

Bratcher, Mike, EMNRD

From: Tavarez, Ike <Ike.Tavarez@tetrattech.com>
Sent: Friday, January 20, 2012 10:05 AM
To: Gregston, Terry G; Bratcher, Mike, EMNRD
Cc: Pat Ellis; Joshua Russo; Grubbs, Robert
Subject: RE: COG-Holder Federal Tank Battery-Work Plan: Request for additional information
Attachments: COG - Revised - Holder CB Federal Tank Battery.pdf

Mike and Terry,

As requested by the BLM, I enclosed the revised work plan to include the sampling of the overspray area. Please call me if you have any questions, thanks

Ike Tavarez
Tetra Tech

From: Gregston, Terry G [<mailto:tgregsto@blm.gov>]
Sent: Thursday, January 19, 2012 7:39 PM
To: Tavarez, Ike; Bratcher, Mike, EMNRD (mike.bratcher@state.nm.us)
Cc: Joshua Russo; Grubbs, Robert; Amos, James A
Subject: RE: COG-Holder Federal Tank Battery-Work Plan: Request for additional information

Gentlemen,

I reviewed your submitted work plan and found that no samples had been taken in the affected pasture area. Nor were there mitigation measures included for the pasture-affected area. A mixture of saltwater and oil was sprayed over the pasture area and there are areas of greater accumulation and saturation to deeper levels the closer you get to the tank facility. The pasture-impacted areas also need to be sampled and mitigation measures put forward in the submitted cleanup plan for this spill. You can resubmit a plan, or submit an addendum for the original plan.

Thank you for your attention to these concerns,

Terry Gregston
Environmental Protection Specialist
Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220
Office (575) 234-5958
Cell (575) 361-2635
Fax (575) 234-5927

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From: Tavarez, Ike [<mailto:Ike.Tavarez@tetrattech.com>]
Sent: Thursday, January 19, 2012 2:51 PM

To: Bratcher, Mike, EMNRD (mike.bratcher@state.nm.us); Gregston, Terry G
Cc: Pat Ellis; Joshua Russo; Grubbs, Robert; Amos, James A
Subject: COG Operating - Holder Federal Tank Battery - Eddy Co - Approval Request

Mike and Terry,

Please review the attached work plan for the Holder CB Federal Tank Battery located in Eddy County, New Mexico. Once approved, the soil remediation will be implemented at the site. I will forward a hard copy of the report for your files. Please call me if you have any questions, thanks .

Ike Tavaréz, PGI | Senior Project Manager

Main: 432.662.4559 | Fax: 432.662.8946 | Cell: 432.425.6978

Ike.Tavaréz@tetrattech.com

Tetra Tech | Complex World. Clear Solutions™

1810 North Big Spring | Midland, TX 79705 www.tetrattech.com

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SITE INFORMATION

Report Type: Work Plan

General Site Information:

Site:	Holder CB Federal Paddock TB					
Company:	COG Operating LLC					
Section, Township and Range	Unit E	Sec 17	T17S	R30E		
Lease Number:	API-30-015-20708					
County:	Eddy County					
GPS:	32.83569° N			103.99915° W		
Surface Owner:	Federal					
Mineral Owner:						
Directions:	In Loco Hills, from the intersection of Haggerman Cutoff (CR 217) and 82, travel north on CR 217 for 0.8 miles, turn left and travel 0.7 miles, turn right and travel 0.2 miles, turn right and travel 200' to site.					

Release Data:

Date Released:	11/13/2011
Type Release:	Produced Fluid
Source of Contamination:	Heater Treater
Fluid Released:	15 bbls
Fluids Recovered:	11 bbls

Official Communication:

Name:	Pat Ellis	Ike Tavarez
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) 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



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January 20, 2012

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

**Re: Revised - Work Plan for the COG Operating LLC., Holder CB
Federal Paddock Tank Battery, Unit E, Section 17, 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 Holder CB Federal Paddock Tank Battery located in Unit E, Section 17, Township 17 South, Range 30 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.83569°, W 103.99915°. 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 November 13, 2011, and released approximately fifteen (15) barrels of produced fluid from the heater treater. To alleviate the problem, COG personnel repaired the heater treater. Eleven (11) barrels of standing fluids were recovered. The majority of the spill was contained within the firewall, with the exception of some overspray that affected the pasture. Micro-blaze has been applied to the oversprayed vegetation. The area affected measures 10' X 85'. The initial C-141 form is enclosed in Appendix A.

Groundwater

No water wells were listed within Section 17. According to the NMOCD groundwater map, the depth to groundwater in this area is approximately 225' below surface. The groundwater data is enclosed in Appendix B.

Tetra Tech

Tetra Tech, Inc. 10000 E. 1st Avenue, Suite 100, Denver, CO 80231
Tel: 303.750.1000 Fax: 303.750.1001 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 December 21, 2011, Tetra Tech personnel inspected and sampled the spill area. Three (3) auger holes (AH-1, AH-2 and 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 C. The results of the sampling are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, none of the samples exceeded the RRAL for TPH except for (AH-2). (AH-2) showed total BTEX above the RRAL for total BTEX at 0-1' and declined at 1'-1.5'. A shallow chloride impact was encountered at the site. Auger holes (AH-2 and AH-3) showed a shallow chloride impact at 0-1' of 1,570 mg/kg and 4,750 mg/kg, respectively. The deeper samples significantly declined with depth at 1.0' below surface.

The area of AH-1 did show a deeper impact to the soils however the chloride levels declined with depth to 1,360 mg/kg at 2-2.5'. Deeper samples were not collected due to a dense caliche formation.

Work Plan

COG proposes to remove impacted material as highlighted (green) in Table 1 and shown on Figure 4. In the area of AH-1, a trench will be installed to define chloride impact. As requested by the BLM, soil samples will be collected from the overspray area to evaluate the soils in the area. The soil samples collected will be analyzed for TPH, BTEX and chlorides. Based on the results, the overspray area will be addressed to remediate the




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soil, if necessary. 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 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. As such, Tetra Tech will excavate the soils to the maximum extent practicable.

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.

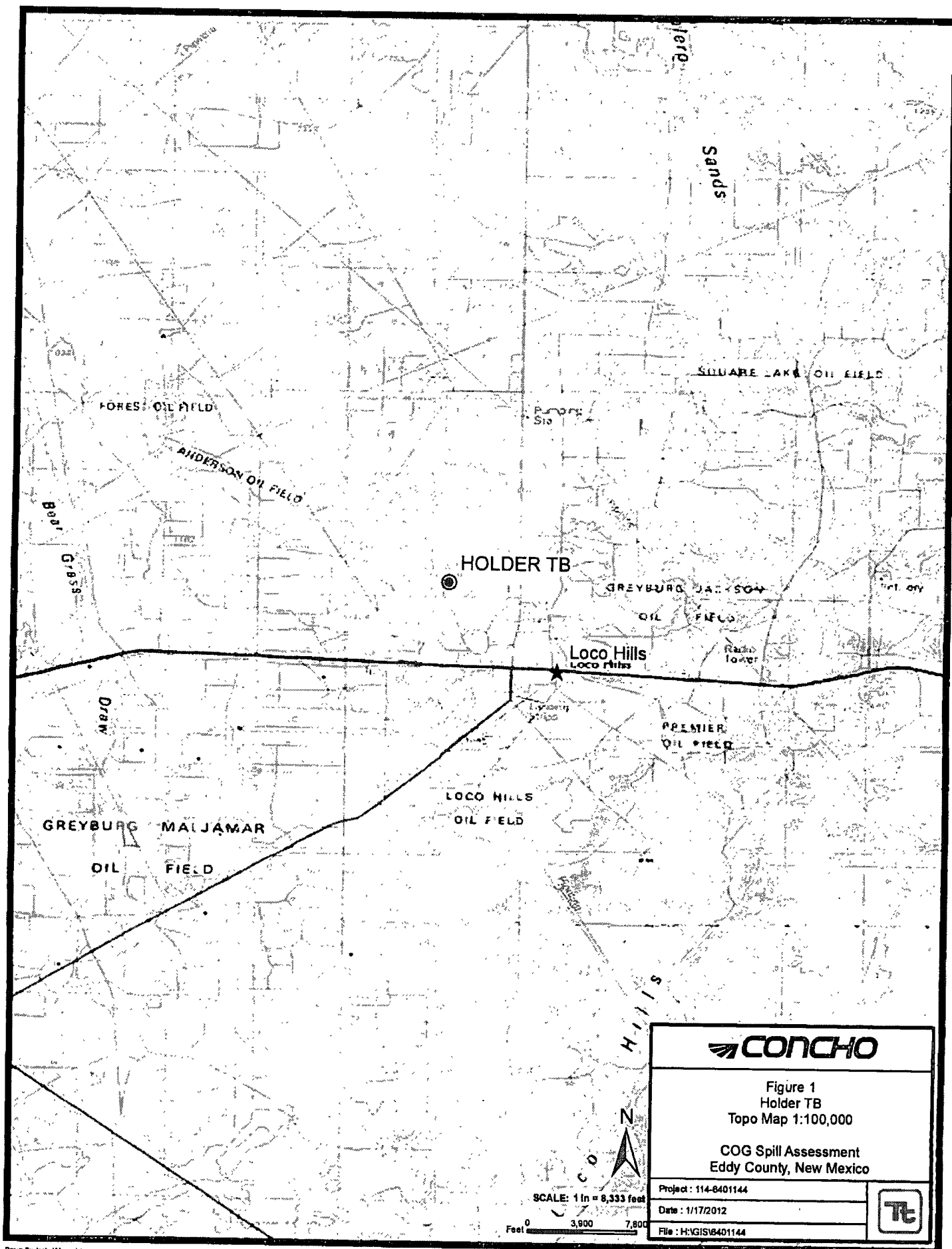
Respectfully submitted,
TETRA TECH

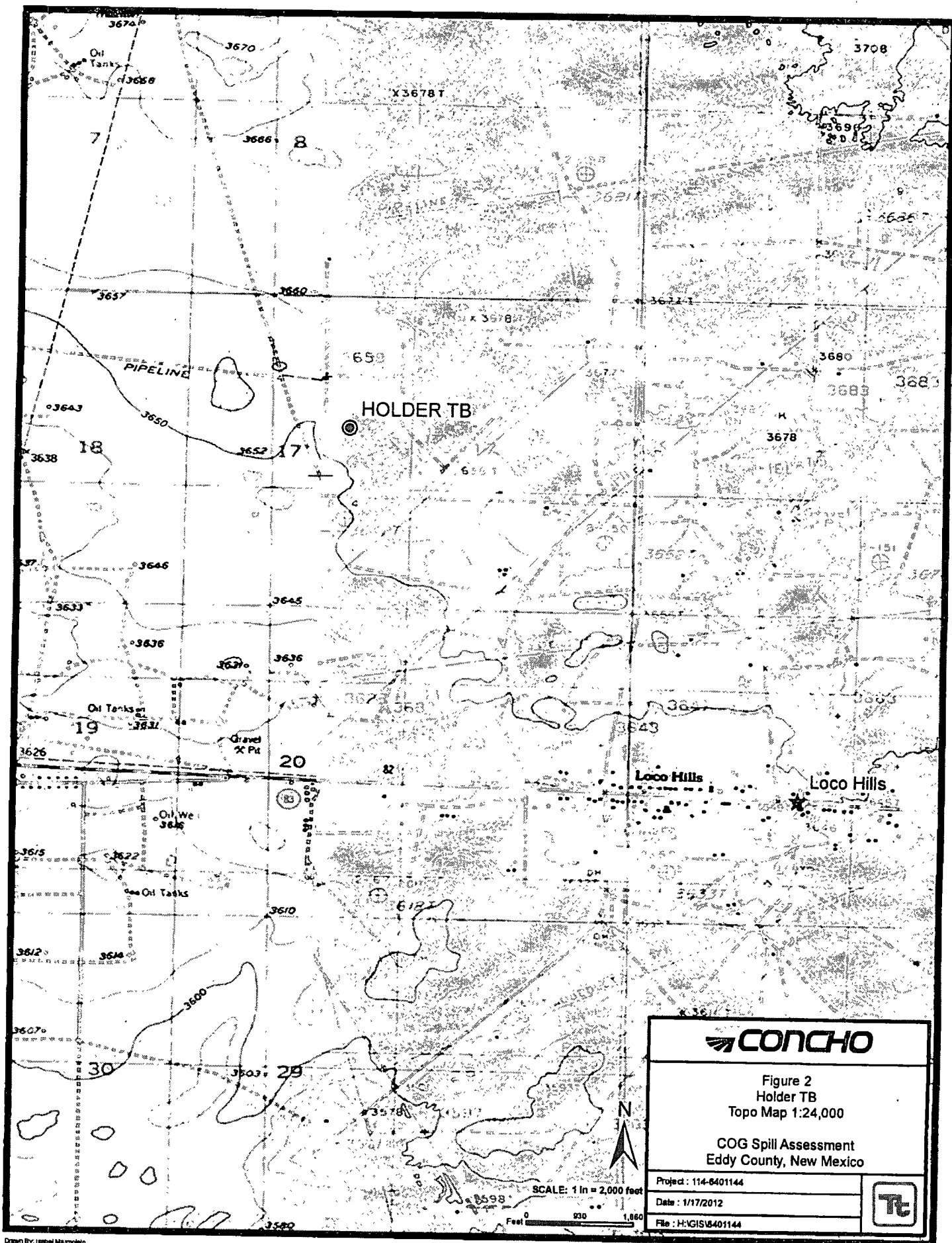


Ike Tavaréz
Project Manager

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

Figures







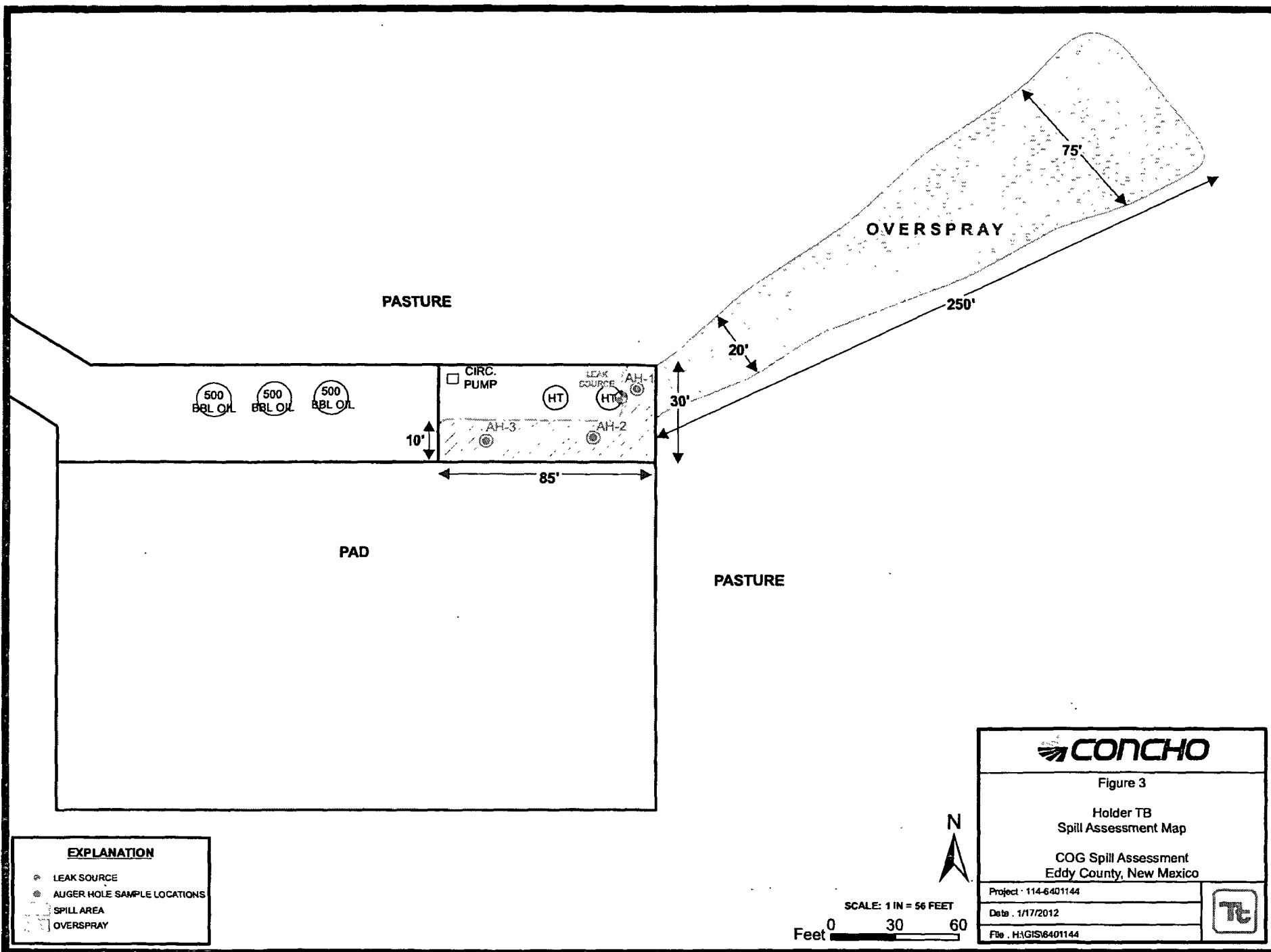
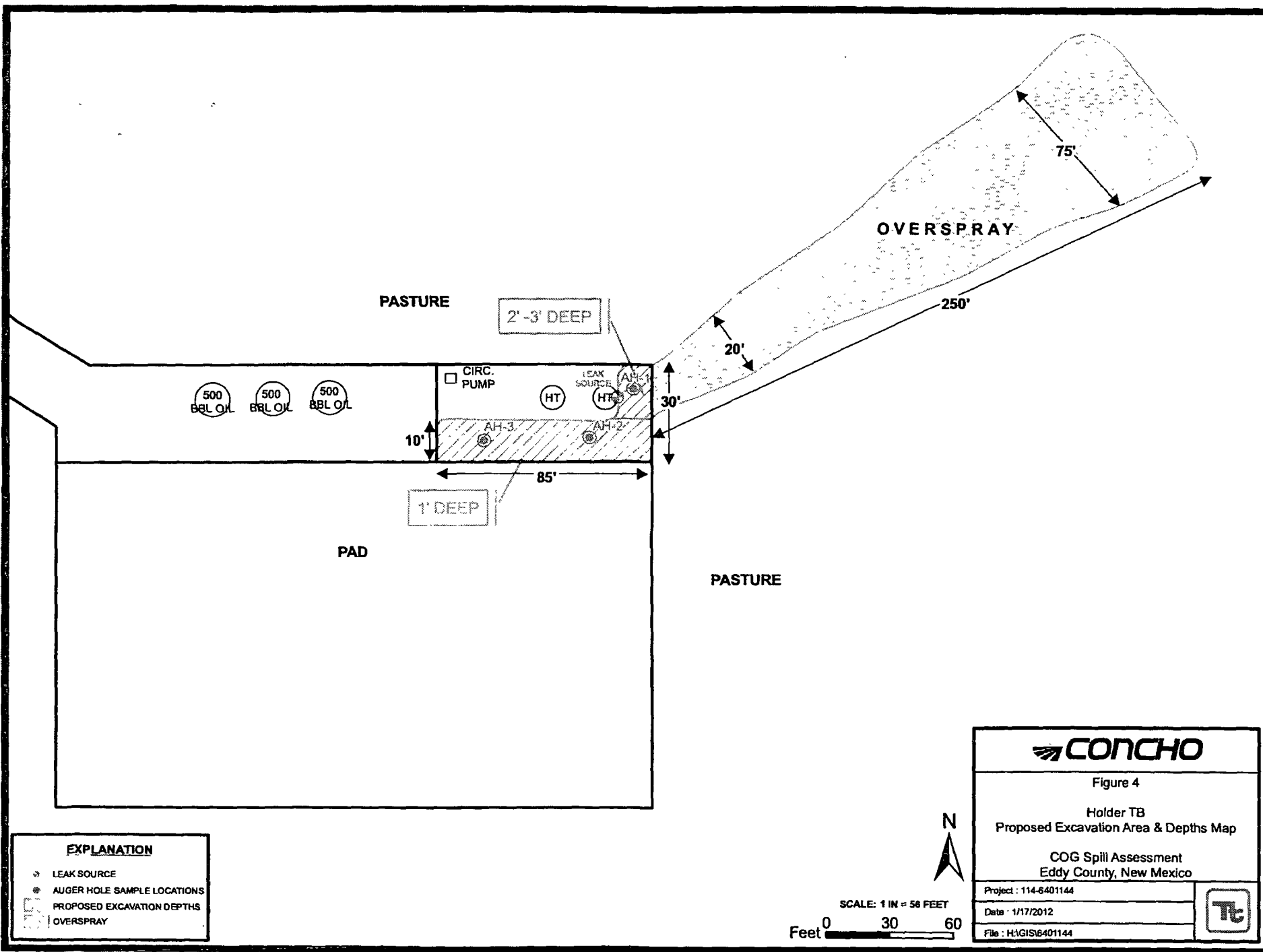


Figure 2
Holder TB
Topo Map 1:24,000

COG Spill Assessment
Eddy County, New Mexico

Project: 114-6401144	
Date: 1/17/2012	
File: H:\GIS\6401144	






Tables

Table 1
COG Operating LLC
Holder CB Federal Paddock 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)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total						
AH-1	12/21/2011	0-1	1'	X		110	88.4	198	0.0223	0.254	1.50	2.34	4.12	8,670
	"	1-1.5	1'	X		-	-	-	-	-	-	-	-	8,860
	"	2-2.5	1'	X		-	-	-	-	-	-	-	-	1,360
AH-2	12/21/2011	0-1	1'	X		3,820	1,340	5,160	7.03	105	77.6	106	296	1,570
	"	1-1.5	1'	X		3.96	<50.0	3.96	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<200
	"	2-2.5	1'	X		-	-	-	-	-	-	-	-	<200
	"	3-3.5	1'	X		-	-	-	-	-	-	-	-	<200
	"	4-4.5	1'	X		-	-	-	-	-	-	-	-	<200
	"	5-5.5	1'	X		-	-	-	-	-	-	-	-	<200
AH-3	12/21/2011	0-1	0.5'	X		<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	4,750
	"	1-1.5	0.5'	X		-	-	-	-	-	-	-	-	288
	"	2-2.5	0.5'	X		-	-	-	-	-	-	-	-	<200

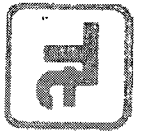
(--) Not Analyzed

 Proposed Excavation Depths

(BEB) Below Excavation Bottom

Photos

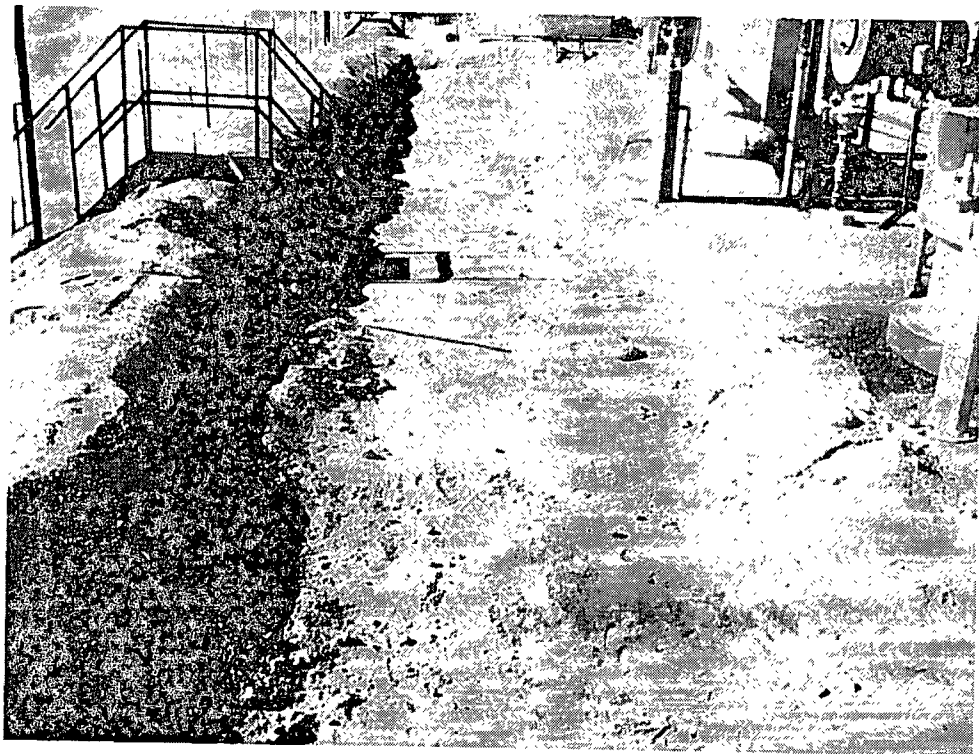
COG Operating LLC
Holder CB Federal
Paddock TB
Eddy County, New Mexico



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View East – AH-3, AH-2 and AH-1

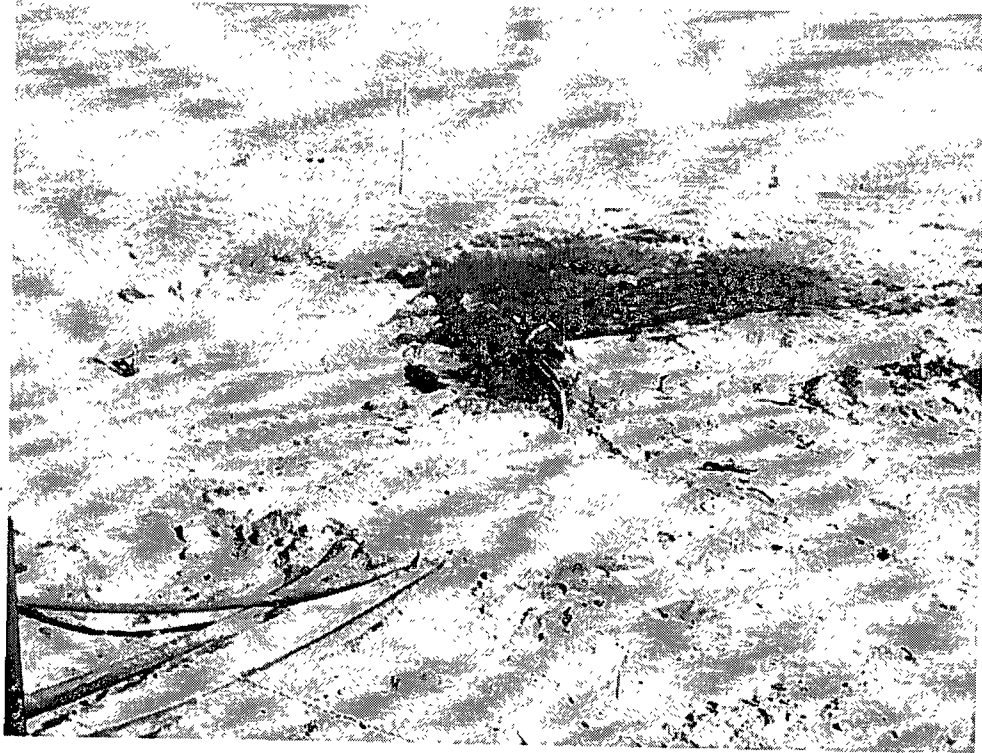


View West – AH-2 and AH-3

COG Operating LLC
Holder CB Federal
Paddock TB
Eddy County, New Mexico



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View East - Overspray

Site info and picture details

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	550 W. Texas, Suite 100, Midland, TX 79701	Telephone No.	432-230-0077
Facility Name	Holder CB Federal Paddock TB	Facility Type	Tank Battery

Surface Owner	Federal	Mineral Owner		Lease No. (API#)	30-015-20708
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LOCATION OF RELEASE

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

Latitude 32 50.138 Longitude 103 59.951

NATURE OF RELEASE

Type of Release	Produced fluid	Volume of Release	3bbls oil 12bbls produced water	Volume Recovered	1bbl oil 10bbls produced water
Source of Release	Heater treater fire tube gasket	Date and Hour of Occurrence	11/13/2011	Date and Hour of Discovery	11/13/2011
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?		Date and Hour			
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.*

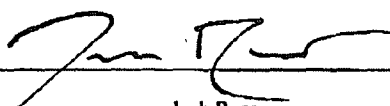
Describe Cause of Problem and Remedial Action Taken.*

Heater treater fire tube gasket was leaking. The heater treater was isolated and the fire tube gasket has been repaired. The heater treater has been returned to service.

Describe Area Affected and Cleanup Action Taken.*

Initially 15bbls of produced fluid was released from the heater treater and we were able to recover 11bbls with a vacuum truck. The spill area was contained inside the dike walls of the facility with the exception of some overspray due to wind gusts. All free fluid has been recovered from inside the facility and micro-blaze has been applied to the over-sprayed vegetation. Tetra Tech will sample the spill site area inside the facility 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: HSE Coordinator	Approval Date:	Expiration Date:	
E-mail Address: jrusso@conchoresources.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 11/22/2011	Phone: 432-212-2399		

* Attach Additional Sheets If Necessary

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
COG - Holder CB Federal Paddock TB
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	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
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

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	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
-  Site Location

Appendix C

Summary Report

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

Report Date: January 5, 2012

Work Order: 11122306



Project Location: Eddy Co., NM
Project Name: COG/Holder CB Federal Paddock TB
Project Number: 114-6401144

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
285190	AH-1 1' BEB 0-1'	soil	2011-12-21	00:00	2011-12-22
285191	AH-1 1' BEB 1-1.5'	soil	2011-12-21	00:00	2011-12-22
285192	AH-1 1' BEB 2-2.5'	soil	2011-12-21	00:00	2011-12-22
285193	AH-2 1' BEB 0-1'	soil	2011-12-21	00:00	2011-12-22
285194	AH-2 1' BEB 1-1.5'	soil	2011-12-21	00:00	2011-12-22
285195	AH-2 1' BEB 2-2.5'	soil	2011-12-21	00:00	2011-12-22
285196	AH-2 1' BEB 3-3.5'	soil	2011-12-21	00:00	2011-12-22
285197	AH-2 1' BEB 4-4.5'	soil	2011-12-21	00:00	2011-12-22
285198	AH-2 1' BEB 5-5.5'	soil	2011-12-21	00:00	2011-12-22
285199	AH-3 0.5' BEB 0-1'	soil	2011-12-21	00:00	2011-12-22
285200	AH-3 0.5' BEB 1-1.5'	soil	2011-12-21	00:00	2011-12-22
285201	AH-3 0.5' BEB 2-2.5'	soil	2011-12-21	00:00	2011-12-22

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)
285190 - AH-1 1' BEB 0-1'	0.0223	0.254	1.50	2.34	88.4	110 Q _s
285193 - AH-2 1' BEB 0-1'	7.03	105	77.6	106	1340	3820 Q _s
285194 - AH-2 1' BEB 1-1.5'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	3.96 Q _r Q _s
285199 - AH-3 0.5' BEB 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00 Q _r Q _s

Sample: 285190 - AH-1 1' BEB 0-1'

Param	Flag	Result	Units	RL
Chloride		8670	mg/Kg	4

Sample: 285191 - AH-1 1' BEB 1-1.5'

TraceAnalysis, Inc. • 6701 Aberdeen Ave., Suite 9 • Lubbock, TX 79424-1515 • (806) 794-1296

This is only a summary. Please, refer to the complete report package for quality control data.

Param	Flag	Result	Units	RL
Chloride		8860	mg/Kg	4

Sample: 285192 - AH-1 1' BEB 2-2.5'

Param	Flag	Result	Units	RL
Chloride		1360	mg/Kg	4

Sample: 285193 - AH-2 1' BEB 0-1'

Param	Flag	Result	Units	RL
Chloride		1570	mg/Kg	4

Sample: 285194 - AH-2 1' BEB 1-1.5'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Sample: 285195 - AH-2 1' BEB 2-2.5'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Sample: 285196 - AH-2 1' BEB 3-3.5'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Sample: 285197 - AH-2 1' BEB 4-4.5'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Sample: 285198 - AH-2 1' BEB 5-5.5'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Sample: 285199 - AH-3 0.5' BEB 0-1'

Param	Flag	Result	Units	RL
Chloride		4750	mg/Kg	4

Sample: 285200 - AH-3 0.5' BEB 1-1.5'

Param	Flag	Result	Units	RL
Chloride		288	mg/Kg	4

Sample: 285201 - AH-3 0.5' BEB 2-2.5'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Bratcher, Mike, EMNRD

From: Gregston, Terry G <tgregsto@blm.gov>
Sent: Friday, January 20, 2012 3:03 PM
To: Tavaréz, Ike; Bratcher, Mike, EMNRD
Cc: Pat Ellis; Joshua Russo; Grubbs, Robert
Subject: RE: CB Holder Federal Tank Battery-Revised Work Plan: Approval Stipulations

Gentlemen,

This notification is in regard to the following location and undesirable event:

Event Number: NU12047TG
Event Date: 11/13/2011
Event Name: Holder CB Federal Tank Battery
Legals: T17S/R30E, sec. 17, SWNW

The submitted cleanup plan for the Holder CB Tank Battery is approved with the following conditions of approval:

Notification Stipulations:

- 1. A copy of the cleanup plan and conditions of approval must be given to the contractor or site work personnel and be present on the location during all cleanup operations.**
- 2. The authorized officer must be notified at the following phases of cleanup or conditions:**
 - a. Prior to moving equipment on location for cleanup
 - b. When the excavation is nearing completion and a BLM inspection of the excavation or witnessing of sampling is required by the cleanup plan COA's.
 - c. When the final dirt work is nearing completion and to schedule a final onsite prior to removal of equipment.
 - d. Three days before the site is seeded.
 - e. Any time that a variance of the approved plan or conditions of approval is required.
 - f. In the event that you encounter excavation difficulties, unexpected void areas, or archeological artifacts the Authorized Officer must be contacted immediately. An onsite may be required to assess the situation.
3. The authorized officer on this undesirable event case is:

Terry Gregston
(575) 361-2635
tgregsto@blm.gov

Facility Cleanup Stipulations:

Unlined facility:

1. The BLM requires horizontal cleanup of the spill impacted areas in addition to vertical cleanup/mitigation measures. In this case, the location is still a working tank battery location. As such, excavation depths in portions of the spill area in close proximity to standing production equipment may be limited due to safety concerns. In such cases, the spill will be excavated as far as practical and safety limits to cleanup measures will be considered a temporary spill abatement measure that will be further mitigated upon the abandonment of the well/facility location. Appropriate notations to that effect will be entered in the well file.
2. Cleanup will include removal of any contaminated berm materials and/or unsuitable berm materials such as sandy soils, gravels, or cobblestones. Tank battery berms should be built of compactable caliche that is capable of fluid containment.
3. The BLM will wish to inspect the excavation once it reaches cleanup depth/width. Confirmation samples of bottoms, sidewalls and any visibly affected areas outside of the excavation trench will be required; the BLM will witness the sampling. Contact the authorized officer to schedule.

4. Lab analysis of the confirmation sampling must be forwarded to the authorized officer for final approval before backfilling. Based on the sampling results, additional cleanup may be required or the site may be approved for closure.
5. Once final approval of cleanup is given, the excavation can be backfilled with compactable caliche to the level of the original native contour plus enough loft to accommodate the settling and compaction of unconsolidated fill soils.
6. Install secondary containment berms of good quality compactable caliche around existing production equipment and the pad to prevent future spills from being released off the facility location.

Pasture Impacted Areas:

Undelineated Spill:

1. The operator will sample and present a proposal to address the pasture spill area.

Other Stipulations:

1. At the time of the final onsite for this location, the production facilities, well pad, access road, and surrounding pasture areas must be in a condition that will pass a routine inspection.
2. All household trash, debris, disconnected pipe and equipment must be removed from the area and the surrounding pasture and hauled to an authorized landfill. Do not bury cleanup trash or equipment debris in the cleanup excavation.

BLM approval of this proposal does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health, or the environment, or if the location fails to reclaim properly. In such an event that location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state, or local laws/regulations.

Terry Gregston

Environmental Protection Specialist
Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220
Office (575) 234-5958
Cell (575) 361-2635
Fax (575) 234-5927

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From: Tavarez, Ike [mailto:Ike.Tavarez@tetrattech.com]

Sent: Friday, January 20, 2012 10:05 AM

To: Gregston, Terry G; Bratcher, Mike, EMNRD (mike.bratcher@state.nm.us)

Cc: Pat Ellis; Joshua Russo; Grubbs, Robert

Subject: RE: COG-Holder Federal Tank Battery-Work Plan: Request for additional information

Mike and Terry,

As requested by the BLM, I enclosed the revised work plan to include the sampling of the overspray area. Please call me if you have any questions, thanks

Ike Tavarez
Tetra Tech

From: Gregston, Terry G [<mailto:tgregsto@blm.gov>]
Sent: Thursday, January 19, 2012 7:39 PM
To: Tavarez, Ike; Bratcher, Mike, EMNRD (mike.bratcher@state.nm.us)
Cc: Joshua Russo; Grubbs, Robert; Amos, James A
Subject: RE: COG-Holder Federal Tank Battery-Work Plan: Request for additional information

Gentlemen,

I reviewed your submitted work plan and found that no samples had been taken in the affected pasture area. Nor were there mitigation measures included for the pasture-affected area. A mixture of saltwater and oil was sprayed over the pasture area and there are areas of greater accumulation and saturation to deeper levels the closer you get to the tank facility. The pasture-impacted areas also need to be sampled and mitigation measures put forward in the submitted cleanup plan for this spill. You can resubmit a plan, or submit an addendum for the original plan.

Thank you for your attention to these concerns,

Terry Gregston

Environmental Protection Specialist
Bureau of Land Management
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From: Tavarez, Ike [<mailto:Ike.Tavarez@tetrattech.com>]
Sent: Thursday, January 19, 2012 2:51 PM
To: Bratcher, Mike, EMNRD (mike.bratcher@state.nm.us); Gregston, Terry G
Cc: Pat Ellis; Joshua Russo; Grubbs, Robert; Amos, James A
Subject: COG Operating - Holder Federal Tank Battery - Eddy Co - Approval Request

Mike and Terry,

Please review the attached work plan for the Holder CB Federal Tank Battery located in Eddy County, New Mexico. Once approved, the soil remediation will be implemented at the site. I will forward a hard copy of the report for your files. Please call me if you have any questions, thanks .

Ike Tavarez, PG | Senior Project Manager

Mail: 432.382.4639 Fax: 432.382.0910 Cell: 432.382.5878

Ike.Tavarez@tetrattech.com

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