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
JUL 01 2011
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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 Jon-Bob #1	Facility Type **Tank Battery**

Surface Owner: Federal	Mineral Owner	Lease No. 30-025-24973

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	35	17S	32E	660	North	330	East	Lea

Latitude N 32 47.770° **Longitude** W 103 43.795°

NATURE OF RELEASE

Type of Release: Water	Volume of Release 15 **bbls**	Volume Recovered 0 **bbls**
Source of Release **Water Tank**	Date and Hour of Occurrence 12/13/09	Date and Hour of Discovery **12/13/09**
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. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

The discharge hose on the transfer pump had pulled off the pump. The pump was 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 away for proper disposal. Site was then brought up to surface grade with clean backfill material and a 40 mil liner installed. 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: Patrick L. Ellis	Approved by District Supervisor:	
Title: Environmental and Safety Supervisor	Approval Date:	Expiration Date:
E-mail Address: pellis@conchoresources.com	Conditions of Approval:	Attached ☐
Date: 6-2-11 Phone: (432) 686-3023		

* Attach Additional Sheets If Necessary

pJXK1601145060
4099

District I
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State of New Mexico
Energy Minerals and Natural Resources

HOBBS OCD

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

JUL 01 2011

Form C-141
Revised October 10, 2003

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Release Notification and Corrective Ac RECEIVED

OPERATOR

☒ Initial Report ☐ Final Repor

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 – Jon-Bob #1	Facility Type- Battery

Surface Owner Federal	Mineral Owner	Lease No. 30-025-24973

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	35	17S	32E	660	North	330	East	Lea

Latitude N32 47.770' **Longitude** W 103 43.795'

NATURE OF RELEASE

Type of Release- Water	Volume of Release- 15 bbls	Volume Recovered- 0 bbls
Source of Release- Water tank	Date and Hour of Occurrence- 12/13/09	Date and Hour of Discovery 12/13/09
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.*
The discharge hose on the transfer pump had pulled off the pump. The pump was repaired.

Describe Area Affected and Cleanup Action Taken.*
The water flowed west in the 2' wide ditch along the lease road. About 150 yards west of the battery, the stream went off the road into a low spot in the pasture. We scraped the road and hauled off contaminated soil.
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 for your 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: K. C.	OIL CONSERVATION DIVISION	
Printed Name: Kanicia Carrillo	Approved by District Supervisor:	
Title: Regulatory Analyst	Approval Date:	Expiration Date:
E-mail Address: kcarrillo@conchoresources.com	Conditions of Approval:	Attached ☐
Date: 12/28/09 Phone: 432-685-4332		

* Attach Additional Sheets If Necessary

SITE INFORMATION

Report Type: Closure Report

General Site Information:	
Site:	**Jon-Bob #1 Tank Battery**
Company:	**COG Operating LLC**
Section, Township and Range	**Section 35, T17S, R32E Unit Letter - A NE 1/4**
Lease Number:	**30-025-24973**
County:	**Lea County**
GPS:	**N 32.79613° W 103.730019°**
Surface Owner:	**State**
Mineral Owner:	
Directions:	From intersection of 529 and 126, Go east on 529 (1.8m), turn left north (0.4m), turn right to location

Release Data:	
Date Released:	12/13/2009
Type Release:	Produced water
Source of Contamination:	Discharge line pulled off of pump
Fluid Released:	15 barrels
Fluids Recovered:	0 barrels

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) 631-0348
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	
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:	**10**	

Acceptable Soil RRAL (mg/kg)		
Benzene	**Total BTEX**	**TPH**
10	50	1,000

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HOBBS OCD

JUL 01 2011

RECEIVED

April 12, 2011

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, Jon-Bob Tank Battery, Unit A, Section 35, Township 17 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 Jon-Bob Tank Battery located in Unit A, Section 35, Township 17 South, Range 32 East, Lea County, New Mexico. The spill site coordinates are N 32° 47.778, W 103° 43.793. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Release Report, the leak was discovered on December 13, 2009, and released approximately fifteen (15) barrels of produced water when a discharge line pulled loose from the transfer pump located at the tank battery. To alleviate the problem, COG personnel repaired the pump. Zero (0) barrels were recovered. The spill ran off the southwest corner of the pad location, migrated down a lease road 650' and pooled in a native low-lying pasture area west of the tank battery. The initial and final C-141 forms are enclosed in Appendix C.

Groundwater

The United States Geological Survey (USGS) Well Reports did not list any wells in Section 35. However, the New Mexico Office of the State Engineer did list a well in Section 28 with a reported depth of 158' below ground surface (bgs). According to the NMOCD map, the depth to groundwater in this area is <100'. The groundwater data 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 1,000 mg/kg.

Soil Assessment and Analytical Results

On February 8, 2010, Tetra Tech personnel inspected and sampled the spill area. A total of five (8) auger holes (AH-1 through AH-8) were installed using a stainless steel hand auger to assess the impacted soils. Soil samples were collected to a depth of 4-4.5' in the majority of the auger holes. Deeper samples could not be collected due to a dense caliche formation. 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 results of the sampling are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, all the submitted samples were below the RRAL for TPH and BTEX. The chloride concentrations for AH-1, AH-5, and AH-6 were all below 200 mg/kg. Elevated chloride concentrations were detected for AH-2 (3.5') of 8,320, AH-3 (4.5') of 3,050, AH-4 (3') of 3,470 mg/kg, AH-7 (4') of 944 mg/kg, and AH-8 (2') of 5,690 mg/kg.

In order to define the chloride impact, soil borings were installed at each auger hole location. On March 3, 2010, Tetra Tech personnel supervised the installation of soil borings (SB-1 through SB-5) utilizing an air rotary drilling rig. Referring to Table 1, all samples collected from the soil borings vertically defined the chloride impact. The chloride concentrations declined to <250 mg/kg at SB-1 (20') (SB-2 (10'), SB-3 (15'), SB-4 (15'), and SB-5 (20').

TETRA TECH

Remedial Work and Closure Request

On February 7, 2011, Tetra Tech personnel supervised the excavation of the site. The soil remediation was performed according to the approved work plan. The excavations measured approximately 25' x 250', 3' x 390', and 60' x 205', with depths from 4' to 8' below grade surface. Approximately 2,020 yards^3 were removed and hauled to CRI Inc. for proper disposal. Photos of the excavation are attached. The excavation depths are highlighted in Table 1 and shown on Figure 3.

Once excavated, Tetra Tech collected bottom hole confirmation samples, as shown on Figure 4. The confirmation sample results are summarized in Table 2. Based on the results, NMOCD requested the bottom of the excavation be lined to the cap the areas. A 40 mil liner was installed at 4' below surface and backfilled with clean material to grade. A copy of the C-141 (Final) is included in Appendix A.

Based on the remedial activities performed at this site, COG request closure of this site. If you require any additional information or have any questions or comments concerning this report, please call at (432) 682-4559.

Respectfully submitted,
TETRA TECH

Kim Dorey
Staff II Geologist

cc: Pat Ellis – COG

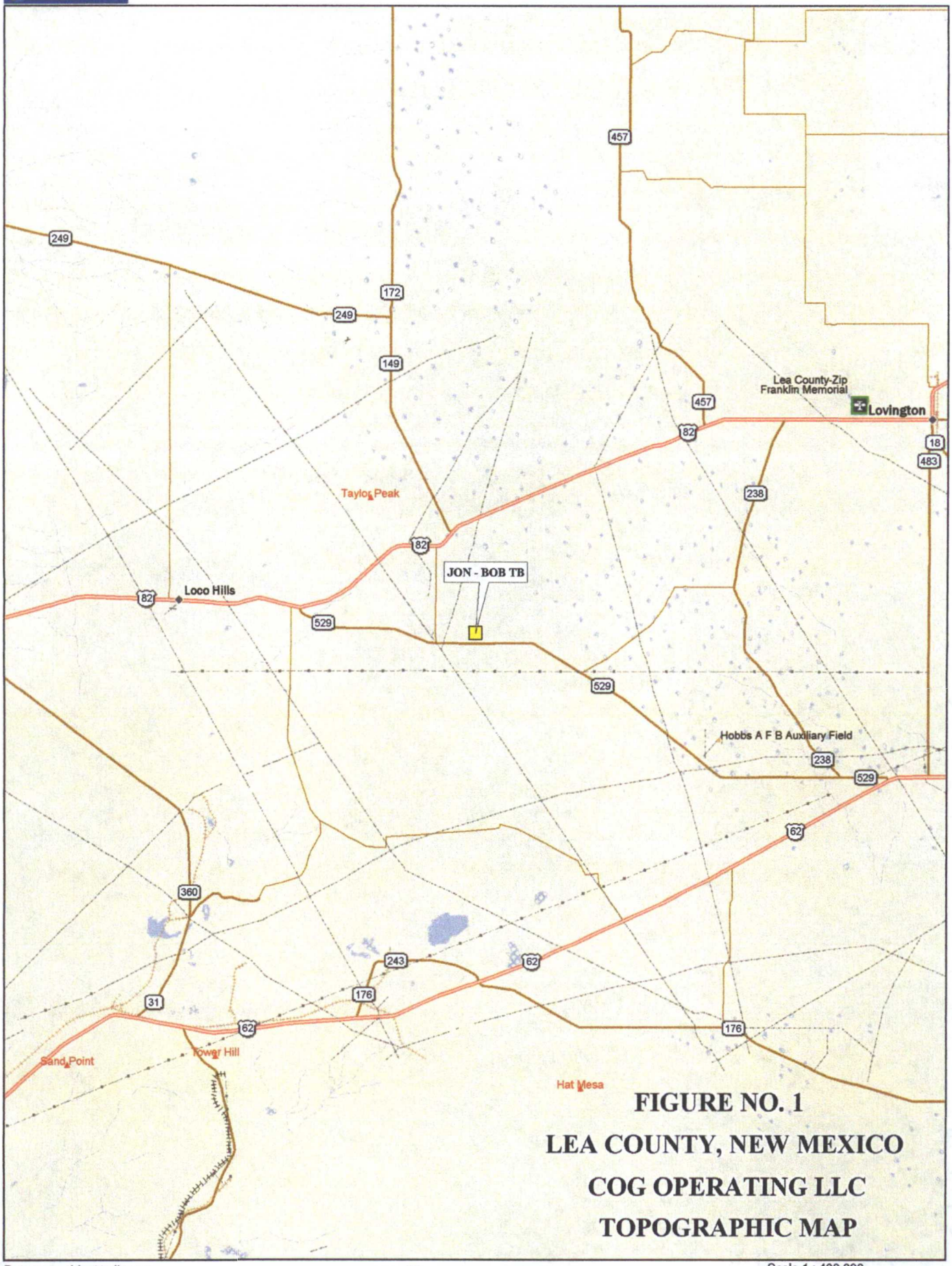


FIGURE NO. 1
LEA COUNTY, NEW MEXICO
COG OPERATING LLC
TOPOGRAPHIC MAP

TN
MN (7.9°E)

Scale 1 : 400,000
1" = 6.31 mi
Data Zoom 9-0

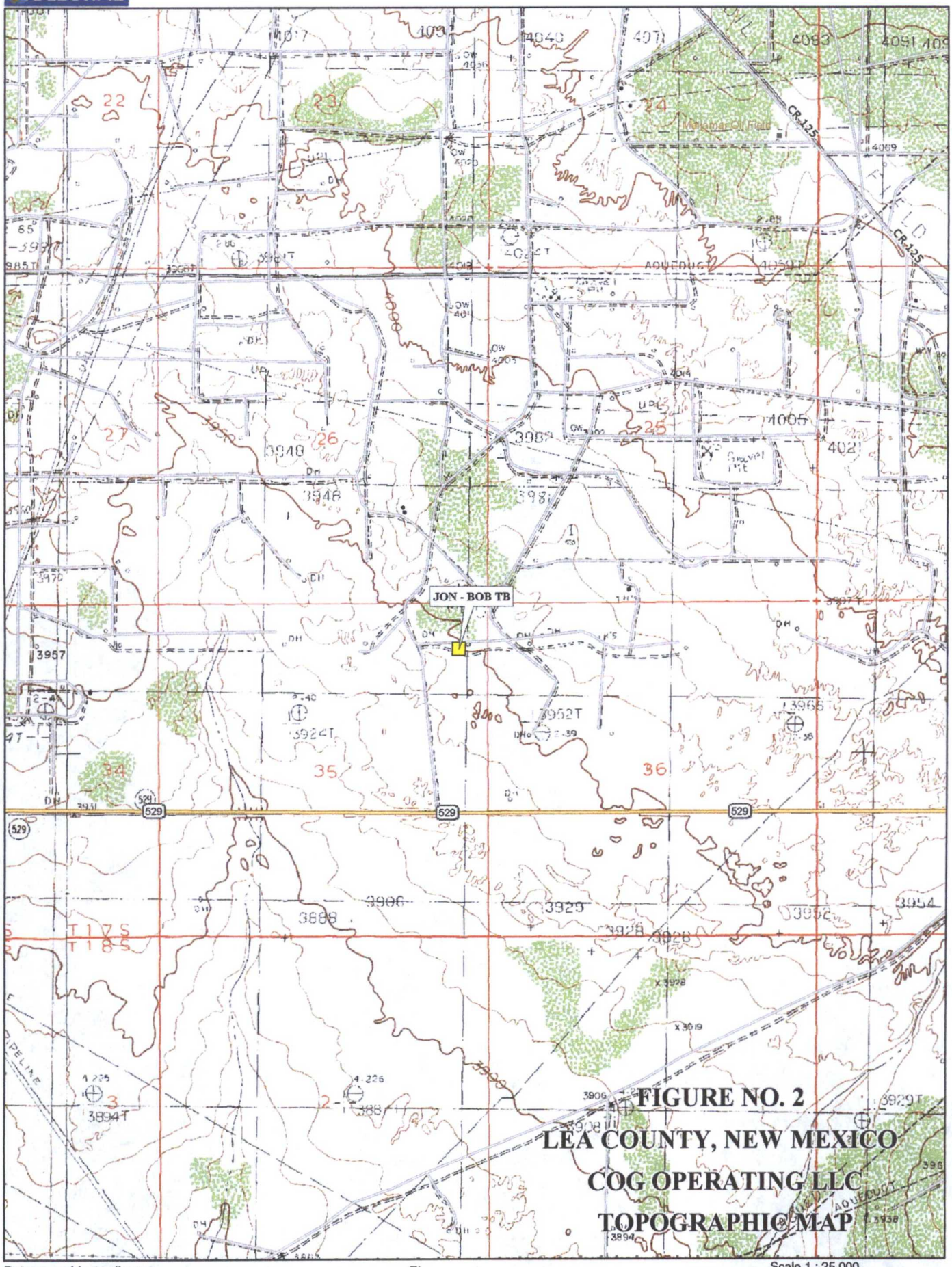
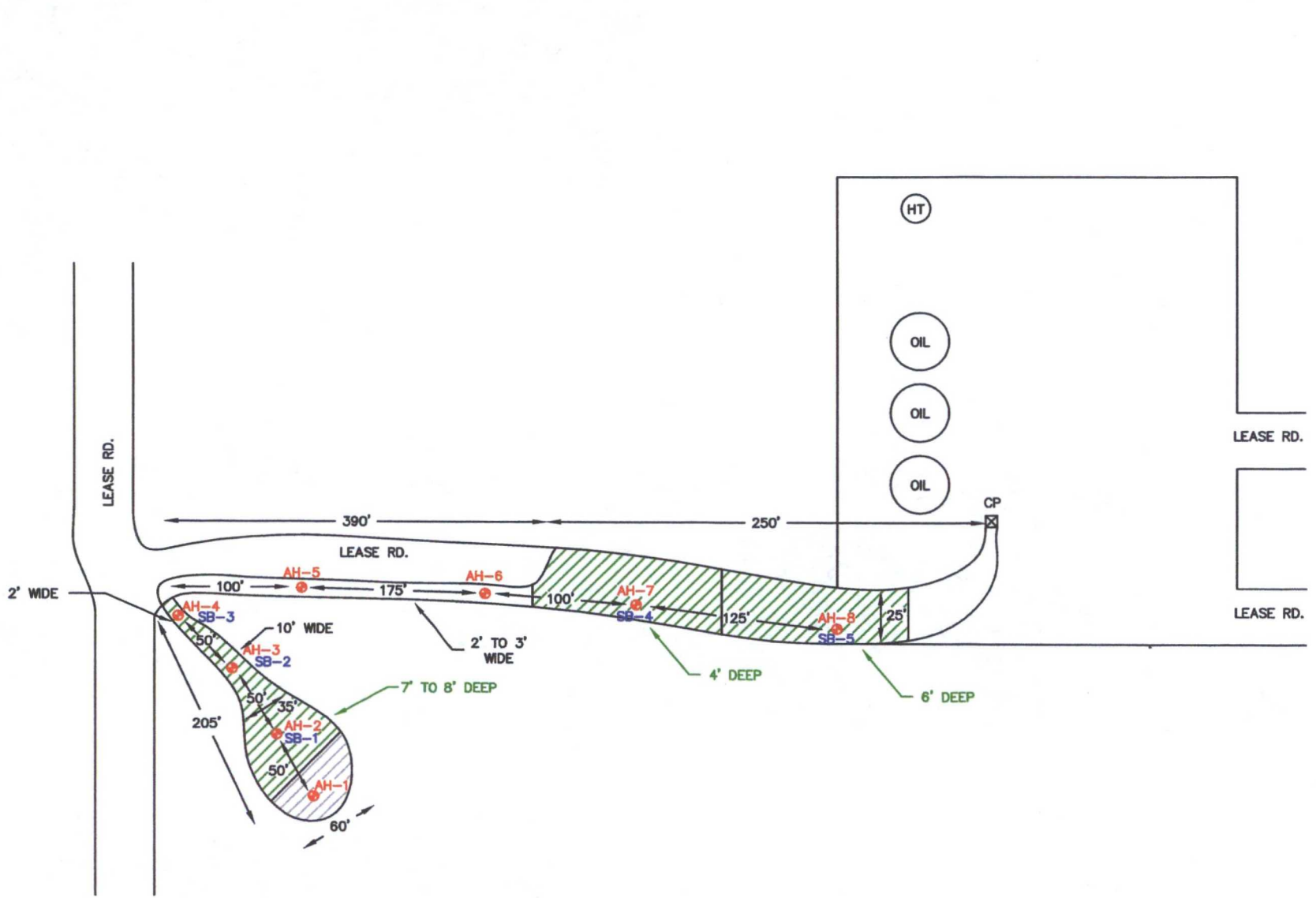


FIGURE NO. 2
LEA COUNTY, NEW MEXICO
COG OPERATING LLC
TOPOGRAPHIC MAP

TN
MN (7.9°E)

Scale 1 : 25,000
0 600 1200 1800 2400 3000 ft
0 200 400 600 800 1000 m
1" = 2,083.3 ft Data Zoom 13-0



NOT TO SCALE

FIGURE NO. 3

LEA COUNTY, NEW MEXICO

COG OPERATING LLC

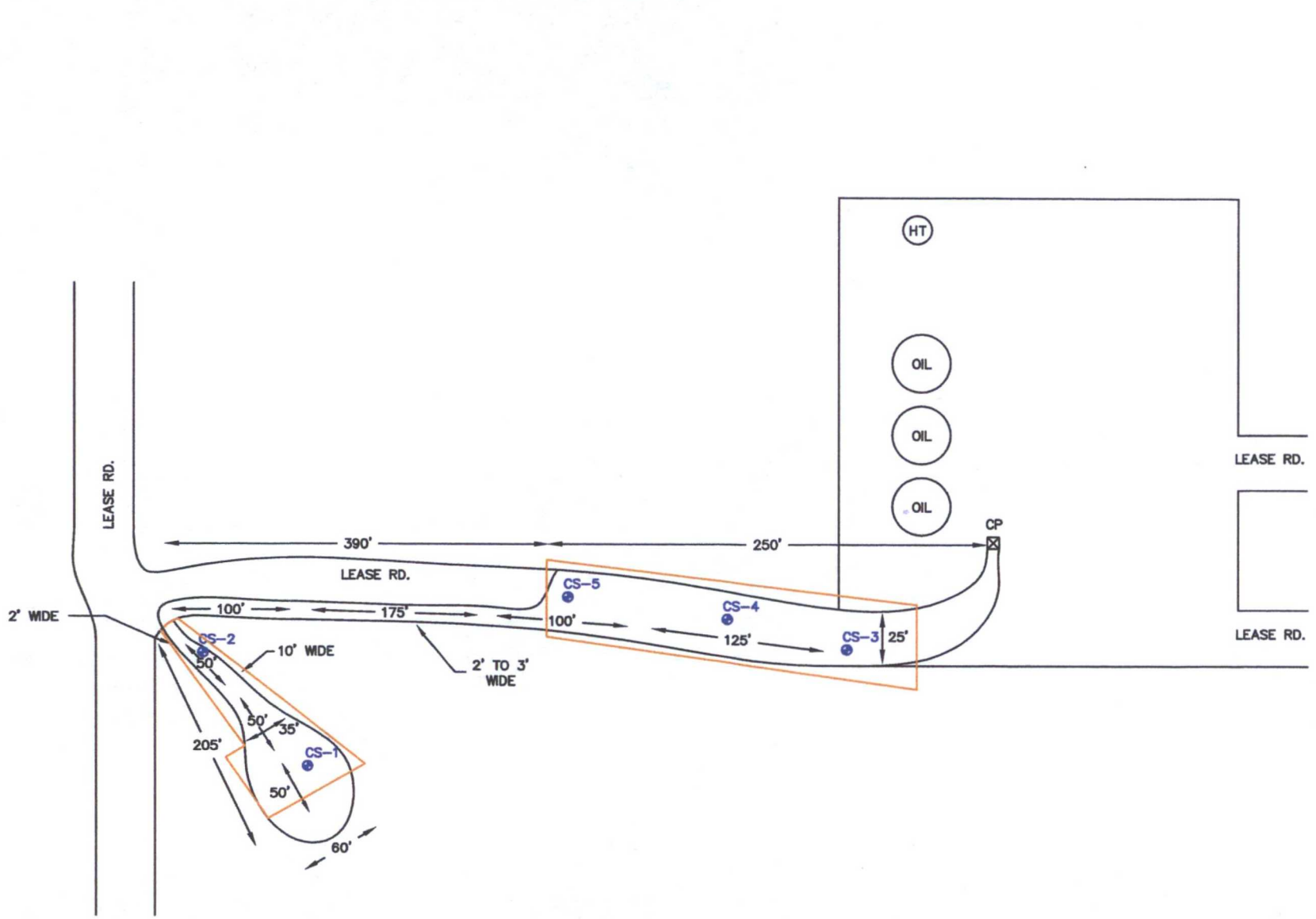
JON-BOB TB

DATE: 1/22/09

DWN. BY: JJ

FILE: H:\COG\8400389 JON-BOB TB

TETRA TECH, INC.
MIDLAND, TEXAS



— LINER
● CONFIRMATION SAMPLE

NOT TO SCALE

FIGURE NO. 4

LEA COUNTY, NEW MEXICO

COG OPERATING LLC

JON-BOB TB

DATE: 04-12-2011
DWN. BY: IM
FILE: H:\COG\6400389 JON-BOB TB

TETRA TECH, INC.
MIDLAND, TEXAS

Table 1
COG Operating LLC.
Jon-Bob Tank Battery
LEA 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	DRO	GRO	Total					
AH-1	2/8/2010	0-1'	X		<50.0	<1.00	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	<200
		1-1.5'	X		-	-	-	-	-	-	-	<200
		2-2.5'	X		-	-	-	-	-	-	-	<200
AH-2	2/8/2010	0-1'	X		-	-	-	-	-	-	-	1,050
		1-1.5'	X		-	-	-	-	-	-	-	3,650
		2-2.5'	X		-	-	-	-	-	-	-	5,760
		3-3.5'	X		-	-	-	-	-	-	-	4,050
		3.5-4'	X		-	-	-	-	-	-	-	8,320
SB-1	3/4/2010	4-5'	X		-	-	-	-	-	-	-	13,400
		6-7'	X		-	-	-	-	-	-	-	13,200
		10-11'	X		-	-	-	-	-	-	-	469
		15-16'	X		-	-	-	-	-	-	-	510
		20-21'	X		-	-	-	-	-	-	-	232
		25-26'	X		-	-	-	-	-	-	-	<200

Table 1
COG Operating LLC.
Jon-Bob Tank Battery
LEA 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	DRO	GRO	Total					
AH-3	2/8/2010	0-1'	X		<50.0	<1.00	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	905
		1-1.5'	X		-	-	-	-	-	-	-	1,550
		2-2.5'	X		-	-	-	-	-	-	-	2,100
		3-3.5'	X		-	-	-	-	-	-	-	2,970
		4-4.5'	X		-	-	-	-	-	-	-	2,070
		4.5-5'	X		-	-	-	-	-	-	-	3,050
SB-2	3/4/2010	4-5'	X		-	-	-	-	-	-	-	652
		6-7'	X		-	-	-	-	-	-	-	2,190
		10-11'	X		-	-	-	-	-	-	-	<200
		15-16'	X		-	-	-	-	-	-	-	636
		20-21'	X		-	-	-	-	-	-	-	<200
		25-26'	X		-	-	-	-	-	-	-	<200
AH-4	2/8/2010	0-1'	X		<50.0	<1.00	<50.0	-	-	-	-	<200
		1-1.5'	X		-	-	-	-	-	-	-	<200
		2-2.5'	X		-	-	-	-	-	-	-	561
		3-3.5'	X		-	-	-	-	-	-	-	3,470
SB-3	3/4/2010	4-5'	X		-	-	-	-	-	-	-	1,560
		6-7'	X		-	-	-	-	-	-	-	2,500
		10-11'	X		-	-	-	-	-	-	-	321
		15-16'	X		-	-	-	-	-	-	-	203
		20-21'	X		-	-	-	-	-	-	-	<200
		25-26'	X		-	-	-	-	-	-	-	<200

Table 1
COG Operating LLC.
Jon-Bob Tank Battery
LEA 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	DRO	GRO	Total					
AH-5	2/8/2010	0-1'	X		<50.0	<1.00	<50.0	-	-	-	-	<200
		1-1.5'	X		-	-	-	-	-	-	-	<200
		2-2.5'	X		-	-	-	-	-	-	-	<200
		3-3.5'	X		-	-	-	-	-	-	-	<200
AH-6	2/8/2010	0-1'	X		<50.0	<1.00	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	<200
		1-1.5'	X		--	--	--	--	--	--	--	<200
		2-2.5'	X		--	--	--	--	--	--	--	<200
AH-7	2/8/2010	0-1'	X		<50.0	<1.00	<50.0	-	-	-	-	<200
		1-1.5'	X		-	-	-	-	-	-	-	1,990
		2-2.5'	X		-	-	-	-	-	-	-	5,620
		3-3.5'	X		-	-	-	-	-	-	-	3,540
		4-4.5'	X		-	-	-	-	-	-	-	944
SB-4	3/4/2010	4-5'	X		-	-	-	-	-	-	-	4,010
		6-7'	X		-	-	-	-	-	-	-	228
		10-11'	X		-	-	-	-	-	-	-	654
		15-16'	X		-	-	-	-	-	-	-	<200
		20-21'	X		-	-	-	-	-	-	-	<200

Table 1
COG Operating LLC.
Jon-Bob Tank Battery
LEA 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	DRO	GRO	Total					
AH-8	2/8/2010	0-1'	X		<50.0	<1.00	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	<200
		1-1.5'	X		-	-	-	-	-	-	-	481
		2-2.5'	X		-	-	-	-	-	-	-	5,690
SB-5	3/4/2010	2-3'	X		-	-	-	-	-	-	-	624
		4-5'	X		-	-	-	-	-	-	-	9,410
		6-7'	X		-	-	-	-	-	-	-	7,900
		10-11'	X		-	-	-	-	-	-	-	361
		15-16'	X		-	-	-	-	-	-	-	305
		20-21'	X		-	-	-	-	-	-	-	<200
		25-26'	X		-	-	-	-	-	-	-	<200
		30-31'	X		-	-	-	-	-	-	-	<200

BEB Below Excavation Bottom
(-) Not Analyzed
Soil excavated and hauled to disposal

Table 2
COG Operating LLC.
Jon-Bob Tank Battery
LEA 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	DRO	GRO	Total					
CS-1	2/11/2011	7'	X		-	-	-	-	-	-	-	<200
CS-2	2/11/2011	7'	X		-	-	-	-	-	-	-	545
CS-3	2/11/2011	6'	X		-	-	-	-	-	-	-	695
CS-4	2/11/2011	4'	X		-	-	-	-	-	-	-	337
CS-5	2/11/2011	4'	X		-	-	-	-	-	-	-	462

BEB Below Excavation Bottom
(-) Not Analyzed

COG Operating LLC
Jon-Bob Tank Battery
Lea County, New Mexico

TETRA TECH

Excavation along lease road (SB-4 and SB-5)

Excavation of pasture area (SB-1, SB-2, and SB-3)

COG Operating LLC
Jon-Bob Tank Battery
Lea County, New Mexico

TETRA TECH

Post excavation – Backfilled to 4' for liner (Along road)

Post excavation – Backfilled to 4' for liner (Pasture area)

COG Operating LLC
Jon-Bob Tank Battery
Lea County, New Mexico

TETRA TECH

Liner installed in pasture area

Liner installed along lease road

COG Operating LLC
Jon-Bob Tank Battery
Lea County, New Mexico

TETRA TECH

Post remediation and road backfilled to surface grade

Post remediation and pasture backfilled to surface grade

Water Well Data
Average Depth to Groundwater (ft)
COG - Jon Bob #1
Eddy 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

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

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 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

17 South 32 East

6	5	4 82 Maljamar	3 175	2 60	1 225
7	8	9	10	11 70 88	12
18	17	16	15	14	13
19	20	21	22	23	24
30 180 dry	29	28 158	27	26	25
31	32	33	34	35 SITE	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 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

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

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

- New Mexico State Engineers Well Reports
- USGS Well Reports
- Geology and Groundwater Conditions in Southern Eddy, County, NM
- NMOCD - Groundwater Data
- Field water level
- New Mexico Water and Infrastructure Data System

New Mexico Office of the State Engineer
Point of Diversion Summary

POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	(quarters are 1=NW 2=NE 3=SW 4=SE)						(NAD83 UTM in meters)	
	(quarters are smallest to largest)							
RA 10175	2	1		28	17S	32E	614814	3631005*

Driller License: EADES, ALAN G.
Driller Name: EADES, ALAN

Drill Start Date:	02/04/2002	**Drill Finish Date:**	02/04/2002	**Plug Date:**	
Log File Date:	03/06/2002	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	5.75	**Depth Well:**	158 feet	**Depth Water:**	

Water Bearing Stratifications:	Top	Bottom	Description
	87	89	Shallow Alluvium/Basin Fill
	89	116	Shallow Alluvium/Basin Fill
	116	124	Shallow Alluvium/Basin Fill

Casing Perforations:	Top	Bottom
	118	158

Meter Number:	5380	**Meter Make:**	SENSUS
Meter Serial Number:	560656282	**Meter Multiplier:**	10
Number of Dials:	6	**Meter Type:**	Diversion
Unit of Measure:	Gallons	**Return Flow Percent:**	
Usage Multiplier:		**Reading Frequency:**	Annual

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount
03/20/2002	2002	0	A	RPT		0
05/06/2002	2002	170	A	RPT		0.005
02/13/2003	2002	2410	A	PRT		0.069
02/01/2005	2004	3420	A	ch		0.031

**YTD Meter Amounts:	Year	Amount
	2002	0.074
	2004	0.031

***UTM location was derived from PLSS - see Help**

Summary Report

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

Report Date: February 22, 2010

Work Order: 10021207

Project Location: Lea Co., NM
Project Name: COG/Jon-Bob TB
Project Number: 114-6400389

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
222191	AH-1 0-1'	soil	2010-02-08	00:00	2010-02-11
222192	AH-1 1'-1.5'	soil	2010-02-08	00:00	2010-02-11
222193	AH-1 2'-2.5'	soil	2010-02-08	00:00	2010-02-11
222194	AH-2 0-1'	soil	2010-02-08	00:00	2010-02-11
222195	AH-2 1'-1.5'	soil	2010-02-08	00:00	2010-02-11
222196	AH-2 2'-2.5'	soil	2010-02-08	00:00	2010-02-11
222197	AH-2 3'-3.5'	soil	2010-02-08	00:00	2010-02-11
222198	AH-2 3.5'-4'	soil	2010-02-08	00:00	2010-02-11
222199	AH-3 0-1'	soil	2010-02-08	00:00	2010-02-11
222200	AH-3 1'-1.5'	soil	2010-02-08	00:00	2010-02-11
222201	AH-3 2'-2.5'	soil	2010-02-08	00:00	2010-02-11
222202	AH-3 3'-3.5'	soil	2010-02-08	00:00	2010-02-11
222203	AH-3 4'-4.5'	soil	2010-02-08	00:00	2010-02-11
222204	AH-3 4.5'-5'	soil	2010-02-08	00:00	2010-02-11
222205	AH-4 0-1'	soil	2010-02-08	00:00	2010-02-11
222206	AH-4 1'-1.5'	soil	2010-02-08	00:00	2010-02-11
222207	AH-4 2'-2.5'	soil	2010-02-08	00:00	2010-02-11
222208	AH-4 3'-3.5'	soil	2010-02-08	00:00	2010-02-11
222209	AH-5 0-1'	soil	2010-02-08	00:00	2010-02-11
222210	AH-5 1'-1.5'	soil	2010-02-08	00:00	2010-02-11
222211	AH-5 2'-2.5'	soil	2010-02-08	00:00	2010-02-11
222212	AH-5 3'-3.5'	soil	2010-02-08	00:00	2010-02-11
222213	AH-6 0-1'	soil	2010-02-08	00:00	2010-02-11
222214	AH-6 1'-1.5'	soil	2010-02-08	00:00	2010-02-11
222215	AH-6 2'-2.5'	soil	2010-02-08	00:00	2010-02-11
222216	AH-7 0-1'	soil	2010-02-08	00:00	2010-02-11
222217	AH-7 1'-1.5'	soil	2010-02-08	00:00	2010-02-11
222218	AH-7 2'-2.5'	soil	2010-02-08	00:00	2010-02-11
222219	AH-7 3'-3.5'	soil	2010-02-08	00:00	2010-02-11
222220	AH-7 4'-4.5'	soil	2010-02-08	00:00	2010-02-11

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
222221	AH-8 0-1'	soil	2010-02-08	00:00	2010-02-11
222222	AH-8 1'-1.5'	soil	2010-02-08	00:00	2010-02-11
222223	AH-8 2'-2.5'	soil	2010-02-08	00:00	2010-02-11

	BTEX				TPH DRO - NEW	TPH GRO
Sample - Field Code	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
222191 - AH-1 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
222194 - AH-2 0-1'					<50.0	<1.00
222199 - AH-3 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
222205 - AH-4 0-1'					<50.0	<1.00
222209 - AH-5 0-1'					<50.0	<1.00
222213 - AH-6 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
222216 - AH-7 0-1'					<50.0	<1.00
222221 - AH-8 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00

Sample: 222191 - AH-1 0-1'

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

Sample: 222192 - AH-1 1'-1.5'

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

Sample: 222193 - AH-1 2'-2.5'

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

Sample: 222194 - AH-2 0-1'

Param	Flag	Result	Units	RL
Chloride		**1050**	mg/Kg	4.00

Sample: 222195 - AH-2 1'-1.5'

Param	Flag	Result	Units	RL
Chloride		**3650**	mg/Kg	4.00

Sample: 222196 - AH-2 2'-2.5'

Param	Flag	Result	Units	RL
Chloride		**5760**	mg/Kg	4.00

Sample: 222197 - AH-2 3'-3.5'

Param	Flag	Result	Units	RL
Chloride		**4050**	mg/Kg	4.00

Sample: 222198 - AH-2 3.5'-4'

Param	Flag	Result	Units	RL
Chloride		**8320**	mg/Kg	4.00

Sample: 222199 - AH-3 0-1'

Param	Flag	Result	Units	RL
Chloride		**905**	mg/Kg	4.00

Sample: 222200 - AH-3 1'-1.5'

Param	Flag	Result	Units	RL
Chloride		**1550**	mg/Kg	4.00

Sample: 222201 - AH-3 2'-2.5'

Param	Flag	Result	Units	RL
Chloride		**2100**	mg/Kg	4.00

Sample: 222202 - AH-3 3'-3.5'

Param	Flag	Result	Units	RL
Chloride		**2970**	mg/Kg	4.00

Sample: 222203 - AH-3 4'-4.5'

Param	Flag	Result	Units	RL
Chloride		**2070**	mg/Kg	4.00

Sample: 222204 - AH-3 4.5'-5'

Param	Flag	Result	Units	RL
Chloride		**3050**	mg/Kg	4.00

Sample: 222205 - AH-4 0-1'

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

Sample: 222206 - AH-4 1'-1.5'

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

Sample: 222207 - AH-4 2'-2.5'

Param	Flag	Result	Units	RL
Chloride		**561**	mg/Kg	4.00

Sample: 222208 - AH-4 3'-3.5'

Param	Flag	Result	Units	RL
Chloride		**3470**	mg/Kg	4.00

Sample: 222209 - AH-5 0-1'

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

Sample: 222210 - AH-5 1'-1.5'

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

Sample: 222211 - AH-5 2'-2.5'

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

Sample: 222212 - AH-5 3'-3.5'

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

Sample: 222213 - AH-6 0-1'

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

Sample: 222214 - AH-6 1'-1.5'

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

Sample: 222215 - AH-6 2'-2.5'

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

Sample: 222216 - AH-7 0-1'

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

Sample: 222217 - AH-7 1'-1.5'

Param	Flag	Result	Units	RL
Chloride		**1990**	mg/Kg	4.00

Sample: 222218 - AH-7 2'-2.5'

Param	Flag	Result	Units	RL
Chloride		**5620**	mg/Kg	4.00

Sample: 222219 - AH-7 3'-3.5'

Param	Flag	Result	Units	RL
Chloride		**3540**	mg/Kg	4.00

Sample: 222220 - AH-7 4'-4.5'

Param	Flag	Result	Units	RL
Chloride		**944**	mg/Kg	4.00

Sample: 222221 - AH-8 0-1'

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

Sample: 222222 - AH-8 1'-1.5'

Param	Flag	Result	Units	RL
Chloride		**481**	mg/Kg	4.00

Sample: 222223 - AH-8 2'-2.5'

Param	Flag	Result	Units	RL
Chloride		**5690**	mg/Kg	4.00

Summary Report

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

Report Date: March 17, 2010

Work Order: 10031013

Project Location: Lea Co., NM
Project Name: COG/Jon-Bob TB
Project Number: 114-6400389

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
225055	SB-1 4-5'	soil	2010-03-04	00:00	2010-03-09
225056	SB-1 6-7'	soil	2010-03-04	00:00	2010-03-09
225057	SB-1 10-11'	soil	2010-03-04	00:00	2010-03-09
225058	SB-1 15-16'	soil	2010-03-04	00:00	2010-03-09
225059	SB-1 20-21'	soil	2010-03-04	00:00	2010-03-09
225060	SB-1 25-26'	soil	2010-03-04	00:00	2010-03-09
225061	SB-2 4-5'	soil	2010-03-04	00:00	2010-03-09
225062	SB-2 6-7'	soil	2010-03-04	00:00	2010-03-09
225063	SB-2 10-11'	soil	2010-03-04	00:00	2010-03-09
225064	SB-2 15-16'	soil	2010-03-04	00:00	2010-03-09
225065	SB-2 20-21'	soil	2010-03-04	00:00	2010-03-09
225066	SB-2 25-26'	soil	2010-03-04	00:00	2010-03-09
225067	SB-3 4-5'	soil	2010-03-04	00:00	2010-03-09
225068	SB-3 6-7'	soil	2010-03-04	00:00	2010-03-09
225069	SB-3 10-11'	soil	2010-03-04	00:00	2010-03-09
225070	SB-3 15-16'	soil	2010-03-04	00:00	2010-03-09
225071	SB-3 20-21'	soil	2010-03-04	00:00	2010-03-09
225072	SB-3 25-26'	soil	2010-03-04	00:00	2010-03-09
225073	SB-4 4-5'	soil	2010-03-04	00:00	2010-03-09
225074	SB-4 6-7'	soil	2010-03-04	00:00	2010-03-09
225075	SB-4 10-11'	soil	2010-03-04	00:00	2010-03-09
225076	SB-4 15-16'	soil	2010-03-04	00:00	2010-03-09
225077	SB-4 20-21'	soil	2010-03-04	00:00	2010-03-09
225078	SB-5 2-3'	soil	2010-03-04	00:00	2010-03-09
225079	SB-5 4-5'	soil	2010-03-04	00:00	2010-03-09
225080	SB-5 6-7'	soil	2010-03-04	00:00	2010-03-09
225081	SB-5 10-11'	soil	2010-03-04	00:00	2010-03-09
225082	SB-5 15-16'	soil	2010-03-04	00:00	2010-03-09
225083	SB-5 20-21'	soil	2010-03-04	00:00	2010-03-09
225084	SB-5 25-26'	soil	2010-03-04	00:00	2010-03-09

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
225085	SB-5 30-31'	soil	2010-03-04	00:00	2010-03-09

Sample: 225055 - SB-1 4-5'

Param	Flag	Result	Units	RL
Chloride		**13400**	mg/Kg	4.00

Sample: 225056 - SB-1 6-7'

Param	Flag	Result	Units	RL
Chloride		**13200**	mg/Kg	4.00

Sample: 225057 - SB-1 10-11'

Param	Flag	Result	Units	RL
Chloride		**469**	mg/Kg	4.00

Sample: 225058 - SB-1 15-16'

Param	Flag	Result	Units	RL
Chloride		**510**	mg/Kg	4.00

Sample: 225059 - SB-1 20-21'

Param	Flag	Result	Units	RL
Chloride		**232**	mg/Kg	4.00

Sample: 225060 - SB-1 25-26'

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

Sample: 225061 - SB-2 4-5'

Param	Flag	Result	Units	RL
Chloride		**652**	mg/Kg	4.00

Sample: 225062 - SB-2 6-7'

Param	Flag	Result	Units	RL
Chloride		**2190**	mg/Kg	4.00

Sample: 225063 - SB-2 10-11'

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

Sample: 225064 - SB-2 15-16'

Param	Flag	Result	Units	RL
Chloride		**636**	mg/Kg	4.00

Sample: 225065 - SB-2 20-21'

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

Sample: 225066 - SB-2 25-26'

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

Sample: 225067 - SB-3 4-5'

Param	Flag	Result	Units	RL
Chloride		**1560**	mg/Kg	4.00

Sample: 225068 - SB-3 6-7'

Param	Flag	Result	Units	RL
Chloride		**2500**	mg/Kg	4.00

Sample: 225069 - SB-3 10-11'

Param	Flag	Result	Units	RL
Chloride		**321**	mg/Kg	4.00

Sample: 225070 - SB-3 15-16'

Param	Flag	Result	Units	RL
Chloride		**203**	mg/Kg	4.00

Sample: 225071 - SB-3 20-21'

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

Sample: 225072 - SB-3 25-26'

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

Sample: 225073 - SB-4 4-5'

Param	Flag	Result	Units	RL
Chloride		**4010**	mg/Kg	4.00

Sample: 225074 - SB-4 6-7'

Param	Flag	Result	Units	RL
Chloride		**228**	mg/Kg	4.00

Sample: 225075 - SB-4 10-11'

Param	Flag	Result	Units	RL
Chloride		**654**	mg/Kg	4.00

Sample: 225076 - SB-4 15-16'

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

Sample: 225077 - SB-4 20-21'

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

Sample: 225078 - SB-5 2-3'

Param	Flag	Result	Units	RL
Chloride		**624**	mg/Kg	4.00

Sample: 225079 - SB-5 4-5'

Param	Flag	Result	Units	RL
Chloride		**9410**	mg/Kg	4.00

Sample: 225080 - SB-5 6-7'

Param	Flag	Result	Units	RL
Chloride		**7900**	mg/Kg	4.00

Sample: 225081 - SB-5 10-11'

Param	Flag	Result	Units	RL
Chloride		**361**	mg/Kg	4.00

Sample: 225082 - SB-5 15-16'

Param	Flag	Result	Units	RL
Chloride		**305**	mg/Kg	4.00

Sample: 225083 - SB-5 20-21'

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

Sample: 225084 - SB-5 25-26'

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

Sample: 225085 - SB-5 30-31'

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

Summary Report

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

Report Date: February 11, 2011

Work Order: 11021101

Project Location: Lea County, NM
Project Name: COG/John-Bob TB
Project Number: 114-6400389

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
257143	CS-1 7' Bottom Hole	soil	2011-02-10	00:00	2011-02-11
257144	CS-2 7' Bottom Hole	soil	2011-02-10	00:00	2011-02-11
257145	CS-3 6' Bottom Hole	soil	2011-02-10	00:00	2011-02-11
257146	CS-4 4' Bottom Hole	soil	2011-02-10	00:00	2011-02-11
257147	CS-5 4' Bottom Hole	soil	2011-02-10	00:00	2011-02-11

Sample: 257143 - CS-1 7' Bottom Hole

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

Sample: 257144 - CS-2 7' Bottom Hole

Param	Flag	Result	Units	RL
Chloride		**545**	mg/Kg	4.00

Sample: 257145 - CS-3 6' Bottom Hole

Param	Flag	Result	Units	RL
Chloride		**695**	mg/Kg	4.00

Sample: 257146 - CS-4 4' Bottom Hole

Param	Flag	Result	Units	RL
Chloride		**337**	mg/Kg	4.00

Sample: 257147 - CS-5 4' Bottom Hole

Param	Flag	Result	Units	RL
Chloride		**462**	mg/Kg	4.00