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

RECEIVED
JAN 22 2010
HOBBSOCD

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) 685-4332**
Facility Name **BC Federal #1**	Facility Type **Tank Battery – 100 yards south of battery**

Surface Owner Federal	Mineral Owner	Lease No. 30-025-34733

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	20	17S	32E	330	North	1575	West	Lea

Latitude N 32.825260° **Longitude 103.791110°**

NATURE OF RELEASE

Type of Release **Oil and produced water**	Volume of Release **40 bbls**	Volume Recovered **10 bbls**
Source of Release **Header in mainline**	Date and Hour of Occurrence **7/30/09 10:00 PM**	Date and Hour of Discovery **7/30/09 11:00 PM**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Jeff Leking – OCD** **Trishia Bad Bear - BLM**	
By Whom? Kanicia Castillo	Date and Hour **7/31/09 2:35 PM**	
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.*

Hole in 6" mainline from SWD header between BC Federal and MC Federal leases. Hole has been repaired.

Describe Area Affected and Cleanup Action Taken.*

Tetra Tech inspected site and collected samples to define spills extent. Soil that exceeded RRAL was removed and hauled to Lea Land, Inc in Carlsbad, 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: Patrick L. Ellis	OIL CONSERVATION DIVISION
Printed Name: Pat Ellis	Approved by District Supervisor: Johnson ENVIRONMENTAL ENGINEER
Title: Environmental and Safety Supervisor	Approval Date: 4.9.10 Expiration Date:
E-mail Address: PEllis@conchoresources.com	Conditions of Approval: Attached ☐
Date: 12/7/09 Phone: (432) 686-3023	(RP# 2400)

* Attach Additional Sheets If Necessary

10.1.2400

TETRA TECH

December 8, 2009

RECEIVED
JAN 22 2010
HOBBSOCD

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

Re: Assessment and Closure Report for the COG Operating, LLC, BC Federal #1 (flowline), Located in Unit Letter O, Section 20, Township 17 South, Range 32 East, Lea County, New Mexico.

Mr. Johnson:

Tetra Tech, Inc. was contacted by COG Operating, LLC to investigate a spill that occurred at the BC Federal #1 (flowline). The tank battery is located in Unit Letter O, Section 20, Township 17 South, Range 31 East, Lea County, New Mexico. The site is 100' yards south of the tank battery at coordinates N 32.825260° and W 103.791110°. The site is shown on Figures 1 and 2.

Background

The spill occurred on July 30, 2009, as a result of a hole in the header of the SWD main line, releasing 40 barrels of produced water which affected a 20' x 25' area in the pasture. The area was excavated down to a depth of 0.5' - 1.0' and the material was hauled off for proper disposal. The spill location is shown on Figure 3. The C-141 (initial) is included in Appendix C.

Groundwater and Regulatory

The United States Geological Survey (USGS) Well Reports did not list any wells in Section 20. However, Tetra Tech had previously installed a temporary monitor well (TMW) in section 30 to a depth of 180' bgs and did not encounter groundwater. In addition, according to the NMOCD map of Lea County, groundwater in the vicinity of the site is 300' bgs. As such, based on the depth to groundwater, it appears the groundwater for the site appears to be greater than 100' bgs. The water well data is included in Appendix A.

Tetra Tech
Tel 432 682-4559 Fax 432 682 [illegible]

TETRA TECH

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 on the regional groundwater data, the proposed RRAL for TPH is 5,000 mg/kg.

Assessment and Corrective Action

On August 25, 2009, Tetra Tech personnel inspected the facility and collected confirmation samples for TPH, BTEX and chloride. A total of two (2) auger holes were placed in the impacted area to a total depth of 2-2.5'. All collected samples were below the RRAL for BTEX and TPH. An elevated chloride concentration was detected at AH-1 (0-1') of 3,270 mg/kg which declined to 871 mg/kg at 2-2.5'. The area of AH-2 did not show a chloride impact.

On October 14, 2009, Tetra Tech personnel supervised the excavation of the spill area. The area was scraped to a depth of 1.0' below surface and the material hauled to proper disposal. The site was backfilled with clean material. The sample locations and spill area are shown on Figure 3. The sample analyses are summarized in Table 1. Copies of the laboratory reports and chain of custody documents are included in Appendix B.

Conclusions

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

Respectfully submitted,
Tetra Tech Inc.

Kim Dorey
Staff Geologist

cc: Pat Ellis – COG
cc: Paul Evans – BLM

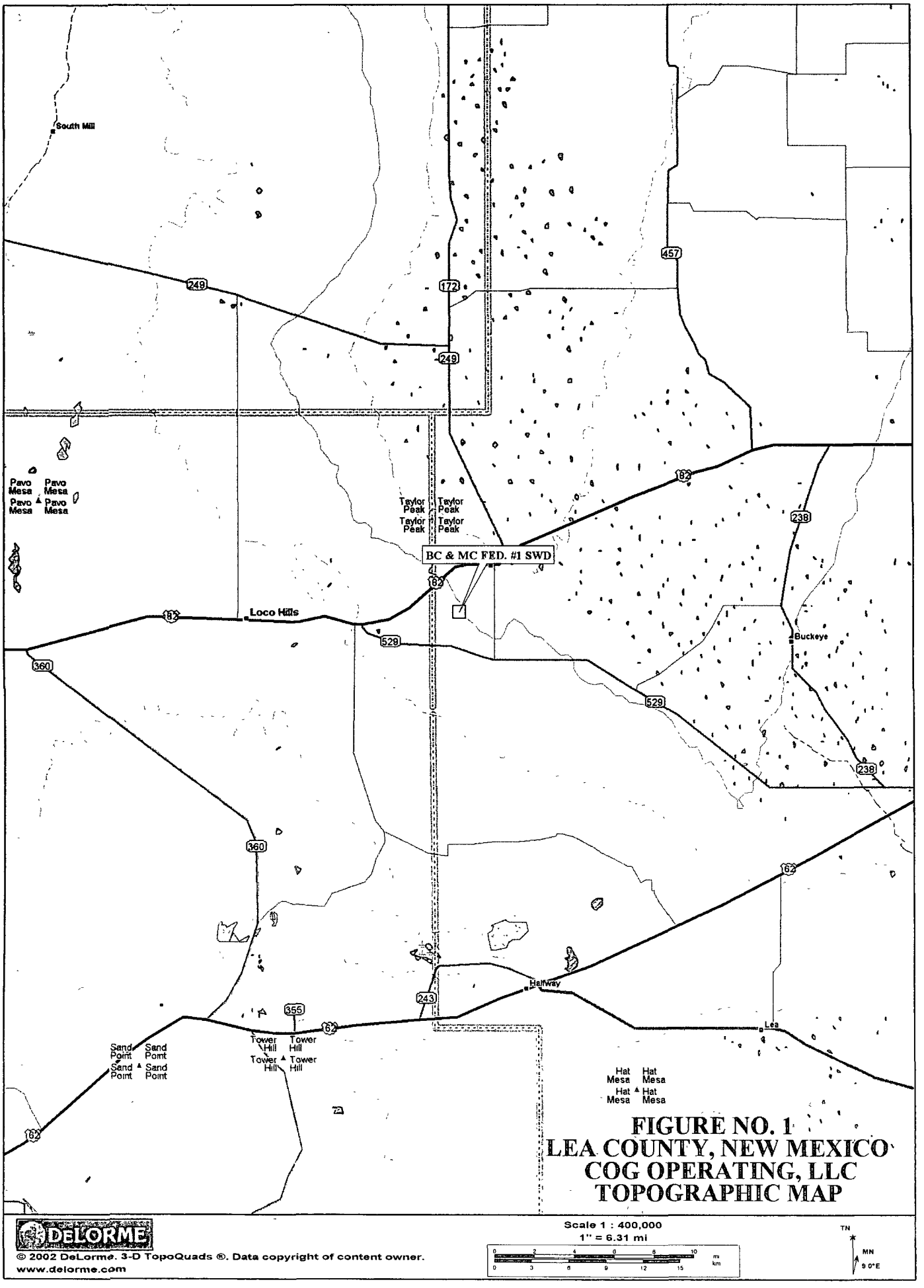


FIGURE NO. 1
LEA COUNTY, NEW MEXICO
COG OPERATING, LLC
TOPOGRAPHIC MAP

Scale 1 : 400,000
1" = 6.31 mi

TN
MN
9.0°E

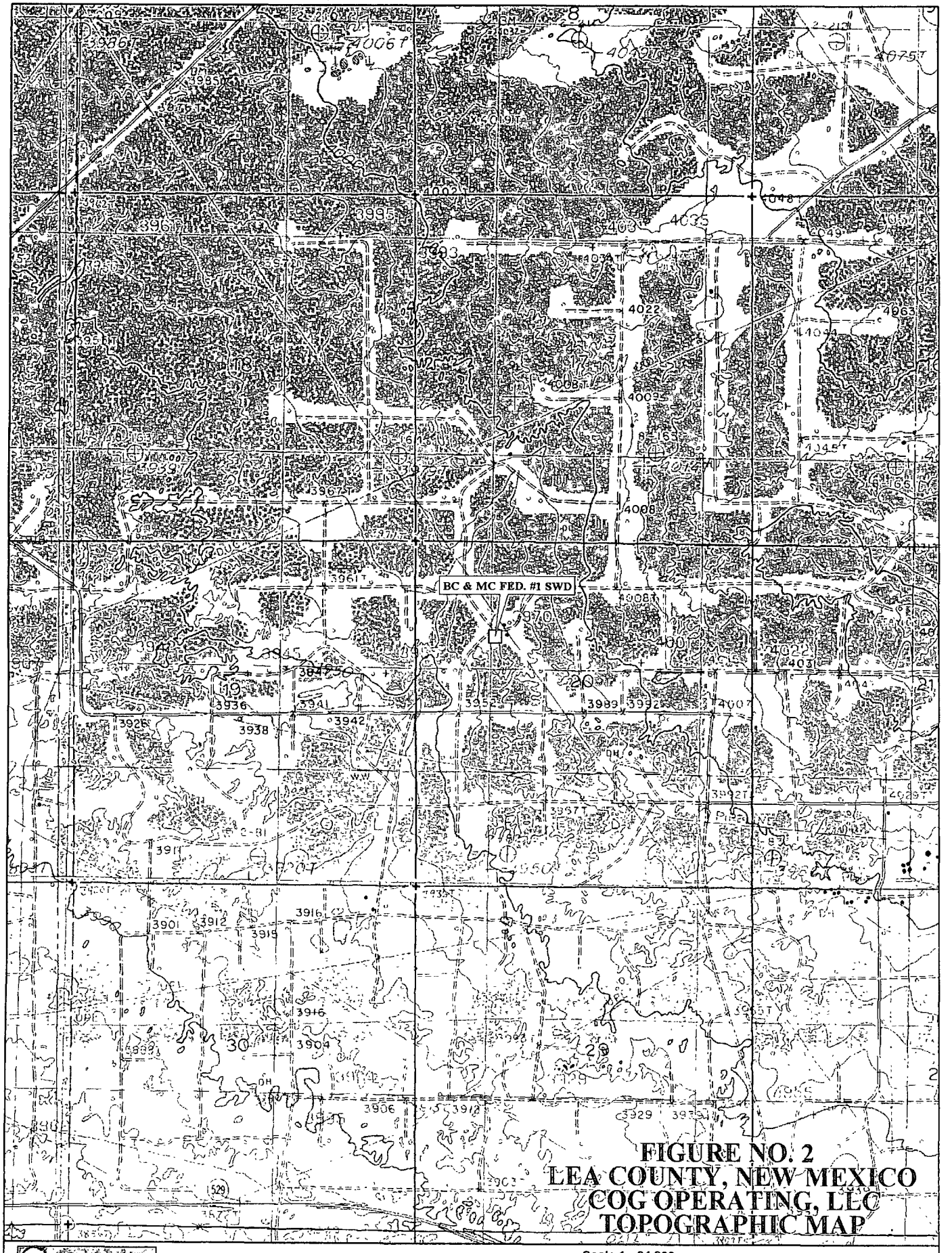
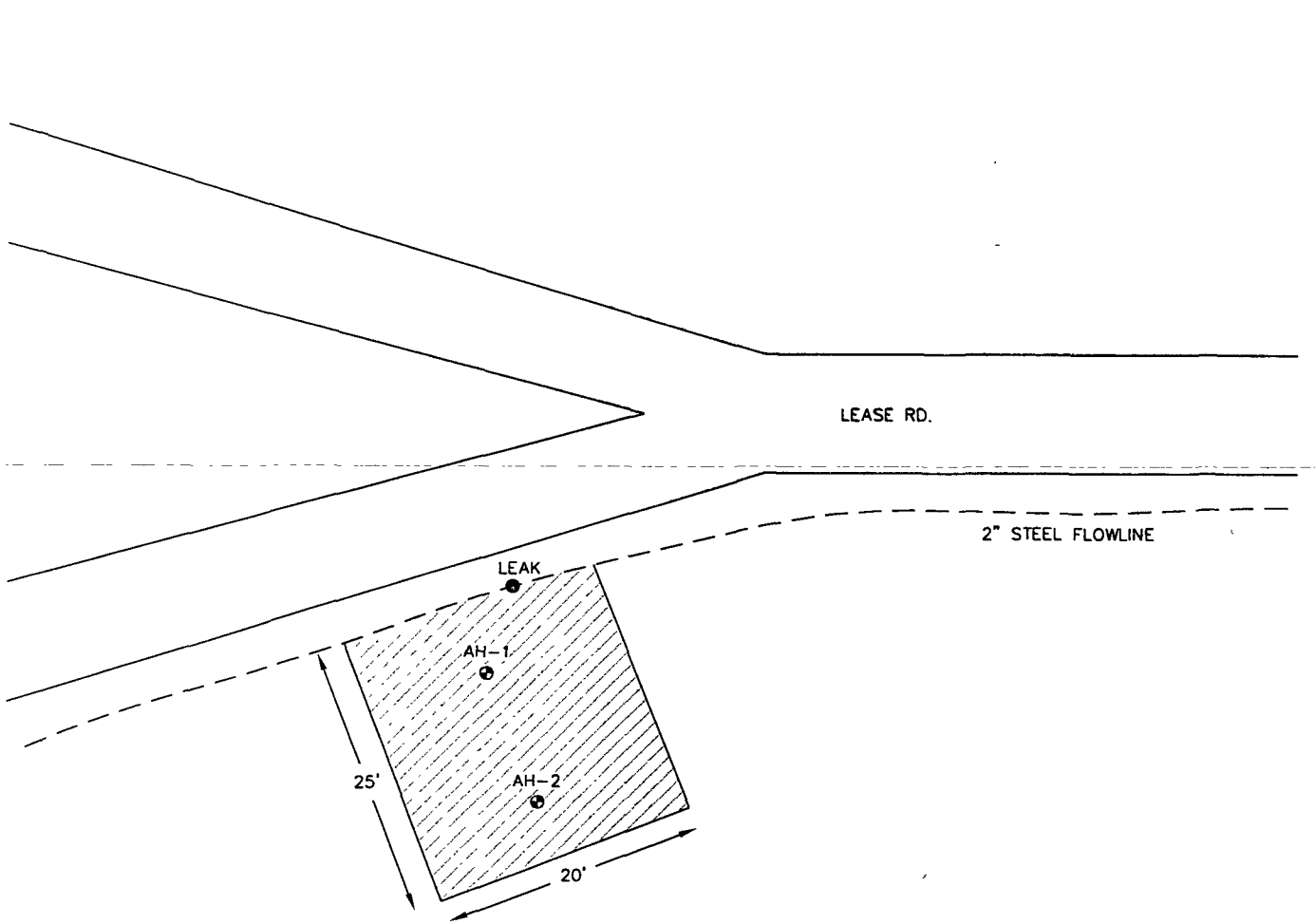


FIGURE NO. 2
LEA COUNTY, NEW MEXICO
COG OPERATING, LLC
TOPOGRAPHIC MAP

DELORME

Scale 1 : 24,000
1" = 2000 ft



SPILL AREA
SAMPLE LOCATIONS

NOT TO SCALE

FIGURE NO. 3

LEA COUNTY, NEW MEXICO

COG OPERATING LLC

BC & MC FED. #1 SWD

TETRA TECH, INC.
MIDLAND, TEXAS

DATE: 8/3/09
DWN. BY. JJ
FILE: M:\COG\640027S BC & MC FED #1 SWD

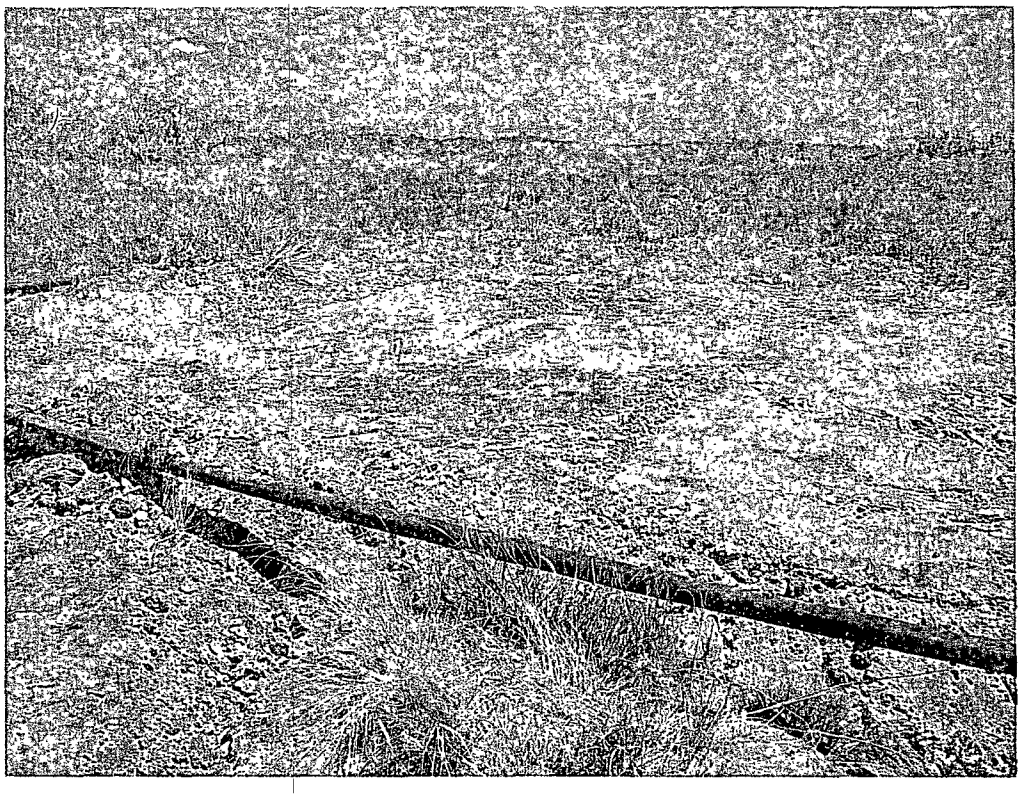
Table 1
COG OPERATING LLC
BC / MC FEDERAL #1 SWD
Lea County, New Mexico

Sample ID	Date Sampled	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	DRO	GRO	Total					
AH-1	8/25/2009	0-1'		X	<50.0	**20.2**	**20.20**	<0.0100	**0.183**	**0.276**	**0.625**	**3,270**
	8/25/2009	1-1.5'	X		<50.0	1.80	1.80	<0.0100	<0.0100	<0.0100	<0.0100	<200
	8/25/2009	2-2.5'	X		-	-	-	-	-	-	-	**871**
AH-2	8/25/2009	0-1'	X		<50.0	1.80	<0.001	<0.001	<0.001	<0.001	<0.001	<200
	8/25/2009	1-1.5	X		-	-	-	-	-	-	-	<200
	8/25/2009	2-2.5'	X		-	-	-	-	-	-	-	**206**

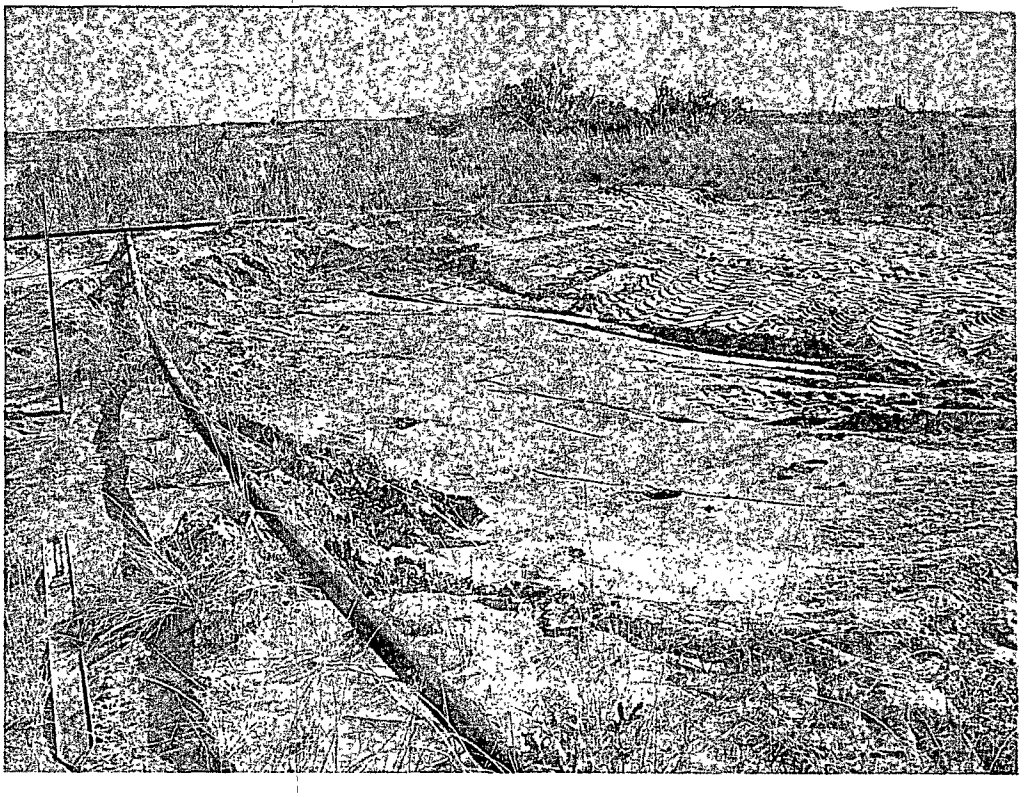
(-) Not Analyzed

COG Operating LLC
BC Federal #1 Flowline
Lea County, New Mexico

TETRA TECH



Day of assessment 8-25-09



After excavation and backfill 10-13-09

Water Well Data
Average Depth to Groundwater (ft)
COG - BC Federal #1 SWD Flowline
Lea County, New Mexico

16 South 31 East

6	5	4	3	2	1
7	8	9	10	11	12 **288**
18	17	16	15	14	13 **113**
19	20	21	22	23	24
30	29	28	27	26	25
31 **290**	32	33	34	35	36

17 South 31 East

6	5	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	27	26	25
31	32	33	34 **271**	35	36

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

16 South 32 East

6	5	4	3 **65**	2 **265**	1 **265**
7	8	9	10	11	12 **215**
18	17	16 **221**	15	14	13 **215**
19 **220**	20	21 **210**	22	23 **210**	24
30	29	28	27	26 **243**	25
31	32	33	34	35	36 **260**

17 South 32 East

6	5	4 **82**	3 **175**	2 **60**	1 **225**
7	8	9	10	11 **70 88**	12 **120**
18	17	16	15	14	13
19	20 **SITE**	21	22	23	24
30 **180**	29	28	27	26	25
31	32	33	34	35	36

18 South 32 East

6	5	4 **65**	3	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

16 South 33 East

6	5 **180**	4 **150**	3 **130**	2 **148**	1 **142**
7	8 **200**	9	10 **182**	11	12 **142**
18	17 **182**	16 **180**	15 **175**	14 **143**	13 **110**
19	20	21	22	23 **120**	24
30 **191**	29	28 **190**	27 **130**	26 **143**	25 **120**
31 **190**	32 **168**	33	34 **160**	35	36

17 South 33 East

6 **90**	5	4	3 **155**	2 **158**	1 **150**
7 **167**	8 **173**	9 **161**	10	11	12
18 **188**	17 **180**	16	15	14	13 **165**
19	20 **190**	21	22	23 **115**	24
30	29	28	27	26	25
31	32	33	34	35 **155**	36

18 South 33 East

6	5	4	3	2	1
7	8 **100**	9	10 **62**	11	12 **143** **140**
18	17 **85**	16	15	14 **36**	13 **60**
19 **>140**	20	21	22	23	24 **195**
30 **35**	29	28	27	26	25
31	32	33	34 **177**	35	36

88 New Mexico State Engineers Well Reports
105 USGS Well Reports
90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)
Geology and Groundwater Resources of Eddy County, NM (Report 3)
34 NMOCD - Groundwater Data
123 Field water level
180 Tetra Tech drilled TMW - Total depth 180' - Dry well

Summary Report

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

Report Date: September 8, 2009

Work Order: 9082838

Project Location: Lea Co., NM
Project Name: COG/BC/MC Fed. #1 SWD
Project Number: 114-6400275

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
208566	AH-1 (0-1')	soil	2009-08-25	00:00	2009-08-28
208567	AH-1 (1-1.5')	soil	2009-08-25	00:00	2009-08-28
208568	AH-1 (2-2.5')	soil	2009-08-25	00:00	2009-08-28
208569	AH-2 (0-1')	soil	2009-08-25	00:00	2009-08-28
208570	AH-2 (1-1.5')	soil	2009-08-25	00:00	2009-08-28
208571	AH-2 (2-2.5')	soil	2009-08-25	00:00	2009-08-28

	BTEX				TPH DRO	TPH GRO
Sample - Field Code	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
208566 - AH-1 (0-1')	<0.0100	**0.183**	**0.276**	**0.625**	<50.0	**20.2**
208569 - AH-2 (0-1')	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	**1.80**

Sample: 208566 - AH-1 (0-1')

Param	Flag	Result	Units	RL
Chloride		**3270**	mg/Kg	4.00

Sample: 208567 - AH-1 (1-1.5')

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 208568 - AH-1 (2-2.5')

Param	Flag	Result	Units	RL
Chloride		**871**	mg/Kg	4.00

Sample: 208569 - AH-2 (0-1')

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 208570 - AH-2 (1-1.5')

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 208571 - AH-2 (2-2.5')

Param	Flag	Result	Units	RL
Chloride		**206**	mg/Kg	4.00

TRACEANALYSIS, INC.

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

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

Report Date: September 8, 2009

Work Order: 9082838

Project Location: Lea Co., NM
Project Name: COG/BC/MC Fed. #1 SWD
Project Number: 114-6400275

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
208566	AH-1 (0-1')	soil	2009-08-25	00:00	2009-08-28
208567	AH-1 (1-1.5')	soil	2009-08-25	00:00	2009-08-28
208568	AH-1 (2-2.5')	soil	2009-08-25	00:00	2009-08-28
208569	AH-2 (0-1')	soil	2009-08-25	00:00	2009-08-28
208570	AH-2 (1-1.5')	soil	2009-08-25	00:00	2009-08-28
208571	AH-2 (2-2.5')	soil	2009-08-25	00:00	2009-08-28

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.

This report consists of a total of 16 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

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

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project COG/BC/MC Fed. #1 SWD were received by TraceAnalysis, Inc. on 2009-08-28 and assigned to work order 9082838. Samples for work order 9082838 were received intact at a temperature of 10.9 deg. 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	53903	2009-08-31 at 14:00	63149	2009-08-31 at 05:42
Chloride (Titration)	SM 4500-Cl B	53998	2009-09-04 at 09:00	63276	2009-09-04 at 13:29
Chloride (Titration)	SM 4500-Cl B	53999	2009-09-04 at 09:01	63277	2009-09-04 at 13:30
TPH DRO	Mod. 8015B	53845	2009-08-31 at 11:57	63088	2009-08-31 at 11:57
TPH GRO	S 8015B	53903	2009-08-31 at 14:00	63148	2009-09-01 at 06:10

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 9082838 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: 208566 - AH-1 (0-1')

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	63149	Date Analyzed:	2009-08-31	Analyzed By:	AG
Prep Batch:	53903	Sample Preparation:	2009-08-31	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		**0.183**	mg/Kg	1	0.0100
Ethylbenzene		**0.276**	mg/Kg	1	0.0100
Xylene		**0.625**	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.01	mg/Kg	1	2.00	100	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.23	mg/Kg	1	2.00	62	45.2 - 144.3

Sample: 208566 - AH-1 (0-1')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	63276	Date Analyzed:	2009-09-04	Analyzed By:	AR
Prep Batch:	53998	Sample Preparation:	2009-09-04	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3270**	mg/Kg	100	4.00

Sample: 208566 - AH-1 (0-1')

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	63088	Date Analyzed:	2009-08-31	Analyzed By:	kg
Prep Batch:	53845	Sample Preparation:	2009-08-31	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		112	mg/Kg	1	100	112	13.2 - 219.3

Sample: 208566 - AH-1 (0-1')

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	63148	Date Analyzed:	2009-09-01	Analyzed By:	AG
Prep Batch:	53903	Sample Preparation:	2009-08-31	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**20.2**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.87	mg/Kg	1	2.00	94	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		1.48	mg/Kg	1	2.00	74	31 - 135

Sample: 208567 - AH-1 (1-1.5')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	63276	Date Analyzed:	2009-09-04	Analyzed By:	AR
Prep Batch:	53998	Sample Preparation:	2009-09-04	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 208568 - AH-1 (2-2.5')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	63276	Date Analyzed:	2009-09-04	Analyzed By:	AR
Prep Batch:	53998	Sample Preparation:	2009-09-04	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**871**	mg/Kg	50	4.00

Sample: 208569 - AH-2 (0-1')

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	63149	Date Analyzed:	2009-08-31	Analyzed By:	AG
Prep Batch:	53903	Sample Preparation:	2009-08-31	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.0100		mg/Kg	1	0.0100
Toluene		<0.0100		mg/Kg	1	0.0100
Ethylbenzene		<0.0100		mg/Kg	1	0.0100
Xylene		<0.0100		mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.01	mg/Kg	1	2.00	100	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.11	mg/Kg	1	2.00	56	45.2 - 144.3

Sample: 208569 - AH-2 (0-1')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	63276	Date Analyzed:	2009-09-04	Analyzed By:	AR
Prep Batch:	53998	Sample Preparation:	2009-09-04	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		<200		mg/Kg	50	4.00

Sample: 208569 - AH-2 (0-1')

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	63088	Date Analyzed:	2009-08-31	Analyzed By:	kg
Prep Batch:	53845	Sample Preparation:	2009-08-31	Prepared By:	kg

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		<50.0		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		116	mg/Kg	1	100	116	13.2 - 219.3

Sample: 208569 - AH-2 (0-1')

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	63148	Date Analyzed:	2009-09-01	Analyzed By:	AG
Prep Batch:	53903	Sample Preparation:	2009-08-31	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**1.80**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.90	mg/Kg	1	2.00	95	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		1.24	mg/Kg	1	2.00	62	31 - 135

Sample: 208570 - AH-2 (1-1.5')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	63276	Date Analyzed:	2009-09-04	Analyzed By:	AR
Prep Batch:	53998	Sample Preparation:	2009-09-04	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 208571 - AH-2 (2-2.5')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	63277	Date Analyzed:	2009-09-04	Analyzed By:	AR
Prep Batch:	53999	Sample Preparation:	2009-09-04	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**206**	mg/Kg	50	4.00

Method Blank (1) QC Batch: 63088

QC Batch:	63088	Date Analyzed:	2009-08-31	Analyzed By:	kg
Prep Batch:	53845	QC Preparation:	2009-08-31	Prepared By:	kg

Parameter	Flag	MDL Result	Units	RL
DRO		<5.86	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		98.8	mg/Kg	1	100	99	13 - 178.5

Method Blank (1) QC Batch: 63148

QC Batch: 63148 Date Analyzed: 2009-09-01 Analyzed By: AG
Prep Batch: 53903 QC Preparation: 2009-08-31 Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
GRO		<0.482	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.86	mg/Kg	1	2.00	93	71.9 - 115
4-Bromofluorobenzene (4-BFB)		1.41	mg/Kg	1	2.00	70	38.1 - 146.2

Method Blank (1) QC Batch: 63149

QC Batch: 63149 Date Analyzed: 2009-08-31 Analyzed By: AG
Prep Batch: 53903 QC Preparation: 2009-08-31 Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00100	mg/Kg	0.01
Toluene		<0.00100	mg/Kg	0.01
Ethylbenzene		<0.00110	mg/Kg	0.01
Xylene		<0.00360	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.94	mg/Kg	1	2.00	97	65.6 - 130.6
4-Bromofluorobenzene (4-BFB)		1.23	mg/Kg	1	2.00	62	51.9 - 128.1

Method Blank (1) QC Batch: 63276

QC Batch: 63276 Date Analyzed: 2009-09-04 Analyzed By: AR
Prep Batch: 53998 QC Preparation: 2009-09-04 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 63277

QC Batch: 63277 Date Analyzed: 2009-09-04 Analyzed By: AR
Prep Batch: 53999 QC Preparation: 2009-09-04 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Laboratory Control Spike (LCS-1)

QC Batch: 63088 Date Analyzed: 2009-08-31 Analyzed By: kg
Prep Batch: 53845 QC Preparation: 2009-08-31 Prepared By: kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	167	mg/Kg	1	250	<5.86	67	57.4 - 133.4

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	176	mg/Kg	1	250	<5.86	70	57.4 - 133.4	5	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-Triacontane	92.1	95.6	mg/Kg	1	100	92	96	48.5 - 146.7

Laboratory Control Spike (LCS-1)

QC Batch: 63148 Date Analyzed: 2009-09-01 Analyzed By: AG
Prep Batch: 53903 QC Preparation: 2009-08-31 Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	16.0	mg/Kg	1	20.0	<0.482	80	60.5 - 120.1

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	15.0	mg/Kg	1	20.0	<0.482	75	60.5 - 120.1	6	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)	1.93	1.91	mg/Kg	1	2.00	96	96	78.8 - 124.7
4-Bromofluorobenzene (4-BFB)	1.65	1.55	mg/Kg	1	2.00	82	78	66.1 - 128.3

Laboratory Control Spike (LCS-1)

QC Batch: 63149 | Date Analyzed: 2009-08-31 | Analyzed By: AG
Prep Batch: 53903 | QC Preparation: 2009-08-31 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.87	mg/Kg	1	2.00	<0.00100	94	72.7 - 129.8
Toluene	1.88	mg/Kg	1	2.00	<0.00100	94	71.6 - 129.6
Ethylbenzene	1.90	mg/Kg	1	2.00	<0.00110	95	70.8 - 129.7
Xylene	5.42	mg/Kg	1	6.00	<0.00360	90	70.9 - 129.4

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.88	mg/Kg	1	2.00	<0.00100	94	72.7 - 129.8	0	20
Toluene	1.93	mg/Kg	1	2.00	<0.00100	96	71.6 - 129.6	3	20
Ethylbenzene	1.96	mg/Kg	1	2.00	<0.00110	98	70.8 - 129.7	3	20
Xylene	5.59	mg/Kg	1	6.00	<0.00360	93	70.9 - 129.4	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)	2.01	1.95	mg/Kg	1	2.00	100	98	65.9 - 132
4-Bromofluorobenzene (4-BFB)	1.32	1.31	mg/Kg	1	2.00	66	66	55.2 - 128.9

Laboratory Control Spike (LCS-1)

QC Batch: 63276 | Date Analyzed: 2009-09-04 | Analyzed By: AR
Prep Batch: 53998 | QC Preparation: 2009-09-04 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	101	mg/Kg	1	100	<2.18	101	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.5	mg/Kg	1	100	<2.18	100	85 - 115	2	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 63277 | Date Analyzed: 2009-09-04 | Analyzed By: AR
Prep Batch: 53999 | QC Preparation: 2009-09-04 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.8	mg/Kg	1	100	<2.18	99	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.2	mg/Kg	1	100	<2.18	99	85 - 115	0	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: 208566

QC Batch: 63088 | Date Analyzed: 2009-08-31 | Analyzed By: kg
Prep Batch: 53845 | QC Preparation: 2009-08-31 | Prepared By: kg

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	197	mg/Kg	1	250	<5.86	79	35.2 - 167.1

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	216	mg/Kg	1	250	<5.86	86	35.2 - 167.1	9	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-Triacontane	107	108	mg/Kg	1	100	107	108	34.5 - 178.4

Matrix Spike (MS-1) Spiked Sample: 208533

QC Batch: 63148 | Date Analyzed: 2009-09-01 | Analyzed By: AG
Prep Batch: 53903 | QC Preparation: 2009-08-31 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	13.2	mg/Kg	1	20.0	<0.482	66	12.8 - 175.2

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	13.2	mg/Kg	1	20.0	<0.482	66	12.8 - 175.2	0	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)	1.80	1.82	mg/Kg	1	2	90	91	60.8 - 132.1
4-Bromofluorobenzene (4-BFB)	1.27	1.24	mg/Kg	1	2	64	62	31.3 - 161.7

Matrix Spike (MS-1) Spiked Sample: 208569

QC Batch: 63149 | Date Analyzed: 2009-08-31 | Analyzed By: AG
Prep Batch: 53903 | QC Preparation: 2009-08-31 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.62	mg/Kg	1	2.00	<0.00100	81	58.6 - 165.2
Toluene	1.70	mg/Kg	1	2.00	<0.00100	85	64.2 - 153.8
Ethylbenzene	1.75	mg/Kg	1	2.00	<0.00110	88	61.6 - 159.4
Xylene	4.89	mg/Kg	1	6.00	<0.00360	82	64.4 - 155.3

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

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1.97	mg/Kg	1	2.00	<0.00100	98	58.6 - 165.2	20	20
Toluene	[1]	2.11	mg/Kg	1	2.00	<0.00100	106	64.2 - 153.8	22	20
Ethylbenzene	[2]	2.21	mg/Kg	1	2.00	<0.00110	110	61.6 - 159.4	23	20
Xylene	[3]	6.24	mg/Kg	1	6.00	<0.00360	104	64.4 - 155.3	24	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)		2.03	2.00	mg/Kg	1	2	102	100	76 - 127.9
4-Bromofluorobenzene (4-BFB)	[4] [5]	1.09	1.14	mg/Kg	1	2	54	57	72 - 127.8

[1] MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.
[2] MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.
[3] MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.
[4] Surrogate out due to peak interference.
[5] Surrogate out due to peak interference.

Matrix Spike (MS-1) Spiked Sample: 208570

QC Batch: 63276 | Date Analyzed: 2009-09-04 | Analyzed By: AR
Prep Batch: 53998 | QC Preparation: 2009-09-04 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	9740	mg/Kg	100	10000	<218	97	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	9820	mg/Kg	100	10000	<218	98	85 - 115	1	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: 208580

QC Batch: 63277 | Date Analyzed: 2009-09-04 | Analyzed By: AR
Prep Batch: 53999 | QC Preparation: 2009-09-04 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	13100	mg/Kg	100	10000	2880	102	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	13200	mg/Kg	100	10000	2880	103	85 - 115	1	20

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

Standard (CCV-2)

QC Batch: 63088 | Date Analyzed: 2009-08-31 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	224	90	80 - 120	2009-08-31

Standard (CCV-3)

QC Batch: 63088 | Date Analyzed: 2009-08-31 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	225	90	80 - 120	2009-08-31

Standard (CCV-1)

QC Batch: 63148 Date Analyzed: 2009-09-01 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.948	95	80 - 120	2009-09-01

Standard (CCV-2)

QC Batch: 63148 Date Analyzed: 2009-09-01 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.17	117	80 - 120	2009-09-01

Standard (CCV-3)

QC Batch: 63148 Date Analyzed: 2009-09-01 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.976	98	80 - 120	2009-09-01

Standard (CCV-1)

QC Batch: 63149 Date Analyzed: 2009-08-31 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.107	107	80 - 120	2009-08-31
Toluene		mg/Kg	0.100	0.113	113	80 - 120	2009-08-31
Ethylbenzene		mg/Kg	0.100	0.114	114	80 - 120	2009-08-31
Xylene		mg/Kg	0.300	0.315	105	80 - 120	2009-08-31

Standard (CCV-2)

QC Batch: 63149 | Date Analyzed: 2009-08-31 | Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0911	91	80 - 120	2009-08-31
Toluene		mg/Kg	0.100	0.0950	95	80 - 120	2009-08-31
Ethylbenzene		mg/Kg	0.100	0.0936	94	80 - 120	2009-08-31
Xylene		mg/Kg	0.300	0.266	89	80 - 120	2009-08-31

Standard (CCV-3)

QC Batch: 63149 | Date Analyzed: 2009-08-31 | Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0949	95	80 - 120	2009-08-31
Toluene		mg/Kg	0.100	0.0933	93	80 - 120	2009-08-31
Ethylbenzene		mg/Kg	0.100	0.0889	89	80 - 120	2009-08-31
Xylene		mg/Kg	0.300	0.248	83	80 - 120	2009-08-31

Standard (ICV-1)

QC Batch: 63276 | Date Analyzed: 2009-09-04 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.7	100	85 - 115	2009-09-04

Standard (CCV-1)

QC Batch: 63276 | Date Analyzed: 2009-09-04 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2009-09-04

Standard (ICV-1)

QC Batch: 63277 | Date Analyzed: 2009-09-04 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.9	100	85 - 115	2009-09-04

Standard (CCV-1)

QC Batch: 63277 Date Analyzed: 2009-09-04 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2009-09-04

Order #: 908 2838

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

CLIENT NAME: COG

SITE MANAGER: IKE TAVAREZ

PROJECT NO.: 114-6400275

PROJECT NAME: COG / BC/MC FED. #1 SWD

LEA CO., NM

LAB I.D. NUMBER	DATE	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 418.1 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
208566	08/25/09		S		X	AH-1 (0-1')	1				X		X	X												X				
567			S		X	AH-1 (1-1.5')	1				X															X				
568			S		X	AH-1 (2-2.5')	1				X															X				
569			S		X	AH-2 (0-1')	1				X		X	X												X				
570			S		X	AH-2 (1-1.5')	1				X															X				
571			S		X	AH-2 (2-2.5')	1				X															X				

RELINQUISHED BY: (Signature) — Date: 08/28/09 Time: 3:55
RECEIVED BY: (Signature) — Date: Time:
SAMPLED BY: (Print & Initial) JOHNNY TESWORTH — Date: 08/28/09 Time: 1015

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:
RECEIVED BY: (Signature)
DATE: 8/28/09 TIME: 15:55
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 10.9°C intact

REMARKS: Run deep sample if TPH exceeds 5,000 mg/kg

All tests - Midland

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

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

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 Kanicia Carrillo
Address 550 W. Texas, Suite 100 Midland, TX 79701	Telephone No. 432-685-4332
Facility Name – Pronghorn 529 Truck Site	Facility Type- Battery

Surface Owner Federal	Mineral Owner	Lease No. ROW#NM72767

LOCATION OF RELEASE

NEAREST WELL PEARSALL BX 002
API # 30.025.00822.00.00

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	34	17S	32E					Lea

Latitude N 32 37.332' Longitude W 103 45.193'

NATURE OF RELEASE

Type of Release- Produced water	Volume of Release-270 bbls	Volume Recovered- 250 bbls
Source of Release- Transfer pump	Date and Hour of Occurrence- 12/17/09	Date and Hour of Discovery 12/17/09
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Larry Johnson, Geoffrey Leking, Paul Evans	
By Whom? Rick Wright	Date and Hour 12/18/09 1:47pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

WATER @ 45'

Describe Cause of Problem and Remedial Action Taken.*
A Discharged hose failed on the transfer pump. The hose has been replaced with a high pressure hose.

Describe Area Affected and Cleanup Action Taken.*
All fluid was contained within the firewall which is lined with 40 mil plastic.

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: K. C.

Printed Name: Kanicia Carrillo

Title: Regulatory Analyst

E-mail Address: kcarrillo@conchoresources.com

Date: 01/06/10 Phone: 432-685-4332

OIL CONSERVATION DIVISION

Approved by ~~District Supervisor~~ ENV ENGINEER: Geoffrey Leking

Approval Date: 01/21/10 Expiration Date: 03/22/10

Conditions of Approval: GROSS CONTAMINATION SHOULD BE REMEDIATED. SUBMIT FINAL C-141 BY

Attached ☐

IRP-10-T-2400

* Attach Additional Sheets If Necessary

fGRL 1002159942

SITE INFORMATION

Report Type: Assessment and Closure Report

General Site Information:	
Site:	**BC Federal #1 Flowline**
Company:	**COG Operating LLC**
Section, Township and Range	**Section 20, T17S, R32 E** **Unit Letter - O**
Lease Number:	**API-30-025-34773**
County:	**Lea County**
GPS:	**32.82638° N, 103.79204° W**
Surface Owner:	BLM
Mineral Owner:	
Directions:	From Maljamar, South on CR126 to Conoco Road, go west 0.3 miles, North 0.3 miles, west 0.8 miles, north 0.2 miles, west 0.3 to pasture area on left (100 yards south of tank battery)

Release Data:	
Date Released:	7/30/2009
Type Release:	Oil and Produced water
Source of Contamination:	Header in mainline leaked
Fluid Released:	40 Barrels
Fluids Recovered:	10 barrels

Official Communication:			
Name:	Pat Ellis		Kim Dorey
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) 631-0348
Fax:	(432) 684-7137		
Email:	pellis@conchoresources.com		kim.dorey@tetratech.com

Ranking Criteria		
Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	*20*	
50-99 ft	10	
>100 ft.	0	**greater than 100'**
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**	

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