

SITE INFORMATION

Report Type: Work Plan

General Site Information:

Site:	Pinto 29 Federal #1 Tank Battery					
Company:	COG Operating LLC					
Section, Township and Range	Unit B	Sec 29	T17S	R30E		
Lease Number:	API-30-015-31956					
County:	Eddy County					
GPS:	32.81165° N			103.99159° W		
Surface Owner:	Federal					
Mineral Owner:						
Directions:	In Loco Hills, from the intersection of Haggerman Cutoff (CR 217) and Hwy 82, travel south on CR 217 for 0.2 mile, turn right (west) and travel 0.2 mile, turn left (south) and travel 0.1 mile to the site.					

Release Data:

Date Released:	4/3/2013
Type Release:	Oil
Source of Contamination:	Steel line from circulating pump.
Fluid Released:	15 bbls
Fluids Recovered:	14 bbls

Official Communication:

Name:	Pat Ellis		Ike Tavaréz
Company:	COG Operating, LLC		Tetra Tech
Address:	One Concho Center		1910 N. Big Spring
	600 W. Illinois Ave.		
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	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:	0	

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



July 16, 2013

Mr. Mike Bratcher
Environmental Engineer Specialist
Oil Conservation Division, District 2
811 S. First Street
Artesia, New Mexico 88210

Re: Work Plan for the COG Operating LLC., Pinto 29 Federal #1 Tank Battery, Unit B, Section 29, Township 17 South, Range 30 East, Eddy County, New Mexico.

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess a spill from the Pinto 29 Federal #1 Tank Battery located in Unit B, Section 29, Township 17 South, Range 30 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.81165°, W 103.99159°. 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 April 3, 2013, and released approximately fifteen (15) barrels of oil from a steel line from the circulating pump. Fourteen (14) barrels of oil were recovered. COG has replaced the steel line and returned it back to service. The spill affected an area inside the firewalls measuring approximately 20' x 20' on the pad. The initial C-141 form is enclosed in Appendix A.

Groundwater

No water wells were listed within Section 29. According to the NMOCD groundwater map, the average depth to groundwater in this area is approximately 250' below surface. The groundwater data is shown in Appendix B.

Tetra Tech

1910 North Big Spring, Midland, TX 79705

Tel 432.682.4559

Fax 432.682.3946

www.tetrattech.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 5,000 mg/kg.

Soil Assessment and Analytical Results

On May 29, 2013, Tetra Tech personnel inspected and sampled the spill area. One (1) auger hole (AH-1) was installed using a stainless steel hand auger to assess the impacted soils. Selected 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, AH-1 exceeded the RRAL for TPH, Benzene and Total BTEX, but declined below regulatory levels at a depth of 3.0' below surface. Auger hole (AH-1) did not show a chloride impact to the area.

Work Plan

COG proposes to remove impacted material as highlighted (green) in Table 1 and shown on Figure 4. The area of AH-1 will be excavated to a depth of approximately 3.0' below surface to remove the hydrocarbon impact. The excavated areas will be backfilled with clean material to surface grade. The excavated material will be transported offsite for proper disposal.

The proposed excavation depths may not be reached due to wall cave ins and safety concerns for onsite personnel. In addition, impacted soil around oil and gas equipment, structures or lines may not be feasible or practicable to be removed due to safety concerns for onsite personnel. As such, Tetra Tech will excavate the impacted soils to the maximum extent practicable. The remaining impact will be deferred until the abandonment of the facility.



Upon completion, a final report will be submitted to the NMOCD. If you have any questions or comments concerning the assessment or the proposed remediation activities for this site, please call me at (432) 682-4559.

Respectfully submitted,
TETRA TECH

A handwritten signature in blue ink, appearing to read 'Ike Tavarez', written over the text 'TETRA TECH'.

Ike Tavarez, PG
Senior Project Manager

cc: Pat Ellis – COG
Mike Burton - BLM

Figures

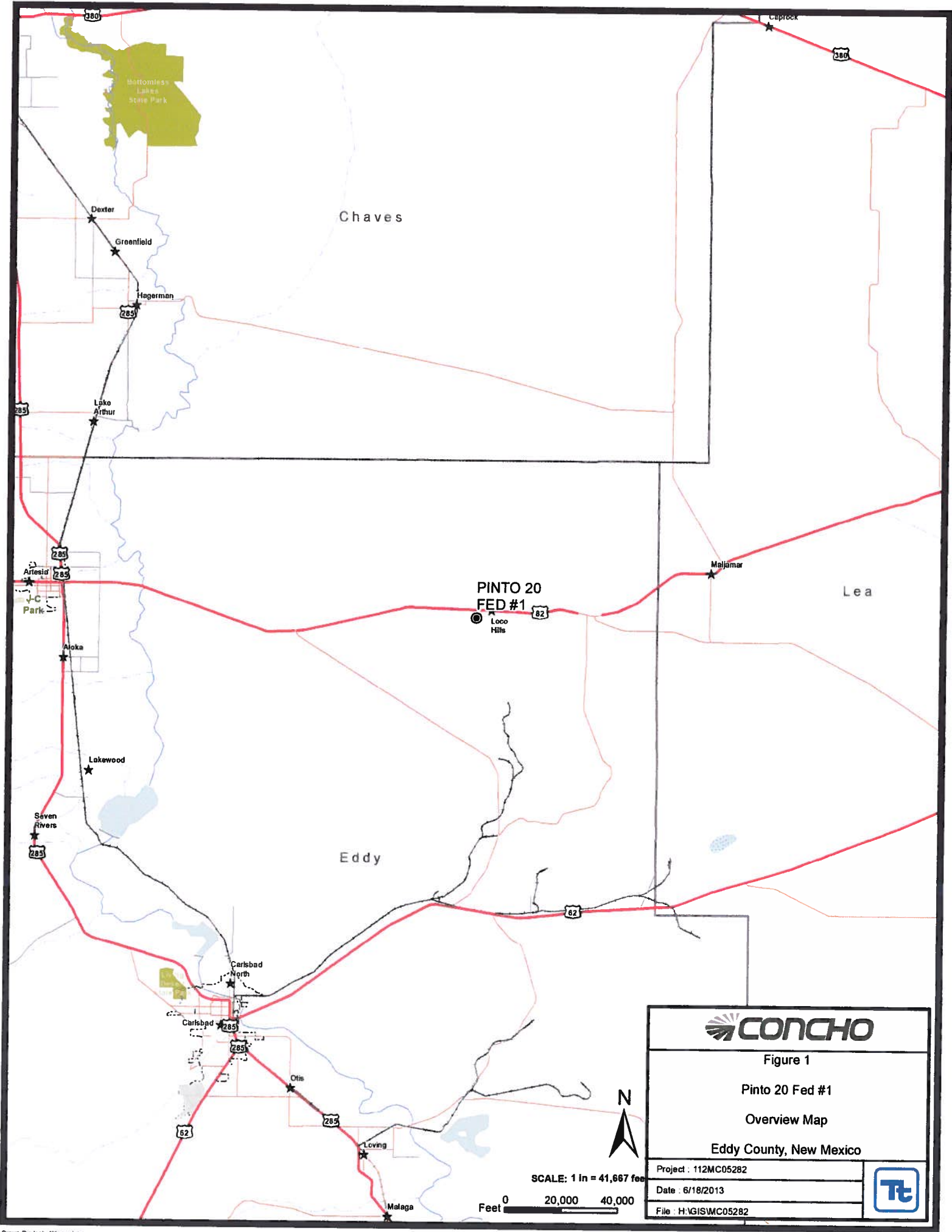


Figure 1

Pinto 20 Fed #1

Overview Map

Eddy County, New Mexico

Project : 112MC05282

Date : 6/18/2013

File : H:\GIS\MC05282



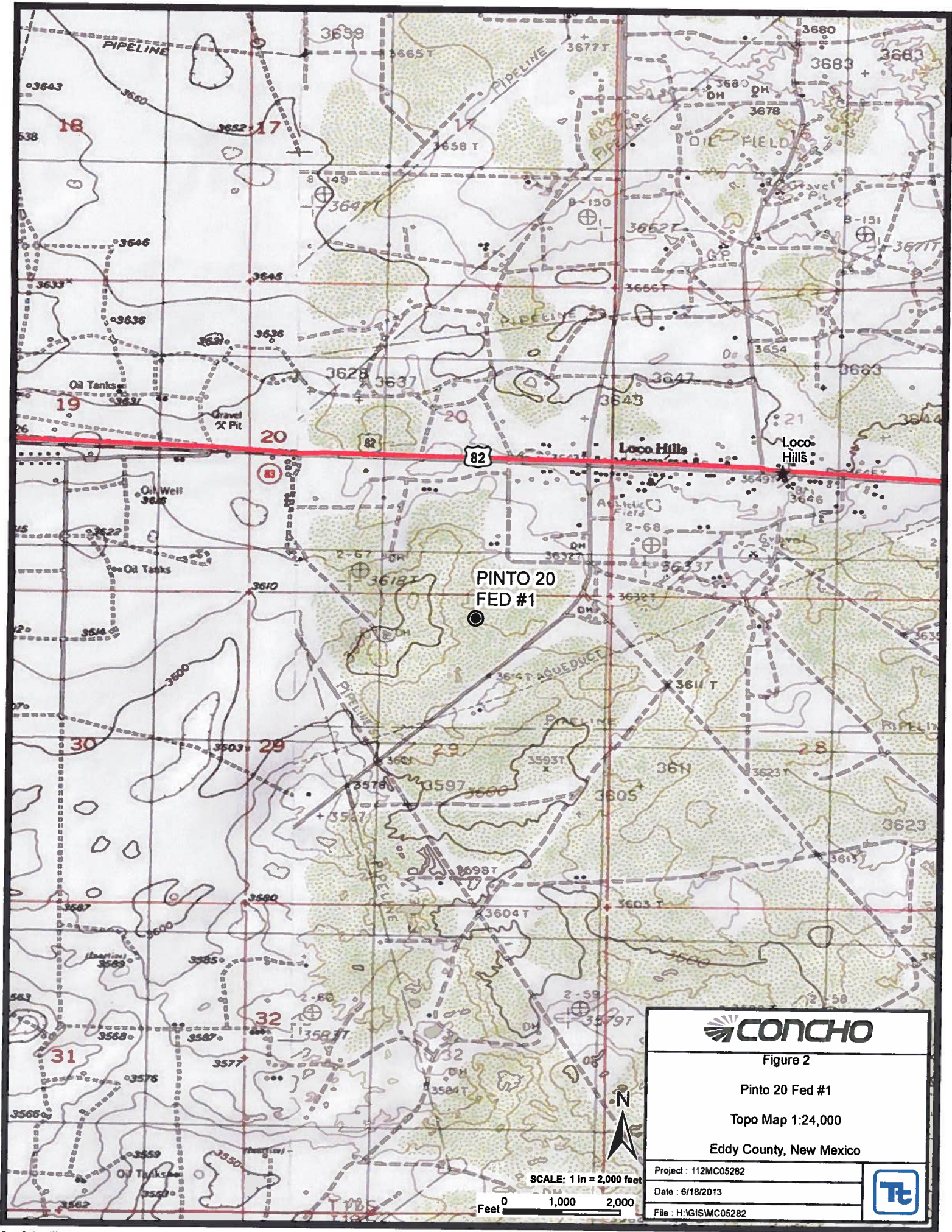


Figure 2

Pinto 20 Fed #1

Topo Map 1:24,000

Eddy County, New Mexico

Project : 112MC05282

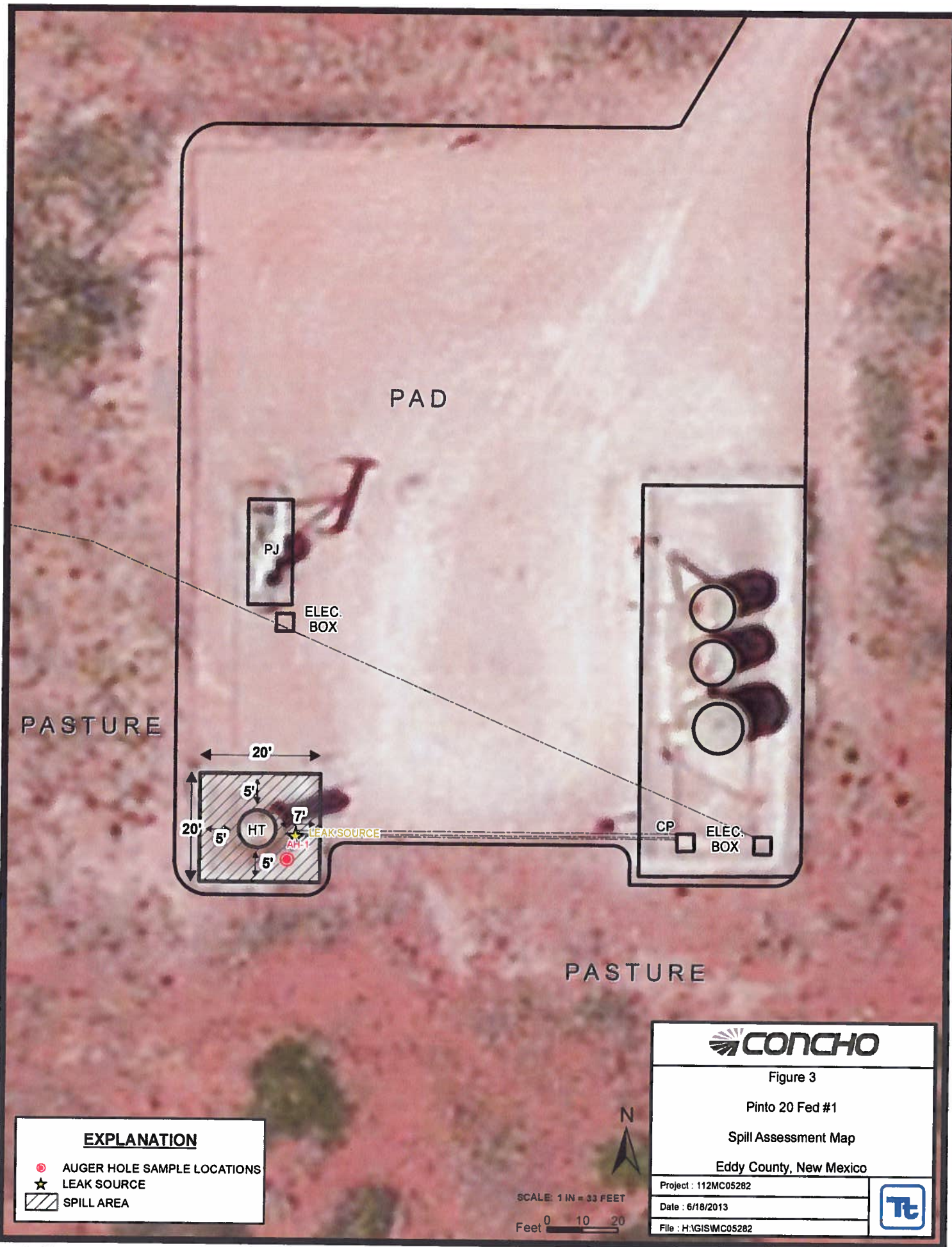
Date : 6/18/2013

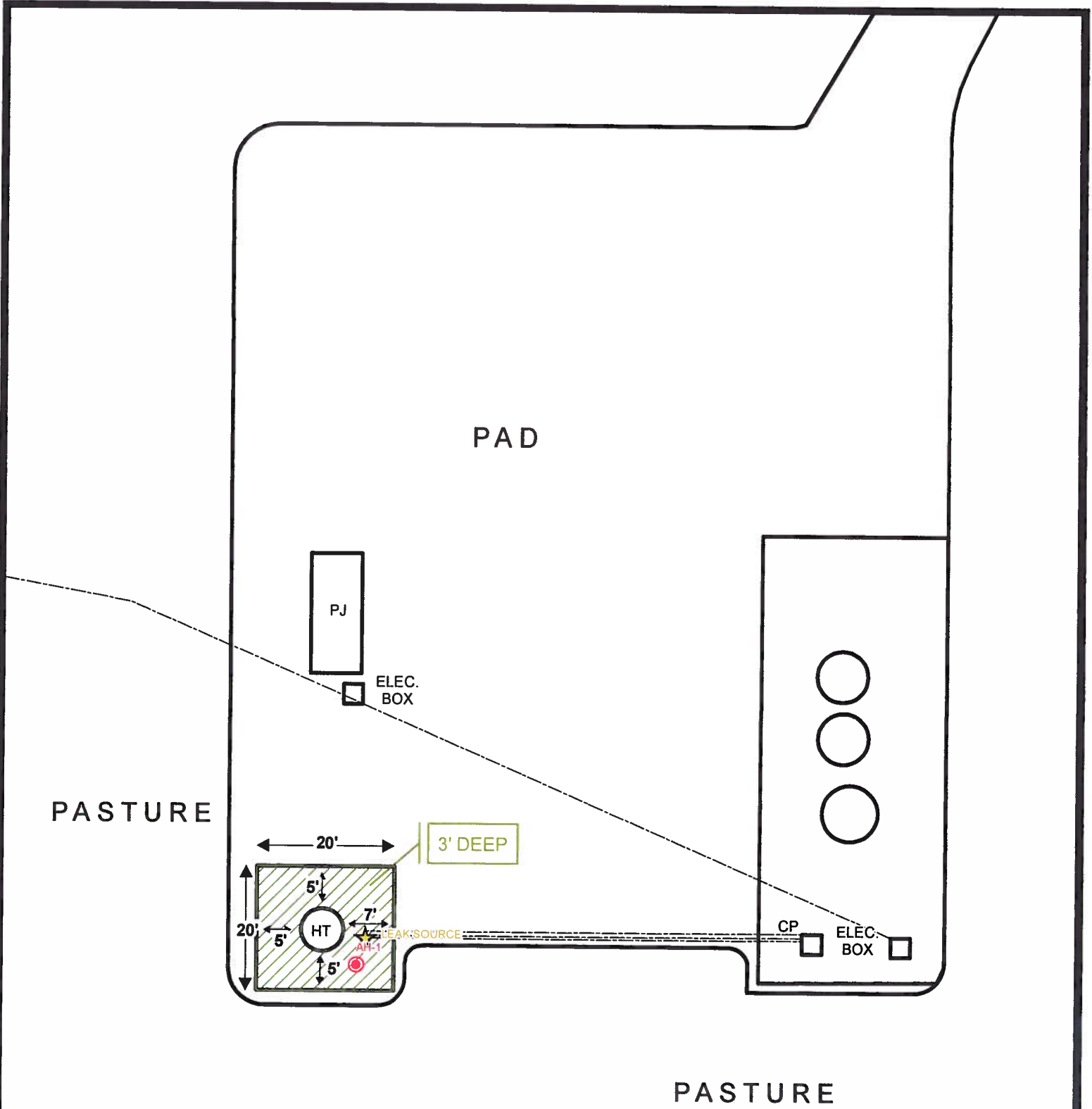
File : H:\GIS\MC05282



SCALE: 1 in = 2,000 feet

0 1,000 2,000
Feet





EXPLANATION

- AUGER HOLE SAMPLE LOCATIONS
- LEAK SOURCE
- PROPOSED EXCAVATION AREA

SCALE: 1 IN = 33 FEET

Feet 0 10 20

Figure 4

Pinto 20 Fed #1

Proposed Excavation Area & Depth Map

Eddy County, New Mexico

Project : 112MC05282	
Date : 6/27/2013	
File : H:\GIS\MC05282	

Tables

14

Table 1

COG Operating LLC.

Pinto 29 Federal #1

Eddy County, New Mexico

Sample ID	Sample Date	BEB Sample Depth (ft)	Excavation Bottom Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total						
AH-1	5/29/2013	0-1	0	X		2,530	5,820	8,350	2.62	45.5	51.9	61.9	162	<20.0
	"	1-1.5	"	X		3,920	3,330	7,250	14.9	144	102	67.5	328	87.3
	"	2-2.5	"	X		8,560	3,190	11,750	45.5	401	238	252	937	123
	"	3-3.5	"	X		428	372	800	<0.200	5.00	7.27	7.99	20.3	-

(-) Not Analyzed

(BEB) Below Excavation Bottom

Proposed Excavate Depths

Photos

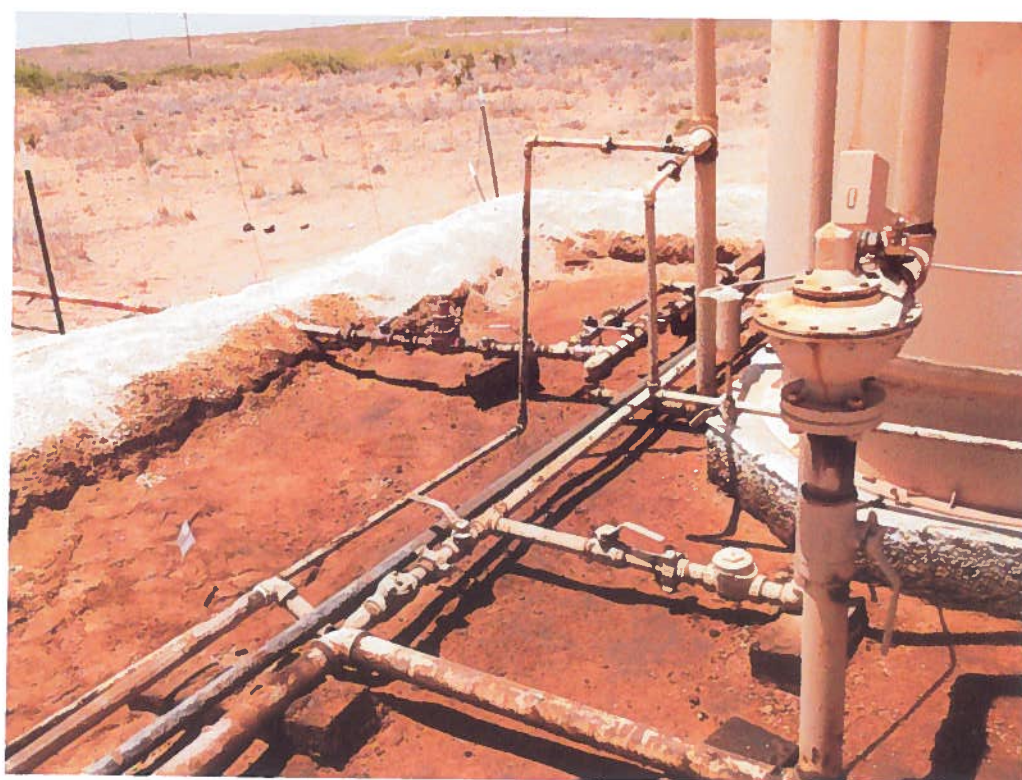
COG Operating LLC
Pinto 29 Federal #1 Tank Battery
Eddy County, New Mexico



TETRA TECH



View South – Area of AH-1



View West – Area of AH-1

Appendix A

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	600 West Illinois Avenue, Midland, TX 79701	Telephone No.	432-230-0077
Facility Name	PINTO 29 FEDERAL #001	Facility Type	TANK BATTERY
Surface Owner	FEDERAL	Mineral Owner	
		Lease No. (API#)	30-015-31956

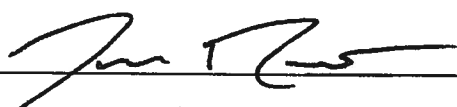
LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	29	17S	30E					EDDY

Latitude 32.81194

Longitude 103.99204

NATURE OF RELEASE

Type of Release	Oil	Volume of Release	15bbls	Volume Recovered	14bbls
Source of Release	Steel line from circulating pump.	Date and Hour of Occurrence	04-03-2013	Date and Hour of Discovery	04-03-2013 3:30pm
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.*					
A hole had developed in a steel line going from the circulating pump to the heater treater. The steel line has been replaced.					
Describe Area Affected and Cleanup Action Taken.*					
Initially 15bbls of oil were released from a steel line that had developed a hole going from the circulating pump to the heater treater. We were able to recover 14bbls with a vacuum truck. The release was contained within the inside of the facility walls. All free fluids have been recovered. 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: Senior Environmental Coordinator		Approval Date:		Expiration Date:	
E-mail Address: jrusso@concho.com		Conditions of Approval:			Attached ☐
Date: 4-5-2013 Phone: 432-212-2399					

* Attach Additional Sheets If Necessary

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
COG-Pinto 29 Federal #1 Tank Battery
Eddy County, New Mexico

16 South			29 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14 220	13
19	20	21	22	23	24
110					
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

16 South			31 East		
6	5	4	3	2 290	1
7	8	9	10	11	12
18	17	16	15	14 314	13 288
19	20	21	22	23	24 113
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	29 210	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 80	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

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

18 South			29 East		
6	5	4	3	2	1
7	8	9	10 95	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

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

- 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

Appendix C

Summary Report

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

Report Date: June 13, 2013

Work Order: 13060304



Project Location: Eddy Co., NM
Project Name: COG/Pinto 29 Fed. #1
Project Number: 112MC05282

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
330710	AH-1 0-1'	soil	2013-05-29	00:00	2013-05-31
330711	AH-1 1-1.5'	soil	2013-05-29	00:00	2013-05-31
330712	AH-1 2-2.5'	soil	2013-05-29	00:00	2013-05-31
330713	AH-1 3-3.5'	soil	2013-05-29	00:00	2013-05-31

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)
330710 - AH-1 0-1'	2.62	45.5	51.9	61.9	5820	2530
330711 - AH-1 1-1.5'	14.9	144	102	67.5	3330	3920
330712 - AH-1 2-2.5'	45.5	401	238	252	3190	8560
330713 - AH-1 3-3.5'	<0.200	5.00	7.27	7.99	372	428

Sample: 330710 - AH-1 0-1'

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 330711 - AH-1 1-1.5'

Param	Flag	Result	Units	RL
Chloride		87.3	mg/Kg	4

Sample: 330712 - AH-1 2-2.5'

Report Date: June 13, 2013

Work Order: 13060304

Page Number: 2 of 2

Param	Flag	Result	Units	RL
Chloride		123	mg/Kg	4
