

Bratcher, Mike, EMNRD

From: Tavarez, Ike [Ike.Tavarez@tetrattech.com]
Sent: Monday, October 25, 2010 12:57 PM
To: Bratcher, Mike, EMNRD
Subject: RE: COG - GJ West COOP #135- Work Plan and Notification
Attachments: COG - GJ West State #135 Work Plan .pdf

Mike,

Here the work plan for COG - GJ West Coop #135. Please let me know if you need additional information, thank

Ike Tavarez
Tetra Tech

From: Tavarez, Ike
Sent: Friday, October 22, 2010 4:43 PM
To: 'mike.bratcher@state.nm.us'
Subject: Re: COG - GJ West COOP #135- Work Plan and Notification

Mike,

Sorry, I will send you attachment on Monday.

From: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
To: Tavarez, Ike
Sent: Fri Oct 22 16:36:04 2010
Subject: RE: COG - GJ West COOP #135- Work Plan and Notification

Ike: There is no attachment with this email.

Mike

From: Tavarez, Ike [mailto:Ike.Tavarez@tetrattech.com]
Sent: Monday, October 11, 2010 3:24 PM
To: Bratcher, Mike, EMNRD
Cc: Pat Ellis; Joshua Russo
Subject: COG - GJ West COOP #135- Work Plan and Notification

COG Operating
GJ West COOP # 135 Flow line Leak
Section 22, T17S, R29E
Eddy County, New Mexico

Mike,

Please find enclosed the work plan for the GJ West COOP #135 Flow line leak located in Eddy County, New Mexico. On September 1, 2010, Tetra Tech met at your office to discuss the investigation data and remediation depths for the site. The proposed excavation depths were approved, as discussed in the work plan. Tetra Tech is scheduling the soil remediation this week (10-13-10). Once completed, a final closure report will be submitted for your review. Please call me if you have any questions, thanks

Ike Tavaréz, PG Senior Project Manager

Main: 432.682.1555 | Fax: 432.682.3946 | Cell: 432.425.3878

Ike.Tavaréz@tetrattech.com

Tetra Tech "Complex World. Clear Solutions."

1910 North Big Spring Midland, TX 79705 | www.tetrattech.com

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Emailed Copy - Third Copy *Rec'd 4/23*
2RP-434
JM
COG

SITE INFORMATION

Report Type: Work Plan

General Site Information:

Site:	GJ West #135 Flowline	
Company:	COG Operating LLC	
Section, Township and Range	Section 22, T17S, R29 E	Unit Letter - B
Lease Number:	API-30-015-28591	
County:	Eddy County	
GPS:	32.822267° N, 104.069467° W	
Surface Owner:	State	
Mineral Owner:		
Directions:	In Loco Hills, from the intersection of Haggerman Cutoff and 82, travel west on 82 (4.7 miles), turn north (800 feet) straight ahead to location	

Release Data:

Date Released:	1/19/2010
Type Release:	Produced Water
Source of Contamination:	Flowline failure
Fluid Released:	15 bbls
Fluids Recovered:	12 bbls

Official Communication:

Name:	Pat Ellis	Kim Dorey
Company:	COG Operating, LLC	Tetra Tech
Address:	550 W. Texas Ave. Ste. 1300	1910 N. Big Spring
P.O. Box		
City:	Midland Texas, 79701	Midland, Texas
Phone number:	(432) 686-3023	(432) 631-0348
Fax:	(432) 684-7137	
Email:	pellis@conchoresources.com	kim.dorey@tetrattech.com

Ranking Criteria

Depth to Groundwater:	Ranking Score	Site Data
<50 ft	20	
50-99 ft	10	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



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

Mr. Bratcher:

Background

Groundwater

Terra Tech



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 22, 2009, Tetra Tech personnel inspected and sampled the spill area. A total of three (3) auger holes (AH-1 through AH-3) 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 B. The sampling results are summarized in Table 1. The spill area and auger hole locations are shown on Figure 3.

Referring to Table 1, AH-1, AH-2, and AH-3 samples exceeded the RRAL for TPH and BTEX at surface down to 3-3.5' below surface. Concentrations decreased to below the RRAL for TPH and BTEX at 4-4.5' below surface at each of the three auger holes. Chloride impact was defined in AH-1 and AH-2 but not at AH-3. Chloride concentration for AH-3 at 7-7.5' below surface was 6,410 mg/kg.

To delineate the chloride impact in the vicinity of AH-3, Tetra Tech supervised the installation of one borehole utilizing an air rotary drilling rig on April 20, 2010. Soil samples were collected to a total depth of 70' below surface and the results are summarized in Table 1. Referring to Table 1, chloride concentrations had a significant decline at 15' (493 mg/kg) and continued to decline with depth.



TETRA TECH

Work Plan

Based on the results, the TPH and BTEX concentrations were vertically defined at 4' below surface in all the auger holes. In addition, the chloride impact was also defined. In order to remove the hydrocarbon and chloride impacted soil, COG proposes to excavate the soil to a depth of 4' to 10' below surface. The excavation depths are shown in Table 1. The excavated soil will be hauled to proper disposal and the excavations backfilled with clean soil. The proposed excavated area is shown on Figure 4.

Once the remedial activities are completed, a closure report will be submitted to NMOCD and BLM for review. If you have any questions or comments concerning the assessment performed at the site, please call me at (432) 682-4559.

Respectfully submitted,
TETRA TECH

Kim Dorey
Staff Geologist

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

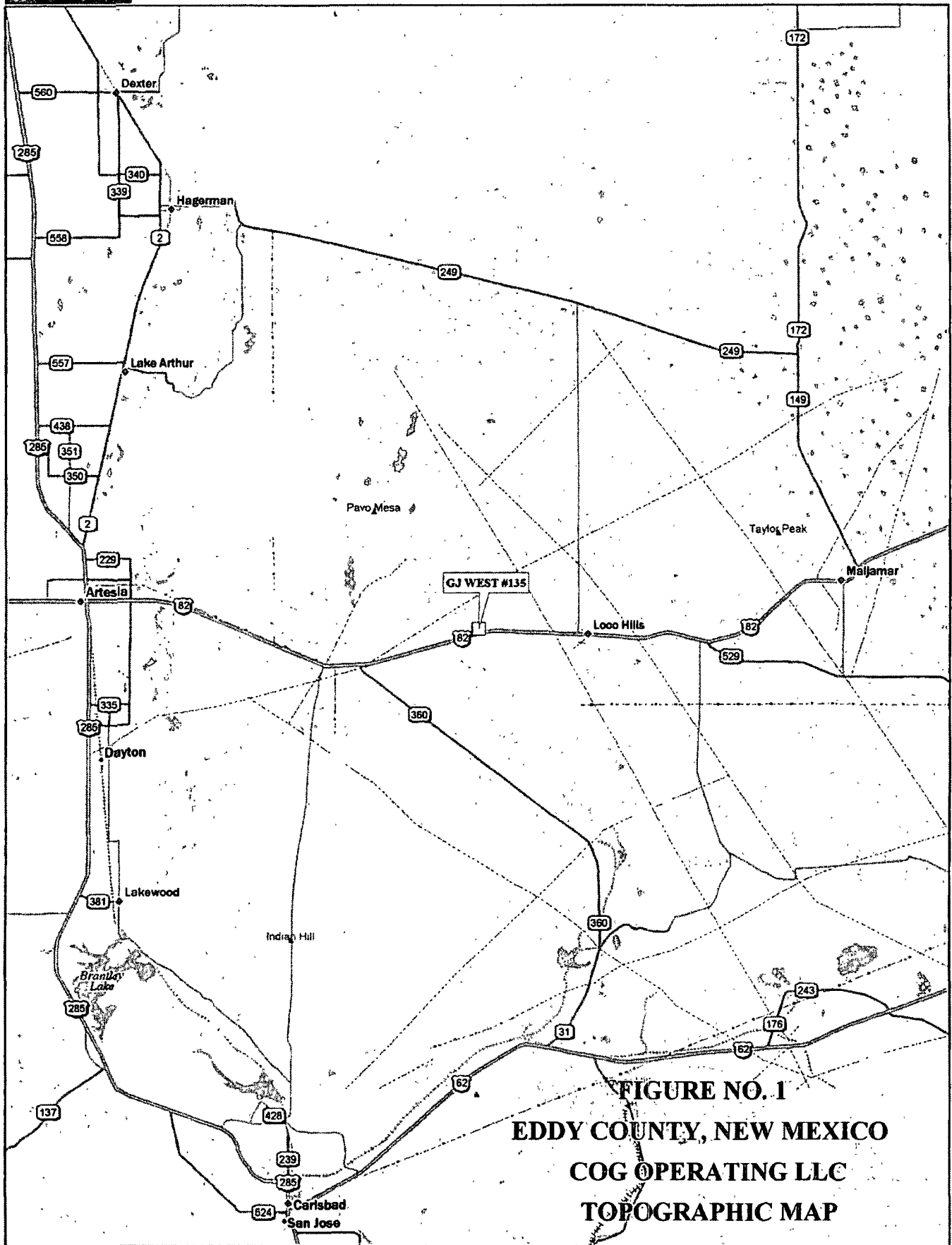
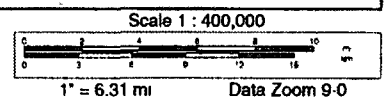


FIGURE NO. 1
EDDY COUNTY, NEW MEXICO
COG OPERATING LLC
TOPOGRAPHIC MAP

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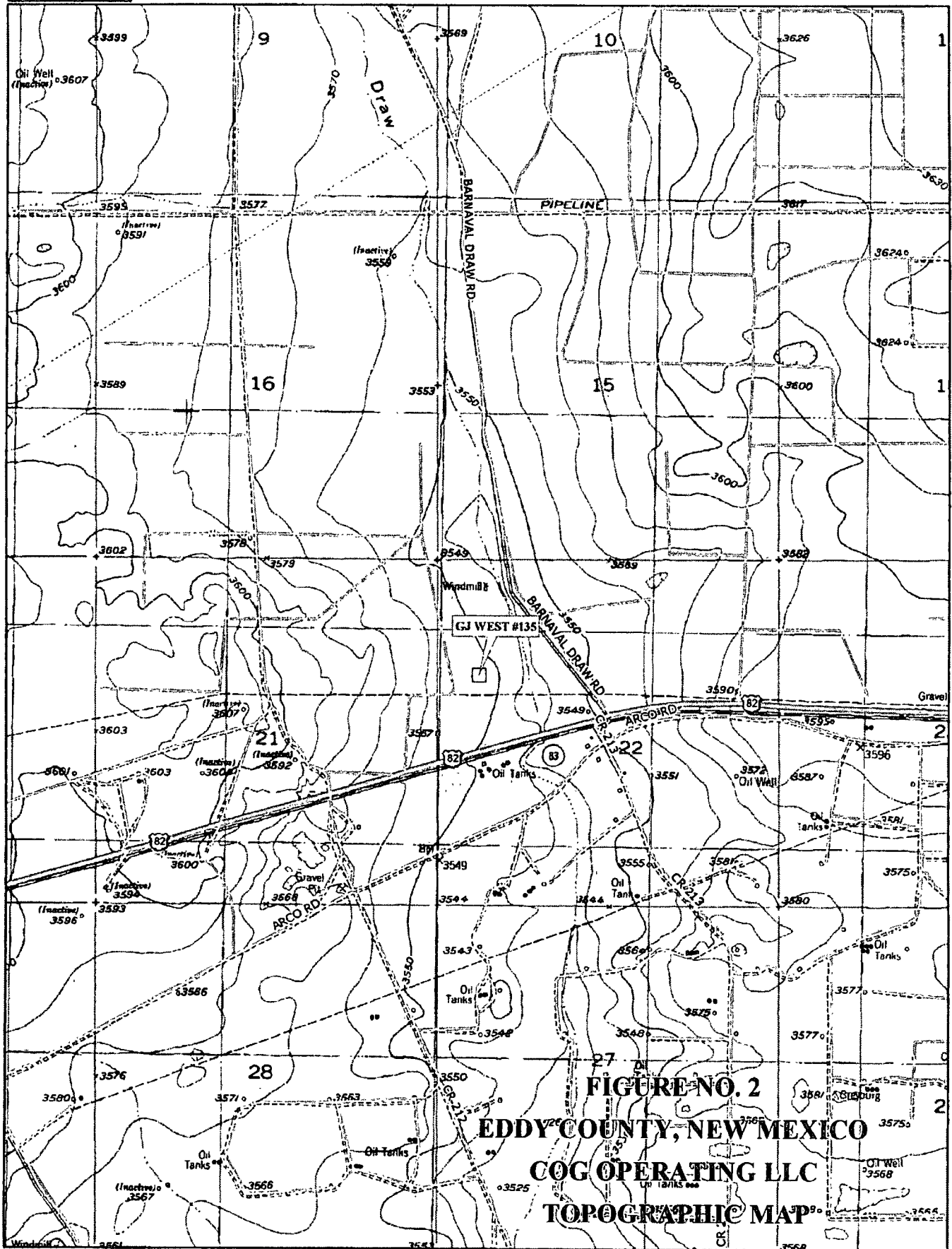


FIGURE NO. 2

EDDY COUNTY, NEW MEXICO

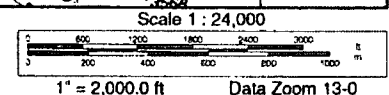
COG OPERATING LLC

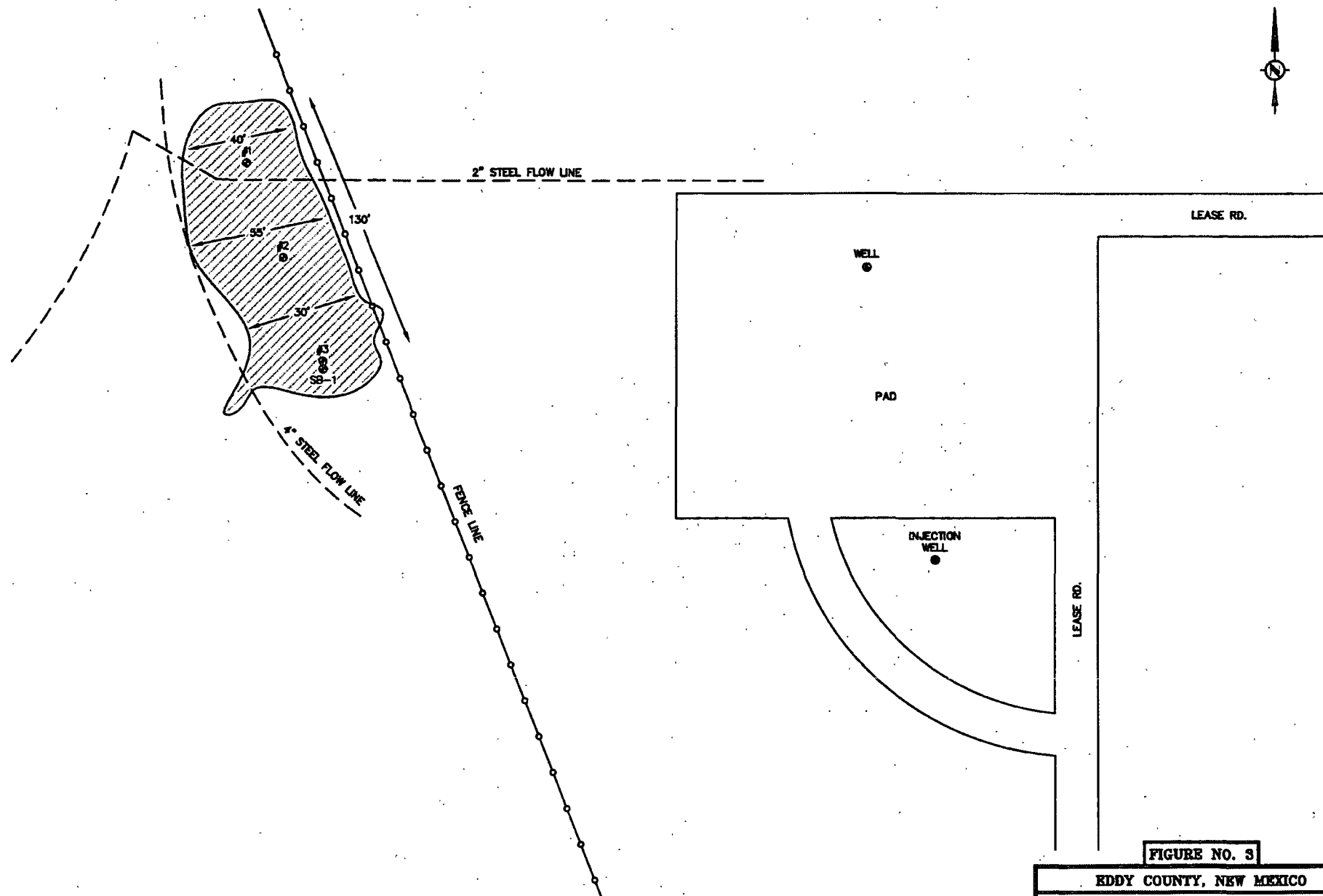
TOPOGRAPHIC MAP

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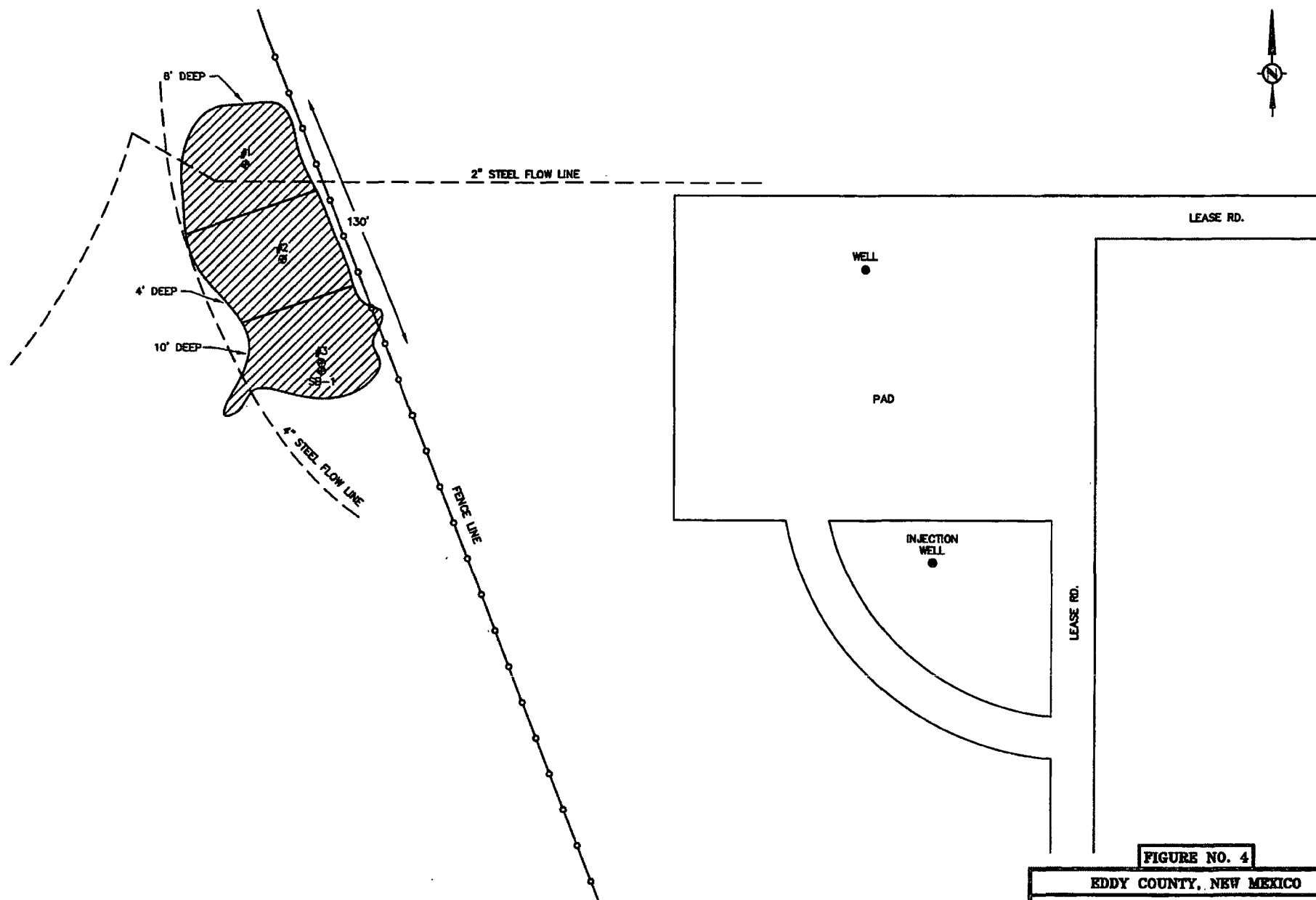


- ☒ SPILL AREA
- SAMPLE LOCATIONS
- ⊙ SOIL BORING LOCATION

NOT TO SCALE

DATE:
2/24/10
DWG BY:
JJ
FILE:
H:\PROJECTS\GJ WEST #135

FIGURE NO. 3
EDDY COUNTY, NEW MEXICO
COG OPERATING LLC
GJ WEST #135
TETRA TECH, INC. MIDLAND, TEXAS



- ☒ PROPOSED EXCAVATION AREA & DEPTHS
- ☐ SAMPLE LOCATIONS
- ☐ SOIL BORING LOCATION

NOT TO SCALE

DATE:
2/24/10
DWG. BY:
JJ
FILE:
H:\COG\4400432
GJ WEST #135

FIGURE NO. 4

EDDY COUNTY, NEW MEXICO
COG OPERATING LLC
GJ WEST #135
TETRA TECH, INC. MIDLAND, TEXAS

Table 1
COG Operating LLC.
GJ West #135
EDDY COUNTY, NEW MEXICO

[illegible]

Table 1
COG Operating LLC.
GJ West #135
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	DRO	GRO	Total					
AH-3	2/22/2010	0-1'		X		1,180	2,540	3,720	6.54	30.4	29.3	41.4	6,600
	2/22/2010	1-1.5'		X		2,620	2,980	5,600					12,100
	2/22/2010	2-2.5'		X		3,020	4,170	7,190	18.4	71.9	53.2	73	549
	2/22/2010	3-3.5'		X		5,060	4,890	9,950					337
	2/22/2010	4-4.5'		X		<50.0	<1.00	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	4,840
	2/22/2010	5-5.5'		X									10,000
	2/22/2010	6-6.5'		X									10,200
	2/22/2010	7-7.5'		X									6,410
SB-1	4/20/2010	8'		X									10,400
	4/20/2010	10'		X									6,150
	4/20/2010	15'		X		-	-	-	-	-	-	-	493
	4/20/2010	20'		X		-	-	-	-	-	-	-	871
	4/20/2010	25'		X		-	-	-	-	-	-	-	363
	4/20/2010	30'		X		-	-	-	-	-	-	-	234
	4/20/2010	40'		X		-	-	-	-	-	-	-	249
	4/20/2010	50'		X		-	-	-	-	-	-	-	443
	4/20/2010	60'		X		-	-	-	-	-	-	-	<200
	4/20/2010	70'		X		-	-	-	-	-	-	-	214

BEB Below Excavation Bottom

(-) Not Analyzed

 Proposed Excavated Depths

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 100 Midland, TX 79701	Telephone No.	432-230-0077
Facility Name	GJ WEST COOP UNIT #135	Facility Type	Flowline GJ WEST COOP UNIT #135
Surface Owner	State	Mineral Owner	Lease No. (API) 30-015-28591

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	22	17S	29E	990	NORTH	2310	EAST	EDDY

Latitude 32.822267 Longitude 104.069467

NATURE OF RELEASE

Type of Release	Produced Fluid	Volume of Release	15 bbls	Volume Recovered	12bbls
Source of Release	Flowline	Date and Hour of Occurrence	01/19/2010	Date and Hour of Discovery	01/19/2010 8:00 a.m.
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Mike Bratcher - OCD		
By Whom?	Gail Lamb	Date and Hour	01/19/2010		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

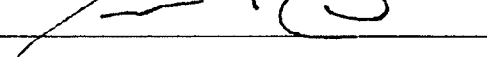
A flowline ruptured and leaked releasing produced fluids into the pasture. The ruptured flowline was replaced with a new flowline.

Describe Area Affected and Cleanup Action Taken *

15bbls of produced fluid released into the pasture next to the ruptured flowline. A vacuum truck recovered 12 bbls of produced fluid from the initial spill. One-call protocol will be made by dirt contractor who will then remove saturated soils prior to soil sampling by Tetra Tech. (The nearest location to the release is the GJ WEST COOP UNIT #98 E-22-17S-29E 1845 FNL 687 FWL 32.822306 : 104.068998). 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 your approval prior to any significant remediation.

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.

OIL CONSERVATION DIVISION

Signature:			
Printed Name:	Josh Russo	Approved by District Supervisor:	
Title:	HSE Coordinator - COG Operating, LLC	Approval Date:	Expiration Date:
E-mail Address:	jrusso@conchoresources.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date:	01/26/2010	Phone:	432-212-2399

* Attach Additional Sheets If Necessary

Water Well Data
Average Depth to Groundwater (ft)
COG - GJ West COOP Unit 135
Eddy County, New Mexico

16 South			28 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

16 South			29 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

16 South			30 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

17 South			28 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







17 South			29 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

17 South			30 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

18 South			28 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

18 South			29 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

18 South			30 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

-  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