

RECEIVED

By JKeyes at 3:28 pm, Jan 14, 2016

Closure Report**APPROVED**

By JKeyes at 3:28 pm, Jan 14, 2016

Site Description

Site Name:	Patterson B-52 Federal Com #2H
Company:	COG Operating LLC
Legal Description:	U/L A, Section 5, T19S, R32E
County:	Lea County, NM
GPS Coordinates:	N 32.69570° W 103.78062°

Release Data

Date of Release:	10/07/2015
Type of Release:	Oil and produced water
Source of Release:	Lightning strike
Volume of Release:	1 bbl oil, 125 bbls produced water
Volume Recovered:	Approximately 1 bbl oil, 125 bbls produced water

Remediation Specifications

Remediation Parameters:	Excavate the entire spill area to a depth of 6 inches. Backfill the site with clean soil.	
Remediation Activities:	12/03/2015 to 12/09/2015	
Plan Sent to OCD:	11/22/2015	Email from Cliff Brunson to Jamie Keyes
OCD Approval of Plan:	11/23/2015	Email from Jamie Keyes to Cliff Brunson
Plan Sent to BLM:	11/23/2015	Email from Cliff Brunson to Shelly Tucker
BLM Approval of Plan:	11/23/2015	Email from Shelly Tucker to Cliff Brunson

Supporting Documentation

Initial C-141	Signed 10/21/2015
Final C-141	Signed 01/11/2016
Site Diagram	November 2015
Groundwater Plot	375'
TOPO Maps	November 2015
Lab Summary	11/05/
Lab Analysis	07/15/2015
Correspondence	Request and approval of remediation plan via email

Request for Closure

Based on the completion of the remediation plan as agreed upon, BBC International requests closure approval from NMOCD.

Cliff Brunson, President of BBC International Inc.

01/14/2016

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: COG Operating LLC	Contact: Robert McNeill	
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-230-0077	
Facility Name: PATTERSON B 52 FEDERAL COM #002H	Facility Type: Battery	
Surface Owner: Federal	Mineral Owner: Federal	API No. 30-025-40773

LOCATION OF RELEASE

Unit Letter A	Section 5	Township 19S	Range 32E	Feet from the 330	North/South Line North	Feet from the 330	East/West Line East	County Eddy <i>lea</i>
------------------	--------------	-----------------	--------------	----------------------	---------------------------	----------------------	------------------------	---------------------------

Latitude 32.6958351 Longitude -103.7809525

KD

NATURE OF RELEASE

Type of Release: Oil & Produced Water	Volume of Release: 1 bbls Oil ; 125 bbls PW	Volume Recovered: 1 bbls Oil ; 125 bbls PW
Source of Release: Lightning Strike	Date and Hour of Occurrence: 10/7/2015 9:00 pm	Date and Hour of Discovery: 10/7/2015 9:00 pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Kellie Jones - NMOCD / Jim Amos - BLM	
By Whom? Lupe Carrasco	Date and Hour: Thu 10/8/2015 3:46 PM	
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.*

This release was caused by a lightning strike. Once the fire has been extinguished vacuum trucks were dispatched to recover all standing fluid.

Describe Area Affected and Cleanup Action Taken.*

This release remained within the lined containment. The liner was damaged in the fire. Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.

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:

A Trujillo

Printed Name: Amanda Trujillo

Approved by Environmental Specialist:

Title: Senior Environmental Coordinator

Approval Date:

Expiration Date:

E-mail Address: atrujillo@concho.com

Conditions of Approval:

Attached ☐

Date: October 21, 2015 Phone: 575-748-6940

* Attach Additional Sheets If Necessary

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: COG Operating	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-230-0077
Facility Name: PATTERSON B 52 FEDERAL COM #002H	Facility Type: Battery
Surface Owner: Federal	Mineral Owner: Federal
API No. 30-025-40773	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	5	19S	32E	330	North	330	East	Lia KAP Eddy County, NM

Latitude N 32.68570° Longitude W 103.78062°

NATURE OF RELEASE

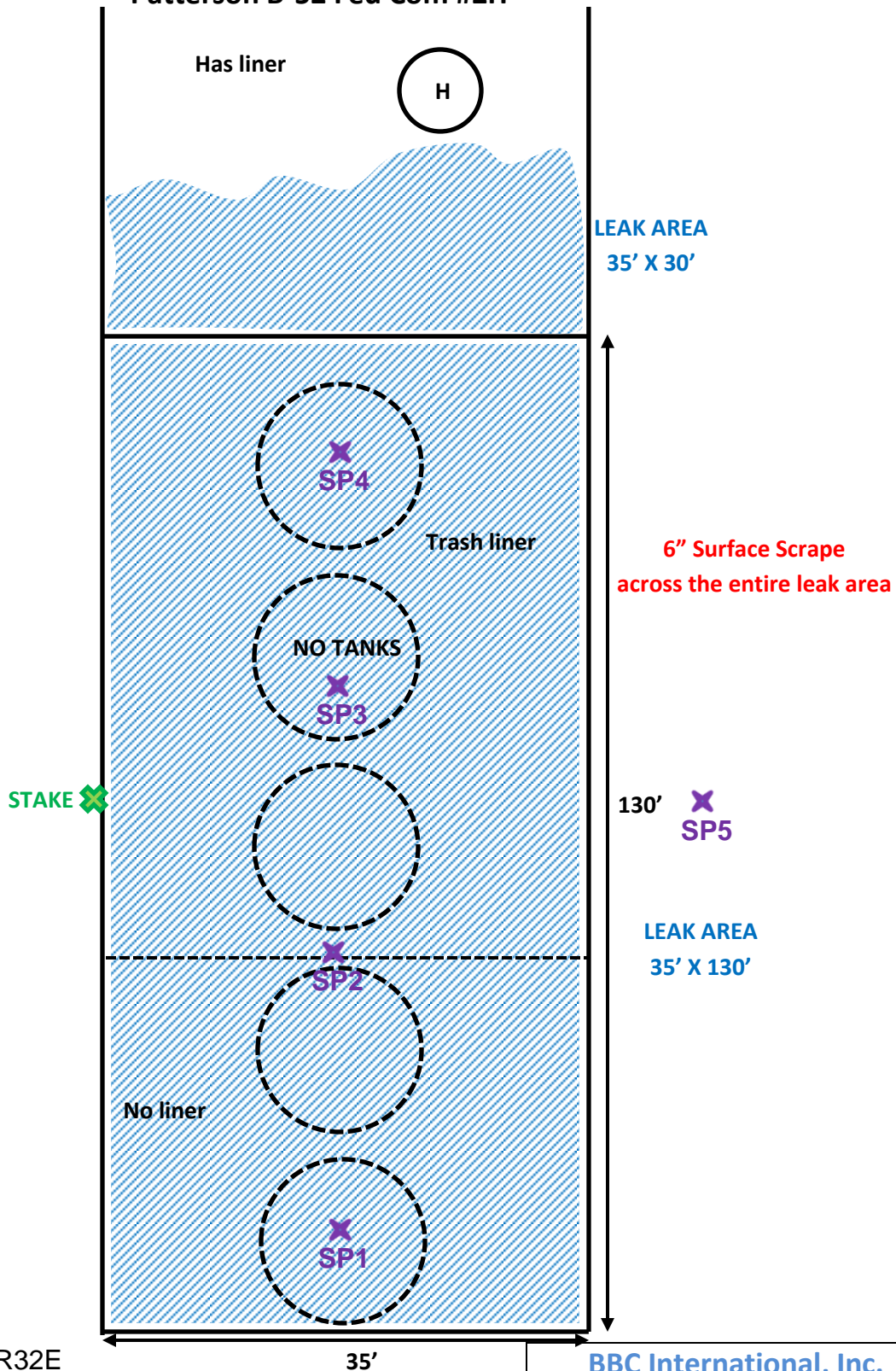
Type of Release: Oil and Produced water	Volume of Release: 1 bbl oil, 125 bbls produced water	Volume Recovered: 1 bbl oil, 125 bbls produced water
Source of Release: Lightning strike	Date and Hour of Occurrence 10/07/2015 @ 9:00 pm	Date and Hour of Discovery 10/07/2015 @ 9:00 pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Kellie Jones-NMOCD, Jim Amos-BLM	
By Whom? Lupe Carrasco	Date and Hour: 10/08/2015 @ 3:46 pm	
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.* This release was caused by a lightning strike. Once the fire had been extinguished, vacuum trucks were dispatched to recover all standing fluid.		
Describe Area Affected and Cleanup Action Taken.* This release remained within the lined containment. Remediation was completed in accordance with the remediation plan approved by Jamie Keyes of NMOCD via email on 11/23/2015 and approved by Shelly Tucker of the BLM via email on 11/23/2015.		
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: <i>A. Davis</i>	OIL CONSERVATION DIVISION	
Printed Name: Amanda Trujillo	Approved by Environmental Specialist: <i>Jamie Keyes</i>	
Title: Environmental Coordinator	Approval Date: 01/14/2016	Expiration Date: ///
E-mail Address: atrujillo@concho.com	Conditions of Approval: ///	Attached <input type="checkbox"/> LRP 3958
Date: 1/11/16	Phone: 575-748-6940	

* Attach Additional Sheets If Necessary



Concho

Patterson B-52 Fed Com #2H



U/L A, Section 5, T19S, R32E

Lea County, NM

N 32.69570° W 103.78062°

API# 30-025-40773

BBC International, Inc.

Concho

Patterson B-52 Fed Com #2H

Date: 11/2/15

DRWG by: K. Purvis

NOT TO SCALE

File: Concho 2015



Groundwater Plot

Concho Patterson B-52 Fed Com #2H

County
Lea

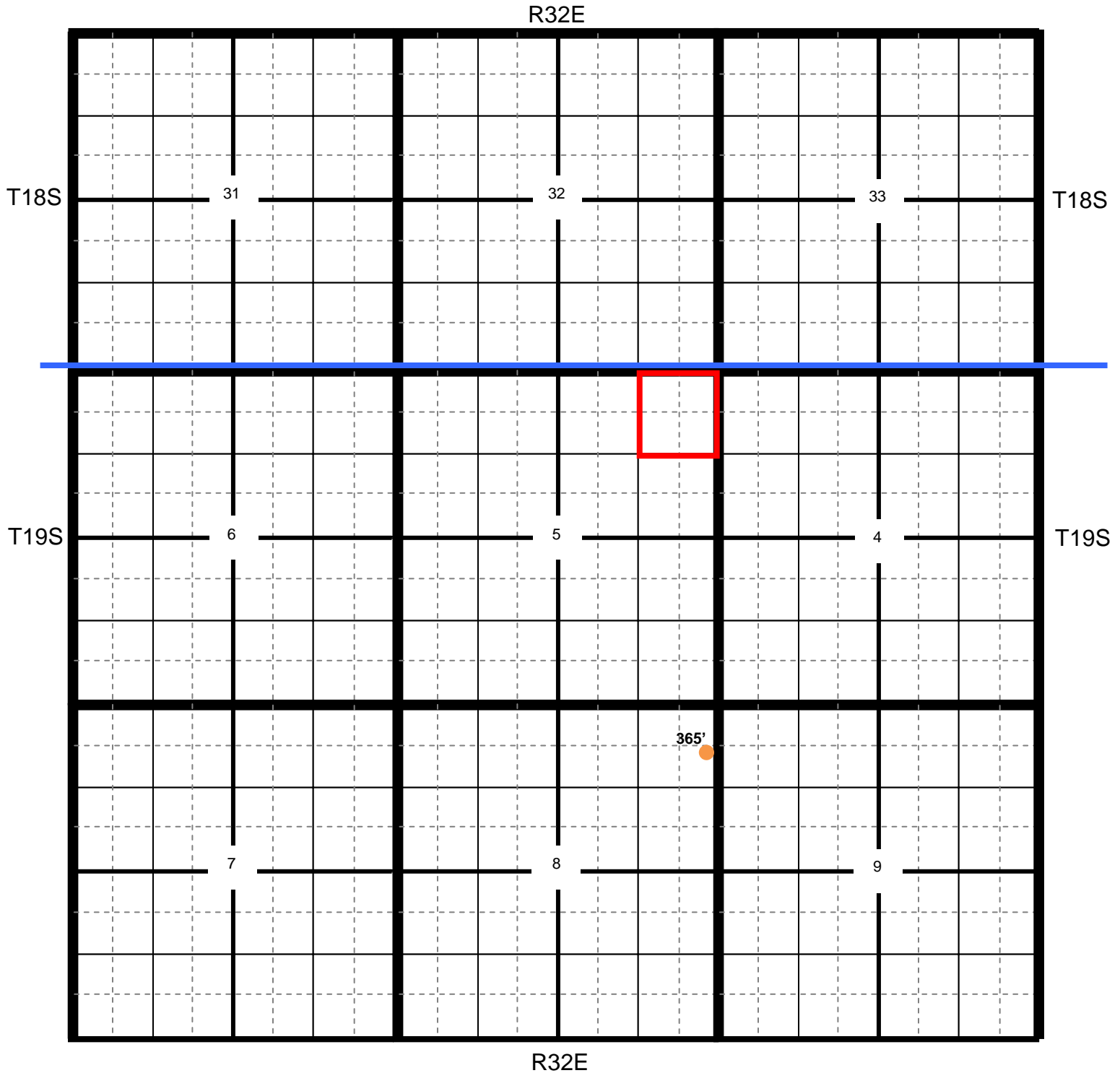
Unit Letter
A

Section
5

Township
19S

Range
32E

Trend Map 375'



Location

OCD

USGS

SEO

All Databases

Concho Patterson B-52 Fed Com #2H

County	Unit Letter	Section	Township	Range
Lea	A	5	19S	32E

Trend Map 375'

1

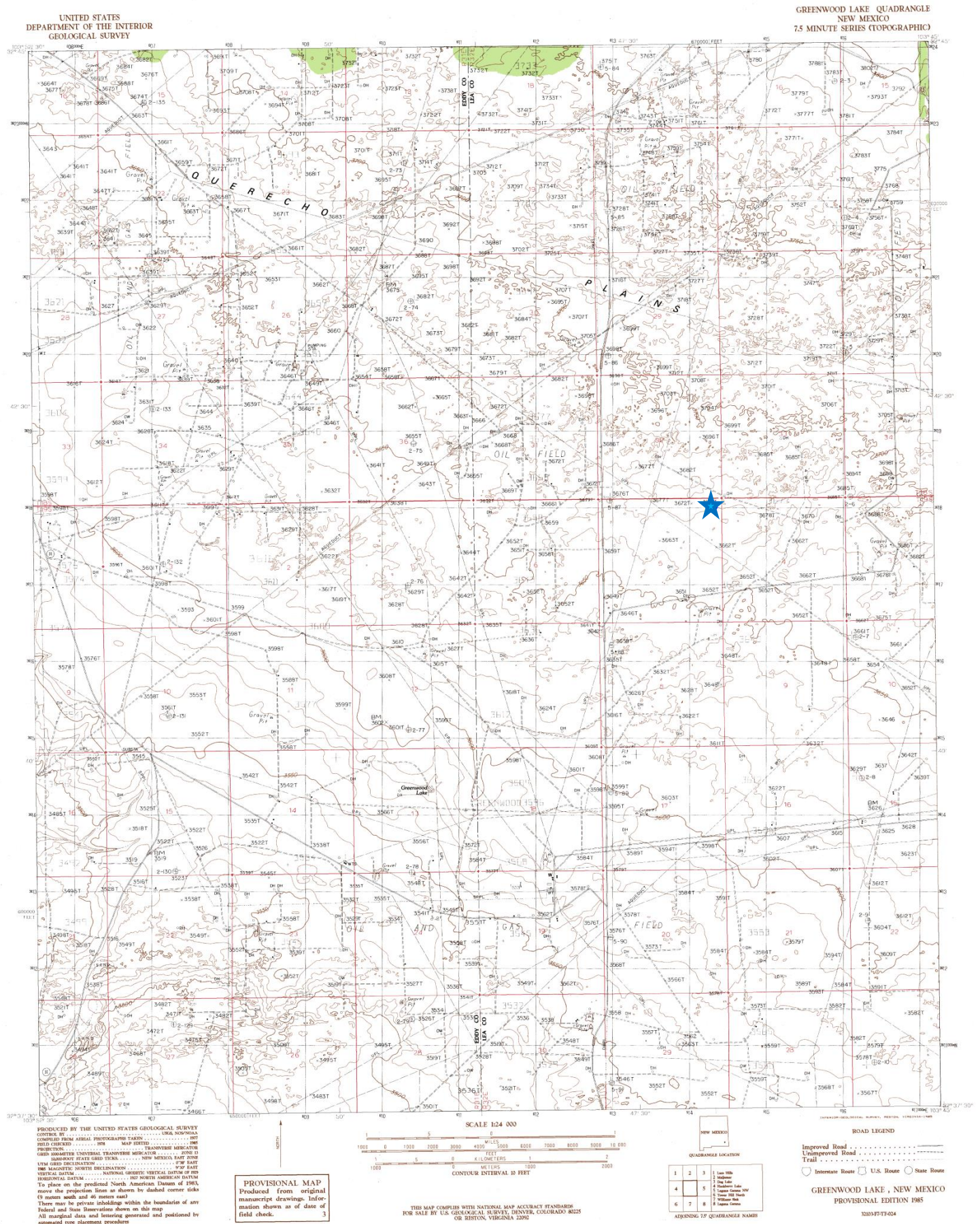
2

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

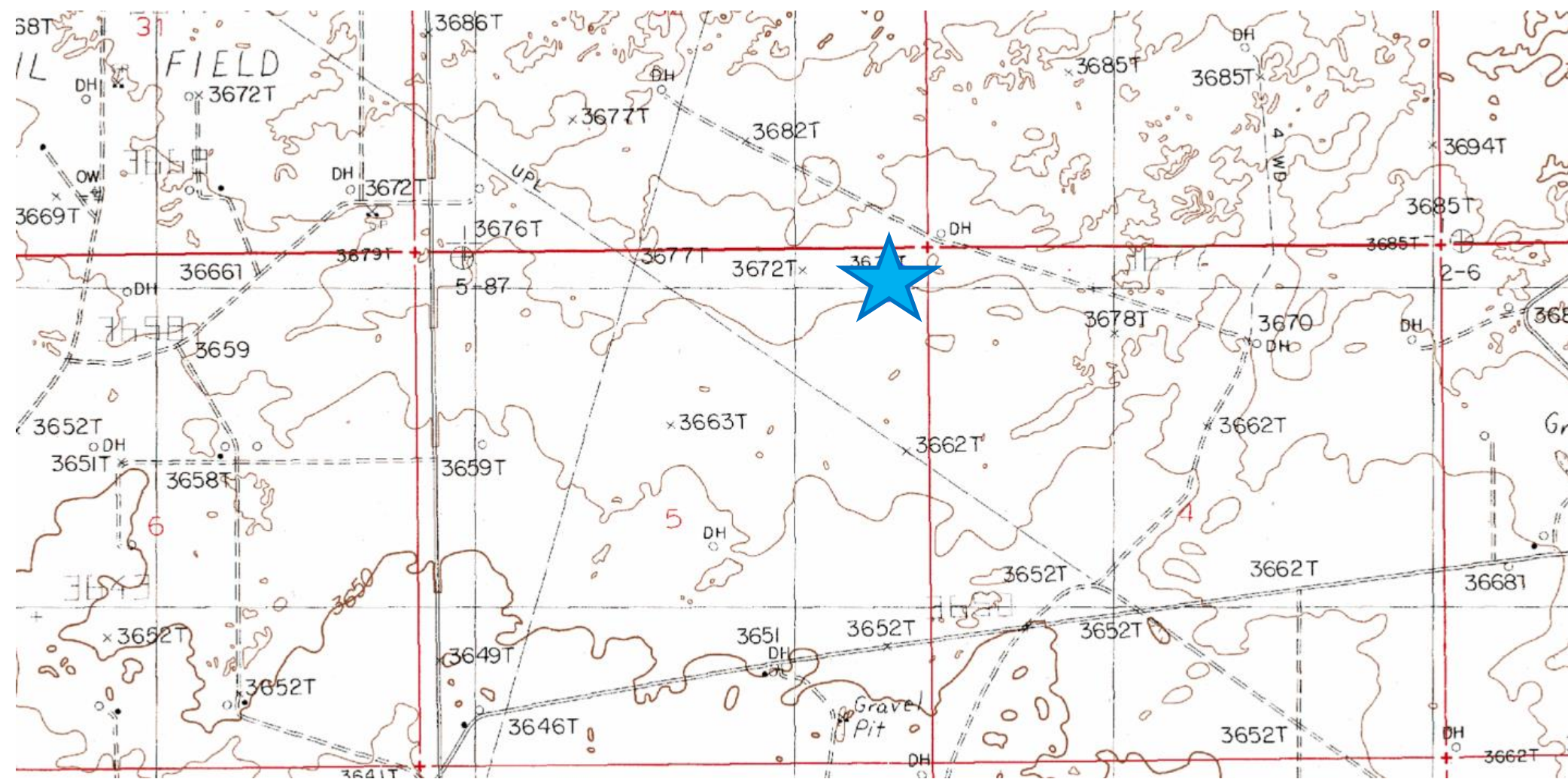
3

4

Patterson B-52 Fed Com #2H



Patterson B-52 Fed Com #2H



**Laboratory Analytical Results Summary
Patterson B-52 Fed Com #2H**

		Sample	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'	SP1 @ 4'
Analyte	Method	Date	11/5/15	11/5/15	11/5/15	11/5/15
			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	<0.050
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		208	368	176	128
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		116	<10.0	<10.0	<10.0

		Sample	SP2 @ 1'	SP2 @ 2'	SP2 @ 3'	SP2 @ 4'
Analyte	Method	Date	11/5/15	11/5/15	11/5/15	11/5/15
			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	<0.050
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		352	304	320	<16.0
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0

		Sample	SP3 @ 1'	SP3 @ 2'
Analyte	Method	Date	11/5/15	11/5/15
			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	SM4500Cl-B		320	32
GRO	TPH 8015M		<10.0	<10.0
DRO	TPH 8015M		<10.0	10.2

		Sample	SP4 @ 1'	SP4 @ 2'
Analyte	Method	Date	11/5/15	11/5/15
			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	SM4500Cl-B		176	<16.0
GRO	TPH 8015M		<10.0	<10.0
DRO	TPH 8015M		10.8	<10.0

		Sample	SP5 @ 1'	SP5 @ 2'
Analyte	Method	Date	11/5/15	11/5/15
			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	SM4500Cl-B		<16.0	<16.0
GRO	TPH 8015M		<10.0	<10.0
DRO	TPH 8015M		<10.0	<10.0

November 13, 2015

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: PATTERSON B-52 #2H

Enclosed are the results of analyses for samples received by the laboratory on 11/09/15 9:08.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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: 11/09/2015
Reported: 11/13/2015
Project Name: PATTERSON B-52 #2H
Project Number: NONE GIVEN
Project Location: 126

Sampling Date: 11/05/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP1 @ 1 (H502958-01)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	13.7	
Toluene*	<0.050	0.050	11/12/2015	ND	2.27	113	2.00	12.0	
Ethylbenzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	10.2	
Total Xylenes*	<0.150	0.150	11/12/2015	ND	6.46	108	6.00	10.1	
Total BTX	<0.300	0.300	11/12/2015	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	11/11/2015	ND	384	96.0	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/10/2015	ND	184	92.2	200	4.70	
DRO >C10-C28	116	10.0	11/10/2015	ND	176	87.9	200	7.82	

Surrogate: 1-Chlorooctane 79.2 % 35-147

Surrogate: 1-Chlorooctadecane 86.5 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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: 11/09/2015
Reported: 11/13/2015
Project Name: PATTERSON B-52 #2H
Project Number: NONE GIVEN
Project Location: 126

Sampling Date: 11/05/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP1 @ 2 (H502958-02)

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	11/12/2015	ND	2.06	103	2.00	13.7	
Toluene*	<0.050	0.050	11/12/2015	ND	2.27	113	2.00	12.0	
Ethylbenzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	10.2	
Total Xylenes*	<0.150	0.150	11/12/2015	ND	6.46	108	6.00	10.1	
Total BTEx	<0.300	0.300	11/12/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	11/11/2015	ND	384	96.0	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/10/2015	ND	184	92.2	200	4.70	
DRO >C10-C28	<10.0	10.0	11/10/2015	ND	176	87.9	200	7.82	

Surrogate: 1-Chlorooctane 92.5 % 35-147

Surrogate: 1-Chlorooctadecane 98.8 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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: 11/09/2015
Reported: 11/13/2015
Project Name: PATTERSON B-52 #2H
Project Number: NONE GIVEN
Project Location: 126

Sampling Date: 11/05/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP1 @ 3 (H502958-03)

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	11/12/2015	ND	2.06	103	2.00	13.7	
Toluene*	<0.050	0.050	11/12/2015	ND	2.27	113	2.00	12.0	
Ethylbenzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	10.2	
Total Xylenes*	<0.150	0.150	11/12/2015	ND	6.46	108	6.00	10.1	
Total BTEx	<0.300	0.300	11/12/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	11/11/2015	ND	384	96.0	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/10/2015	ND	184	92.2	200	4.70	
DRO >C10-C28	<10.0	10.0	11/10/2015	ND	176	87.9	200	7.82	

Surrogate: 1-Chlorooctane 86.4 % 35-147

Surrogate: 1-Chlorooctadecane 93.9 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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: 11/09/2015
Reported: 11/13/2015
Project Name: PATTERSON B-52 #2H
Project Number: NONE GIVEN
Project Location: 126

Sampling Date: 11/05/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP1 @ 4 (H502958-04)

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	11/12/2015	ND	2.06	103	2.00	13.7	
Toluene*	<0.050	0.050	11/12/2015	ND	2.27	113	2.00	12.0	
Ethylbenzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	10.2	
Total Xylenes*	<0.150	0.150	11/12/2015	ND	6.46	108	6.00	10.1	
Total BTEx	<0.300	0.300	11/12/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	11/11/2015	ND	384	96.0	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/10/2015	ND	184	92.2	200	4.70	
DRO >C10-C28	<10.0	10.0	11/10/2015	ND	176	87.9	200	7.82	

Surrogate: 1-Chlorooctane 78.4 % 35-147

Surrogate: 1-Chlorooctadecane 84.4 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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: 11/09/2015
Reported: 11/13/2015
Project Name: PATTERSON B-52 #2H
Project Number: NONE GIVEN
Project Location: 126

Sampling Date: 11/05/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP2 @ 1 (H502958-05)

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	11/12/2015	ND	2.06	103	2.00	13.7	
Toluene*	<0.050	0.050	11/12/2015	ND	2.27	113	2.00	12.0	
Ethylbenzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	10.2	
Total Xylenes*	<0.150	0.150	11/12/2015	ND	6.46	108	6.00	10.1	
Total BTEx	<0.300	0.300	11/12/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.1 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	11/11/2015	ND	384	96.0	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/10/2015	ND	184	92.2	200	4.70	
DRO >C10-C28	<10.0	10.0	11/10/2015	ND	176	87.9	200	7.82	

Surrogate: 1-Chlorooctane 93.3 % 35-147

Surrogate: 1-Chlorooctadecane 101 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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: 11/09/2015
Reported: 11/13/2015
Project Name: PATTERSON B-52 #2H
Project Number: NONE GIVEN
Project Location: 126

Sampling Date: 11/05/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP2 @ 2 (H502958-06)

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	11/12/2015	ND	2.06	103	2.00	13.7	
Toluene*	<0.050	0.050	11/12/2015	ND	2.27	113	2.00	12.0	
Ethylbenzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	10.2	
Total Xylenes*	<0.150	0.150	11/12/2015	ND	6.46	108	6.00	10.1	
Total BTEx	<0.300	0.300	11/12/2015	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	11/11/2015	ND	384	96.0	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/10/2015	ND	184	92.2	200	4.70	
DRO >C10-C28	<10.0	10.0	11/10/2015	ND	176	87.9	200	7.82	

Surrogate: 1-Chlorooctane 88.5 % 35-147

Surrogate: 1-Chlorooctadecane 95.9 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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: 11/09/2015
Reported: 11/13/2015
Project Name: PATTERSON B-52 #2H
Project Number: NONE GIVEN
Project Location: 126

Sampling Date: 11/05/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP2 @ 3 (H502958-07)

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	11/12/2015	ND	2.06	103	2.00	13.7	
Toluene*	<0.050	0.050	11/12/2015	ND	2.27	113	2.00	12.0	
Ethylbenzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	10.2	
Total Xylenes*	<0.150	0.150	11/12/2015	ND	6.46	108	6.00	10.1	
Total BTEx	<0.300	0.300	11/12/2015	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	11/11/2015	ND	384	96.0	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/11/2015	ND	195	97.7	200	2.61	
DRO >C10-C28	<10.0	10.0	11/11/2015	ND	191	95.7	200	5.87	

Surrogate: 1-Chlorooctane 88.4 % 35-147

Surrogate: 1-Chlorooctadecane 94.5 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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: 11/09/2015
Reported: 11/13/2015
Project Name: PATTERSON B-52 #2H
Project Number: NONE GIVEN
Project Location: 126

Sampling Date: 11/05/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP2 @ 4 (H502958-08)

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	11/12/2015	ND	2.06	103	2.00	13.7	
Toluene*	<0.050	0.050	11/12/2015	ND	2.27	113	2.00	12.0	
Ethylbenzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	10.2	
Total Xylenes*	<0.150	0.150	11/12/2015	ND	6.46	108	6.00	10.1	
Total BTEx	<0.300	0.300	11/12/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/11/2015	ND	384	96.0	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/11/2015	ND	195	97.7	200	2.61	
DRO >C10-C28	<10.0	10.0	11/11/2015	ND	191	95.7	200	5.87	

Surrogate: 1-Chlorooctane 86.7 % 35-147

Surrogate: 1-Chlorooctadecane 90.6 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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: 11/09/2015
Reported: 11/13/2015
Project Name: PATTERSON B-52 #2H
Project Number: NONE GIVEN
Project Location: 126

Sampling Date: 11/05/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP3 @ 1 (H502958-09)

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	11/12/2015	ND	2.06	103	2.00	13.7	
Toluene*	<0.050	0.050	11/12/2015	ND	2.27	113	2.00	12.0	
Ethylbenzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	10.2	
Total Xylenes*	<0.150	0.150	11/12/2015	ND	6.46	108	6.00	10.1	
Total BTEx	<0.300	0.300	11/12/2015	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	11/11/2015	ND	384	96.0	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/11/2015	ND	195	97.7	200	2.61	
DRO >C10-C28	<10.0	10.0	11/11/2015	ND	191	95.7	200	5.87	

Surrogate: 1-Chlorooctane 80.6 % 35-147

Surrogate: 1-Chlorooctadecane 83.0 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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: 11/09/2015
Reported: 11/13/2015
Project Name: PATTERSON B-52 #2H
Project Number: NONE GIVEN
Project Location: 126

Sampling Date: 11/05/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP3 @ 2 (H502958-10)

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	11/12/2015	ND	2.06	103	2.00	13.7	
Toluene*	<0.050	0.050	11/12/2015	ND	2.27	113	2.00	12.0	
Ethylbenzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	10.2	
Total Xylenes*	<0.150	0.150	11/12/2015	ND	6.46	108	6.00	10.1	
Total BTEx	<0.300	0.300	11/12/2015	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/11/2015	ND	400	100	400	7.69	

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	11/11/2015	ND	195	97.7	200	2.61	
DRO >C10-C28	10.2	10.0	11/11/2015	ND	191	95.7	200	5.87	

Surrogate: 1-Chlorooctane 89.6 % 35-147

Surrogate: 1-Chlorooctadecane 95.4 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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: 11/09/2015
Reported: 11/13/2015
Project Name: PATTERSON B-52 #2H
Project Number: NONE GIVEN
Project Location: 126

Sampling Date: 11/05/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP4 @ 1 (H502958-11)

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	11/12/2015	ND	2.06	103	2.00	13.7	
Toluene*	<0.050	0.050	11/12/2015	ND	2.27	113	2.00	12.0	
Ethylbenzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	10.2	
Total Xylenes*	<0.150	0.150	11/12/2015	ND	6.46	108	6.00	10.1	
Total BTEx	<0.300	0.300	11/12/2015	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	11/11/2015	ND	400	100	400	7.69	

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	11/11/2015	ND	195	97.7	200	2.61	
DRO >C10-C28	10.8	10.0	11/11/2015	ND	191	95.7	200	5.87	

Surrogate: 1-Chlorooctane 88.6 % 35-147

Surrogate: 1-Chlorooctadecane 92.8 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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: 11/09/2015
Reported: 11/13/2015
Project Name: PATTERSON B-52 #2H
Project Number: NONE GIVEN
Project Location: 126

Sampling Date: 11/05/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP4 @ 2 (H502958-12)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	13.7	
Toluene*	<0.050	0.050	11/12/2015	ND	2.27	113	2.00	12.0	
Ethylbenzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	10.2	
Total Xylenes*	<0.150	0.150	11/12/2015	ND	6.46	108	6.00	10.1	
Total BTEx	<0.300	0.300	11/12/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.9 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/11/2015	ND	400	100	400	7.69	

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	11/11/2015	ND	195	97.7	200	2.61	
DRO >C10-C28	<10.0	10.0	11/11/2015	ND	191	95.7	200	5.87	

Surrogate: 1-Chlorooctane 91.6 % 35-147

Surrogate: 1-Chlorooctadecane 92.6 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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: 11/09/2015
Reported: 11/13/2015
Project Name: PATTERSON B-52 #2H
Project Number: NONE GIVEN
Project Location: 126

Sampling Date: 11/05/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP5 @ 1 (H502958-13)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	13.7	
Toluene*	<0.050	0.050	11/12/2015	ND	2.27	113	2.00	12.0	
Ethylbenzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	10.2	
Total Xylenes*	<0.150	0.150	11/12/2015	ND	6.46	108	6.00	10.1	
Total BTEx	<0.300	0.300	11/12/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/11/2015	ND	400	100	400	7.69	

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	11/11/2015	ND	195	97.7	200	2.61	
DRO >C10-C28	<10.0	10.0	11/11/2015	ND	191	95.7	200	5.87	

Surrogate: 1-Chlorooctane 85.9 % 35-147

Surrogate: 1-Chlorooctadecane 92.3 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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: 11/09/2015
Reported: 11/13/2015
Project Name: PATTERSON B-52 #2H
Project Number: NONE GIVEN
Project Location: 126

Sampling Date: 11/05/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP5 @ 2 (H502958-14)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	13.7	
Toluene*	<0.050	0.050	11/12/2015	ND	2.27	113	2.00	12.0	
Ethylbenzene*	<0.050	0.050	11/12/2015	ND	2.06	103	2.00	10.2	
Total Xylenes*	<0.150	0.150	11/12/2015	ND	6.46	108	6.00	10.1	
Total BTEx	<0.300	0.300	11/12/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/11/2015	ND	400	100	400	7.69	

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	11/11/2015	ND	195	97.7	200	2.61	
DRO >C10-C28	<10.0	10.0	11/11/2015	ND	191	95.7	200	5.87	

Surrogate: 1-Chlorooctane 83.7 % 35-147

Surrogate: 1-Chlorooctadecane 89.8 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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

1/2

Company Name: BBC International, Inc.

Project Manager: Cliff Brunson

Address: P.O. Box 805

City: Hobbs

Phone #: 575-397-6388

Project #:

Project Name:

Project Location:

Sample Name:

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

H502958

1
2
3
4
5
6
7
8
9
10

SP101
SP102
SP103
SP104
SP201
SP202
SP203
SP204
SP301
SP302

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

BTEX
TPH
CL-

BILL TO

ANALYSIS REQUEST

P.O. #:

Company:

Attn:

Address:

City:

State: Zip:

Phone #:

Fax #:

Relinquished By:

Date:

Received By:

Phone Result:

Yes

No

Add'l Phone #:

Add'l Fax #:

REMARKS:

Relinquished By:

Date:

Received By:

Phone Result:

Yes

No

Add'l Phone #:

Add'l Fax #:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition
Cool ☒ Intact
Yes ☒ No ☐

CHECKED BY:
(Initials)

+ 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

2/2

Company Name: BBC International, Inc.

Project Manager: Cliff Brunson

Address: P.O. Box 805

City: Hobbs

Phone #: 575-397-6388

Project #:

Project Name:

Project Location:

Sample Name:

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

HSD1958

SP466
SP466
SP501
SP502
11
12
13
14

(G)RAB OR (C)OMP.
CONTAINERS
GROUNDWATER
WASTEWATER
SOIL
OIL
SLUDGE
OTHER :
ACID/BASE:
ICE / COOL
OTHER :

DATE
TIME
11-5
215
233
326
338

BTEX
TPH
CI-

BILL TO

ANALYSIS REQUEST

P.O. #:

Company:

Attn:

Address:

City:

State:

Phone #:

Fax #:

PRESERV

SAMPLING

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 those for negligence and any other cause whatsoever 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 consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:

Date: 11-9-15

Received By:

Relinquished By:

Date: 11-9-15

Received By:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition

Cool Intact

CHECKED BY:

(Initials)

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

#54

Kathy Purvis

From: Keyes, Jamie, EMNRD <Jamie.Keyes@state.nm.us>
Sent: Monday, November 23, 2015 7:29 AM
To: Cliff Brunson
Cc: Robert Grubbs; Ken Swinney; Jennifer Gilkey; Kathy Purvis; Shelly Tucker; Jones, Kellie, EMNRD
Subject: RE: COG - Patterson B-52 Fed Com #2H - Remediation Plan

Good morning,

The work plan is approved as is.

Thank you,

Jamie

From: Cliff Brunson [<mailto:cbrunson@bbcinternational.com>]
Sent: Sunday, November 22, 2015 4:54 PM
To: Shelly Tucker; Jones, Kellie, EMNRD
Cc: Keyes, Jamie, EMNRD; Oberding, Tomas, EMNRD; Robert Grubbs; Ken Swinney; Jennifer Gilkey; Kathy Purvis
Subject: COG - Patterson B-52 Fed Com #2H - Remediation Plan

Shelly and Kellie,

I have attached the remediation materials that we used in our discussions concerning the remediation plan for the COG Patterson B-52 Fed Com #2H. As we all agreed, COG will excavate the entire spill area 6 inches and then backfill and rebuild the site.

If you would please reply via email with your approval and concurrence, it would be greatly appreciated.

If you have any question, please let me know.

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

Confidentiality Notice: This electronic transmission (and any attached documents) is intended only for the person(s) to whom it is addressed and may contain information that is privileged, confidential, or otherwise protected from disclosure. If you have received this transmission in error, please immediately notify the sender by e-mail or by telephone call to (575) 397-6388 for handling instructions. Any disclosure or distribution of the contents of this transmission by anyone other than the named recipient(s) is strictly prohibited.

No virus found in this message.

Checked by AVG - www.avg.com

Version: 2015.0.6176 / Virus Database: 4460/11047 - Release Date: 11/22/15

No virus found in this message.

Checked by AVG - www.avg.com

Version: 2015.0.6176 / Virus Database: 4460/11052 - Release Date: 11/23/15

Kathy Purvis

From: Tucker, Shelly <stucker@blm.gov>
Sent: Monday, November 23, 2015 8:57 AM
To: Keyes, Jamie, EMNRD
Cc: Cliff Brunson; Robert Grubbs; Ken Swinney; Jennifer Gilkey; Kathy Purvis; Jones, Kellie, EMNRD
Subject: Re: COG - Patterson B-52 Fed Com #2H - Remediation Plan

Morning..

BLM accepts/approves your work plan as submitted.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Shelly J Tucker

Environmental Protection Specialist
Bureau of Land Management

620 E. Greene St
Carlsbad, NM 88220

575.234.5905 - Direct
575.361.0084 - Cellular

stucker@blm.gov



The BLM acceptance/approval does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state or local laws/regulations.

Confidentiality Warning: This message along with any attachments are intended only for use of the individual or entity to which it is addressed and may contain information that is privileged or confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient or the employee or agent responsible for delivering this message to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately.

On Mon, Nov 23, 2015 at 7:28 AM, Keyes, Jamie, EMNRD <Jamie.Keyes@state.nm.us> wrote:

Good morning,

The work plan is approved as is.

Thank you,

Jamie

From: Cliff Brunson [mailto:cbrunson@bbcinternational.com]

Sent: Sunday, November 22, 2015 4:54 PM

To: Shelly Tucker; Jones, Kellie, EMNRD

Cc: Keyes, Jamie, EMNRD; Oberding, Tomas, EMNRD; Robert Grubbs; Ken Swinney; Jennifer Gilkey; Kathy Purvis

Subject: COG - Patterson B-52 Fed Com #2H - Remediation Plan

Shelly and Kellie,

I have attached the remediation materials that we used in our discussions concerning the remediation plan for the COG Patterson B-52 Fed Com #2H. As we all agreed, COG will excavate the entire spill area 6 inches and then backfill and rebuild the site.

If you would please reply via email with your approval and concurrence, it would be greatly appreciated.

If you have any question, please let me know.

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

Confidentiality Notice: This electronic transmission (and any attached documents) is intended only for the person(s) to whom it is addressed and may contain information that is privileged, confidential, or otherwise protected from disclosure. If you have received this transmission in error, please immediately notify the sender by e-mail or by telephone call to (575) 397-6388 for handling instructions. Any disclosure or distribution of the contents of this transmission by anyone other than the named recipient(s) is strictly prohibited.

No virus found in this message.

Checked by AVG - www.avg.com

Version: 2015.0.6176 / Virus Database: 4460/11052 - Release Date: 11/23/15

No virus found in this message.

Checked by AVG - www.avg.com

Version: 2015.0.6176 / Virus Database: 4460/11047 - Release Date: 11/22/15















