

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 Pat Ellis
Address 550 W. Texas, Suite 1300 Midland, Texas 79701	Telephone No. (432) 230-0077
Facility Name GC Federal #1	Facility Type Tank Battery

Surface Owner Federal	Mineral Owner	Lease No. 30-025-35814 NMLC 029405B
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LOCATION OF RELEASE

Unit Letter J	Section 19	Township 17-S	Range 32-E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
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Latitude N 32.81898° Longitude W 103.805108°

NATURE OF RELEASE

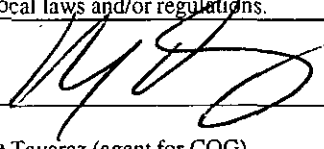
Type of Release: Produced Water	Volume of Release 300 bbls	Volume Recovered 298 bbls
Source of Release Water Tank	Date and Hour of Occurrence 02/08/2011	Date and Hour of Discovery 02/08/2011 7:00a.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Geoffrey Leking - OCD	
By Whom? Josh Russo	Date and Hour 02/08/2011 9:48 p.m.	
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 water tank ran over at the facility due to the transfer pump not working because of freezing temperatures. Alarm was not operating due to the alarm transducer freezing. Both the transfer pump and transducer have been returned back into service.

Describe Area Affected and Cleanup Action Taken.*
Tetra Tech inspected and assessed the spill area for extents. Soil with elevated chloride concentrations was removed and transported to Controlled Recovery, Inc., Hobbs, NM. Once excavated to the appropriate depths, the excavations were backfilled with clean soil to grade. 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:	
Date: 9-24-12 Phone: (432) 682-4559		Attached ☐	

* Attach Additional Sheets If Necessary

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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	GC Federal #1	Facility Type	Tank Battery
Surface Owner	Federal	Mineral Owner	
		Lease No. (API#)	30-025-35814 NMLC-029405B

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	19	17S	32E					Lea

Latitude 32.81898 Longitude 103.805108

NATURE OF RELEASE

Type of Release	Produced Water	Volume of Release	300bbls	Volume Recovered	298bbls
Source of Release	Water tank	Date and Hour of Occurrence	02/08/2011	Date and Hour of Discovery	02/08/2011 7:00 a.m.
Was Immediate Notice Given?	☒ Yes ☐ No ☐ Not Required	If YES, To Whom?	Geoffrey Leking—OCD		
By Whom?	Josh Russo	Date and Hour	02/08/2011 9:48 p.m.		
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 water tank ran over at the facility due to the transfer pump not working because of freezing temperatures. Alarm was not operating due to the alarm transducer freezing. Both the transfer pump and the alarm transducer have been returned back into service.					
Describe Area Affected and Cleanup Action Taken.*					
Initially 300bbls of produced water was released from the water tanks and we were able to recover 298bbls of standing fluid with vacuum trucks. All free fluid was picked up and the entire release was contained inside the walls of the facility. The spill area measure 20' x 80' inside the facility. 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:			
Title: HSE Coordinator		Approval Date:		Expiration Date:	
E-mail Address: jrusso@conchoresources.com		Conditions of Approval:		Attached ☐	
Date: 02/18/2011 Phone: 432-212-2399					

* Attach Additional Sheets If Necessary

SITE INFORMATION**Report Type: Work Plan****General Site Information:**

Site:	GC Federal #1	
Company:	COG Operating LLC	
Section, Township and Range	Unit J Section 19 Township 17S Range 32E	
Lease Number:	30-025-35814 NMLC-029405B	
County:	Lea County	
GPS:	32.81874° N	103.80513° W
Surface Owner:	Federal	
Mineral Owner:		
Directions:	From Gas Plant Road and CR-126 (South of Maljamar, NM), travel 2.0 mi west om Gas Plant Road, turn right 0.2 mi, turn left 0.4 mi, turn left 500' to location.	

Release Data:

Date Released:	2/8/2011
Type Release:	Produced Water
Source of Contamination:	Transfer pump failure
Fluid Released:	300 bbls
Fluids Recovered:	298 bbls

Official Communication:

Name:	Pat Ellis	Ike Tavaréz
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@tetrattech.com

Ranking Criteria

Depth to Groundwater:	Ranking Score	Site Data
<50 ft	20	
50-99 ft	10	
>100 ft.	0	>200'
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

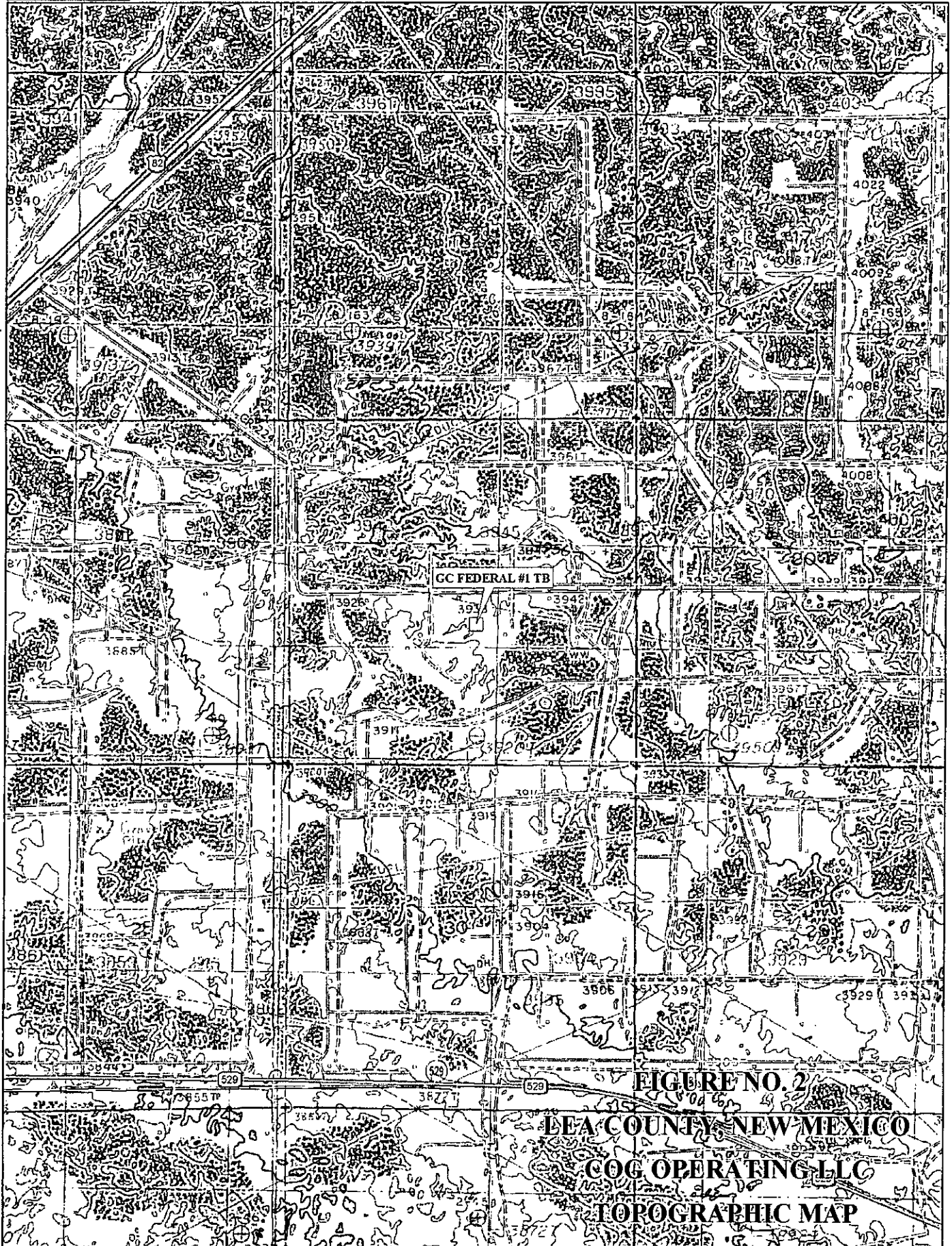
HOBBS OCD

NOV 10 2011

RECEIVED

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

PRIOR REVIEW
COMPLETED
11/11/11



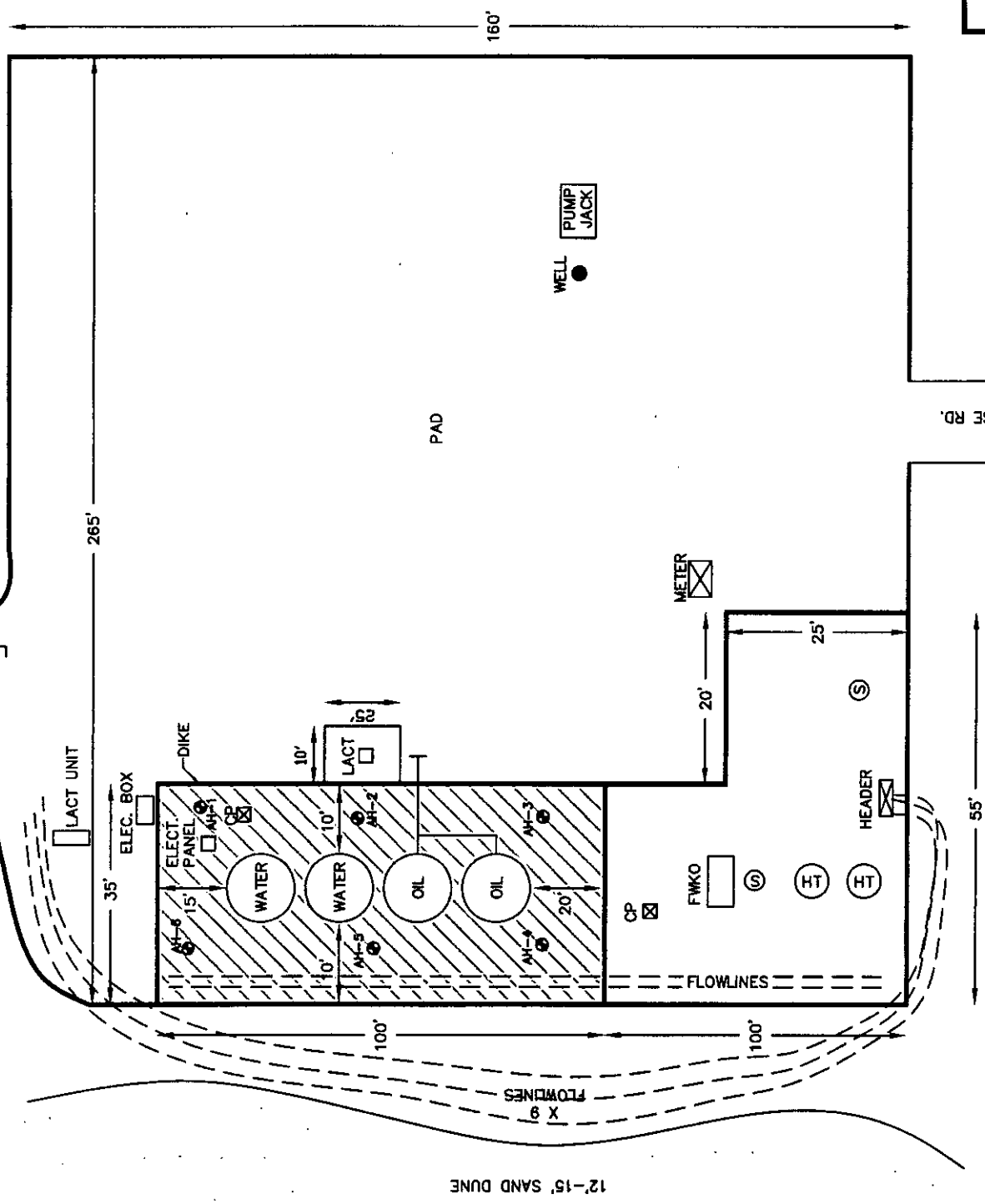
Data use subject to license.

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www.delorme.com



LEASE RD.



PAD

PUMP JACK

WELL

LEASE RD.

FIGURE NO. 3

LEA COUNTY, NEW MEXICO

COG OPERATING LLC

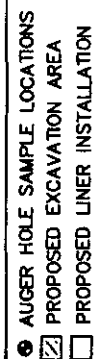
GC FED #1 TB

TETRA TECH, INC.
MIDLAND, TEXAS

DATE:	04/13/2011
DRAWN BY:	TM
FILE:	HA\COG\4400023
	GC FED #1 TB

NOT TO SCALE

- SPILL AREA
- AUGER HOLE SAMPLE LOCATIONS



NOT TO SCALE

Table 1
COG Operating LLC.
GC FEDERAL #1
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total					
AH-1	4/6/2011	0-1'	X		3.67	<50.0	3.67	<0.0200	<0.0200	<0.0200	0.359	9,440
	"	1-1.5'	X		-	-	-	-	-	-	-	313
	"	2-2.5'	X		-	-	-	-	-	-	-	255
	"	3-3.5'	X		-	-	-	-	-	-	-	<200
	"	4-4.5'	X		-	-	-	-	-	-	-	210
	"	5-5.5'	X		-	-	-	-	-	-	-	<200
	"	6-6.5'	X		-	-	-	-	-	-	-	<200
AH-2	4/6/2011	0-1'	X		76.3	57.0	133.3	<0.0200	<0.0200	0.373	1.55	7,680
	"	1-1.5'	X		-	-	-	-	-	-	-	589
	"	2-2.5'	X		-	-	-	-	-	-	-	<200
	"	3-3.5'	X		-	-	-	-	-	-	-	<200
	"	4-4.5'	X		-	-	-	-	-	-	-	<200
	"	5-5.5'	X		-	-	-	-	-	-	-	598
	"	6-6.5'	X		-	-	-	-	-	-	-	1,250
	"	7-7.5'	X		-	-	-	-	-	-	-	979
	"	8-8.5'	X		-	-	-	-	-	-	-	258
	"	9-9.5'	X		-	-	-	-	-	-	-	408
	"	10-10.5'	X		-	-	-	-	-	-	-	224

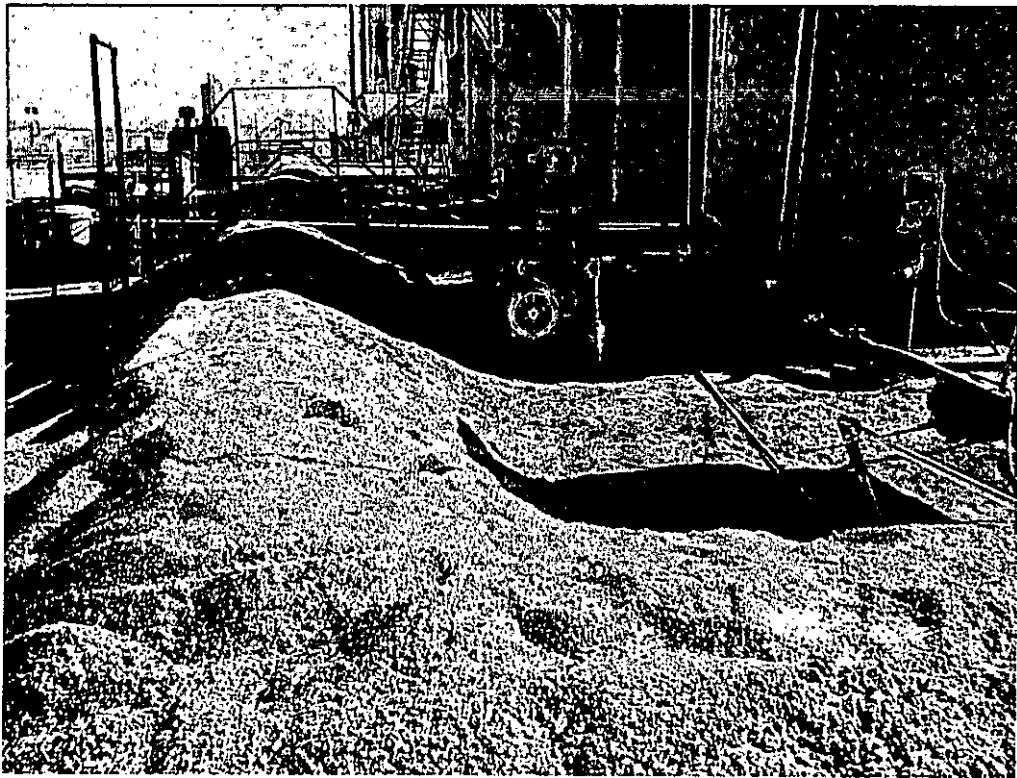
Table 1
COG Operating LLC.
GC FEDERAL #1
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total					
AH-3	4/6/2011	0-1'	X		109	218	327	<0.0200	<0.0200	<0.0200	<0.0200	4,380
	"	1-1.5'	X		-	-	-	-	-	-	-	535
	"	2-2.5'	X		-	-	-	-	-	-	-	715
	"	3-3.5'	X		-	-	-	-	-	-	-	622
	"	4-4.5'	X		-	-	-	-	-	-	-	433
	"	5-5.5'	X		-	-	-	-	-	-	-	<200
	"	6-6.5'	X		-	-	-	-	-	-	-	228
AH-4	4/6/2011	0-1'	X		7.52	<50.0	7.52	<0.0200	<0.0200	<0.0200	<0.0200	12,400
	"	1-1.5'	X		-	-	-	-	-	-	-	9,750
	"	2-2.5'	X		-	-	-	-	-	-	-	571
	"	3-3.5'	X		-	-	-	-	-	-	-	371
	"	4-4.5'	X		-	-	-	-	-	-	-	337
	"	5-5.5'	X		-	-	-	-	-	-	-	<200
	"	6-6.5'	X		-	-	-	-	-	-	-	210

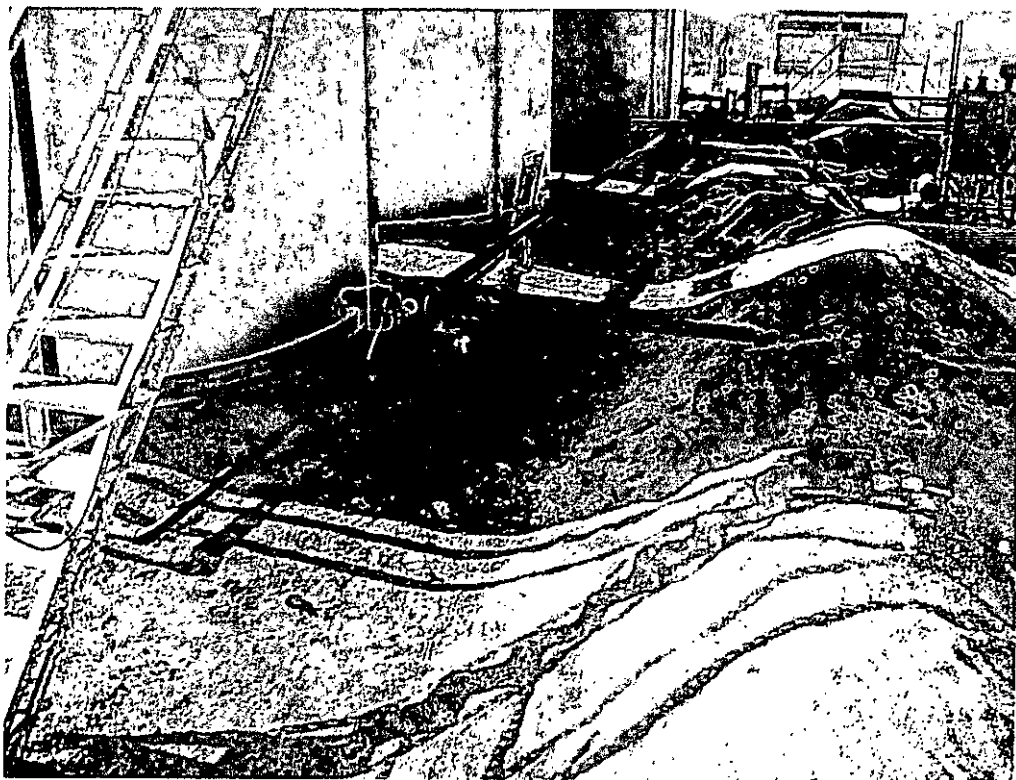
Table 1
COG Operating LLC.
GC FEDERAL #1
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total					
AH-5	4/6/2011	0-1'	X		33.0	88.3	121.3	<0.0200	<0.0200	0.263	0.788	4,030
	"	1-1.5'	X		-	-	-	-	-	-	-	239
	"	2-2.5'	X		-	-	-	-	-	-	-	<200
	"	3-3.5'	X		-	-	-	-	-	-	-	239
	"	4-4.5'	X		-	-	-	-	-	-	-	<200
	"	5-5.5'	X		-	-	-	-	-	-	-	200
	"	6-6.5'	X		-	-	-	-	-	-	-	258
AH-6	4/6/2011	0-1'	X		16.8	255	271.8	<0.0200	<0.0200	0.152	0.409	4,000
	"	1-1.5'	X		-	-	-	-	-	-	-	5,140
	"	2-2.5'	X		-	-	-	-	-	-	-	4,040
	"	3-3.5'	X		-	-	-	-	-	-	-	3,920
	"	4-4.5'	X		-	-	-	-	-	-	-	3,580
	"	5-5.5'	X		-	-	-	-	-	-	-	5,560
	"	6-6.5'	X		-	-	-	-	-	-	-	12,100
	"	7-7.5'	X		-	-	-	-	-	-	-	13,100
	"	8-8.5'	X		-	-	-	-	-	-	-	17,900
	"	8.5'-9'	X		-	-	-	-	-	-	-	10,400

(--) Not Analyzed
☐ Proposed Excavation Depths
☐ Proposed Liner Installation



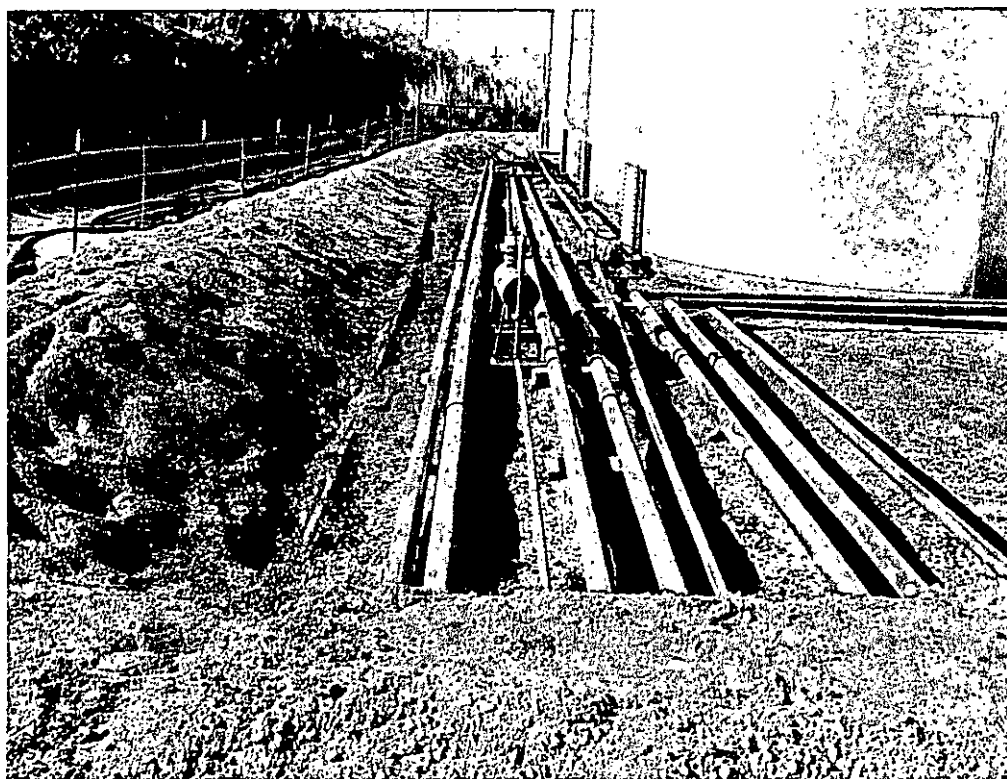
Front of battery – Near AH-1



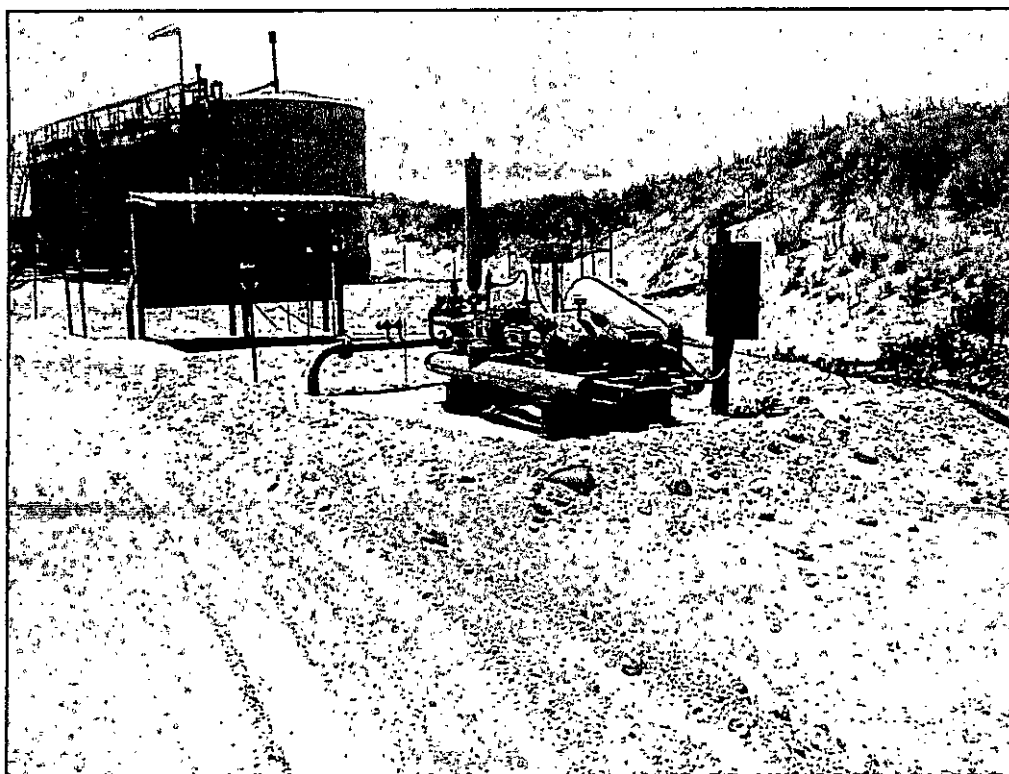
Front of battery – Near AH-3



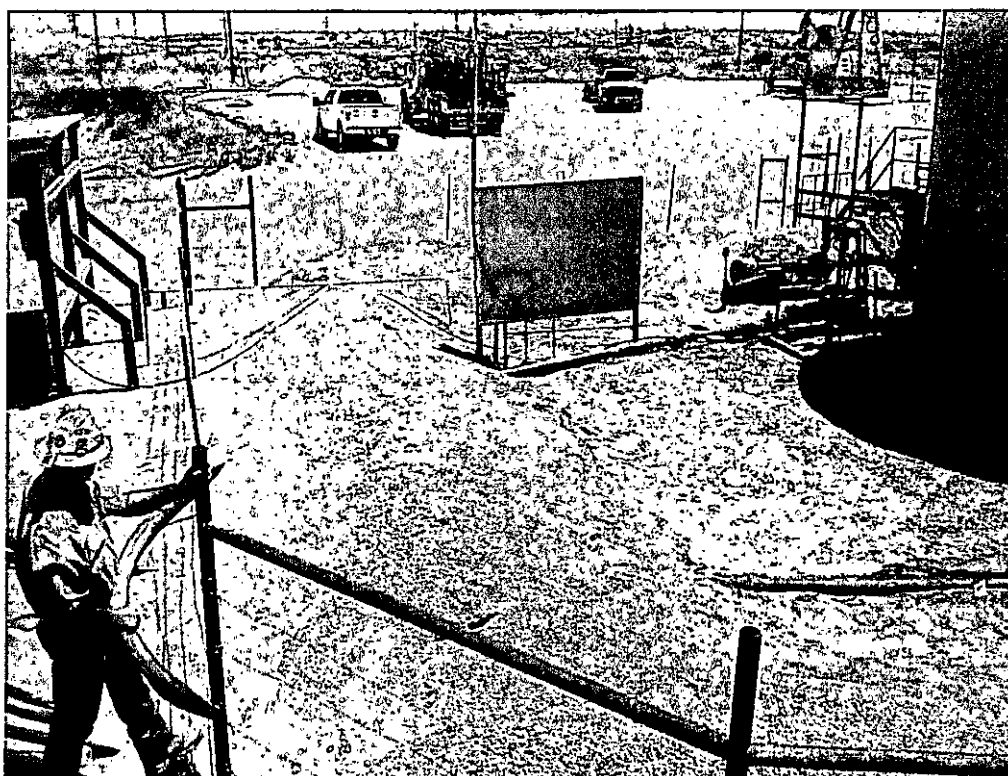
Back side of battery – Near AH-6



Back side of battery – Near AH-4



View south - Drill rig access to AH-6 blocked with existing equipment



View east near AH-6 - No rig assess

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

16 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	35	36
290					

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	35	36
			271		

18 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	35	36
					400
					317
					261

16 South			32 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	35	36
					260

17 South			32 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	35	36
					225
					60
					120
					130' Dry

18 South			32 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	35	36
					117

16 South			33 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	35	36
					120

17 South			33 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	35	36
					155

18 South			33 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	35	36
					143
					140
					60
					195
					177

-  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
-  Site - GC Federal #1
-  Tetra Tech Temporary well

Summary Report

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

Report Date: April 13, 2011

Work Order: 11040725

Project Location: Lea Co., NM
Project Name: COG/GC Fed. #1
Project Number: 114-6400828

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
262818	AH-1 0-1	soil	2011-04-06	00:00	2011-04-07
262819	AH-1 1-1.5	soil	2011-04-06	00:00	2011-04-07
262820	AH-1 2-2.5	soil	2011-04-06	00:00	2011-04-07
262821	AH-1 3-3.5	soil	2011-04-06	00:00	2011-04-07
262822	AH-1 4-4.5	soil	2011-04-06	00:00	2011-04-07
262823	AH-1 5-5.5	soil	2011-04-06	00:00	2011-04-07
262824	AH-1 6-6.5	soil	2011-04-06	00:00	2011-04-07
262825	AH-2 0-1	soil	2011-04-06	00:00	2011-04-07
262826	AH-2 1-1.5	soil	2011-04-06	00:00	2011-04-07
262827	AH-2 2-2.5	soil	2011-04-06	00:00	2011-04-07
262828	AH-2 3-3.5	soil	2011-04-06	00:00	2011-04-07
262829	AH-2 4-4.5	soil	2011-04-06	00:00	2011-04-07
262830	AH-2 5-5.5	soil	2011-04-06	00:00	2011-04-07
262831	AH-2 6-6.5	soil	2011-04-06	00:00	2011-04-07
262832	AH-2 7-7.5	soil	2011-04-06	00:00	2011-04-07
262833	AH-2 8-8.5	soil	2011-04-06	00:00	2011-04-07
262834	AH-2 9-9.5	soil	2011-04-06	00:00	2011-04-07
262835	AH-2 10-10.5	soil	2011-04-06	00:00	2011-04-07
262836	AH-3 0-1	soil	2011-04-06	00:00	2011-04-07
262837	AH-3 1-1.5	soil	2011-04-06	00:00	2011-04-07
262838	AH-3 2-2.5	soil	2011-04-06	00:00	2011-04-07
262839	AH-3 3-3.5	soil	2011-04-06	00:00	2011-04-07
262840	AH-3 4-4.5	soil	2011-04-06	00:00	2011-04-07
262841	AH-3 5-5.5	soil	2011-04-06	00:00	2011-04-07
262842	AH-3 6-6.5	soil	2011-04-06	00:00	2011-04-07
262843	AH-4 0-1	soil	2011-04-06	00:00	2011-04-07
262844	AH-4 1-1.5	soil	2011-04-06	00:00	2011-04-07
262845	AH-4 2-2.5	soil	2011-04-06	00:00	2011-04-07
262846	AH-4 3-3.5	soil	2011-04-06	00:00	2011-04-07
262847	AH-4 4-4.5	soil	2011-04-06	00:00	2011-04-07

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
262848	AH-4 5-5.5	soil	2011-04-06	00:00	2011-04-07
262849	AH-4 6-6.5	soil	2011-04-06	00:00	2011-04-07
262850	AH-5 0-1	soil	2011-04-06	00:00	2011-04-07
262851	AH-5 1-1.5	soil	2011-04-06	00:00	2011-04-07
262852	AH-5 2-2.5	soil	2011-04-06	00:00	2011-04-07
262853	AH-5 3-3.5	soil	2011-04-06	00:00	2011-04-07
262854	AH-5 4-4.5	soil	2011-04-06	00:00	2011-04-07
262855	AH-5 5-5.5	soil	2011-04-06	00:00	2011-04-07
262856	AH-5 6-6.5	soil	2011-04-06	00:00	2011-04-07
262857	AH-6 0-1	soil	2011-04-06	00:00	2011-04-07
262858	AH-6 1-1.5	soil	2011-04-06	00:00	2011-04-07
262859	AH-6 2-2.5	soil	2011-04-06	00:00	2011-04-07
262860	AH-6 3-3.5	soil	2011-04-06	00:00	2011-04-07
262861	AH-6 4-4.5	soil	2011-04-06	00:00	2011-04-07
262862	AH-6 5-5.5	soil	2011-04-06	00:00	2011-04-07
262863	AH-6 6-6.5	soil	2011-04-06	00:00	2011-04-07
262864	AH-6 7-7.5	soil	2011-04-06	00:00	2011-04-07
262865	AH-6 8-8.5	soil	2011-04-06	00:00	2011-04-07
262866	AH-6 8.5-9	soil	2011-04-06	00:00	2011-04-07

Sample - Field Code	BTEX				TPH DRO - NEW	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
262818 - AH-1 0-1	<0.0200	<0.0200	<0.0200	0.359	<50.0	3.67
262825 - AH-2 0-1	<0.0200	<0.0200	0.373	1.55	57.0	76.3
262836 - AH-3 0-1	<0.0200	<0.0200	<0.0200	<0.0200	218	109
262843 - AH-4 0-1	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	7.52
262850 - AH-5 0-1	<0.0200	<0.0200	0.263	0.788	88.3	33.0
262857 - AH-6 0-1	<0.0200	<0.0200	0.152	0.409	255	16.8

Sample: 262818 - AH-1 0-1

Param	Flag	Result	Units	RL
Chloride		9440	mg/Kg	4.00

Sample: 262819 - AH-1 1-1.5

Param	Flag	Result	Units	RL
Chloride		313	mg/Kg	4.00

Sample: 262820 - AH-1 2-2.5

Param	Flag	Result	Units	RL
Chloride		255	mg/Kg	4.00

Report Date: April 13, 2011

Work Order: 11040725

Page Number: 3 of 8

Sample: 262821 - AH-1 3-3.5

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

Sample: 262822 - AH-1 4-4.5

Param	Flag	Result	Units	RL
Chloride		210	mg/Kg	4.00

Sample: 262823 - AH-1 5-5.5

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

Sample: 262824 - AH-1 6-6.5

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

Sample: 262825 - AH-2 0-1

Param	Flag	Result	Units	RL
Chloride		7680	mg/Kg	4.00

Sample: 262826 - AH-2 1-1.5

Param	Flag	Result	Units	RL
Chloride		589	mg/Kg	4.00

Sample: 262827 - AH-2 2-2.5

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

Sample: 262828 - AH-2 3-3.5

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

Report Date: April 13, 2011

Work Order: 11040725

Page Number: 4 of 8

Sample: 262829 - AH-2 4-4.5

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

Sample: 262830 - AH-2 5-5.5

Param	Flag	Result	Units	RL
Chloride		598	mg/Kg	4.00

Sample: 262831 - AH-2 6-6.5

Param	Flag	Result	Units	RL
Chloride		1250	mg/Kg	4.00

Sample: 262832 - AH-2 7-7.5

Param	Flag	Result	Units	RL
Chloride		979	mg/Kg	4.00

Sample: 262833 - AH-2 8-8.5

Param	Flag	Result	Units	RL
Chloride		258	mg/Kg	4.00

Sample: 262834 - AH-2 9-9.5

Param	Flag	Result	Units	RL
Chloride		408	mg/Kg	4.00

Sample: 262835 - AH-2 10-10.5

Param	Flag	Result	Units	RL
Chloride		224	mg/Kg	4.00

Sample: 262836 - AH-3 0-1

Param	Flag	Result	Units	RL
Chloride		4380	mg/Kg	4.00

Report Date: April 13, 2011

Work Order: 11040725

Page Number: 5 of 8

Sample: 262837 - AH-3 1-1.5

Param	Flag	Result	Units	RL
Chloride		535	mg/Kg	4.00

Sample: 262838 - AH-3 2-2.5

Param	Flag	Result	Units	RL
Chloride		715	mg/Kg	4.00

Sample: 262839 - AH-3 3.3.5

Param	Flag	Result	Units	RL
Chloride		622	mg/Kg	4.00

Sample: 262840 - AH-3 4-4.5

Param	Flag	Result	Units	RL
Chloride		433	mg/Kg	4.00

Sample: 262841 - AH-3 5-5.5

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

Sample: 262842 - AH-3 6-6.5

Param	Flag	Result	Units	RL
Chloride		228	mg/Kg	4.00

Sample: 262843 - AH-4 0-1

Param	Flag	Result	Units	RL
Chloride		12400	mg/Kg	4.00

Sample: 262844 - AH-4 1-1.5

Param	Flag	Result	Units	RL
Chloride		9750	mg/Kg	4.00

Sample: 262845 - AH-4 2-2.5

Param	Flag	Result	Units	RL
Chloride		571	mg/Kg	4.00

Sample: 262846 - AH-4 3-3.5

Param	Flag	Result	Units	RL
Chloride		371	mg/Kg	4.00

Sample: 262847 - AH-4 4-4.5

Param	Flag	Result	Units	RL
Chloride		337	mg/Kg	4.00

Sample: 262848 - AH-4 5-5.5

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

Sample: 262849 - AH-4 6-6.5

Param	Flag	Result	Units	RL
Chloride		210	mg/Kg	4.00

Sample: 262850 - AH-5 0-1

Param	Flag	Result	Units	RL
Chloride		4030	mg/Kg	4.00

Sample: 262851 - AH-5 1-1.5

Param	Flag	Result	Units	RL
Chloride		239	mg/Kg	4.00

Sample: 262852 - AH-5 2-2.5

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

Sample: 262853 - AH-5 3-3.5

Param	Flag	Result	Units	RL
Chloride		239	mg/Kg	4.00

Sample: 262854 - AH-5 4-4.5

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

Sample: 262855 - AH-5 5-5.5

Param	Flag	Result	Units	RL
Chloride		200	mg/Kg	4.00

Sample: 262856 - AH-5 6-6.5

Param	Flag	Result	Units	RL
Chloride		258	mg/Kg	4.00

Sample: 262857 - AH-6 0-1

Param	Flag	Result	Units	RL
Chloride		4000	mg/Kg	4.00

Sample: 262858 - AH-6 1-1.5

Param	Flag	Result	Units	RL
Chloride		5140	mg/Kg	4.00

Sample: 262859 - AH-6 2-2.5

Param	Flag	Result	Units	RL
Chloride		4040	mg/Kg	4.00

Sample: 262860 - AH-6 3-3.5

Param	Flag	Result	Units	RL
Chloride		3920	mg/Kg	4.00

Report Date: April 13, 2011

Work Order: 11040725

Page Number: 8 of 8

Sample: 262861 - AH-6 4-4.5

Param	Flag	Result	Units	RL
Chloride		3580	mg/Kg	4.00

Sample: 262862 - AH-6 5-5.5

Param	Flag	Result	Units	RL
Chloride		5560	mg/Kg	4.00

Sample: 262863 - AH-6 6-6.5

Param	Flag	Result	Units	RL
Chloride		12100	mg/Kg	4.00

Sample: 262864 - AH-6 7-7.5

Param	Flag	Result	Units	RL
Chloride		13100	mg/Kg	4.00

Sample: 262865 - AH-6 8-8.5

Param	Flag	Result	Units	RL
Chloride		17900	mg/Kg	4.00

Sample: 262866 - AH-6 8.5-9

Param	Flag	Result	Units	RL
Chloride		10400	mg/Kg	4.00

SITE INFORMATION

Report Type: Closure Report

General Site Information:

Site:	GC Federal #1 Tank Battery	
Company:	COG Operating LLC	
Section, Township and Range	Unit J Section 19 Township 17S Range 32E	
Lease Number:	30-025-35814 NMLC-029405B	
County:	Lea County	
GPS:	32.81874° N	103.80513° W
Surface Owner:	Federal	
Mineral Owner:		
Directions:	From Gas Plant Road and CR-126 (South of Maljamar, NM), travel 2.0 mi west om Gas Plant Road, turn right 0.2 mi, turn left 0.4 mi, turn left 500' to location.	

Release Data:

Date Released:	2/8/2011
Type Release:	Produced Water
Source of Contamination:	Transfer pump failure
Fluid Released:	300 bbls
Fluids Recovered:	298 bbls

Official Communication:

Name:	Pat Ellis	Ike Tavaréz
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.tavaréz@tetrattech.com

Ranking Criteria

Depth to Groundwater:	Ranking Score	Site Data
<50 ft	20	
50-99 ft	10	
>100 ft.	0	>200'
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

HOBBS OCD

NOV 01 2012

RECEIVED



TETRA TECH

September 24, 2012

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

Re: Remedial Activities and Closure Request for the COG Operating LLC., GC Federal #1 Tank Battery, Unit J, Section 19, 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 GC Federal #1 Tank Battery, Unit J, Section 19, Township 17 South, Range 32 East, Lea County, New Mexico (Site). The spill site coordinates are N 32.81874°, W 103.80513°. 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 February 8, 2011, and released approximately 300 barrels of produced water, from the water tank overflowing. The tank overflowed as a result of freezing temperatures causing failures with both the transfer pump and alarm. Approximately 298 barrels of standing fluids were recovered from the site. The spill was contained within the facility firewalls and impacted an area approximately 100' x 35'. The initial C-141 form is enclosed in Appendix A.

Groundwater

No water wells were listed in Section 19. To establish depth to groundwater, Tetra Tech previously installed a temporary monitor well (TMW) in Section 30 to a depth of 180' bgs and did not encounter groundwater. According to the NMOCD groundwater map, the average

Tetra Tech

1910 North Big Spring, Midland, TX 79705

Tel 432.682.4559 Fax 432.682.3946 www.tetrattech.com



depth to groundwater in this area is greater than 200' below surface. The average depth to groundwater is shown in Appendix B.

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 April 6, 2011, Tetra Tech personnel inspected and sampled the spill area. A total of six (6) auger holes (AH-1 through AH-6) were 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 C. The sampling results are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, all of the submitted samples were below the RRAL for TPH and BTEX. Elevated chloride concentrations were detected in all of the six auger holes. All of the auger holes, except for AH-6, showed a shallow impact to the soils, ranging from 4,380 mg/kg to 12,400 mg/kg. The chloride concentrations significantly declined with at depth at 1.0' to 2.0' below surface. The areas of AH-2 and AH-3 also showed chloride spikes in the subsurface soils, but does not appear be significant and an environmental concern.

Based on the results, the fluids from the release appeared to have pooled in the northwest corner of the facility. The area of AH-6 did show a deeper impact to the soils, with chloride concentrations ranging from 3,580 mg/kg at 3.0' to 17,900 mg/kg at 8.0'. The bottom auger hole sample at 8.5' slightly declined to 10,400 mg/kg. Due to access issues, the impacted area could not be investigated with a drilling rig to define extents.



Closure Activities

As stated in the work plan, the area of AH-6 could not be investigated with a drilling rig due to access issues in the area. The northwest corner of the tank battery is blocked with a 12' to 15' sand dunes and numerous flow lines. In addition, the area to the north of tank battery is also blocked by an electrical panel and L.A.C.T. unit, which limits the access to the area of AH-6.

Tetra Tech personnel supervised the excavation of the site. The final excavation depths of the soil remediation were met as stated in the work plan. The excavation depths are highlighted in Table 1 and shown on Figure 4. The majority of spill's footprint was excavated to approximately 1.0' to 2.0' below surface and general housekeeping performed around tanks and aboveground lines. Due to the congestion of oil and gas equipment and limited access, the area of AH-6 was excavated to an approximate depth of 3.0' below surface and capped bottom with a clay material. Approximately 60 cubic yards of impacted soil were excavated and hauled to proper disposal.

Mr. Jim Amos (BLM) inspected the location and approved the remediation activities performed at the site. In addition, Mr. Geoffrey Leking (NMOCD) was contacted to discuss the site remediation and the access issue in the area of AH-6. Due to a limited impacted area, Tetra Tech requested to defer to impact until abandonment of the facility, which Mr. Leking approved.

Based on the remedial activities performed, COG request closure of the site. A copy of the C-141 (Final) is included in Appendix A. If you have any questions or comments concerning the remedial activities, please call me at (432) 682-4559.

Respectfully submitted,
TETRA TECH

Ike Tavaréz, PG
Senior Project Manager

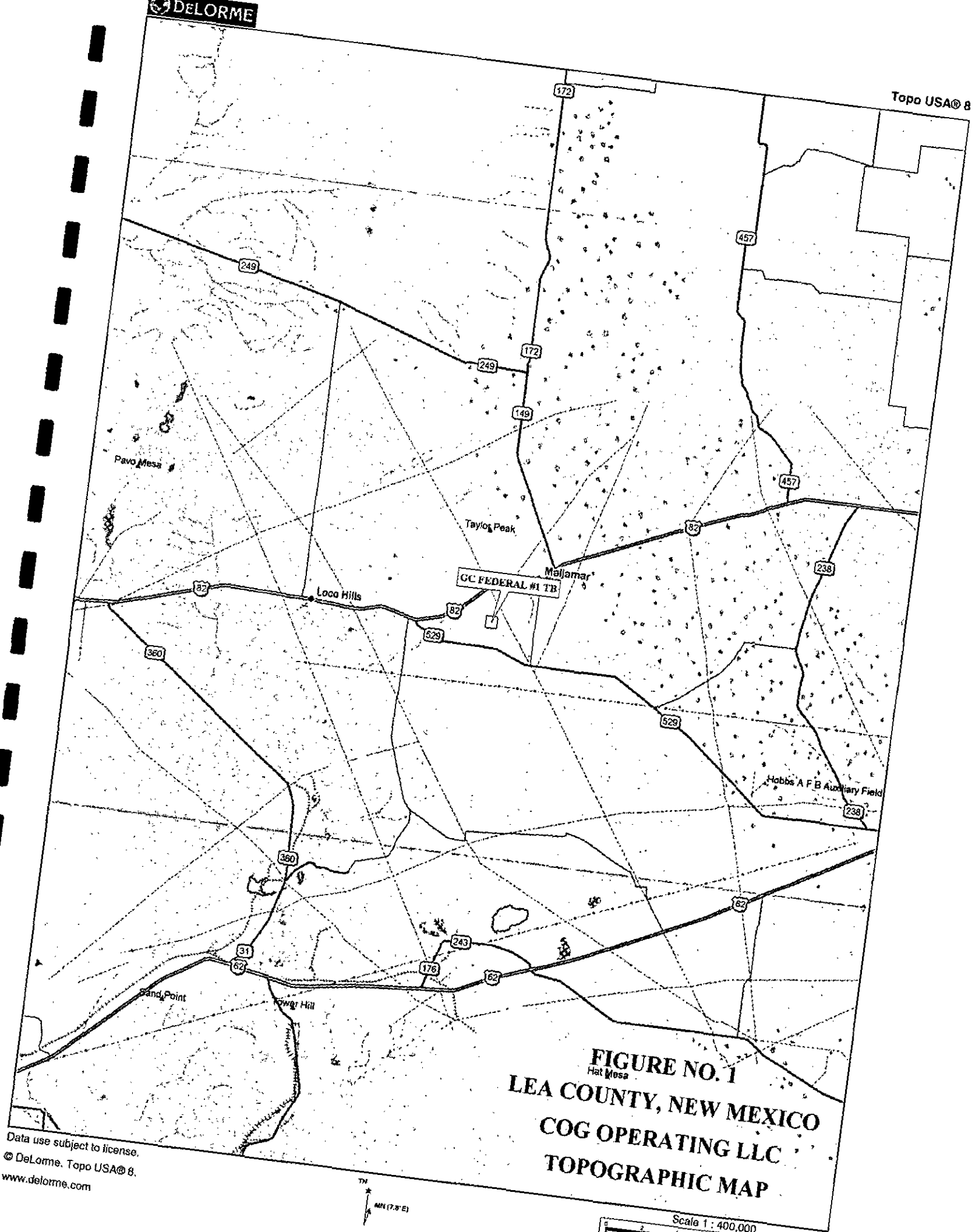
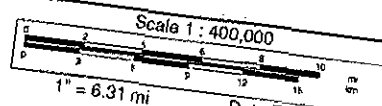
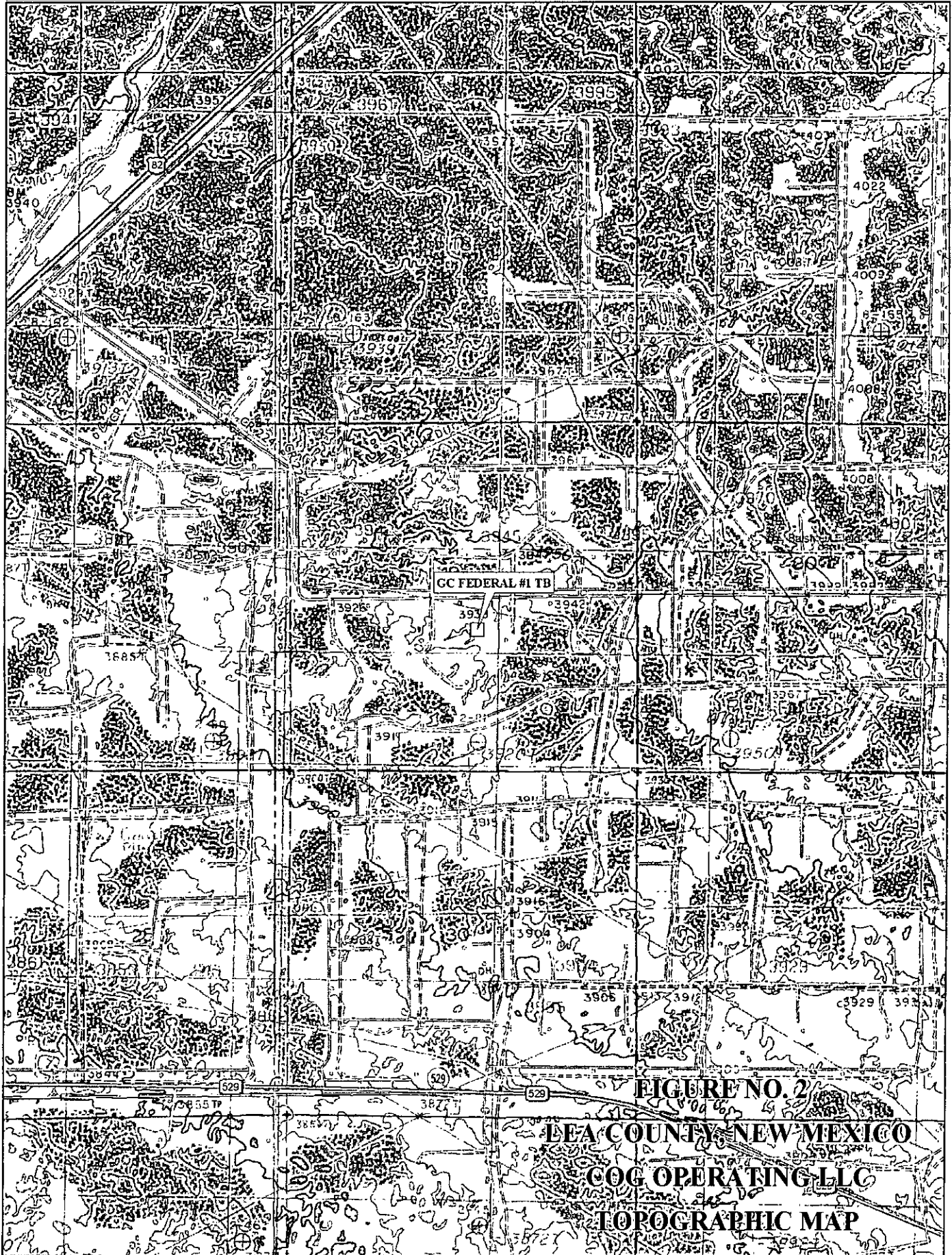


FIGURE NO. 1
LEA COUNTY, NEW MEXICO
COG OPERATING LLC
TOPOGRAPHIC MAP

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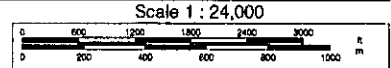


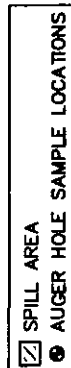


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DATE:	04/13/2011	FILE:	HE\COG\64008228
OWNL BY:	IM		05/08/11 11:17

FIGURE NO. 3

LEA COUNTY, NEW MEXICO

COG OPERATING LLC

GC FED #1 TB

TETRA TECH, INC.
MIDLAND, TEXAS

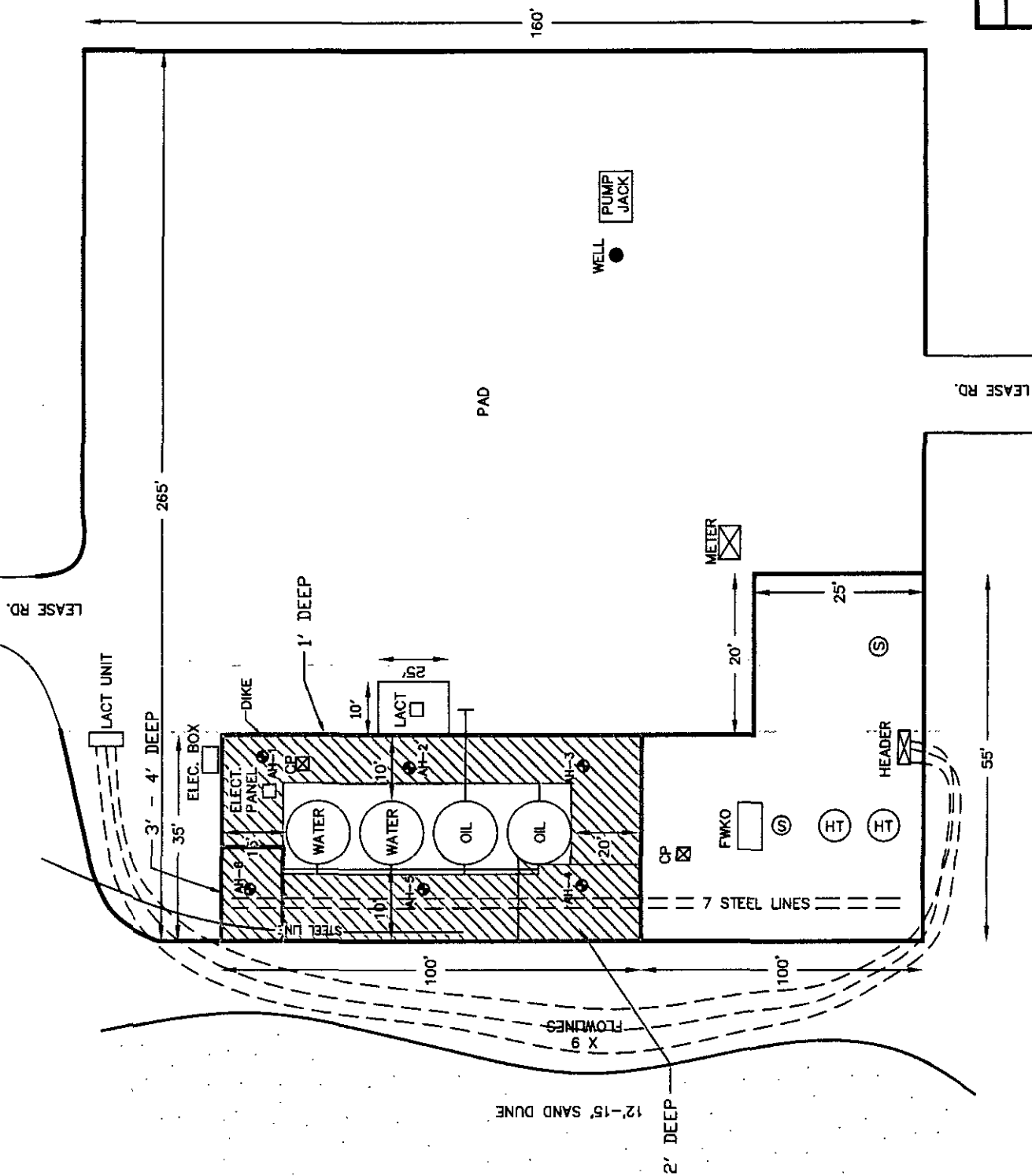


FIGURE NO. 4

ILEA COUNTY, NEW MEXICO

COG OPERATING LLC

GC FED #1 TB

TETRA TECH, INC.
MIDLAND, TEXAS

DATE:	10/12/2011
DIAL BY:	IM
FILE:	HE\COG\6400828

NOT TO SCALE

● AUGER HOLE SAMPLE LOCATIONS
 ▨ EXCAVATED AREA
 □ INSTALLED LINER

Table 1
COG Operating LLC.
GC FEDERAL #1
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total					
AH-1	4/6/2011	0-1'		X	3.67	<50.0	3.67	<0.0200	<0.0200	<0.0200	0.359	9,440
	"	1-1.5'	X		-	-	-	-	-	-	-	313
	"	2-2.5'	X		-	-	-	-	-	-	-	255
	"	3-3.5'	X		-	-	-	-	-	-	-	<200
	"	4-4.5'	X		-	-	-	-	-	-	-	210
	"	5-5.5'	X		-	-	-	-	-	-	-	<200
	"	6-6.5'	X		-	-	-	-	-	-	-	<200
AH-2	4/6/2011	0-1'		X	76.3	57.0	133.3	<0.0200	<0.0200	0.373	1.55	7,680
	"	1-1.5'	X		-	-	-	-	-	-	-	589
	"	2-2.5'	X		-	-	-	-	-	-	-	<200
	"	3-3.5'	X		-	-	-	-	-	-	-	<200
	"	4-4.5'	X		-	-	-	-	-	-	-	<200
	"	5-5.5'	X		-	-	-	-	-	-	-	598
	"	6-6.5'	X		-	-	-	-	-	-	-	1,250
	"	7-7.5'	X		-	-	-	-	-	-	-	979
	"	8-8.5'	X		-	-	-	-	-	-	-	258
	"	9-9.5'	X		-	-	-	-	-	-	-	408
	"	10-10.5'	X		-	-	-	-	-	-	-	224

Table 1
COG Operating LLC.
GC FEDERAL #1
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total					
AH-3	4/6/2011	0-1'		X	109	218	327	<0.0200	<0.0200	<0.0200	<0.0200	14,380
	"	1-1.5'	X		-	-	-	-	-	-	-	535
	"	2-2.5'	X		-	-	-	-	-	-	-	715
	"	3-3.5'	X		-	-	-	-	-	-	-	622
	"	4-4.5'	X		-	-	-	-	-	-	-	433
	"	5-5.5'	X		-	-	-	-	-	-	-	<200
	"	6-6.5'	X		-	-	-	-	-	-	-	228
AH-4	4/6/2011	0-1'		X	752	50.0	752	<0.0200	<0.0200	<0.0200	<0.0200	12,400
	"	1-1.5'		X	-	-	-	-	-	-	-	9,750
	"	2-2.5'	X		-	-	-	-	-	-	-	571
	"	3-3.5'	X		-	-	-	-	-	-	-	371
	"	4-4.5'	X		-	-	-	-	-	-	-	337
	"	5-5.5'	X		-	-	-	-	-	-	-	<200
	"	6-6.5'	X		-	-	-	-	-	-	-	210

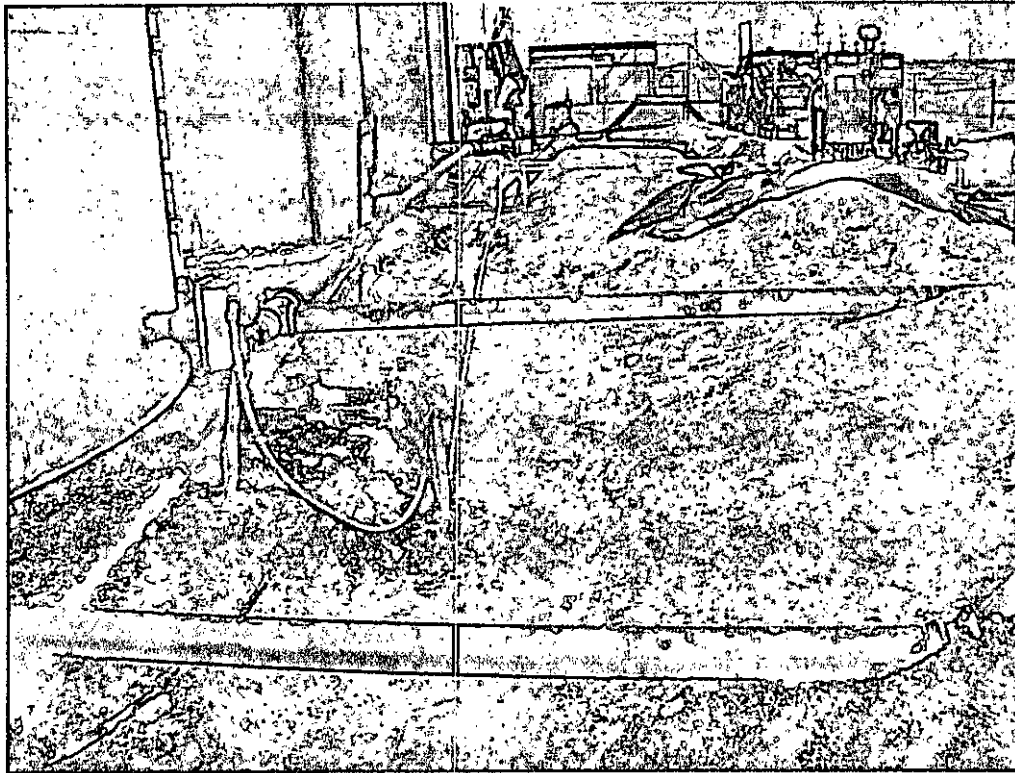
Table 1
COG Operating LLC.
GC FEDERAL #1
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total					
AH-5	4/6/2011	0-1'		X	33.0	88.3	121.3	<0.0200	<0.0200	0.263	0.788	4,030
	"	1-1.5'	X		-	-	-	-	-	-	-	239
	"	2-2.5'	X		-	-	-	-	-	-	-	<200
	"	3-3.5'	X		-	-	-	-	-	-	-	239
	"	4-4.5'	X		-	-	-	-	-	-	-	<200
	"	5-5.5'	X		-	-	-	-	-	-	-	200
	"	6-6.5'	X		-	-	-	-	-	-	-	258
AH-6	4/6/2011	0-1'		X	16.8	255	271.8	<0.0200	<0.0200	0.152	0.409	4,000
	"	1-1.5'		X								5,140
	"	2-2.5'		X								4,040
	"	3-3.5'		X								3,920
	"	4-4.5'		X								3,580
	"	5-5.5'	X		-	-	-	-	-	-	-	5,560
	"	6-6.5'	X		-	-	-	-	-	-	-	12,100
	"	7-7.5'	X		-	-	-	-	-	-	-	13,100
	"	8-8.5'	X		-	-	-	-	-	-	-	17,900
	"	8.5'-9'	X		-	-	-	-	-	-	-	10,400

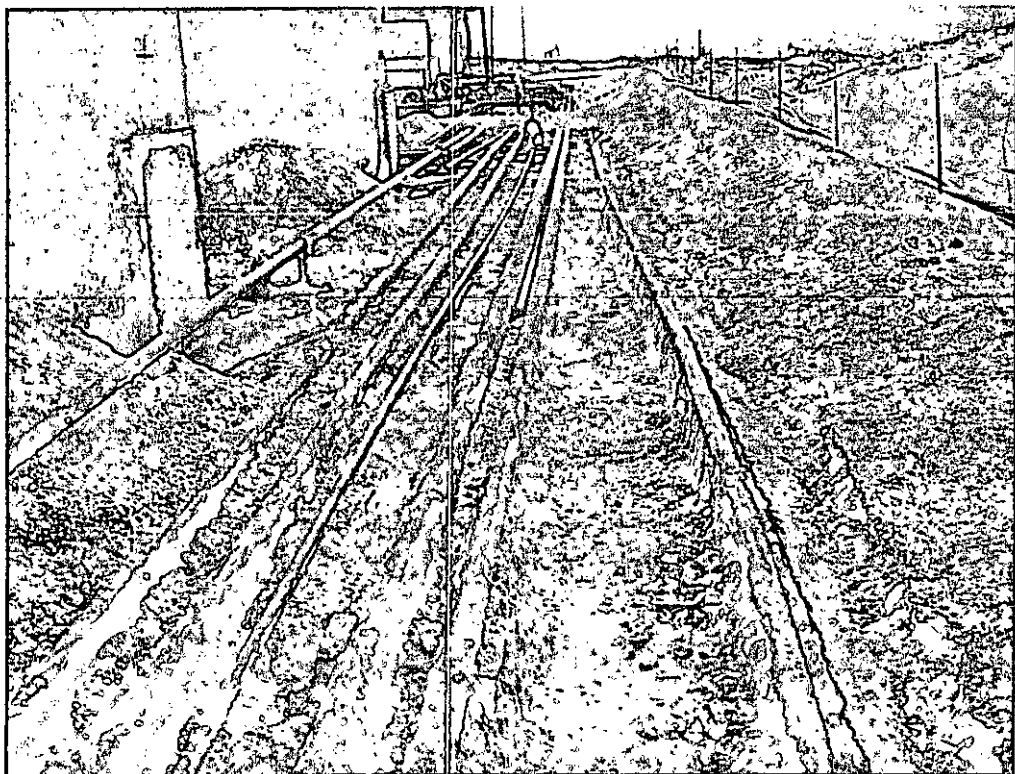
(--) Not Analyzed
 Excavation Depths
 Clay Liner Installation and Depth



TETRA TECH



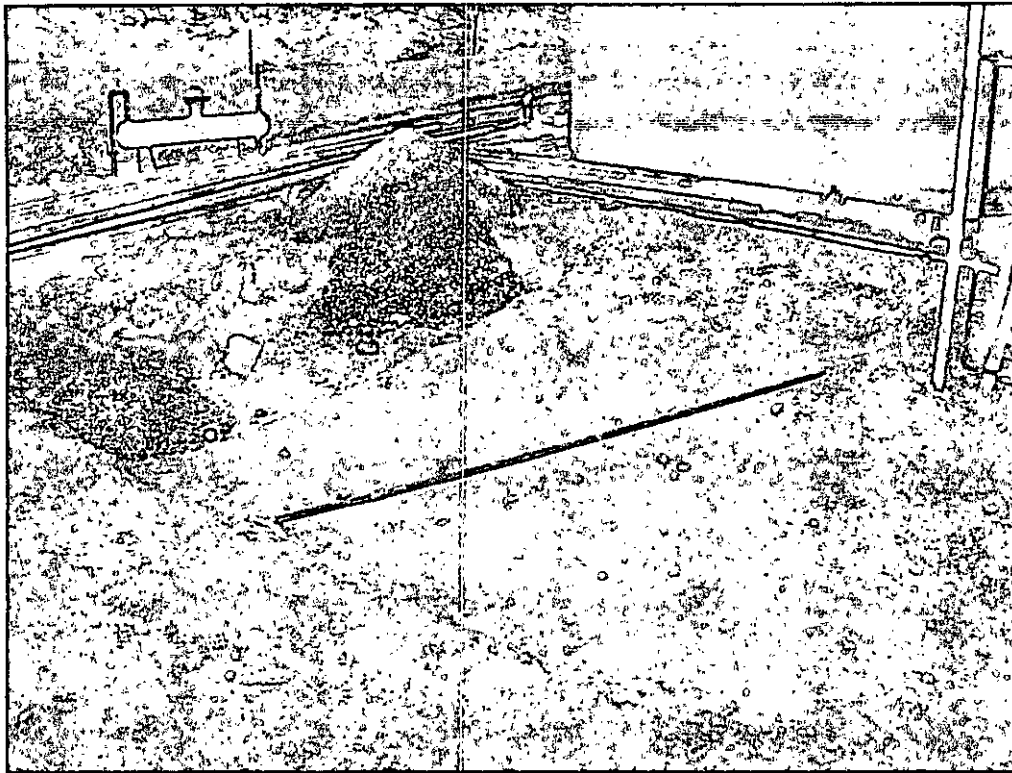
Front of battery excavated approximately 1.0' below surface
Photo near AH-3



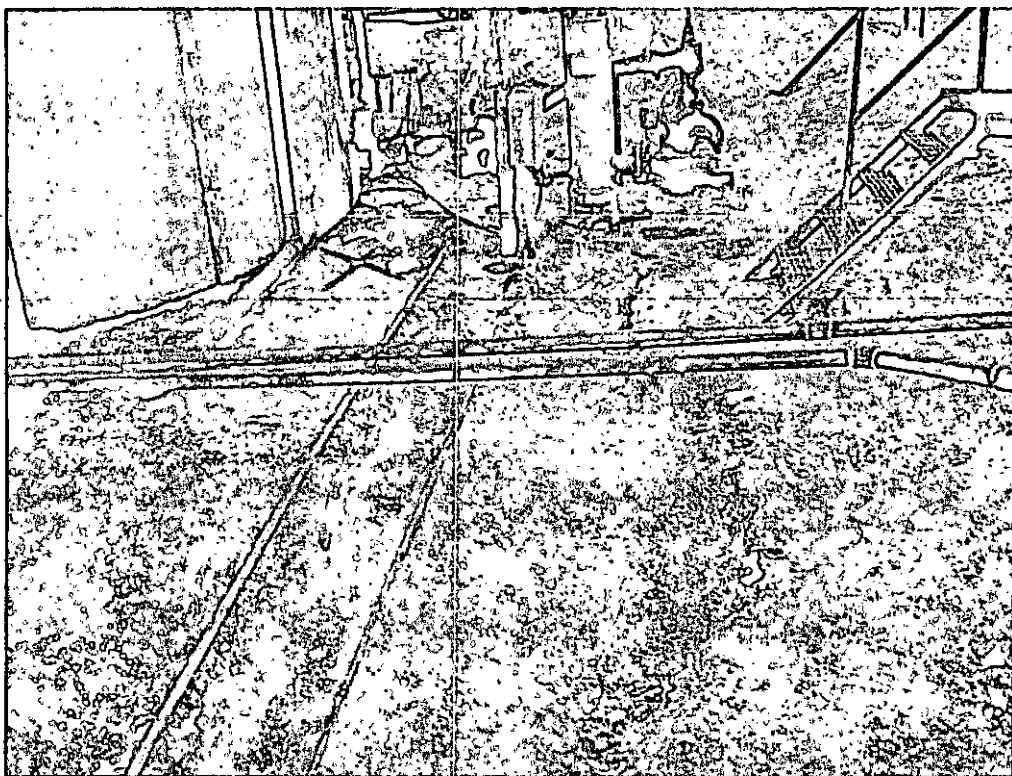
Rear of battery excavated approximately 1.0' below surface
Photo near AH-5



TETRA TECH



Excavation approximately 1.0-1.5' below surface
Photo near area of AH-4

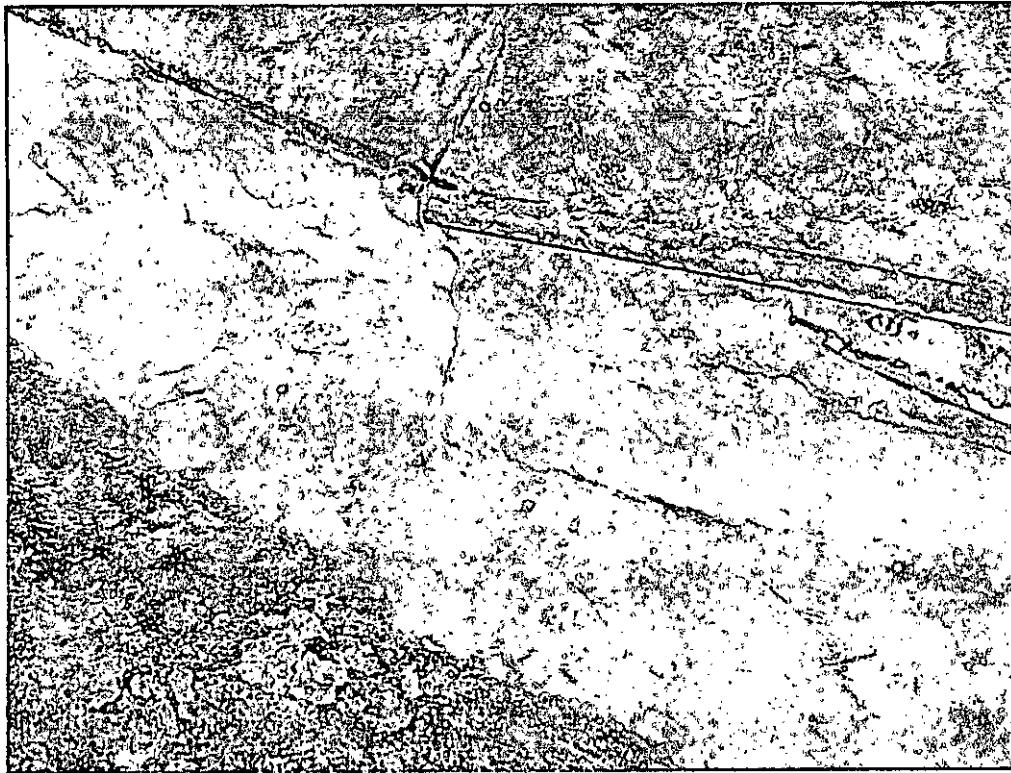


General housekeeping and excavation around oil and gas equipment

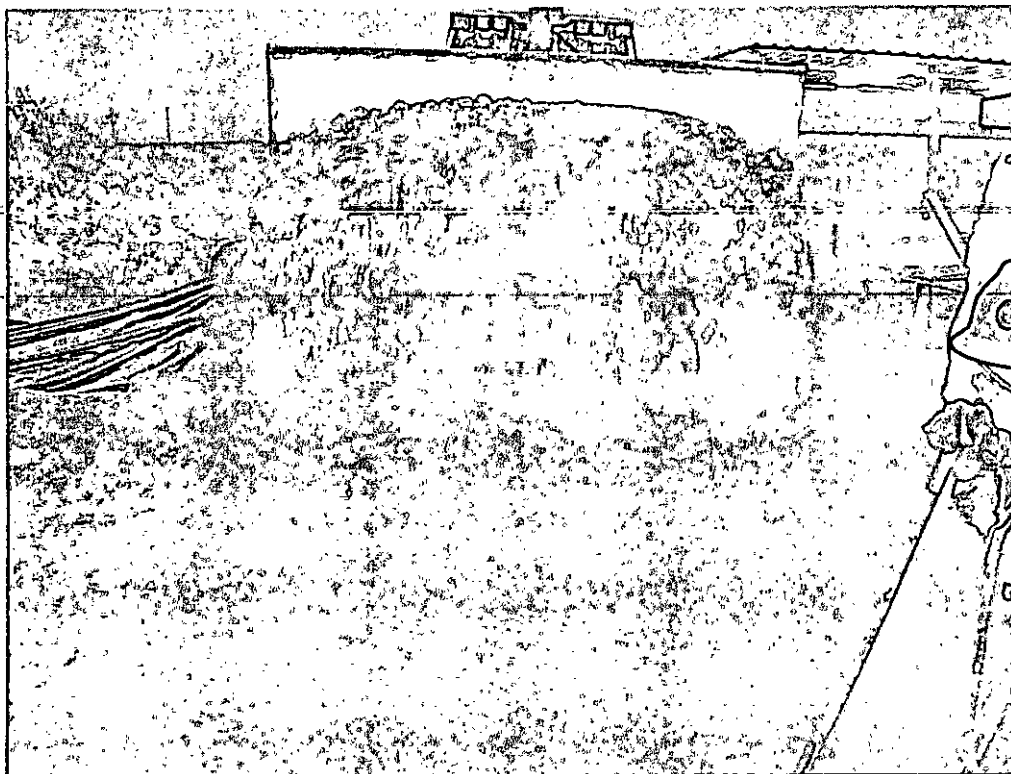
COG Operating LLC
GC Federal #1
Lea County, New Mexico
Site Excavated: November 2011



TETRA TECH



Excavation approximately 1.0-1.5' below surface
Photo near area of AH-6



Site backfilled with clean material and brought up to surface grade

Water Well Data
Average Depth to Groundwater (ft)
COG - GC Federal #1
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	32	33	34	35	36
290					

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	35	36
					271

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

16 South			32 East		
6	5	4	3	2	1
			65	285	265
7	8	9	10	11	12
					215
18	17	16	15	14	13
			221		215
19	20	21	22	23	24
220		210		210	
30	29	28	27	26	25
				243	
31	32	33	34	35	36
					260

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

18 South			32 East		
6	5	4	3	2	1
			65		
7	460	8	9	10	11
82					130' Dry
18	17	16	15	14	13
			84		
19	20	21	22	23	24
			184	429	
30	29	28	27	26	25
31	32	33	34	35	36
					117

16 South			33 East		
6	5	4	3	2	1
		180	150	130	
7	8	9	10	11	12
		200	182	148	142
18	17	16	15	14	13
		182	180	175	143
19	20	21	22	23	24
				120	
30	29	28	27	26	25
191		190	130	143	120
31	32	33	34	35	36
190	188		160		

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

18 South			33 East		
6	5	4	3	2	1
7	8	100	9	10	11
				62	143
18	17	16	15	14	13
		65		36	60
19	20	21	22	23	24
>140					195
30	29	28	27	26	25
35					
31	32	33	34	35	36
			177		

-  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
-  Site - GC Federal #1
-  Tetra Tech Temporary well

Summary Report

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

Report Date: April 13, 2011

Work Order: 11040725

Project Location: Lea Co., NM
Project Name: COG/GC Fed. #1
Project Number: 114-6400828

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
262818	AH-1 0-1	soil	2011-04-06	00:00	2011-04-07
262819	AH-1 1-1.5	soil	2011-04-06	00:00	2011-04-07
262820	AH-1 2-2.5	soil	2011-04-06	00:00	2011-04-07
262821	AH-1 3-3.5	soil	2011-04-06	00:00	2011-04-07
262822	AH-1 4-4.5	soil	2011-04-06	00:00	2011-04-07
262823	AH-1 5-5.5	soil	2011-04-06	00:00	2011-04-07
262824	AH-1 6-6.5	soil	2011-04-06	00:00	2011-04-07
262825	AH-2 0-1	soil	2011-04-06	00:00	2011-04-07
262826	AH-2 1-1.5	soil	2011-04-06	00:00	2011-04-07
262827	AH-2 2-2.5	soil	2011-04-06	00:00	2011-04-07
262828	AH-2 3-3.5	soil	2011-04-06	00:00	2011-04-07
262829	AH-2 4-4.5	soil	2011-04-06	00:00	2011-04-07
262830	AH-2 5-5.5	soil	2011-04-06	00:00	2011-04-07
262831	AH-2 6-6.5	soil	2011-04-06	00:00	2011-04-07
262832	AH-2 7-7.5	soil	2011-04-06	00:00	2011-04-07
262833	AH-2 8-8.5	soil	2011-04-06	00:00	2011-04-07
262834	AH-2 9-9.5	soil	2011-04-06	00:00	2011-04-07
262835	AH-2 10-10.5	soil	2011-04-06	00:00	2011-04-07
262836	AH-3 0-1	soil	2011-04-06	00:00	2011-04-07
262837	AH-3 1-1.5	soil	2011-04-06	00:00	2011-04-07
262838	AH-3 2-2.5	soil	2011-04-06	00:00	2011-04-07
262839	AH-3 3-3.5	soil	2011-04-06	00:00	2011-04-07
262840	AH-3 4-4.5	soil	2011-04-06	00:00	2011-04-07
262841	AH-3 5-5.5	soil	2011-04-06	00:00	2011-04-07
262842	AH-3 6-6.5	soil	2011-04-06	00:00	2011-04-07
262843	AH-4 0-1	soil	2011-04-06	00:00	2011-04-07
262844	AH-4 1-1.5	soil	2011-04-06	00:00	2011-04-07
262845	AH-4 2-2.5	soil	2011-04-06	00:00	2011-04-07
262846	AH-4 3-3.5	soil	2011-04-06	00:00	2011-04-07
262847	AH-4 4-4.5	soil	2011-04-06	00:00	2011-04-07

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
262848	AH-4 5-5.5	soil	2011-04-06	00:00	2011-04-07
262849	AH-4 6-6.5	soil	2011-04-06	00:00	2011-04-07
262850	AH-5 0-1	soil	2011-04-06	00:00	2011-04-07
262851	AH-5 1-1.5	soil	2011-04-06	00:00	2011-04-07
262852	AH-5 2-2.5	soil	2011-04-06	00:00	2011-04-07
262853	AH-5 3-3.5	soil	2011-04-06	00:00	2011-04-07
262854	AH-5 4-4.5	soil	2011-04-06	00:00	2011-04-07
262855	AH-5 5-5.5	soil	2011-04-06	00:00	2011-04-07
262856	AH-5 6-6.5	soil	2011-04-06	00:00	2011-04-07
262857	AH-6 0-1	soil	2011-04-06	00:00	2011-04-07
262858	AH-6 1-1.5	soil	2011-04-06	00:00	2011-04-07
262859	AH-6 2-2.5	soil	2011-04-06	00:00	2011-04-07
262860	AH-6 3-3.5	soil	2011-04-06	00:00	2011-04-07
262861	AH-6 4-4.5	soil	2011-04-06	00:00	2011-04-07
262862	AH-6 5-5.5	soil	2011-04-06	00:00	2011-04-07
262863	AH-6 6-6.5	soil	2011-04-06	00:00	2011-04-07
262864	AH-6 7-7.5	soil	2011-04-06	00:00	2011-04-07
262865	AH-6 8-8.5	soil	2011-04-06	00:00	2011-04-07
262866	AH-6 8.5-9	soil	2011-04-06	00:00	2011-04-07

Sample - Field Code	BTEX				TPH DRO - NEW	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
262818 - AH-1 0-1	<0.0200	<0.0200	<0.0200	0.359	<50.0	3.67
262825 - AH-2 0-1	<0.0200	<0.0200	0.373	1.55	57.0	76.3
262836 - AH-3 0-1	<0.0200	<0.0200	<0.0200	<0.0200	218	109
262843 - AH-4 0-1	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	7.52
262850 - AH-5 0-1	<0.0200	<0.0200	0.263	0.788	88.3	33.0
262857 - AH-6 0-1	<0.0200	<0.0200	0.152	0.409	255	16.8

Sample: 262818 - AH-1 0-1

Param	Flag	Result	Units	RL
Chloride		9440	mg/Kg	4.00

Sample: 262819 - AH-1 1-1.5

Param	Flag	Result	Units	RL
Chloride		313	mg/Kg	4.00

Sample: 262820 - AH-1 2-2.5

Param	Flag	Result	Units	RL
Chloride		255	mg/Kg	4.00

Sample: 262821 - AH-1 3-3.5

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

Sample: 262822 - AH-1 4-4.5

Param	Flag	Result	Units	RL
Chloride		210	mg/Kg	4.00

Sample: 262823 - AH-1 5-5.5

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

Sample: 262824 - AH-1 6-6.5

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

Sample: 262825 - AH-2 0-1

Param	Flag	Result	Units	RL
Chloride		7680	mg/Kg	4.00

Sample: 262826 - AH-2 1-1.5

Param	Flag	Result	Units	RL
Chloride		589	mg/Kg	4.00

Sample: 262827 - AH-2 2-2.5

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

Sample: 262828 - AH-2 3-3.5

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

Sample: 262829 - AH-2 4-4.5

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

Sample: 262830 - AH-2 5-5.5

Param	Flag	Result	Units	RL
Chloride		598	mg/Kg	4.00

Sample: 262831 - AH-2 6-6.5

Param	Flag	Result	Units	RL
Chloride		1250	mg/Kg	4.00

Sample: 262832 - AH-2 7-7.5

Param	Flag	Result	Units	RL
Chloride		979	mg/Kg	4.00

Sample: 262833 - AH-2 8-8.5

Param	Flag	Result	Units	RL
Chloride		258	mg/Kg	4.00

Sample: 262834 - AH-2 9-9.5

Param	Flag	Result	Units	RL
Chloride		408	mg/Kg	4.00

Sample: 262835 - AH-2 10-10.5

Param	Flag	Result	Units	RL
Chloride		224	mg/Kg	4.00

Sample: 262836 - AH-3 0-1

Param	Flag	Result	Units	RL
Chloride		4380	mg/Kg	4.00

Sample: 262837 - AH-3 1-1.5

Param	Flag	Result	Units	RL
Chloride		535	mg/Kg	4.00

Sample: 262838 - AH-3 2-2.5

Param	Flag	Result	Units	RL
Chloride		715	mg/Kg	4.00

Sample: 262839 - AH-3 3.3.5

Param	Flag	Result	Units	RL
Chloride		622	mg/Kg	4.00

Sample: 262840 - AH-3 4-4.5

Param	Flag	Result	Units	RL
Chloride		433	mg/Kg	4.00

Sample: 262841 - AH-3 5-5.5

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

Sample: 262842 - AH-3 6-6.5

Param	Flag	Result	Units	RL
Chloride		228	mg/Kg	4.00

Sample: 262843 - AH-4 0-1

Param	Flag	Result	Units	RL
Chloride		12400	mg/Kg	4.00

Sample: 262844 - AH-4 1-1.5

Param	Flag	Result	Units	RL
Chloride		9750	mg/Kg	4.00

Sample: 262845 - AH-4 2-2.5

Param	Flag	Result	Units	RL
Chloride		571	mg/Kg	4.00

Sample: 262846 - AH-4 3-3.5

Param	Flag	Result	Units	RL
Chloride		371	mg/Kg	4.00

Sample: 262847 - AH-4 4-4.5

Param	Flag	Result	Units	RL
Chloride		337	mg/Kg	4.00

Sample: 262848 - AH-4 5-5.5

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

Sample: 262849 - AH-4 6-6.5

Param	Flag	Result	Units	RL
Chloride		210	mg/Kg	4.00

Sample: 262850 - AH-5 0-1

Param	Flag	Result	Units	RL
Chloride		4030	mg/Kg	4.00

Sample: 262851 - AH-5 1-1.5

Param	Flag	Result	Units	RL
Chloride		239	mg/Kg	4.00

Sample: 262852 - AH-5 2-2.5

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

Sample: 262853 - AH-5 3-3.5

Param	Flag	Result	Units	RL
Chloride		239	mg/Kg	4.00

Sample: 262854 - AH-5 4-4.5

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

Sample: 262855 - AH-5 5-5.5

Param	Flag	Result	Units	RL
Chloride		200	mg/Kg	4.00

Sample: 262856 - AH-5 6-6.5

Param	Flag	Result	Units	RL
Chloride		258	mg/Kg	4.00

Sample: 262857 - AH-6 0-1

Param	Flag	Result	Units	RL
Chloride		4000	mg/Kg	4.00

Sample: 262858 - AH-6 1-1.5

Param	Flag	Result	Units	RL
Chloride		5140	mg/Kg	4.00

Sample: 262859 - AH-6 2-2.5

Param	Flag	Result	Units	RL
Chloride		4040	mg/Kg	4.00

Sample: 262860 - AH-6 3-3.5

Param	Flag	Result	Units	RL
Chloride		3920	mg/Kg	4.00

Report Date: April 13, 2011

Work Order: 11040725

Page Number: 8 of 8

Sample: 262861 - AH-6 4-4.5

Param	Flag	Result	Units	RL
Chloride		3580	mg/Kg	4.00

Sample: 262862 - AH-6 5-5.5

Param	Flag	Result	Units	RL
Chloride		5560	mg/Kg	4.00

Sample: 262863 - AH-6 6-6.5

Param	Flag	Result	Units	RL
Chloride		12100	mg/Kg	4.00

Sample: 262864 - AH-6 7-7.5

Param	Flag	Result	Units	RL
Chloride		13100	mg/Kg	4.00

Sample: 262865 - AH-6 8-8.5

Param	Flag	Result	Units	RL
Chloride		17900	mg/Kg	4.00

Sample: 262866 - AH-6 8.5-9

Param	Flag	Result	Units	RL
Chloride		10400	mg/Kg	4.00