Bratcher, Mike, EMNRD

From:	Tavarez, Ike <ike.tavarez@tetratech.com></ike.tavarez@tetratech.com>
Sent:	Thursday, August 18, 2011 2:34 PM
То:	Bratcher, Mike, EMNRD; Terry Gregston (terry_gregston@nm.blm.gov)
Cc:	Pat Ellis; Joshua Russo; Grubbs, Robert
Subject:	COG - Sagebrush Federal Tank Battery - Work Plan Approval Request
Attachments:	Sagebrush Federal Tank Battery - Work Plan .pdf

Categories:

Purple Category

Mike and Terry,

Please find the enclosed Work Plan for the COG - Sagebrush Federal Tank Battery located in Eddy County, New Mexico. Once approved, Tetra Tech will schedule the soil remediation and will notify you before we start. I will mail you a hard copy of the work plan for your files. Please let me know if you need additional information or call me if you have any questions, thanks

Ike Tavarez, PG | Senior Project Manager

Main: 432.682.4559 (Fax: 432.682.3946) Cell: 412.425.3878

Ike.Tavarez@tetratech.com

Totra Tech | Complex World, Clear Solutions *

1010 North Big Spring | Midland ITX 79705 www.tetratech.com

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		SI	TE INFORM	ATION
		Rep	ort Type: W	ork Plan
General Site Info	ormation:			
Site:	estimate and		Federal	
Company:		COG Opera	ting LLC	and an
Section, Townsl		1		t J - Sec 34 - T-18S - R-27E
ease Number:	and the second	30-015-3391		
County:		Eddy Count	v	and the second of the second
GPS:	<u>i i na seta i contra seta ana s</u>		32.70130° N	104.26465° W
Surface Owner:	·····	Federal		
Mineral Owner:	· · · · · · · · · · · · · · · · · · ·			
Directions:		From the inter mi, right 0.6 m	section of Hwy 82 ar ni, right 2.1 mi, left 1.	nd Illinois Camp Road, travel south on Illinois Camp Road 4 6 ml, right 0.4 ml to location.
Release Data:	Whee,			
Date Released:		7/11/2011		
Type Release:	·	Condensate		·
Source of Contan	nination:	Hole in tank	bottom	
Fluid Released:	,	217 bbls		
Fluids Recovered		0 bbls	w.s	
Official Commun	nication:			
Name:	Pat Ellis	1		Kim Dorey
Company:	COG Operating, L	LC		Tetra Tech
Address:	550 W. Texas Ave			1910 N. Big Spring
P.O. Box	1000 W. Texas Ave	. 016. 1000		
	<u> </u>	<u> </u>		
City:	Midland Texas, 79	· · · · · · · · · · · · · · · · · · ·	<u></u>	Midland, Texas
Phone number:	(432) 686-3023	× ، ^و ر به	<u></u>	(432) 631-0348
Fax:	(432) 684-7137			
Email:	pellis@conchoresc	ources.com		kim.dorey@tetratech.com
Ranking Criteria	N9 } % ~			
Depth to Groundw <50 ft	vater:	·	Ranking Score 20	Site Data
50-99 ft		·· «	10	
-100 ft.		·	0	
WellHead Protecti	on:		Ranking Score	Site Data
	000 ft., Private <200		20	
Vater Source >1,0	000 ft., Private >200	ft	- · · O ·	0
Surface Body of V	Vater:		Ranking Score	Site Data
<200 ft.			20	
200 ft - 1,000 ft.			10	
1,000 ft.	<u> </u>	, `	0	0 , <u>1</u>
To	al Ranking Score		10	
		Accepta	able Soil RRAL (m	g/kg)
		Accepta Benzene 10	able Soil RRAL (m Total BTEX 50	g/kg)



August 15, 2011

Mr. Mike Bratcher Environmental Engineer Specialist Oil Conservation Division, District 2 1301 West Grand Avenue Artesia, New Mexico 88210

Re: Assessment and Work Plan for the COG Operating LLC., Sagebrush Federal Tank Battery, Unit J, Section 34, Township 18 South, Range 27 East, Eddy County, New Mexico.

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess a spill from the Sagebrush Federal Tank Battery, Unit J, Section 34, Township 18 South, Range 27 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.70130°, W 104.26465°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico Oil Conservation Division (NMOCD) Form C-141 Initial Report, the leak was discovered on July 11, 2011, and released approximately 217 barrels of condensate due to a hole in the bottom of the tank. Zero (0) barrels were recovered from the spill area. The spill was contained inside the facility berm impacting an area under the tank measuring approximately 15' x 15'. The initial Form C-141 is enclosed in Appendix A.

Groundwater

No water wells were listed within Section 34. According to the NMOCD groundwater map, one well is located in Section 28, with a reported depth to water of 92' below surface. Based on these findings, groundwater in this area is less than 100' below surface. The groundwater data is shown in Appendix A.



Regulatory

A risk-based evaluation was performed for the Site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 1,000 mg/kg.

Soil Assessment and Analytical Results

Prior to sampling, COG had the leaking tank removed from the facility. On July 14, 2011, Tetra Tech personnel inspected and sampled the spill area. One (1) auger hole (AH-1) was installed at the former tank location using a stainless steel hand auger to assess the impacted soils. The auger hole was advanced to a depth of 9.0' below surface. Select samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The auger hole location is shown on Figure 3.

Referring to Table 1, all of the submitted samples were above the RRAL for TPH and BTEX. Elevated chloride concentrations were detected at the surface and declined with depth to 216 mg/kg at 6-6.5' below surface.

On July 27-28, 2011, Tetra Tech supervised the installation of three (3) boreholes (BH-1, BH-2, and BH-3) utilizing an air rotary drilling rig. Borehole (BH-1) was installed in the center for the former tank location and the remaining boreholes (BH-2 and BH-3) were installed to define horizontal extents. Samples were collected and field screened with an organic vapor meter (OVM) to total depths of 30' to 55' below surface. Samples were placed in laboratory provided containers and submitted for laboratory analysis. Copies of the laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The borehole locations are shown on Figure 4.

Referring to Table 1, the impacted soil in the area of BH-1 declined below TPH and BTEX RRAL at 20.0' and 25.0', respectively. The remaining auger holes (AH-2 and AH-3) did not show any concentrations above the RRAL, which indicates the soil impact is confined to the vicinity of BH-1.

Work Plan

To access the impacted soils, COG will remove the existing tank battery and rebuild the facility on the pad. Once removed, COG proposes to excavate impacted soils at AH-1 (BH-1) to a depth of 20.0' to 25.0' below surface.

Tetra Tech proposes to supervise the removal of impacted material as shown highlighted in green on attached Table 1. Once excavated to the appropriate depths, soil confirmation samples will be collected from the sidewalls and bottom hole to confirm the removal of the impacted soils. The excavated soil will be transported for proper disposal. Once completed, the site will be backfilled with clean material.

If deeper impact is encountered or the proposed excavation depths are not achieved, due to wall cave ins and safety concerns for onsite personnel, the soil will be excavated to the maximum extent practicable. As such, Tetra Tech will contact you to discuss the issues and proposed recommendations for the site.

Upon completion a final report will be submitted to the NMOCD. If you have any questions or require any additional information regarding this work. plan, please call me at (432) 682-4559.

Respectfully submitted, TETRA TECH,

Ike Tavarez Project Management

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cc: Pat Ellis - COG cc: Terry Gregston -- BLM

Tables

Table 1COG Operating LLC.Sagebrush Federal Tank Battery

Eddy County, New Mexico

Sample	Sample	Sample	OVM	Soil	Status	T	PH (mg/kg)	e (- , seb	Benzene	Toluene	Ethlybenzene	Xylene	Total	Chloride
ID	Date	Depth (ft)	(ppm)	In-Situ	Removed	DRO	GRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg) [;]	BTEX	(mg/kg)
AH-1	7/14/2011	0-1'		X		346	2,060	2,406	7.68	2.48	4.49	70.6	85	9,750
	13	4-4.5		X		497	1,470	1,967	6.97	2.18	3.15	52.7	65 🌔	2,500
		6-6.5	•	; X		439	2,150	2,589	8.15	0.72	6.08	80.0	95	216
	38	9-9.5	1	X (1,980	5,630	7,610	34.5	1.97	12.90	239	288	200
BH-1	7/27/2011	0-1'	273	X				- (c)			- <u>-</u>		ad -N Ó	
	11	3'	481	X		.					- 11		· - /	
	8	5'	603	X		446	2,260	2,706	28.2	101	13.8	117	260	
	"	7'	363	X				-						-
	et	10'	463	X		5. A.S C. A.		1.25	-			•	-201	-
		15'	746	X		1,690	4,760	6,450	33.0	133	26.9	179	372	-
		20'	601	X		86.8	844	931	4.49	19.6	5.06	34.4	64	- -
	a	25'	480	Х		64.4	9.16	74	<0.020	0.170	0.135	0.481	0.79	-
	'n	30'	197	Х		-	-	-	-	-	-	-	-	-
	8	40'	301	Х		<50.0	<2.00	<50.00	<0.020	<0.020	<0.020	<0.020	<0.020	-
	8	50'	7	Х		<50.0	<2.00	<50.00	<0.020	<0.020	<0.020	<0.020	<0.020	-
	8	55'	36	Х		<50.0	<2.00	<50.00	<0.020	<0.020	<0.020	<0.020	<0.020	

Table 1COG Operating LLC.Sagebrush Federal Tank BatteryEddy County, New Mexico

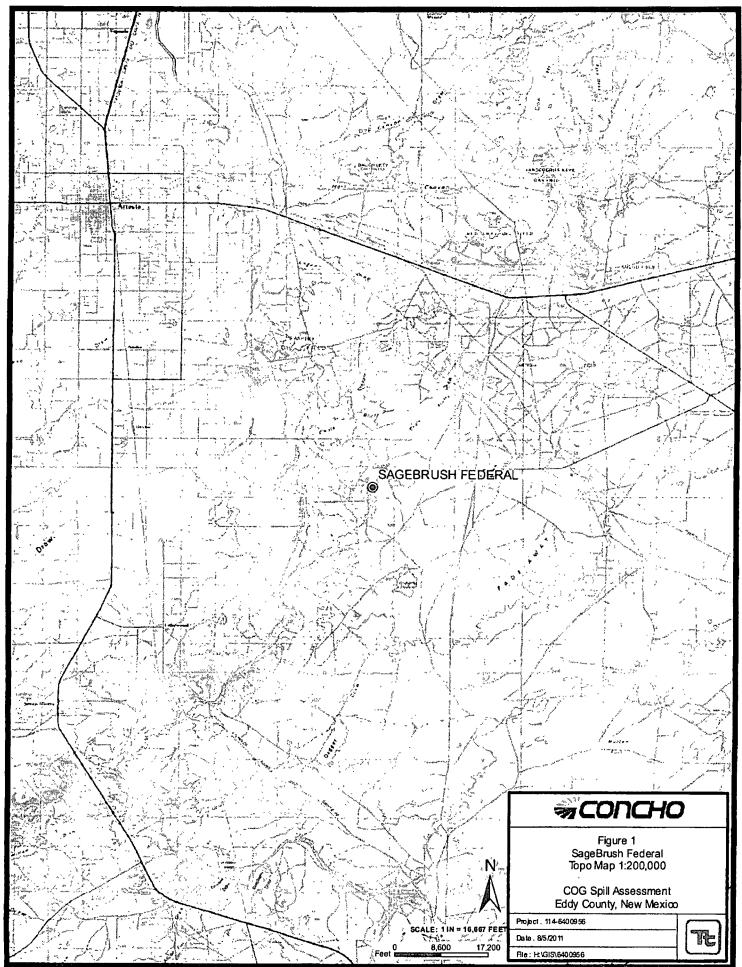
Sample	Sample	Sample	. OVM	Söil	Status 🕤	्र 🕄 👘 🤃	PH (mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total	Chloride
ID .	Date	Depth (ft)	(ppm)	In-Situ	Řemoved	DRO	GRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	BTEX	(mg/kg)
BH-2	7/28/2011	0-1'	47	X		<50.0	<2.00	<50.0	<0.020	<0.020	<0.020	<0.020	<0.020	-
	11	3'	24	X		-	-	-	_	-	-	-	-	-
	- 11	5'	18	́х		-	-	-	-	-	-	-	-	-
<u> </u>	53	7'	26	X		<50.0	<2.00	<50.0	<0.020	<0.020	<0.020	<0.020	<0.020	-
	a	10'	14	X		-	-	-		-	-	-	-	-
	ti	15'	9	X		- -	-	-	-	-	-	-	-	-
	11	20'	18	X		-	-	-	-	-	-	-	-	-
	μ	25'	23	X		-	-	-	-	-	-	-	-	-
	te	30'	6	X		<50.0	<2.00	<50.0	<0.020	<0.020	<0.020	<0.020	<0.020	-
· · · · ·		~			r						······································			1
BH-3	7/28/2011	0-1'	86	X		<50.0	<2.00	<50.0	0.276	0.480	<0.0200	0.633	1.39	
	8	3'	434	X		-	-	· -	-	-	-	-	-	-
	Li	5'	140	X		-	-	-	-	-	-	-	-	-
	9	7'	156	X		<50.0	<2.00	<50.0	<0.020	0.150	<0.020	<0.020	0.150	-
		10'	170	X		-	-	-	-	-	-		-	-
	u	15'	296	X		-	-	-		-	-	-	-	-
	u	20'	664	X		129	146	275	1.65	4.04	0.738	5.36	11.79	-
	ti	25'	-	X		-	-	-	-	-	~	-	-	-
	ti	30'	38	X		<50.0	2.12	<50.0	<0.020	<0.020	<0.020	0.377	0.377	-
	H	40	26	X		-	-	-	-	-	-	-	-	-
i	u	45	15	Х		<50.0	<2.00	<50.0	<0.020	<0.020	<0.020	<0.020	<0.020	-

OVM Organic Vapor Meter

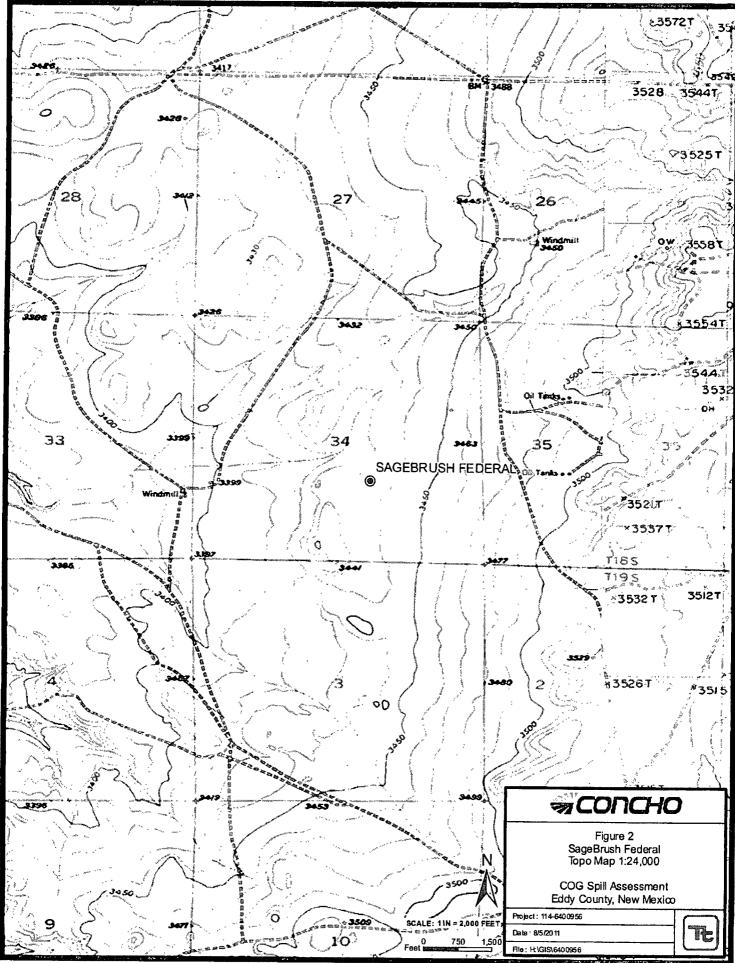
(--) Not Analyzed

Proposed Excavation Depths

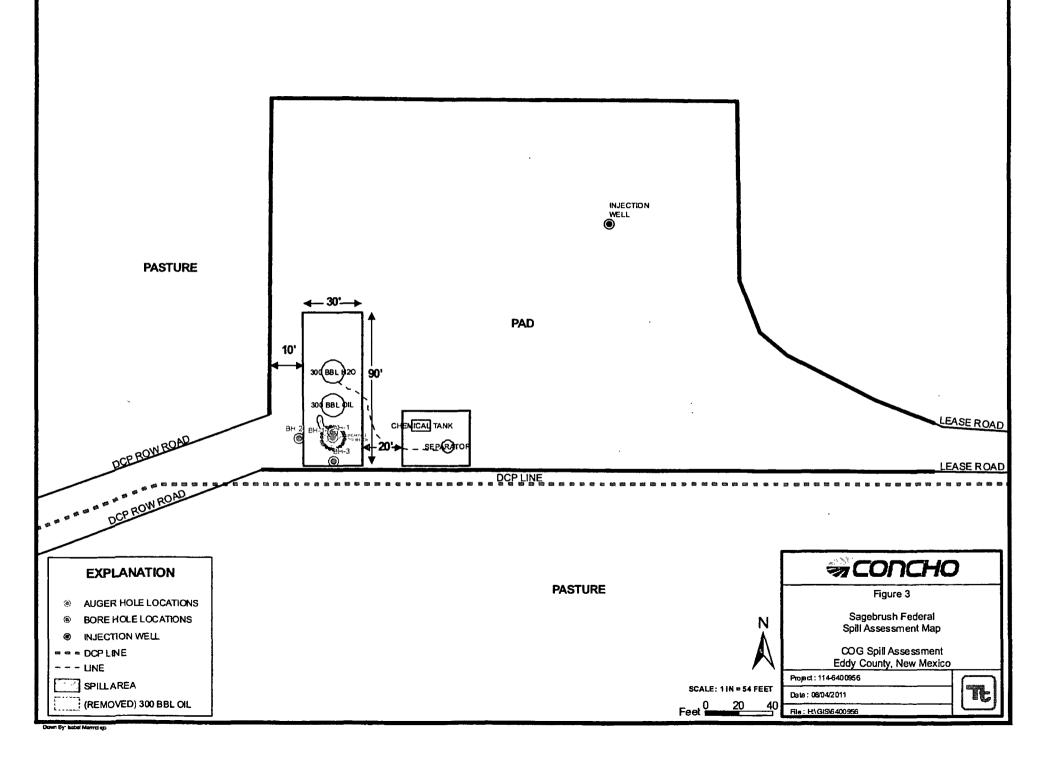
Figures

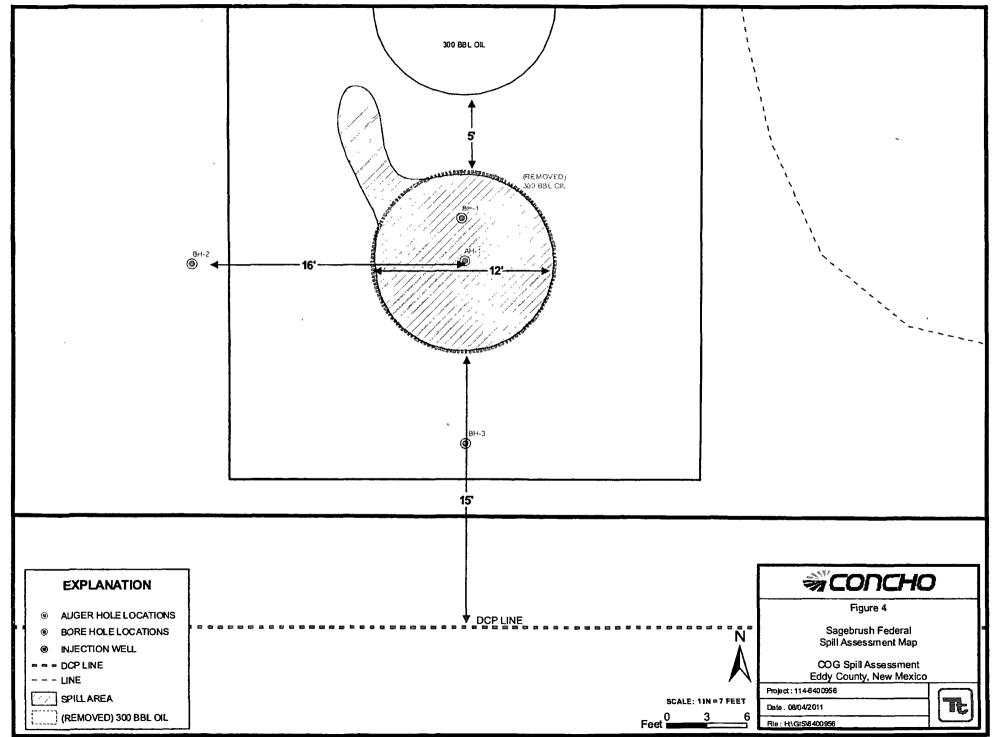


Dawn By babel Marmolejo



Down By, Isabel Mannolejo





Down By testal Marrolsip

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Photos

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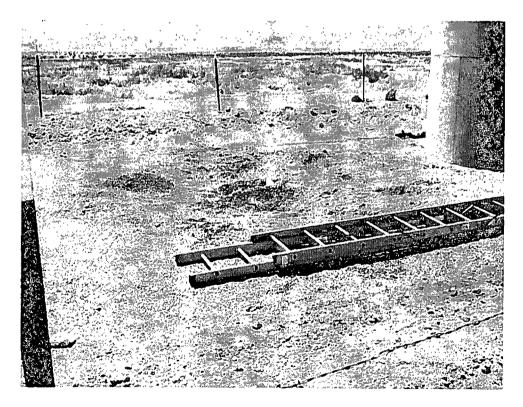
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COG Operating LLC Sagebrush Federal Tank Battery Eddy County, New Mexico Site Assessment: July 14, 2011

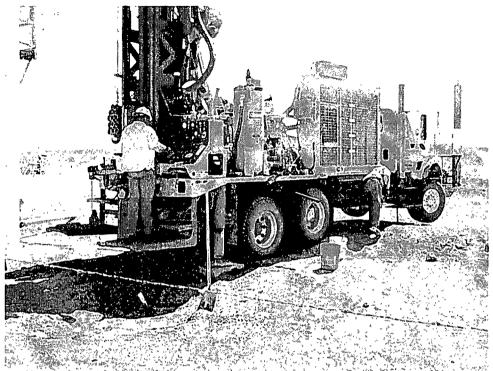
ETRA TECH

View of facility and removed south tank



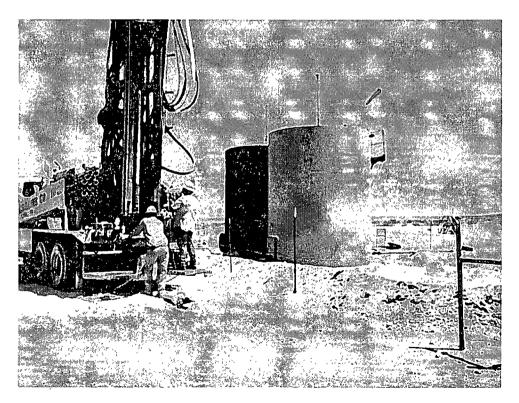
Area of removed south tank

COG Operating LLC Sagebrush Federal Tank Battery Eddy County, New Mexico Soil Bore installation: July 27-28, 2011



ETRA TECH

View of BH-1 installation



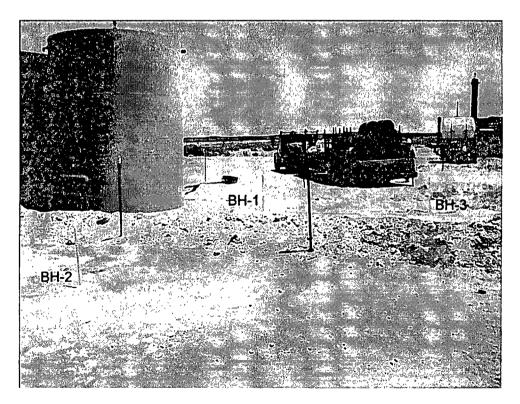
View of BH-2 installation

COG Operating LLC Sagebrush Federal Tank Battery Eddy County, New Mexico Soil Bore installation: July 27-28, 2011



TETRA TECH

View of BH-3 installation



View of BH-1, BH-2, and BH-3 after drilling completed

Appendix A

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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 October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 1 16 on back side of form

.

Release Notification and Corrective Action

	OPERATOR	\boxtimes	Initial Report	Final Report
Name of Company COG OPERATING LLC	Contact	Pat Ellis		
Address 550 W. Texas, Suite 100, Midland, TX 79701	Telephone No.	432-230-0077		
Facility Name Sagebrush Federal	Facility Type	Tank Battery		

Surface Owner Federal	Mineral Owner	Lease No. (API#) 30-015-33910

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	34	18S	27E			0		Eddy

Latitude 32 42.105 Longitude 104 15.876

NATURE OF RELEASE

Type of Release Condensate	Volume of Release 217bbls	Volume Recovered Obbis
Source of Release Hole in bottom of tank	Date and Hour of Occurrence	Date and Hour of Discovery
	07/11/2011	07/11/2011 6:00 p.m.
Was Immediate Notice Given?	If YES, To Whom?	
Yes D No D Not Required	Mike	Bratcher-OCD
By Whom? Josh Russo	Date and Hour 07/13/2011 1:18 a	
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tercourse.
🗌 Yes 🖾 No		
If a Watercourse was Impacted, Describe Fully.*		
na wale course was appaced, seconder any.		
Describe Cause of Problem and Remedial Action Taken.*		
A hole developed in the bottom of the oil tank causing the release of cond	ensate. The tank has been taken out o	of service and will be switched with a new
tank.		
Describe Area Affected and Classics Areise Talas A	and the second	
Describe Area Affected and Cleanup Action Taken.*		
Initially 217bbls of condensate were released from the oil tank and we we	re unable to recover any fluid with a	vacuum truck. The release area is located
directly where the tank was sitting inside the tank battery. Tetra Tech will		
release and we will present a remediation work plan to the BLM/NMOCE		
I hereby certify that the information given above is true and complete to the		
regulations all operators are required to report and/or file certain release n		
public health or the environment. The acceptance of a C-141 report by th		
should their operations have failed to adequately investigate and remediat		
or the environment. In addition, NMOCD acceptance of a C-141 report d federal, state, or local laws and/or regulations.	oes not reneve the operator of respons	signify for compliance with any other
	OIL CONSERV	ATION DIVISION
	OIL CONSERV	ATION DIVISION
Signature:		
	Approved by District Supervisor:	
Printed Name: Josh Russo		
Title: HSE Coordinator	Approval Date:	Expiration Date:
E-mail Address: jrusso@conchoresources.com	Conditions of Approval:	Attached
Date: 07/25/2011 Phone: 432-212-2399		
Date. Uni2011 Phone: 402*212*2079		L

Attach Additional Sheets If Necessary

Appendix B

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Water Well Data Average Depth to Groundwater (ft) COG - Sagebrush Federal Eddy County, New Mexico

	17 :	South		26 East	t		17	South	2	7 East			17	South	2	8 East	1
6	5	4	3	2	1	6	5	4	3	2	1	6	5	4	3	2	1
7 Art	8 esia	9	10	11	12	7	30 8	9	10	11 54 50	12	7	8	9	10	11	12
18	17	16	15	14	13	18	17	16	15	14	13	18	- 17	16	15	14	13
19	20	21	22	23	24	86 19	283 20	194 21	22	23	24	19	20	21	22	23	24
30	29	28	27	26	25	30	29	28	27	26	25	30	29	28	79 27	26	25
31	32	33	34	35	36	31	32 120	33	34	35	36	31	32	33	34 53	35	36
	18 :	South		26 East	-		- 18	B South	2	7 East			- 18	South	2	28 East	1
6	5	4	3	2	1	6	5	4	3	2	1	6	5	4	3	2	1
7	8	9	10	11	12	7	8	9	10	11	12	7	8	9	10	11	12
18	17	16	15	14	13	18	17	16	15	14	13	18	17	16	15	14	13
19	20	21	22	23	24	19	20	21	22	23	24	19	20	21	22	23	24
30	29	28	27	26	25	30	29	28 #2	27	26	25	30	29	28	27	26	25
31	32	33	34	35	36	31	32	33	34 °` SITE	35	36	31	32	33	34	35 65	36
	19 :	South		26 East			19	South	2	7 East			19	South	2	28 East	1
6	5	4	3	2	1	6	5	20 4	3	2	1	6	5	4	3	2	1
7	8	9	10	11	12	7	8	50 9	10	11	12	7	8	9 246 265	10	11	12
18	17	16	15	14	13	18	17	16 18	15	14 82	13 60	18 91	17	16	15.	14	13
19	20	21	22	23	24	19	20	21	22	23	24	19	20	21	22	23	24
30	29	28	27	26	25	30	29	28	27	26	25	30	29	28	27	26	25
31	32	33	34	35	36	31	32	33	34	35	36	31	32	33	34	35	36

New Mexico State Engineers Well Reports

USGS Well Reports

Geology and Groundwater Conditions in Southern Eddy, County, NM

SITE - Sagebrush Federal

Appendix C

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Summary Report

Ike Tavarez Tetra Tech 1910 N. Big Spring Street Midland, TX 79705

Project Location:Eddy Co., NMProject Name:COG/Sagebrush Federal TBProject Number:114-6400956

Date Date Time Sample Description Matrix Taken Taken Received 272048 AH-1 0-1' soil 2011-07-14 00:00 2011-07-15 272052AH-1 4-4.5 2011-07-142011-07-15 soil 00:00 AH-1 6-6.5 272054 2011-07-15 2011-07-14 00:00soil AH-1 9-9.5 272057soil 2011-07-14 00:00 2011-07-15

		1	BTEX		TPH DRO - NEW	TPH GRO
1	Benzene	Toluene	Ethylbenzene	Xylene	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
272048 - AH-1 0-1'	7.68	2.48	4.49	70.6	346	2060
272052 - AH-1 4-4.5	6.97	2.18	3.15	52.7	497	1470
272054 - AH-1 6-6.5	8.15	0.716	6.08	80.0	439	2150
272057 - AH-1 9-9.5	34.5	1.97	12.9	236	1980	5630

Sample: 272048 - AH-1 0-1'

Param	Flag	Result	\mathbf{Units}	RL
Chloride		9750	mg/Kg	4

Sample: 272052 - AH-1 4-4.5

Param	Flag	Result	Units	RL
Chloride		2500	mg/Kg	4

Sample: 272054 - AH-1 6-6.5

TraceAnalysis, Inc. • 6701 Aberdeen Ave., Suite 9 • Lubbock, TX 79424-1515 • (806) 794-1296 This is only a summary. Please, refer to the complete report package for quality control data.

Report Date: July 19, 2011

Work Order: 11071514

Report Date: July 19, 2011		Work Order: 11071514	Page Number: 2 of 2	
Param	Flag	Result	Units	RL
Chloride		216	mg/Kg	4
Sample: 272057	- AH-1 9-9.5			
Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

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TraceAnalysis, Inc. • 6701 Aberdeen Ave., Suite 9 • Lubbock, TX 79424-1515 • (806) 794-1296 This is only a summary. Please, refer to the complete report package for quality control data.

Summary Report

Ike Tavarez Tetra Tech 1910 N. Big Spring Street Midland, TX 79705

Report Date:	August 4, 2011

Work Order: 11072934

Project Location:	Eddy Co., NM
Project Name:	COG/Sagebrush Federal TB
Project Number:	114-6400956

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
273122	BH-1 5'	soil	2011-07-27	00:00	2011-07-29
273125	BH-1 15'	soil	2011-07-27	00:00	2011-07-29
273126	BH-1 20'	soil	2011-07-27	00:00	2011-07-29
273127	BH-1 25'	soil	2011-07-27	00:00	2011-07-29
273129	BH-1 40'	soil	2011-07-27	00:00	2011-07-29
273130	BH-1 50'	soil	2011-07-27	00:00	2011-07-29
273131	BH-1 55'	soil	2011-07-27	00:00	2011-07-29
273132	BH-2 0-1'	soil	2011-07-28	00:00	2011-07-29
273135	BH-2 7'	soil	2011-07-28	00:00	2011-07-29
273140	BH-2 30	soil	2011-07-28	00:00	2011-07-29
273142	BH-3 3'	soil	2011-07-28	00:00	2011-07-29
273144	BH-3 7'	soil	2011-07-28	00:00	2011-07-29
273147	BH-3 20'	soil	2011-07-28	00:00	2011-07-29
273149	BH-3 30'	soil	2011-07-28	00:00	2011-07-29
273151	BH-3 45'	soil	2011-07-28	00:00	2011-07-29

	BTEX			TPH DRO - NEW	TPH GRO	
	Benzene	Toluene	Ethylbenzene	Xylene	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/K*)	(*ng. Kr)	(mg/Kg)	(mg/Kg)	(mg,'Kg)
273122 - BH-1 5'	28.2	101	13.8	117	446	2260
273125 - BH-1 15'	33.0	133	26.9	179	1690	4760
273126 - BH-1 20'	4.49	19.6	5.06	34.4	86.8	844
273127 - BH-1 25'	< 0.0200	0.170	0.135	0.481	64.4	9.16
273129 - BH-1 40'	< 0.0200	<0.0200	< 0.0200	<0.0200	<50.0	<2.00
273130 - BH-1 50'	< 0.0200	< 0.0200	< 0.0200	<0.0200	<50.0	<2.00
273131 - BH-1 55'	< 0.0200	< 0.0200	< 0.0200	<0.0200	<50.0	<2.00
273132 - BH-2 0-1'	< 0.0200	< 0.0200	< 0.0200	<0.0200	<50.0	<2.00
273135 - BH-2 7'	< 0.0200	<0.0200	< 0.0200	<0.0200	<50.0	<2.00
273140 - BH-2 30'	<0.0200	< 0 .0200	< 0.0200	<0.0200	<50.0	<2.00

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	BTEX				TPH DRO - NEW	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	DRO	GRO
Sample - Field Code	(mg/Kg)	(ing/Kg)	(mg/Kg)	(mg/Kg)	(ing/Kg)	(ing/K%)
273142 - BH-3 3'	0.276	0.480	< 0.0200	0.633	<50.0	<2.00
273144 - BH-3 7'	< 0.0200	0.150	< 0.0200	<0.0200	<50.0	<2.00
273147 - BH-3 20'	1.65	4.04	0.738	5.36	129	146
273149 - BH-3 30'	< 0.0200	<0.0200	< 0.0200	0.377	<50.0	2.12
273151 - BH-3 45'	< 0.0200	< 0.0200	< 0.0200	<0.0200	<50.0	<2.00

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