

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

DELINEATION WORKPLAN

COG – DODD FEDERAL UNIT #580 (Leak Date: 9/12/17)

RP # 2RP-4406 API # 30-015-39278

This delineation workplan and remediation proposal addresses the release associated with RP # 2RP-4406.

The following information includes:

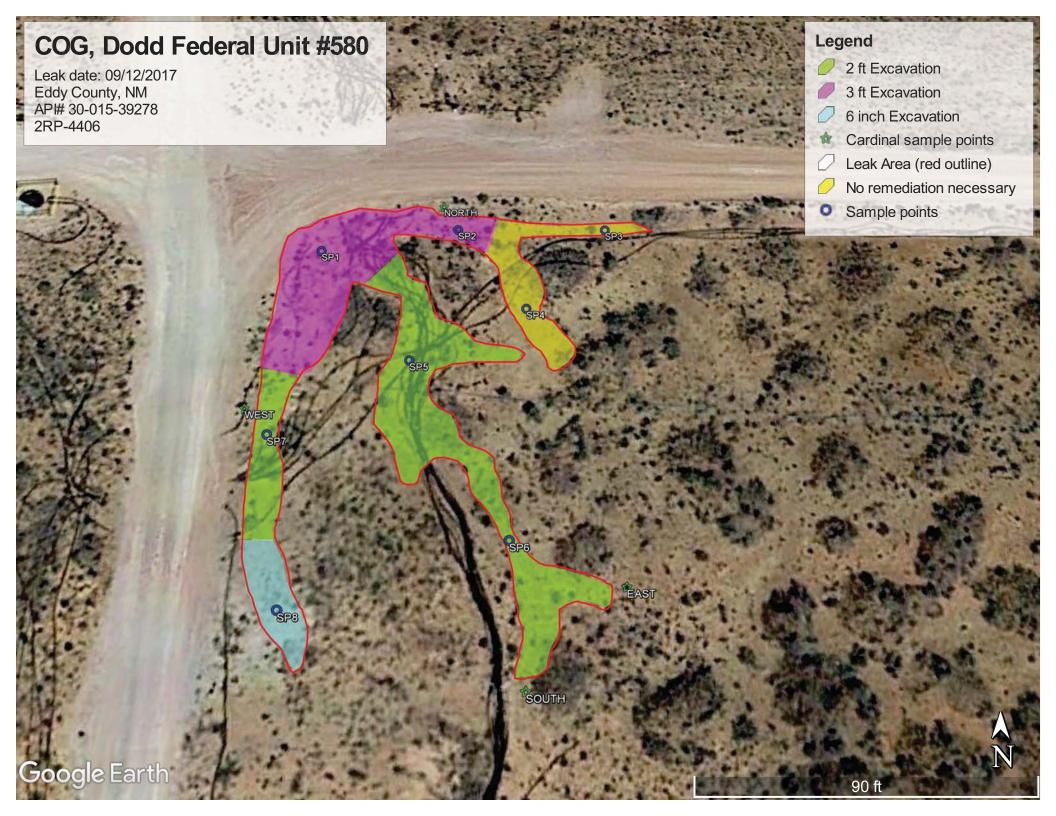
- 1. Scaled digital site map with spill area demarcated and leak point identified along with sample point locations and areas of remediation at appropriate depths.
- 2. GPS information for sample points and sample methodology
- 3. Depth to groundwater information (i.e., pdf of OSE search results and/or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

COG will excavate the spill area as depicted on the following site diagram. The leak area near SP1 and SP2 (purple shade on diagram) will be excavated to a depth of 3 feet. The leak area near SP3 and SP4 (yellow shade on diagram) will not require any remediation. The leak area near SP5, SP6, and SP7 (green shade on diagram) will be excavated to a depth of 2 feet. The leak area near SP8 (blue shade on diagram) 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.



COG, Dodd Federal Unit #580

Sample points

SP1, N 32.84170 W-104.05564

SP2, N 32.84173 W-104.05550

SP3, N 32.84173 W-104.05534

SP4, N 32.84164 W-104.05542

SP5, N 32.84159 W-104.05554

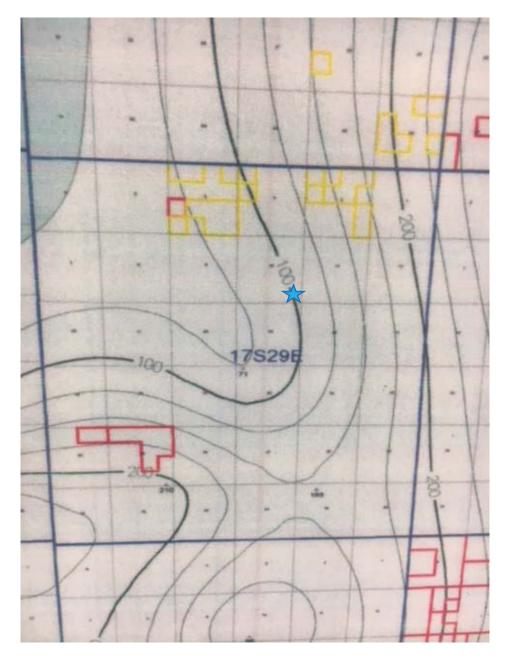
SP6, N 32.84143 W-104.05544

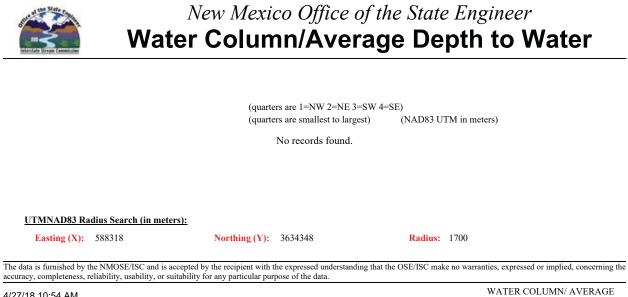
SP7, N 32.84152 W-104.05568

SP8, N 32.84137 W-104.05565

Cardinal sample points NORTH, N 32.84175 W-104.05551 SOUTH, N 32.84132 W-104.05542 EAST, N 32.84140 W-104.05542 WEST, N 32.84155 W-104.05570

COG, Dodd Federal Unit #580 U/L P, Section 10, T17S, R29E Groundwater: 100'





4/27/18 10:54 AM

DEPTH TO WATER

Pag	e 1	of	1	

		Pub	lic Land Surv	vey System (PLS	S)	
•	Q64: 🗸	Q16: SE 🗸	Q 4: SE ∨	Sec: 10 V Tws	17S 🗸	Rng: 29E 🗸
		State F	Plane Coordin	nate System - N	AD27	
0	X: 0 f	t Y: 0	ft	Zone:		\checkmark
		State F	Plane Coordin	nate System - N	AD83	
0	X: 0 f	t Y: 0	ft	Zone:		\checkmark
				utes/Seconds		
$ \circ $	Longitude (X):	Deg	rees: 0 °	Minutes: 0	'	Seconds: 0 "
	Latitude (Y):	Deg	Jrees: 0 °	Minutes: 0	•	Seconds: 0 "
			UTM -	NAD27		
0	Easting (X): 0 V	mtrs	Northing (Y):	0	mtrs Zone:
	SUBMIT					
	All Conversion Results are displayed as <u>NAD 1983 UTM Zone 13</u>					
	Easting (X):	588318.0	mtrs	Northing (Y):	3634348.0	mtrs
	~~ Please keep screen open to copy UTM values for Reports. ~~					

Laboratory Analytical Results Summary Dodd Federal Unit #580

		Sample ID	SP1 @ SURFACE	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'	SP1 @ 4'	SP1 @ 5'
Analyte	Method	Date	4/25/18	4/25/18	4/25/18	4/25/18	4/25/18	5/16/18
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a	n/a
Toluene	BTEX 8021B		< 0.050	<0.050	n/a	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a	n/a	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	n/a	n/a	n/a	n/a
Chloride	SM4500CI-B		320	1280	3640	1340	816	336
Chloride	EPA300.0		n/a	n/a	n/a	n/a	n/a	389
GRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a	n/a
DRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a	n/a
EXT DRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a	n/a

		Sample ID	SP2@ SURFACE	SP2 @ 1'	SP2 @ 2'	SP2 @ 3'	SP2 @ 4'	SP2 @ 5'
Analyte	Method	Date	4/25/18	4/25/18	4/25/18	4/25/18	4/25/18	5/16/18
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a	n/a
Toluene	BTEX 8021B		< 0.050	<0.050	n/a	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a	n/a	n/a	n/a
Total BTEX	BTEX 8021B		< 0.300	<0.300	n/a	n/a	n/a	n/a
Chloride	SM4500CI-B		288	1520	3320	1460	896	400
Chloride	EPA300.0		n/a	n/a	n/a	n/a	n/a	402
GRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a	n/a
DRO	TPH 8015M		21.8	<10.0	n/a	n/a	n/a	n/a
EXT DRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a	n/a

		Sample ID	SP3 @ SURFACE	SP3 @ 1'	SP3 @ 2'
Analyte	Method	Date	4/25/18	4/25/18	4/25/18
			mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a
Toluene	BTEX 8021B		<0.050	<0.050	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a
Total BTEX	BTEX 8021B		<0.300	< 0.300	n/a
Chloride	SM4500CI-B		96	800	352
GRO	TPH 8015M		<10.0	<10.0	n/a
DRO	TPH 8015M		<10.0	<10.0	n/a
EXT DRO	TPH 8015M		<10.0	<10.0	n/a

		Sample ID	SP4@ SURFACE	SP4 @ 1'	SP4 @ 2'
Analyte	Method	Date	4/25/18	4/25/18	4/26/18
			mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a
Toluene	BTEX 8021B		<0.050	<0.050	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	n/a
Chloride	SM4500CI-B		128	800	352
GRO	TPH 8015M		<10.0	<10.0	n/a
DRO	TPH 8015M		<10.0	<10.0	n/a
EXT DRO	TPH 8015M		<10.0	<10.0	n/a

			SP5 @			
		Sample ID	•	SP5 @ 1'	SP5 @ 2'	SP5 @ 3'
Analyte	Method	Date	4/26/18	4/26/18	4/26/18	4/26/18
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Toluene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	n/a	n/a
Chloride	SM4500CI-B		2040	1020	992	480
Chloride	EPA300.0		n/a	n/a	n/a	n/a
GRO	TPH 8015M		<10.0	<10.0	n/a	n/a
DRO	TPH 8015M		469	<10.0	n/a	n/a
EXT DRO	TPH 8015M		167	10.3	n/a	n/a

		Sample ID	SP6 @ SURFACE	SP6 @ 1'	SP6 @ 2'	SP6 @ 3'
Analyte	Method	Date	4/26/18	4/26/18	4/26/18	4/26/18
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Toluene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a	n/a
Total BTEX	BTEX 8021B		< 0.300	<0.300	n/a	n/a
Chloride	SM4500CI-B		1840	1260	992	512
Chloride	EPA300.0		n/a	n/a	n/a	n/a
GRO	TPH 8015M		<10.0	<10.0	n/a	n/a
DRO	TPH 8015M		412	<10.0	n/a	n/a
EXT DRO	TPH 8015M		154	10.6	n/a	n/a

			SP7 @			
		Sample ID	SURFACE	SP7 @ 1'	SP7 @ 2'	SP7 @ 3'
Analyte	Method	Date	4/26/18	4/26/18	4/26/18	4/27/18
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Toluene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	n/a	n/a
Chloride	SM4500CI-B		512	1280	1150	240
GRO	TPH 8015M		<10.0	<10.0	n/a	n/a
DRO	TPH 8015M		<10.0	<10.0	n/a	n/a
EXT DRO	TPH 8015M		<10.0	<10.0	n/a	n/a

		Sample ID	SP8 @ SURFACE	SP8 @ 1'	SP8 @ 2'
Analyte	Method	Date	4/27/18	4/27/18	4/27/18
			mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300
Chloride	SM4500CI-B		5040	400	256
GRO	TPH 8015M		<10.0	<10.0	<10.0
DRO	TPH 8015M		18.1	<10.0	<10.0
EXT DRO	TPH 8015M		<10.0	<10.0	<10.0

		Sample ID	NORTH @ SURFACE
Analyte	Method	Date	4/27/18
			mg/kg
Benzene	BTEX 8021B		<0.050
Toluene	BTEX 8021B		<0.050
Ethylbenzene	BTEX 8021B		<0.050
Total Xylenes	BTEX 8021B		<0.150
Total BTEX	BTEX 8021B		<0.300
Chloride	SM4500CI-B		304
Chloride	EPA300.0		n/a
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

-			FIGT O
		Sample ID	EAST @ SURFACE
		Sample ID	JUNI ACL
Analyte	Method	Date	4/27/18
			mg/kg
Benzene	BTEX 8021B		<0.050
Toluene	BTEX 8021B		<0.050
Ethylbenzene	BTEX 8021B		<0.050
Total Xylenes	BTEX 8021B		<0.150
Total BTEX	BTEX 8021B		<0.300
Chloride	SM4500CI-B		288
Chloride	EPA300.0		n/a
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

		Sample ID	WEST @ SURFACE
Analyte	Method	Date	4/27/18
			mg/kg
Benzene	BTEX 8021B		<0.050
Toluene	BTEX 8021B		<0.050
Ethylbenzene	BTEX 8021B		<0.050
Total Xylenes	BTEX 8021B		<0.150
Total BTEX	BTEX 8021B		<0.300
Chloride	SM4500CI-B		352
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

	Sample ID	SOUTH @ SURFACE
Method	Date	4/27/18
		mg/kg
BTEX 8021B		<0.050
BTEX 8021B		<0.050
BTEX 8021B		<0.050
BTEX 8021B		<0.150
BTEX 8021B		<0.300
SM4500CI-B		352
TPH 8015M		<10.0
TPH 8015M		<10.0
TPH 8015M		<10.0
	BTEX 8021B BTEX 8021B BTEX 8021B BTEX 8021B BTEX 8021B BTEX 8021B SM4500Cl-B TPH 8015M TPH 8015M	BTEX 8021B BTEX 8021B BTEX 8021B BTEX 8021B BTEX 8021B BTEX 8021B SM4500CI-B TPH 8015M TPH 8015M



May 08, 2018

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

Hobbs, NM 88241

RE: DODD FEDERAL UNIT # 580

Enclosed are the results of analyses for samples received by the laboratory on 05/01/18 15:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-10. 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/ga/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celecz D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	05/01/2018	Sampling Date:	04/25/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 1 @ SURFACE (H801206-01)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2018	ND	1.77	88.3	2.00	3.22	
Toluene*	<0.050	0.050	05/03/2018	ND	1.90	94.8	2.00	1.67	
Ethylbenzene*	<0.050	0.050	05/03/2018	ND	1.91	95.4	2.00	1.98	
Total Xylenes*	<0.150	0.150	05/03/2018	ND	5.87	97.8	6.00	2.13	
Total BTEX	<0.300	0.300	05/03/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	% 72-148							
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/02/2018	ND	206	103	200	0.922	
DRO >C10-C28*	<10.0	10.0	05/02/2018	ND	206	103	200	3.25	
EXT DRO >C28-C36	<10.0	10.0	05/02/2018	ND					
Surrogate: 1-Chlorooctane	97.9	% 41-142							
Surrogate: 1-Chlorooctadecane	104 9	% 37.6-14	7						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	05/01/2018	Sampling Date:	04/25/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 1 @ 1 (H801206-02)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2018	ND	1.77	88.3	2.00	3.22	
Toluene*	<0.050	0.050	05/03/2018	ND	1.90	94.8	2.00	1.67	
Ethylbenzene*	<0.050	0.050	05/03/2018	ND	1.91	95.4	2.00	1.98	
Total Xylenes*	<0.150	0.150	05/03/2018	ND	5.87	97.8	6.00	2.13	
Total BTEX	<0.300	0.300	05/03/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.3	% 72-148	,						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1280	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/02/2018	ND	206	103	200	0.922	
DRO >C10-C28*	<10.0	10.0	05/02/2018	ND	206	103	200	3.25	
EXT DRO >C28-C36	<10.0	10.0	05/02/2018	ND					
Surrogate: 1-Chlorooctane	93.3	% 41-142							
Surrogate: 1-Chlorooctadecane	99.3	37.6-14	7						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	05/01/2018	Sampling Date:	04/25/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 1 @ 2 (H801206-03)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3640	16.0	05/03/2018	ND	448	112	400	0.00	

Sample ID: SP 1 @ 3 (H801206-04)

Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1340	16.0	05/03/2018	ND	448	112	400	0.00	

Sample ID: SP 1 @ 4 (H801206-05)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	816	16.0	05/03/2018	ND	448	112	400	0.00	

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	05/01/2018	Sampling Date:	04/25/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 2 @ SURFACE (H801206-06)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2018	ND	1.77	88.3	2.00	3.22	
Toluene*	<0.050	0.050	05/03/2018	ND	1.90	94.8	2.00	1.67	
Ethylbenzene*	<0.050	0.050	05/03/2018	ND	1.91	95.4	2.00	1.98	
Total Xylenes*	<0.150	0.150	05/03/2018	ND	5.87	97.8	6.00	2.13	
Total BTEX	<0.300	0.300	05/03/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	% 72-148							
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/02/2018	ND	206	103	200	0.922	
DRO >C10-C28*	21.8	10.0	05/02/2018	ND	206	103	200	3.25	
EXT DRO >C28-C36	<10.0	10.0	05/02/2018	ND					
Surrogate: 1-Chlorooctane	95.1	% 41-142							
Surrogate: 1-Chlorooctadecane	103 9	37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	05/01/2018	Sampling Date:	04/25/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 2 @ 1 (H801206-07)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2018	ND	1.77	88.3	2.00	3.22	
Toluene*	<0.050	0.050	05/03/2018	ND	1.90	94.8	2.00	1.67	
Ethylbenzene*	<0.050	0.050	05/03/2018	ND	1.91	95.4	2.00	1.98	
Total Xylenes*	<0.150	0.150	05/03/2018	ND	5.87	97.8	6.00	2.13	
Total BTEX	<0.300	0.300	05/03/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 72-148							
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1520	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/02/2018	ND	206	103	200	0.922	
DRO >C10-C28*	<10.0	10.0	05/02/2018	ND	206	103	200	3.25	
EXT DRO >C28-C36	<10.0	10.0	05/02/2018	ND					
Surrogate: 1-Chlorooctane	99.8	% 41-142							
Surrogate: 1-Chlorooctadecane	109	% 37.6-14	7						

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Received:	05/01/2018	Sampling Date:	04/25/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 2 @ 2 (H801206-08)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3320	16.0	05/03/2018	ND	448	112	400	0.00	

Sample ID: SP 2 @ 3 (H801206-09)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1460	16.0	05/03/2018	ND	448	112	400	0.00	

Sample ID: SP 2 @ 4 (H801206-10)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	05/03/2018	ND	448	112	400	0.00	

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Received:	05/01/2018	Sampling Date:	04/25/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 3 @ SURFACE (H801206-11)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2018	ND	1.77	88.3	2.00	3.22	
Toluene*	<0.050	0.050	05/03/2018	ND	1.90	94.8	2.00	1.67	
Ethylbenzene*	<0.050	0.050	05/03/2018	ND	1.91	95.4	2.00	1.98	
Total Xylenes*	<0.150	0.150	05/03/2018	ND	5.87	97.8	6.00	2.13	
Total BTEX	<0.300	0.300	05/03/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.4	% 72-148							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/02/2018	ND	206	103	200	0.922	
DRO >C10-C28*	<10.0	10.0	05/02/2018	ND	206	103	200	3.25	
EXT DRO >C28-C36	<10.0	10.0	05/02/2018	ND					
Surrogate: 1-Chlorooctane	95.4	% 41-142							
Surrogate: 1-Chlorooctadecane	96.7	37.6-14	7						

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Received:	05/01/2018	Sampling Date:	04/25/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 3 @ 1 (H801206-12)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2018	ND	1.77	88.3	2.00	3.22	
Toluene*	<0.050	0.050	05/03/2018	ND	1.90	94.8	2.00	1.67	
Ethylbenzene*	<0.050	0.050	05/03/2018	ND	1.91	95.4	2.00	1.98	
Total Xylenes*	<0.150	0.150	05/03/2018	ND	5.87	97.8	6.00	2.13	
Total BTEX	<0.300	0.300	05/03/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.4	% 72-148							
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/02/2018	ND	206	103	200	0.922	
DRO >C10-C28*	<10.0	10.0	05/02/2018	ND	206	103	200	3.25	
EXT DRO >C28-C36	<10.0	10.0	05/02/2018	ND					
Surrogate: 1-Chlorooctane	93.0	% 41-142							
Surrogate: 1-Chlorooctadecane	99.9	% 37.6-14	7						

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Received:	05/01/2018	Sampling Date:	04/25/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 3 @ 2 (H801206-13)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	05/03/2018	ND	448	112	400	0.00	

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Received:	05/01/2018	Sampling Date:	04/25/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 4 @ SURFACE (H801206-14)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2018	ND	1.77	88.3	2.00	3.22	
Toluene*	<0.050	0.050	05/03/2018	ND	1.90	94.8	2.00	1.67	
Ethylbenzene*	<0.050	0.050	05/03/2018	ND	1.91	95.4	2.00	1.98	
Total Xylenes*	<0.150	0.150	05/03/2018	ND	5.87	97.8	6.00	2.13	
Total BTEX	<0.300	0.300	05/03/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	% 72-148							
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/02/2018	ND	206	103	200	0.922	
DRO >C10-C28*	<10.0	10.0	05/02/2018	ND	206	103	200	3.25	
EXT DRO >C28-C36	<10.0	10.0	05/02/2018	ND					
Surrogate: 1-Chlorooctane	95.5	% 41-142							
Surrogate: 1-Chlorooctadecane	97.8	% 37.6-14	7						

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Received:	05/01/2018	Sampling Date:	04/25/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 4 @ 1 (H801206-15)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/04/2018	ND	1.77	88.3	2.00	3.22	
Toluene*	<0.050	0.050	05/04/2018	ND	1.90	94.8	2.00	1.67	
Ethylbenzene*	<0.050	0.050	05/04/2018	ND	1.91	95.4	2.00	1.98	
Total Xylenes*	<0.150	0.150	05/04/2018	ND	5.87	97.8	6.00	2.13	
Total BTEX	<0.300	0.300	05/04/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 72-148							
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	05/03/2018	ND	448	112	400	0.00	QM-07
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/02/2018	ND	206	103	200	0.922	
DRO >C10-C28*	<10.0	10.0	05/02/2018	ND	206	103	200	3.25	
EXT DRO >C28-C36	<10.0	10.0	05/02/2018	ND					
Surrogate: 1-Chlorooctane	96.1	% 41-142							
Surrogate: 1-Chlorooctadecane	100 9	% 37.6-14	7						

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

Received:	05/01/2018	Sampling Date:	04/26/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 4 @ 2 (H801206-16)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	05/03/2018	ND	448	112	400	0.00	

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Received:	05/01/2018	Sampling Date:	04/26/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 5 @ SURFACE (H801206-17)

BTEX 8021B	mg/	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/04/2018	ND	1.77	88.3	2.00	3.22	
Toluene*	<0.050	0.050	05/04/2018	ND	1.90	94.8	2.00	1.67	
Ethylbenzene*	<0.050	0.050	05/04/2018	ND	1.91	95.4	2.00	1.98	
Total Xylenes*	<0.150	0.150	05/04/2018	ND	5.87	97.8	6.00	2.13	
Total BTEX	<0.300	0.300	05/04/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 9	% 72-148							
Chloride, SM4500Cl-B	mg/	/kg	Analyze	ed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2040	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg/	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/02/2018	ND	206	103	200	0.922	
DRO >C10-C28*	469	10.0	05/02/2018	ND	206	103	200	3.25	
EXT DRO >C28-C36	167	10.0	05/02/2018	ND					
Surrogate: 1-Chlorooctane	97.4	% 41-142							
Surrogate: 1-Chlorooctadecane	136 9	% 37.6-14	7						

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Received:	05/01/2018	Sampling Date:	04/26/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 5 @ 1 (H801206-18)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/04/2018	ND	1.77	88.3	2.00	3.22	
Toluene*	<0.050	0.050	05/04/2018	ND	1.90	94.8	2.00	1.67	
Ethylbenzene*	<0.050	0.050	05/04/2018	ND	1.91	95.4	2.00	1.98	
Total Xylenes*	<0.150	0.150	05/04/2018	ND	5.87	97.8	6.00	2.13	
Total BTEX	<0.300	0.300	05/04/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 9	% 72-148	2						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1020	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/02/2018	ND	206	103	200	0.922	
DRO >C10-C28*	<10.0	10.0	05/02/2018	ND	206	103	200	3.25	
EXT DRO >C28-C36	10.3	10.0	05/02/2018	ND					
Surrogate: 1-Chlorooctane	97.6	% 41-142							
Surrogate: 1-Chlorooctadecane	105 9	% 37.6-14	7						

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Received:	05/01/2018	Sampling Date:	04/26/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 5 @ 2 (H801206-19)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	992	16.0	05/03/2018	ND	448	112	400	0.00	

Sample ID: SP 5 @ 3 (H801206-20)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	05/03/2018	ND	448	112	400	0.00	

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Received:	05/01/2018	Sampling Date:	04/26/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 6 @ SURFACE (H801206-21)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/04/2018	ND	1.67	83.4	2.00	5.67	
Toluene*	<0.050	0.050	05/04/2018	ND	1.78	88.8	2.00	5.08	
Ethylbenzene*	<0.050	0.050	05/04/2018	ND	1.81	90.5	2.00	5.24	
Total Xylenes*	<0.150	0.150	05/04/2018	ND	5.58	93.0	6.00	4.54	
Total BTEX	<0.300	0.300	05/04/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 72-148	}						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1840	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/02/2018	ND	206	103	200	0.922	
DRO >C10-C28*	412	10.0	05/02/2018	ND	206	103	200	3.25	
EXT DRO >C28-C36	154	10.0	05/02/2018	ND					
Surrogate: 1-Chlorooctane	94.2	% 41-142	2						
Surrogate: 1-Chlorooctadecane	132	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	05/01/2018	Sampling Date:	04/26/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 6 @ 1 (H801206-22)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/04/2018	ND	1.67	83.4	2.00	5.67	
Toluene*	<0.050	0.050	05/04/2018	ND	1.78	88.8	2.00	5.08	
Ethylbenzene*	<0.050	0.050	05/04/2018	ND	1.81	90.5	2.00	5.24	
Total Xylenes*	<0.150	0.150	05/04/2018	ND	5.58	93.0	6.00	4.54	
Total BTEX	<0.300	0.300	05/04/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 72-148	2						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1260	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/02/2018	ND	206	103	200	0.922	
DRO >C10-C28*	<10.0	10.0	05/02/2018	ND	206	103	200	3.25	
EXT DRO >C28-C36	10.6	10.0	05/02/2018	ND					
Surrogate: 1-Chlorooctane	89.8	% 41-142	,						
Surrogate: 1-Chlorooctadecane	98.8	% 37.6-14	7						

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

Received:	05/01/2018	Sampling Date:	04/26/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 6 @ 2 (H801206-23)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	992	16.0	05/03/2018	ND	448	112	400	0.00	

Sample ID: SP 6 @ 3 (H801206-24)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	512	16.0	05/03/2018	ND	448	112	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	05/01/2018	Sampling Date:	04/26/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 7 @ SURFACE (H801206-25)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/04/2018	ND	1.67	83.4	2.00	5.67	
Toluene*	<0.050	0.050	05/04/2018	ND	1.78	88.8	2.00	5.08	
Ethylbenzene*	<0.050	0.050	05/04/2018	ND	1.81	90.5	2.00	5.24	
Total Xylenes*	<0.150	0.150	05/04/2018	ND	5.58	93.0	6.00	4.54	
Total BTEX	<0.300	0.300	05/04/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	% 72-148							
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	512	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/02/2018	ND	206	103	200	0.922	
DRO >C10-C28*	<10.0	10.0	05/02/2018	ND	206	103	200	3.25	
EXT DRO >C28-C36	<10.0	10.0	05/02/2018	ND					
Surrogate: 1-Chlorooctane	99.4	% 41-142							
Surrogate: 1-Chlorooctadecane	107 9	37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	05/01/2018	Sampling Date:	04/26/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 7 @ 1' (H801206-26)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/04/2018	ND	1.67	83.4	2.00	5.67	
Toluene*	<0.050	0.050	05/04/2018	ND	1.78	88.8	2.00	5.08	
Ethylbenzene*	<0.050	0.050	05/04/2018	ND	1.81	90.5	2.00	5.24	
Total Xylenes*	<0.150	0.150	05/04/2018	ND	5.58	93.0	6.00	4.54	
Total BTEX	<0.300	0.300	05/04/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.6	% 72-148							
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1280	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/02/2018	ND	206	103	200	0.922	
DRO >C10-C28*	<10.0	10.0	05/02/2018	ND	206	103	200	3.25	
EXT DRO >C28-C36	<10.0	10.0	05/02/2018	ND					
Surrogate: 1-Chlorooctane	97.6	% 41-142							
Surrogate: 1-Chlorooctadecane	104 9	% 37.6-14	7						

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Received:	05/01/2018	Sampling Date:	04/26/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 7 @ 2 (H801206-27)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1150	16.0	05/03/2018	ND	448	112	400	0.00	

Sample ID: SP 7 @ 3 (H801206-28)

Chloride, SM4500Cl-B	4500Cl-B mg/kg		Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	05/03/2018	ND	448	112	400	0.00	

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Received:	05/01/2018	Sampling Date:	04/27/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 8 @ SURFACE (H801206-29)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/04/2018	ND	1.67	83.4	2.00	5.67	
Toluene*	<0.050	0.050	05/04/2018	ND	1.78	88.8	2.00	5.08	
Ethylbenzene*	<0.050	0.050	05/04/2018	ND	1.81	90.5	2.00	5.24	
Total Xylenes*	<0.150	0.150	05/04/2018	ND	5.58	93.0	6.00	4.54	
Total BTEX	<0.300	0.300	05/04/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.4	% 72-148	2						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5040	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2018	ND	238	119	200	10.4	
DRO >C10-C28*	18.1	10.0	05/03/2018	ND	243	122	200	12.1	
EXT DRO >C28-C36	<10.0	10.0	05/03/2018	ND					
Surrogate: 1-Chlorooctane	87.5	% 41-142							
Surrogate: 1-Chlorooctadecane	97.9	% 37.6-14	7						

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

Received:	05/01/2018	Sampling Date:	04/27/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 8 @ 1 (H801206-30)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/04/2018	ND	1.67	83.4	2.00	5.67	
Toluene*	<0.050	0.050	05/04/2018	ND	1.78	88.8	2.00	5.08	
Ethylbenzene*	<0.050	0.050	05/04/2018	ND	1.81	90.5	2.00	5.24	
Total Xylenes*	<0.150	0.150	05/04/2018	ND	5.58	93.0	6.00	4.54	
Total BTEX	<0.300	0.300	05/04/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 72-148	,						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2018	ND	238	119	200	10.4	
DRO >C10-C28*	<10.0	10.0	05/03/2018	ND	243	122	200	12.1	
EXT DRO >C28-C36	<10.0	10.0	05/03/2018	ND					
Surrogate: 1-Chlorooctane	89.0	% 41-142							
Surrogate: 1-Chlorooctadecane	93.9	% 37.6-14	7						

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Received:	05/01/2018	Sampling Date:	04/27/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SP 8 @ 2 (H801206-31)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/04/2018	ND	1.67	83.4	2.00	5.67	
Toluene*	<0.050	0.050	05/04/2018	ND	1.78	88.8	2.00	5.08	
Ethylbenzene*	<0.050	0.050	05/04/2018	ND	1.81	90.5	2.00	5.24	
Total Xylenes*	<0.150	0.150	05/04/2018	ND	5.58	93.0	6.00	4.54	
Total BTEX	<0.300	0.300	05/04/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.4	% 72-148							
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg,	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2018	ND	238	119	200	10.4	
DRO >C10-C28*	<10.0	10.0	05/03/2018	ND	243	122	200	12.1	
EXT DRO >C28-C36	<10.0	10.0	05/03/2018	ND					
Surrogate: 1-Chlorooctane	85.2	% 41-142							
Surrogate: 1-Chlorooctadecane	86.6	% 37.6-14	7						

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

Received:	05/01/2018	Sampling Date:	04/27/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: N @ SURFACE (H801206-32)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/04/2018	ND	1.67	83.4	2.00	5.67	
Toluene*	<0.050	0.050	05/04/2018	ND	1.78	88.8	2.00	5.08	
Ethylbenzene*	<0.050	0.050	05/04/2018	ND	1.81	90.5	2.00	5.24	
Total Xylenes*	<0.150	0.150	05/04/2018	ND	5.58	93.0	6.00	4.54	
Total BTEX	<0.300	0.300	05/04/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 9	% 72-148							
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2018	ND	238	119	200	10.4	
DRO >C10-C28*	<10.0	10.0	05/03/2018	ND	243	122	200	12.1	
EXT DRO >C28-C36	<10.0	10.0	05/03/2018	ND					
Surrogate: 1-Chlorooctane	75.0	% 41-142	,						
Surrogate: 1-Chlorooctadecane	74.0	% 37.6-14	7						

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

Received:	05/01/2018	Sampling Date:	04/27/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: E @ SURFACE (H801206-33)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/04/2018	ND	1.67	83.4	2.00	5.67	
Toluene*	<0.050	0.050	05/04/2018	ND	1.78	88.8	2.00	5.08	
Ethylbenzene*	<0.050	0.050	05/04/2018	ND	1.81	90.5	2.00	5.24	
Total Xylenes*	<0.150	0.150	05/04/2018	ND	5.58	93.0	6.00	4.54	
Total BTEX	<0.300	0.300	05/04/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.2	% 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	288	16.0	05/03/2018	ND	448	112	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2018	ND	238	119	200	10.4	
DRO >C10-C28*	<10.0	10.0	05/03/2018	ND	243	122	200	12.1	
EXT DRO >C28-C36	<10.0	10.0	05/03/2018	ND					
Surrogate: 1-Chlorooctane	85.2	% 41-142							
Surrogate: 1-Chlorooctadecane	87.9	% 37.6-14	7						

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Received:	05/01/2018	Sampling Date:	04/27/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: W @ SURFACE (H801206-34)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/04/2018	ND	1.67	83.4	2.00	5.67	
Toluene*	<0.050	0.050	05/04/2018	ND	1.78	88.8	2.00	5.08	
Ethylbenzene*	<0.050	0.050	05/04/2018	ND	1.81	90.5	2.00	5.24	
Total Xylenes*	<0.150	0.150	05/04/2018	ND	5.58	93.0	6.00	4.54	
Total BTEX	<0.300	0.300	05/04/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.3	% 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	352	16.0	05/03/2018	ND	448	112	400	0.00	
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	05/03/2018	ND	238	119	200	10.4	
DRO >C10-C28*	<10.0	10.0	05/03/2018	ND	243	122	200	12.1	
EXT DRO >C28-C36	<10.0	10.0	05/03/2018	ND					
Surrogate: 1-Chlorooctane	74.3	% 41-142	2						
Surrogate: 1-Chlorooctadecane	74.5	% 37.6-14	7						

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

Received:	05/01/2018	Sampling Date:	04/27/2018
Reported:	05/08/2018	Sampling Type:	Soil
Project Name:	DODD FEDERAL UNIT # 580	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: S @ SURFACE (H801206-35)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/04/2018	ND	1.67	83.4	2.00	5.67	
Toluene*	<0.050	0.050	05/04/2018	ND	1.78	88.8	2.00	5.08	
Ethylbenzene*	<0.050	0.050	05/04/2018	ND	1.81	90.5	2.00	5.24	
Total Xylenes*	<0.150	0.150	05/04/2018	ND	5.58	93.0	6.00	4.54	
Total BTEX	<0.300	0.300	05/04/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 9	% 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	352	16.0	05/03/2018	ND	416	104	400	0.00	
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	05/03/2018	ND	238	119	200	10.4	
DRO >C10-C28*	<10.0	10.0	05/03/2018	ND	243	122	200	12.1	
EXT DRO >C28-C36	<10.0	10.0	05/03/2018	ND					
Surrogate: 1-Chlorooctane	104 9	% 41-142							
Surrogate: 1-Chlorooctadecane	111 9	37.6-14	7						

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Notes and Definitions

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

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(B)	127.0

ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

(505) 393-2326 FAX (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1044

	BBC International, Inc.				ă.		1		B	LL TO				A COLORING CONTRACT	AN	ALYSI	S RE	EQUE	ST	Children of Name	Belleville and	
Project Manage	r: Cliff Brunson						P	.0. #:				1	1			1	1	1	T		1	
Address: P.O	. Box 805						c	ompa	iny:	006		1										2
city: Hobbs	State: NM	Zip	o: 8	882	41				0	ky Has	stell											
Phone #: 575-397-6388 Fax #: 575-397-0397					1	ddres		1														
Project #:	Project Owner	r: (C	6			C	ity:				1										
Project Name:	Dodd Ferleral Unit # 5						SI	tate:		Zip:		1									1	
Project Location	n: Eddy (camply						PI	hone	#:													
Sampler Name:	Jeff Ornelas						Fa	ax #:		М		1										
FOR LAB USE ONLY					MA	RIX		PRE	SERV	SAMPL	ING	1										
Lab I.D. H801206	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER SOIL	OIL	OTHER :	ACID/BASE:	ICE / COOL OTHER :	DATE	TIME	CL	BTex	TPHEXt								
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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 beset upon any of the observices at standard services at

Relinquished By:	Dates	Received By:	Phone Result:	□ Yes	D No	Add'l Phone #:
6 CA CA	4/0410		Fax Result:	□ Yes	D No	Add'l Fax #:
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Delivered By: (Circle Orle)	51	Sample Condition CHEOKED	BY:			
Sampler - UPS - Bus - Other: -4:	5 1.1"	250 Cool Intact	•			
	501-1.	JL NO NO				

f Cardinal cannot accept verbal changes. Please fax written changes to 505-393-1476

BBC International, Inc.	5 <u>a</u>	BILL TO	ANALYSIS REQUEST
Project Manager: Cliff Brunson		P.O. #:	
Address: P.O. Box 805		Company: (06	
Sity: Hobbs State: NM	Zip: 88241	Attn: Hastell -	
Phone #: 575-397-6388 Fax #: 57	5-397-0397	Address:	
Project #: Project Own	er: Colr	City:	
Project Name: Dodd Frderal unit #		State: Zip:	
roject Location: Eddy County		Phone #:	
ampler Name: Jtff Ornelas		Fax #:	
FOR LAB USE ONLY	MATRIX	PRESERV. SAMPLING	9
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Lab I.D. Sample I.D.	I AIN	ASE	オオ
H801206	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL	OTHER : ACID/BASE: ICE / COOL OTHER : ATAT	
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service. In no event shall Cardinal be liable for indicental or consequential cardinages, including willour limitation, costness interruptions, loss or use, or loss or profile inductive by orient, he advantages, and an is based upon any of the above stated reasons or otherwise. Relinquished By: | Date: //c | Received By: | Phone Result: Relinguished By: Paire: □ Yes □ No □ Yes □ No Add'l Phone #: Fax Result: Add'l Fax #: Time REMARKS: du Relinquished By: Date: 5~1 Received By: 3:20 5 15 Delivered Circle es Yes Sampler - UPS - Bus No Blo

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



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

Page 33 of 34

ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: BBC International, Inc.		2		[k]]	2	10.00		BI	ILL.	TO			5		-	ANA	YSIS	RE	QUE	ST	10	1.	
Project Manager: Cliff Brunson				1		P.0	D. #:									1				1			1.
Address: P.O. Box 805		2				Company:												0					-
City: Hobbs State: NM	Zip	o: 8	382	41		Att			tas	cel-	8 1							°			11.9	٦	
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Sampler Name: J-A Ornplans		2.5		· ·		1	x #:		1.7	1							a	1	- ~	80 -			5
FOR LAB USE ONLY	1			MATR	XIX		PRES	SERV	S	AMPL	ING						-						
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST 4074

ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

Page 34 of 34

505)	393-2326	FAX	(505)	393-2476	
,			(000)	000 2110	

	ompany Name: BBC International, Inc.							BILL TO ANALYSIS REQUEST										-								
Project Manage	er: Cliff Brunson					2	1	P.O.	#:	5				1	1	1	1	T			T	T	T	T	T	1
Address: P.O	. Box 805							Com	ipar	ıy:	(Œ	10													
City: Hobbs	State: NM	Zij	o:	882	41		Attn: Haskell -														1				,	
Phone #: 575-	397-6388 Fax #: 575	-39	7-0	397	1			Address:																	1	
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Sampler Name:	Sampler Name: Jtf Ornelas						I	ax	#:		ł						۰.	- 1				5 S	1.	n *		
FOR LAB USE ONLY			Γ		MA	TRIX	(P	RES	ERV	4	SAMPL	NG	1 -									1 -			
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1-Comp 1 -	9123118	~	Fax Result:	□ Yes	D No	Add'I Fax #:
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Relinquished By:	Date:	Received By:				9
Harling Semers Mr.	3:20	Jodi tenson	+			
Delivered By: (Circle One)	-	Sample Condition CHECKED BY:	1			
Sampler - UPS - Bus - Other: 4.	30/-4	352 Dres Pres				

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May 29, 2018

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: DODD FEDERAL UNIT # 580

Enclosed are the results of analyses for samples received by the laboratory on 05/22/18 11:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-10. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



BBC International, Inc. P.O. Box 805 Hobbs NM, 88241		oject Number: oject Manager: (Reported: 29-May-18 15:13
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1 @ 5'	H801407-01	Soil	16-May-18 12:12	22-May-18 11:20
2 @ 5'	H801407-02	Soil	16-May-18 14:11	22-May-18 11:20

Cardinal Laboratories

*=Accredited Analyte

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BBC International, Inc. P.O. Box 805 Hobbs NM, 88241	Project Number: Project Manager:								Reported: 29-May-18 15:13		
1 @ 5' H801407-01 (Soil)											
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
Cardinal Laboratories											
Inorganic Compounds											
Chloride	336		16.0	mg/kg	4	8052206	AC	22-May-18	4500-Cl-B		
Green Analytical Laboratories											
Soluble (DI Water Extraction)											
Chloride	389		10.0	mg/kg wet	10	B805183	JDA	24-May-18	EPA300.0		

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BBC International, Inc. P.O. Box 805 Hobbs NM, 88241	Project: DODD FEDERAL UNIT # 580 Project Number: NONE GIVEN Project Manager: Cliff Brunson Fax To: (575) 397-0397						Reported: 29-May-18 15:13			
2 @ 5' H801407-02 (Soil)										
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
	Cardinal Laboratories									
Inorganic Compounds										
Chloride	400		16.0	mg/kg	4	8052206	AC	22-May-18	4500-Cl-B	
Green Analytical Laboratories										
Soluble (DI Water Extraction)										
Chloride	402		10.0	mg/kg wet	10	B805183	JDA	24-May-18	EPA300.0	

Cardinal Laboratories

*=Accredited Analyte

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BBC International, Inc. P.O. Box 805 Hobbs NM, 88241	Project Number: Project Manager:		Reported: 29-May-18 15:13
--	-------------------------------------	--	------------------------------

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8052206 - 1:4 DI Water										
Blank (8052206-BLK1)	Prepared & Analyzed: 22-May-18									
Chloride	ND	16.0	mg/kg							
LCS (8052206-BS1)				Prepared &	Analyzed:	22-May-18				
Chloride	432	16.0	mg/kg	400		108	80-120			
LCS Dup (8052206-BSD1)				Prepared &	Analyzed:	22-May-18				
Chloride	432	16.0	mg/kg	400		108	80-120	0.00	20	

Cardinal Laboratories

*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. P.O. Box 805 Hobbs NM, 88241	Project: DODD FEDERAL UNIT # 580 Project Number: NONE GIVEN Project Manager: Cliff Brunson Fax To: (575) 397-0397	Reported: 29-May-18 15:13
--	--	------------------------------

Soluble (DI Water Extraction) - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B805183 - General Prep - Wet Chem										
Blank (B805183-BLK1)				Prepared: 2	24-May-18	Analyzed: 2	5-May-18			
Chloride	ND	10.0	mg/kg wet							
LCS (B805183-BS1)				Prepared &	Analyzed:	24-May-18				
Chloride	240	10.0	mg/kg wet	250		96.1	85-115			
LCS Dup (B805183-BSD1)	Prepared & Analyzed: 24-May-18									
Chloride	234	10.0	mg/kg wet	250		93.5	85-115	2.74	20	

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*=Accredited Analyte

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Celeg D. Keine

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

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Celeg D. Keine

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: BBC International, Inc.	BILL TO		ANALYSIS REQUEST
Project Manager: Cliff Brunson	P.O. #:		
Address: P.O. Box 805	Company:		
city: Hobbs State: NM Zip: 88241	Attn:		
Phone #: 575-397-6388 Fax #: 575-397-0397	Address:		
Project #: Project Owner:	City:		
Project Name: Vodd Fed 580	State: Zip:		
Project Location:	Phone #:		
Sampler Name: Jeff Orndus	Fax #:		
FOR LAB USE ONLY MATRIX	PRESERV. SAMPLING	20	
Tap I'D' Samble I'D' # CONTAINERS 6(5)RAB OR (C)OMP # CONTAINERS MASTEWATER VASTEWATER VIOL	ACIDIBASE: ACIDIBASE: ICE / COOL OTHER : OTHER : OTHER :	CL 4SC	
2205 61	(S/16/18 211	CC	
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contri analyses. All claims induding those for negligence and any other cause whatsoever shall be deemed waived unless made in writing ; service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruption affiliates or successors arising out of or related to the performance of services hereunder by Cardinal repartless of womens such dail Relinquished By: Received By:	and received by Cardinal within 30 days after completion of the s, loss of use, or loss of profits incurred by client, its subsidie in is based upon any of the above stated reasons or otherwise Phone Re	he applicable sries, se Sult: □ Yes □ No	Add' Phone #:
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100 horas	STIERS	Fax Result:	□ Yes	D No	Add'l Fax #:	
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NM OIL CONSERVATION

ARTESIA DISTRICT

SEP 1 9 2017

Form C-141 Revised August 8, 2011

District 1 1625 N. French Dr., Hobbs, NM 88240 District III 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

Sub Sub CEIP En appropriate District Office in accordance with 19.15.29 NMAC.

1220 South St. Francis Dr. Santa Fe, NM 87505

Oil Conservation Division

nAB12	2/1 355	5011			OPERA	FOR	Initial Re	port 🔲 Final Repo
Name of Co	mpany: C	OG Operati	ng LLC	[OGRID] 22913	7 Contact: Ro	bert McNeill		
Address: 60	0 West III	inois Avenue	e, Midlan	d TX 79701	Telephone N	lo. 432-230-00	77	
Facility Name: DODD FEDERAL UNIT #580 Facility Type: Well								
Surface Ow					wner: Federal	LEASE	API No. 30-	015-39278
Unit Letter P	Section 10	Township 17S	Range 29E	Feet from the 330'	North/South Line South	Feet from the 330'	East/West Line East	County Eddy
				Latitude 32	.841706 Longitud	-104.05566		
					URE OF RELI			

Type of Release:	Volume of Release:	Volume Recovered:				
Oil & Produced Water	4.5 bbls pw; 0.5 bbls oil	0 bbls pw; 0 bbls oil				
Source of Release:	Date and Hour of Occurrence:	Date and Hour of Discovery:				
Flowline/Pipeline	9-12-2017 12:00 pm	9-12-2017 12:00 pm				
Was Immediate Notice Given?	If YES, To Whom?					
By Whom?	Date and Hour:					
Was a Watercourse Reached?	If YES, Volume Impacting the W	atercourse.				
🗖 Yes 🖾 No	Diesse	refer to the New Mexico Oil				
If a Watercourse was Impacted, Describe Fully.*	Fieuse	vation Division Website for				
	undate	d form(s) at:				
	upuate	www.emnrd.state.nm.us/				
	nttp://	forms.html Thank you				
	<u>OCD/1</u>	orms.num				
Describe Cause of Problem and Remedial Action Taken.* This release occurred when a 3 rd party backhoe driver clipped the water		to making The demonstration of the flow				
line was cut out and replaced.	production line causing the flow line	to rupture. The damaged portion of the now				
the was cut out and replaced.						
Describe Area Affected and Cleanup Action Taken.*						
The release impacted the pasture and a portion of the lease road. The flow	w line was immediately isolated to re	duce further impact. Concho will have the				
spill area evaluated for any possible impact from the release and we will	present a remediation work plan to th	e NMOCD for approval prior to any				
significant remediation activities.		(1) See and the Property of Constraints of Second Constraints and Revenue				
I have be and if that the information along about in two and associate to t	he had after here to be and a set					
I hereby certify that the information given above is true and complete to t regulations all operators are required to report and/or file certain release r						
public health or the environment. The acceptance of a C-141 report by th	e NMOCD marked as "Final Report	" does not relieve the operator of liability				
should their operations have failed to adequately investigate and remediat	te contamination that pose a threat to	ground water, surface water, human health				
or the environment. In addition, NMOCD acceptance of a C-141 report of	loes not relieve the operator of respon	nsibility for compliance with any other				
federal, state, or local laws and/or regulations.						
S. d. I	OIL CONSER	VATION DIVISION				
Sin Dup 1						
Signature:	Approved by Environmental Special	Ally Brannien				
Printed Name: Dakota Neel	Approved by Environmental Special	ist:				
Title: HSE Coordinator	Approval Date: ////////////////////////////////////	Expiration Date:				
E-mail Address: dneel2@concho.com	Conditions of Approval:	tanhort Attached DAD				
	Conditions of Approval: See At	THUNKI Andened 200 1400				
Sale. Deptember 17, 2017 Thome. STO TTO 2010	W O	UKPAN				
Attach Additional Sheets If Necessary	forms state					
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Operator/Responsible Party,

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete <u>division-approved corrective action</u> for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District $\frac{2}{2}$ office in <u>ARTESIA</u> on or before <u>10/19/2017</u>. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

• Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

• Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

• Nominal detection limits for field and laboratory analyses must be provided.

• Composite sampling is not generally allowed.

• Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

•Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

• If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

• Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold OCD Environmental Bureau Chief 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505-476-3465 jim.griswold@state.nm.us

Bratcher, Mike, EMNRD

From:	Dakota Neel <dneel2@concho.com></dneel2@concho.com>
Sent:	Tuesday, September 19, 2017 1:00 PM
То:	Weaver, Crystal, EMNRD; stucker@blm.gov
Cc:	Bratcher, Mike, EMNRD; James_Amos@blm.gov; Rebecca Haskell; Robert McNeill
Subject:	(C-141 Initial) Dodd Federal Unit #580 9-12-17 (30-015-39278)
Attachments:	(C-141 Initial) Dodd Federal Unit #580 9-12-2017 (30-015-39278).pdf

Ms. Weaver / Ms. Tucker,

Please find the attached Initial C-141 for your consideration. If you have any questions or concerns please contact me.

Thank You,

Dakota Neel HSE Coordinator COG Operating LLC Cell: <u>432-215-2783</u> dneel2@concho.com

2407 Pecos Ave. Artesia , NM 88210



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