Inorganic Compounds											
Chloride	32.0		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-Cl-B		

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## **Analytical Results For:**

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019

Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 3 @ 8'

H903469-19 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	ories					

**Inorganic Compounds** 9101606 Chloride <16.0 16.0 AC16-Oct-19 4500-Cl-B mg/kg

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

DUTRAY SWD

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 4 @ SURFACE H903469-20 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
<b>Inorganic Compounds</b>										
Chloride	8530		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-Cl-B	
Volatile Organic Compounds by	y EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.8 %	73.3	-129	9101404	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by GO	C FID									S-04
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
DRO >C10-C28*	1420		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	509		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane			93.2 %	41-	142	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			154 %	37.6	-147	9101501	MS	15-Oct-19	8015B	

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397 Reported: 18-Oct-19 11:44

SP 4 @ 1' H903469-21 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
<b>Inorganic Compounds</b>										
Chloride	2480		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101703	BF	17-Oct-19	8021B	·
Toluene*	< 0.050		0.050	mg/kg	50	9101703	BF	17-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101703	BF	17-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101703	BF	17-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101703	BF	17-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.7 %	73.3	-129	9101703	BF	17-Oct-19	8021B	
Petroleum Hydrocarbons by GC	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101714	MS	17-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101714	MS	17-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101714	MS	17-Oct-19	8015B	
Surrogate: 1-Chlorooctane			105 %	41-	142	9101714	MS	17-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			97.1 %	37.6	-147	9101714	MS	17-Oct-19	8015B	

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397 Reported: 18-Oct-19 11:44

SP 4 @ 2' H903469-22 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	864		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101701	BF	17-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101701	BF	17-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101701	BF	17-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101701	BF	17-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101701	BF	17-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.9 %	73.3	-129	9101701	BF	17-Oct-19	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101714	MS	17-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101714	MS	17-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101714	MS	17-Oct-19	8015B	
Surrogate: 1-Chlorooctane			110 %	41-	142	9101714	MS	17-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			102 %	37.6	-147	9101714	MS	17-Oct-19	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Reported:

18-Oct-19 11:44

## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397

SP 4 @ 3'

H903469-23 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	tories					
Inorganic Compounds										
Chloride	2320		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-Cl-B	

Cardinal Laboratories \*=Accredited Analyte

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Celeg D. Keine



## Analytical Results For:

BBC International, Inc.

P.O. Box 805

Hobbs NM, 88241

Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

Reported: 18-Oct-19 11:44

SP 4 @ 4'

H903469-24 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	ories					
Inorganic Compounds										
Chloride	1100		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-Cl-B	

Cardinal Laboratories \*=Accredited Analyte

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397 Reported: 18-Oct-19 11:44

SP 4 @ 5'

H903469-25 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	ories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-Cl-B	

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# Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Reported:

Project Number: 6/26/2019

Project Manager: Cliff Brunson

18-Oct-19 11:44

Fax To: (575) 397-0397

SP 4 @ 6'

H903469-26 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	<16.0		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-Cl-B	

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## Analytical Results For:

BBC International, Inc.

Project: MESQUITE MOUTRAY SWD

Reported:

P.O. Box 805 Hobbs NM, 88241 Project Number: 6/26/2019

18-Oct-19 11:44

Project Manager: Cliff Brunson

Fax To: (575) 397-0397

# SP 5 @ SURFACE H903469-27 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
Inorganic Compounds										
Chloride	7060		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			100 %	73.3	-129	9101404	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane			85.2 %	41-	142	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			88.0 %	37.6	-147	9101501	MS	15-Oct-19	8015B	

Cardinal Laboratories \*=Accredited Analyte

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397 Reported:

18-Oct-19 11:44

# SP 5 @ 1' H903469-28 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	tories					
Inorganic Compounds										
Chloride	4320		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-Cl-B	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050	•	0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101404	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PIL	0)		98.9 %	73.3	-129	9101404	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane			87.7 %	41-	142	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			90.2 %	37.6	-147	9101501	MS	15-Oct-19	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019

Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 5 @ 2' H903469-29 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	tories					
Inorganic Compounds										
Chloride	1020		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-C1-B	

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# Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson

Reported: 18-Oct-19 11:44

Fax To: (575) 397-0397

SP 5 @ 3' H903469-30 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	ories					
Inorganic Compounds										
Chloride	1300		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-Cl-B	

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# Analytical Results For:

BBC International, Inc.

Hobbs NM, 88241

P.O. Box 805

Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

Reported: 18-Oct-19 11:44

SP 5 @ 4'

H903469-31 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	ories					
Inorganic Compounds										
Chloride	608		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-Cl-B	

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019

Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 5 @ 5'

H903469-32 (Soil)

	Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
				Cardina	al Laborat	ories					
]	Inorganic Compounds										
(	Chloride	32.0		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-Cl-B	

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397 Reported: 18-Oct-19 11:44

SP 5 @ 6'

H903469-33 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	tories					
Inorganic Compounds										
Chloride	16.0		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-C1-B	

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

Reported:

18-Oct-19 11:44

# SP 6 @ SURFACE H903469-34 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	7200		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-Cl-B	
Volatile Organic Compounds b	y EPA Method 8	3021								
Benzene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.9 %	73.3	-129	9101507	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane			91.8 %	41	142	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			96.9 %	37.6	-147	9101501	MS	15-Oct-19	8015B	

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Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Reported:

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397 18-Oct-19 11:44

SP 6 @ 1' H903469-35 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	2560		16.0	mg/kg	4	9101606	AC	16-Oct-19	4500-C1-B	
Volatile Organic Compounds by I	PA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.6 %	73.3	-129	9101507	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane			88.6 %	41	142	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			93.8 %	37.6	-147	9101501	MS	15-Oct-19	8015B	

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Reported:

18-Oct-19 11:44



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 6 @ 2' H903469-36 (Soil)

	Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
--	---------	--------	-----	--------------------	-------	----------	-------	---------	----------	--------	-------

#### **Cardinal Laboratories**

 Inorganic Compounds
 3040
 16.0
 mg/kg
 4
 9101606
 AC
 16-Oct-19
 4500-Cl-B

Cardinal Laboratories \*=Accredited Analyte

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1010

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

16-Oct-19

# Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241

Chloride

Project: MESQUITE MOUTRAY SWD

9101515

AC

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019

16.0

4500-Cl-B

Project Manager: Cliff Brunson Fax To: (575) 397-0397

SP 6 @ 3'

H903469-37 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
Inorganic Compounds										

mg/kg

Cardinal Laboratories \*=Accredited Analyte

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Reported:

18-Oct-19 11:44

## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397

SP 6 @ 4'

H903469-38 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborato	ories					

 Inorganic Compounds
 1090
 16.0
 mg/kg
 4
 9101515
 AC
 16-Oct-19
 4500-Cl-B

Cardinal Laboratories \*=Accredited Analyte

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

Reported: 18-Oct-19 11:44

SP 6 @ 5'

H903469-39 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	ories					
Inorganic Compounds										
Chloride	16.0		16.0	mg/kg	4	9101515	AC	16-Oct-19	4500-Cl-B	

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019

Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 6 @ 6' H903469-40 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	ories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	9101515	AC	16-Oct-19	4500-Cl-B	

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# Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397 Reported:

18-Oct-19 11:44

# SP 7 @ SURFACE H903469-41 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	tories					
Inorganic Compounds										
Chloride	1760		16.0	mg/kg	4	9101515	AC	16-Oct-19	4500-Cl-B	
Volatile Organic Compound	s by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (P.	ID)		97.7 %	73.3	-129	9101507	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane			92.7 %	41-	142	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			98.0 %	37.6	-147	9101501	MS	15-Oct-19	8015B	

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 7 @ 1' H903469-42 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	tories					
Inorganic Compounds										
Chloride	3040		16.0	mg/kg	4	9101515	AC	16-Oct-19	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.4 %	73.3	-129	9101507	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by GC	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane			91.6%	41-	142	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			98.6 %	37.6	-147	9101501	MS	15-Oct-19	8015B	

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Reported:

4500-Cl-B

18-Oct-19 11:44



3960

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

16-Oct-19

## **Analytical Results For:**

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241

Chloride

Project: MESQUITE MOUTRAY SWD

9101515

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397

SP 7 @ 2'

H903469-43 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	tories					
Inorganic Compounds										

mg/kg

16.0

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Celey D. Keene, Lab Director/Quality Manager

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## **Analytical Results For:**

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 7 @ 3' H903469-44 (Soil)

Analyte	Result	MDL	Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Reporting							

#### Cardinal Laboratories

**Inorganic Compounds** 9101515 AC16-Oct-19 4500-Cl-B 4320 16.0 Chloride mg/kg

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# Analytical Results For:

BBC International, Inc.

Project: MESQUITE MOUTRAY SWD

Reported:

P.O. Box 805 Hobbs NM, 88241 Project Number: 6/26/2019

18-Oct-19 11:44

Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 7 @ 4'

H903469-45 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
Cardinal Laboratories													
Inorganic Compounds													
Chloride	5760		16.0	mg/kg	4	9101515	AC	16-Oct-19	4500-Cl-B				

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019

Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 7 @ 5'

H903469-46 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										

9101515 16.0 16-Oct-19 4500-Cl-B mg/kg Chloride 7060

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4800

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# Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241

Chloride

Project: MESQUITE MOUTRAY SWD

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019

Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 7 @ 6' H903469-47 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
Cardinal Laboratories													
Inorganic Compounds													
Chloride	4800		16.0	mg/kg	4	9101515	AC	16-Oct-19	4500-Cl-B				

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# Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Reported: 18-Oct-19 11:44

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 7 @ 7'

H903469-48 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	ories					
Inorganic Compounds										
Chloride	8400		16.0	mg/kg	4	9101515	AC	16-Oct-19	4500-Cl-B	

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

Reported: 18-Oct-19 11:44

SP 7 @ 8'

H903469-49 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
	Cardinal Laboratories												
Inorganic Compounds													
Chloride	13400		16.0	mg/kg	4	9101515	AC	16-Oct-19	4500-Cl-B				

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# Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019
Project Manager: Cliff Brunson

Fax To: (575) 397-0397

Reported: 18-Oct-19 11:44

SP 7 @ 9'

H903469-50 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	ories					
Inorganic Compounds										
Chloride	9330		16.0	mg/kg	4	9101515	AC	16-Oct-19	4500-C1-B	

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8400

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16-Oct-19

Reported:

4500-Cl-B

18-Oct-19 11:44

## **Analytical Results For:**

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241

Chloride

Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

SP 7 @ 10' H903469-51 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	tories					
Inorganic Compounds										

mg/kg

16.0

# 9101515

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## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019
Project Manager: Cliff Brunson

Fax To: (575) 397-0397

Reported:

18-Oct-19 11:44

# NORTH @ SURFACE H903469-52 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	9101515	AC	16-Oct-19	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050	•	0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.7 %	73.3	-129	9101507	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane			88.8 %	41-	142	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			93.6 %	37.6	-147	9101501	MS	15-Oct-19	8015B	

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# Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

18-Oct-19 11:44

Reported:

# EAST @ SURFACE H903469-53 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	<16.0		16.0	mg/kg	4	9101515	AC	16-Oct-19	4500-Cl-B	
Volatile Organic Compound	s by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (P.	ID)		97.5 %	73.3	-129	9101507	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane			85.0 %	41-	142	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			89.6 %	37.6	-147	9101501	MS	15-Oct-19	8015B	

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Reported:

18-Oct-19 11:44

## Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Number: C/2C/2010

Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

# WEST @ SURFACE H903469-54 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
Inorganic Compounds										
Chloride	<16.0		16.0	mg/kg	4	9101515	AC	16-Oct-19	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.5 %	73.3	-129	9101507	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by GC	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane			93.4 %	41-	142	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			98.9 %	37.6	-147	9101501	MS	15-Oct-19	8015B	

Cardinal Laboratories \*=Accredited Analyte

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# Analytical Results For:

BBC International, Inc.

P.O. Box 805 Hobbs NM, 88241 Project: MESQUITE MOUTRAY SWD

Project Number: 6/26/2019

Project Manager: Cliff Brunson Fax To: (575) 397-0397 Reported:

18-Oct-19 11:44

# SOUTH @ SURFACE

H903469-55 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	<16.0		16.0	mg/kg	4	9101515	AC	16-Oct-19	4500-Cl-B	
<b>Volatile Organic Compounds by</b>	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	9101507	BF	15-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.1 %	73.3-	129	9101507	BF	15-Oct-19	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctane			86.3 %	41-	142	9101501	MS	15-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			96.2 %	37.6-	147	9101501	MS	15-Oct-19	8015B	

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# Analytical Results For:

BBC International, Inc.

Project: MESQUITE MOUTRAY SWD

Reported: 18-Oct-19 11:44

P.O. Box 805 Hobbs NM, 88241 Project Number: 6/26/2019 Project Manager: Cliff Brunson

Fax To: (575) 397-0397

#### **Inorganic Compounds - Quality Control**

## **Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9101515 - 1:4 DI Water										
Blank (9101515-BLK1)				Prepared &	: Analyzed:	15-Oct-19				
Chloride	ND	16.0	mg/kg							
LCS (9101515-BS1)				Prepared &	Analyzed:	15-Oct-19				
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (9101515-BSD1)				Prepared &	Analyzed:	15-Oct-19				
Chloride	432	16.0	mg/kg	400		108	80-120	3.77	20	
Batch 9101521 - 1:4 DI Water										
Blank (9101521-BLK1)				Prepared &	Analyzed:	15-Oct-19				
Chloride	ND	16.0	mg/kg							
LCS (9101521-BS1)				Prepared &	Analyzed:	15-Oct-19				
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (9101521-BSD1)				Prepared &	Analyzed:	15-Oct-19				
Chloride	432	16.0	mg/kg	400		108	80-120	3.77	20	
Batch 9101606 - 1:4 DI Water										
Blank (9101606-BLK1)				Prepared &	: Analyzed:	16-Oct-19				
Chloride	ND	16.0	mg/kg							
LCS (9101606-BS1)				Prepared &	Analyzed:	16-Oct-19				
Chloride	416	16.0	mg/kg	400		104	80-120			

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## **Analytical Results For:**

BBC International, Inc.

Project: MESQUITE MOUTRAY SWD

Reported:

P.O. Box 805

Project Number: 6/26/2019 Project Manager: Cliff Brunson 18-Oct-19 11:44

Hobbs NM, 88241

Fax To: (575) 397-0397

#### **Inorganic Compounds - Quality Control**

#### **Cardinal Laboratories**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 9101606 - 1:4 DI Water

LCS Dup (9101606-BSD1)				Prepared & Analyzed:	16-Oct-19			
Chloride	400	16.0	mg/kg	400	100	80-120	3.92	20

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Celeg D. Kreene

Celey D. Keene, Lab Director/Quality Manager

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## Analytical Results For:

BBC International, Inc.

Project: MESQUITE MOUTRAY SWD

Reported:

P.O. Box 805

Project Number: 6/26/2019

18-Oct-19 11:44

Hobbs NM, 88241

Project Manager: Cliff Brunson Fax To: (575) 397-0397

#### Volatile Organic Compounds by EPA Method 8021 - Quality Control

#### **Cardinal Laboratories**

	_	Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 9101404 - Volatiles										
Blank (9101404-BLK1)				Prepared: 1	14-Oct-19 A	nalyzed: 1	5-Oct-19			
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.100		mg/kg	0.100		100	73.3-129			
LCS (9101404-BS1)				Prepared: 1	14-Oct-19 A	nalyzed: 1	5-Oct-19			
Benzene	1.95	0.050	mg/kg	2.00		97.4	72.2-131			
Toluene	2.02	0.050	mg/kg	2.00		101	71.7-126			
Ethylbenzene	1.97	0.050	mg/kg	2.00		98.7	68.9-126			
Total Xylenes	6.04	0.150	mg/kg	6.00		101	71.4-125			
Surrogate: 4-Bromofluorobenzene (PID)	0.0972		mg/kg	0.100		97.2	73.3-129			
LCS Dup (9101404-BSD1)				Prepared: 1	14-Oct-19 A	nalyzed: 1	5-Oct-19			
Benzene	1.93	0.050	mg/kg	2.00		96.3	72.2-131	1.13	6.91	
Toluene	2.00	0.050	mg/kg	2.00		99.9	71.7-126	0.971	7.12	
Ethylbenzene	1.96	0.050	mg/kg	2.00		98.1	68.9-126	0.572	7.88	
Total Xylenes	5.96	0.150	mg/kg	6.00		99.3	71.4-125	1.42	7.46	
Surrogate: 4-Bromofluorobenzene (PID)	0.0966		mg/kg	0.100		96.6	73.3-129			
Batch 9101507 - Volatiles										
Blank (9101507-BLK1)				Prepared &	k Analyzed:	15-Oct-19				
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							

#### Cardinal Laboratories

Surrogate: 4-Bromofluorobenzene (PID)

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73.3-129

97.5

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mg/kg

0.0500

ND

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%REC

## Analytical Results For:

BBC International, Inc.

Project: MESQUITE MOUTRAY SWD

Source

Reported:

P.O. Box 805

Project Number: 6/26/2019

18-Oct-19 11:44

RPD

Hobbs NM, 88241

Project Manager: Cliff Brunson Fax To: (575) 397-0397

#### Volatile Organic Compounds by EPA Method 8021 - Quality Control

#### **Cardinal Laboratories**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 9101507 - Volatiles										
LCS (9101507-BS1)				Prepared &	Analyzed:	15-Oct-19				
Benzene	1.94	0.050	mg/kg	2.00		96.9	72.2-131			
Toluene	1.95	0.050	mg/kg	2.00		97.3	71.7-126			
Ethylbenzene	1.96	0.050	mg/kg	2.00		98.1	68.9-126			
Total Xylenes	5.89	0.150	mg/kg	6.00		98.1	71.4-125			
Surrogate: 4-Bromofluorobenzene (PID)	0.0474		mg/kg	0.0500		94.8	73.3-129			
LCS Dup (9101507-BSD1)				Prepared &	Analyzed:	15-Oct-19				
Benzene	1.89	0.050	mg/kg	2.00		94.5	72.2-131	2.55	6.91	
Toluene	1.92	0.050	mg/kg	2.00		95.8	71.7-126	1.46	7.12	
Ethylbenzene	1.93	0.050	mg/kg	2.00		96.6	68.9-126	1.60	7.88	
Total Xylenes	5.79	0.150	mg/kg	6.00		96.6	71.4-125	1.61	7.46	
Surrogate: 4-Bromofluorobenzene (PID)	0.0487		mg/kg	0.0500		97.4	73.3-129			
Batch 9101701 - Volatiles										
Blank (9101701-BLK1)				Prepared &	Analyzed:	17-Oct-19				
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0962		mg/kg	0.100		96.2	73.3-129			
LCS (9101701-BS1)				Prepared &	Analyzed:	17-Oct-19				
Benzene	1.65	0.050	mg/kg	2.00		82.5	72.2-131			
Toluene	1.69	0.050	mg/kg	2.00		84.7	71.7-126			
Ethylbenzene	1.65	0.050	mg/kg	2.00		82.7	68.9-126			
Total Xylenes	4.98	0.150	mg/kg	6.00		82.9	71.4-125			
Surrogate: 4-Bromofluorobenzene (PID)	0.0946		mg/kg	0.100		94.6	73.3-129			

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## Analytical Results For:

BBC International, Inc.

Project: MESQUITE MOUTRAY SWD

Reported:

P.O. Box 805 Hobbs NM, 88241 Project Number: 6/26/2019

18-Oct-19 11:44

Project Manager: Cliff Brunson Fax To: (575) 397-0397

#### Volatile Organic Compounds by EPA Method 8021 - Quality Control

#### **Cardinal Laboratories**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 9101701 - Volatiles										
LCS Dup (9101701-BSD1)				Prepared &	Analyzed:	17-Oct-19				
Benzene	1.58	0.050	mg/kg	2.00		79.1	72.2-131	4.24	6.91	
Toluene	1.66	0.050	mg/kg	2.00		82.9	71.7-126	2.07	7.12	
Ethylbenzene	1.59	0.050	mg/kg	2.00		79.5	68.9-126	3.95	7.88	
Total Xylenes	4.82	0.150	mg/kg	6.00		80.3	71.4-125	3.25	7.46	
Surrogate: 4-Bromofluorobenzene (PID)	0.0958		mg/kg	0.100		95.8	73.3-129			
Batch 9101703 - Volatiles										
Blank (9101703-BLK1)				Prepared &	Analyzed:	17-Oct-19				
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		98.8	73.3-129			
LCS (9101703-BS1)				Prepared &	Analyzed:	17-Oct-19				
Benzene	1.59	0.050	mg/kg	2.00		79.3	72.2-131			
Toluene	1.58	0.050	mg/kg	2.00		78.8	71.7-126			
Ethylbenzene	1.61	0.050	mg/kg	2.00		80.3	68.9-126			
Total Xylenes	4.82	0.150	mg/kg	6.00		80.4	71.4-125			
Surrogate: 4-Bromofluorobenzene (PID)	0.0487		mg/kg	0.0500		97.3	73.3-129			
LCS Dup (9101703-BSD1)				Prepared &	Analyzed:	17-Oct-19				
Benzene	1.60	0.050	mg/kg	2.00		80.0	72.2-131	0.819	6.91	
Toluene	1.59	0.050	mg/kg	2.00		79.6	71.7-126	1.02	7.12	
Ethylbenzene	1.62	0.050	mg/kg	2.00		81.1	68.9-126	0.941	7.88	
Total Xylenes	4.85	0.150	mg/kg	6.00		80.9	71.4-125	0.635	7.46	
Surrogate: 4-Bromofluorobenzene (PID)	0.0486		mg/kg	0.0500		97.2	73.3-129			

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



%REC

Limits

## Analytical Results For:

BBC International, Inc.

Project: MESQUITE MOUTRAY SWD

Spike

Level

Source

Result

%REC

Reported: 18-Oct-19 11:44

**RPD** 

Limit

Notes

P.O. Box 805 Hobbs NM, 88241

Analyte

Project Number: 6/26/2019 Project Manager: Cliff Brunson

10 001 10 11

RPD

Fax To: (575) 397-0397

Petroleum Hydrocarbons by GC FID - Quality Control

#### **Cardinal Laboratories**

Units

Reporting

Limit

Result

Blank (9101401-BLK1)				Prepared & Anal	yzed: 14-Oct-19	
GRO C6-C10	ND	10.0	mg/kg			
DRO >C10-C28	ND	10.0	mg/kg			
EXT DRO >C28-C36	ND	10.0	mg/kg			
Surrogate: 1-Chlorooctane	48.8		mg/kg	50.0	97.7	41-142
Surrogate: 1-Chlorooctadecane	46.2		mg/kg	50.0	92.4	37.6-147

GRO C6-C10	210	10.0	mg/kg	200	105	76.5-133			
DRO >C10-C28	213	10.0	mg/kg	200	106	72.9-138			
Total TPH C6-C28	423	10.0	mg/kg	400	106	78-132			
Surrogate: 1-Chlorooctane	53.4		mg/kg	50.0	107	41-142			
Surrogate: 1-Chlorooctadecane	49.3		mg/kg	50.0	98.7	37.6-147			
LCS Dup (9101401-BSD1)				Prepared & Ana	alyzed: 14-Oct-19				
GRO C6-C10	215	10.0	mg/kg	200	107	76.5-133	2.10	20.6	
	213	10.0	mg/kg	200	107	/0.3-133	2.10	20.0	
DRO >C10-C28	211	10.0	mg/kg	200	107	72.9-138	1.03	20.6	
DRO >C10-C28 Total TPH C6-C28									
	211	10.0	mg/kg	200	105	72.9-138	1.03	20.6	
Total TPH C6-C28	211 425	10.0	mg/kg mg/kg	200 400	105 106	72.9-138 78-132	1.03	20.6	

Batch 9101413 - General Prep - Organics

Blank (9101413-BLK1)			]	Prepared & Analyzed: 1	4-Oct-19	
GRO C6-C10	ND	10.0	mg/kg			
DRO >C10-C28	ND	10.0	mg/kg			
EXT DRO >C28-C36	ND	10.0	mg/kg			
Surrogate: 1-Chlorooctane	60.2		mg/kg	50.0	120	41-142
Surrogate: 1-Chlorooctadecane	61.5		mg/kg	50.0	123	37.6-147

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Celeg D. Keine



%REC

## Analytical Results For:

BBC International, Inc.

Project: MESQUITE MOUTRAY SWD

Spike

Source

Reported:

P.O. Box 805 Hobbs NM, 88241 Project Number: 6/26/2019 Project Manager: Cliff Brunson 18-Oct-19 11:44

RPD

Fax To: (575) 397-0397

#### Petroleum Hydrocarbons by GC FID - Quality Control

#### **Cardinal Laboratories**

Reporting

		reporting		Spike	Bource		/orch		KI D	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 9101413 - General Prep - Organi	cs									
LCS (9101413-BS1)				Prepared &	k Analyzed:	14-Oct-19				
GRO C6-C10	212	10.0	mg/kg	200		106	76.5-133			
DRO >C10-C28	214	10.0	mg/kg	200		107	72.9-138			
Total TPH C6-C28	425	10.0	mg/kg	400		106	78-132			
Surrogate: 1-Chlorooctane	53.9		mg/kg	50.0		108	41-142			
Surrogate: 1-Chlorooctadecane	50.7		mg/kg	50.0		101	37.6-147			
LCS Dup (9101413-BSD1)				Prepared &	k Analyzed:	14-Oct-19				
GRO C6-C10	215	10.0	mg/kg	200		107	76.5-133	1.45	20.6	
DRO >C10-C28	211	10.0	mg/kg	200		105	72.9-138	1.46	20.6	
Total TPH C6-C28	425	10.0	mg/kg	400		106	78-132	0.00253	18	
Surrogate: 1-Chlorooctane	56.5		mg/kg	50.0		113	41-142			
Surrogate: 1-Chlorooctadecane	53.1		mg/kg	50.0		106	37.6-147			
Batch 9101501 - General Prep - Organi	ics									
Blank (9101501-BLK1)				Prepared &	k Analyzed:	15-Oct-19				
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	49.6		mg/kg	50.0		99.2	41-142			
Surrogate: 1-Chlorooctadecane	52.5		mg/kg	50.0		105	37.6-147			
LCS (9101501-BS1)				Prepared &	k Analyzed:	15-Oct-19				
GRO C6-C10	195	10.0	mg/kg	200		97.5	76.5-133			
DRO >C10-C28	205	10.0	mg/kg	200		103	72.9-138			
Total TPH C6-C28	400	10.0	mg/kg	400		100	78-132			
Surrogate: 1-Chlorooctane	57.9		mg/kg	50.0		116	41-142			
Surrogate: 1-Chlorooctadecane	59.5		mg/kg	50.0		119	37.6-147			

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keine



## Analytical Results For:

BBC International, Inc.

Project: MESQUITE MOUTRAY SWD

Reported:

P.O. Box 805 Hobbs NM, 88241 Project Number: 6/26/2019 Project Manager: Cliff Brunson 18-Oct-19 11:44

Fax To: (575) 397-0397

#### Petroleum Hydrocarbons by GC FID - Quality Control

#### **Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9101501 - General Prep - Organics										
LCS Dup (9101501-BSD1)				Prepared &	k Analyzed:	15-Oct-19	1			
GRO C6-C10	190	10.0	mg/kg	200		95.2	76.5-133	2.38	20.6	
DRO >C10-C28	194	10.0	mg/kg	200		97.0	72.9-138	5.68	20.6	
Total TPH C6-C28	385	10.0	mg/kg	400		96.1	78-132	4.06	18	
Surrogate: 1-Chlorooctane	57.3		mg/kg	50.0		115	41-142			
Surrogate: 1-Chlorooctadecane	58.2		mg/kg	50.0		116	37.6-147			
Batch 9101714 - General Prep - Organics										
Blank (9101714-BLK1)				Prepared &	ն Analyzed:	17-Oct-19				
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	59.0		mg/kg	50.0		118	41-142			
Surrogate: 1-Chlorooctadecane	56.2		mg/kg	50.0		112	37.6-147			
LCS (9101714-BS1)				Prepared &	ն Analyzed:	17-Oct-19				
GRO C6-C10	218	10.0	mg/kg	200		109	76.5-133			
DRO >C10-C28	222	10.0	mg/kg	200		111	72.9-138			
Total TPH C6-C28	439	10.0	mg/kg	400		110	78-132			
Surrogate: 1-Chlorooctane	63.2		mg/kg	50.0		126	41-142			
Surrogate: 1-Chlorooctadecane	59.7		mg/kg	50.0		119	37.6-147			
LCS Dup (9101714-BSD1)				Prepared &	ն Analyzed:	17-Oct-19				
GRO C6-C10	221	10.0	mg/kg	200		111	76.5-133	1.58	20.6	
DRO >C10-C28	219	10.0	mg/kg	200		109	72.9-138	1.29	20.6	
Total TPH C6-C28	440	10.0	mg/kg	400		110	78-132	0.146	18	
Surrogate: 1-Chlorooctane	64.4		mg/kg	50.0		129	41-142			
Surrogate: 1-Chlorooctadecane	60.7		mg/kg	50.0		121	37.6-147			

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#### **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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Celeg D. Keene

Page 69 of 74

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

RDINAL LA	BO	DRA	TC	PI	ES	
101 East Marla	nd,	Hobb	s, I	MV	88240	
(505) 393-2326	FA	X (50	5) 3	393-	2476	

	BBC International, Inc.									E	3/L	LL TO	000000					ANAI	YSI	S RE	QUE	ST	 	
	: Cliff Brunson							P.C	). #:															
Address: P.O.	Box 805							Со	mpa	iny:		OXY												
city: Hobbs	State: NM	Zip	: 8	8824	1			Att	n:	1	N.	<b>bith</b>	ich			a.								
Phone #: 575-3	397-6388 Fax #: 575-	39	7-0	397				Ad	dres	ss:														
Project #:	Project Owner	: 0	ху					Cit	y:												1	1		
	Mesquite Moutray SWD (6/26/19)							Sta	ate:			Zip:								1				
Project Location	: Eddy County, NM							Ph	one	#:												1		
Sampler Name:	Jeff Ornelas							Fa	x #:															
FOR LAB USE ONLY					MA	ATRI	X		PRI	ESE	RV.	SAMPL	ING			1								
		OR (C)OMP	S	ER	~											C								
	Samuela I D	(C)	# CONTAINERS	MAT	WASTEWATER				Ш	7					×	B		İ						
Lab I.D.	Sample I.D.		ΙΨ	ONC.	EW.	7	SE	8	BAS	COC	۳. 	U		_	100	1								
H903469		)(G)RAB	CO	SROI	WAS	5 =	I CO	OTHER:	ACID/BASE:	ICE / COOL	OTHER	DATE	TIME	0	8	1								
ושרכשווו	SP1 @ SURFACE	G	1	Ĭ	> 0	/	, 0,			/		10/4/19	9:20 AM	1	1	1								l
2	THE RESERVE OF THE PROPERTY OF	ĭ	1		1					1		10/4/19	9:30 AM	1	1	1								
3	SP1 @ 2'											10/4/19	9:40 AM	✓										
4	SP1 @ 3'											10/4/19	10:05 AM	1										
	SP1 @ 4'	П	П							1		10/4/19	10:22 AM	<b>√</b>	ļ.,		-			-	-			
4	SP2 @ SURFACE	Ш	Ш						<u> </u>	1		10/4/19	10:30 AM	v	1	1	-	-		_		-		
	SP2 @ 1'	Ш	Ш				-		-			10/4/19	10:40 AM	-	<b>V</b>	1	-				-			
8	SP2 @ 2'	H	$\parallel$			1			-			10/4/19	10:55 AM	-	-	-	-	-	-	-	+			
9	SP2 @ 3'	H	JI.	_					H	1		10/4/19	11:11 AM 11:30 AM	1		-	+	+						
DI EASE NOTE: Liability a	SP2 @ 4' and Damages. Cardinal's liability and client's exclusive remedy for	any cl	aim an	ising wh	ether ba	sed in	contrac	t or to	ort, sha	ill be i	mited	to the amount p	aid by the client fo	or the		<u> </u>				- 10	-			
analyses All claims includ	ling those for negligence and any other cause whatsoever shall be	deem a with	ed wa	ived unl	ess mad ousiness	e in w	riting an uptions	loss	of use	or los	s of p	orofits incurred b	y client, its subsidia	aries,	able									
affiliates or successors and	sing out of or related to the performance of services hereunder by	Cardin	al reg	ardless ived	of wheth	ner suc	ch claim	is ba	sed up	on an	y 01 II	ne above stated	Phone Re	ise:	□ Y		□ No		Phon					
Kellilquisiled		-	/	10	d	,	1	d	A A	1	N A	M	Fax Resu REMARK	It:	□ Y	es [	□ No	Add'	I Fax #	t:				
ViXX	( Time: 00 m	1_	6	nu	W	l	3	4	U	16	4													
Relinquished B	By: Date:	R	ege	ived	ву:																			
L	Time:																							
Delivered By	y: (Circle One)		#C	-	Samp	ole C	ondi	tion	6)	СН	EQ	KED BY:	-											
Sampler - UPS	7: (Circle One) 6 - Bus - Other: -3.8° -3.4	0		1	Cool	es [	Ye N	es			4	1												
						NO		O	_	_	/	V			-				_					

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



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

Company Name:	BBC International, Inc.							14	. 1	L	3//	LL TO						Al	VAL	YSI	SR	EQI	JES	1	 	
Project Manager	: Cliff Brunson							P.C	). #:																	
Address: P.O.	Box 805							Co	mpa	-	- 1	DXY				l.										
City: Hobbs	State: NM	Zip	: 8	824	11			Att	n:		W	· DIPM	ich			1									li .	
Phone #: 575-3	397-6388 Fax #: 575-	397	7-0	397				Ad	dres	ss:																1
Project #:	Project Owner	: O	⟨y					Cit	y:																	
Project Name: N	Mesquite Moutray SWD (6/26/19)							Sta	ate:			Zip:				ŀ										
Project Location	: Eddy County, NM							Ph	one	#:																
Sampler Name:	Jeff Ornelas						_	Fa	x #:		_															
FOR LAB USE ONLY		٠.			MA	TR	X		PRE	SE	RV.	SAMPL	ING													
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER		SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	77	RTEX	1010x	120411									
11100101	SP3 @ SURFACE	G	1		-	/				1		10/4/19	11:40 AM	<b>V</b>	1	·										
12	SP3 @ 1'	1	1		1					1		10/4/19	11:50 AM	1	1	1	/									
13	SP3 @ 2'											10/4/19	11:59 AM	1		_										
14	SP3 @ 3'	Ш	Ц									10/4/19	12:15 PM	1		1					-	_				
13	SP3 @ 4'	Ш	П							1		10/4/19	1:11 PM	✓		-	_	_			-	+				
16	SP3 @ 5'	Ш	Ц			1					_	10/4/19	1:38 PM	1	-	-						-				
17	SP3 @ 6'	Ш	Ц	_			_	-	-	1		10/4/19	1:40 PM	1		+					-	-	_			
18	SP3 @ 7'	H	П	-			+			1	-	10/4/19	1:50 PM	1		-		-			-	-				
	SP3 @ 8'		H	_					-	1		10/4/19	1:59 PM 2:18 PM	1	1	+	,  -				-	+				
PLEASE NOTE: Liability a	SP4 @ SURFACE nd Damages. Cardinal's liability and client's exclusive remedy for	any cla	im ani	sing wh	ether bas	ed in	contrac	or to	ort, sha	II be li	imited	to the amount p	aid by the client fo	or the												
analyses All claims includ	ing those for negligence and any other cause whatsoever shall be cardinal be liable for incidental or consequental damages, including	deeme	ed war	ved uni	ess mad	e in w	riting an	d reo	erved b	by Car	dinal	within 30 days at	ter completion of	the applic	able											
affiliates or successors aris	ing out of or related to the performance of services hereunder by	Cardina	al reg	ved	of wheth	er suc	ch claim	is ba	sed up	on an	y of th	ne above stated r	Phone Re	ise:		res .	□ No	0 /	Add'l	Phon	e #:					
Relinquished B	y: Time:	R	ece	O/ Ived	U By:	C	14	l	N	U	20	m	Fax Resu REMARK	lt:			□ No			Fax#						
Delivered By Sampler - UPS	: (Circle One) - Bus - Other: 3.82 -3.4	地	7	7	Samp Cool	es [		s		CH	EC	KED BY:														

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

Page 71 of 74

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 85 of 88

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

Company Name:	BBC International, Inc.		B	ILL TO				ANAL	YSIS	REC	QUEST			
Project Manager	: Cliff Brunson		P.O. #:											
Address: P.O.	Box 805		Company:	OKY										
city: Hobbs	State: NM	Zip: 88241	Attn: ()	U. Diffrid										
Phone #: 575-3	97-6388 Fax #: 575-	397-0397	Address:											
Project #:	Project Owner	Oxy	City:											
	Mesquite Moutray SWD (6/26/19)		State:	Zip:										
Project Location	: Eddy County, NM		Phone #:											
Sampler Name:	Jeff Ornelas		Fax #:											
FOR LAB USE ONLY		MATRIX	PRESER	V. SAMPLING							1			
Lab I.D. H903469	Sample I.D.	(G)RAB OR (C)OMP  # CONTAINERS GROUNDWATER WASTEWATER  SOIL OIL	OTHER: ACID/BASE: ICE/COOL	 E DATE TIME	77	87EX	TYPH-BYT							
	SP4 @ 1'	6100	<b>V</b>	10/4/19 2:20 PI	M 🗸	V	V	Rus	2/1	2	dod	10/1-	7/19	
Description of the last of the	SP4 @ 2'		1	10/4/19 2:28 PI	M 🗸	~	V	Kuz	1	170	01	3:20	Fon	- TO
23	CD4 @ 2!			10/4/19 2:40 PI	M 🗸									
24	SP4 @ 4' SP4 @ 5' SP4 @ 6'			10/9/19 9:11 At										
25	SP4 @ 5'			10/9/19 9:22 Al	M ✓									
26	SP4 @ 6'			10/9/19 9:43 AI										
70	SP5 @ SURFACE			10/9/19 9:59 A		✓	<b>√</b>		(4)					
28	SP5 @ 1'			10/9/19 10:15 A		1	1							
29	SP5 @ 1' SP5 @ 2'			10/9/19 10:27 A	50.90 M									
30	SP5 @ 3'	VV	V and a leaf a half ha list	10/9/19 10:47 A	000 OF 10 TO									
analyses All claims include	nd Damages. Cardinal's liability and client's exclusive remedy for ng those for negligence and any other cause whatsoever shall be	deemed waived unless made in writing a	and received by Card	inal within 30 days after completion	n of the applica	ble								
affiliates or successors aris	ardinal be liable for incidental or consequental damages, including ng out of or related to the performance of services hereunder by C	Cardinal, regardless of whether such clair	m is based upon any	of the above stated reasons or oth	Result:	□ Ye	s 🗆 N	lo Add'i	Phone	#-				
Relinquished B	y: Date:	Received By:	dens	Fax Re REMAI	esult:	□ Ye			Fax #:					
The contract of the contract o	: (Circle One) 3.80 -3.4	Sample Conc Cool Intact PYES IN No I	/	ECKED BY: Injuials)										

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

Page 72 of 74

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	BBC International, Inc.							I			BI	LL	<i>TO</i>					8	ANA	LYSI	S RE	QUE	ST			
Project Manager	: Cliff Brunson							P.	O. #	<b>#</b> :												1				
Address: P.O.	Box 805							С	omp	any	y:	ÓX	y													
city: Hobbs	State: NM	Zip:	8	824	41			Α	ttn:		W	id.	HAM	<b>\</b>							1					
Phone #: 575-3	397-6388 Fax #: 575-	397	<b>7-0</b> 3	397	Š			A	ddre	ess:											1					
Project #:	Project Owner	0>	(y					c	ity:																	
Project Name: N	Mesquite Moutray SWD (6/26/19)							s	tate	<u>.                                    </u>		Zip:					į.									
Project Location	: Eddy County, NM							Р	hon	e#:											li.					
Sampler Name:	Jeff Ornelas							F	ax#												1					
FOR LAB USE ONLY					_	TAIV	RIX		PF	RESI	ERV	S	SAMPLI	NG					l							
Lab I.D.  H903H69 31 32 33 34 35 36 37	Sample I.D.	C)(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	NASTEWATER	SOIL	OIL	SLUDGE	ACID/BASE	ICE / COOL	OTHER:		DATE	TIME	CI	876X	TPHAKT									
31	SP5 @ 4'	Ğ	1	Ĭ		1		,		/	1		/9/19	11:02 AM	1											
32	SP5 @ 5'	1	1			1				1		10/	/9/19	11:15 AM	1											
33	SP5 @ 6'									1		10	/9/19	11:31 AM	1					1		4	-			
34	SP6 @ SURFACE											10	/9/19	11:40 AM	1	1	<b>√</b>			_		-	+	-		
35	SP6 @ 1'								$\perp$				/9/19	11:50 AM	<b>✓</b>	1	1						-		_	_
36	SP6 @ 2'		Ш							1			/9/19	12:12 PM	1		-	-	-	-	+-	-	+			-
37	SP6 @ 3'	11	Ц						1			-	/9/19	12:52 PM	1						-	-	-		_	-
38	SP6 @ 4'	11	Ц	L		1		4				-	/9/19	1:01 PM	1	-	-	-	-	-		-	-			
39	SP6 @ 5'	N,	Н		-			- 1	1			-	/9/19	1:11 PM	1	-		-		-	-	-	+	-	-	
9/	ISP6 @ 6'	V	V	100 40	hothor	hacer	in cor	tract o	r tort s	hall be	e limite		/9/19	1:22 PM	ir the						1					
analyses. All claims includ	nd Damages. Cardinal's liability and client's exclusive remedy for ing those for negligence and any other cause whatsoever shall be Cardinal be liable for incidental or consequental damages, includin ing out of or related to the performance of services hereunder by (	deeme g witho Cardina	ed war out limi al, rega	ed un tation, ardless	busin busin	nade in ess int nether	errupti	g and r ons. lo:	ss of us	se, or l	loss of	f profits	incurred by	client, its subsidia easons or otherwi	aries, se			l No	Add	'l Phor	10 #·					
Relinquished E	Date: Time:  C. (Circle One)	R	ece	Ol	d By	L T	Cor	AL ditio	el	N	D		n	Phone Re Fax Resu REMARK	it:	□ Y		No		'I Fax #						
Sampler - UPS	- Bus - Other: -3.82 -3.4	0	7	1	20	Yes		Yes No		4	1	7	•,													

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

Page 73 of 74

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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name	BBC International, Inc.										BIL	LL TO	vija <sup>1</sup> ' i i					ANA	LYS	IS R	EQL	JES	T		
Project Manage	r: Cliff Brunson							P	.0. #																
Address: P.O.	Box 805							С	omp	any	r:	049													
city: Hobbs	State: NM	Zip	): {	882	41			А	ttn:		U	J. KITH	id												
Phone #: 575-	397-6388 Fax #: 575	-39	7-0	397	7			A	ddre	ss:															
Project #:	Project Owne	: 0	ху					С	ity:																
Project Name:	Mesquite Moutray SWD (6/26/19)							s	tate:			Zip:													
Project Location	n: Eddy County, NM							Р	hone	e #:														-	
Sampler Name:								F	ax#	_								1							
FOR LAB USE ONLY					ľ	ΙAΤ	RIX		PR	ESI	RV.	SAMPL	NG												
Lab I.D.	Sample I.D.	(C) (C) RAB OR (C) OMP	N N	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	61	87EX	TPHTAT									
41	SP7 @ SURFACE	G	)			/				1	1	10/9/19	1:25 PM	1	1	1					$\perp$				
	SP7 @ 1'	1	1			1				1		10/9/19	1:35 PM	1	1	1									
43	SP7 @ 2' SP7 @ 3'	11								1		10/9/19	1:45 PM	1											
44	SP7 @ 3'											10/9/19	2:01 PM	1											
45	SP7 @ 4'		11						$\perp$			10/9/19	2:22 PM	✓				_			$\perp$				
46	SP7 @ 5'								$\perp$			10/9/19	2:32 PM	1			_				_				
47	SP7 @ 6'	1	$\perp$	L		1						10/9/19	2:39 PM	<b>✓</b>							_				
	SP7 @ 7'		П						$\perp$				9:20 AM	✓											 -
49	SP7 @ 8'	11	1			1	,		$\bot$	П		10/10/19	CHECK TOTAL DISTRICT	<b>√</b>							_	_			 
The second secon	SP7 @ 9'	V	A	1		V			124 25	1	/	10/10/19	10:30 AM	<b>√</b>	ļ.,,,		1								ļ
analyses All claims includ service. In no event shall of affiliates or successors are Relinquished B													er completion of t client, its subsidi	the applications aries, se. esult:	□ Ye		No No		'l Phoi 'l Fax i						
Sampler - UPS	r: (Circle One) 3 - Bus - Other: -3,8 -3,6 I cannot accept verbal changes. Pleas	e fa	# G	7	Coc	Yes	Intac	No		4	(Inj	(ED BY:													

Page 74 of 74

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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Phone \$: 575-397-6388	Company Name	BBC International, Inc.				115	BI	LL TO					F	NAL	YSIS	RE	QUES	ST			
City: Hobbs  State: NM Zip: 88241  Attn: W. White Common C	Project Manager	: Cliff Brunson				P.O.	#:														
Phone #: 575-397-6388 Fax #: 575-397-0397 Address:  Project County   Project County   State: Zip: Project County   State: Zip: Project County   State: Zip: Phone #: Fax #	Address: P.O.	Box 805				Com	pany:	DK													
Project Same: Mesquite Moutray SWD (6/26/19)  State: Zip: Project Location: Eddy County, NM Phone #: Project Mark #: Project M	city: Hobbs	State: NM	Zip: 8	38241		Attn:	1	N. Dittr	id												
Project Name: Mesquite Moutray SWD (6/26/19)  State: Zip: Phone #: Fax #: Fax #: Fax #:  Face Lab I.D.  Sample I.D.  Sampl	Phone #: 575-3	397-6388 Fax #: 575	-397-0	397		Addr	ess:				1										
Project Location: Eddy County, NM  Sample Name: Jeff Ornelas  Fax #:	Project #:	Project Owner	r: Oxy			City:															
Sampler Name: Jeff Ornelas  Fox.#:  Fox.Busic Only  Lab I.D. Sample I.D. Bample I.D. Bampl						State	):	Zip:					- 4						1		
POR USB USE ONLY   Lab I.D.   Sample I.D.	Project Location	: Eddy County, NM				Phor	ne #:														
Lab I.D. Sample I.D. By	Sampler Name:	Jeff Ornelas					Lewes													-	
ST SPT @ 10'  NORTH @ SURFACE  10/10/19 11:28 AM	Lab I.D.		유			ú	OL			61	1874X	TPHTCKT									
PLEASE NOTE: Lability and Damages Cardinal's lability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liabile for incidental or consequental claimages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal regardless of whether such claim is based upon any of the above stated reasons or otherwise.    Received By:	51	SP7 @ 10'	61		<b>V</b>		7		10:59 AM	1											
PLEASE NOTE: Liability and Damages Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negigence and any other cause whatsoever shall be deemed vaived unless made in writing and received by Cardinal vintin 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal reparaties of whether such claim is based upon any of the above stated reasons or otherwise.    Phone Result:   Yes   No   Add'l Phone #: Fax Result:   Yes   No   Add'l Fax #: REMARKS:   Phone Result:   Yes   Received By:   Time:   Phone Result:   Yes   No   Add'l Fax #: REMARKS:   Phone Result:   Yes   No   Phone Result:   Yes   No   Phone Result:   Yes   Phone Resul	52	NORTH @ SURFACE	111		1		1	10/10/19	11:28 AM	1	✓	✓									
PLEASE NOTE: Liability and Damages Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negigence and any other cause whatsoever shall be deemed vaived unless made in writing and received by Cardinal vintin 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal reparaties of whether such claim is based upon any of the above stated reasons or otherwise.    Phone Result:   Yes   No   Add'l Phone #: Fax Result:   Yes   No   Add'l Fax #: REMARKS:   Phone Result:   Yes   Received By:   Time:   Phone Result:   Yes   No   Add'l Fax #: REMARKS:   Phone Result:   Yes   No   Phone Result:   Yes   No   Phone Result:   Yes   Phone Resul	53	EAST @ SURFACE	Ш					10/10/19	11:49 PM	1	1	✓									
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analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arrange of services hereunder by Cardinal regardless of whether such claim is based upon any of the above stated reasons or otherwise.    Phone Result:   Yes   No   Add'l Phone #: Fax Result:   Yes   No   Add'l Fax #: REMARKS:				$\vdash$		$\vdash$															
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Sampler - UPS - Bus - Other: 3.82 - 3.42 Cool Intact   Yes   Yes   Yes     Yes   Yes   Yes     Yes   Yes   Yes   Yes     Yes   Yes   Yes   Yes     Yes   Yes   Yes   Yes   Yes   Yes     Yes   Y	Sampler - UPS	fials																			