

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

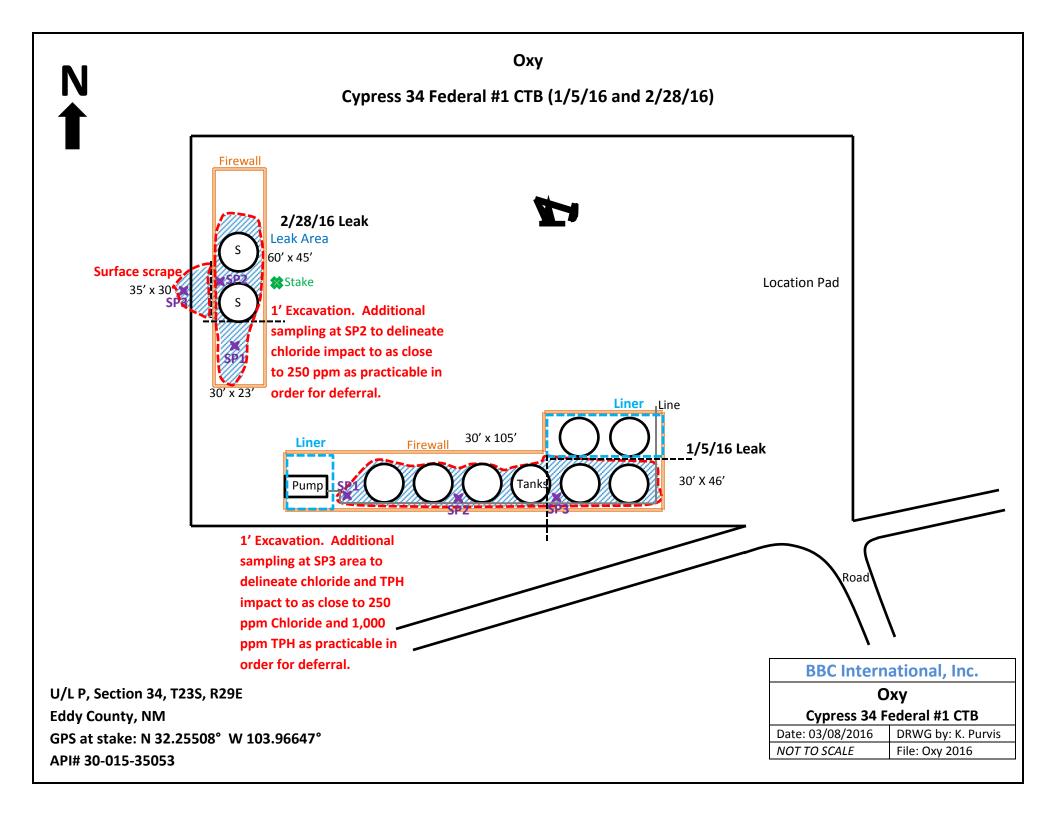
## **OXY – CYPRESS 34 FEDERAL #1 CTB**

## **REMEDIATION PLAN**

OXY will excavate the spill areas as depicted on the following site diagram. There are two spills at this site. The 1/5/16 spill will be excavated to a depth of 1 foot. Additional sampling will be conducted to delineate the chloride and TPH impact near SP3 to find as close to 250 ppm chloride and 1,000 ppm TPH as practicable. This site will be deferred until the battery is closed. The excavated area will be backfilled with clean soil.

The 2/28/16 spill will be excavated to a depth of 1 foot. Additional sampling will be conducted to delineate the chloride impact near SP2 to find as close to 250 ppm chloride as practicable. This site will be deferred until the battery is closed. The excavated area will be backfilled with clean soil.

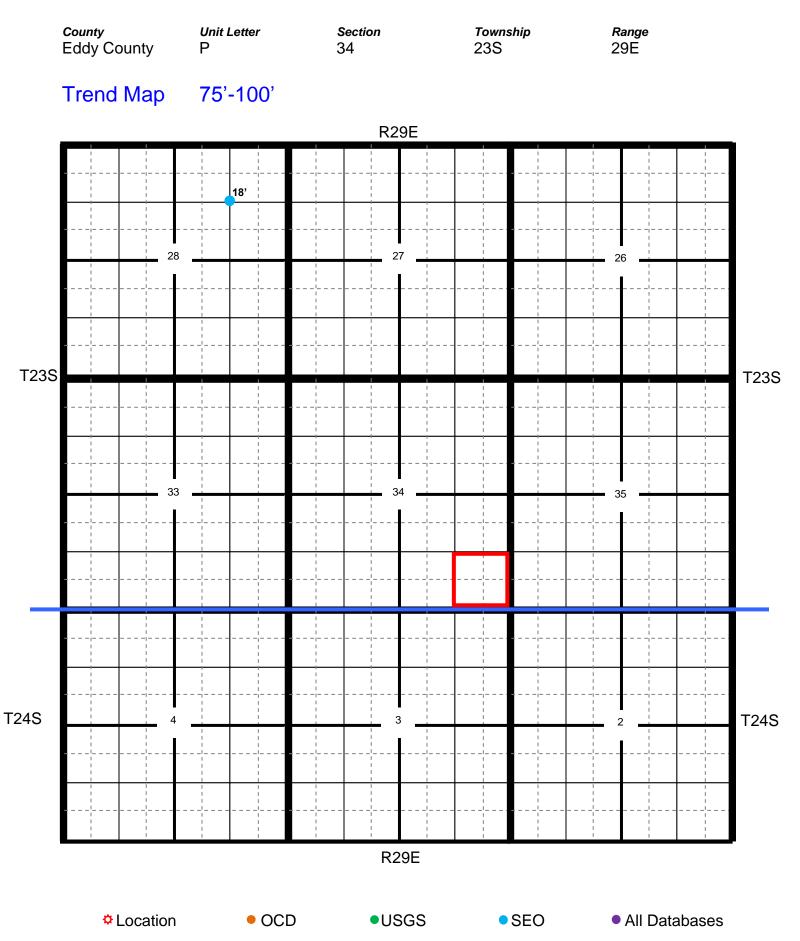
All excavated materials will be disposed of at an NMOCD-approved disposal facility.





## **Groundwater Plot**

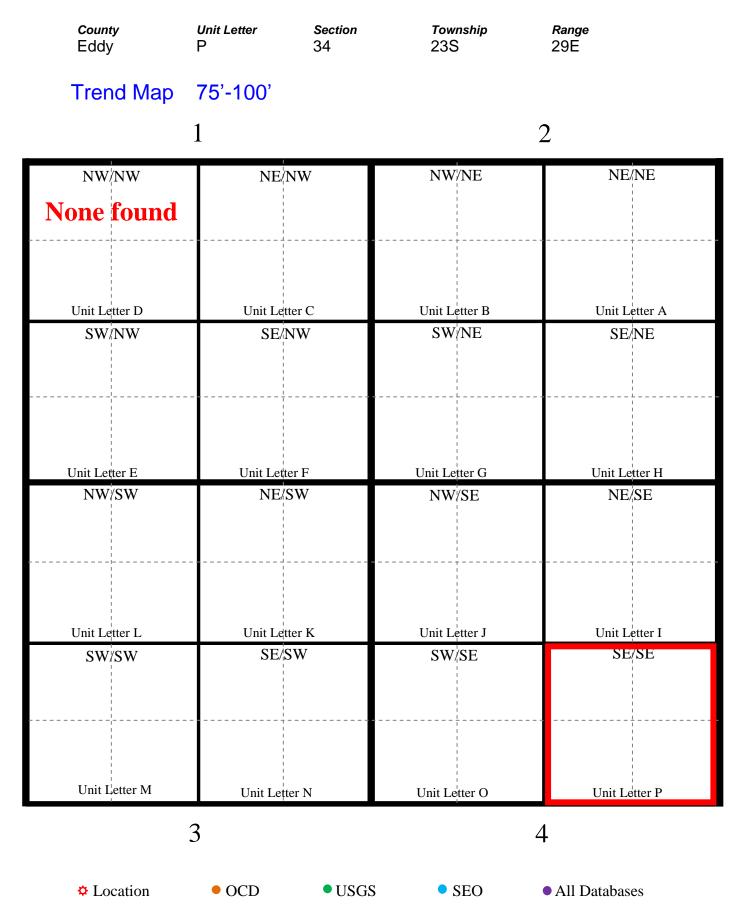
## Oxy Cypress 34 Federal #1 CTB





Section Quarters

# Oxy Cypress 34 Federal #1 CTB



### Laboratory Analytical Results Summary Cypress 34 Federal #1 CTB (1/5/16 leak)

		Sample	SP1 @ 1'
Analyte	Method	Date	3/8/16
			mg/Kg
Benzene	BTEX 8021B		<0.100
Toluene	BTEX 8021B		0.512
Ethylbenzene	BTEX 8021B		0.1
<b>Total Xylenes</b>	BTEX 8021B		5.49
Total BTEX	BTEX 8021B		6
Chloride	SM4500CI-B		8000
GRO	TPH 8015M		223
DRO	TPH 8015M		3690

		Sample	SP2 @ 1'
Analyte	Method	Date	3/8/16
			mg/Kg
Benzene	BTEX 8021B		<0.050
Toluene	BTEX 8021B		0.62
Ethylbenzene	BTEX 8021B		< 0.050
Total Xylenes	BTEX 8021B		6.13
Total BTEX	BTEX 8021B		6.75
Chloride	SM4500CI-B		6930
GRO	TPH 8015M		107
DRO	TPH 8015M		2130

		Sample	SP3 @ 1'
Analyte	Method	Date	3/8/16
			mg/Kg
Benzene	BTEX 8021B		<1.00
Toluene	BTEX 8021B		0.323
Ethylbenzene	BTEX 8021B		<0.100
Total Xylenes	BTEX 8021B		4.66
Total BTEX	BTEX 8021B		4.98
Chloride	SM4500CI-B		5730
GRO	TPH 8015M		190
DRO	TPH 8015M		3270

### Laboratory Analytical Results Summary Cypress 34 Federal #1 CTB

		Sample	SP1 @ 1'
Analyte	Method	Date	4/11/16
			mg/Kg
Benzene	BTEX 8021B		<0.050
Toluene	BTEX 8021B		< 0.050
Ethylbenzene	BTEX 8021B		< 0.050
Total Xylenes	BTEX 8021B		0.597
Total BTEX	BTEX 8021B		0.63
Chloride	SM4500CI-B		6130
GRO	TPH 8015M		30.4
DRO	TPH 8015M		1730

		Sample	SP2 @ 2'
Analyte	Method	Date	4/11/16
			mg/Kg
Benzene	BTEX 8021B		<0.050
Toluene	BTEX 8021B		0.061
Ethylbenzene	BTEX 8021B		< 0.050
Total Xylenes	BTEX 8021B		0.68
Total BTEX	BTEX 8021B		0.741
Chloride	SM4500CI-B		3720
GRO	TPH 8015M		135
DRO	TPH 8015M		7180

		Sample	SP3 @ 2'
Analyte	Method	Date	4/11/16
			mg/Kg
Benzene	BTEX 8021B		<0.050
Toluene	BTEX 8021B		0.056
Ethylbenzene	BTEX 8021B		< 0.050
Total Xylenes	BTEX 8021B		0.748
Total BTEX	BTEX 8021B		0.803
Chloride	SM4500CI-B		4400
GRO	TPH 8015M		123
DRO	TPH 8015M		6430

### Laboratory Analytical Results Summary Cypress 34 Federal #1 CTB (2/28/16 leak)

		Sample	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'	SP1 @ 4'
Analyte	Method	Date	3/7/16	3/7/16	3/7/16	3/8/16
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	< 0.050	< 0.050	< 0.050
Toluene	BTEX 8021B		0.071	< 0.050	< 0.050	< 0.050
Ethylbenzene	BTEX 8021B		<0.050	< 0.050	< 0.050	< 0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		< 0.300	< 0.300	< 0.300	< 0.300
Chloride	SM4500CI-B		336	880	1840	2360
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		<10.0	20.7	165	104

		Sample	SP2 @ 1'	SP2 @ 2'	SP2 @ 3'	SP2 @ 4'
Analyte	Method	Date	3/7/16	3/7/16	3/7/16	3/8/16
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	< 0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	0.051
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	< 0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	< 0.300
Chloride	SM4500CI-B		416	768	688	3040
GRO	TPH 8015M		<10.0	<10.0	<10.0	12.5
DRO	TPH 8015M		15.2	<10.0	<10.0	374

		Sample	SP3 @ 1'	SP3 @ 2'
Analyte	Method	Date	3/7/16	3/7/16
			mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050
Toluene	BTEX 8021B		<0.050	< 0.050
Ethylbenzene	BTEX 8021B		<0.050	< 0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	< 0.300
Chloride	SM4500CI-B		<16.0	<16.0
GRO	TPH 8015M		<10.0	<10.0
DRO	TPH 8015M		148	151



March 17, 2016

Cliff Brunson BBC International, Inc. P.O. Box 805 Hobbs, NM 88241

RE: CYPRESS 34 FEDERAL #1 CTB

Enclosed are the results of analyses for samples received by the laboratory on 03/11/16 13:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

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

Method EPA 552.2	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. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	03/11/2016	Sampling Date:	03/08/2016
Reported:	03/17/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SOUTH 128		

### Sample ID: SP 1 @ 1' (H600542-01)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	03/17/2016	ND	1.97	98.6	2.00	1.09	
Toluene*	0.512	0.100	03/17/2016	ND	1.89	94.4	2.00	2.12	
Ethylbenzene*	<0.100	0.100	03/17/2016	ND	1.66	83.1	2.00	2.82	
Total Xylenes*	5.49	0.300	03/17/2016	ND	5.13	85.5	6.00	2.14	
Total BTEX	6.00	0.600	03/17/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	140 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8000	16.0	03/17/2016	ND	400	100	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	223	10.0	03/15/2016	ND	219	109	200	10.7	
DRO >C10-C28	3690	10.0	03/15/2016	ND	239	119	200	13.3	
Surrogate: 1-Chlorooctane	109 9	% 35-147	7						

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/11/2016	Sampling Date:	03/08/2016
Reported:	03/17/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SOUTH 128		

### Sample ID: SP 2 @ 1' (H600542-02)

BTEX 8021B	mg/	kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2016	ND	1.97	98.6	2.00	1.09	
Toluene*	0.620	0.050	03/17/2016	ND	1.89	94.4	2.00	2.12	
Ethylbenzene*	<0.050	0.050	03/17/2016	ND	1.66	83.1	2.00	2.82	
Total Xylenes*	6.13	0.150	03/17/2016	ND	5.13	85.5	6.00	2.14	
Total BTEX	6.75	0.300	03/17/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	176 9	73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6930	16.0	03/17/2016	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	107	10.0	03/15/2016	ND	201	100	200	10.0	
DRO >C10-C28	2130	10.0	03/15/2016	ND	216	108	200	9.28	
Surrogate: 1-Chlorooctane	113 9	6 35-147	,						
Surrogate: 1-Chlorooctadecane	139 9	6 28-171							

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/11/2016	Sampling Date:	03/08/2016
Reported:	03/17/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SOUTH 128		

### Sample ID: SP 3 @ 1' (H600542-03)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	03/17/2016	ND	1.97	98.6	2.00	1.09	
Toluene*	0.323	0.100	03/17/2016	ND	1.89	94.4	2.00	2.12	
Ethylbenzene*	<0.100	0.100	03/17/2016	ND	1.66	83.1	2.00	2.82	
Total Xylenes*	4.66	0.300	03/17/2016	ND	5.13	85.5	6.00	2.14	
Total BTEX	4.98	0.600	03/17/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	131 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5730	16.0	03/17/2016	ND	400	100	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	190	10.0	03/15/2016	ND	201	100	200	10.0	
DRO >C10-C28	3270	10.0	03/15/2016	ND	216	108	200	9.28	
Surrogate: 1-Chlorooctane	123 9	% 35-147	7						
Surrogate: 1-Chlorooctadecane	153 9	% 28-171							

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



### **Notes and Definitions**

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside if 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

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Acharden Bate	Address:   P.O. Box 805     City:   Hobbs   State:   NM   Zip:   88241     Project #:   Project Owner:   Project Owner:   NU     Project Location:   Sampler Name:   MUSCOM   Barnol II.     None #:   State:   None   State:   None     Robit Location:   Sampler I.D.   Barnol II.   Barnol III.   <	101 East Marland, Hobbs, NM 88240 (505) 393-2326 FAX (505) 393-2476 Company Name: BBC International, Inc. Project Manager: Cliff Brunson
ived By: Phone Result:   ived By: Fax Result:   Sample Condition CHECKED BY:   Cool Intact   Mo No	Company:   397 Address:   397 Address:   274 City:   574 State:   274 State:   275 Solil   01L State:   275 Solil   01L State:   275 Solil   01L State:   276 State:   277 State:   277 State:   278 State:   2700 State:   2700 State:   271 State:   2700 <th>P.O. #</th>	P.O. #
Ves No Add'i Phone #:	BIEX	ANALYSIS REQUEST
		-

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Page 6 of 6



April 21, 2016

Cliff Brunson BBC International, Inc. P.O. Box 805

Hobbs, NM 88241

RE: CYPRESS 34 FEDERAL #1 CTB

Enclosed are the results of analyses for samples received by the laboratory on 04/14/16 9:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab\_accred\_certif.html">www.tceq.texas.gov/field/qa/lab\_accred\_certif.html</a>.

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

Method EPA 552.2	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. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	04/14/2016	Sampling Date:	04/11/2016
Reported:	04/21/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	01/05/16 LEAK	Sample Received By:	Celey D. Keene
Project Location:	SOUTH 128		

### Sample ID: SP1 @ 1' (H600814-01)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/14/2016	ND	1.99	99.4	2.00	3.92	
Toluene*	<0.050	0.050	04/14/2016	ND	1.91	95.6	2.00	3.23	
Ethylbenzene*	<0.050	0.050	04/14/2016	ND	1.74	87.2	2.00	1.99	
Total Xylenes*	0.597	0.150	04/14/2016	ND	5.28	88.0	6.00	2.25	
Total BTEX	0.630	0.300	04/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6130	16.0	04/18/2016	ND	416	104	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	30.4	10.0	04/14/2016	ND	178	89.0	200	12.3	
DRO >C10-C28	1730	10.0	04/14/2016	ND	206	103	200	16.0	QM-07
Surrogate: 1-Chlorooctane	98.2	% 35-147	7						
Surrogate: 1-Chlorooctadecane	192 9	% 28-171							

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	04/14/2016	Sampling Date:	04/11/2016
Reported:	04/21/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	01/05/16 LEAK	Sample Received By:	Celey D. Keene
Project Location:	SOUTH 128		

### Sample ID: SP2 @ 2' (H600814-02)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/14/2016	ND	1.99	99.4	2.00	3.92	
Toluene*	0.061	0.050	04/14/2016	ND	1.91	95.6	2.00	3.23	
Ethylbenzene*	<0.050	0.050	04/14/2016	ND	1.74	87.2	2.00	1.99	
Total Xylenes*	0.680	0.150	04/14/2016	ND	5.28	88.0	6.00	2.25	
Total BTEX	0.741	0.300	04/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	125 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3720	16.0	04/18/2016	ND	416	104	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	135	10.0	04/14/2016	ND	178	89.0	200	12.3	
DRO >C10-C28	7180	10.0	04/14/2016	ND	206	103	200	16.0	
Surrogate: 1-Chlorooctane	110 9	% 35-147	7						
Surrogate: 1-Chlorooctadecane	204 9	% 28-171							

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	04/14/2016	Sampling Date:	04/11/2016
Reported:	04/21/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	01/05/16 LEAK	Sample Received By:	Celey D. Keene
Project Location:	SOUTH 128		

### Sample ID: SP3 @ 2' (H600814-03)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/14/2016	ND	1.99	99.4	2.00	3.92	
Toluene*	0.056	0.050	04/14/2016	ND	1.91	95.6	2.00	3.23	
Ethylbenzene*	<0.050	0.050	04/14/2016	ND	1.74	87.2	2.00	1.99	
Total Xylenes*	0.748	0.150	04/14/2016	ND	5.28	88.0	6.00	2.25	
Total BTEX	0.803	0.300	04/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	126 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	04/18/2016	ND	416	104	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	123	10.0	04/14/2016	ND	178	89.0	200	12.3	
DRO >C10-C28	6430	10.0	04/14/2016	ND	206	103	200	16.0	
Surrogate: 1-Chlorooctane	108 9	% 35-147	7						
Surrogate: 1-Chlorooctadecane	194 9	% 28-171							

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



### **Notes and Definitions**

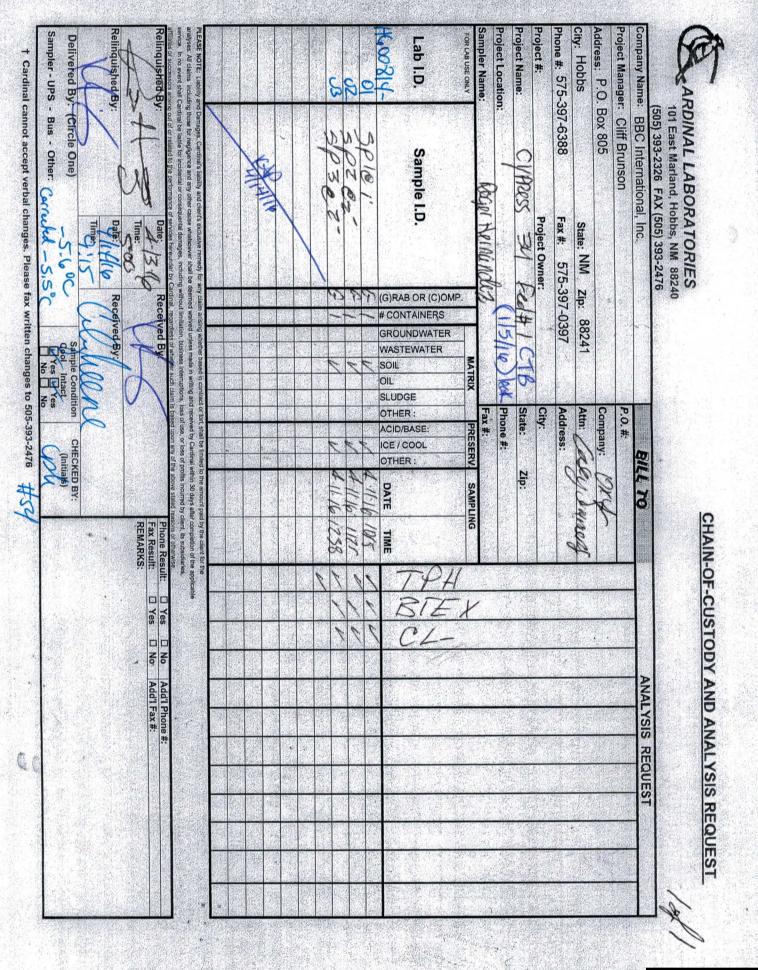
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness 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

#### **Cardinal Laboratories**

### \*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Page 6 of 6



March 17, 2016

Cliff Brunson BBC International, Inc. P.O. Box 805 Hobbs, NM 88241

RE: CYPRESS 34 FEDERAL #1 CTB

Enclosed are the results of analyses for samples received by the laboratory on 03/11/16 13:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

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

Method EPA 552.2	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. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	03/11/2016	Sampling Date:	03/07/2016
Reported:	03/17/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SOUTH 128		

### Sample ID: SP 1 @ 1' (H600541-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/16/2016	ND	2.03	102	2.00	1.63	
Toluene*	0.071	0.050	03/16/2016	ND	1.96	98.1	2.00	2.12	
Ethylbenzene*	<0.050	0.050	03/16/2016	ND	1.75	87.4	2.00	1.92	
Total Xylenes*	<0.150	0.150	03/16/2016	ND	5.30	88.4	6.00	1.65	
Total BTEX	<0.300	0.300	03/16/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 9	73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	03/17/2016	ND	432	108	400	3.77	
ТРН 8015М	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/14/2016	ND	220	110	200	4.67	
DRO >C10-C28	<10.0	10.0	03/14/2016	ND	236	118	200	7.31	
Surrogate: 1-Chlorooctane	82.7	% 35-147	,						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/11/2016	Sampling Date:	03/07/2016
Reported:	03/17/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SOUTH 128		

### Sample ID: SP 1 @ 2' (H600541-02)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/16/2016	ND	2.03	102	2.00	1.63	
Toluene*	<0.050	0.050	03/16/2016	ND	1.96	98.1	2.00	2.12	
Ethylbenzene*	<0.050	0.050	03/16/2016	ND	1.75	87.4	2.00	1.92	
Total Xylenes*	<0.150	0.150	03/16/2016	ND	5.30	88.4	6.00	1.65	
Total BTEX	<0.300	0.300	03/16/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.1	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	880	16.0	03/17/2016	ND	432	108	400	3.77	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/14/2016	ND	220	110	200	4.67	
DRO >C10-C28	20.7	10.0	03/14/2016	ND	236	118	200	7.31	
Surrogate: 1-Chlorooctane	81.5	% 35-147	7						
Surrogate: 1-Chlorooctadecane	84.4	% 28-171							

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/11/2016	Sampling Date:	03/07/2016
Reported:	03/17/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SOUTH 128		

### Sample ID: SP 1 @ 3' (H600541-03)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/16/2016	ND	2.03	102	2.00	1.63	
Toluene*	<0.050	0.050	03/16/2016	ND	1.96	98.1	2.00	2.12	
Ethylbenzene*	<0.050	0.050	03/16/2016	ND	1.75	87.4	2.00	1.92	
Total Xylenes*	<0.150	0.150	03/16/2016	ND	5.30	88.4	6.00	1.65	
Total BTEX	<0.300	0.300	03/16/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.5	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1840	16.0	03/17/2016	ND	432	108	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/15/2016	ND	219	109	200	10.7	
DRO >C10-C28	165	10.0	03/15/2016	ND	239	119	200	13.3	
Surrogate: 1-Chlorooctane	90.9	% 35-147	7						
Surrogate: 1-Chlorooctadecane	84.6	% 28-171							

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/11/2016	Sampling Date:	03/08/2016
Reported:	03/17/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SOUTH 128		

### Sample ID: SP 1 @ 4' (H600541-04)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/16/2016	ND	2.03	102	2.00	1.63	
Toluene*	<0.050	0.050	03/16/2016	ND	1.96	98.1	2.00	2.12	
Ethylbenzene*	<0.050	0.050	03/16/2016	ND	1.75	87.4	2.00	1.92	
Total Xylenes*	<0.150	0.150	03/16/2016	ND	5.30	88.4	6.00	1.65	
Total BTEX	<0.300	0.300	03/16/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	<b>99</b> .7 9	73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2360	16.0	03/17/2016	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/15/2016	ND	219	109	200	10.7	
DRO >C10-C28	104	10.0	03/15/2016	ND	239	119	200	13.3	
Surrogate: 1-Chlorooctane	98.4 9	35-147	,						
Surrogate: 1-Chlorooctadecane	89.4 9	% 28-171							

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/11/2016	Sampling Date:	03/07/2016
Reported:	03/17/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SOUTH 128		

### Sample ID: SP 2 @ 1' (H600541-05)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/16/2016	ND	2.03	102	2.00	1.63	
Toluene*	<0.050	0.050	03/16/2016	ND	1.96	98.1	2.00	2.12	
Ethylbenzene*	<0.050	0.050	03/16/2016	ND	1.75	87.4	2.00	1.92	
Total Xylenes*	<0.150	0.150	03/16/2016	ND	5.30	88.4	6.00	1.65	
Total BTEX	<0.300	0.300	03/16/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	03/17/2016	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/15/2016	ND	219	109	200	10.7	
DRO >C10-C28	15.2	10.0	03/15/2016	ND	239	119	200	13.3	
Surrogate: 1-Chlorooctane	93.4	% 35-147	,						
Surrogate: 1-Chlorooctadecane	88.7	% 28-171							

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/11/2016	Sampling Date:	03/07/2016
Reported:	03/17/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SOUTH 128		

### Sample ID: SP 2 @ 2' (H600541-06)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2016	ND	1.97	98.6	2.00	1.09	
Toluene*	<0.050	0.050	03/17/2016	ND	1.89	94.4	2.00	2.12	
Ethylbenzene*	<0.050	0.050	03/17/2016	ND	1.66	83.1	2.00	2.82	
Total Xylenes*	<0.150	0.150	03/17/2016	ND	5.13	85.5	6.00	2.14	
Total BTEX	<0.300	0.300	03/17/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.5	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	768	16.0	03/17/2016	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/15/2016	ND	219	109	200	10.7	
DRO >C10-C28	<10.0	10.0	03/15/2016	ND	239	119	200	13.3	
Surrogate: 1-Chlorooctane	93.9	% 35-147	,						
Surrogate: 1-Chlorooctadecane	91.1	% 28-171							

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/11/2016	Sampling Date:	03/07/2016
Reported:	03/17/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SOUTH 128		

### Sample ID: SP 2 @ 3' (H600541-07)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2016	ND	1.97	98.6	2.00	1.09	
Toluene*	<0.050	0.050	03/17/2016	ND	1.89	94.4	2.00	2.12	
Ethylbenzene*	<0.050	0.050	03/17/2016	ND	1.66	83.1	2.00	2.82	
Total Xylenes*	<0.150	0.150	03/17/2016	ND	5.13	85.5	6.00	2.14	
Total BTEX	<0.300	0.300	03/17/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 %	6 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	688	16.0	03/17/2016	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/15/2016	ND	219	109	200	10.7	
DRO >C10-C28	<10.0	10.0	03/15/2016	ND	239	119	200	13.3	
Surrogate: 1-Chlorooctane	89.9 9	35-147	,						
Surrogate: 1-Chlorooctadecane	80.0 \$	28-171							

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/11/2016	Sampling Date:	03/08/2016
Reported:	03/17/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SOUTH 128		

### Sample ID: SP 2 @ 4' (H600541-08)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2016	ND	1.97	98.6	2.00	1.09	
Toluene*	0.051	0.050	03/17/2016	ND	1.89	94.4	2.00	2.12	
Ethylbenzene*	<0.050	0.050	03/17/2016	ND	1.66	83.1	2.00	2.82	
Total Xylenes*	<0.150	0.150	03/17/2016	ND	5.13	85.5	6.00	2.14	
Total BTEX	<0.300	0.300	03/17/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3040	16.0	03/17/2016	ND	400	100	400	3.92	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	12.5	10.0	03/15/2016	ND	219	109	200	10.7	
DRO >C10-C28	374	10.0	03/15/2016	ND	239	119	200	13.3	
Surrogate: 1-Chlorooctane	90.6	% 35-147	,						
Surrogate: 1-Chlorooctadecane	101 9	28-171							

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/11/2016	Sampling Date:	03/07/2016
Reported:	03/17/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SOUTH 128		

### Sample ID: SP 3 @ 1' (H600541-09)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2016	ND	1.97	98.6	2.00	1.09	
Toluene*	<0.050	0.050	03/17/2016	ND	1.89	94.4	2.00	2.12	
Ethylbenzene*	<0.050	0.050	03/17/2016	ND	1.66	83.1	2.00	2.82	
Total Xylenes*	<0.150	0.150	03/17/2016	ND	5.13	85.5	6.00	2.14	
Total BTEX	<0.300	0.300	03/17/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.3	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/17/2016	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/15/2016	ND	219	109	200	10.7	
DRO >C10-C28	148	10.0	03/15/2016	ND	239	119	200	13.3	
Surrogate: 1-Chlorooctane	92.4	% 35-147	7						
Surrogate: 1-Chlorooctadecane	85.1	% 28-171							

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/11/2016	Sampling Date:	03/07/2016
Reported:	03/17/2016	Sampling Type:	Soil
Project Name:	CYPRESS 34 FEDERAL #1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SOUTH 128		

### Sample ID: SP 3 @ 2' (H600541-10)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2016	ND	1.97	98.6	2.00	1.09	
Toluene*	<0.050	0.050	03/17/2016	ND	1.89	94.4	2.00	2.12	
Ethylbenzene*	<0.050	0.050	03/17/2016	ND	1.66	83.1	2.00	2.82	
Total Xylenes*	<0.150	0.150	03/17/2016	ND	5.13	85.5	6.00	2.14	
Total BTEX	<0.300	0.300	03/17/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.3 <sup>g</sup>	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/17/2016	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/15/2016	ND	219	109	200	10.7	
DRO >C10-C28	151	10.0	03/15/2016	ND	239	119	200	13.3	
Surrogate: 1-Chlorooctane	96.8 9	% 35-147	,						
Surrogate: 1-Chlorooctadecane									

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



### **Notes and Definitions**

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

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Project Manager: Cliff Brunson Address: P.O. Box 805 city: Hobbs Stat	e: NM zip: 88241	P.O. #: Company: Attn: 2554/Sul/MERK
e #: 575-397-6388	575-397-0397	Address:
Project #: CVD/USS 34 A	Field   CTB (2-28-16) State:	y: te: Zip:
on:		#
Porel	Heinundez Fax #:	C#
140	MATRIX	PRESERV. SAMPLING
Lab I.D. Sample I.D.	(G)RAB OR (C)OMF # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE	
1 Spi@I.V		771
H O H	0	1 38.16 qu0
5 Sp 2 @ 1' V	0	1 37.16 170
7 634	6 1	1/2 01.12
2 1 0 2 0 A P	6	8001 1.0.5
0	611	1 3-2-14 530
-re-x-ac Wulle: Lealing and Lamages. Cardina's lability and client's exclus analyses. Al claims including those for negligence and any other cause what service. In no event shall Cardinal be lable for incidental or consequental dan affiliates or successors arising out of or related to the aerformance of services.	ent's exclusive remety for any claim arising whether based in contrad or tort, shall be cause whatboever shall be deemed waived unless made in writing and raceved by Car quental damages, including without limitation, business interruptions, loss of tese of too of services hereunder bu Cardinal meantiles of whether such claim is based inton an of services hereunder bu Cardinal meantiles of whether such claim is based inton an	shall be limited to the amount paid by the client for the ed by Cardinal within 30 days after completion of the applicable use, or loss of profils incurred by client, its subsidiaries, I mon any of the above states reasons or intereses
Relinquished By:	s: 10-16 Received By	Phone Result: Fax Result: REMARKS:
1	Print Contractived By:	Wan
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool_Intact	CHECKED BY:
† Cardinal cannot accept verbal change	Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2446 -1,82 #54	393-2 <b>44</b>

Page 13 of 13

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

				54	inta i c	, INIVI 075	05						
			Rele	ase Notific	ation	and Co	orrective A	ction	1				
						<b>OPERA</b>	FOR		🔀 Initia	al Report		Final Report	
Name of Co	mpany	Oxy Permia	n Ltd.			Contact Casey Summers							
Address (	o Desta Dr	ive, Midland	I, TX 797	05	,	Telephone No. (575) 513-8289							
Facility Nar	ne Cypr	ess 34 Feder	al #1 CT	В		Facility Typ	cility Type Battery						
Surface Owner BLM Mineral Owner					)wner				API No	API No. 30-015-35053			
				LOCA	TION	N OF REI	LEASE						
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	East/	West Line	County			
Р	34	23S	29E			Eddy County, NM					1		
Latitude <u>N 32.25497°</u> Longitude <u>W 103.96603°</u>													
				NAT	URE	OF REL	EASE						
Type of Release Oil and produced water						Volume of Release 15 bbls oil,			Volume Recovered				
						25 bbls produced water			36 bbls				
Source of Release Head switch was full of trash and failed causing a tank spill				ing a	Date and Hour of Occurrence 01/05/2016			Date and Hour of Discovery					
Was Immedia	ate Notice C	Given?				If YES, To Whom?							
Yes 🗌 No 🗌 Not Required				equired	Mike Bratcher, Kelly Jones-NMOCD								
By Whom? Jennifer Gilkey @ BBC International					Date and Hour 01/05/2016 @ 4:55 pm								
Was a Watercourse Reached?					If YES, Volume Impacting the Watercourse.								
10 . 11/		nested Dees		k		1							

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

A head switch full of trash failed causing a tank to spill 15 bbls of oil and 25 bbls of produced water onto the ground. A vacuum truck recovered 36 bbls of fluids and the head switch was cleaned out.

Describe Area Affected and Cleanup Action Taken.\*

The affected area is approximately 150' x 60' on location around the tanks inside the containment. Remediation will be completed in accordance with a remediation plan approved by NMOCD and the BLM.

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

	OIL CONSER	VATION DIVISION
Signature:	Approved by Environmental Special	
Printed Name: Casey Summers	Approved by Environmental Special	ISI.
Title: NM Environmental Advisor	Approval Date:	Expiration Date:
E-mail Address: Casey_Summers@oxy.com	Conditions of Approval:	Attached
Date: (-(4-) Phone: (575) 513-8289		

\* Attach Additional Sheets If Necessary

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

OPERATOR   ☑ Initial Report   ☐ Final Report     Name of Company   Oxy Permian Ltd.   Contact   Casey Summers     Address   6 Desta Drive, Midland, TX 79705   Telephone No.   (575) 513-8289     Facility Name   Cypress 34 Federal #1CTB   Facility Type   Gathering     Surface Owner   BLM   Mineral Owner   API No. 30-015-35053     LOCATION OF RELEASE     Unit Letter   Section   Township   Range   Feet from the   North/South Line   Feet from the   East/West Line   County     P   34   23S   29E   460   South   660   East   Eddy     NATURE OF RELEASE						
Address   6 Desta Drive, Midland, TX 79705   Telephone No.   (575) 513-8289     Facility Name   Cypress 34 Federal #1CTB   Facility Type   Gathering     Surface Owner   BLM   Mineral Owner   API No. 30-015-35053     LOCATION OF RELEASE   LOCATION OF RELEASE     Unit Letter   Section   Township   Range   Feet from the   North/South Line   Feet from the   East/West Line   County     P   34   23S   29E   460   South   660   East   Eddy     Latitude   N 32.25508°   Longitude   W 103.96647°   Ketter   Ketter						
Facility Name   Cypress 34 Federal #1CTB   Facility Type   Gathering     Surface Owner   BLM   Mineral Owner   API No. 30-015-35053     LOCATION OF RELEASE     Unit Letter   Section   Township   Range   Feet from the   North/South Line   Feet from the   East/West Line   County     P   34   23S   29E   460   South   660   East   Eddy     Latitude N 32.25508°						
Surface Owner   BLM   Mineral Owner   API No. 30-015-35053     LOCATION OF RELEASE   LOCATION OF RELEASE     Unit Letter   Section   Township   Range   Feet from the   North/South Line   Feet from the   East/West Line   County     P   34   23S   29E   460   South   660   East   Eddy     Latitude N 32.25508°   Longitude W 103.96647°						
LOCATION OF RELEASE     Unit Letter   Section   Township   Range   Feet from the   North/South Line   Feet from the   East/West Line   County     P   34   23S   29E   460   South   660   East   Eddy     Latitude N 32.25508°   Longitude W 103.96647°						
Unit Letter   Section   Township   Range   Feet from the   North/South Line   Feet from the   East/West Line   County     P   34   23S   29E   460   South   660   East   Eddy     Latitude   N 32.25508°   Longitude   W 103.96647°						
P   34   23S   29E   460   South   660   East   Eddy     Latitude N 32.25508°						
Latitude <u>N 32.25508°</u> Longitude <u>W 103.96647°</u>						
NATURE OF RELEASE						
NATURE OF RELEASE						
Type of Release Oil and produced water Volume of Release 10 bbls oil, Volume Recovered 15 bbls						
I0 bbls produced water       Source of Release     A dump line clog forced fluids to spill out of the     Date and Hour of Occurrence     Date and Hour of Discovery						
test heater Date and Hour of Discovery 02/28/2016						
Was Immediate Notice Given?						
Yes X No X Not Required						
By Whom?   Kathy @BBC International.com   Date and Hour 03/02/2016 @ 11:37 am     Was a Watercourse Reached?   If YES, Volume Impacting the Watercourse.						
□ Yes ⊠ No						
If a Watercourse was Impacted, Describe Fully.*						
Describe Cause of Problem and Remedial Action Taken.*						
Describe Cause of Problem and Remedial Action Taken.*						
A dump line clog forced 10 bbls of oil and 10 bbls of produced water to spill out of the test heater. A vacuum truck recovered 15 bbls of fluids and the						
dump line was unclogged.						
Describe Area Affected and Cleanup Action Taken.*						
The affected area is approximately 90' x 45' on location inside containment. Remediation will be completed in accordance with a remediation plan						
approved by NMOCD and the BLM.						
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and						
regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger						
public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability						
should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other						
federal, state, or local laws and/or regulations.						
OIL CONSERVATION DIVISION						
Signature:						
Printed Name: Coccu Symmetry Approved by Environmental Specialist:						
Printed Name: Casey Summers						
Title:     NM Environmental Advisor     Approval Date:     Expiration Date:						
E-mail Address: <u>Casey.Summers@oxy.com</u> Conditions of Approval: Attached						
Date: 3-9-16 Phone: (575) 513-8289						

\* Attach Additional Sheets If Necessary