SITE INFORMATION

Report Type: Work Plan

General Site Information:						
Site:	**Hearse 36 State #4H**					
Company:	**COG Operating LLC**					
Section, Township and Range	**Unit O**	**Sec 36**	**T19S**	**R25E**		
Lease Number:	**API-30-015-39264**					
County:	**Eddy County**					
GPS:	**32.61030° N**			**104.43493° W**		
Surface Owner:	State					
Mineral Owner:						
Directions:	North of Carlsbad at the intersection of Hwy 285 and Hwy 524, travel north on Hwy 285 for 11.9 miles, turn left (west) onto CR 23 and travel 1.8 miles, turn left (southwest) and travel 0.8 mile, turn left (east) and travel 0.2 mile to the site.					

Release Data:	
Date Released:	5/3/2013
Type Release:	Oil
Source of Contamination:	Casing valve on well head
Fluid Released:	40 bbls
Fluids Recovered:	30 bbls

Official Communication:			
Name:	Pat Ellis		Ike Tavarez
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@tetratech.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

TETRA TECH

July 29, 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., Hearse 36 State #4H, Well Site, Unit O, Section 36, Township 19 South, Range 25 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 Hearse 36 State #4H, Well Site located in Unit O, Section 36, Township 19 South, Range 25 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.61030°, W 104.43493°. 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 May 3, 2013, and released approximately forty (40) barrels of oil from the casing valve on the wellhead. To alleviate the problem, COG personnel closed the valve. Thirty (30) barrels of standing fluids were recovered. The spill initiated on the well pad affecting an area approximately 30' X 50', the release then migrated into the pasture affecting an area 40' x 150', 15' x 40', 25' x 140' and 30' x 230'. The initial C-141 form is enclosed in Appendix A.

Groundwater

No water wells were listed within Section 36. According to the NMOCD groundwater map, the average depth to groundwater in this area is between 100' and 125' 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.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 5,000 mg/kg.

Soil Assessment and Analytical Results

On May 29, 2013, Tetra Tech personnel inspected and sampled the spill area. Fourteen (14) auger holes (AH-1 through AH-14) and a background auger hole were 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, the areas of AH-3, AH-5, AH-7 and AH-8 did not show any significant impact to the soils for TPH, BTEX or chlorides. However, the samples in the areas of AH-10, AH-12, AH-13 and AH-14 either exceeded the TPH or BTEX constituents. Auger holes (AH-12, AH-13 and AH-14) declined below the RRAL's at 1-1.5' below surface. AH-10 was not vertically defined at 1-1.5', with TPH concentrations of 9,080 mg/kg and total BTEX of 276 mg/kg.

Elevated chloride concentrations were detected in auger holes (AH-1, AH-2, AH-4, AH-6, AH-9, AH-10, and AH-11). Auger holes (AH-1, AH-4, AH-6 and AH-10) showed elevated chloride concentrations and were not vertically defined. Auger holes (AH-2, AH-9, AH-11) showed declining chloride concentrations with depth and vertically defined at approximately 1.0' to 2.0' below surface.

Work Plan

COG proposes to remove the impacted material as highlighted (green) in Table 1 and shown on Figure 4. The areas of AH-1, AH-4, AH-11, AH-12, AH-13 and AH-14 will be excavated to depth of approximately 1.0' below surface to remove the elevated chlorides and soil exceeding the RRAL. In addition, the areas of AH-6, AH-9 and AH-10 will be excavated to a depth of approximately 2.0' to 3.0' below surface.

TETRA TECH

Once these areas (AH-1, AH-4, AH-6 and AH-10) are excavated, Tetra Tech will install backhoe trenches to define extents. Based on the field results, the areas will be excavated to the appropriate depths. Tetra Tech will collect a bottom hole sample in the area of AH-10 for TPH and BTEX to confirm the removal of the soil above the RRAL. All of the excavated soil will be transported offsite for proper disposal and the areas will be backfilled with clean material to surface grade.

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 safely concerns. As such, Tetra Tech will excavate the soils to the maximum extent practicable.

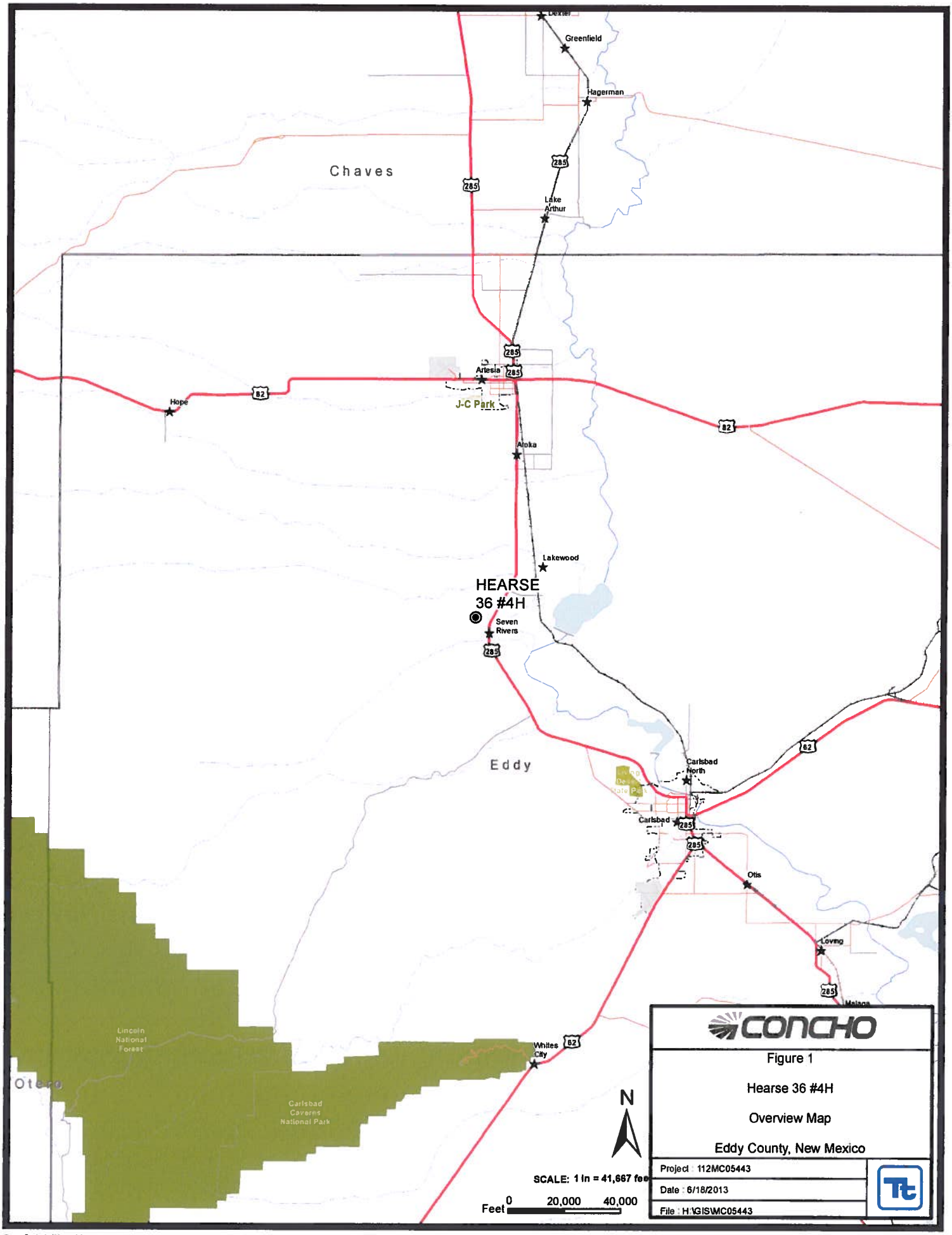
Once the remedial activities are completed, Tetra Tech will prepare a closure report for review. If you have any questions or comments concerning the assessment or the proposed remediation activities for this site, please call me at (432) 682-4559.

Respectfully submitted,
TETRA TECH

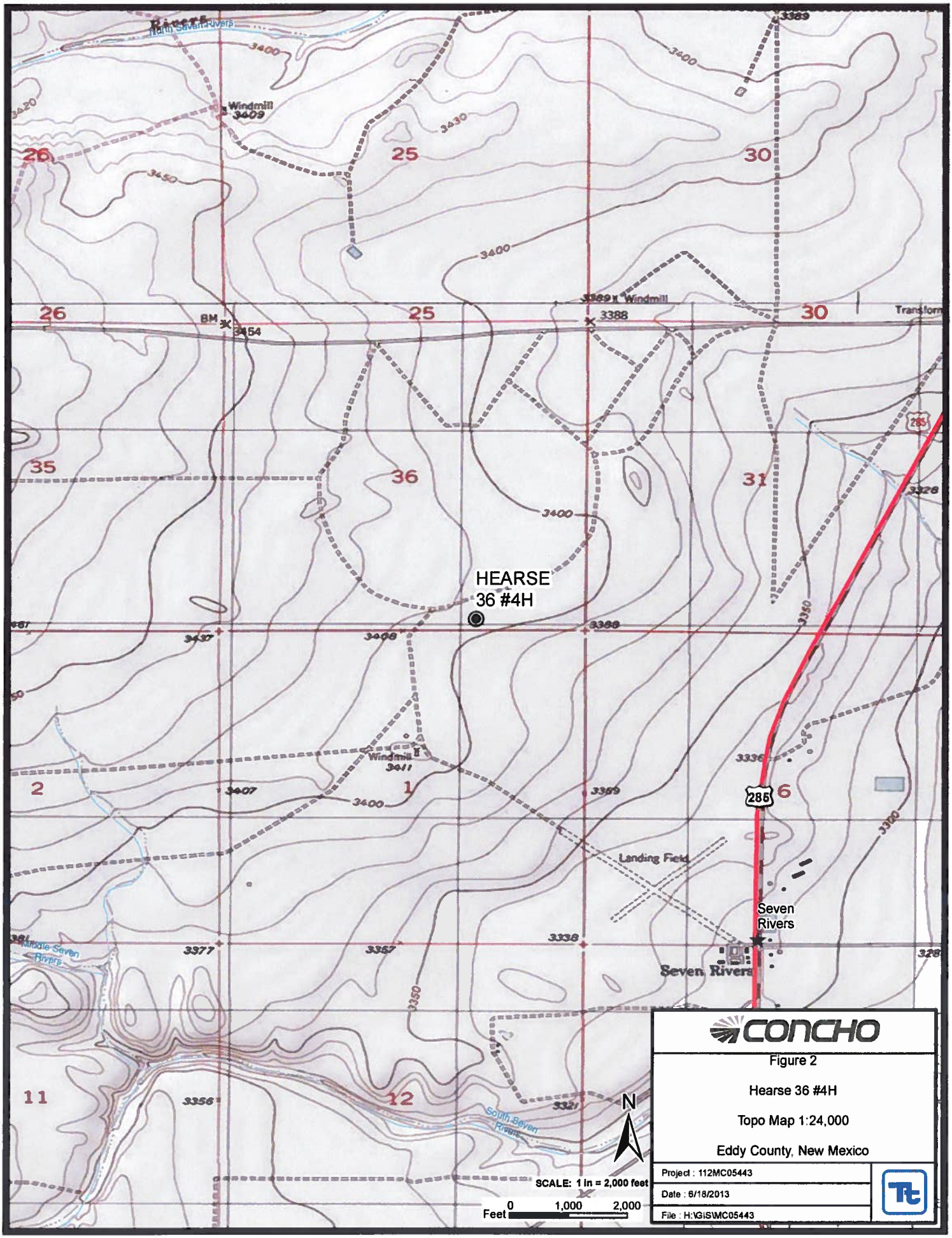
Ike Tavarez, PG
Senior Project Manager

cc: Pat Ellis – COG

Figures



Drawn By: IsabelMarmolejo



CONCHO

Figure 2

Hearse 36 #4H

Topo Map 1:24,000

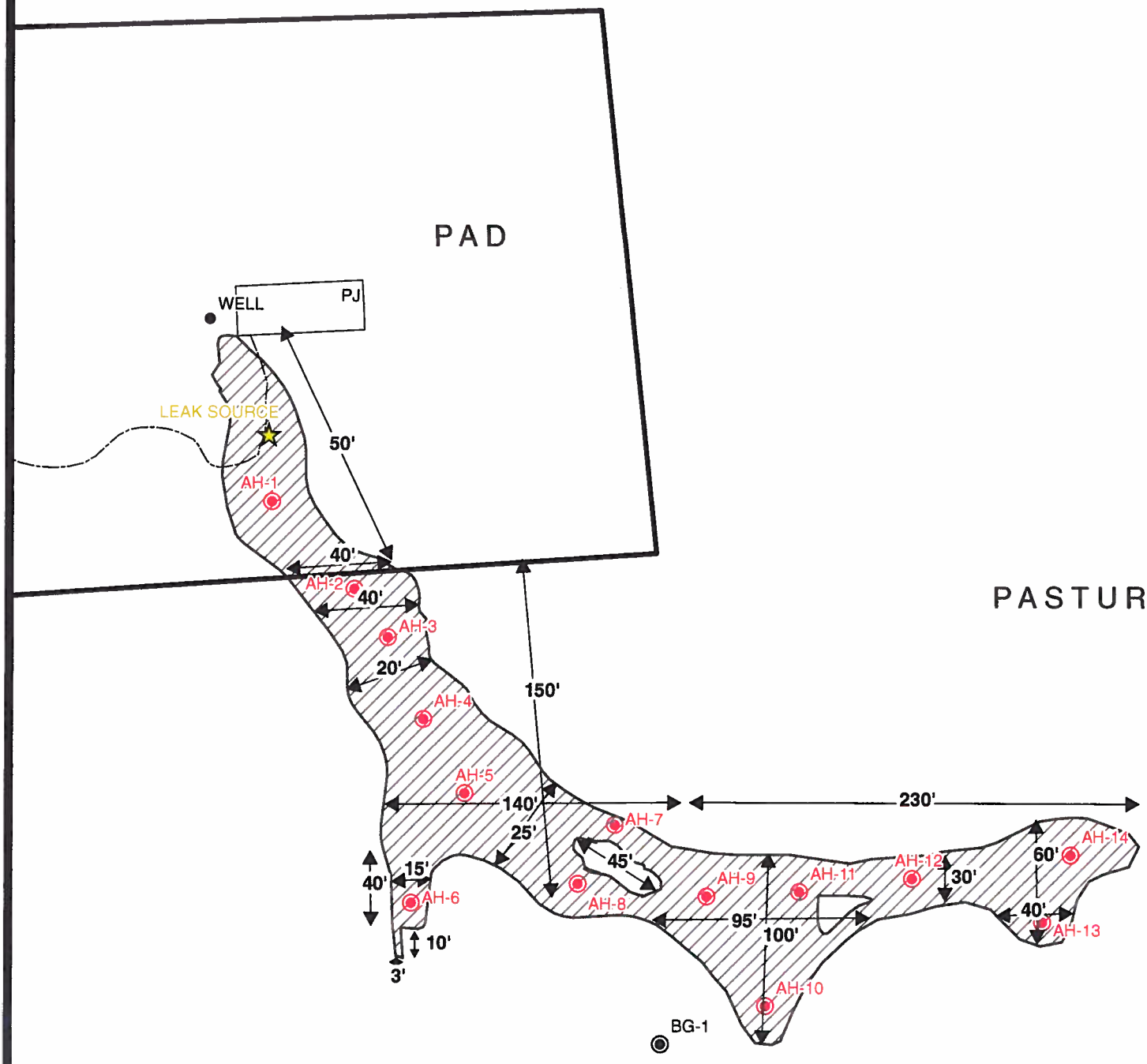
Eddy County, New Mexico

Project : 112MC05443

Date : 6/18/2013

File : H:\GIS\MC05443

Drawn By Isabel Marmolejo



EXPLANATION

- AUGER HOLE SAMPLE LOCATIONS
- LEAK SOURCE
- SPILL AREA

N

SCALE: 1 IN = 83 FEET

Feet 0 20 40

CONCHO

Figure 3

Hearse 36 #4H

Spill Assessment Map

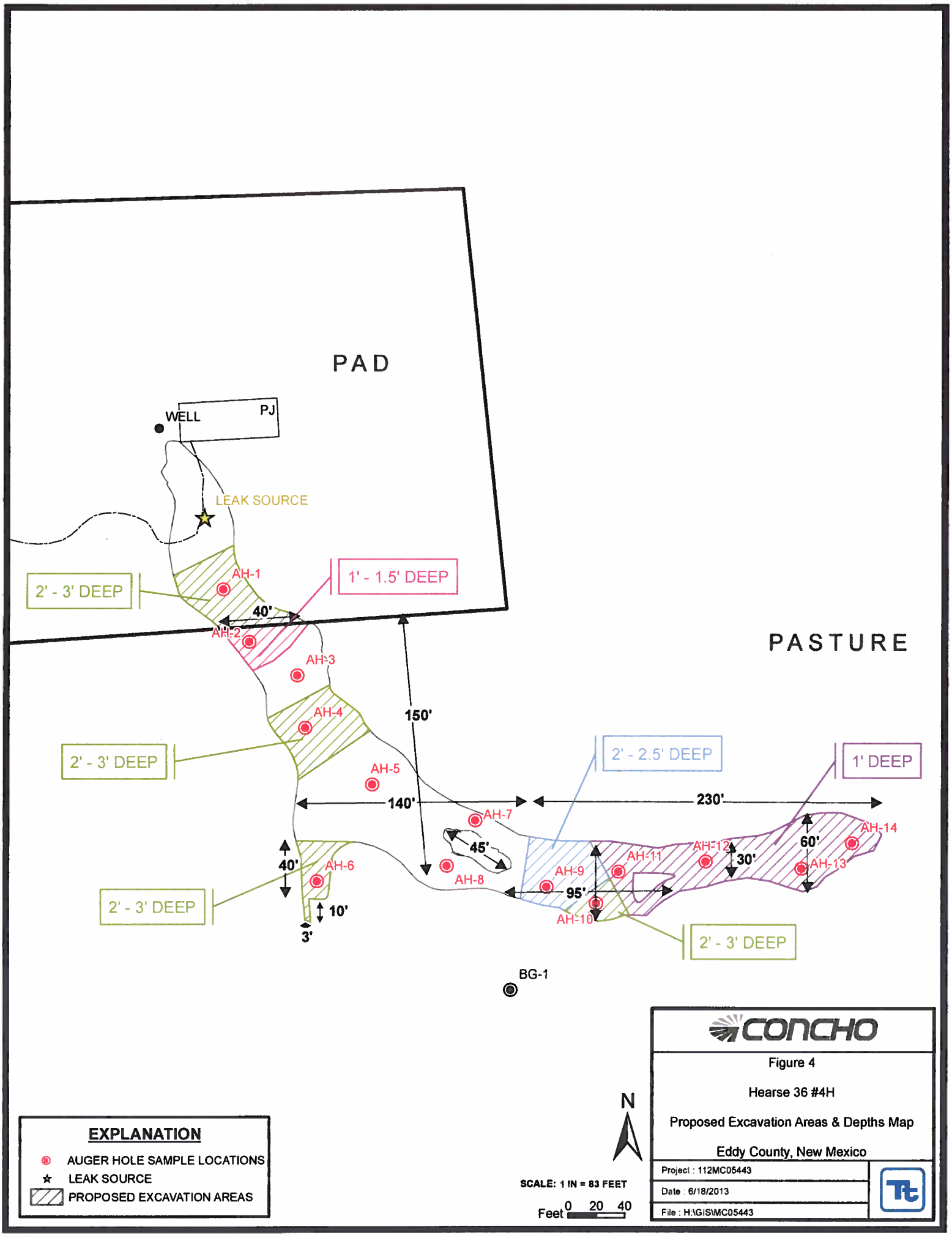
Eddy County, New Mexico

Project : 112MC05443

Date : 6/18/2013

File : H:\GIS\MC05443

Drawn By: Isabel Marmolejo



Drawn By Isabel Marmolejo

Tables

Table 1
COG Operating LLC.
Hearse 36 #4H
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)	Ethlybenzene (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		<4.00	<50.0	<50.0	-	-	-	-	-	1,480
Trench	"	1-1.5	"	X		-	-	-	-	-	-	-	-	1,490
AH-2	5/29/2013	0-1	0	X		113	407	520	-	-	-	-	-	7,850
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	8,060
	"	2-2.5	"	X		-	-	-	-	-	-	-	-	339
AH-3	5/29/2013	0-1	0	X		<4.00	<50.0	<50.0	-	-	-	-	-	319
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	648
	"	2-2.5	"	X		-	-	-	-	-	-	-	-	<20.0
AH-4	5/29/2013	0-1	0	X		7.31	<50.0	7.31	-	-	-	-	-	2,350
Trench	"	1-1.5	"	X		-	-	-	-	-	-	-	-	1,100
AH-5	5/29/2013	0-1	0	X		67.3	654	721	<0.100	<0.100	<0.100	1.37	1.37	429
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	74.7
	"	2-2.5	"	X		-	-	-	-	-	-	-	-	54.8
AH-6	5/29/2013	0-1	0	X		7.19	<50.0	7.19	-	-	-	-	-	4,490
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	5,880
Trench	"	2-2.5	"	X		-	-	-	-	-	-	-	-	4,840

Table 1
COG Operating LLC.
Hearse 36 #4H
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)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total						
AH-7	5/30/2013	0-1	0	X		35.1	<50.0	35.1	-	-	-	-	-	<20.0
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	<20.0
	"	2-2.5	"	X		-	-	-	-	-	-	-	-	<20.0
	"	3-3.5	"	X		-	-	-	-	-	-	-	-	<20.0
AH-8	5/30/2013	0-1	0	X		299	2,770	3,069	<0.400	<0.400	<0.400	2.62	2.62	<20.0
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	<20.0
	"	2-2.5	"	X		-	-	-	-	-	-	-	-	<20.0
	"	3-3.5	"	X		-	-	-	-	-	-	-	-	<20.0
AH-9	5/30/2013	0-1	0	X		691	129	820	<0.200	1.98	10.9	28.0	40.9	7,510
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	2,030
	"	2-2.5	"	X		-	-	-	-	-	-	-	-	3,220
	"	2.5-3	"	X		-	-	-	-	-	-	-	-	396
AH-10	5/30/2013	0-1	0	X		1,880	7,770	**9,650**	**17.3**	74.9	164	386	**642**	4,550
Trench	"	1-1.5	"	X		4,430	4,650	**9,080**	3.42	27.4	85.3	160	**276**	3,530
AH-11	5/30/2013	0-1	0	X		33.2	163	196	-	-	-	-	-	3,650
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	<20.0
	"	2-2.5	"	X		-	-	-	-	-	-	-	-	147

Table 1
COG Operating LLC.
Hearse 36 #4H
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)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total						
AH-12	5/30/2013	0-1	0	X		3,860	916	4,776	<0.200	12.9	58.6	116	**188**	832
	"	1-1.5	"	X		-	-	-	<0.0200	<0.0200	0.498	1.46	1.96	65.5
AH-13	5/30/2013	0-1	0	X		4,270	2,770	**7,040**	<0.200	11.2	66.5	139	**217**	<20.0
	"	1-1.5	"	X		39.5	207	247	<0.0200	<0.0200	<0.0200	0.974	0.974	<20.0
	"	2-2.5	"	X		-	-	-	-	-	-	-	-	<20.0
AH-14	5/30/2013	0-1	0	X		6,620	3,740	**10,360**	5.23	35.2	119	219	**378**	282
	"	1-1.5	"	X		8.34	<50.0	8.34	<0.0200	<0.0200	<0.0200	0.118	0.118	<20.0
	"	2-2.5	"	X		-	-	-	-	-	-	-	-	<20.0
Background 1	5/30/2013	0-1	0	X		<4.00	<50.0	<50.0	-	-	-	-	-	<20.0
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	<20.0
	"	2-2.5	"	X		-	-	-	-	-	-	-	-	<20.0

(-) Not Analyzed

(BEB) Below Excavation Bottom

Proposed Excavation Depths and Areas

Trench Install Backhoe Trench

Photos

COG Operating LLC
Hearse 36 State #4H
Eddy County, New Mexico

TETRA TECH

View Northwest – Area of AH-1

View South – Area of AH-2

COG Operating LLC
Hearse 36 State #4H
Eddy County, New Mexico

TETRA TECH

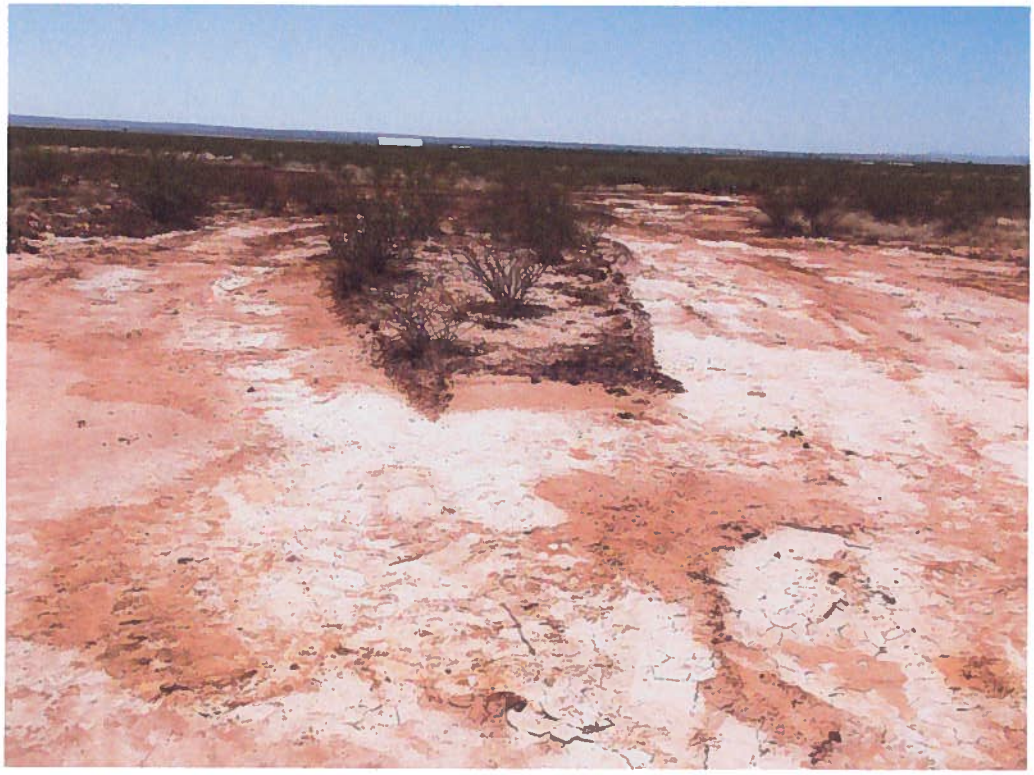
View South – Area of AH-3 and AH-4

View South – Area of AH-5

COG Operating LLC
Hearse 36 State #4H
Eddy County, New Mexico

TETRA TECH

View South – Area of AH-6

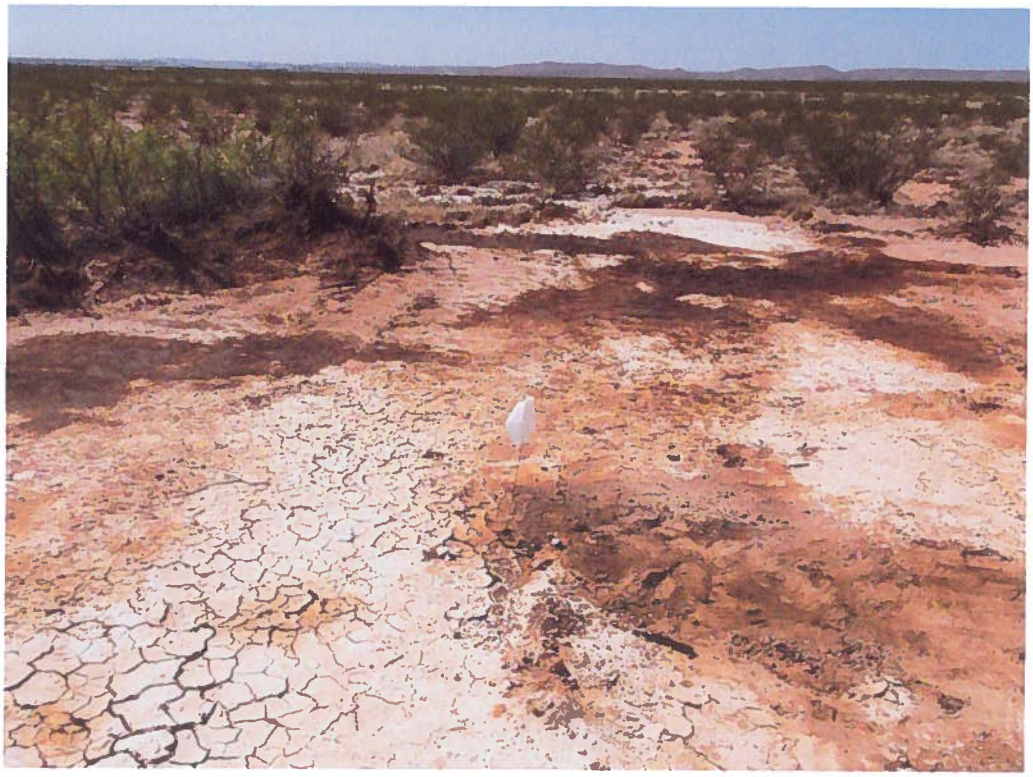


View East – Area of AH-7 and AH-8

COG Operating LLC
Hearse 36 State #4H
Eddy County, New Mexico

TETRA TECH

View East – Area of AH-9



View South – Area of AH-10

COG Operating LLC
Hearse 36 State #4H
Eddy County, New Mexico

TETRA TECH

View East – Area of AH-11

View East – Area of AH-12

COG Operating LLC
Hearse 36 State #4H
Eddy County, New Mexico

TETRA TECH

View South – Area of AH-13

View East – Area of AH-14

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	HEARSE 36 STATE #004H	Facility Type	WELL PAD

Surface Owner	Mineral Owner	Lease No. (API#)
STATE		30-015-39264

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	36	19S	25E					EDDY

Latitude 32.61068 **Longitude** 104.43531

NATURE OF RELEASE

Type of Release Oil	Volume of Release 40bbls	Volume Recovered 30bbls
Source of Release Casing valve on well head	Date and Hour of Occurrence 05-03-2013	Date and Hour of Discovery 05-03-2013 7:00am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher - NMOCD	
By Whom? Michelle Mullins	Date and Hour 05-03-2013 1:23pm	
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 casing valve was left open on the well head. Closed the valve to prevent any further release.

Describe Area Affected and Cleanup Action Taken.*

Initially 40bbls of oil were released from an open casing valve on the well head. We were able to recover 30bbls of oil with a vacuum truck. The spill occurred on the location and traveled to the adjacent pasture. All free fluids have been removed from the location and the pasture. A work plan will be presented to the NMOCD 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: Robert Grubbs	OIL CONSERVATION DIVISION	
Printed Name: Robert Grubbs Jr.	Approved by District Supervisor:	
Title: Senior Environmental Coordinator	Approval Date:	Expiration Date:
E-mail Address: rgrubbs@concho.com	Conditions of Approval:	Attached ☐
Date: 05-14-2013 Phone: 432-661-6601		

* Attach Additional Sheets If Necessary

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
COG-Hearse 36 State #4H
Eddy County, New Mexico

18 South 24 East

6	5	4	3	2	1
7	8	9	10	11 350	12
18 475	17	16 516	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35 364	36

18 South 25 East

6	5	4 155	3 184	2 175	1 187
7	8	9	10 168	11	12
18 230	17	16	15	14	13
19	20	21	22	23 117	24 168
30	29	28	27	26 200	25
31	32	33	34	35	36 270

18 South 26 East

6 200	5 95	4 24	3 65	2 50 14	1
7	8	9 70	10 8 40	11	12
18 56	17	16 51	15	14	13
19	20	21	22 98	23	24 19
30	29	28 85	27	26	25
31	32	33	34	35	36

19 South 24 East

6	5	4	3	2	1
7	8	9	10 335	11	12 285
18	17 295	16	15	14	13
19	20	21 300	22	23	24
30	29	28 558	27	26 322	25
31	32	33	34 270	35	36

19 South 25 East

6	5 305	4	3	2 100	1 172
7	8	9 280	10	11	12
18	17 83	16	15 59	14	13
19 310	20	21	22 130	23	24
30 222	29	28	27 60	26	25 60
31 140	32	33	34	35	36 SITE

19 South 26 East

6	5	4 70	3	2	1 70
7	8	9	10 50	11	12 24
18 69	17	16	15	14 67	13
19	20 52	21	22	23 80	24
30 105	29	28	27 49	26	25
31 95	32 95	33	34	35	36

20 South 24 East

6	5	4	3 268	2	1 131
7	8 500	9	10	11	12
18	17	16	15	14 80	13
19	20	21	22 300	23	24
30	29	28	27	26	25 268
31	32 350	33	34	35	36

20 South 25 East

6	5	4	3	2	1 121
7	8 249	9	10 130	11 70	12 102
18	17 170	16 129	15 67	14	13
19	20 228	21 80	22	23	24
30	29	28	27	26	25
31 312	32 100	33	34	35	36

20 South 26 East

6 65	5 20	4	3	2	1
7 5 60	8	9	10	11 49	12
18	17 51	16	15	14	13
19	20	21	22	23 105	24
30 190	29	28	27	26	25
31	32 51	33	34 135	35 62	36 120

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

(Corrected Report)

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

Report Date: June 19, 2013

Work Order: 13060319

Project Location: Eddy Co., NM
Project Name: COG/Hearse 36 #4H
Project Number: 112MC05443

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
330784	AH-1 0-1'	soil	2013-05-29	00:00	2013-05-31
330785	AH-1 1-1.5'	soil	2013-05-29	00:00	2013-05-31
330786	AH-2 0-1'	soil	2013-05-29	00:00	2013-05-31
330787	AH-2 1-1.5'	soil	2013-05-29	00:00	2013-05-31
330788	AH-2 2-2.5'	soil	2013-05-29	00:00	2013-05-31
330789	AH-3 0-1'	soil	2013-05-29	00:00	2013-05-31
330790	AH-3 1-1.5'	soil	2013-05-29	00:00	2013-05-31
330791	AH-3 2-2.5'	soil	2013-05-29	00:00	2013-05-31
330792	AH-4 0-1'	soil	2013-05-29	00:00	2013-05-31
330793	AH-4 1-1.5'	soil	2013-05-29	00:00	2013-05-31
330794	AH-5 0-1'	soil	2013-05-29	00:00	2013-05-31
330795	AH-5 1-1.5'	soil	2013-05-29	00:00	2013-05-31
330796	AH-5 2-2.5'	soil	2013-05-29	00:00	2013-05-31
330797	AH-6 0-1'	soil	2013-05-29	00:00	2013-05-31
330798	AH-6 1-1.5'	soil	2013-05-29	00:00	2013-05-31
330799	AH-6 2-2.5'	soil	2013-05-29	00:00	2013-05-31
330800	AH-7 0-1'	soil	2013-05-30	00:00	2013-05-31
330801	AH-7 1-1.5'	soil	2013-05-30	00:00	2013-05-31
330802	AH-7 2-2.5'	soil	2013-05-30	00:00	2013-05-31
330803	AH-7 3-3.5'	soil	2013-05-30	00:00	2013-05-31
330804	AH-8 0-1'	soil	2013-05-30	00:00	2013-05-31
330805	AH-8 1-1.5'	soil	2013-05-30	00:00	2013-05-31
330806	AH-8 2-2.5'	soil	2013-05-30	00:00	2013-05-31
330807	AH-8 3-3.5'	soil	2013-05-30	00:00	2013-05-31
330808	AH-9 0-1'	soil	2013-05-30	00:00	2013-05-31
330809	AH-9 1-1.5'	soil	2013-05-30	00:00	2013-05-31
330810	AH-9 2-2.5'	soil	2013-05-30	00:00	2013-05-31
330811	AH-9 2.5-3'	soil	2013-05-30	00:00	2013-05-31

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
330812	AH-10 0-1'	soil	2013-05-30	00:00	2013-05-31
330813	AH-10 1-1.5'	soil	2013-05-30	00:00	2013-05-31
330814	AH-11 0-1'	soil	2013-05-30	00:00	2013-05-31
330815	AH-11 1-1.5'	soil	2013-05-30	00:00	2013-05-31
330816	AH-11 2-2.5'	soil	2013-05-30	00:00	2013-05-31
330817	AH-12 0-1'	soil	2013-05-30	00:00	2013-05-31
330818	AH-12 1-1.5'	soil	2013-05-30	00:00	2013-05-31
330819	AH-13 0-1'	soil	2013-05-30	00:00	2013-05-31
330820	AH-13 1-1.5'	soil	2013-05-30	00:00	2013-05-31
330821	AH-13 2-2.5'	soil	2013-05-30	00:00	2013-05-31
330822	AH-14 0-1'	soil	2013-05-30	00:00	2013-05-31
330823	AH-14 1-1.5'	soil	2013-05-30	00:00	2013-05-31
330824	AH-14 2-2.5'	soil	2013-05-30	00:00	2013-05-31
330825	BG 1 0-1'	soil	2013-05-30	00:00	2013-05-31
330826	BG 1 1-1.5'	soil	2013-05-30	00:00	2013-05-31
330827	BG 1 2-2.5'	soil	2013-05-30	00:00	2013-05-31

Sample - Field Code	BTEX Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	TPH DRO - NEW DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
330784 - AH-1 0-1'					<50.0	<4.00
330786 - AH-2 0-1'					**407**	**113**
330789 - AH-3 0-1'					<50.0	<4.00
330792 - AH-4 0-1'					<50.0	**7.31**
330794 - AH-5 0-1'	<0.100 [1]	<0.100	<0.100	**1.37**	**654**	**67.3**
330797 - AH-6 0-1'					<50.0	**7.19**
330800 - AH-7 0-1'					<50.0	**35.1**
330804 - AH-8 0-1'	<0.400 [2]	<0.400	<0.400	**2.62**	**2770**	**299**
330808 - AH-9 0-1'	<0.200 [3]	**1.98**	**10.9**	**28.0**	**129**	**691**
330812 - AH-10 0-1'	**17.3**	**74.9**	**164**	**386**	**7770**	**1880**
330813 - AH-10 1-1.5'	**3.42**	**27.4**	**85.3**	**160**	**4650**	**4430**
330814 - AH-11 0-1'					**163**	**33.2**
330817 - AH-12 0-1'	<0.200 [4]	**12.9**	**58.6**	**116**	**916**	**3860**
330818 - AH-12 1-1.5'	<0.0200	<0.0200	**0.498**	**1.46**		
330819 - AH-13 0-1'	<0.200 [5]	**11.2**	**66.5**	**139**	**2770**	**4270**
330820 - AH-13 1-1.5'	<0.0200	<0.0200	<0.0200	**0.974**	**207** Qr,Qs	**39.5**
330822 - AH-14 0-1'	**5.23**	**35.2**	**119**	**219**	**3740**	**6620**
330823 - AH-14 1-1.5'	<0.0200	<0.0200	<0.0200	**0.118**	<50.0 Qr,Qs	**8.34**
330825 - BG 1 0-1'					<50.0	<4.00

Sample: 330784 - AH-1 0-1'

Param	Flag	Result	Units	RL
Chloride		**1480**	mg/Kg	4

[1]Dilution due to hydrocarbons.
[2]Dilutions due to hydrocarbons.
[3]Dilutions due to hydrocarbons.
[4]Dilution due to hydrocarbons.
[5]Dilution due to hydrocarbons.

Sample: 330785 - AH-1 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**1490**	mg/Kg	4

Sample: 330786 - AH-2 0-1'

Param	Flag	Result	Units	RL
Chloride		**7850**	mg/Kg	4

Sample: 330787 - AH-2 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**8060**	mg/Kg	4

Sample: 330788 - AH-2 2-2.5'

Param	Flag	Result	Units	RL
Chloride		**339**	mg/Kg	4

Sample: 330789 - AH-3 0-1'

Param	Flag	Result	Units	RL
Chloride		**319**	mg/Kg	4

Sample: 330790 - AH-3 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**648**	mg/Kg	4

Sample: 330791 - AH-3 2-2.5'

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

Sample: 330792 - AH-4 0-1'

Param	Flag	Result	Units	RL
Chloride		**2350**	mg/Kg	4

Sample: 330793 - AH-4 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**1100**	mg/Kg	4

Sample: 330794 - AH-5 0-1'

Param	Flag	Result	Units	RL
Chloride		**429**	mg/Kg	4

Sample: 330795 - AH-5 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**74.7**	mg/Kg	4

Sample: 330796 - AH-5 2-2.5'

Param	Flag	Result	Units	RL
Chloride		**54.8**	mg/Kg	4

Sample: 330797 - AH-6 0-1'

Param	Flag	Result	Units	RL
Chloride		**4490**	mg/Kg	4

Sample: 330798 - AH-6 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**5880**	mg/Kg	4

Sample: 330799 - AH-6 2-2.5'

Param	Flag	Result	Units	RL
Chloride		**4840**	mg/Kg	4

Sample: 330800 - AH-7 0-1'

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

Sample: 330801 - AH-7 1-1.5'

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

Sample: 330802 - AH-7 2-2.5'

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

Sample: 330803 - AH-7 3-3.5'

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

Sample: 330804 - AH-8 0-1'

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

Sample: 330805 - AH-8 1-1.5'

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

Sample: 330806 - AH-8 2-2.5'

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

Sample: 330807 - AH-8 3-3.5'

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

Sample: 330808 - AH-9 0-1'

Param	Flag	Result	Units	RL
Chloride		**7510**	mg/Kg	4

Sample: 330809 - AH-9 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**2030**	mg/Kg	4

Sample: 330810 - AH-9 2-2.5'

Param	Flag	Result	Units	RL
Chloride		**3220**	mg/Kg	4

Sample: 330811 - AH-9 2.5-3'

Param	Flag	Result	Units	RL
Chloride		**396**	mg/Kg	4

Sample: 330812 - AH-10 0-1'

Param	Flag	Result	Units	RL
Chloride		**4550**	mg/Kg	4

Sample: 330813 - AH-10 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**3530**	mg/Kg	4

Sample: 330814 - AH-11 0-1'

Param	Flag	Result	Units	RL
Chloride		**3650**	mg/Kg	4

Sample: 330815 - AH-11 1-1.5'

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

Sample: 330816 - AH-11 2-2.5'

Param	Flag	Result	Units	RL
Chloride		**147**	mg/Kg	4

Sample: 330817 - AH-12 0-1'

Param	Flag	Result	Units	RL
Chloride		**832**	mg/Kg	4

Sample: 330818 - AH-12 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**65.5**	mg/Kg	4

Sample: 330819 - AH-13 0-1'

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

Sample: 330820 - AH-13 1-1.5'

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

Sample: 330821 - AH-13 2-2.5'

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

Sample: 330822 - AH-14 0-1'

Param	Flag	Result	Units	RL
Chloride		**282**	mg/Kg	4

Sample: 330823 - AH-14 1-1.5'

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

Sample: 330824 - AH-14 2-2.5'

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

Sample: 330825 - BG 1 0-1'

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

Sample: 330826 - BG 1 1-1.5'

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

Sample: 330827 - BG 1 2-2.5'

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