WORLD-WIDE ENVIRONMENTAL SPECIALISTS

BBC INTERNATIONAL INCORPORATED

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

DELINEATION WORKPLAN

OXY – SIMPSON CDM COM #1H CTB
(Leak Date: 4/23/17)

RP # 2RP-4188
API # 30-015-42012

This delineation workplan and remediation proposal addresses the release associated with RP # 2RP-4188.

The following information includes:

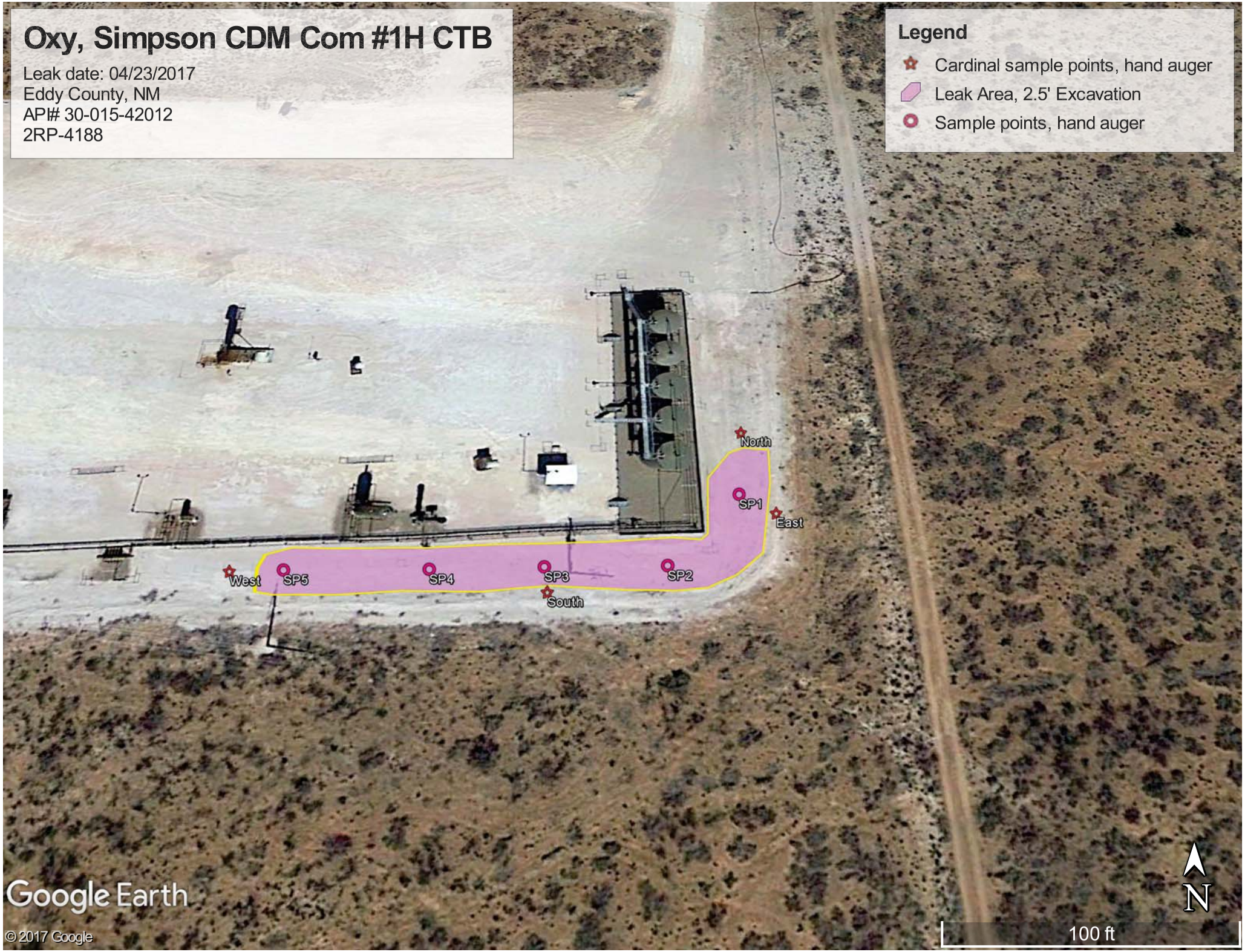
1. Scaled digital site map with spill area demarcated and leak point identified along with sample point locations and areas of remediation at appropriate depths.
2. GPS information for sample points and sample methodology
3. Depth to groundwater information (i.e., pdf of OSE search results and/or copy 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.


Oxy, Simpson CDM Com #1H CTB
Leak date: 04/23/2017
Eddy County, NM
API# 30-015-42012
2RP-4188
Legend
Cardinal sample points, hand auger
Leak Area, 2.5' Excavation
Sample points, hand auger
North
SP1
East
West
SP5
SP4
SP3
SP2
South
Google Earth
© 2017 Google
N
100 ft

Oxy, Simpson CDM Com #1H CTB

Sample points, hand auger

SP1, N 32.45667 W-104.20382

SP2, N 32.45658 W-104.20392

SP3, N 32.45658 W-104.20408

SP4, N 32.45658 W-104.20423

SP5, N 32.45658 W-104.20442

NORTH, N 32.45676 W-104.20381

SOUTH, N 32.45654 W-104.20407

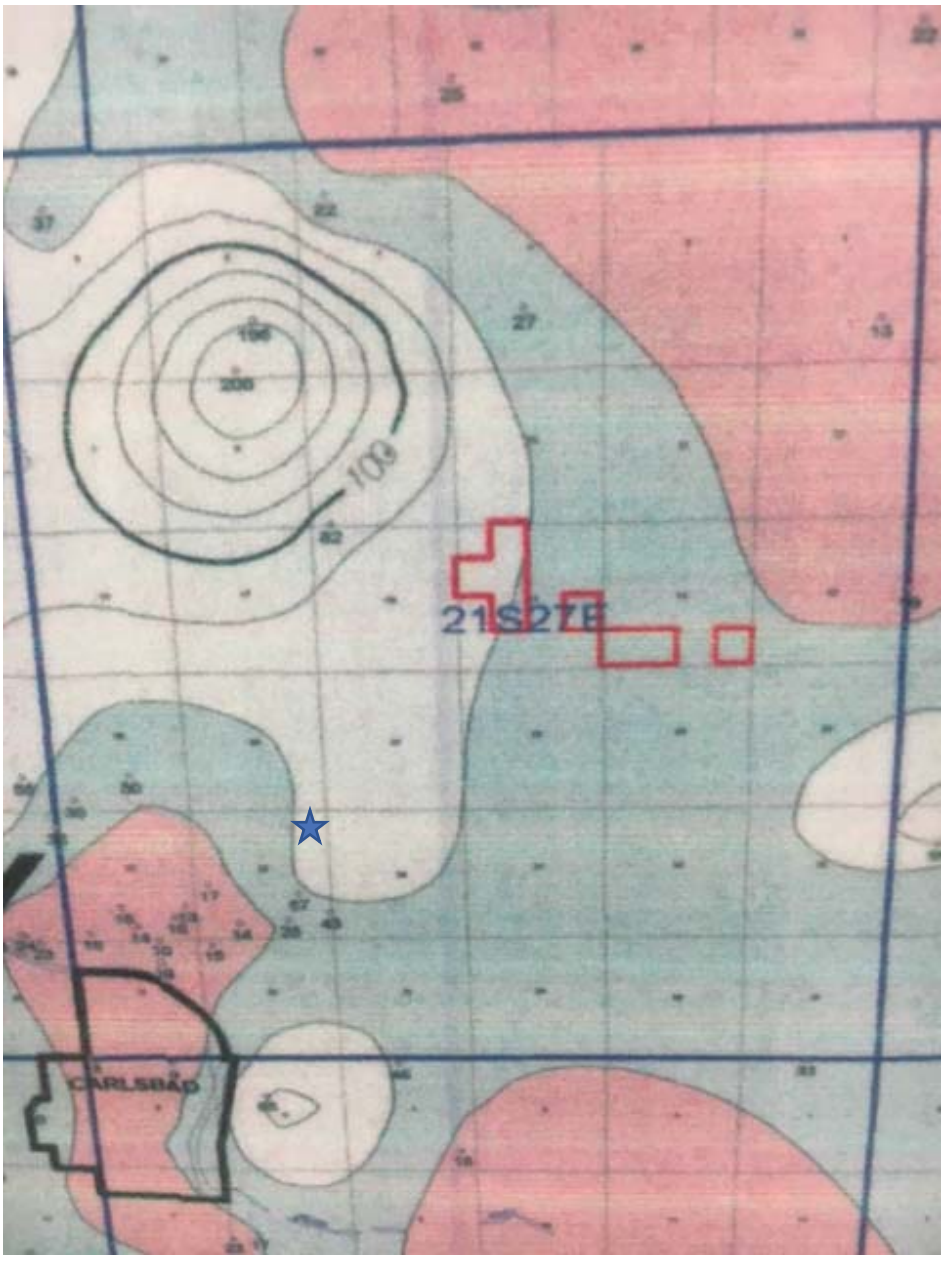
EAST, N 32.45665 W-104.20377

WEST, N 32.45657 W-104.20449

Oxy, Simpson CDM Com #1H CTB

U/L A, Section 29, T21S T27E

Groundwater: <50’



New Mexico Office of the State Engineer
Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 01875		C	ED	4	1	1	28	21S	27E	575157	3591204*	509	170	40	130
C 01449		C	ED	1	3	3	21	21S	27E	574950	3591807*	587	108	75	33
C 00096		CUB	ED				29	21S	27E	574063	3590675*	860	91		
C 00779		C	ED				29	21S	27E	574063	3590675*	860	247	18	229
C 00781		C	ED				29	21S	27E	574063	3590675*	860	302	29	273
C 00888		C	ED				29	21S	27E	574063	3590675*	860	270	12	258
C 01709		C	ED				29	21S	27E	574063	3590675*	860	42	15	27
C 00925		C	ED		1	3	28	21S	27E	575070	3590498*	900	300	46	254
C 01653		C	ED		4	1	29	21S	27E	573856	3590882*	901	60	20	40
C 00688		C	ED	2	2	3	29	21S	27E	573959	3590579*	1001	90	31	59
C 01087		C	ED			1	29	21S	27E	573654	3591077*	1026	310	16	294
C 00652			ED	2	4	4	29	21S	27E	574771	3590188*	1115	458		
C 02645		C	ED	2	4	4	29	21S	27E	574771	3590188*	1115	195	45	150
C 02837		C	ED	2	4	4	29	21S	27E	574771	3590188*	1115	179	155	24
C 03614 POD1		CUB	ED	1	2	3	29	21S	27E	573836	3590510	1136	228	30	198
C 01321		C	LE		2	3	29	21S	27E	573860	3590480*	1141	270	60	210
C 01755		C	ED		2	3	29	21S	27E	573860	3590480*	1141	320	17	303
C 02045		C	ED		2	3	29	21S	27E	573860	3590480*	1141	80	29	51
C 00552		C	ED	1	2	3	29	21S	27E	573759	3590579	1149	240	24	216
C 00673		C	ED	2	3	4	29	21S	27E	574367	3590182*	1152	309	30	279
C 01644		C	ED		1	1	29	21S	27E	573450	3591278*	1206	66	35	31
C 01650		C	ED		4	4	29	21S	27E	574672	3590089*	1209	45		
C 00222			ED	1	3	4	29	21S	27E	574167	3590182*	1218	297		
C 00767			ED	1	3	4	29	21S	27E	574167	3590182*	1218	150	26	124
C 00725		C	ED	4	3	1	29	21S	27E	573552	3590775*	1221	222	22	200
C 03903 POD1		CUB	ED	4	3	1	29	21S	27E	573540	3590712	1260	165		
C 01047			ED		3	1	29	21S	27E	573453	3590876*	1274	288	256	32
C 01662		C	ED		3	1	29	21S	27E	573453	3590876*	1274	40		
C 00188		C	ED		3	3	28	21S	27E	575076	3590094*	1275	280		
C 01947		C	ED		3	4	29	21S	27E	574268	3590083*	1275	43	18	25

C_01553	C	ED	3	1	1	29	21S	27E	573349	3591177*		1312	84		
C_01649	C	ED	3	1	1	29	21S	27E	573349	3591177*		1312	88	25	63
C_02170	C	ED	1	4	3	28	21S	27E	575375	3590196*		1315	253	60	193
C_00943	C	ED	2	4	3	29	21S	27E	573963	3590177*		1317	280	27	253
C_01174	C	ED	1	3	1	29	21S	27E	573352	3590975*		1343	280	27	253
C_01299	C	ED	1	3	1	29	21S	27E	573352	3590975*		1343	284	23	261
C_03171	C	ED	3	2	3	29	21S	27E	573705	3590267		1402	100	31	69
C_00741	C	ED	3	3	1	29	21S	27E	573352	3590775*		1404			
C_01069	C	ED	3	3	1	29	21S	27E	573352	3590775*		1404	355	20	335
C_01248	C	ED	3	3	1	29	21S	27E	573352	3590775*		1404	240	19	221
C_00634	C	ED	4	1	3	29	21S	27E	573555	3590373*		1437	122	17	105
C_01155	C	ED		1	3	29	21S	27E	573456	3590474*		1455	290	22	268
C_00606	C	ED	1	1	3	29	21S	27E	573355	3590573*		1489	252	8	244
C_00749	C	ED	4	4	3	29	21S	27E	573963	3589977*		1491			
C_00566	C	ED	2	2	2	32	21S	27E	574773	3589785*		1517	323	18	305
C_00632	C	ED	2	2	2	32	21S	27E	574773	3589785*		1517	270	30	240
C_00665	CUB	ED	2	4	2	30	21S	27E	573150	3590961*		1543	40		
C_00668	C	ED	2	4	2	30	21S	27E	573150	3590961*		1543	280	12	268
C_01165		ED	2	4	2	30	21S	27E	573150	3590961*		1543	180	26	154
C_00660	C	ED	2	1	2	32	21S	27E	574368	3589780*		1545	325	14	311
C_00337	C	ED	1	1	2	32	21S	27E	574168	3589780*		1594	318	40	278
C_01038	C	ED	3	4	3	29	21S	27E	573763	3589977*		1594	293	14	279
C_01096	C	ED	3	4	3	29	21S	27E	573763	3589977*		1594	306	17	289
C_01101	C	ED	3	4	3	29	21S	27E	573763	3589977*		1594	315	17	298
C_01068	C	ED	3	1	3	29	21S	27E	573355	3590373*		1596	350	20	330
C_02530	C	ED	3	1	3	29	21S	27E	573355	3590373*		1596	30	17	13
C_01175		ED	4	4	2	30	21S	27E	573150	3590761*		1598	100	19	81
C_03484 POD1	C	ED	2	4	4	19	21S	27E	573071	3591694		1633	95	42	53
C_01157	C	ED		4	2	30	21S	27E	573051	3590862*		1663	292	17	275
C_02217	CUB	ED		4	2	30	21S	27E	573051	3590862*		1663	270	17	253

Average Depth to Water: **33 feet**

Minimum Depth: **8 feet**

Maximum Depth: **256 feet**

Record Count: 60

UTMNAD83 Radius Search (in meters):

Easting (X): 574656 **Northing (Y):** 3591298 **Radius:** 1700

***UTM location was derived from PLSS - see Help**

Public Land Survey System (PLSS)

Q64: Q16: NE Q4: NE Sec: 29 Tws: 21S Rng: 27E

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): 574656.0 mtrs Northing (Y): 3591298.0 mtrs

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

Laboratory Analytical Results Summary
Simpson CDM Com #1H

Analyte	Method	Sample Date	SP1 @ 1' 5/3/17	SP1 @ 2' 5/17/17	SP1 @ 3' 5/17/17	SP1 @ 8' 5/17/17	SP1 @ 13' 5/17/17
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	n/a	n/a	n/a	n/a
Toluene	BTEX 8021B		<0.050	n/a	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	n/a	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	n/a	n/a	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	n/a	n/a	n/a	n/a
Chloride	SM4500Cl-B		**5520**	**4080**	**128**	**16**	**32**
GRO	TPH 8015M		<10.0	n/a	n/a	n/a	n/a
DRO	TPH 8015M		<10.0	n/a	n/a	n/a	n/a

Analyte	Method	Sample Date	NORTH @ SURFACE 5/3/17
			mg/Kg
Benzene	BTEX 8021B		n/a
Toluene	BTEX 8021B		n/a
Ethylbenzene	BTEX 8021B		n/a
Total Xylenes	BTEX 8021B		n/a
Total BTEX	BTEX 8021B		n/a
Chloride	SM4500Cl-B		**96**
GRO	TPH 8015M		n/a
DRO	TPH 8015M		n/a

Analyte	Method	Sample Date	SP2 @ 1' 5/3/17	SP2 @ 2' 5/17/17	SP2 @ 3' 5/17/17	SP2 @ 8' 5/17/17	SP2 @ 13' 5/17/17
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		n/a	n/a	n/a	n/a	n/a
Toluene	BTEX 8021B		n/a	n/a	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		n/a	n/a	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		n/a	n/a	n/a	n/a	n/a
Total BTEX	BTEX 8021B		n/a	n/a	n/a	n/a	n/a
Chloride	SM4500Cl-B		**6640**	**1380**	**32**	**48**	**16**
GRO	TPH 8015M		n/a	n/a	n/a	n/a	n/a
DRO	TPH 8015M		n/a	n/a	n/a	n/a	n/a

Analyte	Method	Sample Date	EAST @ SURFACE 5/3/17
			mg/Kg
Benzene	BTEX 8021B		n/a
Toluene	BTEX 8021B		n/a
Ethylbenzene	BTEX 8021B		n/a
Total Xylenes	BTEX 8021B		n/a
Total BTEX	BTEX 8021B		n/a
Chloride	SM4500Cl-B		**96**
GRO	TPH 8015M		n/a
DRO	TPH 8015M		n/a

Analyte	Method	Sample Date	SP3 @ 1' 5/3/17	SP3 @ 2' 5/17/17	SP3 @ 3' 5/18/17	SP3 @ 8' 5/18/17	SP3 @ 13' 5/18/17
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		n/a	n/a	n/a	n/a	n/a
Toluene	BTEX 8021B		n/a	n/a	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		n/a	n/a	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		n/a	n/a	n/a	n/a	n/a
Total BTEX	BTEX 8021B		n/a	n/a	n/a	n/a	n/a
Chloride	SM4500Cl-B		**7440**	**4040**	**80**	**48**	**64**
GRO	TPH 8015M		n/a	n/a	n/a	n/a	n/a
DRO	TPH 8015M		n/a	n/a	n/a	n/a	n/a

Analyte	Method	Sample Date	WEST @ SURFACE 5/3/17
			mg/Kg
Benzene	BTEX 8021B		n/a
Toluene	BTEX 8021B		n/a
Ethylbenzene	BTEX 8021B		n/a
Total Xylenes	BTEX 8021B		n/a
Total BTEX	BTEX 8021B		n/a
Chloride	SM4500Cl-B		**112**
GRO	TPH 8015M		n/a
DRO	TPH 8015M		n/a

Analyte	Method	Sample Date	SP4 @ 1' 5/3/17	SP4 @ 2' 5/18/17	SP4 @ 3' 5/18/17	SP4 @ 8' 5/18/17	SP4 @ 13' 5/18/17
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	n/a	n/a	n/a	n/a
Toluene	BTEX 8021B		<0.050	n/a	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	n/a	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	n/a	n/a	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	n/a	n/a	n/a	n/a
Chloride	SM4500Cl-B		**6800**	**656**	**64**	**80**	**64**
GRO	TPH 8015M		<10.0	n/a	n/a	n/a	n/a
DRO	TPH 8015M		<10.0	n/a	n/a	n/a	n/a

Analyte	Method	Sample Date	SOUTH @ SURFACE 5/3/17
			mg/Kg
Benzene	BTEX 8021B		n/a
Toluene	BTEX 8021B		n/a
Ethylbenzene	BTEX 8021B		n/a
Total Xylenes	BTEX 8021B		n/a
Total BTEX	BTEX 8021B		n/a
Chloride	SM4500Cl-B		**96**
GRO	TPH 8015M		n/a
DRO	TPH 8015M		n/a

Analyte	Method	Sample Date	SP5 @ 1' 5/3/17	SP5 @ 2' 5/18/17	SP5 @ 3' 5/18/17	SP5 @ 8' 5/18/17	SP5 @ 13' 5/18/17
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		n/a	n/a	n/a	n/a	n/a
Toluene	BTEX 8021B		n/a	n/a	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		n/a	n/a	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		n/a	n/a	n/a	n/a	n/a
Total BTEX	BTEX 8021B		n/a	n/a	n/a	n/a	n/a
Chloride	SM4500Cl-B		**6720**	**464**	**80**	**192**	**96**
GRO	TPH 8015M		n/a	n/a	n/a	n/a	n/a
DRO	TPH 8015M		n/a	n/a	n/a	n/a	n/a

CARDINAL Laboratories

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

May 15, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: SIMPSON CDM COM #1H

Enclosed are the results of analyses for samples received by the laboratory on 05/08/17 11:25.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	05/08/2017	Sampling Date:	05/03/2017
Reported:	05/15/2017	Sampling Type:	Soil
Project Name:	SIMPSON CDM COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	CARLSBAD, NM		

Sample ID: SP 1 @ 1' (H701220-01)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/15/2017	ND	2.08	104	2.00	1.17	
Toluene*	<0.050	0.050	05/15/2017	ND	2.10	105	2.00	1.84	
Ethylbenzene*	<0.050	0.050	05/15/2017	ND	2.12	106	2.00	2.63	
Total Xylenes*	<0.150	0.150	05/15/2017	ND	6.23	104	6.00	1.86	
Total BTEX	<0.300	0.300	05/15/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *128 %* *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	**5520**	16.0	05/09/2017	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	<10.0	10.0	05/12/2017	ND	187	93.6	200	1.76	
DRO >C10-C28	<10.0	10.0	05/12/2017	ND	191	95.5	200	0.844	

Surrogate: 1-Chlorooctane *84.3 %* *28.3-164*

Surrogate: 1-Chlorooctadecane *81.6 %* *34.7-157*

Sample ID: SP 2 @ 1' (H701220-02)

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6640**	16.0	05/09/2017	ND	432	108	400	3.64	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	05/08/2017	Sampling Date:	05/03/2017
Reported:	05/15/2017	Sampling Type:	Soil
Project Name:	SIMPSON CDM COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	CARLSBAD, NM		

Sample ID: SP 3 @ 1' (H701220-03)

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**7440**	16.0	05/09/2017	ND	432	108	400	3.64	

Sample ID: SP 4 @ 1' (H701220-04)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/13/2017	ND	2.08	104	2.00	1.17	
Toluene*	<0.050	0.050	05/13/2017	ND	2.10	105	2.00	1.84	
Ethylbenzene*	<0.050	0.050	05/13/2017	ND	2.12	106	2.00	2.63	
Total Xylenes*	<0.150	0.150	05/13/2017	ND	6.23	104	6.00	1.86	
Total BTEX	<0.300	0.300	05/13/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *128 %* *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	**6800**	16.0	05/09/2017	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	<10.0	10.0	05/12/2017	ND	187	93.6	200	1.76	
DRO >C10-C28	<10.0	10.0	05/12/2017	ND	191	95.5	200	0.844	

Surrogate: 1-Chlorooctane *75.1 %* *28.3-164*

Surrogate: 1-Chlorooctadecane *79.5 %* *34.7-157*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	05/08/2017	Sampling Date:	05/03/2017
Reported:	05/15/2017	Sampling Type:	Soil
Project Name:	SIMPSON CDM COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	CARLSBAD, NM		

Sample ID: SP 5 @ 1' (H701220-05)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6720**	16.0	05/09/2017	ND	432	108	400	3.64	

Sample ID: NORTH @ SURFACE (H701220-06)

Chloride, SM4500Cl-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	05/09/2017	ND	432	108	400	3.64	

Sample ID: EAST @ SURFACE (H701220-07)

Chloride, SM4500Cl-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	05/09/2017	ND	432	108	400	3.64	

Sample ID: WEST @ SURFACE (H701220-08)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	05/09/2017	ND	432	108	400	3.64	

Sample ID: SOUTH @ SURFACE (H701220-09)

Chloride, SM4500Cl-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	05/09/2017	ND	432	108	400	3.64	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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.
Project Manager:	Cliff Brunson
Address:	P.O. Box 805
City:	Hobbs
State:	NM
Zip:	88241
Phone #:	575-397-6388
Fax #:	575-397-0397
Project #:	
Project Owner:	OXY
Project Name:	Simpson CDM Com #1H
Project Location:	Carlsbad
Sampler Name:	J.D.

BILL TO

P.O. #:	
Company:	OXY
Attn:	Jimmy
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX	TPH	Cl-
H701220-1	Sp 1 e 1	G	1			X					X		5-3	059	X	X	X
-2	Sp 2 e 1	G	1			X					X			944			X
-3	Sp 3 e 1	G	1			X					X			1041			X
-4	Sp 4 e 1	G	1			X					X			1157	X	X	X
-5	Sp 5 e 1	G	1			X					X			129			X
-6	Sp NO Sw	G	1			X					X			150			X
-7	EA Sw	G	1			X					X			215			X
-8	WO Sw	G	1			X					X			230			X
-9	SO Sw	G	1			X					X			240			X

Relinquished By:	Date: 5-6-17	Received By:	
	Time: 11:25	Jodi Henson	
Relinquished By:	Date:	Received By:	
	Time:		

Delivered By: (Circle One)
Sampler - UPS - Bus - Other: #75 -6.8°C

Sample Condition: Cool: ☑ Yes ☐ No — Intact: ☑ Yes ☐ No

CHECKED BY: (Initials) JH

Phone Result:	☐ Yes	☐ No	Add'l Phone #:
Fax Result:	☐ Yes	☐ No	Add'l Fax #:
REMARKS:			

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

CARDINAL Laboratories

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

May 25, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: SIMPSON CDM COM #1H

Enclosed are the results of analyses for samples received by the laboratory on 05/19/17 14:50.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	05/19/2017	Sampling Date:	05/17/2017
Reported:	05/25/2017	Sampling Type:	Soil
Project Name:	SIMPSON CDM COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	CARLSBAD, NM		

Sample ID: SP 1 @ 2' (H701348-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4080**	16.0	05/22/2017	ND	448	112	400	7.41	

Sample ID: SP 1 @ 3' (H701348-02)

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	05/22/2017	ND	416	104	400	3.77	

Sample ID: SP 1 @ 8' (H701348-03)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	05/22/2017	ND	416	104	400	3.77	

Sample ID: SP 1 @ 13' (H701348-04)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	05/22/2017	ND	416	104	400	3.77	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	05/19/2017	Sampling Date:	05/17/2017
Reported:	05/25/2017	Sampling Type:	Soil
Project Name:	SIMPSON CDM COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	CARLSBAD, NM		

Sample ID: SP 2 @ 2' (H701348-05)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1380**	16.0	05/22/2017	ND	416	104	400	3.77	

Sample ID: SP 2 @ 3' (H701348-06)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	05/22/2017	ND	416	104	400	3.77	

Sample ID: SP 2 @ 8' (H701348-07)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	05/22/2017	ND	416	104	400	3.77	

Sample ID: SP 2 @ 13' (H701348-08)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	05/22/2017	ND	416	104	400	3.77	

Sample ID: SP 3 @ 2' (H701348-09)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4040**	16.0	05/22/2017	ND	416	104	400	3.77	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	05/19/2017	Sampling Date:	05/18/2017
Reported:	05/25/2017	Sampling Type:	Soil
Project Name:	SIMPSON CDM COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	CARLSBAD, NM		

Sample ID: SP 3 @ 3' (H701348-10)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	05/22/2017	ND	416	104	400	3.77	

Sample ID: SP 3 @ 8' (H701348-11)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	05/22/2017	ND	416	104	400	3.77	

Sample ID: SP 3 @ 13' (H701348-12)

Chloride, SM4500Cl-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	05/22/2017	ND	416	104	400	3.77	

Sample ID: SP 4 @ 2' (H701348-13)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**656**	16.0	05/22/2017	ND	416	104	400	3.77	

Sample ID: SP 4 @ 3' (H701348-14)

Chloride, SM4500Cl-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	05/22/2017	ND	416	104	400	3.77	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	05/19/2017	Sampling Date:	05/18/2017
Reported:	05/25/2017	Sampling Type:	Soil
Project Name:	SIMPSON CDM COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	CARLSBAD, NM		

Sample ID: SP 4 @ 8' (H701348-15)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	05/22/2017	ND	416	104	400	3.77	

Sample ID: SP 4 @ 13' (H701348-16)

Chloride, SM4500Cl-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	05/22/2017	ND	416	104	400	3.77	

Sample ID: SP 5 @ 2' (H701348-17)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**464**	16.0	05/22/2017	ND	416	104	400	3.77	

Sample ID: SP 5 @ 3' (H701348-18)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	05/22/2017	ND	416	104	400	3.77	

Sample ID: SP 5 @ 8' (H701348-19)

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	05/22/2017	ND	416	104	400	3.77	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	05/19/2017	Sampling Date:	05/18/2017
Reported:	05/25/2017	Sampling Type:	Soil
Project Name:	SIMPSON CDM COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	CARLSBAD, NM		

Sample ID: SP 5 @ 13' (H701348-20)

Chloride, SM4500Cl-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	05/22/2017	ND	416	104	400	3.77	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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.
Project Manager:	Cliff Brunson
Address:	P.O. Box 805
City:	Hobbs
State:	NM
Zip:	88241
Phone #:	575-397-6388
Fax #:	575-397-0397
Project #:	
Project Owner:	OXY
Project Name:	Simpson CDM Com # 1H
Project Location:	Carlsbad, NM
Sampler Name:	VO

BILL TO

P.O. #:	
Company:	OXY
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Cl-
H701342-01	Spoil 2	C	1			X					X		5-17	919	X
02	3	C	1			X					X			933	X
03	0	C	1			X					X			1015	X
04	13	C	1			X					X			1101	X
05	Spoil 3	C	1			X					X			1115	X
06	3	C	1			X					X			1122	X
07	0	C	1			X					X			1140	X
08	13	C	1			X					X			1215	X
09	Spoil 4	C	1			X					X			141	X
10	3	C	1			X					X		5-18	933	X

Relinquished By:	Date: 5-19-17	Received By:	Jennifer Gelley
	Time: 2:36 pm		
Relinquished By:	Date: 5.19.17	Received By:	
J Gelley	Time: 2:50p		
Delivered By: (Circle One)	Sample Condition: Cool: Yes / No; Intact: Yes / No	CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other:	-17.8°C		

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	BBC International, Inc.
Project Manager:	Cliff Brunson
Address:	P.O. Box 805
City:	Hobbs **State:** NM **Zip:** 88241
Phone #:	575-397-6388 **Fax #:** 575-397-0397
Project #:	**Project Owner:** OXY
Project Name:	Simpson CDM Com 1H
Project Location:	Carlsbad, NM
Sampler Name:	VU

BILL TO

P.O. #:	
Company:	OXY
Attn:	
Address:	
City:	
State:	**Zip:**
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Cl.
11	Sp3e 0	C	1			X					X		5.18	1015	X
12	13	C	1			X					X			1037	X
13	Sp4e 2	C	1			X					X			1045	X
14	3	C	1			X					X			1058	X
15	8	C	1			X					X			1119	X
16	13	C	1			X					X			1201	X
17	Sp5e 2	C	1			X					X			101	X
18	3	C	1			X					X			115	X
19	0	C	1			X					X			205	X
20	13	C	1			X					X			255	X

Relinquished By:	**Date:** 5-19-17	**Received By:**	Jennifer Gilkey
	Time: 2:36pm		
Relinquished By: J. Gilkey	**Date:** 5/19/17	**Received By:**	
	Time: 2:50		

Delivered By: (Circle One)
Sampler - UPS - Bus - Other: -17.8°C

Sample Condition		CHECKED BY: (Initials)
Cool	Intact	
☑ Yes ☐ No	☑ Yes ☐ No	CHK #15

Phone Result:	☐ Yes	☐ No	**Add'l Phone #:**
Fax Result:	☐ Yes	☐ No	**Add'l Fax #:**
REMARKS:			

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

NM OIL CONSERVATION
ARTESIA DISTRICT

APR 25 2017

RECEIVED

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised April 3, 2017

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

Release Notification and Corrective Action

nAB1711829191

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company OXY USA WTP LP 192463	Contact CASEY L SUMMERS
Address PO BOX 4294; HOUSTON, TX 77210	Telephone No. 575-513-8289
Facility Name SIMPSON CDM COM #1H CTB	Facility Type CTB

Surface Owner FEE	Mineral Owner FEE	API No. 30-015-42012

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	29	21S	27E	480	NORTH	310	EAST	EDDY

Latitude_32.4569092_ Longitude_-104.2045975_____ NAD83

NATURE OF RELEASE

Type of Release PRODUCED WATER	Volume of Release 40 bbls	Volume Recovered 35 bbls
Source of Release 3 INCH STEEL WATER LINE	Date and Hour of Occurrence 4/23/2017	Date and Hour of Discovery 4/24/2017
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? MIKE BRATCHER-NMOCD; CYSTAL WEAVER-NMOCD;	
By Whom? CASEY L SUMMERS	Date and Hour 04/24/2017 11:03AM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Spill caused by a failure in a 3 inch steel water line from the heater treater to the water tank. The failed line was replaced. 35 bbls of free fluids was recovered by vacuum truck.

Describe Area Affected and Cleanup Action Taken.*

The affected area is approximately 149 x 8 FT (measurements are subject to change with future GPS track). Remediation will be completed in accordance with a remediation plan approved by the 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 L SUMMERS	Approved by Environmental Specialist: Signed By Mike Bratcher
Title: ENVIRONMENTAL ADVISOR	Approval Date: 4/26/17 Expiration Date: N/A
E-mail Address: casey_summers@oxy.com	Conditions of Approval: See attached ☐ Attached
Date: 4-25-17 Phone: 575-513-8289	

* Attach Additional Sheets If Necessary

2RP-4188

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 4/25/17 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4188 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 2 office in ARTESIA on or before 5/25/17. 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; C_6 thru C_{36}), 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; C_6 thru C_{36}), 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

Bratcher, Mike, EMNRD

From: Casey_Summers@oxy.com
Sent: Tuesday, April 25, 2017 8:26 AM
To: Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD; Jennifer_Hudgens@oxy.com
Cc: cbrunson@bbcinternational.com; kswinney@bbcinternational.com; kathy@bbcinternational.com; jgilkey@bbcinternational.com
Subject: RE: Simpson CDM 1H CTB
Attachments: SIMPSON CDM 1H CTB - INITIAL C-141.pdf

All,
Please find the initial C141 for the Simpson CDM 1H CTB attached.

Please let me know if you have any questions.

Casey Summers
O: (575)-628-4152
C: (575)-513-8289

From: Summers, Casey L
Sent: Monday, April 24, 2017 10:03 AM
To: 'Bratcher, Mike, EMNRD' <mike.bratcher@state.nm.us>; 'Weaver, Crystal, EMNRD' <Crystal.Weaver@state.nm.us>; 'Tucker, Shelly' <stucker@blm.gov>; Hudgens, Jennifer A <Jennifer_Hudgens@oxy.com>
Cc: 'Cliff Brunson' <cbrunson@bbcinternational.com>; 'Ken Swinney' <kswinney@bbcinternational.com>; 'Kathy Purvis' <kathy@bbcinternational.com>; 'Jennifer Gilkey' <jgilkey@bbcinternational.com>
Subject: Simpson CDM 1H CTB

All,
This is to inform you that Oxy Permian had a release in Eddy County at the Simpson CDM 1H CTB on 4/23/2017.

- **Release Location**: Legal A-29-21S-27E, API: 30-015-42012
- **Release Volume**: 0 bbls of Oil and 40 bbls of Produced Water
- **Recovered**: 35 bbls recovered
- **Cause of Release**: 3 INCH STEEL WATER LINE FROM THE HEATER TREATER TO WATER TANK FAILED
- **Approximate Area impacted by release**: 60Lx3W FT (measurements are subject to change with future GPS track)
- **GPS Coordinates and Driving Direction**: 32.4569092,-104.2045975, FROM CARLSBAD GO EAST ON HOBBS HWY 4 MILES, GO NORTH ON TRUCK BYPASS FOR 1.5 MILE, TAKE LEFT AT FIRST CATTLEGUARD TO 1ST INTERSECTION, TURN WEST GO .5 MILE TO BATTERY ON LEFT

Please let me know if you have any questions.

Casey Summers
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C: (575)-513-8289

Bratcher, Mike, EMNRD

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To: Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD; stucker@blm.gov; Jennifer_Hudgens@oxy.com
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