HOBBS OCD

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

JAN 1 2 2012

RECEIVED

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ 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	Falcon Federal 2 and 3H	Facility Type	Tank Battery

Surface Owner Federal	Mineral Owner	Lease No.

LOCATION OF RELEASE

FALCON FEDERAL 2
API # 30-025-39009

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	9	19S	32E					Lea

Latitude 32 40.857 **Longitude** 103 46.339

NATURE OF RELEASE

Type of Release Produced fluid	Volume of Release 12bbls	Volume Recovered 10bbls
Source of Release Heater treater	Date and Hour of Occurrence 04/11/2011	Date and Hour of Discovery 04/11/2011 12:00 p.m.
Was Immediate Notice Given? ☐ Yes ☒ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

A hole in the fire tube caused the release. The heater is currently out of service and is going to be replaced with a new one.

Describe Area Affected and Cleanup Action Taken.*

Initially 12bbls of fluid was released from the fire tube and we were able to recover 10bbls with a vacuum truck. The entire release was completely contained inside the berm wall around the production equipment. The spill area measured 30' x 30'. Contaminated soil has been scraped and hauled appropriately. Tetra Tech will sample the spill site area to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD / BLM for approval prior to any significant remediation work.

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

Signature:	OIL CONSERVATION DIVISION
Printed Name: Josh Russo	Approved by District Supervisor: Environmental Specialist
Title: HSE Coordinator	Approval Date: 10/25/12 Expiration Date: —
E-mail Address: jrusso@conchoresources.com	Conditions of Approval: — Attached ☐ IRP-10-12-2858
Date: 04/18/2011 Phone: 432-212-2399	

* Attach Additional Sheets If Necessary

SITE INFORMATION

Report Type: Closure Report

General Site Information:						
Site:	Falcon Federal 2 and 3H					
Company:	COG Operating LLC					
Section, Township and Range	Sec 9	T19S	R32E			
Lease Number:						
County:	Lea County					
GPS:	32.68165° N			103.77211° W		
Surface Owner:	Federal					
Mineral Owner:						
Directions:	From Hwy 529 and CR 126 travel south on CR 126 for 7.9 miles, turn left onto lease road and travel for 1.7 miles, turn right and travel 0.7 miles, turn right and travel for 0.2 miles to site.					

Release Data:	
Date Released:	4/11/2011
Type Release:	Produced Fluid
Source of Contamination:	Heater Treater
Fluid Released:	12 bbls
Fluids Recovered:	10 bbls

Jeffrey Leking
Environmental Specialist
NMOCD - DIST 1
10/25/12

Official Communication:			
Name:	Pat Ellis		Ike Tavarez
Company:	COG Operating, LLC		Tetra Tech
Address:	550 W. Texas Ave. Ste. 1300		1910 N. Big Spring
P.O. Box			
City:	Midland Texas, 79701		Midland, Texas
Phone number:	(432) 686-3023		(432) 682-4559
Fax:	(432) 684-7137		
Email:	pellis@conchoresources.com		ike.tavarez@tetratech.com

Ranking Criteria		
Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	20	
50-99 ft	10	
>100 ft.	**0**	**0**
WellHead Protection:	***Ranking Score***	***Site Data***
Water Source <1,000 ft., Private <200 ft.	*20*	
Water Source >1,000 ft., Private >200 ft.	**0**	**0**
Surface Body of Water:	***Ranking Score***	***Site Data***
<200 ft.	*20*	
200 ft - 1,000 ft.	*10*	
>1,000 ft.	**0**	**0**
Total Ranking Score:	**0**	

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Acceptable Soil RRAL (mg/kg)		
Benzene	***Total BTEX***	***TPH***
10	50	5,000

TETRA TECH

December 9, 2011

HOBBS OCD

JAN 12 2012

RECEIVED

Mr. Geoffrey Leking
Environmental Engineer Specialist
Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

Re: Closure Report for the COG Operating LLC., Falcon Federal 2 and 3H Tank Battery, Unit B, Section 9, Township 19 South, Range 32 East, Lea County, New Mexico.

Mr. Leking:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess a spill from the Falcon Federal 2 and 3H Tank Battery located in Unit B, Section 9, Township 19 South, Range 32 East, Lea County, New Mexico (Site). The spill site coordinates are N 32.68165°, W 103.77211°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the leak was discovered on April 11, 2011, and released approximately twelve (12) barrels of produced fluid due to a hole in the fire tube of the heater treater. To alleviate the problem, COG personnel will replace the heater treater. Ten (10) barrels of standing fluids were recovered. The spill was contained within the facility firewall. The initial C-141 form is enclosed in Appendix C.

Groundwater

No water wells were listed within Section 9. According to the NMOCD groundwater map, the average depth to groundwater in the area is approximately 375' below surface. The average depth to groundwater map is shown in Appendix A.

Tetra Tech
1910 North Big Spring, Midland,TX 79705
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (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 5,000 mg/kg.

Soil Assessment and Analytical Results

On May 10, 2011, Tetra Tech personnel inspected and sampled the spill area, which measured approximately 30' X 30'. A total of one (1) auger hole (AH-1) was installed using a stainless steel hand auger to assess the impacted soils. 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 B. 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 below the TPH and BTEX RRAL. A chloride high of 4,160 mg/kg at 0-1' was detected and declined with depth to 4.0' to 5.0' where there was an increase to 2,780 mg/kg, before declining to 397 mg/kg at 7.0'. Based on the results, the deeper chloride impact appears to be historical.

Assessment and Corrective Action

As stated in the approved work plan, deeper excavation of the spill could not be achieve due to proximity of oil and gas equipment, structures or lines, which may cause cave ins and safety concerns for onsite equipment and personnel.

From November 9-16, 2011, Tetra Tech personnel supervised the excavation as recommended in the approved work plan. Approximately 20 cubic yards of impacted soil was hauled to CRI for proper disposal. Once excavated to the appropriate depth, the NMCOD and BLM were contacted and approved the backfilling of the excavation.

TETRA TECH

Based upon the results of the investigation and approved remediation performed at this site, COG requests closure of this site. The C-141 (Final) is included in Appendix A. If you have any question or comments concerning the activities performed at the Site, please call me at (432) 682-4559.

Respectfully submitted,
TETRA TECH

Ike Tavarez
Project Manager

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

FIGURES

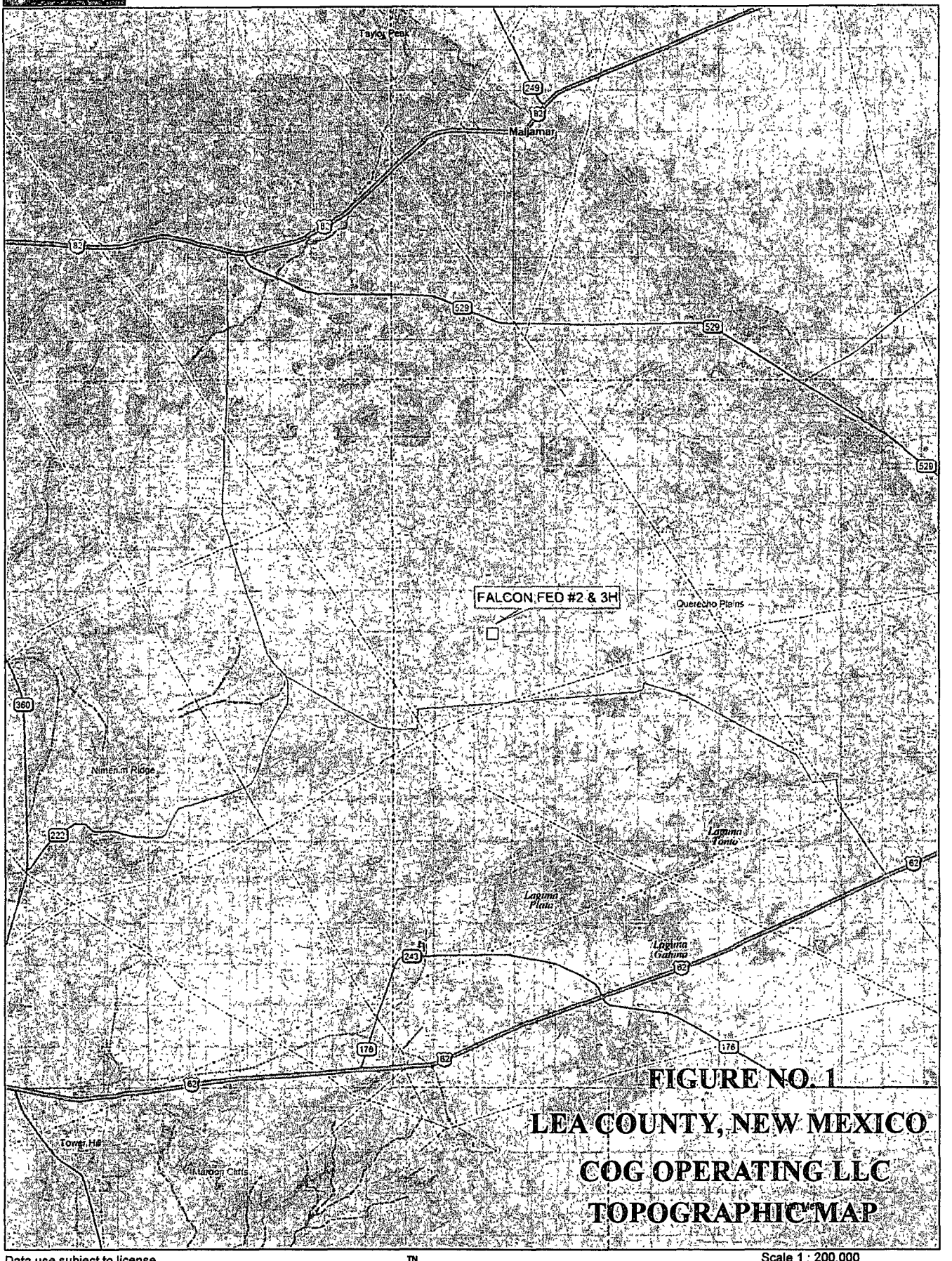


FIGURE NO. 1

LEA COUNTY, NEW MEXICO

COG OPERATING LLC

TOPOGRAPHIC MAP

TN

MN (7.7°E)

Scale 1 : 200,000

0 1 2 3 4 5 mi

0 1 2 3 4 5 km

1" = 3.16 mi

Data Zoom 10-2

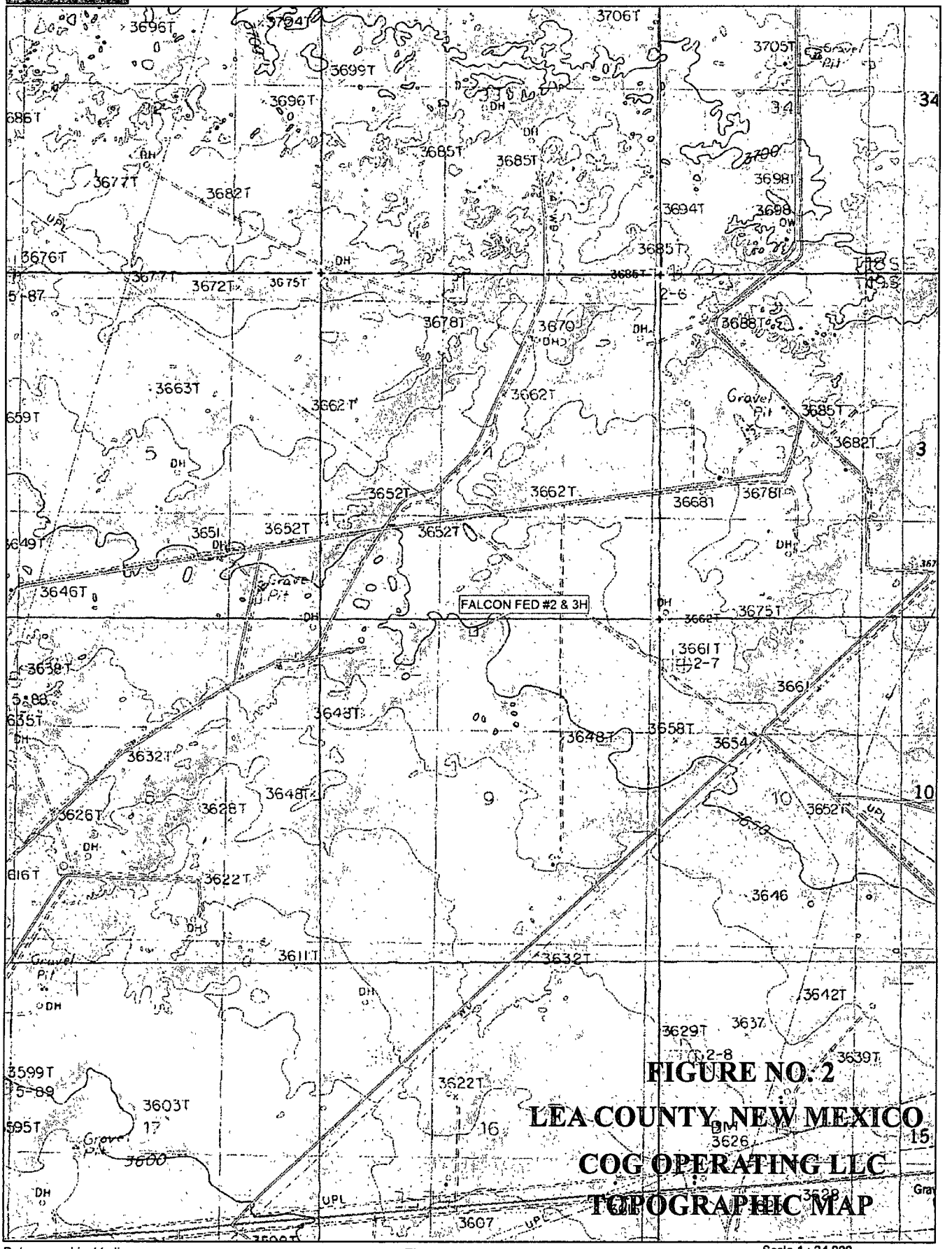


FIGURE NO. 2

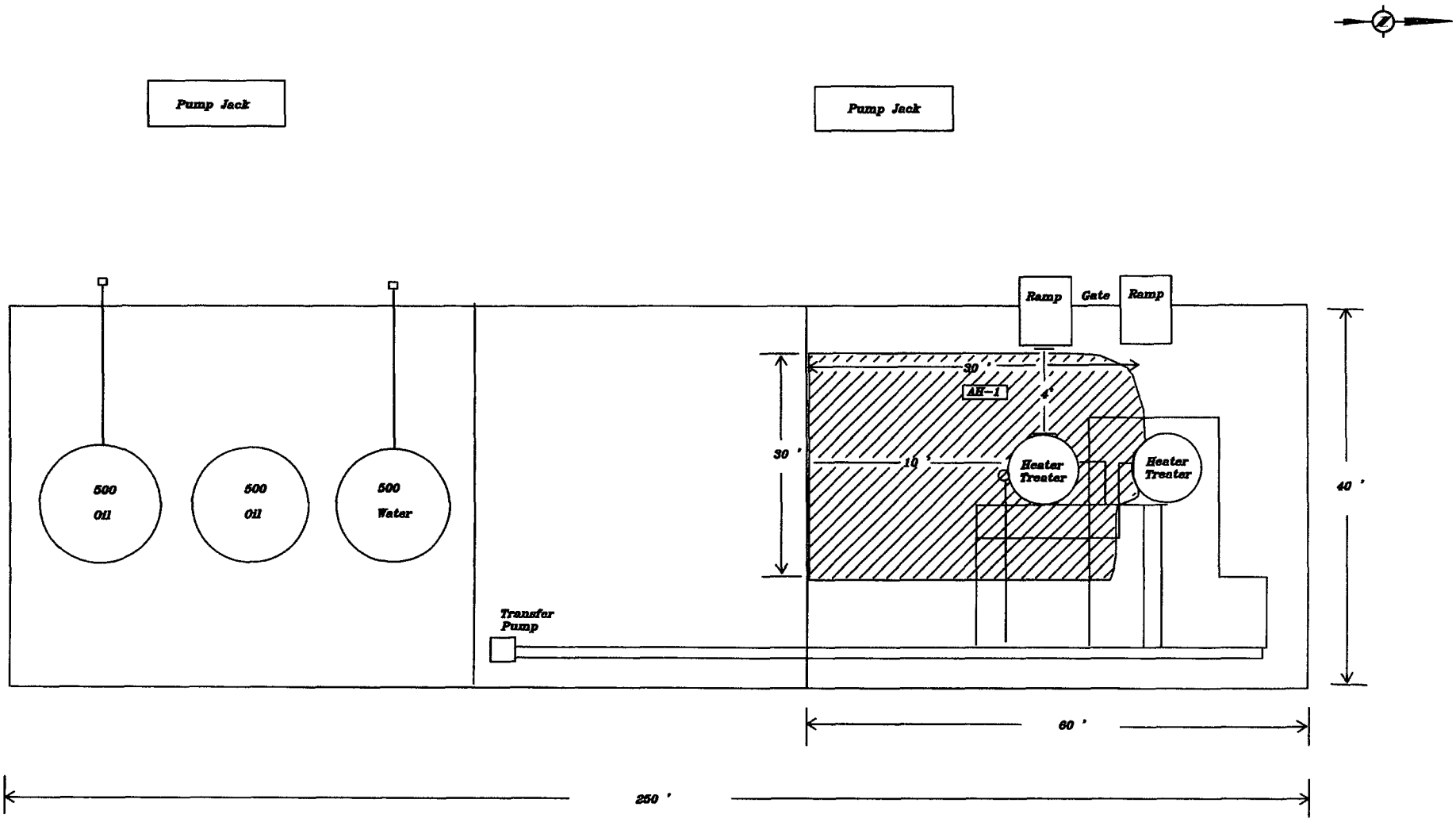
LEA COUNTY, NEW MEXICO

COG OPERATING LLC

TOPOGRAPHIC MAP

TN
MN (7.7°E)

Scale 1 : 24,000
1" = 2,000.0 ft
Data Zoom 13-6



SPILL AREA

NOT TO SCALE

FIGURE NO. 3

LEA CO. NEW MEXICO

COG OPERATING LLC

FALCON FED # 2 & 3H

TETRA TECH, INC.
MIDLAND, TEXAS

DATE: 5/13/11
DWN. BY: JAD
FILE: H:\COG\640091 FALCON FED #2 & 3H

TABLES

Table 1
COG Operating LLC.
FALCON FEDERAL 2 AND 3H
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total					
AH-1	5/10/2011	0-1'		X	376	844	1,220	<0.200	0.836	0.789	2.71	4,160
	"	1-1.5'	X		-	-	-	-	-	-	-	1,090
	"	2-2.5'	X		-	-	-	-	-	-	-	1,560
	"	3-3.5'	X		-	-	-	-	-	-	-	899
	"	4-4.5'	X		-	-	-	-	-	-	-	2,780
	"	5-5.5'	X		-	-	-	-	-	-	-	2,420
	"	6-6.5'	X		-	-	-	-	-	-	-	1,840
	"	7-7.5'	X		-	-	-	-	-	-	-	397

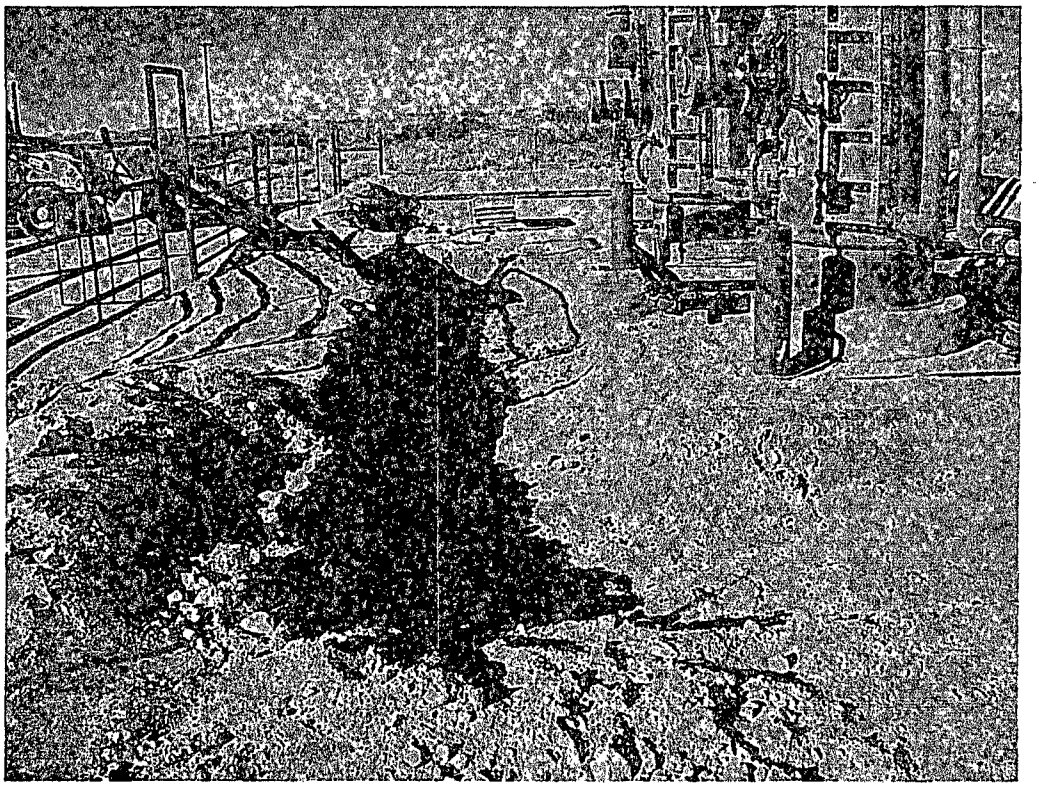
(--) Not Analyzed

Excavated Material and Depths

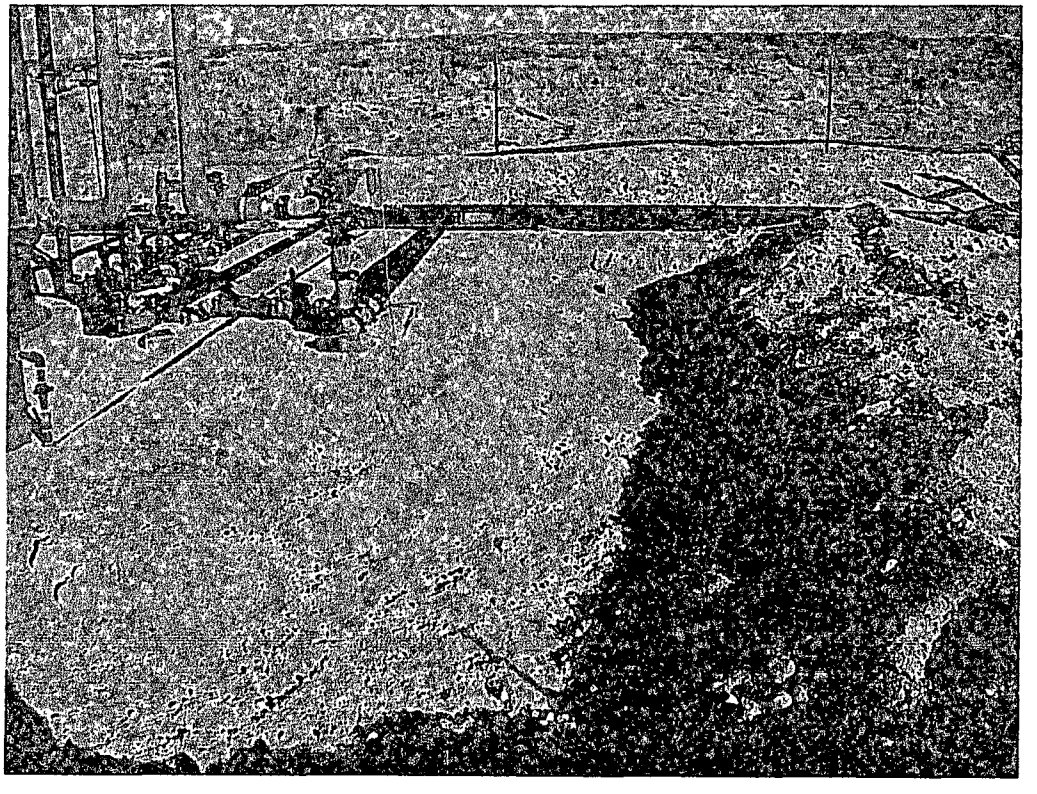
PHOTOGRAPHS

COG Operating LLC
Falcon Fed 2 and 3H Tank Battery
Eddy County, New Mexico
Site Excavation Date: Nov. 9-16, 2011

TETRA TECH



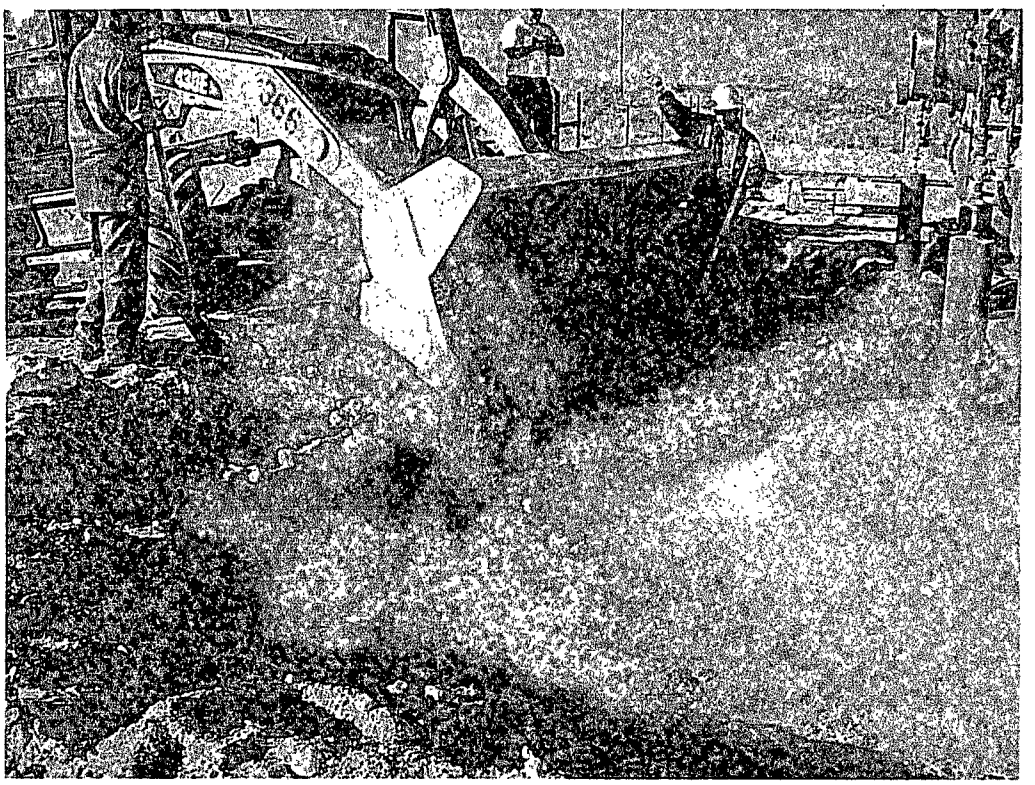
View south – 1' bgs excavated



View east – 1' bgs excavated

COG Operating LLC
Falcon Fed 2 and 3H Tank Battery
Eddy County, New Mexico
Site Excavation Date: Nov. 9-16, 2011

TETRA TECH



View south – Backfilling with clean material

View south – Site backfilled with clean material and remediation complete

APPENDIX A

Water Well Data
Average Depth to Groundwater (ft)
COG - Falcon Federal 2 and 3H
Lea County, New Mexico

18 South 31 East

6	5	4	3	2	1
7	8	9	10	11	12 **400**
18	17	16	15	14 **317**	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35 **261**	36

19 South 31 East

6	5 **SITE**	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28 **180**	27	26	25
31	32	33 **101**	34	35	36 **130**

20 South 31 East

6	5	4	3	2	1
7	8	9	10 **130**	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36 **80**

18 South 32 East

6	5	4 **65**	3 Prong #2	2	1
7 **460** **82**	8	9	10	11	12
18	17	16 **84**	15	14	13
19	20 **164**	21	22 **429**	23	24
30	29	28	27	26	25
31	32	33	34 **117**	35	36

19 South 32 East

6	5	4	3	2	1
7	8 **365**	9 SITE	10	11	12
18	17	16	15	14	13 135 dry
19 **102**	20 **345**	21	22	23	24
30	29	28	27	26	25
31	32	33	34 **250**	35	36

20 South 32 East

6	5	4	3	2	1 **21.8**
7	8	9	10	11	12
18 **89**	17	16	15	14	13
19	20	21	22	23	24
30 **9.9**	29	28	27 **12.3**	26	25
31	32	33	34	35	36 **46**

18 South 33 East

6	5	4	3	2
7	8 **100**	9	10 **62**	11
18	17 **85**	16	15	14 **36**
19 **>140**	20	21	22	23
30 **35**	29	28	27	26
31	32	33	34 **177**	35

19 South 33 East

6	5	4	3	2
7	8	9	10	11
18 **340**	17 **116**	16	15	14
19	20	21	22	23
30	29	28	27	26 **92** **85**
31	32 **185**	33	34	35

20 South 33 East

6	5 **278**	4	3	2
7	8	9	10	11
18	17	16	15	14
19	20	21	22	23
30	29	28	27	26
31	32	33	34	35

- New Mexico State Engineers Well Reports
- USGS Well Reports
- Geology and Groundwater Conditions in Southern Eddy, County, NM
- NMOCD - Groundwater Data

APPENDIX B

Summary Report

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

Report Date: June 1, 2011

Work Order: 11051104

Project Name: COG/Falcon Federal 2 and 3H
Project Number: 114-6400891

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
266100	AH-1 0-1'	soil	2011-05-10	00:00	2011-05-10
266101	AH-1 1-1.5'	soil	2011-05-10	00:00	2011-05-10
266102	AH-1 2-2.5'	soil	2011-05-10	00:00	2011-05-10
266103	AH-1 3-3.5'	soil	2011-05-10	00:00	2011-05-10
266104	AH-1 4-4.5'	soil	2011-05-10	00:00	2011-05-10
266105	AH-1 5-5.5'	soil	2011-05-10	00:00	2011-05-10
266106	AH-1 6-6.5'	soil	2011-05-10	00:00	2011-05-10
266107	AH-1 7-7.5'	soil	2011-05-10	00:00	2011-05-10

	BTEX				TPH DRO - NEW	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
266100 - AH-1 0-1'	<0.200	**0.836**	**0.789**	**2.71**	**844**	**376**

Sample: 266100 - AH-1 0-1'

Param	Flag	Result	Units	RL
Chloride		**4160**	mg/Kg	4

Sample: 266101 - AH-1 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**1090**	mg/Kg	4

Sample: 266102 - AH-1 2-2.5'

Param	Flag	Result	Units	RL
Chloride		**1560**	mg/Kg	4

Sample: 266103 - AH-1 3-3.5'

Param	Flag	Result	Units	RL
Chloride		**899**	mg/Kg	4

Sample: 266104 - AH-1 4-4.5'

Param	Flag	Result	Units	RL
Chloride		**2780**	mg/Kg	4

Sample: 266105 - AH-1 5-5.5'

Param	Flag	Result	Units	RL
Chloride		**2420**	mg/Kg	4

Sample: 266106 - AH-1 6-6.5'

Param	Flag	Result	Units	RL
Chloride		**1840**	mg/Kg	4

Sample: 266107 - AH-1 7-7.5'

Param	Flag	Result	Units	RL
Chloride		**397**	mg/Kg	4

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: June 1, 2011

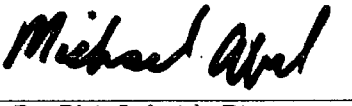
Work Order: 11051104

Project Name: COG/Falcon Federal 2 and 3H
Project Number: 114-6400891

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
266100	AH-1 0-1'	soil	2011-05-10	00:00	2011-05-10
266101	AH-1 1-1.5'	soil	2011-05-10	00:00	2011-05-10
266102	AH-1 2-2.5'	soil	2011-05-10	00:00	2011-05-10
266103	AH-1 3-3.5'	soil	2011-05-10	00:00	2011-05-10
266104	AH-1 4-4.5'	soil	2011-05-10	00:00	2011-05-10
266105	AH-1 5-5.5'	soil	2011-05-10	00:00	2011-05-10
266106	AH-1 6-6.5'	soil	2011-05-10	00:00	2011-05-10
266107	AH-1 7-7.5'	soil	2011-05-10	00:00	2011-05-10

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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- Sample 266101 (AH-1 1-1.5') . . . 6
- Sample 266102 (AH-1 2-2.5') . . . 6
- Sample 266103 (AH-1 3-3.5') . . . 7
- Sample 266104 (AH-1 4-4.5') . . . 7
- Sample 266105 (AH-1 5-5.5') . . . 7
- Sample 266106 (AH-1 6-6.5') . . . 8
- Sample 266107 (AH-1 7-7.5') . . . 8

Method Blanks 9
- QC Batch 81213 - Method Blank (1) . . . 9
- QC Batch 81214 - Method Blank (1) . . . 9
- QC Batch 81246 - Method Blank (1) . . . 9
- QC Batch 81651 - Method Blank (1) . . . 10

Laboratory Control Spikes 11
- QC Batch 81213 - LCS (1) . . . 11
- QC Batch 81214 - LCS (1) . . . 11
- QC Batch 81246 - LCS (1) . . . 12
- QC Batch 81651 - LCS (1) . . . 12
- QC Batch 81213 - MS (1) . . . 13
- QC Batch 81214 - MS (1) . . . 13
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- QC Batch 81213 - CCV (1) . . . 16
- QC Batch 81213 - CCV (2) . . . 16
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- QC Batch 81246 - CCV (3) . . . 17
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- QC Batch 81651 - ICV (1) . . . 17
- QC Batch 81651 - CCV (1) . . . 17

Appendix 19
- Laboratory Certifications . . . 19
- Standard Flags . . . 19
- Attachments . . . 19

Case Narrative

Samples for project COG/Falcon Federal 2 and 3H were received by TraceAnalysis, Inc. on 2011-05-10 and assigned to work order 11051104. Samples for work order 11051104 were received intact at a temperature of 8.4 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	68938	2011-05-12 at 08:58	81213	2011-05-12 at 21:06
Chloride (Titration)	SM 4500-Cl B	69151	2011-05-20 at 10:57	81651	2011-05-26 at 14:22
TPH DRO - NEW	S 8015 D	68968	2011-05-13 at 10:42	81246	2011-05-13 at 10:42
TPH GRO	S 8015 D	68938	2011-05-12 at 08:58	81214	2011-05-12 at 21:06

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11051104 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 266100 - AH-1 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	81213	Date Analyzed:	2011-05-12	Analyzed By:	ME
Prep Batch:	68938	Sample Preparation:	2011-05-12	Prepared By:	ME

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	<0.200	mg/Kg	10	0.0200
Toluene		1	**0.836**	mg/Kg	10	0.0200
Ethylbenzene		1	**0.789**	mg/Kg	10	0.0200
Xylene		1	**2.71**	mg/Kg	10	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			11.2	mg/Kg	10	10.0	112	52.8 - 137
4-Bromofluorobenzene (4-BFB)			13.0	mg/Kg	10	10.0	130	38.4 - 157

Sample: 266100 - AH-1 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	81651	Date Analyzed:	2011-05-26	Analyzed By:	AR
Prep Batch:	69151	Sample Preparation:	2011-05-20	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**4160**	mg/Kg	100	4.00

Sample: 266100 - AH-1 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	81246	Date Analyzed:	2011-05-13	Analyzed By:	kg
Prep Batch:	68968	Sample Preparation:	2011-05-13	Prepared By:	kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	**844**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			245	mg/Kg	1	100	245	70 - 130

Sample: 266100 - AH-1 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	81214	Date Analyzed:	2011-05-12	Analyzed By:	ME
Prep Batch:	68938	Sample Preparation:	2011-05-12	Prepared By:	ME

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**376**	mg/Kg	10	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			12.4	mg/Kg	10	10.0	124	48.5 - 152
4-Bromofluorobenzene (4-BFB)			13.2	mg/Kg	10	10.0	132	42 - 159

Sample: 266101 - AH-1 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	81651	Date Analyzed:	2011-05-26	Analyzed By:	AR
Prep Batch:	69151	Sample Preparation:	2011-05-20	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**1090**	mg/Kg	100	4.00

Sample: 266102 - AH-1 2-2.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	81651	Date Analyzed:	2011-05-26	Analyzed By:	AR
Prep Batch:	69151	Sample Preparation:	2011-05-20	Prepared By:	AR

continued ...

sample 266102 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**1560**	mg/Kg	100	4.00

Sample: 266103 - AH-1 3-3.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	81651	Date Analyzed:	2011-05-26	Analyzed By:	AR
Prep Batch:	69151	Sample Preparation:	2011-05-20	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**899**	mg/Kg	50	4.00

Sample: 266104 - AH-1 4-4.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	81651	Date Analyzed:	2011-05-26	Analyzed By:	AR
Prep Batch:	69151	Sample Preparation:	2011-05-20	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**2780**	mg/Kg	100	4.00

Sample: 266105 - AH-1 5-5.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	81651	Date Analyzed:	2011-05-26	Analyzed By:	AR
Prep Batch:	69151	Sample Preparation:	2011-05-20	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**2420**	mg/Kg	100	4.00

Sample: 266106 - AH-1 6-6.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	81651	Date Analyzed:	2011-05-26	Analyzed By:	AR
Prep Batch:	69151	Sample Preparation:	2011-05-20	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**1840**	mg/Kg	100	4.00

Sample: 266107 - AH-1 7-7.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	81651	Date Analyzed:	2011-05-26	Analyzed By:	AR
Prep Batch:	69151	Sample Preparation:	2011-05-20	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**397**	mg/Kg	50	4.00

Method Blanks

Method Blank (1) QC Batch: 81213

QC Batch: 81213 | Date Analyzed: 2011-05-12 | Analyzed By: ME
Prep Batch: 68938 | QC Preparation: 2011-05-12 | Prepared By: ME

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.0118	mg/Kg	0.02
Toluene		1	<0.00600	mg/Kg	0.02
Ethylbenzene		1	<0.00850	mg/Kg	0.02
Xylene		1	<0.00613	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.71	mg/Kg	1	2.00	86	66.6 - 122
4-Bromofluorobenzene (4-BFB)			1.46	mg/Kg	1	2.00	73	55.4 - 124

Method Blank (1) QC Batch: 81214

QC Batch: 81214 | Date Analyzed: 2011-05-12 | Analyzed By: ME
Prep Batch: 68938 | QC Preparation: 2011-05-12 | Prepared By: ME

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	<0.753	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.82	mg/Kg	1	2.00	91	67.6 - 150
4-Bromofluorobenzene (4-BFB)			1.51	mg/Kg	1	2.00	76	52.4 - 130

Method Blank (1) QC Batch: 81246

QC Batch: 81246 | Date Analyzed: 2011-05-13 | Analyzed By: kg
Prep Batch: 68968 | QC Preparation: 2011-05-13 | Prepared By: kg

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<15.7	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			105	mg/Kg	1	100	105	70 - 130

Method Blank (1) QC Batch: 81651

QC Batch:	81651	Date Analyzed:	2011-05-26	Analyzed By:	AR
Prep Batch:	69151	QC Preparation:	2011-05-20	Prepared By:	AR

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 81213 | Date Analyzed: 2011-05-12 | Analyzed By: ME
Prep Batch: 68938 | QC Preparation: 2011-05-12 | Prepared By: ME

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.04	mg/Kg	1	2.00	<0.0118	102	81.9 - 108
Toluene		1	2.18	mg/Kg	1	2.00	<0.00600	109	81.9 - 118
Ethylbenzene		1	1.88	mg/Kg	1	2.00	<0.00850	94	78.4 - 115
Xylene		1	5.62	mg/Kg	1	6.00	<0.00613	94	79.1 - 116

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.00	mg/Kg	1	2.00	<0.0118	100	81.9 - 108	2	20
Toluene		1	2.13	mg/Kg	1	2.00	<0.00600	106	81.9 - 118	2	20
Ethylbenzene		1	1.87	mg/Kg	1	2.00	<0.00850	94	78.4 - 115	0	20
Xylene		1	5.56	mg/Kg	1	6.00	<0.00613	93	79.1 - 116	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.60	1.57	mg/Kg	1	2.00	80	78	70.2 - 114
4-Bromofluorobenzene (4-BFB)	1.59	1.56	mg/Kg	1	2.00	80	78	69.8 - 121

Laboratory Control Spike (LCS-1)

QC Batch: 81214 | Date Analyzed: 2011-05-12 | Analyzed By: ME
Prep Batch: 68938 | QC Preparation: 2011-05-12 | Prepared By: ME

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	12.7	mg/Kg	1	20.0	<0.753	64	60.9 - 95.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

control spikes continued ...

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	12.3	mg/Kg	1	20.0	<0.753	62	60.9 - 95.4	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.99	1.95	mg/Kg	1	2.00	100	98	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.78	1.79	mg/Kg	1	2.00	89	90	68.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 81246 | Date Analyzed: 2011-05-13 | Analyzed By: kg
Prep Batch: 68968 | QC Preparation: 2011-05-13 | Prepared By: kg

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	206	mg/Kg	1	250	<15.7	82	47.5 - 144.1

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	200	mg/Kg	1	250	<15.7	80	47.5 - 144.1	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	114	110	mg/Kg	1	100	114	110	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 81651 | Date Analyzed: 2011-05-26 | Analyzed By: AR
Prep Batch: 69151 | QC Preparation: 2011-05-20 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			98.0	mg/Kg	1	100	<3.85	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			104	mg/Kg	1	100	<3.85	104	85 - 115	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 266100

QC Batch: 81213 | Date Analyzed: 2011-05-12 | Analyzed By: ME
Prep Batch: 68938 | QC Preparation: 2011-05-12 | Prepared By: ME

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	10.3	mg/Kg	10	10.0	<0.118	103	80.5 - 112
Toluene		1	11.4	mg/Kg	10	10.0	0.8359	106	82.4 - 113
Ethylbenzene		1	9.94	mg/Kg	10	10.0	0.7886	92	83.9 - 114
Xylene		1	30.5	mg/Kg	10	30.0	2.7118	93	84 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	10.1	mg/Kg	10	10.0	<0.118	101	80.5 - 112	2	20
Toluene		1	11.0	mg/Kg	10	10.0	0.8359	102	82.4 - 113	4	20
Ethylbenzene		1	9.63	mg/Kg	10	10.0	0.7886	88	83.9 - 114	3	20
Xylene		1	29.9	mg/Kg	10	30.0	2.7118	91	84 - 114	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	11.2	10.2	mg/Kg	10	10	112	102	41.3 - 117
4-Bromofluorobenzene (4-BFB)	12.4	11.2	mg/Kg	10	10	124	112	35.5 - 129

Matrix Spike (MS-1) Spiked Sample: 266092

QC Batch: 81214 | Date Analyzed: 2011-05-12 | Analyzed By: ME
Prep Batch: 68938 | QC Preparation: 2011-05-12 | Prepared By: ME

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	12.8	mg/Kg	1	20.0	<0.753	64	61.8 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	12.4	mg/Kg	1	20.0	<0.753	62	61.8 - 114	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.22	2.20	mg/Kg	1	2	111	110	50 - 162
4-Bromofluorobenzene (4-BFB)	2.06	2.01	mg/Kg	1	2	103	100	50 - 162

Matrix Spike (MS-1) Spiked Sample: 266092

QC Batch: 81246 | Date Analyzed: 2011-05-13 | Analyzed By: kg
Prep Batch: 68968 | QC Preparation: 2011-05-13 | Prepared By: kg

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	184	mg/Kg	1	250	<15.7	74	11.7 - 152.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	181	mg/Kg	1	250	<15.7	72	11.7 - 152.3	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	106	112	mg/Kg	1	100	106	112	70 - 130

Matrix Spike (MS-1) Spiked Sample: 266107

QC Batch: 81651 | Date Analyzed: 2011-05-26 | Analyzed By: AR
Prep Batch: 69151 | QC Preparation: 2011-05-20 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			10400	mg/Kg	100	10000	397	100	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

matrix spikes continued ...

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			10800	mg/Kg	100	10000	397	104	80 - 120	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Calibration Standards

Standard (CCV-1)

QC Batch: 81213 | Date Analyzed: 2011-05-12 | Analyzed By: ME

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.0983	98	80 - 120	2011-05-12
Toluene		1	mg/Kg	0.100	0.102	102	80 - 120	2011-05-12
Ethylbenzene		1	mg/Kg	0.100	0.0900	90	80 - 120	2011-05-12
Xylene		1	mg/Kg	0.300	0.268	89	80 - 120	2011-05-12

Standard (CCV-2)

QC Batch: 81213 | Date Analyzed: 2011-05-12 | Analyzed By: ME

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.0982	98	80 - 120	2011-05-12
Toluene		1	mg/Kg	0.100	0.106	106	80 - 120	2011-05-12
Ethylbenzene		1	mg/Kg	0.100	0.0912	91	80 - 120	2011-05-12
Xylene		1	mg/Kg	0.300	0.273	91	80 - 120	2011-05-12

Standard (CCV-1)

QC Batch: 81214 | Date Analyzed: 2011-05-12 | Analyzed By: ME

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.845	84	80 - 120	2011-05-12

Standard (CCV-2)

QC Batch: 81214 | Date Analyzed: 2011-05-12 | Analyzed By: ME

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.857	86	80 - 120	2011-05-12

Standard (CCV-3)

QC Batch: 81246 Date Analyzed: 2011-05-13 Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	208	83	80 - 120	2011-05-13

Standard (CCV-4)

QC Batch: 81246 Date Analyzed: 2011-05-13 Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	203	81	80 - 120	2011-05-13

Standard (ICV-1)

QC Batch: 81651 Date Analyzed: 2011-05-26 Analyzed By: AR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.3	99	85 - 115	2011-05-26

Standard (CCV-1)

QC Batch: 81651 Date Analyzed: 2011-05-26 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	101	101	85 - 115	2011-05-26

Appendix

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-10-TX	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

1105 1104

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 1

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-6400891

PROJECT NAME: Falcon Federal 2 and 3H

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH TX1005 (Ext to C35)	TPH 8015 MOD	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
266100	5/10		S		X	AH-1 0-1'	1				X		X	X												X				
101						AH-1 1-1.5'																								
102						AH-1 2-2.5'																								
103						AH-1 3-3.5'																								
104						AH-1 4-4.5'																								
105						AH-1 5-5.5'																								
106						AH-1 6-6.5'																								
107						AH-1 7-7.5'																								

RELINQUISHED BY: (Signature) Date: 5-10-11 Time: 1635
RECEIVED BY: (Signature) Date: 5/10/11 Time: 16:35
SAMPLED BY: (Print & Initial) TT Date: 5-10-11 Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS AIRBILL #: OTHER:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
TETRA TECH CONTACT PERSON: Ike Tavarez Results by:

RECEIVING LABORATORY: Trace
ADDRESS:
CITY: Midland STATE: TX ZIP:
CONTACT: PHONE: DATE: TIME:
RECEIVED BY: (Signature)
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 8.4°C intact

REMARKS: If total TPH exceeds 5000 mg/kg run deeper sample

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

APPENDIX C

HOBBS OCD

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

JAN 12 2012

RECEIVED

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ 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	Falcon Federal 2 and 3H	Facility Type	Tank Battery

Surface Owner Federal	Mineral Owner	Lease No.

LOCATION OF RELEASE

FALCON FEDERAL 2
API# 30-025-39009

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	9	19S	32E					Lea

Latitude 32 40.857 **Longitude** 103 46.339

NATURE OF RELEASE

Type of Release Produced fluid	Volume of Release 12bbls	Volume Recovered 10bbls
Source of Release Heater treater	Date and Hour of Occurrence 04/11/2011	Date and Hour of Discovery 04/11/2011 12:00 p.m.
Was Immediate Notice Given? ☐ Yes ☒ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

A hole in the fire tube caused the release. The heater is currently out of service and is going to be replaced with a new one.

Describe Area Affected and Cleanup Action Taken.*

Initially 12bbls of fluid was released from the fire tube and we were able to recover 10bbls with a vacuum truck. The entire release was completely contained inside the berm wall around the production equipment. The spill area measured 30' x 30'. Contaminated soil has been scraped and hauled appropriately. Tetra Tech will sample the spill site area to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD / BLM for approval prior to any significant remediation work.

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

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Josh Russo	Approved by District Supervisor: Environmental Specialist	
Title: HSE Coordinator	Approval Date: 10/25/12	Expiration Date: —
E-mail Address: jrusso@conchoresources.com	Conditions of Approval: —	Attached ☐ IRP-10-12-2858
Date: 04/18/2011 Phone: 432-212-2399		

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

HOBBS OCD
JAN 12 2012
RECEIVED

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **COG Operating LLC**	Contact **Pat Ellis**
Address **550 W. Texas, Suite 1300 Midland, Texas 79701**	Telephone No. **(432) 230-0077**
Facility Name Falcon Federal 2 and 3H	Facility Type **Tank Battery**

Surface Owner Federal	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	9	19-S	32-E					Lea

Latitude N 32 40.857° **Longitude** W 104 46.339°

NATURE OF RELEASE

Type of Release: Produced Fluid	Volume of Release **12 bbls**	Volume Recovered **10 bbls**
Source of Release **Heater Treater**	Date and Hour of Occurrence 4/11/2011	Date and Hour of Discovery **4/11/2011 12:00 p.m.**
Was Immediate Notice Given? ☐ Yes ☒ No ☒ Not Required	If YES, To Whom?	
By Whom? Josh Russo	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

A hole in the fire tube caused the release. The heater is currently out of service and is going to be replaced with a new one.

Describe Area Affected and Cleanup Action Taken.*

Tetra Tech inspected site and collected samples to define spills extent. Soil with elevated chloride concentrations was removed and hauled away to Controlled Recovery, Inc., Hobbs, NM. Site was then brought up to surface grade with clean backfill material. Tetra Tech prepared closure report and submitted to NMOCD for review.

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

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Ike Tavarez (Agent for COG)	Approved by District Supervisor:	
Title: Project Manager	Approval Date:	Expiration Date:
E-mail Address: ike.tavarez@tetratech.com	Conditions of Approval:	Attached ☐
Date: 12-15-11 Phone: (432) 682-4559		

Attach Additional Sheets If Necessary