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DELINEATION WORKPLAN

OXY – STATE A&B BATTERY

(Leak Date: 3/19/17)

RP # 1RP-4650
API # 30-025-23330

This delineation workplan and remediation proposal addresses the release associated with RP # 1RP-4650.

The following information includes:

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

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

OXY will excavate the spill area as depicted on the following site diagram. The entire leak area will be excavated to a depth of 2.5 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.

APPROVED

By Olivia Yu at 9:22 am, Dec 05, 2017

NMOCD approves of the delineation for 1RP-4650. For remediation, excavate to 3 ft. bgs with confirmation bottom and sidewall samples demonstrating permissible levels.

Oxy, State A&B Battery


Leak date: 03/19/2017


Lea County, NM


API# 30-025-23330


1RP-4650


Legend

 2.5' Excavation across entire leak area


 East Sample


 Leak Point

 North Sample

 Sample points

 South Sample

 Spill Area

 West Sample

North Sample

SP1

West Sample

SP2

SP3

Leak Point

SP5

East Sample

South Sample

SP4

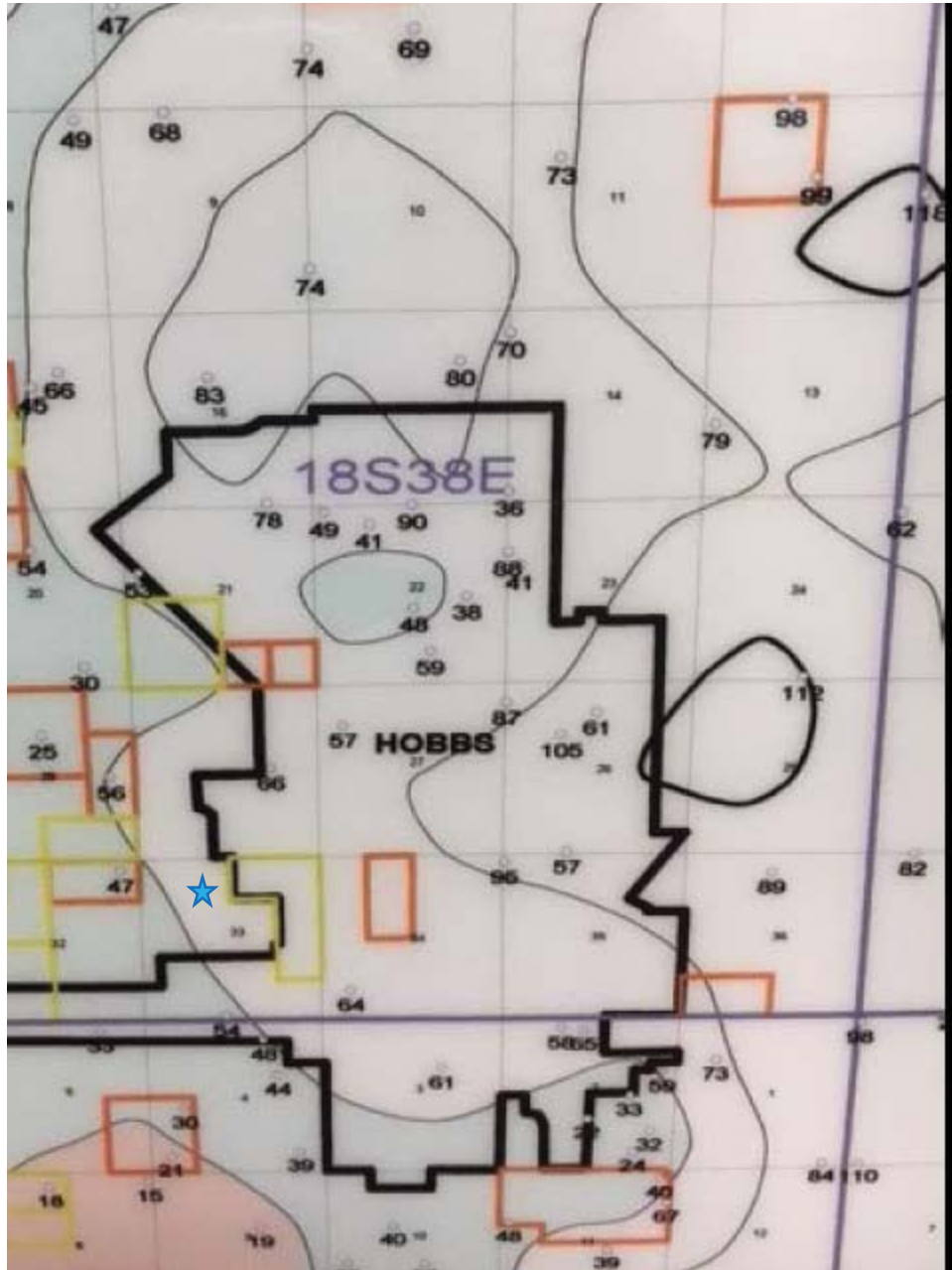


90 ft

Google Earth

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Oxy, State A & B Battery
U/L C, Section 33, T18S, R38E
Groundwater: 50'-75'





New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

(R=POD has been replaced,
O=orphaned,

C=the file is closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD	County	Q Q Q						X	Y	Distance	Depth	Well	Depth	Water	Column
		Sub-basin		64	16	4	Sec	Tws	Rng								
L_02316		L	LE	1	2	33	18S	38E	673275	3620569*	<input type="checkbox"/>	403	110		46	64	
L_02512		L	LE	1	3	2	33	18S	38E	673181	3620265*	<input type="checkbox"/>	428	150		55	95
L_11274		L	LE	2	1	2	33	18S	38E	673374	3620668*	<input type="checkbox"/>	513	230			
L_02223 POD2		L	LE	2	3	2	33	18S	38E	673381	3620265*	<input type="checkbox"/>	589	212		60	152
L_02264		L	LE		2	33	18S	38E	673483	3620367*	<input type="checkbox"/>	641	93		56	37	
L_06574		L	LE	3	3	1	33	18S	38E	672376	3620051*	<input type="checkbox"/>	712	120		52	68
L_01786 POD1		L	LE	1	2	2	33	18S	38E	673576	3620676*	<input type="checkbox"/>	713	104		55	49
L_05026		L	LE		4	28	18S	38E	673468	3621173*	<input type="checkbox"/>	853	110		48	62	
L_02992		L	LE	1	4	4	28	18S	38E	673569	3621079*	<input type="checkbox"/>	867	95		42	53
L_07527		L	LE	3	1	3	28	18S	38E	672353	3621260*	<input type="checkbox"/>	869	380			
L_07536		L	LE	4	4	2	32	18S	38E	672173	3620044*	<input type="checkbox"/>	870	360			
L_02272		L	LE	4	2	2	33	18S	38E	673776	3620476*	<input type="checkbox"/>	908	105		60	45
L_04750		L	LE	4	2	3	33	18S	38E	672986	3619655*	<input type="checkbox"/>	914	86		45	41
L_02232		L	LE		3	33	18S	38E	672693	3619547*	<input type="checkbox"/>	1030	112		56	56	
L_08223		L	LE		3	33	18S	38E	672693	3619547*	<input type="checkbox"/>	1030	120		52	68	
L_00143 POD2		L	LE	3	1	3	33	18S	38E	672383	3619648*	<input type="checkbox"/>	1036	108			
L_09684		L	LE	4	4	1	28	18S	38E	672949	3621670*	<input type="checkbox"/>	1110	120		65	55
L_02097 POD2		L	LE	1	1	1	34	18S	38E	673979	3620683*	<input type="checkbox"/>	1113	214		68	146
L_03160		L	LE	3	4	1	28	18S	38E	672749	3621670*	<input type="checkbox"/>	1114	119		45	74
L_09116		L	LE	1	2	4	28	18S	38E	673561	3621482*	<input type="checkbox"/>	1149	130		68	62
L_07526		L	LE	3	3	2	28	18S	38E	673151	3621678*	<input type="checkbox"/>	1150	390			
L_01701 POD1		L	LE		4	3	33	18S	38E	672894	3619353*	<input type="checkbox"/>	1209	104		50	54
L_10938		L	LE		4	3	33	18S	38E	672894	3619353*	<input type="checkbox"/>	1209	183			
L_02588		L	LE	4	3	2	28	18S	38E	673351	3621678*	<input type="checkbox"/>	1214	130		53	77
L_13342 POD1		L	LE	3	3	1	34	18S	38E	674044	3620065	<input type="checkbox"/>	1273	100			
L_08564		L	LE		3	3	33	18S	38E	672492	3619346*	<input type="checkbox"/>	1273	125		50	75
L_13342 POD5		L	LE	3	3	1	34	18S	38E	674040	3620048	<input type="checkbox"/>	1276	35			
L_13342 POD3		L	LE	3	3	1	34	18S	38E	674049	3620067	<input type="checkbox"/>	1276	103			
L_00220 S10		L	LE	4	2	4	33	18S	38E	673791	3619669*	<input type="checkbox"/>	1281	80			
L_13342 POD4		L	LE	3	3	1	34	18S	38E	674049	3620052	<input type="checkbox"/>	1282	35			

L 13342 POD2	L	LE	3	3	1	34	18S	38E	674059	3620064	<input type="checkbox"/>	1286	105			
L 07524	L	LE	4	1	1	34	18S	38E	674179	3620483*	<input type="checkbox"/>	1309	350			
L 07434	L	LE	4	4	2	29	18S	38E	672143	3621656*	<input type="checkbox"/>	1314	125	55	70	
L 03299	L	LE	1	4	4	33	18S	38E	673599	3619466*	<input type="checkbox"/>	1315	110	61	49	
L 07523	L	LE	1	4	4	33	18S	38E	673599	3619466*	<input type="checkbox"/>	1315	350			
L 07528	L	LE	4	1	4	29	18S	38E	671747	3621246*	<input type="checkbox"/>	1316	380			
L 11176	L	LE	4	1	4	29	18S	38E	671747	3621246*	<input type="checkbox"/>	1316	220	65	155	
L 02836	L	LE	3	3	4	33	18S	38E	673196	3619259*	<input type="checkbox"/>	1342	129	53	76	
L 13342 POD7	L	LE	1	1	3	34	18S	38E	674095	3619970	<input type="checkbox"/>	1358	35			
L 13342 POD6	L	LE	1	1	3	34	18S	38E	674097	3619973	<input type="checkbox"/>	1359	35			
L 13342 POD8	L	LE	2	1	3	34	18S	38E	674100	3619967	<input type="checkbox"/>	1364	45			
L 13342 POD9	L	LE	2	1	3	34	18S	38E	674103	3619964	<input type="checkbox"/>	1368	35			
L 07679	L	LE	2	3	2	28	18S	38E	673351	3621878*	<input type="checkbox"/>	1400	110	68	42	
L 06488	L	LE	3	3	2	32	18S	38E	671569	3620037*	<input type="checkbox"/>	1404	120	57	63	
L 12068 POD1	L	LE	2	4	2	29	18S	38E	672190	3621798	<input type="checkbox"/>	1411	160			
L 07535	L	LE	1	4	4	32	18S	38E	671987	3619438*	<input type="checkbox"/>	1430	360			
L 08429	L	LE	2	1	4	29	18S	38E	671747	3621446*	<input type="checkbox"/>	1430	120	62	58	
L 07204	L	LE		4	4	32	18S	38E	672088	3619339*	<input type="checkbox"/>	1452	125	64	61	
L 09390	L	LE		4	4	32	18S	38E	672088	3619339*	<input type="checkbox"/>	1452	120	30	90	
L 06717	L	LE		4	2	29	18S	38E	672044	3621757*	<input type="checkbox"/>	1453	130	55	75	
L 07427	L	LE		4	2	29	18S	38E	672044	3621757*	<input type="checkbox"/>	1453	130	60	70	
L 07432 POD1	L	LE		4	2	29	18S	38E	672044	3621757*	<input type="checkbox"/>	1453	125	55	70	
L 07839	L	LE		4	2	29	18S	38E	672044	3621757*	<input type="checkbox"/>	1453	120	60	60	
L 08135	L	LE		4	2	29	18S	38E	672044	3621757*	<input type="checkbox"/>	1453	130	62	68	
L 08737	L	LE		4	2	29	18S	38E	672044	3621757*	<input type="checkbox"/>	1453	132	60	72	
L 09586	L	LE		4	2	29	18S	38E	672044	3621757*	<input type="checkbox"/>	1453	120	78	42	
L 12052 POD1	L	LE	2	4	2	29	18S	38E	672150	3621825	<input type="checkbox"/>	1454	218			
L 12304 POD1	L	LE	2	4	2	29	18S	38E	672140	3621821	<input type="checkbox"/>	1456	155			
L 07534	L	LE	1	1	4	32	18S	38E	671577	3619834*	<input type="checkbox"/>	1485	360			
L 00940	L	LE	3	2	1	34	18S	38E	674382	3620490*	<input type="checkbox"/>	1511	206	133	73	
L 00940	R	L	LE	3	2	1	34	18S	38E	674382	3620490*	<input type="checkbox"/>	1511	206	133	73
L 00941		L	LE	3	2	1	34	18S	38E	674382	3620490*	<input type="checkbox"/>	1511	205	133	72
L 00941	R	L	LE	3	2	1	34	18S	38E	674382	3620490*	<input type="checkbox"/>	1511	205	133	72
L 00942		L	LE	3	2	1	34	18S	38E	674382	3620490*	<input type="checkbox"/>	1511	210	133	77
L 00942	R	L	LE	3	2	1	34	18S	38E	674382	3620490*	<input type="checkbox"/>	1511	210	133	77
L 00943		L	LE	3	2	1	34	18S	38E	674382	3620490*	<input type="checkbox"/>	1511	206	133	73
L 00943	R	L	LE	3	2	1	34	18S	38E	674382	3620490*	<input type="checkbox"/>	1511	206	133	73
L 00944		L	LE	4	2	1	34	18S	38E	674382	3620490*	<input type="checkbox"/>	1511	206	140	66
L 00944	R	L	LE	4	2	1	34	18S	38E	674382	3620490*	<input type="checkbox"/>	1511	206	140	66

L_00228	L	LE	1	2	1	04	19S	38E	672800	3619051*	<input type="checkbox"/>	1512	180	150	30
L_00227	L	LE	2	1	1	04	19S	38E	672597	3619044*	<input type="checkbox"/>	1542	180	62	118
L_12636 POD1	L	LE	2	2	1	32	18S	38E	671302	3620719	<input type="checkbox"/>	1577	191		
L_12855 POD1	L	LE	2	2	1	32	18S	38E	671302	3620719	<input type="checkbox"/>	1577	181		
L_07540	L	LE	1	1	1	04	19S	38E	672397	3619044*	<input type="checkbox"/>	1590	350		
L_08317	L	LE	1	1	1	04	19S	38E	672397	3619044*	<input type="checkbox"/>	1590	150	50	100
L_07656	L	LE	4	1	2	28	18S	38E	673344	3622081*	<input type="checkbox"/>	1590	110	68	42
L_07678	L	LE	4	1	2	28	18S	38E	673344	3622081*	<input type="checkbox"/>	1590	110	68	42
L_08229	L	LE	1	4	2	29	18S	38E	671943	3621856*	<input type="checkbox"/>	1592	115	68	47
L_08448	L	LE	1	4	2	29	18S	38E	671943	3621856*	<input type="checkbox"/>	1592	130	38	92
L_01196 POD1	L	LE	4	4	4	33	18S	38E	673799	3619266*	<input type="checkbox"/>	1593	100	56	44
L_14213 POD1	L	LE	3	3	2	29	18S	38E	671610	3621586	<input type="checkbox"/>	1625	215	63	152
L_13997 POD1	L	LE	2	4	3	29	18S	38E	671343	3621125	<input type="checkbox"/>	1629	109	62	47
L_01340	L	LE		4	1	34	18S	38E	674490	3620188*	<input type="checkbox"/>	1660	102	80	22
L_08485	L	LE		1	1	28	18S	38E	672440	3622167*	<input type="checkbox"/>	1662	120	61	59
L_01592 POD1	L	LE	1	2	2	04	19S	38E	673605	3619065*	<input type="checkbox"/>	1666	82	50	32
L_07754	L	LE	4	2	2	29	18S	38E	672136	3622059*	<input type="checkbox"/>	1668	207	50	157
L_08228	L	LE	4	2	2	29	18S	38E	672136	3622059*	<input type="checkbox"/>	1668	115	68	47
L_08370	L	LE	4	2	2	29	18S	38E	672136	3622059*	<input type="checkbox"/>	1668	120	60	60
L_02646	L	LE	2	2	2	05	19S	38E	672194	3619037*	<input type="checkbox"/>	1668	80	35	45
L_02966	L	LE	2	2	2	05	19S	38E	672194	3619037*	<input type="checkbox"/>	1668	43	27	16
L_03865	L	LE	2	2	2	05	19S	38E	672194	3619037*	<input type="checkbox"/>	1668	50	29	21

Average Depth to Water: **69 feet**
Minimum Depth: **27 feet**
Maximum Depth: **150 feet**

Record Count: 91

UTMNAD83 Radius Search (in meters):

Easting (X): 672872

Northing (Y): 3620562

Radius: 1700

*UTM location was derived from PLSS - see Help

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

3/23/17 3:52 PM

WATER COLUMN/ AVERAGE DEPTH TO
WATER

Public Land Survey System (PLSS)

☐

Q64:

Q16:

NE

Q4:

NW

Sec:

33

Tws:

18S

Rng:

38E

State Plane Coordinate System - NAD27

☐

X:

0

ft

Y:

0

ft

Zone:

State Plane Coordinate System - NAD83

☐

X:

0

ft

Y:

0

ft

Zone:

Degrees/Minutes/Seconds

☐

Longitude (X):

Degrees:

0

°

Minutes:

0

'

Seconds:

0

"

Latitude (Y):

Degrees:

0

°

Minutes:

0

'

Seconds:

0

"

UTM - NAD27

☐

Easting (X):

0

mtrs

Northing (Y):

0

mtrs

Zone:

SUBMIT

All Conversion Results are displayed as NAD 1983 UTM Zone 13

Easting (X):

672872.0

mtrs

Northing (Y):

3620562.0

mtrs

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

http://nmwrrs.ose.state.nm.us/nmwrrs/ConvertUTMDispatcher[3/23/2017 3:51:34 PM]

Laboratory Analytical Results Summary
State A B Battery

Analyte	Method	Sample Date	SP1 @ 1'	SP1 @ 2'	SP1 @ 2.5'	SP1 @ 3'	SP1 @ 4'	SP1 @ 5'	SP1 @ 10'
			4/4/17	4/4/17	4/4/17	4/19/17	4/19/17	4/19/17	4/19/17
Benzene	BTEX 8021B		mg/Kg <1.00	mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050
Toluene	BTEX 8021B		8.69	0.326	0.641	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		19.7	1.02	0.969	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		45.9	2.61	2.09	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		74.3	3.96	3.7	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		n/a	n/a	192	288	288	208	176
GRO	TPH 8015M		2040	116	19.7	<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		10100	2170	178	<10.0	<10.0	<10.0	<10.0

Analyte	Method	Sample Date	SP2 @ 1'	SP2 @ 2'	SP2 @ 2.5'	SP2 @ 3'	SP2 @ 4'	SP2 @ 9'
			4/4/17	4/4/17	4/4/17	4/20/17	4/20/17	4/20/17
Benzene	BTEX 8021B		mg/Kg <0.500	mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050
Toluene	BTEX 8021B		2.5	<0.050	0.145	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		8.18	0.125	0.224	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		19.9	0.398	0.541	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		30.6	0.523	0.911	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		n/a	n/a	224	112	112	192
GRO	TPH 8015M		747	13.6	<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		5060	592	285	<10.0	<10.0	<10.0

Analyte	Method	Sample Date	SP3 @ 1'	SP3 @ 2'	SP3 @ 2.5'	SP3 @ 3'	SP3 @ 8'
			4/4/17	4/4/17	4/4/17	4/20/17	4/20/17
Benzene	BTEX 8021B		mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050
Toluene	BTEX 8021B		0.114	<0.050	0.054	<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.461	0.079	0.089	<0.050	<0.050
Total Xylenes	BTEX 8021B		1.35	0.258	0.217	<0.150	<0.150
Total BTEX	BTEX 8021B		1.92	0.338	0.359	<0.300	<0.300
Chloride	SM4500Cl-B		n/a	n/a	176	48	32
GRO	TPH 8015M		<50.0	<50.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		474	124	106	<10.0	<10.0

Analyte	Method	Sample Date	SP4 @ 1'	SP4 @ 2'	SP4 @ 2.5'	SP4 @ 3'	SP4 @ 8'
			4/4/17	4/4/17	4/4/17	4/20/17	4/20/17
Benzene	BTEX 8021B		mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050
Toluene	BTEX 8021B		0.231	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		1.15	0.158	0.057	<0.050	<0.050
Total Xylenes	BTEX 8021B		3.19	0.488	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		4.57	0.646	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		n/a	n/a	176	128	112
GRO	TPH 8015M		97.6	<50.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		1290	208	189	<10.0	<10.0

Analyte	Method	Sample Date	SP5 @ 1'	SP5 @ 2'	SP5 @ 2.5'	SP5 @ 3'	SP5 @ 4'	SP5 @ 9'
			4/4/17	4/4/17	4/4/17	4/20/17	4/20/17	4/20/17
Benzene	BTEX 8021B		mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050	mg/Kg <0.050
Toluene	BTEX 8021B		0.148	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.828	0.178	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		2.37	0.526	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		3.35	0.704	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		n/a	n/a	176	96	64	48
GRO	TPH 8015M		102	<50.0	<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		1240	171	126	<10.0	<10.0	<10.0

Analyte	Method	Sample Date	NORTH @ SURFACE 4/4/17	NORTH @ SURFACE 4/20/17
Benzene	BTEX 8021B		mg/Kg <0.050	mg/Kg <0.050
Toluene	BTEX 8021B		<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.058	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300
Chloride	SM4500Cl-B		288	128
GRO	TPH 8015M		<10.0	<10.0
DRO	TPH 8015M		364	<10.0

Analyte	Method	Sample Date	EAST @ SURFACE 4/4/17	EAST @ SURFACE 4/20/17
Benzene	BTEX 8021B		mg/Kg <0.050	mg/Kg <0.050
Toluene	BTEX 8021B		<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.091	<0.050
Total Xylenes	BTEX 8021B		0.148	<0.050
Total BTEX	BTEX 8021B		0.353	<0.150
Chloride	SM4500Cl-B		0.592	<0.300
GRO	TPH 8015M		256	128
DRO	TPH 8015M		<10.0	<10.0
	TPH 8015M		306	<10.0

Analyte	Method	Sample Date	WEST @ SURFACE 4/4/17	WEST @ SURFACE 4/20/17
Benzene	BTEX 8021B		mg/Kg <0.050	mg/Kg <0.050
Toluene	BTEX 8021B		<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.136	<0.050
Total Xylenes	BTEX 8021B		0.108	<0.050
Total BTEX	BTEX 8021B		0.189	<0.150
Chloride	SM4500Cl-B		0.434	<0.300
GRO	TPH 8015M		256	112
DRO	TPH 8015M		<10.0	<10.0
	TPH 8015M		260	<10.0

Analyte	Method	Sample Date	SOUTH @ SURFACE 4/4/17	SOUTH @ SURFACE 4/20/17
Benzene	BTEX 8021B		mg/Kg <0.050	mg/Kg <0.050
Toluene	BTEX 8021B		<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.444	<0.050
Total Xylenes	BTEX 8021B		0.572	<0.050
Total BTEX	BTEX 8021B		1.23	<0.150
Chloride	SM4500Cl-B		2.24	<0.300
GRO	TPH 8015M		240	128
DRO	TPH 8015M		13.7	<10.0
	TPH 8015M		262	<10.0

April 12, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: STATE A & B

Enclosed are the results of analyses for samples received by the laboratory on 04/05/17 11:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

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

Received:	04/05/2017	Sampling Date:	04/04/2017
Reported:	04/12/2017	Sampling Type:	Soil
Project Name:	STATE A & B	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOBBS, NM		

Sample ID: SP 1 @ 1' (H700894-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	04/07/2017	ND	2.20	110	2.00	0.945	
Toluene*	8.69	1.00	04/07/2017	ND	2.01	100	2.00	0.959	
Ethylbenzene*	19.7	1.00	04/07/2017	ND	2.01	100	2.00	1.01	
Total Xylenes*	45.9	3.00	04/07/2017	ND	5.73	95.5	6.00	1.10	
Total BTEX	74.3	6.00	04/07/2017	ND					

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

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	2040	50.0	04/06/2017	ND	200	99.9	200	2.77		
DRO >C10-C28	10100	50.0	04/06/2017	ND	215	107	200	2.74		

Surrogate: 1-Chlorooctane 195 % 28.3-164

Surrogate: 1-Chlorooctadecane 215 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 04/05/2017
Reported: 04/12/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

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

Sample ID: SP 1 @ 2' (H700894-02)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/07/2017	ND	2.20	110	2.00	0.945	
Toluene*	0.326	0.050	04/07/2017	ND	2.01	100	2.00	0.959	
Ethylbenzene*	1.02	0.050	04/07/2017	ND	2.01	100	2.00	1.01	
Total Xylenes*	2.61	0.150	04/07/2017	ND	5.73	95.5	6.00	1.10	
Total BTEX	3.96	0.300	04/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 121 % 72-148

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	116	50.0	04/07/2017	ND	200	99.9	200	2.77	
DRO >C10-C28	2170	50.0	04/07/2017	ND	215	107	200	2.74	

Surrogate: 1-Chlorooctane 131 % 28.3-164

Surrogate: 1-Chlorooctadecane 135 % 34.7-157

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Analytical Results For:

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

Received: 04/05/2017
Reported: 04/12/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

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

Sample ID: SP 1 @ 2.5' (H700894-03)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/08/2017	ND	2.20	110	2.00	0.945	
Toluene*	0.641	0.050	04/08/2017	ND	2.01	100	2.00	0.959	
Ethylbenzene*	0.969	0.050	04/08/2017	ND	2.01	100	2.00	1.01	
Total Xylenes*	2.09	0.150	04/08/2017	ND	5.73	95.5	6.00	1.10	
Total BTX	3.70	0.300	04/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	04/07/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	19.7	10.0	04/07/2017	ND	200	99.9	200	2.77	
DRO >C10-C28	178	10.0	04/07/2017	ND	215	107	200	2.74	

Surrogate: 1-Chlorooctane 72.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 89.4 % 34.7-157

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Analytical Results For:

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

Received:	04/05/2017	Sampling Date:	04/04/2017
Reported:	04/12/2017	Sampling Type:	Soil
Project Name:	STATE A & B	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOBBS, NM		

Sample ID: SP 2 @ 1' (H700894-04)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	04/08/2017	ND	2.20	110	2.00	0.945	
Toluene*	2.50	0.500	04/08/2017	ND	2.01	100	2.00	0.959	
Ethylbenzene*	8.18	0.500	04/08/2017	ND	2.01	100	2.00	1.01	
Total Xylenes*	19.9	1.50	04/08/2017	ND	5.73	95.5	6.00	1.10	
Total BTEX	30.6	3.00	04/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 72-148

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	747	50.0	04/07/2017	ND	200	99.9	200	2.77		
DRO >C10-C28	5060	50.0	04/07/2017	ND	215	107	200	2.74		

Surrogate: 1-Chlorooctane 173 % 28.3-164

Surrogate: 1-Chlorooctadecane 171 % 34.7-157

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P.O. Box 805
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Received:	04/05/2017	Sampling Date:	04/04/2017
Reported:	04/12/2017	Sampling Type:	Soil
Project Name:	STATE A & B	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOBBS, NM		

Sample ID: SP 2 @ 2' (H700894-05)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/08/2017	ND	2.20	110	2.00	0.945	
Toluene*	<0.050	0.050	04/08/2017	ND	2.01	100	2.00	0.959	
Ethylbenzene*	0.125	0.050	04/08/2017	ND	2.01	100	2.00	1.01	
Total Xylenes*	0.398	0.150	04/08/2017	ND	5.73	95.5	6.00	1.10	
Total BTEX	0.523	0.300	04/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 72-148

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	13.6	10.0	04/07/2017	ND	200	99.9	200	2.77	
DRO >C10-C28	592	10.0	04/07/2017	ND	215	107	200	2.74	

Surrogate: 1-Chlorooctane 106 % 28.3-164

Surrogate: 1-Chlorooctadecane 126 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	04/05/2017	Sampling Date:	04/04/2017
Reported:	04/12/2017	Sampling Type:	Soil
Project Name:	STATE A & B	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOBBS, NM		

Sample ID: SP 2 @ 2.5' (H700894-06)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/08/2017	ND	2.20	110	2.00	0.945	
Toluene*	0.145	0.050	04/08/2017	ND	2.01	100	2.00	0.959	
Ethylbenzene*	0.224	0.050	04/08/2017	ND	2.01	100	2.00	1.01	
Total Xylenes*	0.541	0.150	04/08/2017	ND	5.73	95.5	6.00	1.10	
Total BTX	0.911	0.300	04/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.9 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	04/07/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/07/2017	ND	200	99.9	200	2.77	
DRO >C10-C28	265	10.0	04/07/2017	ND	215	107	200	2.74	

Surrogate: 1-Chlorooctane 106 % 28.3-164

Surrogate: 1-Chlorooctadecane 104 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 04/05/2017
Reported: 04/12/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

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

Sample ID: SP 3 @ 1' (H700894-07)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/08/2017	ND	2.20	110	2.00	0.945	
Toluene*	0.114	0.050	04/08/2017	ND	2.01	100	2.00	0.959	
Ethylbenzene*	0.461	0.050	04/08/2017	ND	2.01	100	2.00	1.01	
Total Xylenes*	1.35	0.150	04/08/2017	ND	5.73	95.5	6.00	1.10	
Total BTEX	1.92	0.300	04/08/2017	ND					

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

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	04/07/2017	ND	200	99.9	200	2.77	
DRO >C10-C28	474	50.0	04/07/2017	ND	215	107	200	2.74	

Surrogate: 1-Chlorooctane 109 % 28.3-164

Surrogate: 1-Chlorooctadecane 108 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	04/05/2017	Sampling Date:	04/04/2017
Reported:	04/12/2017	Sampling Type:	Soil
Project Name:	STATE A & B	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOBBS, NM		

Sample ID: SP 3 @ 2' (H700894-08)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/08/2017	ND	2.20	110	2.00	0.945		
Toluene*	<0.050	0.050	04/08/2017	ND	2.01	100	2.00	0.959		
Ethylbenzene*	0.079	0.050	04/08/2017	ND	2.01	100	2.00	1.01		
Total Xylenes*	0.258	0.150	04/08/2017	ND	5.73	95.5	6.00	1.10		
Total BTEX	0.338	0.300	04/08/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 72-148

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<50.0	50.0	04/07/2017	ND	200	99.9	200	2.77		
DRO >C10-C28	124	50.0	04/07/2017	ND	215	107	200	2.74		

Surrogate: 1-Chlorooctane 83.6 % 28.3-164

Surrogate: 1-Chlorooctadecane 91.5 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 04/05/2017
Reported: 04/12/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

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

Sample ID: SP 3 @ 2.5' (H700894-09)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/08/2017	ND	2.20	110	2.00	0.945	
Toluene*	0.054	0.050	04/08/2017	ND	2.01	100	2.00	0.959	
Ethylbenzene*	0.089	0.050	04/08/2017	ND	2.01	100	2.00	1.01	
Total Xylenes*	0.217	0.150	04/08/2017	ND	5.73	95.5	6.00	1.10	
Total BTEX	0.359	0.300	04/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.7 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	04/07/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/07/2017	ND	200	99.9	200	2.77	
DRO >C10-C28	106	10.0	04/07/2017	ND	215	107	200	2.74	

Surrogate: 1-Chlorooctane 95.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 92.4 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	04/05/2017	Sampling Date:	04/04/2017
Reported:	04/12/2017	Sampling Type:	Soil
Project Name:	STATE A & B	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOBBS, NM		

Sample ID: SP 4 @ 1' (H700894-10)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/08/2017	ND	2.13	107	2.00	0.646	
Toluene*	0.231	0.050	04/08/2017	ND	1.96	98.2	2.00	0.712	
Ethylbenzene*	1.15	0.050	04/08/2017	ND	1.95	97.5	2.00	0.953	
Total Xylenes*	3.19	0.150	04/08/2017	ND	5.57	92.9	6.00	0.976	
Total BTX	4.57	0.300	04/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 124 % 72-148

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	97.6	50.0	04/07/2017	ND	200	99.9	200	2.77	
DRO >C10-C28	1290	50.0	04/07/2017	ND	215	107	200	2.74	

Surrogate: 1-Chlorooctane 117 % 28.3-164

Surrogate: 1-Chlorooctadecane 120 % 34.7-157

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Fax To: (575) 397-0397

Received: 04/05/2017
Reported: 04/12/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

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

Sample ID: SP 4 @ 2' (H700894-11)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/08/2017	ND	2.13	107	2.00	0.646	
Toluene*	<0.050	0.050	04/08/2017	ND	1.96	98.2	2.00	0.712	
Ethylbenzene*	0.158	0.050	04/08/2017	ND	1.95	97.5	2.00	0.953	
Total Xylenes*	0.488	0.150	04/08/2017	ND	5.57	92.9	6.00	0.976	
Total BTEX	0.646	0.300	04/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 72-148

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	04/07/2017	ND	200	99.9	200	2.77	
DRO >C10-C28	208	50.0	04/07/2017	ND	215	107	200	2.74	

Surrogate: 1-Chlorooctane 97.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 96.0 % 34.7-157

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Received: 04/05/2017
Reported: 04/12/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

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

Sample ID: SP 4 @ 2.5' (H700894-12)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/08/2017	ND	2.13	107	2.00	0.646	
Toluene*	<0.050	0.050	04/08/2017	ND	1.96	98.2	2.00	0.712	
Ethylbenzene*	0.057	0.050	04/08/2017	ND	1.95	97.5	2.00	0.953	
Total Xylenes*	<0.150	0.150	04/08/2017	ND	5.57	92.9	6.00	0.976	
Total BTEX	<0.300	0.300	04/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.5 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	04/07/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/07/2017	ND	200	99.9	200	2.77	
DRO >C10-C28	189	10.0	04/07/2017	ND	215	107	200	2.74	

Surrogate: 1-Chlorooctane 93.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 101 % 34.7-157

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 Hobbs NM, 88241
 Fax To: (575) 397-0397

 Received: 04/05/2017
 Reported: 04/12/2017
 Project Name: STATE A & B
 Project Number: NONE GIVEN
 Project Location: HOBBS, NM

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

Sample ID: SP 5 @ 1' (H700894-13)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/08/2017	ND	2.13	107	2.00	0.646	
Toluene*	0.148	0.050	04/08/2017	ND	1.96	98.2	2.00	0.712	
Ethylbenzene*	0.828	0.050	04/08/2017	ND	1.95	97.5	2.00	0.953	
Total Xylenes*	2.37	0.150	04/08/2017	ND	5.57	92.9	6.00	0.976	
Total BTEX	3.35	0.300	04/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 72-148

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	102	50.0	04/07/2017	ND	200	99.9	200	2.77	
DRO >C10-C28	1240	50.0	04/07/2017	ND	215	107	200	2.74	

Surrogate: 1-Chlorooctane 95.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 95.1 % 34.7-157

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Received: 04/05/2017
Reported: 04/12/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

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

Sample ID: SP 5 @ 2' (H700894-14)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/08/2017	ND	2.13	107	2.00	0.646	
Toluene*	<0.050	0.050	04/08/2017	ND	1.96	98.2	2.00	0.712	
Ethylbenzene*	0.178	0.050	04/08/2017	ND	1.95	97.5	2.00	0.953	
Total Xylenes*	0.526	0.150	04/08/2017	ND	5.57	92.9	6.00	0.976	
Total BTEX	0.704	0.300	04/08/2017	ND					

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

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	04/07/2017	ND	200	99.9	200	2.77	
DRO >C10-C28	171	50.0	04/07/2017	ND	215	107	200	2.74	

Surrogate: 1-Chlorooctane 100 % 28.3-164

Surrogate: 1-Chlorooctadecane 103 % 34.7-157

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Fax To: (575) 397-0397

Received: 04/05/2017
Reported: 04/12/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

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

Sample ID: SP 5 @ 2.5' (H700894-15)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/08/2017	ND	2.13	107	2.00	0.646	
Toluene*	<0.050	0.050	04/08/2017	ND	1.96	98.2	2.00	0.712	
Ethylbenzene*	<0.050	0.050	04/08/2017	ND	1.95	97.5	2.00	0.953	
Total Xylenes*	<0.150	0.150	04/08/2017	ND	5.57	92.9	6.00	0.976	
Total BTEx	<0.300	0.300	04/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.3 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	04/07/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/07/2017	ND	200	99.9	200	2.77	
DRO >C10-C28	126	10.0	04/07/2017	ND	215	107	200	2.74	

Surrogate: 1-Chlorooctane 94.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 86.5 % 34.7-157

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Hobbs NM, 88241
Fax To: (575) 397-0397

Received:	04/05/2017	Sampling Date:	04/04/2017
Reported:	04/12/2017	Sampling Type:	Soil
Project Name:	STATE A & B	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOBBS, NM		

Sample ID: NORTH @ SURFACE (H700894-16)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/08/2017	ND	2.13	107	2.00	0.646	
Toluene*	<0.050	0.050	04/08/2017	ND	1.96	98.2	2.00	0.712	
Ethylbenzene*	0.058	0.050	04/08/2017	ND	1.95	97.5	2.00	0.953	
Total Xylenes*	<0.150	0.150	04/08/2017	ND	5.57	92.9	6.00	0.976	
Total BTX	<0.300	0.300	04/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.9 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	288	16.0	04/07/2017	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/06/2017	ND	187	93.7	200	10.6	
DRO >C10-C28	364	10.0	04/06/2017	ND	191	95.5	200	10.6	

Surrogate: 1-Chlorooctane 86.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 103 % 34.7-157

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Fax To: (575) 397-0397

Received: 04/05/2017
Reported: 04/12/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

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

Sample ID: EAST @ SURFACE (H700894-17)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/08/2017	ND	2.13	107	2.00	0.646	
Toluene*	0.091	0.050	04/08/2017	ND	1.96	98.2	2.00	0.712	
Ethylbenzene*	0.148	0.050	04/08/2017	ND	1.95	97.5	2.00	0.953	
Total Xylenes*	0.353	0.150	04/08/2017	ND	5.57	92.9	6.00	0.976	
Total BTEx	0.592	0.300	04/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.5 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	04/07/2017	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/06/2017	ND	187	93.7	200	10.6	
DRO >C10-C28	306	10.0	04/06/2017	ND	191	95.5	200	10.6	

Surrogate: 1-Chlorooctane 86.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 97.2 % 34.7-157

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Fax To: (575) 397-0397

Received: 04/05/2017
Reported: 04/12/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

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

Sample ID: WEST @ SURFACE (H700894-18)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/08/2017	ND	2.13	107	2.00	0.646	
Toluene*	0.136	0.050	04/08/2017	ND	1.96	98.2	2.00	0.712	
Ethylbenzene*	0.108	0.050	04/08/2017	ND	1.95	97.5	2.00	0.953	
Total Xylenes*	0.189	0.150	04/08/2017	ND	5.57	92.9	6.00	0.976	
Total BTEx	0.434	0.300	04/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.7 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	04/07/2017	ND	432	108	400	3.64	QR-03	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/06/2017	ND	187	93.7	200	10.6	
DRO >C10-C28	260	10.0	04/06/2017	ND	191	95.5	200	10.6	

Surrogate: 1-Chlorooctane 94.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 104 % 34.7-157

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Cliff Brunson
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Hobbs NM, 88241
Fax To: (575) 397-0397

Received: 04/05/2017
Reported: 04/12/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

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

Sample ID: SOUTH @ SURFACE (H700894-19)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/08/2017	ND	2.13	107	2.00	0.646	
Toluene*	0.444	0.050	04/08/2017	ND	1.96	98.2	2.00	0.712	
Ethylbenzene*	0.572	0.050	04/08/2017	ND	1.95	97.5	2.00	0.953	
Total Xylenes*	1.23	0.150	04/08/2017	ND	5.57	92.9	6.00	0.976	
Total BTEX	2.24	0.300	04/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	04/07/2017	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	13.7	10.0	04/06/2017	ND	187	93.7	200	10.6	
DRO >C10-C28	262	10.0	04/06/2017	ND	191	95.5	200	10.6	

Surrogate: 1-Chlorooctane 95.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 104 % 34.7-157

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report



Celey D. Keene, Lab Director/Quality Manager



CARDINAL 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.		BILL TO		ANALYSIS REQUEST									
Project Manager: Cliff Brunson		P.O. #:											
Address: P.O. Box 805		Company: OXY											
City: Hobbs		Attn: Jimmers											
Phone #: 575-397-6388		Address:											
State: NM		City:											
Zip: 88241		State:											
Fax #: 575-397-0397		Zip:											
Project #:		Project Owner: OXY											
Project Name: State A & B		City:											
Project Location: Hobbs, NM		State:											
Sample Name: 10		Phone #:											
Fax #:		Zip:											
FOR LAB USE ONLY													
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		MATRIX		PRESERV.		SAMPLING	
								<input type="checkbox"/> GROUNDWATER <input type="checkbox"/> WASTEWATER <input type="checkbox"/> SOIL <input type="checkbox"/> OIL <input type="checkbox"/> SLUDGE <input type="checkbox"/> OTHER :		<input type="checkbox"/> ACID/BASE: <input type="checkbox"/> ICE / COOL <input type="checkbox"/> OTHER :			
H100894		SP101		X		X		X		X		X	
1		2 1/2		X		X		X		X		X	
2		2 1/2		X		X		X		X		X	
3		2 1/2		X		X		X		X		X	
4		2 1/2		X		X		X		X		X	
5		2 1/2		X		X		X		X		X	
6		2 1/2		X		X		X		X		X	
7		2 1/2		X		X		X		X		X	
8		2 1/2		X		X		X		X		X	
9		2 1/2		X		X		X		X		X	
10		2 1/2		X		X		X		X		X	
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Relinquished By: [Signature]		Day: 4-5-17		Received By: [Signature]		DATE		TIME					
Refiniquished By: [Signature]		Time:		Received By:		DATE		TIME					
Delivered By: (Circle One)		Date: 4-5-17		Received By: [Signature]		DATE		TIME					
Sampler - UPS - Bus - Other:		Time: 11:00		Received By: [Signature]		DATE		TIME					
		Sample Condition		CHECKED BY: (Initials)		DATE		TIME					
		<input type="checkbox"/> Cool <input type="checkbox"/> Intact		70 #75		DATE		TIME					
		<input type="checkbox"/> Yes <input type="checkbox"/> No				DATE		TIME					
		<input type="checkbox"/> No <input type="checkbox"/> Yes				DATE		TIME					
REMARKS:													



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.		BILL TO		ANALYSIS REQUEST									
Project Manager: Cliff Brunson		P.O. #:											
Address: P.O. Box 805		Company: <i>PRY</i>											
City: Hobbs		Attn: <i>cliff</i>											
Phone #: 575-397-6388		Address:											
State: NM Zip: 88241													
Fax #: 575-397-0397													
Project #:		City:											
Project Name: <i>State 4 + B</i>		State:											
Project Location: <i>Hobbs, NM</i>		Zip:											
Sample Name: <i>10</i>		Phone #:											
Fax #:													
<small>FOR LAB USE ONLY</small>													
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		MATRIX		PRESERV.		SAMPLING	
								GROUNDWATER					
								WASTEWATER					
								SOIL					
								OIL					
								SLUDGE					
								OTHER :					
								ACID/BASE:					
								ICE / COOL					
								OTHER :					
								DATE					
								TIME					
<i>11</i>		<i>SP 402</i>		<i>C</i>		<i>1</i>		<i>X</i>		<i>44</i>		<i>137</i>	
<i>12</i>		<i>2 1/2</i>		<i>C</i>		<i>1</i>		<i>X</i>		<i>206</i>		<i>206</i>	
<i>13</i>		<i>SP 502</i>		<i>C</i>		<i>1</i>		<i>X</i>		<i>225</i>		<i>225</i>	
<i>14</i>		<i>2 1/2</i>		<i>C</i>		<i>1</i>		<i>X</i>		<i>230</i>		<i>230</i>	
<i>15</i>		<i>North 0.50R</i>		<i>C</i>		<i>1</i>		<i>X</i>		<i>251</i>		<i>251</i>	
<i>16</i>		<i>East 0.50R</i>		<i>C</i>		<i>1</i>		<i>X</i>		<i>300</i>		<i>300</i>	
<i>17</i>		<i>West 0.50R</i>		<i>C</i>		<i>1</i>		<i>X</i>		<i>309</i>		<i>309</i>	
<i>18</i>		<i>South 0.50R</i>		<i>C</i>		<i>1</i>		<i>X</i>		<i>317</i>		<i>317</i>	
<i>19</i>				<i>C</i>		<i>1</i>		<i>X</i>		<i>331</i>		<i>331</i>	
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Relinquished By:		Date: <i>4-5-17</i>		Received By:		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:					
Relinquished By: <i>Jeff Davis</i>		Time:		Received By: <i>Juanita Williams</i>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #:					
Delivered By: (Circle One)		Date: <i>4-5-17</i>		Received By:		REMARKS:							
Sampler - UPS - Bus - Other:		Time: <i>11:00</i>		Sample Condition									
				Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>									
				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>									
				Checked By: <i>JD</i>									
				Initials									
				Signature									
				Signature									

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

April 27, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: STATE A & B

Enclosed are the results of analyses for samples received by the laboratory on 04/21/17 10:43.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

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

Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/19/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: SP 1 @ 3' (H701070-01)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2017	ND	1.98	99.0	2.00	0.347	
Toluene*	<0.050	0.050	04/25/2017	ND	1.84	91.8	2.00	0.698	
Ethylbenzene*	<0.050	0.050	04/25/2017	ND	1.81	90.5	2.00	1.00	
Total Xylenes*	<0.150	0.150	04/25/2017	ND	5.17	86.2	6.00	0.551	
Total BTX	<0.300	0.300	04/25/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	288	16.0	04/25/2017	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/24/2017	ND	184	91.9	200	1.36	
DRO >C10-C28	<10.0	10.0	04/24/2017	ND	194	97.1	200	1.76	

Surrogate: 1-Chlorooctane 67.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 62.8 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/19/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: SP 1 @ 4' (H701070-02)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/25/2017	ND	1.98	99.0	2.00	0.347		
Toluene*	<0.050	0.050	04/25/2017	ND	1.84	91.8	2.00	0.698		
Ethylbenzene*	<0.050	0.050	04/25/2017	ND	1.81	90.5	2.00	1.00		
Total Xylenes*	<0.150	0.150	04/25/2017	ND	5.17	86.2	6.00	0.551		
Total BTX	<0.300	0.300	04/25/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	04/25/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/24/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/24/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 80.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 76.5 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/19/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: SP 1 @ 5' (H701070-03)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/25/2017	ND	1.98	99.0	2.00	0.347		
Toluene*	<0.050	0.050	04/25/2017	ND	1.84	91.8	2.00	0.698		
Ethylbenzene*	<0.050	0.050	04/25/2017	ND	1.81	90.5	2.00	1.00		
Total Xylenes*	<0.150	0.150	04/25/2017	ND	5.17	86.2	6.00	0.551		
Total BTX	<0.300	0.300	04/25/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	04/25/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/24/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/24/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 80.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 78.0 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/19/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: SP 1 @ 10' (H701070-04)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2017	ND	1.98	99.0	2.00	0.347	
Toluene*	<0.050	0.050	04/26/2017	ND	1.84	91.8	2.00	0.698	
Ethylbenzene*	<0.050	0.050	04/26/2017	ND	1.81	90.5	2.00	1.00	
Total Xylenes*	<0.150	0.150	04/26/2017	ND	5.17	86.2	6.00	0.551	
Total BTX	<0.300	0.300	04/26/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	04/25/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/24/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/24/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 78.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 74.0 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/20/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: SP 2 @ 3' (H701070-05)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2017	ND	1.98	99.0	2.00	0.347	
Toluene*	<0.050	0.050	04/26/2017	ND	1.84	91.8	2.00	0.698	
Ethylbenzene*	<0.050	0.050	04/26/2017	ND	1.81	90.5	2.00	1.00	
Total Xylenes*	<0.150	0.150	04/26/2017	ND	5.17	86.2	6.00	0.551	
Total BTX	<0.300	0.300	04/26/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	04/25/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/24/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/24/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 81.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 80.7 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/20/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: SP 2 @ 4' (H701070-06)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2017	ND	1.98	99.0	2.00	0.347	
Toluene*	<0.050	0.050	04/26/2017	ND	1.84	91.8	2.00	0.698	
Ethylbenzene*	<0.050	0.050	04/26/2017	ND	1.81	90.5	2.00	1.00	
Total Xylenes*	<0.150	0.150	04/26/2017	ND	5.17	86.2	6.00	0.551	
Total BTX	<0.300	0.300	04/26/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	04/26/2017	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/24/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/24/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 90.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 88.5 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/20/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: SP 2 @ 9' (H701070-07)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/26/2017	ND	1.98	99.0	2.00	0.347		
Toluene*	<0.050	0.050	04/26/2017	ND	1.84	91.8	2.00	0.698		
Ethylbenzene*	<0.050	0.050	04/26/2017	ND	1.81	90.5	2.00	1.00		
Total Xylenes*	<0.150	0.150	04/26/2017	ND	5.17	86.2	6.00	0.551		
Total BTX	<0.300	0.300	04/26/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	04/26/2017	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/24/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/24/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 90.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 91.5 % 34.7-157

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Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/20/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: SP 3 @ 3' (H701070-08)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2017	ND	1.98	99.0	2.00	0.347	
Toluene*	<0.050	0.050	04/26/2017	ND	1.84	91.8	2.00	0.698	
Ethylbenzene*	<0.050	0.050	04/26/2017	ND	1.81	90.5	2.00	1.00	
Total Xylenes*	<0.150	0.150	04/26/2017	ND	5.17	86.2	6.00	0.551	
Total BTX	<0.300	0.300	04/26/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	04/26/2017	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/24/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/24/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 93.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 92.2 % 34.7-157

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Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/20/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: SP 3 @ 8' (H701070-09)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2017	ND	1.98	99.0	2.00	0.347	
Toluene*	<0.050	0.050	04/26/2017	ND	1.84	91.8	2.00	0.698	
Ethylbenzene*	<0.050	0.050	04/26/2017	ND	1.81	90.5	2.00	1.00	
Total Xylenes*	<0.150	0.150	04/26/2017	ND	5.17	86.2	6.00	0.551	
Total BTX	<0.300	0.300	04/26/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/26/2017	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/24/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/24/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 88.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 89.8 % 34.7-157

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Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/20/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: SP 4 @ 3' (H701070-10)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2017	ND	1.98	99.0	2.00	0.347	
Toluene*	<0.050	0.050	04/26/2017	ND	1.84	91.8	2.00	0.698	
Ethylbenzene*	<0.050	0.050	04/26/2017	ND	1.81	90.5	2.00	1.00	
Total Xylenes*	<0.150	0.150	04/26/2017	ND	5.17	86.2	6.00	0.551	
Total BTX	<0.300	0.300	04/26/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	04/26/2017	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/24/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/24/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 89.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 86.3 % 34.7-157

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Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/20/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: SP 4 @ 8' (H701070-11)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2017	ND	1.98	99.0	2.00	0.347	
Toluene*	<0.050	0.050	04/26/2017	ND	1.84	91.8	2.00	0.698	
Ethylbenzene*	<0.050	0.050	04/26/2017	ND	1.81	90.5	2.00	1.00	
Total Xylenes*	<0.150	0.150	04/26/2017	ND	5.17	86.2	6.00	0.551	
Total BTX	<0.300	0.300	04/26/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	04/26/2017	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/24/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/24/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 87.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 84.8 % 34.7-157

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Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/20/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: SP 5 @ 3' (H701070-12)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2017	ND	1.98	99.0	2.00	0.347	
Toluene*	<0.050	0.050	04/26/2017	ND	1.84	91.8	2.00	0.698	
Ethylbenzene*	<0.050	0.050	04/26/2017	ND	1.81	90.5	2.00	1.00	
Total Xylenes*	<0.150	0.150	04/26/2017	ND	5.17	86.2	6.00	0.551	
Total BTX	<0.300	0.300	04/26/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	04/26/2017	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/24/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/24/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 91.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 93.8 % 34.7-157

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Fax To: (575) 397-0397

Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/20/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: SP 5 @ 4' (H701070-13)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2017	ND	1.98	99.0	2.00	0.347	
Toluene*	<0.050	0.050	04/26/2017	ND	1.84	91.8	2.00	0.698	
Ethylbenzene*	<0.050	0.050	04/26/2017	ND	1.81	90.5	2.00	1.00	
Total Xylenes*	<0.150	0.150	04/26/2017	ND	5.17	86.2	6.00	0.551	
Total BTX	<0.300	0.300	04/26/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	04/26/2017	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/24/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/24/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 82.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 81.1 % 34.7-157

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Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/20/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: SP 5 @ 9' (H701070-14)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/26/2017	ND	1.98	99.0	2.00	0.347		
Toluene*	<0.050	0.050	04/26/2017	ND	1.84	91.8	2.00	0.698		
Ethylbenzene*	<0.050	0.050	04/26/2017	ND	1.81	90.5	2.00	1.00		
Total Xylenes*	<0.150	0.150	04/26/2017	ND	5.17	86.2	6.00	0.551		
Total BTX	<0.300	0.300	04/26/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	04/26/2017	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/24/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/24/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 88.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 89.2 % 34.7-157

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Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/20/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: NORTH (H701070-15)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/26/2017	ND	1.98	99.0	2.00	0.347		
Toluene*	<0.050	0.050	04/26/2017	ND	1.84	91.8	2.00	0.698		
Ethylbenzene*	<0.050	0.050	04/26/2017	ND	1.81	90.5	2.00	1.00		
Total Xylenes*	<0.150	0.150	04/26/2017	ND	5.17	86.2	6.00	0.551		
Total BTX	<0.300	0.300	04/26/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	04/26/2017	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/24/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/24/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 79.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 75.6 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/20/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: EAST (H701070-16)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2017	ND	1.98	99.0	2.00	0.347	
Toluene*	<0.050	0.050	04/26/2017	ND	1.84	91.8	2.00	0.698	
Ethylbenzene*	<0.050	0.050	04/26/2017	ND	1.81	90.5	2.00	1.00	
Total Xylenes*	<0.150	0.150	04/26/2017	ND	5.17	86.2	6.00	0.551	
Total BTX	<0.300	0.300	04/26/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	04/26/2017	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/25/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/25/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 77.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 77.2 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/20/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: WEST (H701070-17)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2017	ND	1.98	99.0	2.00	0.347	
Toluene*	<0.050	0.050	04/26/2017	ND	1.84	91.8	2.00	0.698	
Ethylbenzene*	<0.050	0.050	04/26/2017	ND	1.81	90.5	2.00	1.00	
Total Xylenes*	<0.150	0.150	04/26/2017	ND	5.17	86.2	6.00	0.551	
Total BTX	<0.300	0.300	04/26/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	04/26/2017	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/25/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/25/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 73.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 73.5 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 04/21/2017
Reported: 04/27/2017
Project Name: STATE A & B
Project Number: NONE GIVEN
Project Location: HOBBS, NM

Sampling Date: 04/20/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: SOUTH (H701070-18)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2017	ND	2.06	103	2.00	4.14	
Toluene*	<0.050	0.050	04/26/2017	ND	1.91	95.4	2.00	3.49	
Ethylbenzene*	<0.050	0.050	04/26/2017	ND	1.91	95.6	2.00	3.84	
Total Xylenes*	<0.150	0.150	04/26/2017	ND	5.43	90.6	6.00	3.93	
Total BTX	<0.300	0.300	04/26/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	04/26/2017	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/25/2017	ND	206	103	200	1.25	
DRO >C10-C28	<10.0	10.0	04/25/2017	ND	215	108	200	0.745	

Surrogate: 1-Chlorooctane 82.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 79.1 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

CARDINAL 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.				BILL TO				ANALYSIS REQUEST			
Project Manager: Cliff Brunson				P.O. #:							
Address: P.O. Box 805				Company: OKY							
City: Hobbs				Attn: Shirley							
State: NM Zip: 88241				Address:							
Phone #: 575-397-6388 Fax #: 575-397-0397				City:							
Project #:				State: Zip:							
Project Name: Site 4+13				Phone #:							
Project Location: 4-555				Fax #:							
Sampler Name: Lee											
FOR LAB USE ONLY											
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP. # CONTAINERS		MATRIX		PRESERV		SAMPLING	
						GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:		ACID/BASE: ICE / COOL OTHER:		DATE TIME	
H701070		SP 400		C-1						4:10	
11		SP 500		C-1						11:22	
12		4		C-1						11:55	
13				C-1						3:48	
14				C-1						3:49	
15		Nestle		C-1						3:51	
16		Frost		C-1						3:55	
17		West		C-1						3:59	
18		South		C-1						4:05	

PLEASE NOTE: Liability and Damages. Cardholder's liability and client's exclusive remedy for any claim arising under this contract or tort, shall be limited to the amount paid by the client for the analysis. At claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardholder within 30 days after completion of the applicable service. In no event shall Cardholder be liable for incidental or consequential damages, including without limitation, business interruptions, loss of lease, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance hereunder by Cardholder, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Lee		Date: 4-21-17		Received By: Cliff Brunson	
Relinquished By:		Date:		Received By:	
Time:		Time:		Time:	
Delivered By: (Circle One)		Sample Condition		CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other:		Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No		9.50 4-21-17	

REMARKS:

BTEX
TPH
CH

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Oxy Permian	Contact	Casey Summers
Address	PO Box 4294; Houston, TX 77210	Telephone No.	(575) 513-8289
Facility Name	State A&B Battery	Facility Type	Battery

Surface Owner	State	Mineral Owner		API No.	30-025-23330
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	33	18S	38E					Lea County, NM

Latitude N 32.70557° Longitude W 103.16538°

NATURE OF RELEASE

Type of Release	Oil	Volume of Release	40 bbls	Volume Recovered	35 bbls
Source of Release	Compromised 3" steel load line	Date and Hour of Occurrence	03/19/2017	Date and Hour of Discovery	
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Olivia Yu, Kristen Lynch, Maxey Brown- NMOCD		
By Whom?	Tony Aguilar, Oxy Permian	Date and Hour	03/20/2017 @ 7:02 am		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

RECEIVED

By Olivia Yu at 3:26 pm, Mar 22, 2017

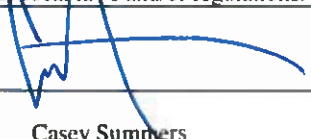

Describe Cause of Problem and Remedial Action Taken.*

A 3" load line came apart leaking 40 bbls of oil. A vacuum truck was deployed to recover 35 bbls of oil and the line was repaired/replaced.

Describe Area Affected and Cleanup Action Taken.*

The area affected is approximately 30' x 50' off location. Remediation will be completed in accordance with a remediation plan approved by NMOCD.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 		OIL CONSERVATION DIVISION	
Printed Name: Casey Summers		Approved by Environmental Specialist: 	
Title: NM Environmental Advisor		Approval Date: 3/22/2017	Expiration Date:
E-mail Address: Caey_Summers@oxy.com		Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
Date: 3-21-17 Phone: (575) 513-8289			

* Attach Additional Sheets If Necessary

1RP-4650

nOY1708155887

pOY1708156219

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _03/20/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number __1R-_4650_ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs__ on or before _4/22/2017_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold

OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us