

Bratcher, Mike, EMNRD

From: Tavarez, Ike [Ike.Tavarez@tetratech.com]
Sent: Monday, October 11, 2010 3:45 PM
To: Bratcher, Mike, EMNRD
Cc: Pat Ellis; Joshua Russo
Subject: COG- Coyote State #5 Work Plan
Attachments: COG - Coyote State #5 Work Plan .pdf; COG - Coyote State #5 Figures .pdf

COG Operating
Coyote State #5 Water Line Leak
Section 36, T17S, R31E
Eddy County, New Mexico
32.78846. 103.81546

Mike,

Please find enclosed the work plan for the Coyote State #5 leak located in Eddy County, New Mexico. On September 1, 2010, Tetra Tech met in your office to discuss the site data and proposed excavation depths. The proposed excavation depths were approved and discussed in the attached work plan. Tetra Tech will schedule the soil remediation in the next couple weeks and will notify you before we start. Please call me if you have any questions, thanks

Ike Tavarez, PG Senior Project Manager

Phone: 432.682.1546 | Fax: 432.682.3946 | Cell: 432.682.3578

Ike.Tavarez@tetratech.com

Tetra Tech | Customized Groundwater Solutions

101 North Braddock | Midland, TX 79706 | www.tetratech.com

PLEASE NOTE: This message, including any attachments, may include private, confidential and/or inside information. Any distribution or use of this communication, except to other than the intended recipient(s) may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.



TETRA TECH

September 17, 2010

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

Re: Work Plan for the COG Operating LLC., Coyote State #5, Water Trunk Line Leak, Unit I, Section 36, Township 17 South, Range 31 East, Eddy County, New Mexico. (API 30-015-03563)

Mr. Bratcher:

Tetra Tech Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess the spill from the Coyote State #5, Water Trunk Line Leak located in Unit I, Section 36 Township 17 South, Range 31 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.78846°, W 103.81546°. 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 March 27, 2010. Approximately 150 barrels of produced water was released from a broken tee on a produced water truck line. Vacuum trucks were utilized to recover 140 barrels of standing fluids. The initial C-141 is enclosed in Appendix A.

Groundwater

No water wells were listed within Section 36. According to the *Geology and Groundwater Resources of Eddy County, New Mexico* (Report 3), one well is located in Section 34, with a reported depth to water of 271' below surface. According to the NMOCD groundwater map, the average depth to groundwater in this area is greater than 350' below surface. The *Geology and Groundwater Resources of Eddy County, New Mexico* (Report 3) well report data is shown in Appendix B.

Regulatory

Tetra Tech

For: [illegible] Fax: [illegible]



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 Results

On April 22, 2010, Tetra Tech personnel inspected and sampled the spill area. The spill area is shown on Figure 3. A total of fifteen (15) auger holes (AH-1 through AH-15) 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 results of the sampling are summarized in Table 1.

Referring to Table 1, no BTEX and TPH concentrations exceeded the RRAL. Chloride impact was vertically defined in the majority of the auger holes, with the exception of AH-4, AH-5, AH-7, AH-8, AH-9 and AH-10. These auger holes were not vertically defined and required additional delineation.

On August 11, 2010, Tetra Tech personnel were onsite to supervise the installation of six (6) soil borings (SB-1 through SB-6) utilizing an air rotary drilling rig. The soil boring locations are shown on Figure 3. The borings were installed in the vicinity of the undefined auger holes. The soil borings were extended to a depth from 20' to 50' below surface, with samples collected at 2 to 3 foot intervals for the first 10 feet and 5 foot intervals thereafter and submitted to the laboratory for chloride analysis. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 1.

Conclusions

Referring to Table 1, the deepest chloride impact was detected in the areas of AH-8 (SB-2) and AH-9 (SB-3) at a depth of approximately 20' below surface. Auger holes (AH-3, AH-4, AH-5, AH-6, AH-7 and AH-10) did show a deeper impact to the soil to approximately 3' to 10' below surface. The remaining areas of auger holes (AH-1, AH-2, AH-11, AH-12, AH-13, AH-14 and AH-15) showed a shallow impact (0-1') to the soils.



TETRA TECH

Work Plan

COG proposes to excavate the impacted soil from the area. Based on the data and depth to groundwater, the impacted soil will be excavated at depths ranging from 1.0' to 20.0' below surface. The proposed excavation depths (highlighted) are shown in Table 1. The excavation depths are also shown on Figure 4. Tetra Tech personnel will supervise the removal of impacted soils and transport to CRI for proper disposal. The excavated area will then be backfilled with clean soil to grade.

Since the impacted area is in the native sand dunes, the proposed excavation depths may not be reached due to wall cave ins, safety concerns for lines and equipment operators, as well as other onsite personnel. As such, Tetra Tech will excavate the soils to the maximum extent practicable.

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

Ike Tavarez, P.G.
Senior Project Manager

cc: Pat Ellis – COG

Table 1
COG Operating LLC.
Coyote State #5
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-1	4/22/2010	0-1'		X		<1.00	<50.0	<50.0	-	-	-	-	798
		1-1.5'		X		-	-	-	-	-	-	-	4,590
		2-2.5'		X		-	-	-	-	-	-	-	222
		3-3.5'		X		-	-	-	-	-	-	-	<200
		4-4.5'		X		-	-	-	-	-	-	-	<200
		5-5.5'		X		-	-	-	-	-	-	-	<200
		6-6.5'		X		-	-	-	-	-	-	-	<200
		7-7.5'		X		-	-	-	-	-	-	-	<200
		8-8.5'		X		-	-	-	-	-	-	-	<200
		9-9.5'		X		-	-	-	-	-	-	-	<200
AH-2	4/22/2010	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	790
		1-1.5'		X		-	-	-	-	-	-	-	<200
		2-2.5'		X		-	-	-	-	-	-	-	<200
		3-3.5'		X		-	-	-	-	-	-	-	<200
		4-4.5'		X		-	-	-	-	-	-	-	<200
		5-5.5'		X		-	-	-	-	-	-	-	<200
		6-6.5'		X		-	-	-	-	-	-	-	<200
		7-7.5'		X		-	-	-	-	-	-	-	<200
		8-8.5'		X		-	-	-	-	-	-	-	<200
		9-9.5'		X		-	-	-	-	-	-	-	<200

Green Highlight - Proposed Excavation Depths

Table 1
COG Operating LLC.
Coyote State #5
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-3	4/22/2010	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	1,540
		1-1.5'		X		-	-	-	-	-	-	-	1,190
		2-2.5'		X		-	-	-	-	-	-	-	1,560
		3-3.5'		X		-	-	-	-	-	-	-	1,250
		4-4.5'		X		-	-	-	-	-	-	-	990
		5-5.5'		X		-	-	-	-	-	-	-	640
		6-6.5'		X		-	-	-	-	-	-	-	470
		7-7.5'		X		-	-	-	-	-	-	-	285
		8-8.5'		X		-	-	-	-	-	-	-	<200
		9-9.5'		X		-	-	-	-	-	-	-	<200

Green Highlight - Proposed Excavation Depths

Table 1
COG Operating LLC.
Coyote State #5
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-4	4/22/2010	0-1'		X		<1.00	<50.0	<50.0	-	-	-	-	2,310
		1-1.5'		X				-	-	-	-	-	941
		2-2.5'		X				-	-	-	-	-	906
		3-3.5'		X				-	-	-	-	-	931
		4-4.5'		X				-	-	-	-	-	1,060
		5-5.5'		X				-	-	-	-	-	1,020
		6-6.5'		X		-	-	-	-	-	-	-	971
		7-7.5'		X		-	-	-	-	-	-	-	1,030
		8-8.5'		X		-	-	-	-	-	-	-	1,010
		9-9.5'		X		-	-	-	-	-	-	-	881
SB-5	8/11/2010	1'		X		<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	2,060
	"	3'		X				-	-	-	-	-	760
	"	5'		X				-	-	-	-	-	687
	"	7'		X		-	-	-	-	-	-	-	636
	"	10'		X		-	-	-	-	-	-	-	837
	"	15'		X		-	-	-	-	-	-	-	1,020
	"	20'		X		-	-	-	-	-	-	-	<200

Green Highlight - Proposed Excavation Depths

Table 1
COG Operating LLC.
Coyote State #5
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-5	4/22/2010	0-1'		X		<1.00	<50.0	<50.0	-	-	-	-	5,590
		1-1.5'		X		-	-	-	-	-	-	-	8,980
		2-2.5'		X		-	-	-	-	-	-	-	3,910
		3-3.5'		X		-	-	-	-	-	-	-	3,890
		4-4.5'		X		-	-	-	-	-	-	-	3,790
		5-5.5'		X		-	-	-	-	-	-	-	2,620
		6-6.5'		X		-	-	-	-	-	-	-	2,120
		7-7.5'		X		-	-	-	-	-	-	-	2,440
		8-8.5'		X		-	-	-	-	-	-	-	6,240
		9-9.5'		X		-	-	-	-	-	-	-	7,980
SB-1	8/11/2010	1'		X		<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	808
	"	3'		X		-	-	-	-	-	-	-	3,920
	"	5'		X		-	-	-	-	-	-	-	4,710
	"	7'		X		-	-	-	-	-	-	-	3,670
	"	10'		X		-	-	-	-	-	-	-	8,120
	"	15'		X		-	-	-	-	-	-	-	295
	"	20'		X		-	-	-	-	-	-	-	553
	"	25'		X		-	-	-	-	-	-	-	284

Green Highlight - Proposed Excavation Depths

Table 1
COG Operating LLC.
Coyote State #5
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-6	4/22/2010	0-1'		X		9.05	60.80	69.85	<0.0100	<0.0100	<0.0100	0.0911	4,430
		1-1.5'		X					-	-	-	-	17,100
		2-2.5'		X					-	-	-	-	5,980
		3-3.5'		X					-	-	-	-	5,820
		4-4.5'		X					-	-	-	-	4,350
		5-5.5'		X					-	-	-	-	2,660
		6-6.5'		X					-	-	-	-	4,670
		7-7.5'		X					-	-	-	-	10,200
		8-8.5'		X		-	-	-	-	-	-	-	<200
		9-9.5'		X		-	-	-	-	-	-	-	<200

Green Highlight - Proposed Excavation Depths

Table 1
COG Operating LLC.
Coyote State #5
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-7	4/22/2010	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	7,320
		1-1.5'		X		-	-	-	-	-	-	-	682
		2-2.5'		X		-	-	-	-	-	-	-	826
		3-3.5'		X		-	-	-	-	-	-	-	1,360
		4-4.5'		X		-	-	-	-	-	-	-	3,620
		5-5.5'		X		-	-	-	-	-	-	-	3,950
		6-6.5'		X		-	-	-	-	-	-	-	3,910
		7-7.5'		X		-	-	-	-	-	-	-	4,060
		8-8.5'		X		-	-	-	-	-	-	-	4,370
		9-9.5'		X		-	-	-	-	-	-	-	5,200
SB-6	8/11/2010	1'		X		<2.00	<50.0	<50.0	-	-	-	-	5,600
	"	3'		X		-	-	-	-	-	-	-	1,180
	"	5'		X		-	-	-	-	-	-	-	1,930
	"	7'		X		-	-	-	-	-	-	-	4,030
	"	10'		X		-	-	-	-	-	-	-	2,720
	"	15'		X		-	-	-	-	-	-	-	1,540
	"	20'		X		-	-	-	-	-	-	-	734
	"	25'		X		-	-	-	-	-	-	-	540
	"	30'		X		-	-	-	-	-	-	-	320
	"	40'		X		-	-	-	-	-	-	-	619
	"	50'		X		-	-	-	-	-	-	-	530

Green Highlight - Proposed Excavation Depths

Table 1
COG Operating LLC.
Coyote State #5
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-8	4/22/2010	0-1'		X		<1.00	<50.0	<50.0	-	-	-	-	1,980
		1-1.5'		X		-	-	-	-	-	-	-	5,070
		2-2.5'		X		-	-	-	-	-	-	-	5,200
		3-3.5'		X		-	-	-	-	-	-	-	5,380
		4-4.5'		X		-	-	-	-	-	-	-	4,380
		5-5.5'		X		-	-	-	-	-	-	-	4,240
		6-6.5'		X		-	-	-	-	-	-	-	4,270
		7-7.5'		X		-	-	-	-	-	-	-	4,020
		8-8.5'		X		-	-	-	-	-	-	-	8,910
		9-9.5'		X		-	-	-	-	-	-	-	9,930
SB-2	8/11/2010	1'		X		<2.00	<50.0	<50.0	-	-	-	-	<200
	"	3'		X		-	-	-	-	-	-	-	<200
	"	5'		X		-	-	-	-	-	-	-	247
	"	7'		X		-	-	-	-	-	-	-	4,970
	"	10'		X		-	-	-	-	-	-	-	11,200
	"	15'		X		-	-	-	-	-	-	-	4,290
	"	20'		X		-	-	-	-	-	-	-	4,020
	"	25'		X		-	-	-	-	-	-	-	2,840
	"	30'		X		-	-	-	-	-	-	-	369

Green Highlight - Proposed Excavation Depths

Table 1
COG Operating LLC.
Coyote State #5
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-9	4/22/2010	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	1,460
		1-1.5'		X		-	-	-	-	-	-	-	5,630
		2-2.5'		X		-	-	-	-	-	-	-	5,900
		3-3.5'		X		-	-	-	-	-	-	-	4,840
		4-4.5'		X		-	-	-	-	-	-	-	4,290
		5-5.5'		X		-	-	-	-	-	-	-	4,200
		6-6.5'		X		-	-	-	-	-	-	-	4,450
		7-7.5'		X		-	-	-	-	-	-	-	4,450
		8-8.5'		X		-	-	-	-	-	-	-	13,700
		9-9.5'		X		-	-	-	-	-	-	-	6,620
SB-3	8/11/2010	1'		X		<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<200
	"	3'		X		-	-	-	-	-	-	-	<200
	"	5'		X		-	-	-	-	-	-	-	1,630
	"	7'		X		-	-	-	-	-	-	-	4,650
	"	10'		X		-	-	-	-	-	-	-	9,960
	"	15'		X		-	-	-	-	-	-	-	4,500
	"	20'		X		-	-	-	-	-	-	-	4,090
	"	25'		X		-	-	-	-	-	-	-	<200
	"	30'		X		-	-	-	-	-	-	-	<200

Green Highlight - Proposed Excavation Depths

Table 1
COG Operating LLC.
Coyote State #5
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-10	4/22/2010	0-1'		X		<1.00	<50.0	<50.0	-	-	-	-	4,030
		1-1.5'		X		-	-	-	-	-	-	-	4,330
		2-2.5'		X		-	-	-	-	-	-	-	4,640
		3-3.5'		X		-	-	-	-	-	-	-	4,930
		4-4.5'		X		-	-	-	-	-	-	-	4,170
		5-5.5'		X		-	-	-	-	-	-	-	4,700
		6-6.5'		X		-	-	-	-	-	-	-	5,960
		7-7.5'		X		-	-	-	-	-	-	-	11,200
		8-8.5'		X		-	-	-	-	-	-	-	9,120
		9-9.5'		X		-	-	-	-	-	-	-	7,410
SB-4	8/11/2010	1'		X		<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<200
	"	3'		X		-	-	-	-	-	-	-	416
	"	5'		X		-	-	-	-	-	-	-	4,740
	"	7'		X		-	-	-	-	-	-	-	6,610
	"	10'		X		-	-	-	-	-	-	-	3,940
	"	15'		X		-	-	-	-	-	-	-	610
	"	20'		X		-	-	-	-	-	-	-	<200
	"	25'		X		-	-	-	-	-	-	-	<200

Green Highlight - Proposed Excavation Depths

Table 1
COG Operating LLC.
Coyote State #5
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-11	4/22/2010	0-1'		X		<1.00	<50.0	<50.0				-	3,200
		1-1.5'		X		-	-	-	-	-	-	-	<200
		2-2.5'		X		-	-	-	-	-	-	-	213
		3-3.5'		X		-	-	-	-	-	-	-	<200
		4-4.5'		X		-	-	-	-	-	-	-	<200
AH-12	4/22/2010	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	873
		1-1.5'		X		-	-	-	-	-	-	-	<200
		2-2.5'		X		-	-	-	-	-	-	-	<200
		3-3.5'		X		-	-	-	-	-	-	-	247
		4-4.5'		X		-	-	-	-	-	-	-	<200
AH-13	4/22/2010	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	5,780
		1-1.5'		X		-	-	-	-	-	-	-	<200
		2-2.5'		X		-	-	-	-	-	-	-	<200
		3-3.5'		X		-	-	-	-	-	-	-	<200
AH-14	4/22/2010	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	2,040
		1-1.5'		X		-	-	-	-	-	-	-	208
		2-2.5'		X		-	-	-	-	-	-	-	<200
		3-3.5'		X		-	-	-	-	-	-	-	<200
AH-15	4/22/2010	0-1'		X		<1.00	<50.0	<50.0				-	811
		1-1.5'		X		-	-	-	-	-	-	-	<200
		2-2.5'		X		-	-	-	-	-	-	-	<200
		3-3.5'		X		-	-	-	-	-	-	-	<200

BEB Below Excavation Bottom

(-) Not Analyzed

Green Highlight - Proposed Excavation Depths

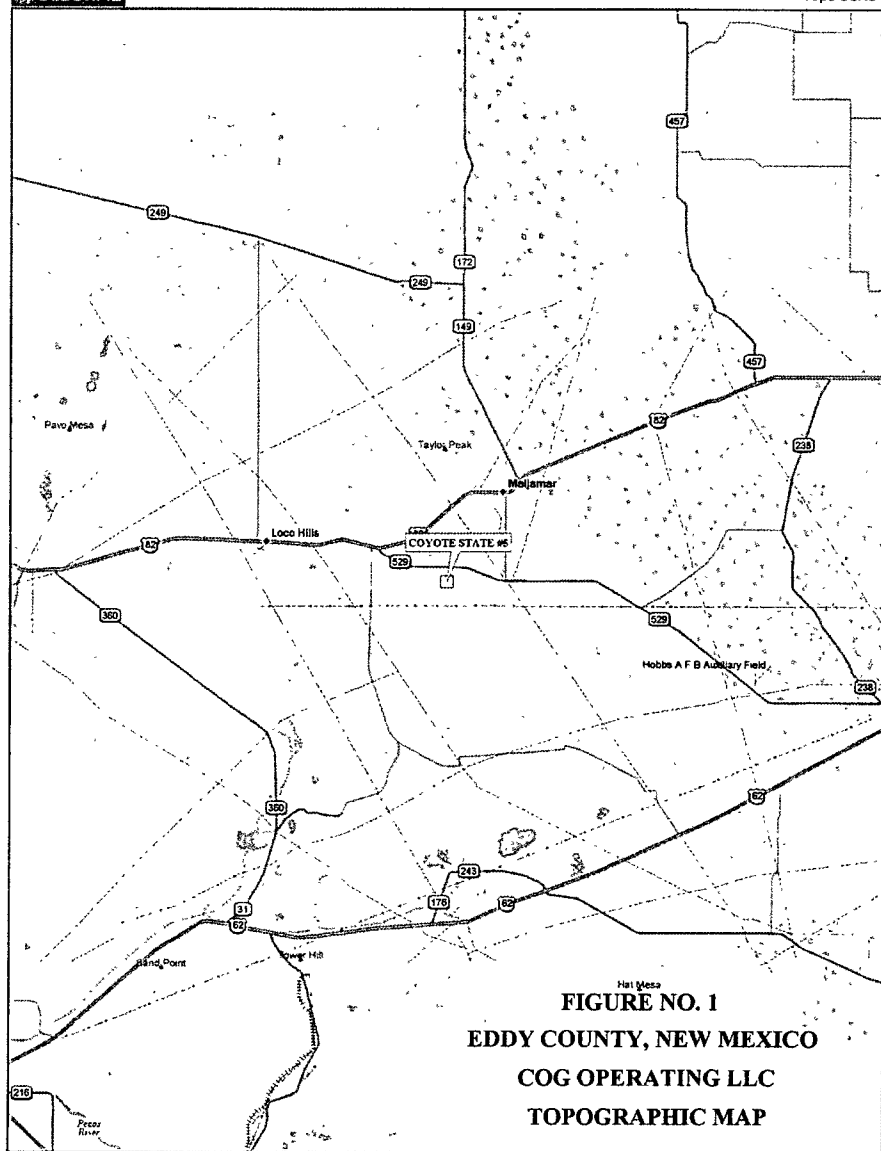
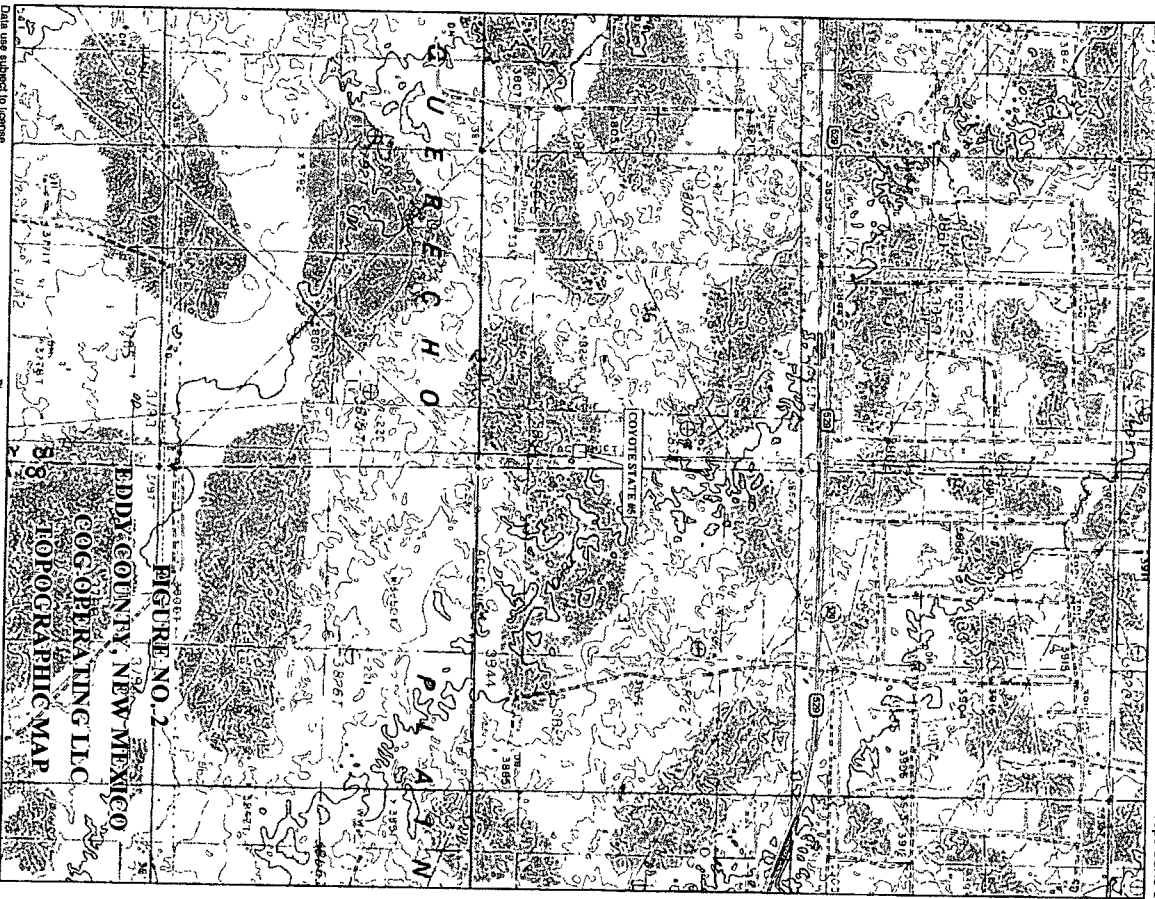
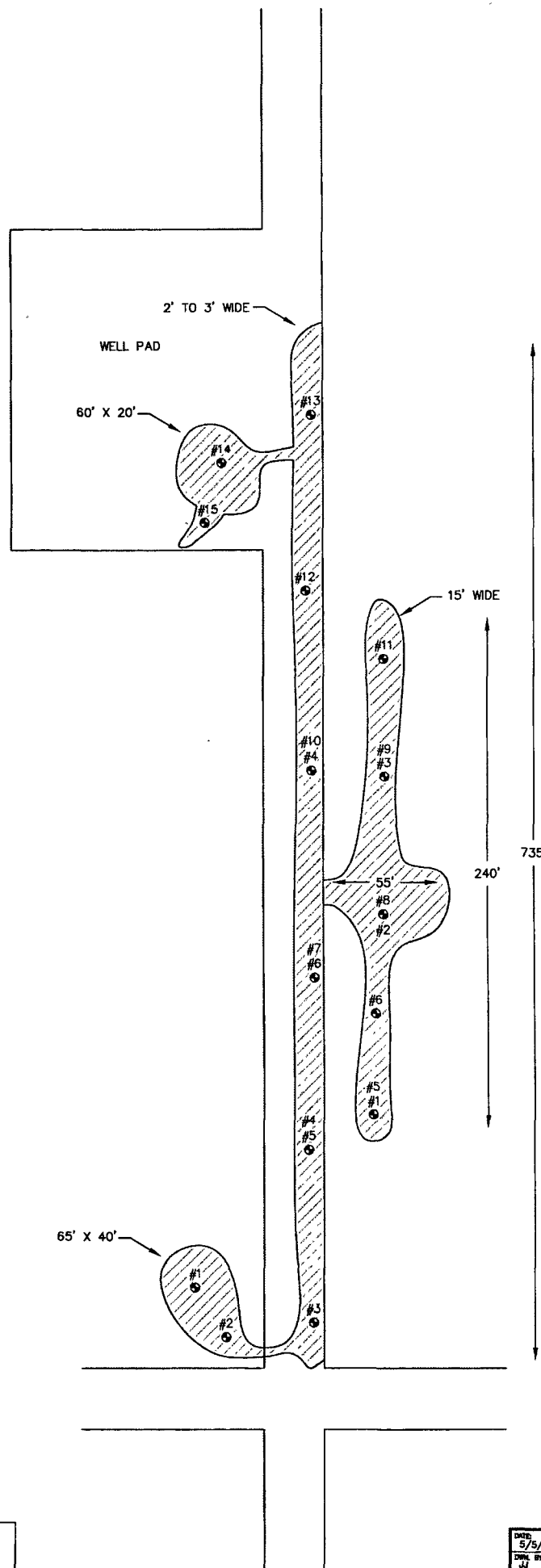


FIGURE NO. 1
EDDY COUNTY, NEW MEXICO
COG OPERATING LLC
TOPOGRAPHIC MAP



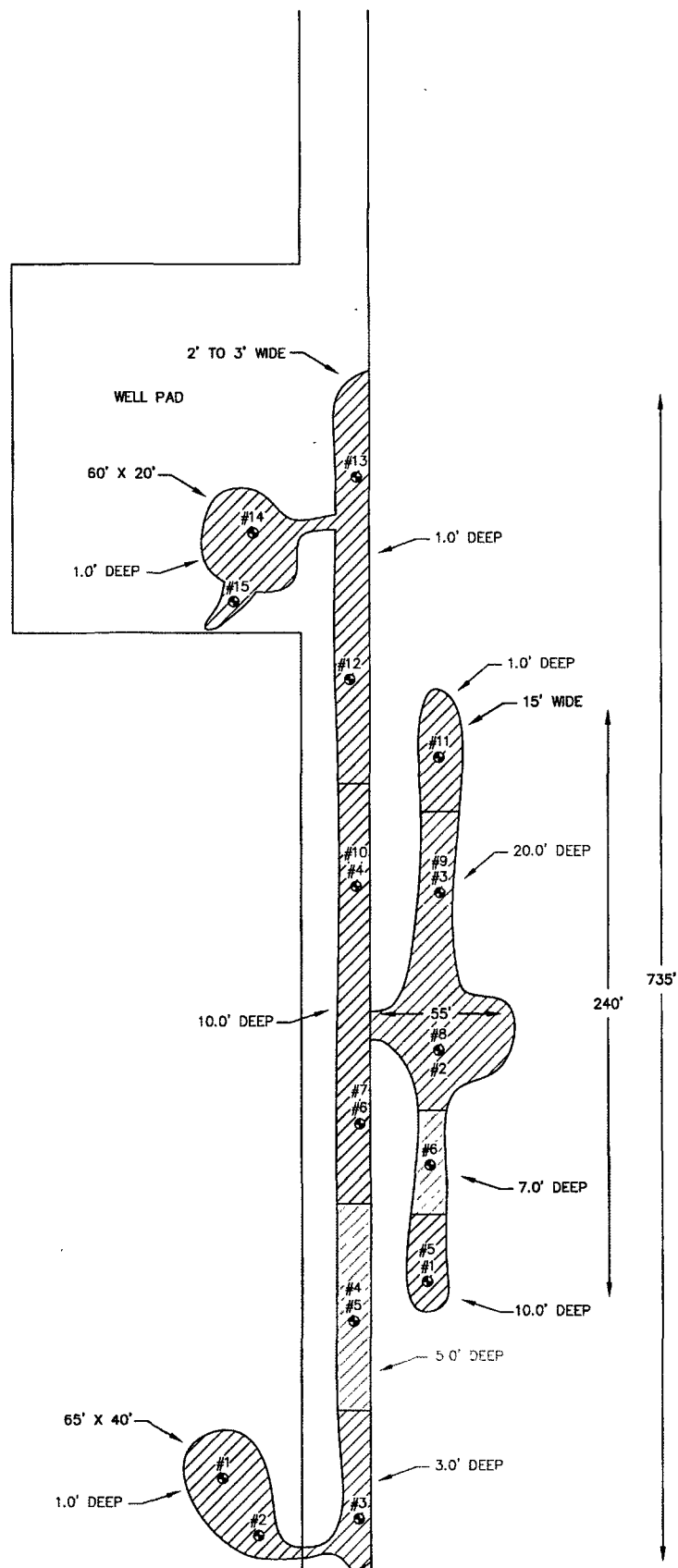


- SPILL AREA
- SAMPLE LOCATIONS
- SOIL BORING LOCATIONS

NOT TO SCALE

DATE:
5/5/10
DRAWN BY:
JJ
FILE:
MIDLAND, TEXAS

FIGURE NO. 3	
EDDY COUNTY, NEW MEXICO	
COG OPERATING LLC	
COYOTE STATE #5	
TETRA TECH, INC. MIDLAND, TEXAS	



- EXCAVATION DEPTH 1.0'
- EXCAVATION DEPTH 3.0'
- EXCAVATION DEPTH 5.0'
- EXCAVATION DEPTH 7.0'
- EXCAVATION DEPTH 10.0'
- EXCAVATION DEPTH 20.0'
- SAMPLE LOCATIONS
- SOIL BORING LOCATIONS

NOT TO SCALE

FIGURE NO. 4

EDDY COUNTY, NEW MEXICO

COG OPERATING LLC

COYOTE STATE #5

TETRA TECH, INC.
MIDLAND, TEXAS

DATE:
5/5/10
DRAWN BY:
J.J.
FILE:
MIDLAND-EDDY COUNTY STATE #5