Bratcher, Mike, EMNRD

From: Cliff P. Brunson <cbrunson@bbcinternational.com>

Sent: Saturday, September 21, 2013 4:35 PM

To: Bratcher, Mike, EMNRD

Cc: C J Summers; Ken Swinney; Jennifer Gilkey; Kathy Purvis

Subject: OXY-Sand Dunes 34 Federal #2-Remediation Plan

Attachments: Remediation Packet- Sand Dunes 34-2.pdf

Mike,

This e-mail is to confirm our conversation the other day about the remediation plan for the above referenced site. I have attached the materials that we used in our discussion. As discussed, in the former pit area located to the north of the well pad, Oxy will remove 2 feet and then backfill with 1 foot of caliche and 2 feet of top soil. This area is represented by sample points SP4-SP6. The area on the well pad will not require any remediation as the sample data shows no impact.

If you would please e-mail your concurrence with this remediation plan, it would be greatly appreciated.

Thanks, Cliff

Cliff P. Brunson, CEI, CRS
President
BBC International, Inc.
World-Wide Environmental Specialists
Mailing Address:
P. O. Box 805
Hobbs, NM 88241-0805 USA
Shipping Address:
1324 W. Marland St.
Hobbs, NM 88240 USA
Phone: (575) 397-6388
Fax: (575) 397-0397

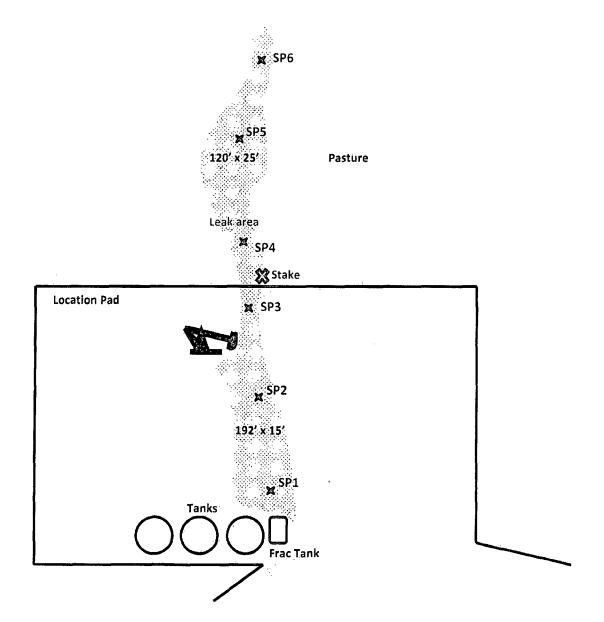
E-Mail: cbrunson@bbcinternational.com

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Оху

Sand Dunes 34 Federal #2



U/L H, Section 34, T23S, R31E Eddy County, NM

N 32.26192° W 103.75925°

BBC Interr	national, Inc.
C	Оху
Sand Dunes	34 Federal #2
Date: 03/28/2013	DRWG by: K. Purvis
NOT TO SCALE	File: Oxy 2013



Groundwater Plot

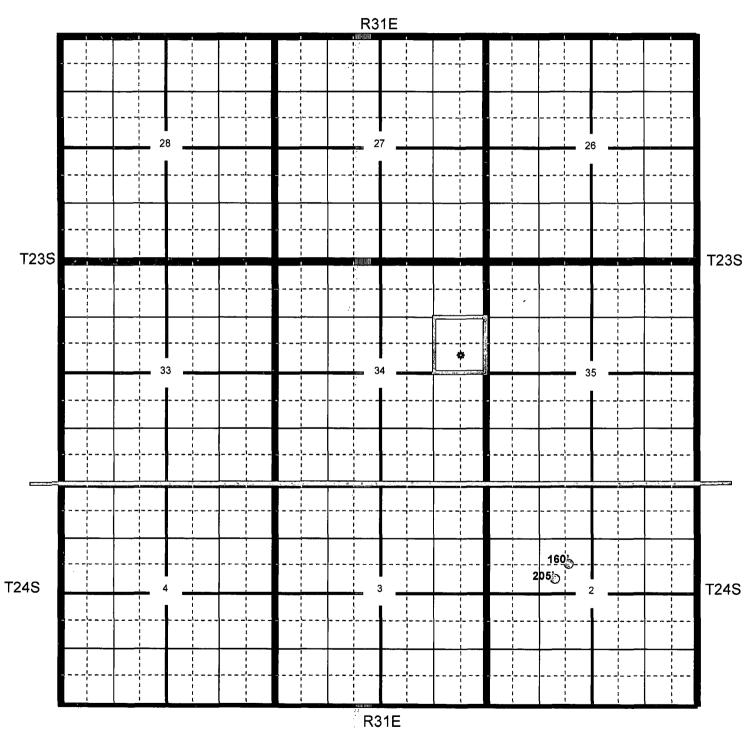
Oxy Sand Dunes 34 Federal #2 CTB

County Eddy County Unit Letter

Section 34 Township 23S Range 31E

Trend Map

300'





Section Quarters

Oxy Sand Dunes 34 Federal #2 CTB

County Eddy Unit Letter H Section 34 Township 23S

Range 31E

Trend Map 300'

1

2

	_	•	_
NW/NW	NE/NW	NW/NE	NEINE
None		; ; ;	
Unit Letter D	Unit Letter C	Unit Letter B	Unit Letter A
SW/NW	SE/NW	SWINE	SE/NE
Unit Letter E	Unit Letter F	Unit Letter G	Unit Letter H
NW/SW	NE/SW	NW/SE	NE/SE
Unit Letter L	Unit Letter K	Unit Letter J	Unit Letter I
SW/SW	SE/SW	SW/SE	SE/SE
Unit Letter M	Unit Letter N	Unit Letter O	Unit Letter P

3

4

❖ Location

O OCD

OUSGS

© SEO

All Databases

Laboratory Analytical Results Summary SAND DUNES 34 FED #2

		Sample	SP4@2	SP4 @ 4	SP4 @ 7	SP4 @ 9
Analyte	Method	Date	4/3/13	4/3/13	4/11/13	4/11/13
	_		"mg/Kg	//mg/Kg	@mg/Kg®	mg/Kg
Benzene	BTEX 8021B		<0.050	n/a	n/a	n/a
Toluene	BTEX 8021B		<0.050	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	n/a	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	n/a	n/a	n/a
Chloride	SM4500CI-B		21000	26400	1490	1120
GRO	TPH 8015M		<10.0	n/a	n/a	n/a
DRO	TPH 8015M		<10.0	n/a	n/a	n/a

		Sample	SP5 @ 1'	SP5 @ 4'	SP5 @ 7	SP5 @ 9'
Analyte	Method	Date	4/3/13	4/3/13	4/11/13	4/11/13
			mg/Kg	mg/Kg	mg/Kg	mg/Kg 🖫
Benzene	BTEX 8021B		<0.050	n/a	n/a	n/a
Toluene	BTEX 8021B		<0.050	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	n/a	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	n/a	n/a	n/a
Chloride	SM4500CI-B		12200	24800	1440	1260
GRO	TPH 8015M		<10.0	n/a	n/a	n/a
DRO	TPH 8015M		<10.0	n/a	n/a	n/a

_		Sample	SP6 @ 2',	SP6 @ 4'	SP6@7	SP6 @ 9'
Analyte	Method	Date	4/3/13	4/3/13	4/11/13	4/11/13
			mg/Kg	⇒ mg/Kg∜	⊕mg/Kg &	mg/Kg
Benzene	BTEX 8021B		<0.050	n/a	n/a	n/a
Toluene	BTEX 8021B		<0.050	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	n/a	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	n/a	n/a	n/a
Chloride	SM4500CI-B		18400	19200	1440	1010
GRO	TPH 8015M		10	n/a	n/a	n/a
DRO	TPH 8015M		10	n/a	n/a	n/a

Laboratory Analytical Results Summary SAND DUNES 34 FED #2

		Sample	SP1 @ 1	SP1 @ 2
Analyte	Method	Date	4/3/13	4/3/13
			s mg/Kg	:::mg/Kg.∴
Benzene	BTEX 8021B		n/a	<0.050
Toluene	BTEX 8021B		n/a	<0.050
Ethylbenzene	BTEX 8021B		n/a	<0.050
Total Xylenes	BTEX 8021B		n/a	<0.150
Total BTEX	BTEX 8021B		n/a	<0.300
Chloride	SM4500CI-B		160	<16.0
GRO	TPH 8015M		n/a	<10.0
DRO	TPH 8015M		n/a	<10.0

		Sample	SP2 @ 1'	SP2 @
Analyte	Method	Date	4/3/13	4/3/13
			mg/Kg	mg/Kg ^
Benzene	BTEX 8021B	T	n/a	<0.050
Toluene	BTEX 8021B		n/a	<0.050
Ethylbenzene	BTEX 8021B		n/a	<0.050
Total Xylenes	BTEX 8021B		n/a	<0.150
Total BTEX	BTEX 8021B		n/a	<0.300
Chloride	SM4500CI-B		176	<16.0
GRO	TPH 8015M		n/a	<10.0
DRO	TPH 8015M		n/a	24

		Sample	SP3 @ 1'	SP3 @ 2
Analyte	Method	Date	4/3/13	4/3/13
			mg/Kg	mg/Kg
Benzene	BTEX 8021B		n/a	<0.050
Toluene	BTEX 8021B		n/a	<0.050
Ethylbenzene	BTEX 8021B	1	n/a	<0.050
Total Xylenes	BTEX 8021B		n/a	<0.150
Total BTEX	BTEX 8021B	1	n/a	<0.300
Chloride	SM4500CI-B		192	<16.0
GRO	TPH 8015M		n/a	<10.0
DRO	TPH 8015M		n/a	<10.0



April 12, 2013

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: 34 FED #2 CTB

Enclosed are the results of analyses for samples received by the laboratory on 04/09/13 9:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 accredited analytes and matrices visit the TCEQ website at

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.

Celeg & Keene

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



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

(575) 397-0397 Fax To:

Analyzed

04/10/2013

Received:

04/09/2013 04/12/2013 34 FED #2 CTB Sampling Date: Sampling Type:

BS

432

Method Blank

ND

04/03/2013

Soil

400

Reported: Project Name: **NONE GIVEN**

Sampling Condition: Sample Received By:

Cool & Intact Jodi Henson

Project Number: Project Location:

Analyte

NOT GIVEN

Result

160

Sample ID: SP 1 @1' (H300843-01)

Chloride, SM4500CI-B

mg/kg Analyzed By: DW

Reporting Limit

16.0

63.6-154

True Value QC % Recovery

108

Qualifier

RPD

0.00

Chloride

Sample ID: SP 1 @2' (H300843-02)

BTEX 8021B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	04/11/2013	ND	1.99	99.3	2.00	4.07	
Toluene*	<0.050	0.050	04/11/2013	ND	2.29	115	2.00	4.40	
Ethylbenzene*	<0.050	0.050	04/11/2013	ND	2.52	126	2.00	4.27	
Total Xylenes*	<0.150	0.150	04/11/2013	ND	7.34	122	6.00	4.96	
Total BTEX	<0.300	0.300	04/11/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID	104	% 89.4-12	6						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/10/2013	ND	432	108	400	0.00	
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	04/11/2013	ND	222	111	200	5.04	
DRO >C10-C28	<10.0	10.0	04/11/2013	ND	218	109	200	5.96	
Surrogate: 1-Chlorooctane	92.0	% 65.2-14	0						

92.0 % Surrogate: 1-Chlorooctane 113 % Surrogate: 1-Chlorooctadecane

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*=Accredited Analyte

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Celey D. Keene



BBC International, Inc.

Cliff Brunson P.O. Box 805

Hobbs NM, 88241

Fax To: (575) 397-0397

Received:

04/09/2013

Reported:

04/12/2013

Project Name: Project Number: 34 FED #2 CTB NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

04/03/2013

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: SP 2 @1' (H300843-03)

Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: DW				_	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	04/10/2013	ND	432	108	400	0.00	

Sample ID: SP 2 @2' (H300843-04)

Analyte Result Reporting L Benzene* <0.050 0.050 Toluene* <0.050 0.050 Ethylbenzene* <0.050 0.050	04/11/2013	Method Blank ND ND	BS 1.99	% Recovery 99.3	True Value QC 2.00	RPD 4.07	Qualifier
Toluene* <0.050 0.050	• •			99.3	2.00	4.07	
	04/11/2013	ND					
Ethylbenzene* <0.050 0.050		110	2.29	115	2.00	4.40	
	04/11/2013	ND	2.52	126	2.00	4.27	
Total Xylenes* <0.150 0.150	04/11/2013	ND	7.34	122	6.00	4.96	
Total BTEX <0.300 0.300	04/11/2013	ND					

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/10/2013	ND	432	108	400	0.00	
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	04/11/2013	ND	222	111	200	5.04	
DRO >C10-C28	24.0	10.0	04/11/2013	ND	218	109	200	5.96	

Surrogate: 1-Chlorooctane94.0 %65.2-140Surrogate: 1-Chlorooctadecane117 %63.6-154

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Celey D. Keine.



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

Fax To:

(575) 397-0397

Analyzed By: DW

Received:

04/09/2013

Reported:

04/12/2013

Project Name:

Chloride, SM4500CI-B

34 FED #2 CTB

mg/kg

113 %

63.6-154

Project Number: Project Location:

NONE GIVEN

NOT GIVEN

Sampling Date:

04/03/2013

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: SP 3 @1' (H300843-05)

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	04/10/2013	ND	432	108	400	0.00	
Sample ID: SP 3 @2' (H300843	-06)								
STEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/11/2013	ND	1.99	99.3	2.00	4.07	
Toluene*	<0.050	0.050	04/11/2013	ND	2.29	115	2.00	4.40	
Ethylbenzene*	<0.050	0.050	04/11/2013	ND	2.52	126	2.00	4.27	
Total Xylenes*	<0.150	0.150	04/11/2013	ND	7.34	122	6.00	4.96	
Total BTEX	<0.300	0.300	04/11/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIC	101	% 89.4-12	6			-			
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: DW			- <u></u> -		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/10/2013	ND	432	108	400	0.00	
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	04/11/2013	ND	222	111	200	5.04	
DRO >C10-C28	<10.0	10.0	04/11/2013	ND	218	109	200	5.96	
Surrogate: 1-Chlorooctane	92.9	% 65.2-14	0					-	

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Surrogate: 1-Chlorooctadecane

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Cliff Brunson

P.O. Box 805

Hobbs NM, 88241

Fax To: (575) 397-0397

Received:

04/09/2013

04/03/2013

Reported:

04/12/2013

Sampling Date: Sampling Type:

Soil

Project Name:

34 FED #2 CTB

112 %

63.6-154

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

NOT GIVEN

Sample ID: SP 4 @2' (H300843-07)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/11/2013	ND	1.99	99.3	2,00	4.07	
Toluene*	<0.050	0.050	04/11/2013	ND	2.29	115	2.00	4.40	
Ethylbenzene*	<0.050	0.050	04/11/2013	ND	2.52	126	2.00	4.27	
Total Xylenes*	<0.150	0.150	04/11/2013	ND	7.34	122	6.00	4.96	
Total BTEX	<0.300	0.300	04/11/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	103 9	6 89.4-12	6		-				
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: DW				· · · · · · · · · · · · · · · · · · ·	<u></u>
Analyte	Result	Reporting Limit	Anatyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	21000	16.0	04/10/2013	ND	432	108	400	0.00	
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	04/11/2013	ND	222	111	200	5.04	
DRO >C10-C28	<10.0	10.0	04/11/2013	ND	218	109	200	5.96	
Surrogate: 1-Chlorooctane	92.2	% 65.2-14	10		<u>-</u> -				

Sample ID: SP 4 @4' (H300843-08)

Surrogate: 1-Chlorooctadecane

Chloride, SM4500CI-B	mg/	kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	26400	16.0	04/10/2013	ND	432	108	400	0.00	

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

(575) 397-0397 Fax To:

Received:

04/09/2013 04/12/2013 Sampling Date: Sampling Type: 04/03/2013

Reported:

BTEX 8021B

34 FED #2 CTB

Soil Cool & Intact

Project Name: Project Number:

NONE GIVEN

mg/kg

Sampling Condition: Sample Received By:

Jodi Henson

Project Location:

NOT GIVEN

Sample ID: SP 5 @1' (H300843-09)

				/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/11/2013	ND	1.99	99.3	2.00	4.07	
Toluene*	<0.050	0.050	04/11/2013	ND	2.29	115	2.00	4.40	
Ethylbenzene*	<0.050	0.050	04/11/2013	ND	2.52	126	2.00	4.27	
Total Xylenes*	<0.150	0.150	04/11/2013	ND	7.34	122	6.00	4.96	
Total BTEX	<0.300	0.300	04/11/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIC	103	% 89.4-12	16						-
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12200	16.0	04/10/2013	ND	432	108	400	0.00	
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	04/11/2013	ND	214	107	200	1.94	
DRO >C10-C28	<10.0	10.0	04/11/2013	ND	210	105	200	3.26	

Analyzed By: AP

Surrogate: 1-Chlorooctane

90.1 %

65.2-140

Surrogate: 1-Chlorooctadecane

115%

63.6-154

Sample ID: SP 5 @4' (H300843-10)

Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	24800	16.0	04/10/2013	ND	432	108	400	3.77	

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BBC International, Inc.

Cliff Brunson

P.O. Box 805

Hobbs NM, 88241

(575) 397-0397 Fax To:

Received:

04/09/2013

Sampling Date:

04/03/2013

Reported:

04/12/2013

Sampling Type:

Soil

Project Name:

34 FED #2 CTB NONE GIVEN

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

RPD

4.07 4.40 Qualifier

Project Number: Project Location:

NOT GIVEN

Sample ID: SP 6 @2' (H300843-11)

B	T	EX	8	02	1	B
---	---	----	---	----	---	---

BTEX 8021B	mg/	kg	Analyze	d By: AP				_
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	
Benzene*	<0.050	0.050	04/11/2013	ND	1.99	99.3	2.00	
Toluene*	<0.050	0.050	04/11/2013	ND	2.29	115	2.00	

Ethylbenzene* < 0.050 0.050 04/11/2013 ND 2.52 126 2.00 4.27 Total Xylenes* 7.34 6.00 4.96 < 0.150 0.150 04/11/2013 ND 122 Total BTEX < 0.300 04/11/2013 ND 0.300

Surrogate: 4-Bromofluorobenzene (PIL)

102 %

89 4-126

Chloride, SM4500Cl-B	mg,			d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	18400	16.0	04/10/2013	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	04/11/2013	ND	214	107	200	1.94	
DRO >C10-C28	<10.0	10.0	04/11/2013	ND	210	105	200	3.26	

Surrogate: 1-Chlorooctane

82.7 %

65.2-140

Surrogate: 1-Chlorooctadecane

111 %

63.6-154

Sample ID: SP 6 @4' (H300843-12)

Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19200	16.0	04/10/2013	ND	432	108	400	3.77	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Kure



ND

Notes and Definitions

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

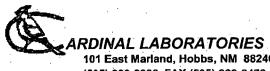
Analyte NOT DETECTED at or above the reporting limit

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Kuna



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(505) 393-2326 FAX (505) 393-2476		
Company Name: BBC International, Inc.	ANALYSIS	REQUEST
Project Manager: Cliff Brunson	P.O. #:	
Address: P.O. Box 805	Company:	
City: Hobbs State: NM zip: 88241	Attn:	
Phone #: 575-397-6388 Fax #: 575-397-0397	Address: SAME	
Project #: Project Owner: DXV	City:	
Project Name: 34 FEO # 2 CTB	State: Zip:	
Project Location:	Phone #:	
Sampler Name: Regto Hechards	Fax #:	
FOR LAB USE ONLY MATRIX	PRESERV. SAMPLING	
C)OMP RS TTER		
Lab I.D. Sample I.D.	PIBASE J COOL HR:	
Tap I.D. Sample I.D. (G)RAB OR (C)OIL (G)RAB OR (C)OIL (G)IL (G)	OTHER OTHER OTHER OTHER	
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5 Sp3 1' 6 1 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
6 2. 61	9.5.0 /232	
7 59402' 61	19.3.1) 1750 2	
8 64 64	1 43.3 /09	
9 SPC /:	1 9.3.13 /35	ь .
	1 43.0/52 6	
PLEASE NOTE: Liability and Damages. Cardina's liability and client's exclusive remedy for any claim arising whether based in contra	t or tort, shall be limited to the amount paid by the client for the	

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or lort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed warved unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries,

Relinancished By: Phone Result: Yes No Add'l Phone #: Fax Result: Yes No Add'l Fax #:	
Time; OC / Y// A UO // REMARKS:	-
9:05 4 CC SECON	
Relinquished By: Date: Received By:	
Time:	
Delivered By: (Circle One) Sample Condition CHECKED BY:	
Cool Intact (Milias)	
Sampler - UPS - Bus - Other: Q Lies Lies / 17/41	
No No V	

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

ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

	93-2326 FAX (505) 393-24	76		•															_ <	Los
Company Name: BB(International, Inc.							LL FO		NATURE DE LA COMPANIE				ANA	YSI	S RE	QUE	ST		7
Project Manager: Clif	Brunson					P.0	O. #:						į							
Address: P.O. Box 8	05	-				Co	mpany:]										.
city: Hobbs	State: NM	Zip:	882	241		Att	n:	,]		ŀ			٠.					·
Phone #: 575-397-63	88 Fax #: 575	-397-0	0397	7		Ad	dress:	< A1	NE]				}	l	1	{ ·	1		
Project #:	Project Owne		OX			Cit		78/08	16	1	'					·				1 1
Project Name: 3	1 FED #2 C			<i></i>		Sta		Zip:		1.	·		,							1 .
Project Location:			-				one #:			X	y			i						
Sampler Name:						_	x #:			12	¥		1	}			l]]
FOR LAB USE ONLY		\mathbf{L}	T	MAT	RIX		PRESERV	SAMPL	NG		}	2								
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Lab I.D.	Sample I.D.	S S	Š	WA	. 1,2	اندايا				7	1	8								
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PLEASE NOTE: Liability and Damages. Cardina's flability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be dearned waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal to liable for incidental or consequential damages, including without furnishin, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, efficials or successors arising out of or related to the performance of services heregore by Cardinal recardless of whether such plain is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date .9.13	Received By:	A A	Phone Result:	☐ Yes	□ No	Add'l Phone #:		
Patho	Time:	Main	MOM NON	Fax Result: REMARKS:	□ Yes	□ No	Add'l Fax #:		
Relinquished By:	Date:	Received By:	THUMON C	†					
	Time:								
Delivered By: (Circle One)		Sample Co						. ,	
Sampler - UPS - Bus - Other:	·	Yes No	Yes /						
A Comittee I are made according to the	l shangoo Blance	for written abanger	to FOE 200 2476						

[†] Cardinal cannot accept verbal changes. Please fax written changes to 505-398-2476



April 19, 2013

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: SAND DUNES 34 FED #2 CTB

Enclosed are the results of analyses for samples received by the laboratory on 04/15/13 9:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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.

Celey D. Keens

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



BBC International, Inc. Cliff Brunson

P.O. Box 805 Hobbs NM, 88241

Fax To: (575) 397-0397

Received:

04/15/2013

Sampling Date:

04/11/2013

Reported:

Soil

04/19/2013

Sampling Type:

Cool & Intact

Project Name:

SAND DUNES 34 FED #2 CTB

Sampling Condition:

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

EDDY COUNTY, NM

Sample ID: SP 4 @ 7' (H300896-01)

Chloride.	SM4500C1-B	
0111011407	311130000	

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1490	16.0	04/17/2013	ND	432	108	400	0.00	
Sample ID: SP 4 @ 9' (H3	00896-02)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1120	16.0	04/17/2013	ND	432	108	400	0.00	
Sample ID: SP 5 @ 7' (H3	00896-03)								
Chloride, SM4500CI-B	mg	/kg	Analyzed By: DW				<u></u> _		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1440	16.0	04/17/2013	ND	432	108	400	0.00	
Sample ID: SP 5 @ 9' (H3	00896-04)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1260	16.0	04/17/2013	ND	432	108	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keine



BBC International, Inc.

Cliff Brunson P.O. Box 805

Hobbs NM, 88241

Fax To:

(575) 397-0397

Received:

04/15/2013

Sampling Date:

04/11/2013

Reported:

04/19/2013

Sampling Type:

Soil

Project Name:

SAND DUNES 34 FED #2 CTB

16,0

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

Analyte

EDDY COUNTY, NM

Sample ID: SP 6 @ 7' (H300896-05)

Chloride, SM4500CI-B

Chloride

Chlorid

mg/kg

Analyzed By: DW

Reporting Limit Result 1440

Analyzed 04/17/2013 Method Blank ND

BS % Recovery 432

108

True Value QC 400

Qualifier

RPD

0.00

Sample ID: SP 6 @ 9' (H300896-06)

Chloride, SM4500CI-B

ma/ka

Analyzed Ry: DW

1C, 511150001 B	9	,a	Alleryze	<u> </u>						_
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
de	1010	16.0	04/17/2013	ND	432	108	400	0.00		

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Celey D. Keine



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

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Celey D. Keine

ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240 (506) 303-2336 EAY (506) 303-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: BBC International, Inc.	FILL TO	ANALYSIS REQUEST
Project Manager: Cliff Brunson	P.O. #:	
Address: P.O. Box 805	Company:	
City: Hobbs State: NM Zip: 88241	Attn: SAME	
Phone #: 575-397-6388 Fax #: 575-397-0397	Address:	
Project #: Project Owner: OXV	City:	
Project Name: SAND DUNES 34 FEO# 2	State: Zip:	
Project Location:	Phone #:	
Sampler Name: QCEQ HERMINGEZ	Fax #:	
Lab ID Sample ID WATE WATER MATER	Fax #: PRESERV SAMPLING OTHER: OTHER: OTHER: TIME Studge	
1594671 611 1	1 4.11.13 1210	
2 ea' e1 v	V 411-13 1240 V	
3 SP5e 7: 61	911.13 /18	
	4.11.13 148	
5 Sp60 7' 6' V	911.7 296	
6 9 6/1	41113 308	
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in	ract or tort, shall be limited to the amount paid by the client for the	

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including hisses for negligence and any other cause whatsower shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damagés, including without limitation, business interruptions, toos of use, or loss of priofils incurred by client, it is subsidiaries.

Relinquished By:	Date:	Received By:	1.1	Phone Result:	☐ Yes	□ No	Add'l Phone #:		
12118	4.13.12	/Odi:	MOIA NOW	Fax Result:	☐ Yes	□ No	Add'i Fax #:		
A SEE HOD	TO :40	A LIL C	JUNION	REMARKS:		•			
Relinquished By:	Date:	Received By:		1				•	
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		Cool Int	(hifialk)	1 .					
Sampler - UPS - Bus - Other:		104 1%	Yes W						,

#54

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

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, 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

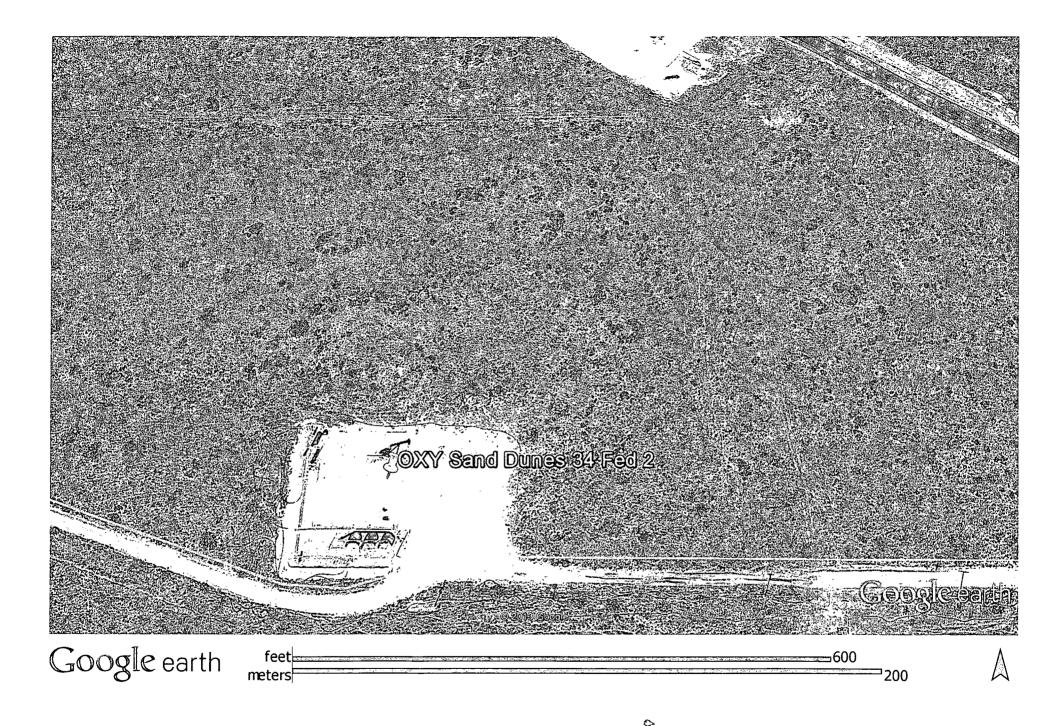
Submit 2 Copies to appropriate District Office in accordance: with Rule 116 on back side of form

Revised October 10, 2003

Form C-141

Release Notification and Corrective Action

						OPERA	ror	⊠ 1	nitial Report		Final Report		
Name of Co		Oxy Permia				Contact CJ Summers							
		tanolind Rd,		VM .		Telephone No. (575) 397-8216							
Facility Nat	ne Sand	Dunes 34 Fe	ederal #2			Facility Type Battery							
Surface Ow	ner BLM			Mineral O	wner			Lea	Lease No. NM 43744				
				LOCA	Tioi	N OF REI	FASE						
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/West Li	ine County				
Н	3.4	238	31E			·							
] 3,41			atitude N 32.20	5192°	Longitu	de W 103.7592	5°.	Eddy				
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Type of Rele	ase Produ	uced water			····	Volume of		ls Volu	me Recovered	0 bbl	J S		
Source of Re overflow	lease Pow	er(failure at th	e transfer	pump caused frac	tank	Date and H 03/25/2013	our of Occurrenc	e Date.	and Hour of D	scovery	ī		
Was Immedi	te Notice (Yes [No □ Not.Re	quired	If YES, To Jennifer Va	Whóm?: in Curen, James A	Amos-BLM an	d Mike Bratche	er-OCD			
By Whom?	Chancey S	Summers				Date and H	our 03/25/2013 (@ 10 18 am					
Was a Water		ched?	Yes 🏻	·No		Date and Hour 03/25/2013 @ 10:18 am If YES, Volume Impacting the Watercourse.							
	21 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	pacted, Descri											
Power failure	at the trans	em and Remed sfer pump caus up wastrestore	sed the fra	rTaken.** c tank to overflow	and sp	ill 20 bbls of	produced water o	nto the ground	l. No fluids we	re recov	gered and		
Describe Are	a Affected	and Gleanup A	etion Tak	ëń.*						·····			
				c tank to overflow diation will be per									
regulations all public health should their cor the environ	l operators or the envir perations h iment. In a	are required to conment. The ave failed to a	report an acceptance dequately CD acceptance	is true and compl d/or file certain re e of a C-141 report investigate and re tance of a C-141 r	lease no t by the mediate	otifications and NMOCD made contamination	d perform correct arked as "Final Re on that pose a thre	tive actions for eport" does no eat to ground v	r releases which t relieve the op- vater, surface w	i may e erator of ater, hu	ndanger f liability ıman health		
Signature:							OIL CONS	SERVATIO	ON DIVISI	ON			
Printed Name	Chance	y Summers			. /	Approved by	District Superviso	or:					
Title: HES	Specialist					Approval Date	3:	Expirat	ion Date:				
E-mail Addre	ss: Chan	cey.Summers(····	nė: (575) 397-821		Conditions of	Approval:		Attache	d 🔲			
Attach Addit				(0.0) 557 521	<u></u>								



Imagery Date 3/2/2012