



DELINEATION WORKPLAN

OXY – PLAINS KNIGHT #1 TB (Leak Date: 12/19/16)

**RP # 1RP-4555
API # 30-025-11207**

This delineation workplan and remediation proposal addresses the release associated with RP # 1RP-4555.

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 leak area around SP1 and SP2 will be excavated to a depth of 1.5 feet , the area around SP3 will be excavated to a depth of 2.5 feet, and the overspray area around SP4 will be excavated to a depth of 6 inches.

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, Plains Knight #1 TB

Leak date: 12/19/2016
Lea County, NM
AP# 30-025-11207
1RP-4555

Legend

- 1.5 ft Excavation
- 2.5 ft Excavation
- East Sample, hand auger
- Leak Area (yellow outline)
- Leak point
- North Sample, hand auger
- Overspray Area, 6 inch Excavation
- Sample points, hand auger
- South Sample, hand auger
- West Sample, hand auger



Oxy, Plains Knight #1 Tank Battery

Sample points, hand auger

SP1, N 32.19981 W-103.13771

SP2, N 32.19978 W-103.13759

SP3, N 32.19981 W-103.13749

SP4, N 32.19981 W-103.13740

NORTH, N 32.19986 W-103.13760

SOUTH, N 32.19977 W-103.13757

EAST, N 32.19982 W-103.13734

WEST, N 32.19981 W-103.13773

Oxy, Plains Knight #1 Tank Battery

U/L L, Section 23, T24S, R37E

Groundwater: 75'-100'





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	DepthWell	DepthWater	Water Column
CP 00540			LE				23	24S	37E	675913	3564435*	<input type="checkbox"/>	641	110	94 16
CP 00289 POD1		CP	LE	4	1	1	23	24S	37E	675388	3564938*	<input type="checkbox"/>	708	1105	
CP 00301 POD1		CP	LE	4	2	1	22	24S	37E	674182	3564918*	<input type="checkbox"/>	1312	85	
CP 00663			LE	1	1	3	24	24S	37E	676812	3564362*	<input type="checkbox"/>	1514	112	100 12
CP 00302 POD1		CP	LE	3	3	1	24	24S	37E	676805	3564564*	<input type="checkbox"/>	1537	88	
CP 00303 POD1		CP	LE	3	3	1	24	24S	37E	676805	3564564*	<input type="checkbox"/>	1537	87	

Average Depth to Water: **97 feet**

Minimum Depth: **94 feet**

Maximum Depth: **100 feet**

Record Count: 6

UTMNAD83 Radius Search (in meters):

Easting (X): 675303

Northing (Y): 3564235

Radius: 1700

*UTM location was derived from PLSS - see Help

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

4/17/17 9:01 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Public Land Survey System (PLSS)

Q64: Q16: Q4: Sec: Tws: Rng:

State Plane Coordinate System - NAD27

X: ft Y: ft Zone:

State Plane Coordinate System - NAD83

X: ft Y: ft Zone:

Degrees/Minutes/Seconds

Longitude (X): Degrees: ° Minutes: ' Seconds: "

Latitude (Y): Degrees: ° Minutes: ' Seconds: "

UTM - NAD27

Easting (X): mtrs Northing (Y): mtrs Zone:

SUBMIT

All Conversion Results are displayed as NAD 1983 UTM Zone 13

Easting (X): mtrs Northing (Y): mtrs

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

Laboratory Analytical Results Summary
Plains Knight #1 TB

Analyte	Method	Sample		SP1 @ SURFACE		SP1 @ 1'		SP1 @ 2'	
		Date		1/19/17	mg/kg	1/19/17	mg/kg	3/6/17	mg/kg
Benzene	BTEX 8021B			<0.100	<0.050	<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B			<0.100	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B			0.174	<0.050	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B			1.22	<0.150	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B			1.39	<0.300	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B			560	368	128			
GRO	TPH 8015M			<200	<50.0	<10.0			
DRO	TPH 8015M			19600	169	17			

Analyte	Method	Sample		SP2 @ SURFACE		SP2 @ 1'		SP2 @ 2'	
		Date		1/19/17	mg/kg	1/19/17	mg/kg	3/6/17	mg/kg
Benzene	BTEX 8021B			<0.200	<0.100	<0.100	<0.050	<0.050	<0.050
Toluene	BTEX 8021B			<0.200	<0.100	<0.100	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B			0.239	0.244	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B			2.01	0.566	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B			2.25	0.811	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B			976	256	160			
GRO	TPH 8015M			309	<200	<10.0			
DRO	TPH 8015M			8750	2470	<10.0			

Analyte	Method	Sample		SP3 @ SURFACE		SP3 @ 1'		SP3 @ 2'		SP3 @ 3'	
		Date		1/19/17	mg/kg	1/19/17	mg/kg	3/6/17	mg/kg	3/6/17	mg/kg
Benzene	BTEX 8021B			<0.200	<0.100	<0.100	<0.050	<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B			<0.200	<0.100	<0.100	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B			<0.200	0.392	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B			1.39	0.943	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B			1.39	1.34	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B			400	224	480	176				
GRO	TPH 8015M			224	<200	<50.0	<10.0				
DRO	TPH 8015M			21000	2860	<50.0	<10.0				

Analyte	Method	Sample		SP4 @ SURFACE		SP4 @ 1'	
		Date		1/19/17	mg/kg	3/6/17	mg/kg
Benzene	BTEX 8021B			<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B			<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B			<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B			<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B			<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B			240	128		
GRO	TPH 8015M			<50.0	<10.0		
DRO	TPH 8015M			220	<10.0		

Analyte	Method	Sample		NORTH SAMPLE	
		Date		1/19/17	mg/kg
Benzene	BTEX 8021B			<0.050	<0.050
Toluene	BTEX 8021B			<0.050	<0.050
Ethylbenz	BTEX 8021B			<0.050	<0.050
Total Xyle	BTEX 8021B			<0.150	<0.150
Total BTE	BTEX 8021B			<0.300	<0.300
Chloride	SM4500Cl-B			<16.0	<16.0
GRO	TPH 8015M			<10.0	<10.0
DRO	TPH 8015M			<10.0	<10.0

Analyte	Method	Sample		SOUTH SAMPLE	
		Date		1/19/17	mg/kg
Benzene	BTEX 8021B			<0.050	<0.050
Toluene	BTEX 8021B			<0.050	<0.050
Ethylbenz	BTEX 8021B			<0.050	<0.050
Total Xyle	BTEX 8021B			<0.150	<0.150
Total BTE	BTEX 8021B			<0.300	<0.300
Chloride	SM4500Cl-B			<16.0	<16.0
GRO	TPH 8015M			<10.0	<10.0
DRO	TPH 8015M			<10.0	<10.0

Analyte	Method	Sample		WEST SAMPLE	
		Date		1/19/17	mg/kg
Benzene	BTEX 8021B			<0.050	<0.050
Toluene	BTEX 8021B			<0.050	<0.050
Ethylbenz	BTEX 8021B			<0.050	<0.050
Total Xyle	BTEX 8021B			<0.150	<0.150
Total BTE	BTEX 8021B			<0.300	<0.300
Chloride	SM4500Cl-B			<16.0	<16.0
GRO	TPH 8015M			<10.0	<10.0
DRO	TPH 8015M			<10.0	<10.0

Analyte	Method	Sample		EAST SAMPLE	
		Date		1/19/17	mg/kg
Benzene	BTEX 8021B			<0.050	<0.050
Toluene	BTEX 8021B			<0.050	<0.050
Ethylbenz	BTEX 8021B			<0.050	<0.050
Total Xyle	BTEX 8021B			<0.150	<0.150
Total BTE	BTEX 8021B			<0.300	<0.300
Chloride	SM4500Cl-B			<16.0	<16.0
GRO	TPH 8015M			<10.0	<10.0
DRO	TPH 8015M			<10.0	<10.0

January 30, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: PLAINS KNIGHT #1 TB

Enclosed are the results of analyses for samples received by the laboratory on 01/23/17 11:50.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

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

Received:	01/23/2017	Sampling Date:	01/19/2017
Reported:	01/30/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - LEA COUNTY, NM		

Sample ID: SP 1 @ SURFACE (H700147-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	01/27/2017	ND	2.13	107	2.00	0.189	
Toluene*	<0.100	0.100	01/27/2017	ND	2.11	106	2.00	0.288	
Ethylbenzene*	0.174	0.100	01/27/2017	ND	2.16	108	2.00	0.00954	
Total Xylenes*	1.22	0.300	01/27/2017	ND	6.14	102	6.00	0.0936	
Total BTEX	1.39	0.600	01/27/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	01/25/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<200	200	01/25/2017	ND	188	94.1	200	1.98		
DRO >C10-C28	19600	200	01/25/2017	ND	185	92.7	200	4.22		

Surrogate: 1-Chlorooctane 115 % 35-147

Surrogate: 1-Chlorooctadecane 277 % 28-171

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*=Accredited Analyte

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Received:	01/23/2017	Sampling Date:	01/19/2017
Reported:	01/30/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - LEA COUNTY, NM		

Sample ID: SP 1 @ 1' (H700147-02)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/27/2017	ND	2.13	107	2.00	0.189	
Toluene*	<0.050	0.050	01/27/2017	ND	2.11	106	2.00	0.288	
Ethylbenzene*	<0.050	0.050	01/27/2017	ND	2.16	108	2.00	0.00954	
Total Xylenes*	<0.150	0.150	01/27/2017	ND	6.14	102	6.00	0.0936	
Total BTEX	<0.300	0.300	01/27/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	01/25/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	01/25/2017	ND	188	94.1	200	1.98	
DRO >C10-C28	169	50.0	01/25/2017	ND	185	92.7	200	4.22	

Surrogate: 1-Chlorooctane 84.9 % 35-147

Surrogate: 1-Chlorooctadecane 105 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

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

Received:	01/23/2017	Sampling Date:	01/19/2017
Reported:	01/30/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - LEA COUNTY, NM		

Sample ID: SP 2 @ SURFACE (H700147-03)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	01/27/2017	ND	2.13	107	2.00	0.189	
Toluene*	<0.200	0.200	01/27/2017	ND	2.11	106	2.00	0.288	
Ethylbenzene*	0.239	0.200	01/27/2017	ND	2.16	108	2.00	0.00954	
Total Xylenes*	2.01	0.600	01/27/2017	ND	6.14	102	6.00	0.0936	
Total BTEX	2.25	1.20	01/27/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	976	16.0	01/25/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	309	50.0	01/25/2017	ND	188	94.1	200	1.98		
DRO >C10-C28	8750	50.0	01/25/2017	ND	185	92.7	200	4.22		

Surrogate: 1-Chlorooctane 556 % 35-147

Surrogate: 1-Chlorooctadecane 169 % 28-171

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Received:	01/23/2017	Sampling Date:	01/19/2017
Reported:	01/30/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - LEA COUNTY, NM		

Sample ID: SP 2 @ 1' (H700147-04)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	01/27/2017	ND	2.13	107	2.00	0.189	
Toluene*	<0.100	0.100	01/27/2017	ND	2.11	106	2.00	0.288	
Ethylbenzene*	0.244	0.100	01/27/2017	ND	2.16	108	2.00	0.00954	
Total Xylenes*	0.566	0.300	01/27/2017	ND	6.14	102	6.00	0.0936	
Total BTEX	0.811	0.600	01/27/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	01/25/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<200	200	01/25/2017	ND	188	94.1	200	1.98	
DRO >C10-C28	2470	200	01/25/2017	ND	185	92.7	200	4.22	

Surrogate: 1-Chlorooctane 109 % 35-147
Surrogate: 1-Chlorooctadecane 150 % 28-171

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Received:	01/23/2017	Sampling Date:	01/19/2017
Reported:	01/30/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - LEA COUNTY, NM		

Sample ID: SP 3 @ SURFACE (H700147-05)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	01/27/2017	ND	2.13	107	2.00	0.189	
Toluene*	<0.200	0.200	01/27/2017	ND	2.11	106	2.00	0.288	
Ethylbenzene*	<0.200	0.200	01/27/2017	ND	2.16	108	2.00	0.00954	
Total Xylenes*	1.39	0.600	01/27/2017	ND	6.14	102	6.00	0.0936	
Total BTEX	1.39	1.20	01/27/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	01/25/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	224	200	01/25/2017	ND	188	94.1	200	1.98		
DRO >C10-C28	21000	200	01/25/2017	ND	185	92.7	200	4.22		

Surrogate: 1-Chlorooctane 374 % 35-147

Surrogate: 1-Chlorooctadecane 313 % 28-171

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	01/23/2017	Sampling Date:	01/19/2017
Reported:	01/30/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - LEA COUNTY, NM		

Sample ID: SP 3 @ 1' (H700147-06)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	01/27/2017	ND	2.13	107	2.00	0.189	
Toluene*	<0.100	0.100	01/27/2017	ND	2.11	106	2.00	0.288	
Ethylbenzene*	0.392	0.100	01/27/2017	ND	2.16	108	2.00	0.00954	
Total Xylenes*	0.943	0.300	01/27/2017	ND	6.14	102	6.00	0.0936	
Total BTEX	1.34	0.600	01/27/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 126 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	01/25/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<200	200	01/25/2017	ND	188	94.1	200	1.98		
DRO >C10-C28	2860	200	01/25/2017	ND	185	92.7	200	4.22		

Surrogate: 1-Chlorooctane 108 % 35-147
Surrogate: 1-Chlorooctadecane 196 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	01/23/2017	Sampling Date:	01/19/2017
Reported:	01/30/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - LEA COUNTY, NM		

Sample ID: SP 4 @ SURFACE (H700147-07)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/27/2017	ND	2.13	107	2.00	0.189	
Toluene*	<0.050	0.050	01/27/2017	ND	2.11	106	2.00	0.288	
Ethylbenzene*	<0.050	0.050	01/27/2017	ND	2.16	108	2.00	0.00954	
Total Xylenes*	<0.150	0.150	01/27/2017	ND	6.14	102	6.00	0.0936	
Total BTEX	<0.300	0.300	01/27/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	01/25/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	01/25/2017	ND	188	94.1	200	1.98	
DRO >C10-C28	220	50.0	01/25/2017	ND	185	92.7	200	4.22	

Surrogate: 1-Chlorooctane 80.2 % 35-147

Surrogate: 1-Chlorooctadecane 93.1 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	01/23/2017	Sampling Date:	01/19/2017
Reported:	01/30/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - LEA COUNTY, NM		

Sample ID: NORTH SAMPLE (H700147-08)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/27/2017	ND	2.13	107	2.00	0.189		
Toluene*	<0.050	0.050	01/27/2017	ND	2.11	106	2.00	0.288		
Ethylbenzene*	<0.050	0.050	01/27/2017	ND	2.16	108	2.00	0.00954		
Total Xylenes*	<0.150	0.150	01/27/2017	ND	6.14	102	6.00	0.0936		
Total BTEX	<0.300	0.300	01/27/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	01/25/2017	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	01/25/2017	ND	178	89.1	200	10.2		
DRO >C10-C28	<10.0	10.0	01/25/2017	ND	188	93.9	200	2.21		

Surrogate: 1-Chlorooctane 87.1 % 35-147
Surrogate: 1-Chlorooctadecane 93.9 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	01/23/2017	Sampling Date:	01/19/2017
Reported:	01/30/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - LEA COUNTY, NM		

Sample ID: SOUTH SAMPLE (H700147-09)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/27/2017	ND	2.13	107	2.00	0.189		
Toluene*	<0.050	0.050	01/27/2017	ND	2.11	106	2.00	0.288		
Ethylbenzene*	<0.050	0.050	01/27/2017	ND	2.16	108	2.00	0.00954		
Total Xylenes*	<0.150	0.150	01/27/2017	ND	6.14	102	6.00	0.0936		
Total BTEX	<0.300	0.300	01/27/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	01/25/2017	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	01/25/2017	ND	178	89.1	200	10.2		
DRO >C10-C28	<10.0	10.0	01/25/2017	ND	188	93.9	200	2.21		

Surrogate: 1-Chlorooctane 84.6 % 35-147

Surrogate: 1-Chlorooctadecane 79.0 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	01/23/2017	Sampling Date:	01/19/2017
Reported:	01/30/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - LEA COUNTY, NM		

Sample ID: WEST SAMPLE (H700147-10)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/27/2017	ND	2.13	107	2.00	0.189	
Toluene*	<0.050	0.050	01/27/2017	ND	2.11	106	2.00	0.288	
Ethylbenzene*	<0.050	0.050	01/27/2017	ND	2.16	108	2.00	0.00954	
Total Xylenes*	<0.150	0.150	01/27/2017	ND	6.14	102	6.00	0.0936	
Total BTEX	<0.300	0.300	01/27/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/25/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/25/2017	ND	178	89.1	200	10.2	
DRO >C10-C28	<10.0	10.0	01/25/2017	ND	188	93.9	200	2.21	

Surrogate: 1-Chlorooctane 86.7 % 35-147

Surrogate: 1-Chlorooctadecane 84.8 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	01/23/2017	Sampling Date:	01/19/2017
Reported:	01/30/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - LEA COUNTY, NM		

Sample ID: EAST SAMPLE (H700147-11)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/27/2017	ND	2.13	107	2.00	0.189	
Toluene*	<0.050	0.050	01/27/2017	ND	2.11	106	2.00	0.288	
Ethylbenzene*	<0.050	0.050	01/27/2017	ND	2.16	108	2.00	0.00954	
Total Xylenes*	<0.150	0.150	01/27/2017	ND	6.14	102	6.00	0.0936	
Total BTEX	<0.300	0.300	01/27/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/25/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/25/2017	ND	178	89.1	200	10.2	
DRO >C10-C28	<10.0	10.0	01/25/2017	ND	188	93.9	200	2.21	

Surrogate: 1-Chlorooctane 85.9 % 35-147

Surrogate: 1-Chlorooctadecane 79.6 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
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





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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1082

BILL TO

ANALYSIS REQUEST

Company Name: BBC International, Inc. P.O. #:
 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: Plains Knight #1 TB
 Project Location: Lea County, NM
 Sampler Name: Roger Hernandez
 Company: Oxy
 Attn: Casey Summers
 Address:
 City:
 State: Zip:
 Phone #:
 Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV	SAMPLING	DATE	TIME	BTEX	CI	TPH
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :							
AT00147	SP1 @ SURFACE		1								1/19/17	8:45 AM	✓	✓	✓	
	SP1 @ 1'		1								1/19/17	9:30 AM	✓	✓	✓	
	SP2 @ SURFACE		1								1/19/17	10:00 AM	✓	✓	✓	
	SP2 @ 1'		1								1/19/17	10:35 AM	✓	✓	✓	
	SP3 @ SURFACE		1								1/19/17	11:00 AM	✓	✓	✓	
	SP3 @ 1'		1								1/19/17	11:40 AM	✓	✓	✓	
	SP4 @ SURFACE		1								1/19/17	12:00 PM	✓	✓	✓	
	NORTH SAMPLE		1								1/19/17	1:05 PM	✓	✓	✓	
	SOUTH SAMPLE		1								1/19/17	1:25 PM	✓	✓	✓	
	WEST SAMPLE		1								1/19/17	1:45 PM	✓	✓	✓	

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Relinquished By: *Cliff Brunson* Date: *1/19/17* Time: *5:00pm*
 Received By: *Casey Summers*
 Relinquished By: *Casey Summers* Date: *1/23/17* Time: *11:50*
 Received By: *Cliff Brunson*
 Delivered By: (Circle One) *Casey Summers* Sample Condition: Intact Cool Yes No
 Sampler - UPS - Bus - Other: *#75 2.40* CHECKED BY: *Casey Summers*
 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

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

287

Company Name: BBC International, Inc. **BILL TO** P.O. #: **ANALYSIS REQUEST**

Project Manager: Cliff Brunson Address: P.O. Box 805 City: Hobbs State: NM Zip: 88241

Phone #: 575-397-6388 Fax #: 575-397-0397 Attn: Casey Summers

Project #: Project Name: Plains Knight #1 TB Project Owner: Oxy

Project Location: Lea County, NM City: State: Zip:

Sampler Name: Roger Hernandez P.O. #: Phone #: Fax #:

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV	SAMPLING	DATE	TIME	ANALYSIS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
H10D147	11	6	1			✓				✓	1/19/17	2:00 PM	BTEX	
													CI	
													TPH	

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Relinquished By: *Casey Summers* Date: 1/19/17 Received By: *Casey Summers*

Relinquished By: *Casey Summers* Date: 1/19/17 Received By: *Casey Summers*

Delivered By: (Circle One) *UPS* #75 2:40

Sampler - UPS - Bus - Other: *#75 2:40*

Sample Condition: Cool Intact Yes No

CHECKED BY: *Casey Summers*

REMARKS:

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

March 14, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: PLAINS KNIGHT #1 TB

Enclosed are the results of analyses for samples received by the laboratory on 03/08/17 10:30.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

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

Received:	03/08/2017	Sampling Date:	03/06/2017
Reported:	03/14/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - JAL		

Sample ID: SP 1 @ 2 (H700589-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/13/2017	ND	2.01	101	2.00	1.89	
Toluene*	<0.050	0.050	03/13/2017	ND	1.87	93.7	2.00	2.37	
Ethylbenzene*	<0.050	0.050	03/13/2017	ND	1.86	92.9	2.00	2.94	
Total Xylenes*	<0.150	0.150	03/13/2017	ND	5.29	88.1	6.00	3.03	
Total BTEX	<0.300	0.300	03/13/2017	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/09/2017	ND	448	112	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	03/08/2017	ND	199	99.5	200	4.57	
DRO >C10-C28	17.0	10.0	03/08/2017	ND	211	106	200	7.03	

Surrogate: 1-Chlorooctane 84.0 % 25.1-158
Surrogate: 1-Chlorooctadecane 87.2 % 26.8-170

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	03/08/2017	Sampling Date:	03/06/2017
Reported:	03/14/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - JAL		

Sample ID: SP 2 @ 2 (H700589-02)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/13/2017	ND	2.01	101	2.00	1.89	
Toluene*	<0.050	0.050	03/13/2017	ND	1.87	93.7	2.00	2.37	
Ethylbenzene*	<0.050	0.050	03/13/2017	ND	1.86	92.9	2.00	2.94	
Total Xylenes*	<0.150	0.150	03/13/2017	ND	5.29	88.1	6.00	3.03	
Total BTEX	<0.300	0.300	03/13/2017	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	03/09/2017	ND	448	112	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	03/08/2017	ND	199	99.5	200	4.57	
DRO >C10-C28	<10.0	10.0	03/08/2017	ND	211	106	200	7.03	

Surrogate: 1-Chlorooctane 84.0 % 25.1-158

Surrogate: 1-Chlorooctadecane 82.8 % 26.8-170

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	03/08/2017	Sampling Date:	03/06/2017
Reported:	03/14/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - JAL		

Sample ID: SP 3 @ 2 (H700589-03)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/13/2017	ND	2.01	101	2.00	1.89	
Toluene*	<0.050	0.050	03/13/2017	ND	1.87	93.7	2.00	2.37	
Ethylbenzene*	<0.050	0.050	03/13/2017	ND	1.86	92.9	2.00	2.94	
Total Xylenes*	<0.150	0.150	03/13/2017	ND	5.29	88.1	6.00	3.03	
Total BTEX	<0.300	0.300	03/13/2017	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	03/09/2017	ND	448	112	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	<50.0	50.0	03/08/2017	ND	199	99.5	200	4.57	
DRO >C10-C28	<50.0	50.0	03/08/2017	ND	211	106	200	7.03	

Surrogate: 1-Chlorooctane 93.8 % 25.1-158

Surrogate: 1-Chlorooctadecane 99.3 % 26.8-170

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	03/08/2017	Sampling Date:	03/06/2017
Reported:	03/14/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - JAL		

Sample ID: SP 3 @ 3 (H700589-04)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/13/2017	ND	2.01	101	2.00	1.89	
Toluene*	<0.050	0.050	03/13/2017	ND	1.87	93.7	2.00	2.37	
Ethylbenzene*	<0.050	0.050	03/13/2017	ND	1.86	92.9	2.00	2.94	
Total Xylenes*	<0.150	0.150	03/13/2017	ND	5.29	88.1	6.00	3.03	
Total BTEX	<0.300	0.300	03/13/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	176	16.0	03/09/2017	ND	448	112	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	03/08/2017	ND	199	99.5	200	4.57	
DRO >C10-C28	<10.0	10.0	03/08/2017	ND	211	106	200	7.03	

Surrogate: 1-Chlorooctane 87.7 % 25.1-158

Surrogate: 1-Chlorooctadecane 86.8 % 26.8-170

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	03/08/2017	Sampling Date:	03/06/2017
Reported:	03/14/2017	Sampling Type:	Soil
Project Name:	PLAINS KNIGHT #1 TB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY - JAL		

Sample ID: SP 4 @ 1 (H700589-05)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/13/2017	ND	2.01	101	2.00	1.89	
Toluene*	<0.050	0.050	03/13/2017	ND	1.87	93.7	2.00	2.37	
Ethylbenzene*	<0.050	0.050	03/13/2017	ND	1.86	92.9	2.00	2.94	
Total Xylenes*	<0.150	0.150	03/13/2017	ND	5.29	88.1	6.00	3.03	
Total BTEX	<0.300	0.300	03/13/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/09/2017	ND	448	112	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	03/08/2017	ND	193	96.6	200	1.04	
DRO >C10-C28	<10.0	10.0	03/08/2017	ND	198	99.0	200	0.803	

Surrogate: 1-Chlorooctane 85.2 % 25.1-158

Surrogate: 1-Chlorooctadecane 78.2 % 26.8-170

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Celey D. Keene, Lab Director/Quality Manager

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



Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: BBC International, Inc.		P.O. #:		Company: Oxy							
Project Manager: Cliff Brunson		Attn:		Address: Oxy							
Address: P.O. Box 805		State: NM		Zip: 88241							
City: Hobbs		Phone #: 575-397-6388		Fax #: 575-397-0397							
Project #:		Project Owner: Oxy		City:							
Project Name: Plain Knight #1TB		State:		Zip:							
Project Location: 21		Phone #:		Fax #:							
Sampler Name: Jeff		FOR LAB USE ONLY									
Lab I.D. H100589	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV	SAMPLING	DATE	TIME	TPH	BTEX	CL-
1	SP102	G	1	SOIL	✓	3-6	10:19	✓	✓	✓	
2	SP202	G	1	WASTEWATER	✓	3-6	11:30	✓	✓	✓	
3	SP302	G	1	SLUDGE	✓	3-6	12:45	✓	✓	✓	
4	SP303	G	1	OTHER:	✓	3-6	1:39	✓	✓	✓	
5	SP401	G	1	ACID/BASE:	✓	3-6	2:30	✓	✓	✓	
				ICE / COOL							
				OTHER:							

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Relinquished By: _____ Date: 3/6/17 Time: 10:30

Received By: Jeff Brunson

Delivered By: (Circle One) #75 - UPS - Bus - Other: -9.62

Sample Condition: Cool Intact Yes No Yes No

CHECKED BY: [Signature]

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

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

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.

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company	Oxy Permian Ltd.	Contact	Casey Summers
Address	PO Box 4294; Houston, TX 77210	Telephone No.	(575) 513-8289
Facility Name	Plains Knight #1 Tank Battery	Facility Type	Battery
Surface Owner	Mineral Owner	API No.	30-025-11207

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	23	24S	37E					Lea County, NM

Latitude N 32.19978° Longitude W 103.13753°

NATURE OF RELEASE

Type of Release	Produced water	Volume of Release	15 bbls	Volume Recovered	10 bbls
Source of Release	Tank spilled due to failure of a pump toggle switch	Date and Hour of Occurrence	12/19/2016	Date and Hour of Discovery	
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Tomas Oberding- NMOCD		
By Whom?	Kathy@ BBC International, Inc.	Date and Hour	12/21/2016 @ 10:38 am		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Failure of a pump toggle switched caused a tank to spill 15 bbls of produced water inside the firewall on location. A vacuum truck recovered 10 bbls of produced water and the switch was returned to service.

Describe Area Affected and Cleanup Action Taken.*

The affected area is approximately 70' x 20' on location inside the firewall. Remediation will be completed in accordance with a plan approved by NMOCD.

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

Signature:	OIL CONSERVATION DIVISION		
Printed Name: Casey Summers	Approved by Environmental Specialist:		
Title: NM Environmental Advisor	Approval Date:	Expiration Date:	
E-mail Address: Casey_Summers@oxy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 1-9-17 Phone: (575) 513-8289			

* Attach Additional Sheets If Necessary