Bratcher, Mike, EMNRD

From: Tavarez, Ike [Ike.Tavarez@tetratech.com]
Sent: Wednesday, January 19, 2011 3:13 PM
To: Bratcher, Mike, EMNRD
Subject: RE: COG - Mesilla State #3 TB Work Plan Approval Request

Mike,

You are correct. I will make the changes and re-submit the work plan. Thanks

Ike Tavarez
Tetra Tech

From: Bratcher, Mike, EMNRD [mailto:mike.bratcher@state.nm.us]
Sent: Wednesday, January 19, 2011 11:35 AM
To: Tavarez, Ike
Subject: RE: COG - Mesilla State #3 TB Work Plan Approval Request

Ike,

Will you review the labeling on the diagrams? I think SB-3/AH-1 and SB-2/AH-6 may be mislabeled.

Mike

From: Tavarez, Ike [mailto:Ike.Tavarez@tetratech.com]
Sent: Friday, January 07, 2011 12:03 PM
To: Bratcher, Mike, EMNRD
Cc: Pat Ellis; Joshua Russo
Subject: COG - Mesilla State #3 TB Work Plan Approval Request

Mike,

Please review the attached work plan on the Mesilla State #3 TB . If you need a hard copy of the work plan let me know. Once approved, Tetra Tech will setup the remediation. Call me if you have any questions, thanks

Ike Tavarez, PG | Senior Project Manager

Main: 432.682.4559 | Fax: 432.682.3946 | Cell: 432.425.3878

Ike.Tavarez@tetratech.com

Tetra Tech | Complex World, Clear Solutions™

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

Bratcher, Mike, EMNRD

From: Bratcher, Mike, EMNRD
Sent: Wednesday, January 19, 2011 10:35 AM
To: 'Tavarez, Ike'
Subject: RE: COG - Mesilla State #3 TB Work Plan Approval Request

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To: Bratcher, Mike, EMNRD
Cc: Pat Ellis; Joshua Russo
Subject: COG - Mesilla State #3 TB Work Plan Approval Request
Attachments: COG - Mesilla State #3 TB Work Plan .pdf

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SITE INFORMATION

Report Type: Work Plan

General Site Information:		
Site:	Mesilla State #3 Tank Battery	
Company:	COG Operating LLC	
Section, Township and Range	T-17S R-30E Sec. 16 Unit H	
Lease Number:	B-2103	
County:	Eddy County	
GPS:	32.83727° N	103.96921° W
Surface Owner:	State	
Mineral Owner:		
Directions:	From the intersection of Hwy 529 and Goat Roper Road (Loco Hills, NM), travel North 0.7 miles, turn right 0.5 miles, turn left 0.3 miles to location.	

Release Data:	
Date Released:	9/3/2010
Type Release:	BS&W
Source of Contamination:	High winds broke support brace
Fluid Released:	60 bbls
Fluids Recovered:	50 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@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

December 29, 2010

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

Re: Work Plan for the COG Operating LLC., Mesilla State #3 , Unit H, Section 16, 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 Mesilla State #3 located in Unit H, Section 16, Township 17 South, Range 30 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.83727°, W 103.96921°. 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 September 3, 2010, and released approximately sixty (60) barrels of basic sediment and water (BS&W). The spill was caused by high winds breaking loose a support brace on the PVC leg of the storage vessel. COG personnel replaced the broken PVC line with a steel line. Fifty (50) barrels of standing fluids were recovered. The spill initiated from the battery and breached the facility dike impacting the pad area measuring approximately 175' x 175'. The spill migrated off the south pad into the pasture, impacting an area approximately 20' by 20'. The initial C-141 form is enclosed in Appendix A.

Groundwater

No water wells were listed within Section 16. According to the NMOCD groundwater map, the average depth to groundwater in this area is greater than 300' below surface. The groundwater data is shown in Appendix B.

Tetra Tech
[illegible] Big Spring, [illegible]
Tel [illegible] Fax [illegible]

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 September 22, 2010, Tetra Tech personnel inspected and sampled the spill area. A total of seven (7) auger holes (AH-1 through AH-7) 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 results of the sampling are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, all the submitted samples were below RRAL for TPH and BTEX. Auger holes (AH-2, AH-4 and AH-5) had slight chloride concentrations at the surface (0-1') of 327 mg/kg, 206 mg/kg and 818 mg/kg, respectively. The chloride concentrations declined below reporting limit of <200 at 1-1.5' below surface. The remaining auger holes were not vertically defined, with bottom hole chloride concentrations of 3,910 mg/kg at 1-1.5' (AH-1), 9,580 mg/kg at 6-6.5' (AH-6), and 1,510 mg/kg at 5-5.5' (AH-7).

On December 1, 2010, Tetra Tech personnel supervised the installation of three soil borings (SB-1, SB-2 and SB-3) utilizing an air rotary drilling rig. Soil samples were collected to define the impact of the chloride concentrations in the vicinity of AH-1, AH-6 and AH-7. Referring to Table 1, elevated chloride concentrations significantly declined with depth at 7' (SB-1), 3' (SB-2) and 40' (SB-3). The soil boring locations are shown on Figure 3

TETRA TECH

Work Plan

COG proposes to removal of impacted material as highlighted (green) in Table 1 and Figure 4. Once the areas are excavated to the appropriate depths, the excavation will be backfilled with clean soil. Upon completion a final report will be submitted to the NMOCD.

The goal of the remediation is to establish surface growth and to reduce the environmental liabilities for the protection of the groundwater. Concerns exist regarding a deep excavation plan. Since the impacted area is in the native sand dunes, 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. If the depths are not reached, a 40 mil liner will be installed at depth of 4' to 5' below surface to cap the impacted area.

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

Kim Dorey
Staff Geologist

cc: Pat Ellis – COG
cc: Terry Gregston and Jim Amos – BLM

Table 1
COG Operating LLC.
MESILLA STATE #3 TANK BATTERY
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	9/22/2010	0-1'		X		41.3	71.6	112.9	<0.0100	<0.0100	<0.0100	<0.0100	3,680
	"	1-1.5'		X		-	-	-	-	-	-	-	3,910
SB-2	12/1/2010	3'		X		-	-	-	-	-	-	-	<200
	"	5'		X		-	-	-	-	-	-	-	<200
	"	7'		X		-	-	-	-	-	-	-	399
	"	10'		X		-	-	-	-	-	-	-	<200
	"	15'		X		-	-	-	-	-	-	-	<200
	"	20'		X		-	-	-	-	-	-	-	<200
AH-2	9/2/2010	0-1'		X		<1.00	<50.0	<50.0	-	-	-	-	327
	"	1-1.5'		X		-	-	-	-	-	-	-	<200
	"	2-2.5'		X		-	-	-	-	-	-	-	<200
	"	3-3.5'		X		-	-	-	-	-	-	-	<200
	"	3.5-4'		X		-	-	-	-	-	-	-	<200

Table 1
COG Operating LLC.
MESILLA STATE #3 TANK BATTERY
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	9/22/2010	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	2,420
	"	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
AH-4	9/22/2010	0-1'		X		<1.00	<50.0	<50.0	-	-	-	-	206
	"	1-1.5'		X		-	-	-	-	-	-	-	<200
	"	2-2.5'		X		-	-	-	-	-	-	-	<200
	"	3-3.5'		X		-	-	-	-	-	-	-	<200
AH-5	9/22/2010	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	818
	"	1-1.5'		X		-	-	-	-	-	-	-	<200
	"	2-2.5'		X		-	-	-	-	-	-	-	<200
	"	3-3.5'		X		-	-	-	-	-	-	-	<200
	"	4-4.5'		X		-	-	-	-	-	-	-	<200

Table 1
COG Operating LLC.
MESILLA STATE #3 TANK BATTERY
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	9/22/2010	0-1'		X		6.89	167	173.89	<0.0100	<0.0100	<0.0100	<0.0100	7,400
	"	1-1.5'		X		-	-	-	-	-	-	-	1,790
	"	2-2.5'		X		-	-	-	-	-	-	-	1,520
	"	3-3.5'		X		-	-	-	-	-	-	-	<200
	"	4-4.5'		X		-	-	-	-	-	-	-	5,540
	"	5-5.5'		X		-	-	-	-	-	-	-	7,580
	"	6-6.5'		X		-	-	-	-	-	-	-	9,580
SB-3	12/1/2010	0-1'		X		-	-	-	-	-	-	-	<200
	"	3'		X		-	-	-	-	-	-	-	<200
	"	5'		X		-	-	-	-	-	-	-	1,510
	"	7'		X		-	-	-	-	-	-	-	1,420
	"	10'		X		-	-	-	-	-	-	-	3,010
	"	15'		X		-	-	-	-	-	-	-	4,420
	"	20'		X		-	-	-	-	-	-	-	5,970
	"	25'		X		-	-	-	-	-	-	-	6,310
	"	30'		X		-	-	-	-	-	-	-	3,800
	"	40'		X		-	-	-	-	-	-	-	312
	"	50'		X		-	-	-	-	-	-	-	<200
	"	60'		X		-	-	-	-	-	-	-	<200

Table 1
COG Operating LLC.
MESILLA STATE #3 TANK BATTERY
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	9/22/2010	0-1'		X		<1.00	<50.0	<50.0	-	-	-	-	4,600
	"	1-1.5'		X		-	-	-	-	-	-	-	651
	"	2-2.5'		X		-	-	-	-	-	-	-	570
	"	3-3.5'		X		-	-	-	-	-	-	-	1,730
	"	4-4.5'		X		-	-	-	-	-	-	-	1,360
	"	5-5.5'		X		-	-	-	-	-	-	-	1,510
SB-1	12/1/2010	0-1'		X		-	-	-	-	-	-	-	4,630
	"	3'		X		-	-	-	-	-	-	-	5,340
	"	5'		X		-	-	-	-	-	-	-	347
	"	7'		X		-	-	-	-	-	-	-	<200
	"	10'		X		-	-	-	-	-	-	-	<200
	"	15'		X		-	-	-	-	-	-	-	233
	"	20'		X		-	-	-	-	-	-	-	<200

BEB Below Excavation Bottom
(--) Not Analyzed
Proposed excavation depth

Water Well Data
Average Depth to Groundwater (ft)
COG -Mesilla State #3 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	13
19 110	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

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
31 290	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 80	23	24
30	29 210 208'	28	27	26	25
31	32	33	34	35 153	36

17 South 30 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16 SITE	15	14	13
19	20	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	34 271	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

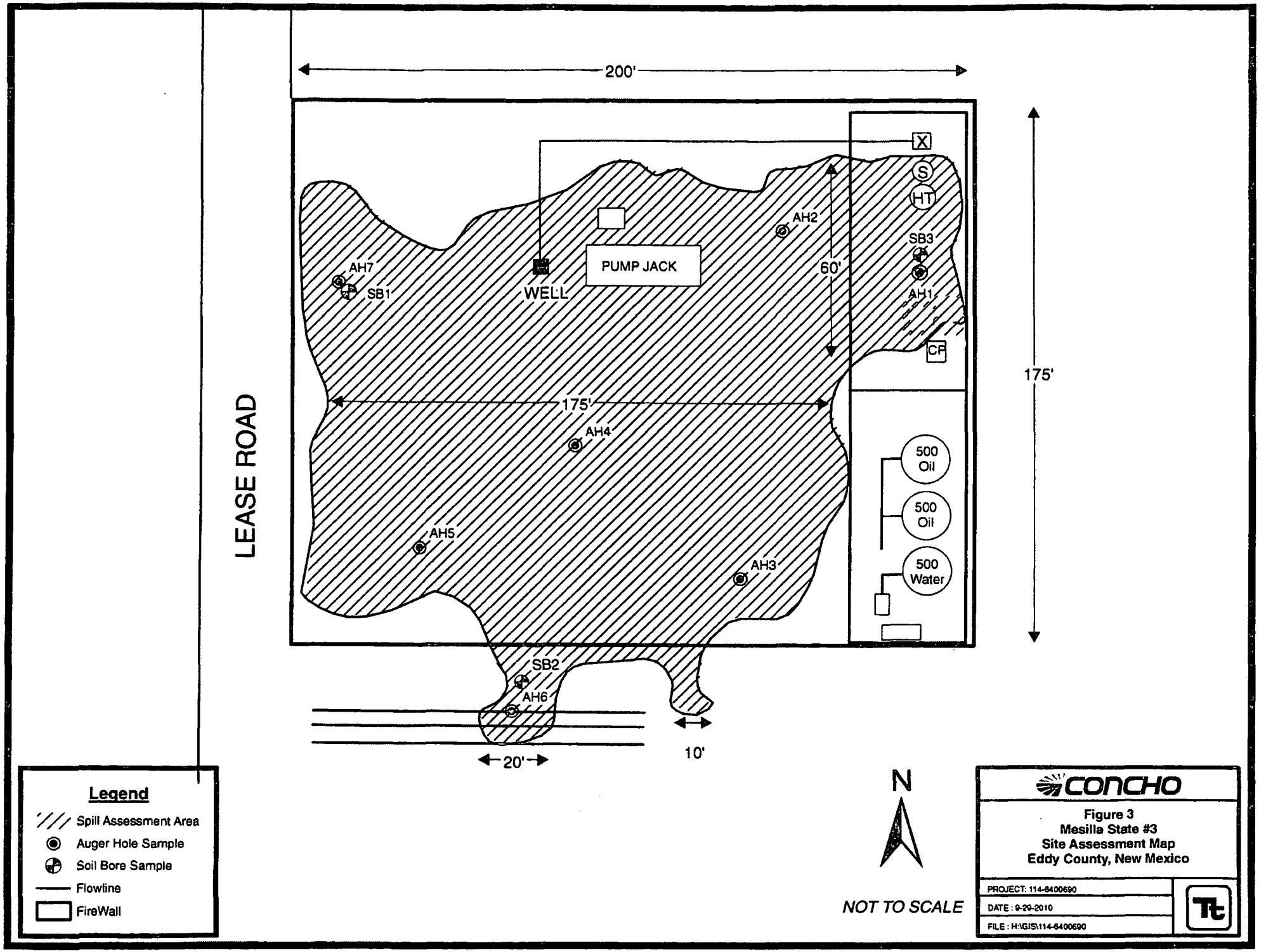
18 South 30 East

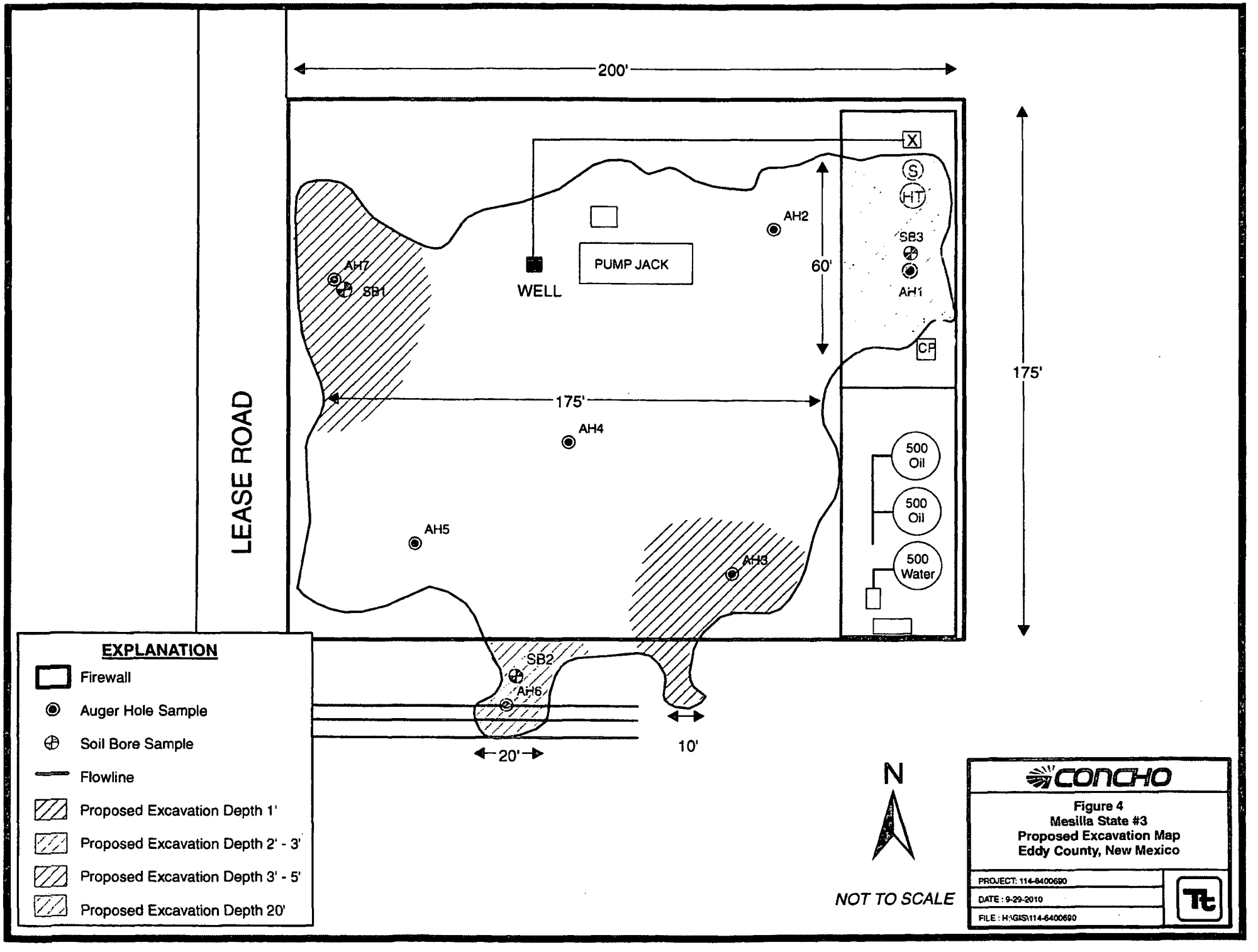
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

18 South 31 East

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

- New Mexico State Engineers Well Reports
- USGS Well Reports
- Geology and Groundwater Conditions in Southern Eddy, County, NM
- NMOCD - Groundwater Data


200'
LEASE ROAD
X
S
HT
AH2
SB3
AH1
AH7
SB1
WELL
PUMP JACK
60'
CF
175'
175'
AH4
500
Oil
500
Oil
500
Water
AH5
AH3
SB2
AH6
10'
20'
Legend
Spill Assessment Area
Auger Hole Sample
Soil Bore Sample
Flowline
FireWall
N
NOT TO SCALE
CONCHO
Figure 3
Mesilla State #3
Site Assessment Map
Eddy County, New Mexico
PROJECT: 114-6400690
DATE : 9-29-2010
FILE : H:\GIS\114-6400690


200'
LEASE ROAD
X
S
HT
AH2
SB3
AH1
PUMP JACK
WELL
60'
AH7
SB1
CF
175'
175'
AH4
500 Oil
500 Oil
500 Water
AH5
AH3
SB2
AH6
20'
10'
EXPLANATION
Firewall
Auger Hole Sample
Soil Bore Sample
Flowline
Proposed Excavation Depth 1'
Proposed Excavation Depth 2' - 3'
Proposed Excavation Depth 3' - 5'
Proposed Excavation Depth 20'
N
NOT TO SCALE
CONCHO
Figure 4
Mesilla State #3
Proposed Excavation Map
Eddy County, New Mexico
PROJECT: 114-6400690
DATE : 9-29-2010
FILE : H:\GIS\114-6400690

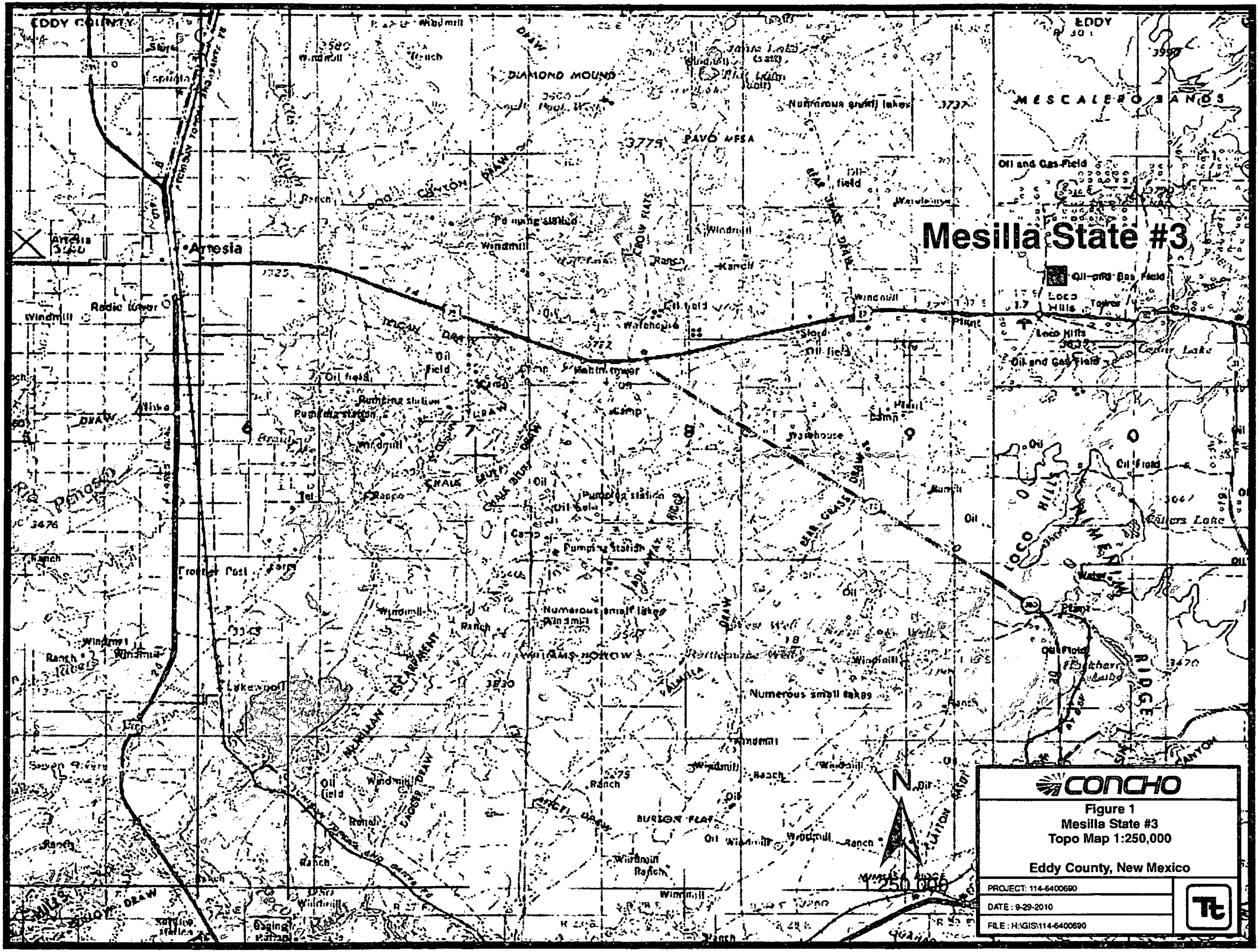
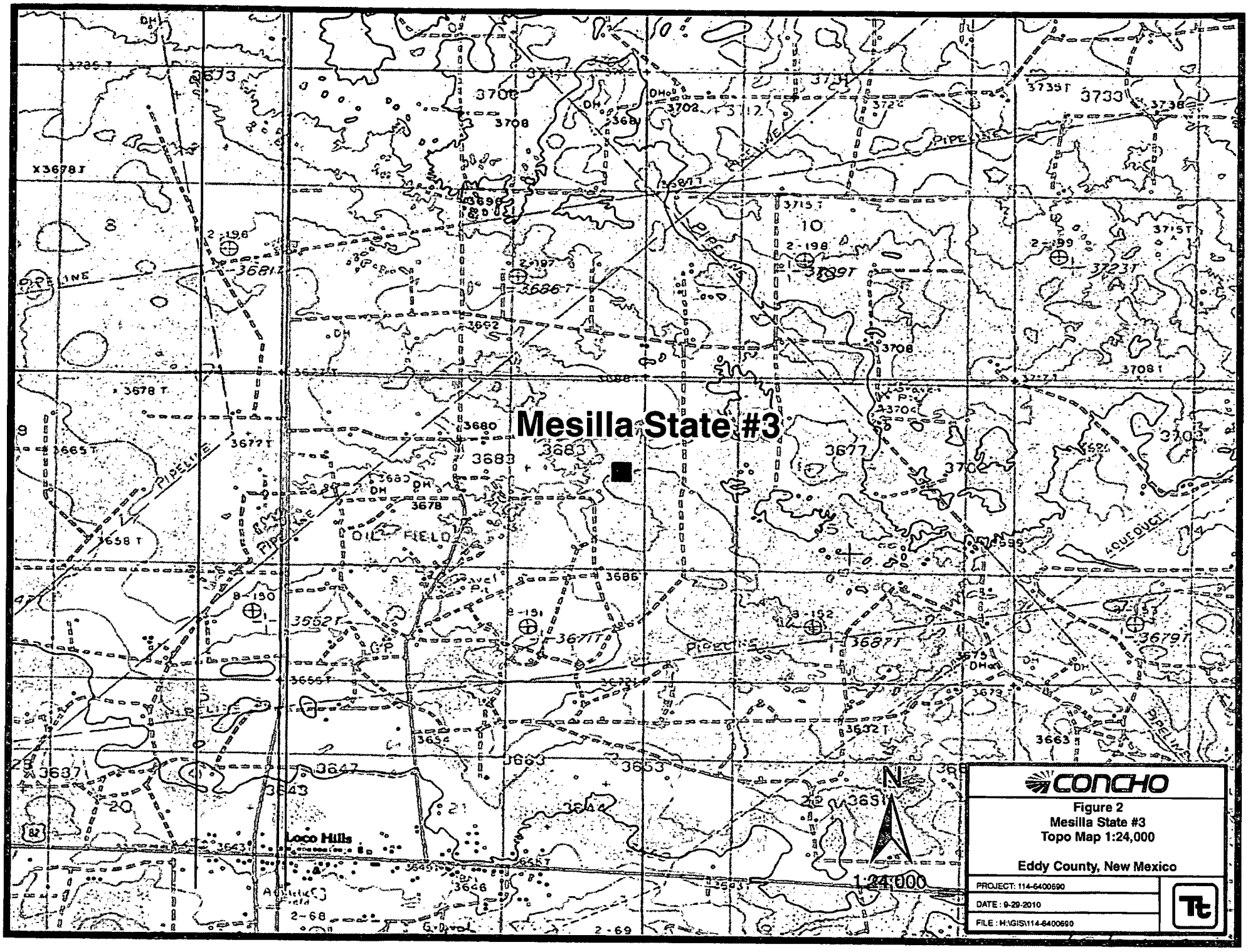


Figure 1
Mesilla State #3
Topo Map 1:250,000

Eddy County, New Mexico


Mesilla State #3
Loco Hills
OIL FIELD
PIPELINE
AQUEDUCT
N
1:24,000
CONCHO
Figure 2
Mesilla State #3
Topo Map 1:24,000
Eddy County, New Mexico
PROJECT: 114-6400690
DATE : 9-29-2010
FILE : H:\GIS\114-6400690

0690

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 Repo

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	Mesilla State #3 Tank Battery	Facility Type	Tank Battery

Surface Owner State	Mineral Owner	Lease No. B-2103

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	16	17S	30E					Eddy

Latitude 32 50.233 **Longitude** 103 58.155

NATURE OF RELEASE

Type of Release BS & W	Volume of Release 60bbls	Volume Recovered 50bbls
Source of Release PVC water leg	Date and Hour of Occurrence 09/03/2010	Date and Hour of Discovery 09/03/2010 8:30 a.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher—OCD	
By Whom? Josh Russo	Date and Hour 09/03/2010 8:30 a.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.*

High wind speed moved the supports bracing the PVC water leg and broke it in half causing the release. The PVC water leg has been replaced with a new steel water leg.

Describe Area Affected and Cleanup Action Taken.*

Initially we released 60bbls of BS&W from the broken water leg and we were able to recover 50bbls with a vacuum truck. The spill area covered a portion of the well pad measuring approximately 200' x 200' from the battery towards the pumping unit. All standing fluid has been recovered. The well pad has been scraped and the contaminated pad material has been hauled to the appropriate disposal facility. (The closest well location to the release is the Mesilla State #3, this well is located on the same pad as the tank battery, (API#) 30-015-34538). Tetra Tech will sample the spill site are to delineate any possible contamination from the release and we will present a remediation work plan 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:	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: 09/15/2010 Phone: 432-212-2399		

* Attach Additional Sheets If Necessary

Summary Report

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

Report Date: October 13, 2010

Work Order: 10092407

Project Location: Eddy County, NM
Project Name: COG/Mesilla State #3 TB
Project Number: 114-6400690

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
245696	AH-1 0-1'	soil	2010-09-22	00:00	2010-09-23
245697	AH-1 1-1.5'	soil	2010-09-22	00:00	2010-09-23
245698	AH-2 0-1'	soil	2010-09-22	00:00	2010-09-23
245699	AH-2 1-1.5'	soil	2010-09-22	00:00	2010-09-23
245700	AH-2 2-2.5'	soil	2010-09-22	00:00	2010-09-23
245701	AH-2 3-3.5'	soil	2010-09-22	00:00	2010-09-23
245702	AH-2 3.5-4'	soil	2010-09-22	00:00	2010-09-23
245703	AH-3 0-1'	soil	2010-09-22	00:00	2010-09-23
245704	AH-3 1-1.5'	soil	2010-09-22	00:00	2010-09-23
245705	AH-3 2-2.5'	soil	2010-09-22	00:00	2010-09-23
245706	AH-3 3-3.5'	soil	2010-09-22	00:00	2010-09-23
245707	AH-3 4-4.5'	soil	2010-09-22	00:00	2010-09-23
245708	AH-3 5-5.5'	soil	2010-09-22	00:00	2010-09-23
245709	AH-4 0-1'	soil	2010-09-22	00:00	2010-09-23
245710	AH-4 1-1.5'	soil	2010-09-22	00:00	2010-09-23
245711	AH-4 2-2.5'	soil	2010-09-22	00:00	2010-09-23
245712	AH-4 3-3.5'	soil	2010-09-22	00:00	2010-09-23
245713	AH-5 0-1'	soil	2010-09-22	00:00	2010-09-23
245714	AH-5 1-1.5'	soil	2010-09-22	00:00	2010-09-23
245715	AH-5 2-2.5'	soil	2010-09-22	00:00	2010-09-23
245716	AH-5 3-3.5'	soil	2010-09-22	00:00	2010-09-23
245717	AH-5 4-4.5'	soil	2010-09-22	00:00	2010-09-23
245718	AH-6 0-1'	soil	2010-09-22	00:00	2010-09-23
245719	AH-6 1-1.5'	soil	2010-09-22	00:00	2010-09-23
245720	AH-6 2-2.5'	soil	2010-09-22	00:00	2010-09-23
245721	AH-6 3-3.5'	soil	2010-09-22	00:00	2010-09-23
245722	AH-6 4-4.5'	soil	2010-09-22	00:00	2010-09-23
245723	AH-6 5-5.5'	soil	2010-09-22	00:00	2010-09-23
245724	AH-6 6-6.5'	soil	2010-09-22	00:00	2010-09-23
245725	AH-7 0-1'	soil	2010-09-22	00:00	2010-09-23

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
245726	AH-7 1-1.5'	soil	2010-09-22	00:00	2010-09-23
245727	AH-7 2-2.5'	soil	2010-09-22	00:00	2010-09-23
245728	AH-7 3-3.5'	soil	2010-09-22	00:00	2010-09-23
245729	AH-7 4-4.5'	soil	2010-09-22	00:00	2010-09-23
245730	AH-7 5-5.5'	soil	2010-09-22	00:00	2010-09-23

Sample - Field Code	BTEX Benzene (mg/Kg)	BTEX Toluene (mg/Kg)	BTEX Ethylbenzene (mg/Kg)	BTEX Xylene (mg/Kg)	TPH DRO - NEW DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
245696 - AH-1 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	**71.6**	**41.3**
245698 - AH-2 0-1'					<50.0	<1.00
245703 - AH-3 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
245709 - AH-4 0-1'					<50.0	<1.00
245713 - AH-5 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
245718 - AH-6 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	**167**	**6.89**
245725 - AH-7 0-1'					<50.0	<1.00

Sample: 245696 - AH-1 0-1'

Param	Flag	Result	Units	RL
Chloride		**3680**	mg/Kg	4.00

Sample: 245697 - AH-1 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**3910**	mg/Kg	4.00

Sample: 245698 - AH-2 0-1'

Param	Flag	Result	Units	RL
Chloride		**327**	mg/Kg	4.00

Sample: 245699 - AH-2 1-1.5'

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

Sample: 245700 - AH-2 2-2.5'

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

Sample: 245701 - AH-2 3-3.5'

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

Sample: 245702 - AH-2 3.5-4'

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

Sample: 245703 - AH-3 0-1'

Param	Flag	Result	Units	RL
Chloride		**2420**	mg/Kg	4.00

Sample: 245704 - AH-3 1-1.5'

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

Sample: 245705 - AH-3 2-2.5'

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

Sample: 245706 - AH-3 3-3.5'

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

Sample: 245707 - AH-3 4-4.5'

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

Sample: 245708 - AH-3 5-5.5'

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

Sample: 245709 - AH-4 0-1'

Param	Flag	Result	Units	RL
Chloride		**206**	mg/Kg	4.00

Sample: 245710 - AH-4 1-1.5'

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

Sample: 245711 - AH-4 2-2.5'

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

Sample: 245712 - AH-4 3-3.5'

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

Sample: 245713 - AH-5 0-1'

Param	Flag	Result	Units	RL
Chloride		**818**	mg/Kg	4.00

Sample: 245714 - AH-5 1-1.5'

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

Sample: 245715 - AH-5 2-2.5'

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

Sample: 245716 - AH-5 3-3.5'

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

Sample: 245717 - AH-5 4-4.5'

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

Sample: 245718 - AH-6 0-1'

Param	Flag	Result	Units	RL
Chloride		**7400**	mg/Kg	4.00

Sample: 245719 - AH-6 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**1790**	mg/Kg	4.00

Sample: 245720 - AH-6 2-2.5'

Param	Flag	Result	Units	RL
Chloride		**1520**	mg/Kg	4.00

Sample: 245721 - AH-6 3-3.5'

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

Sample: 245722 - AH-6 4-4.5'

Param	Flag	Result	Units	RL
Chloride		**5540**	mg/Kg	4.00

Sample: 245723 - AH-6 5-5.5'

Param	Flag	Result	Units	RL
Chloride		**7580**	mg/Kg	4.00

Sample: 245724 - AH-6 6-6.5'

Param	Flag	Result	Units	RL
Chloride		**9580**	mg/Kg	4.00

Sample: 245725 - AH-7 0-1'

Param	Flag	Result	Units	RL
Chloride		**4600**	mg/Kg	4.00

Sample: 245726 - AH-7 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**651**	mg/Kg	4.00

Sample: 245727 - AH-7 2-2.5'

Param	Flag	Result	Units	RL
Chloride		**570**	mg/Kg	4.00

Sample: 245728 - AH-7 3-3.5'

Param	Flag	Result	Units	RL
Chloride		**1730**	mg/Kg	4.00

Sample: 245729 - AH-7 4-4.5'

Param	Flag	Result	Units	RL
Chloride		**1360**	mg/Kg	4.00

Sample: 245730 - AH-7 5-5.5'

Param	Flag	Result	Units	RL
Chloride		**1510**	mg/Kg	4.00

Summary Report

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

Report Date: December 10, 2010

Work Order: 10120608

Project Location: Eddy County, NM
Project Name: COG/Mesilla State #3 TB
Project Number: 114-6400690

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
252360	SB-1 0-1'	soil	2010-12-01	00:00	2010-12-03
252361	SB-1 3'	soil	2010-12-01	00:00	2010-12-03
252362	SB-1 5'	soil	2010-12-01	00:00	2010-12-03
252363	SB-1 7'	soil	2010-12-01	00:00	2010-12-03
252364	SB-1 10'	soil	2010-12-01	00:00	2010-12-03
252365	SB-1 15'	soil	2010-12-01	00:00	2010-12-03
252366	SB-1 20'	soil	2010-12-01	00:00	2010-12-03
252367	SB-2 3'	soil	2010-12-01	00:00	2010-12-03
252368	SB-2 5'	soil	2010-12-01	00:00	2010-12-03
252369	SB-2 7'	soil	2010-12-01	00:00	2010-12-03
252370	SB-2 10'	soil	2010-12-01	00:00	2010-12-03
252371	SB-2 15'	soil	2010-12-01	00:00	2010-12-03
252372	SB-2 20'	soil	2010-12-01	00:00	2010-12-03
252373	SB-3 0-1'	soil	2010-12-01	00:00	2010-12-03
252374	SB-3 3'	soil	2010-12-01	00:00	2010-12-03
252375	SB-3 5'	soil	2010-12-01	00:00	2010-12-03
252376	SB-3 7'	soil	2010-12-01	00:00	2010-12-03
252377	SB-3 10'	soil	2010-12-01	00:00	2010-12-03
252378	SB-3 15'	soil	2010-12-01	00:00	2010-12-03
252379	SB-3 20'	soil	2010-12-01	00:00	2010-12-03
252380	SB-3 25'	soil	2010-12-01	00:00	2010-12-03
252381	SB-3 30'	soil	2010-12-01	00:00	2010-12-03
252382	SB-3 40'	soil	2010-12-01	00:00	2010-12-03
252383	SB-3 50'	soil	2010-12-01	00:00	2010-12-03
252384	SB-3 60'	soil	2010-12-01	00:00	2010-12-03

Sample: 252360 - SB-1 0-1'

Param	Flag	Result	Units	RL
Chloride		**4630**	mg/Kg	4.00

Sample: 252361 - SB-1 3'

Param	Flag	Result	Units	RL
Chloride		**5340**	mg/Kg	4.00

Sample: 252362 - SB-1 5'

Param	Flag	Result	Units	RL
Chloride		**347**	mg/Kg	4.00

Sample: 252363 - SB-1 7'

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

Sample: 252364 - SB-1 10'

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

Sample: 252365 - SB-1 15'

Param	Flag	Result	Units	RL
Chloride		**233**	mg/Kg	4.00

Sample: 252366 - SB-1 20'

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

Sample: 252367 - SB-2 3'

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

Sample: 252368 - SB-2 5'

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

Sample: 252369 - SB-2 7'

Param	Flag	Result	Units	RL
Chloride		**399**	mg/Kg	4.00

Sample: 252370 - SB-2 10'

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

Sample: 252371 - SB-2 15'

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

Sample: 252372 - SB-2 20'

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

Sample: 252373 - SB-3 0-1'

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

Sample: 252374 - SB-3 3'

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

Sample: 252375 - SB-3 5'

Param	Flag	Result	Units	RL
Chloride		**1510**	mg/Kg	4.00

Sample: 252376 - SB-3 7'

Param	Flag	Result	Units	RL
Chloride		**1420**	mg/Kg	4.00

Sample: 252377 - SB-3 10'

Param	Flag	Result	Units	RL
Chloride		**3010**	mg/Kg	4.00

Sample: 252378 - SB-3 15'

Param	Flag	Result	Units	RL
Chloride		**4420**	mg/Kg	4.00

Sample: 252379 - SB-3 20'

Param	Flag	Result	Units	RL
Chloride		**5970**	mg/Kg	4.00

Sample: 252380 - SB-3 25'

Param	Flag	Result	Units	RL
Chloride		**6310**	mg/Kg	4.00

Sample: 252381 - SB-3 30'

Param	Flag	Result	Units	RL
Chloride		**3800**	mg/Kg	4.00

Sample: 252382 - SB-3 40'

Param	Flag	Result	Units	RL
Chloride		**312**	mg/Kg	4.00

Sample: 252383 - SB-3 50'

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

Sample: 252384 - SB-3 60'

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