

## SITE INFORMATION

### Report Type: Work Plan

#### General Site Information:

Site:	Resposado 2 State #2H					
Company:	COG Operating					
Section, Township and Range	Unit A	Section 2	T26S	R29E		
Lease Number:	API-30-015-39455					
County:	Eddy County					
GPS:	32.07818° N			103.95021° W		
Surface Owner:	State					
Mineral Owner:						
Directions:	South of Malaga, at the intersection of Hwy 285 and CR 725 (Longhorn Rd). Travel east on CR 725 (Longhorn Rd) for 4.3 miles, turn left and travel 2.7 miles, turn left and travel 1.1 miles to the site on right side of road.					

#### Release Data:

Date Released:	2/13/2013
Type Release:	Produced Water
Source of Contamination:	Transport Truck
Fluid Released:	100 bbls
Fluids Recovered:	5 bbls

#### Official Communication:

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



August 19, 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., Resposado 2 State #2H, Well Site, Unit A, Section 2, Township 26 South, Range 29 East, Eddy County, New Mexico.**

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by Sahara Transport Services LLC. to assess a spill that occurred at the COG Operating LLC. (COG), Resposado 2 State #2H Well Pad located in Unit A, Section 2, Township 26 South, Range 29 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.07818°, W 103.95021°. 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 February 13, 2013, and released approximately one hundred (100) barrels of produced water from a transport truck. Five (5) barrels of standing fluids were recovered. The spill initiated west edge of the pad in the pasture measuring approximately 35' x 100' and migrated west approximately 700' with a width of 3' to 5' wide. In addition, an area 30' x 60' impacted the pad of the Resposado 2 State #1H. The initial C-141 form is enclosed in Appendix A.

### **Groundwater**

No water wells were listed within Section 2. According to the NMOCD groundwater map, the average depth to groundwater in this area is greater than 125' below surface. The groundwater data is shown in Figure B.



## **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 March 13, 2013, Tetra Tech personnel inspected and sampled the spill area. A total of fifteen (15) auger holes (AH-1 through AH-15) 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, none of the samples exceeded the RRAL for TPH and BTEX. The areas of auger holes (AH-7, AH-9, AH-10, AH-11, AH-12, AH-14 and AH-15), the chlorides concentrations did not show a significant impact to the subsurface soil and do not appear to an environmental concern. The remaining areas showed a shallow chloride impact to the soils. Auger holes (AH-1, AH-2, AH-3, AH-6 and H-8) showed chloride concentrations ranging from 1,060 to 1,900 mg/kg at 0-1' and significantly declined with depth at 1-1.5' below surface. In the areas of AH-4, AH-5 and AH-13, the chloride impacted soils were not vertically defined, with concentrations of 1,220 mg/kg, 1,490 mg/kg and 1,690 mg/kg, respectively.

## **Work Plan**

Sahara proposes to remove the impacted material as highlighted (green) in Table 1 and shown on Figure 4. The areas of AH-1, AH-2, AH-3, AH-6 and AH-8 will be excavated to a depth of approximately 1.0' below surface. Backhoe trenches will be installed in the areas of AH-4, AH-5 and AH-13 in order to attempt to vertically define the chloride impact. Based on the field data, these areas will be excavated to the appropriate depths.



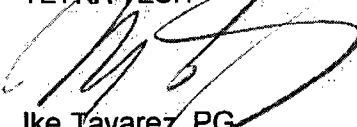
**TETRA TECH**

Once the areas are excavated to the appropriate depths, the excavation will be backfilled with clean soil. All of the excavated soil will be transported to 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. As such, Tetra Tech will excavate the soils to the maximum extent practicable.

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.

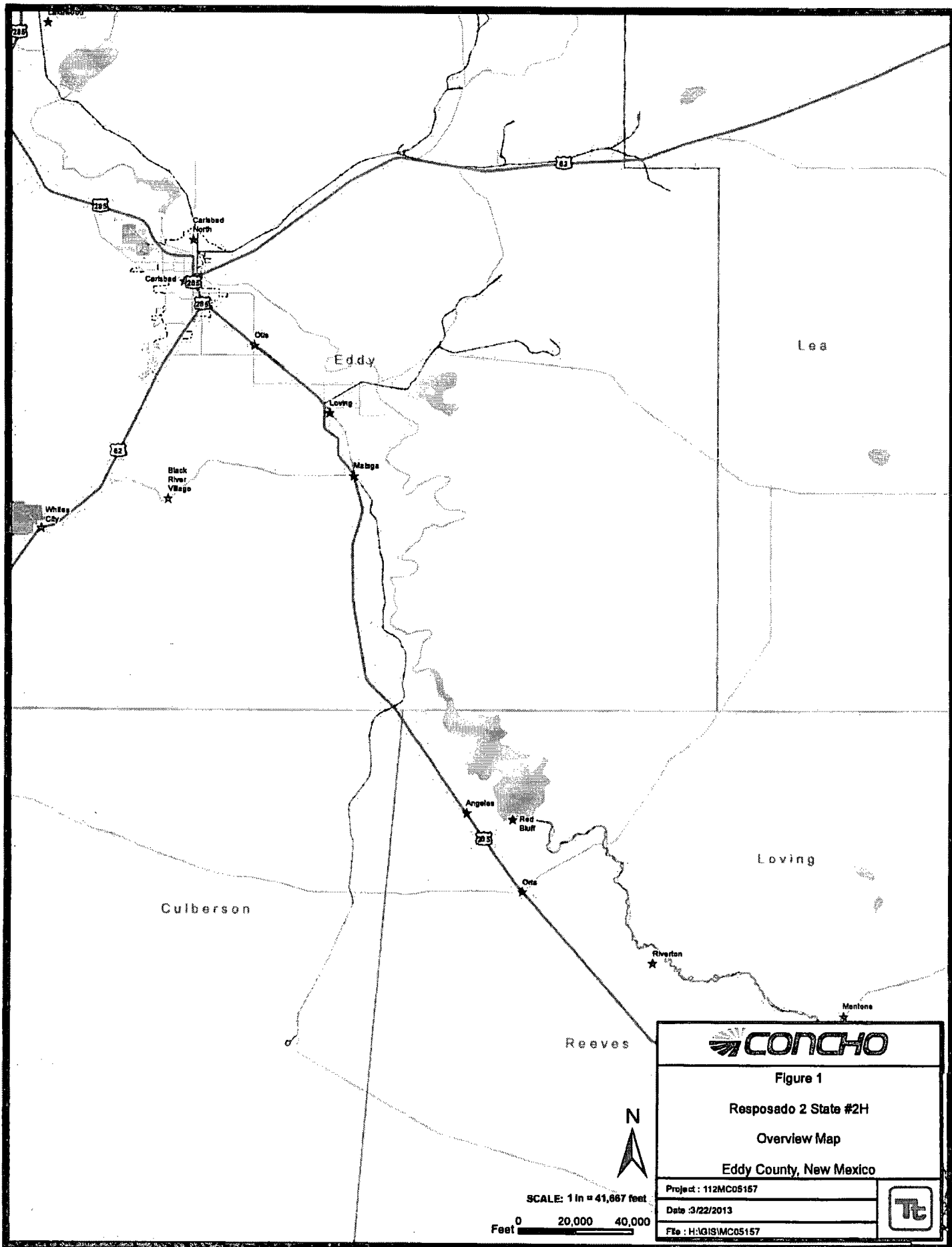
Respectfully submitted,  
TETRA TECH





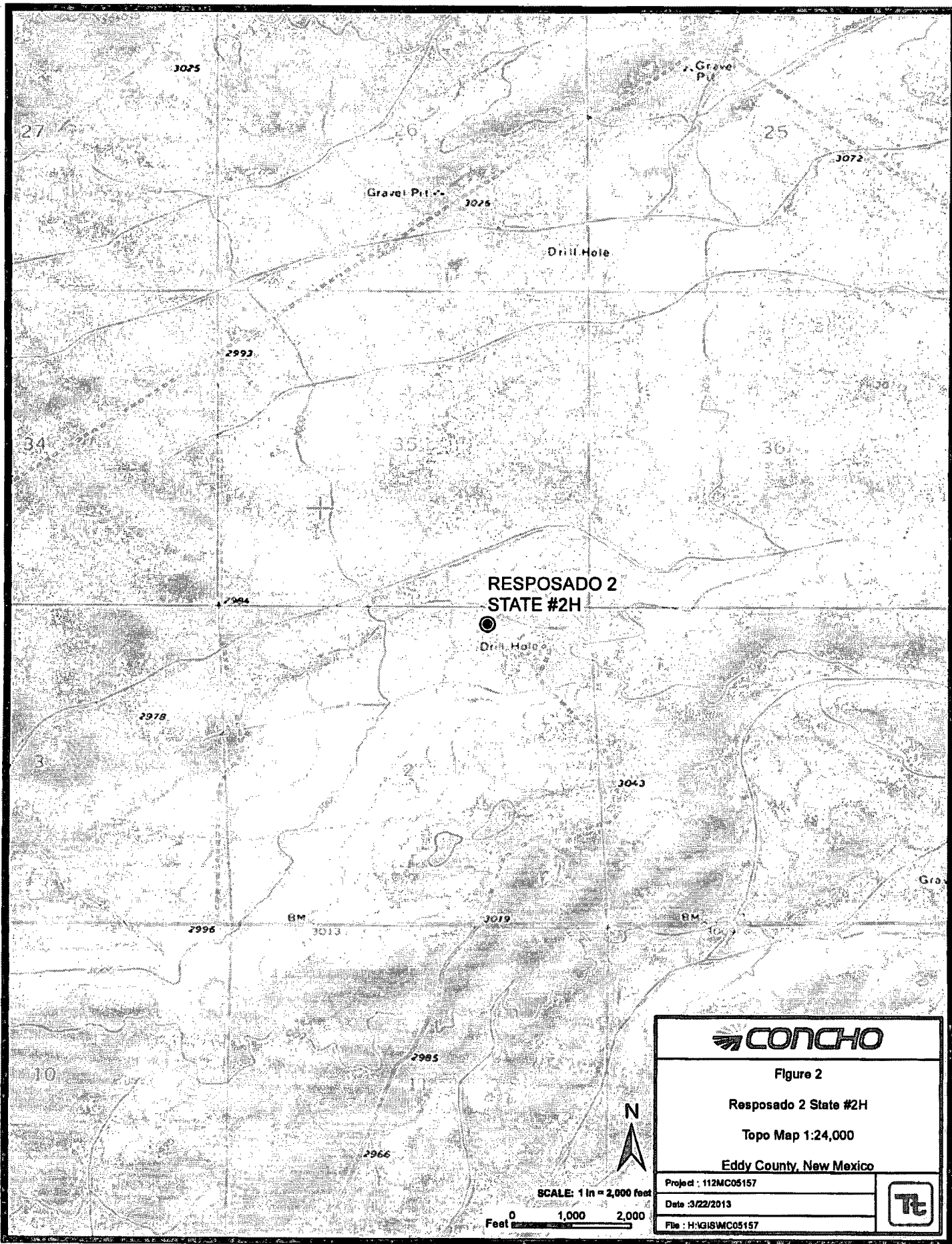
Ike Tavaréz, PG  
Senior Project Manager

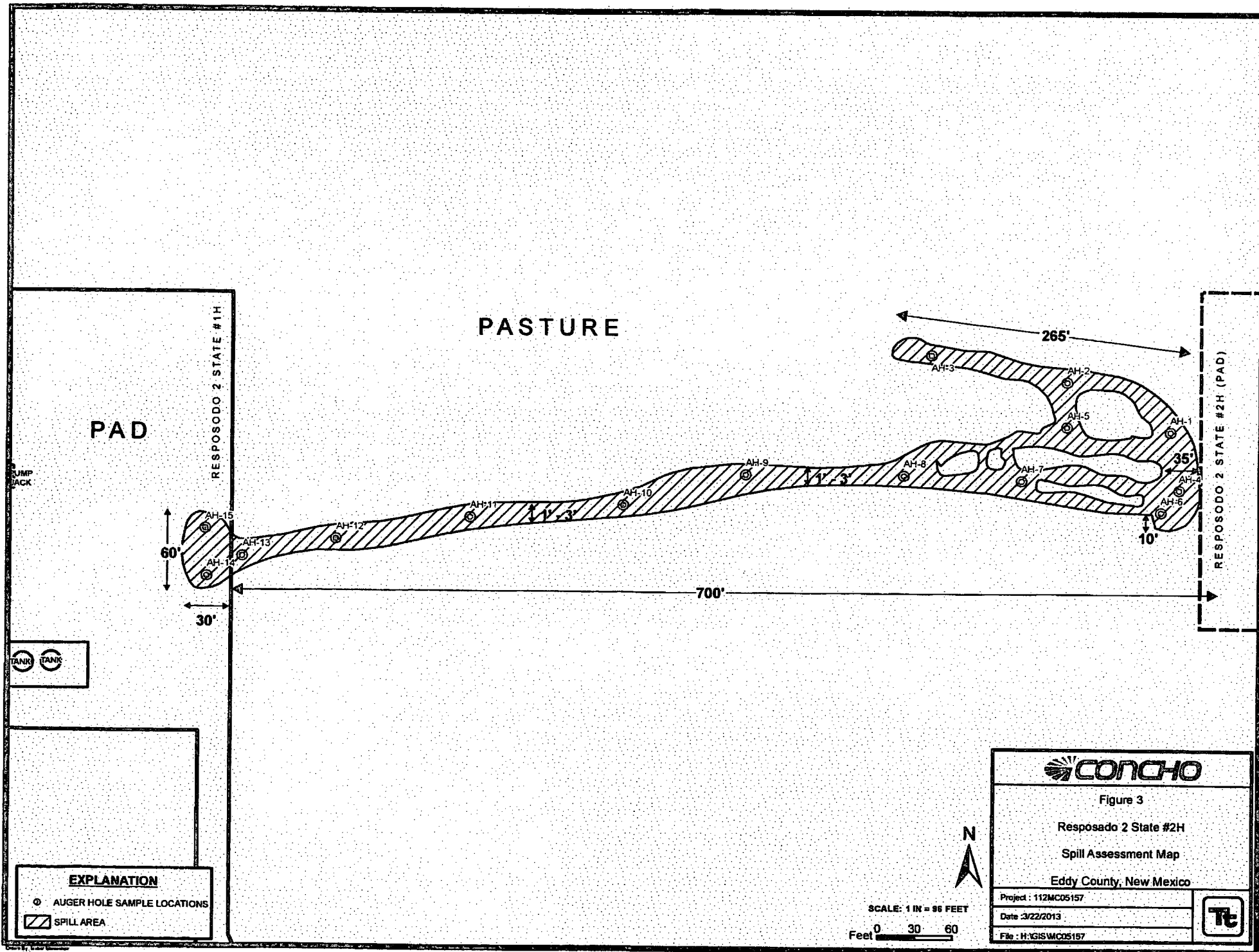
cc: Robert McNeill – COG  
Danny Franco - Sahara

## Figures

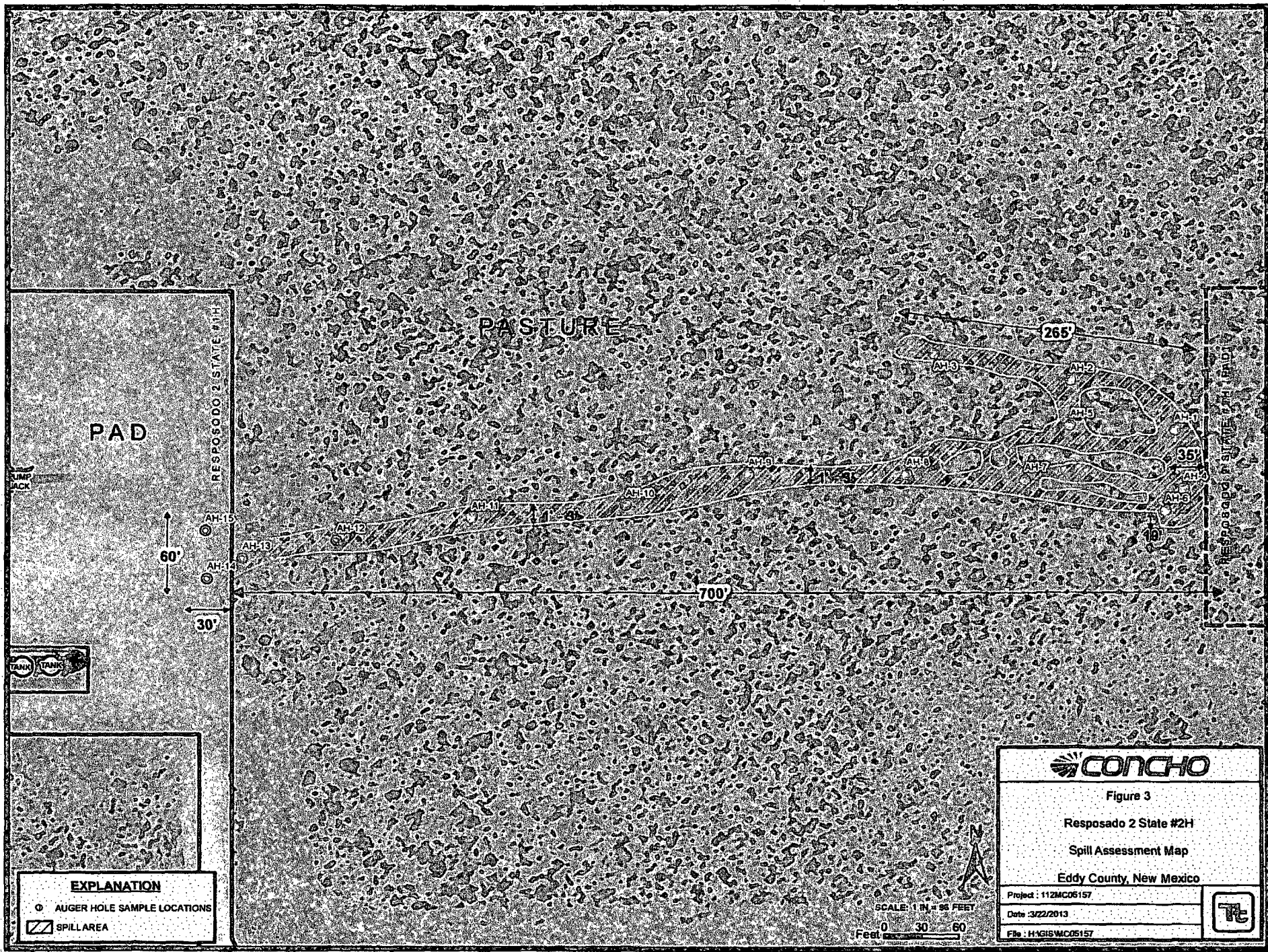


	
<b>Figure 1</b> <b>Resposado 2 State #2H</b> <b>Overview Map</b> <b>Eddy County, New Mexico</b>	
Project : 112MC05157	
Date : 3/22/2013	
File : H:\GIS\MC05157	
	











## Tables

**Table 1**  
**COG Operating LLC.**  
**Resposado 2 State #2H**  
**Eddy County, New Mexico**

[illegible]

**Table 1**  
**COG Operating LLC.**  
**Resposado 2 State #2H**  
**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-8	3/13/2013	0-1	0.5	X		<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	1,520
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	129
	"	2-2.5	"	X		-	-	-	-	-	-	-	-	64.7
	"	3-3.5	"	X		-	-	-	-	-	-	-	-	294
AH-9	3/13/2013	0-1	1	X		<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	498
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	743
AH-10	3/13/2013	0-1	1	X		<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	291
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	128
AH-11	3/13/2013	0-1	1	X		<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	547
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	773
	"	2-2.5	"	X		-	-	-	-	-	-	-	-	650
	"	3-3.5	"	X		-	-	-	-	-	-	-	-	24.6
	"	4-4.5	"	X		-	-	-	-	-	-	-	-	24.6
AH-12	3/13/2013	0-1	1	X		<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	123
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	93.6
AH-13	3/13/2013	0-1	1	X		<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	1,690

Photos



COG Operating LLC  
Resposado 2 State #2H  
Eddy County, New Mexico



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View Northwest – Area of AH-1



View West – Area of AH-2

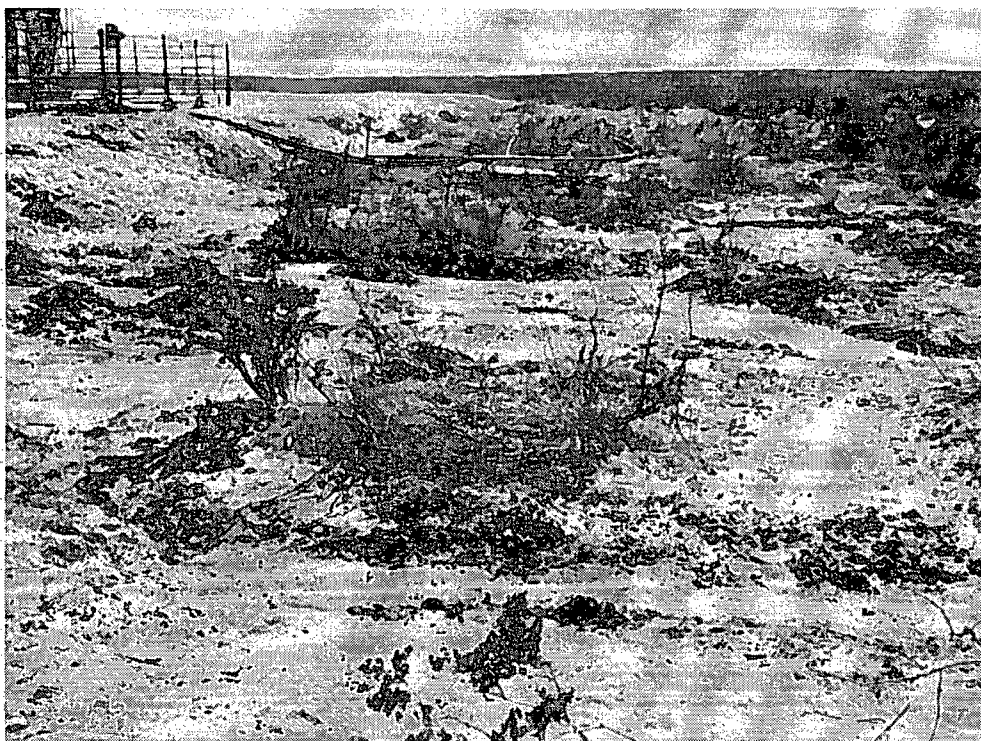
COG Operating LLC  
Resposado 2 State #2H  
Eddy County, New Mexico



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View West – Area of AH-3



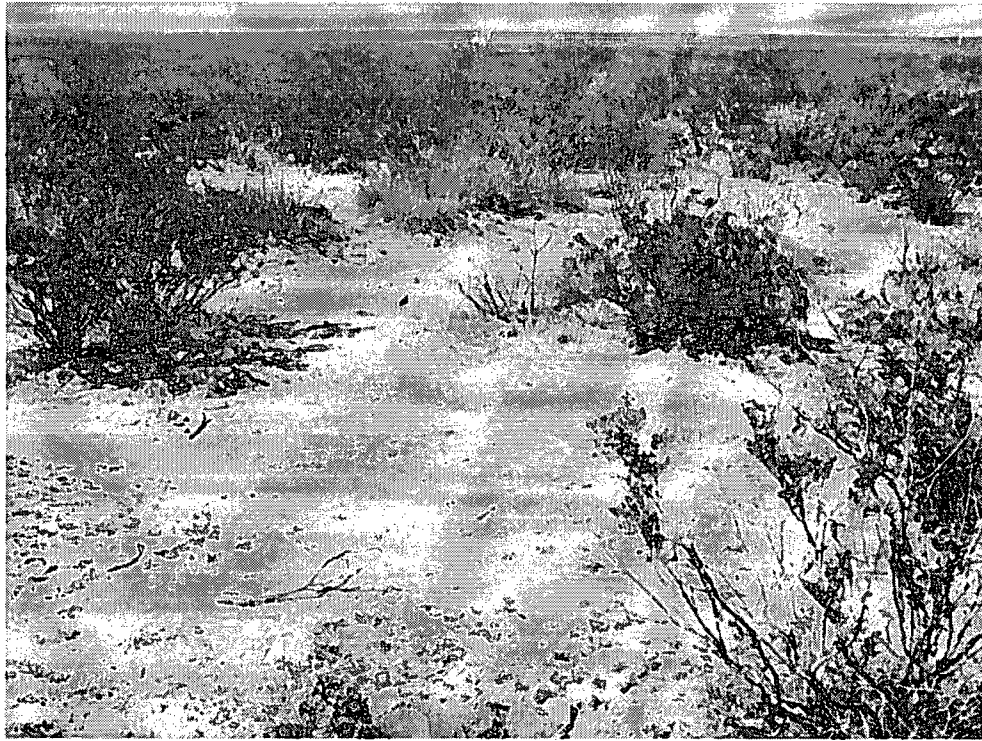
View South – Area of AH-4 and AH-6



COG Operating LLC  
Resposado 2 State #2H  
Eddy County, New Mexico



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View North – Area of AH-5



View West – Area of AH-7

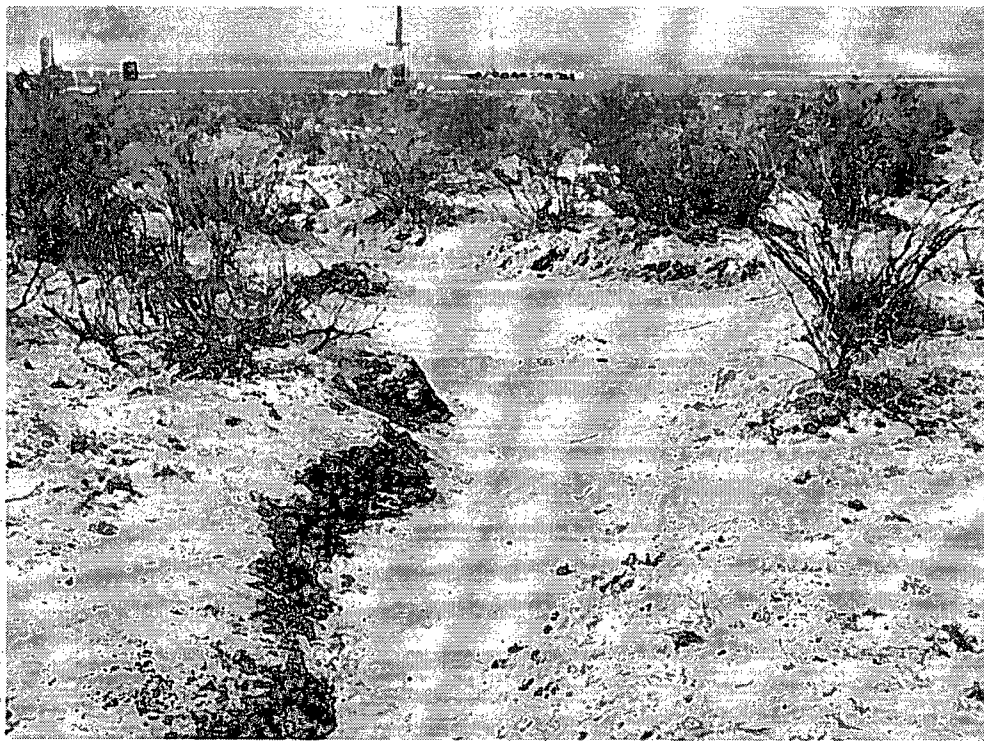
COG Operating LLC  
Resposado 2 State #2H  
Eddy County, New Mexico



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View West – Area of AH-8



View West – Area of AH-9

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Resposado 2 State #2H  
Eddy County, New Mexico



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View West – Area of AH-10



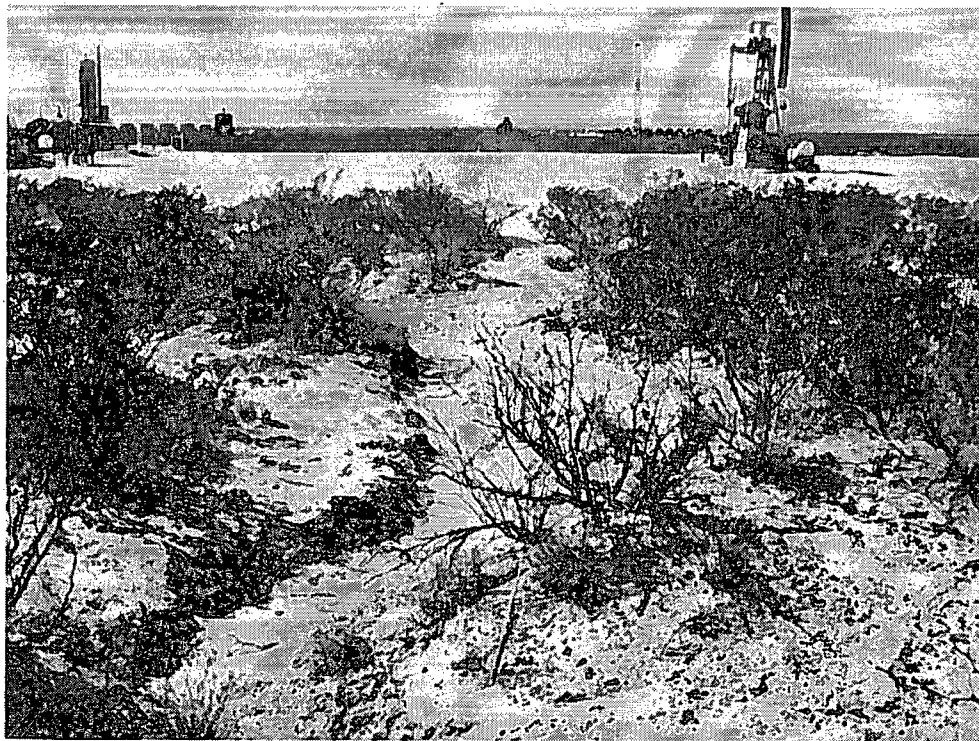
View West – Area of AH-11



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Resposado 2 State #2H  
Eddy County, New Mexico



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View West – Area of AH-12



View West – Area of AH-13

COG Operating LLC  
Resposado 2 State #2H  
Eddy County, New Mexico



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View North – Area of AH-14 and AH-15

## 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	RESPOSADO 2 STATE #2H	Facility Type	WELL PAD

Surface Owner	STATE	Mineral Owner		Lease No. (API)	30-015-39455
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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
A	2	26S	29E					EDDY

Latitude 32 03.745 Longitude 103 59.929

**NATURE OF RELEASE**

Type of Release Produced water	Volume of Release 100bbls	Volume Recovered 5bbls
Source of Release Water transport truck	Date and Hour of Occurrence 2/13/2013	Date and Hour of Discovery 2/13/2013 3:00am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher - OCD	
By Whom? Michelle Mullins	Date and Hour 02/14/2013 2:32pm	
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.\*

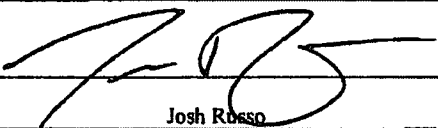
Describe Cause of Problem and Remedial Action Taken.\*

The water transport truck appeared to have a clogged filter and screen on his trailer. The truck released fluids on the RESPOSADO 2 STATE #2H location and pasture. The filter and screen have been cleaned and replaced. The trucking company is responsible for the release.

Describe Area Affected and Cleanup Action Taken.\*

Initially an estimated 100bbls were released from transfer truck due to clogged filter and screen. We were able to recover 5bbls of fluid with a vacuum truck. The spill area is located on the location and the adjacent pasture. Tetra Tech will sample the spill site area to delineate any possible contamination from the release and we will present a 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: 	<b>OIL CONSERVATION DIVISION</b>		
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 <input type="checkbox"/>
Date: 02-22-2013	Phone: 432-212-2399		

\* Attach Additional Sheets If Necessary

**Water Well Data**  
**Average Depth to Groundwater (ft)**  
**COG - Resposado 2 State #2H**  
**Eddy County, New Mexico**

26 South 28 East					
6	5	59	4	3	Site
				32	2
7	8	9	10	11	12
16	17	18	15	43	14
57			49		13
19	20	31	21	22	23
					24
30	29	15	28	190	27
				26	39
31	32	33	34	35	36







26 South 29 East					
6	43	5	4	3	2
					1
7	8	9	10	43	11
					12
18	17	16	15	33	14
					13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

26 South 30 East					
6	5	4	3	2	1
7	234	8	9	235	10
					11
18	17	16	15	14	13
19	20	21	235	22	23
					24
30	29	28	27	26	25
31	32	33	34	35	36

26 South 28 East					
6	5	4	3	2	1
				123	
7	8	9	10	11	12
				21	100
18	17	16	15	14	13
				120	56
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

26 South 29 East					
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	125	15	14
					13
19	20	21	22	57	23
					24
30	29	28	27	26	25
31	32	33	34	35	36

26 South 30 East					
6	5	179	4	3	2
					1
7	8	172	9	10	11
					12
18	17	16	15	14	13
19	20	21	22	23	24
					180
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: March 26, 2013

Work Order: 13031823



Project Location: Eddy Co., NM  
Project Name: COG/Resposado 2 State # 2H  
Project #: 112MC05157

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
323755	AH-1 0-1'	soil	2013-03-13	00:00	2013-03-18
323756	AH-1 1-1.5'	soil	2013-03-13	00:00	2013-03-18
323757	AH-2 0-1' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323758	AH-2 1-1.5' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323759	AH-3 0-1' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323760	AH-3 1-1.5' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323761	AH-4 0-1' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323762	AH-4 1-1.5' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323763	AH-4 2-2.5' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323764	AH-5 0-1' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323765	AH-5 1-1.5' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323766	AH-6 0-1' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323767	AH-6 1-1.5' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323768	AH-7 0-1' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323769	AH-7 1-1.5' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323770	AH-7 2-2.5' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323771	AH-8 0-1' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323772	AH-8 1-1.5' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323773	AH-8 2-2.5' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323774	AH-8 3-3.5' 0.5' BEB	soil	2013-03-13	00:00	2013-03-18
323775	AH-9 0-1' 1' BEB	soil	2013-03-13	00:00	2013-03-18
323776	AH-9 1-1.5' 1' BEB	soil	2013-03-13	00:00	2013-03-18
323777	AH-10 0-1' 1' BEB	soil	2013-03-13	00:00	2013-03-18
323778	AH-10 1-1.5' 1' BEB	soil	2013-03-13	00:00	2013-03-18
323779	AH-11 0-1' 1' BEB	soil	2013-03-13	00:00	2013-03-18
323780	AH-11-1.5' 1' BEB	soil	2013-03-13	00:00	2013-03-18
323781	AH-11 2-2.5' 1' BEB	soil	2013-03-13	00:00	2013-03-18
323782	AH-11 3-3.5' 1' BEB	soil	2013-03-13	00:00	2013-03-18
323783	AH-11 4-4.5' 1' BEB	soil	2013-03-13	00:00	2013-03-18
323784	AH-12 0-1' 1' BEB	soil	2013-03-13	00:00	2013-03-18

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
323785	AH-12 1-1.5' 1' BEB	soil	2013-03-13	00:00	2013-03-18
323786	AH-13 0-1' 1' BEB	soil	2013-03-13	00:00	2013-03-18
323787	AH-14 0-1' Scrape	soil	2013-03-13	00:00	2013-03-18
323788	AH-14 1-1.5' Scrape	soil	2013-03-13	00:00	2013-03-18
323789	AH-14 2-2.5' Scrape	soil	2013-03-13	00:00	2013-03-18
323790	AH-14 3-3.5' Scrape	soil	2013-03-13	00:00	2013-03-18
323791	AH-15 0-1' Scrape	soil	2013-03-13	00:00	2013-03-18
323792	AH-15 1-1.5' Scrape	soil	2013-03-13	00:00	2013-03-18
323793	AH-15 2-2.5' Scrape	soil	2013-03-13	00:00	2013-03-18

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)
323755 - AH-1 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00 q*
323757 - AH-2 0-1' 0.5' BEB	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00 q*
323759 - AH-3 0-1' 0.5' BEB	<0.0200 q*	<0.0200 q*	<0.0200 q*	<0.0200 q*	<50.0	<4.00
323761 - AH-4 0-1' 0.5' BEB	<0.0200 q*	<0.0200 q*	<0.0200 q*	<0.0200 q*	<50.0	<4.00
323764 - AH-5 0-1' 0.5' BEB	<0.0200 q*	<0.0200 q*	<0.0200 q*	<0.0200 q*	<50.0	<4.00
323766 - AH-6 0-1' 0.5' BEB	<0.0200 q*	<0.0200 q*	<0.0200 q*	<0.0200 q*	<50.0	<4.00
323768 - AH-7 0-1' 0.5' BEB	<0.0200 q*	<0.0200 q*	<0.0200 q*	<0.0200 q*	<50.0	<4.00
323771 - AH-8 0-1' 0.5' BEB	<0.0200 q*	<0.0200 q*	<0.0200 q*	<0.0200 q*	<50.0	<4.00
323775 - AH-9 0-1' 1' BEB	<0.0200 q*	<0.0200 q*	<0.0200 q*	<0.0200 q*	<50.0	<4.00
323777 - AH-10 0-1' 1' BEB	<0.0200 q*	<0.0200 q*	<0.0200 q*	<0.0200 q*	<50.0	<4.00
323779 - AH-11 0-1' 1' BEB	<0.0200 q*	<0.0200 q*	<0.0200 q*	<0.0200 q*	<50.0	<4.00
323784 - AH-12 0-1' 1' BEB	<0.0200 q*	<0.0200 q*	<0.0200 q*	<0.0200 q*	<50.0	<4.00
323786 - AH-13 0-1' 1' BEB	<0.0200 q*	<0.0200 q*	<0.0200 q*	<0.0200 q*	<50.0	<4.00
323787 - AH-14 0-1' Scrape	<0.0200 q*	<0.0200 q*	<0.0200 q*	<0.0200 q*	<50.0	<4.00
323791 - AH-15 0-1' Scrape	<0.0200 q*	<0.0200 q*	<0.0200 q*	<0.0200 q*	<50.0	<4.00

## Sample: 323755 - AH-1 0-1'

Param	Flag	Result	Units	RL
Chloride		1900	mg/Kg	4

## Sample: 323756 - AH-1 1-1.5'

Param	Flag	Result	Units	RL
Chloride		263	mg/Kg	4

## Sample: 323757 - AH-2 0-1' 0.5' BEB

Param	Flag	Result	Units	RL
Chloride		1060	mg/Kg	4

**Sample: 323758 - AH-2 1-1.5' 0.5' BEB**

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

**Sample: 323759 - AH-3 0-1' 0.5' BEB**

Param	Flag	Result	Units	RL
Chloride		1340	mg/Kg	4

**Sample: 323760 - AH-3 1-1.5' 0.5' BEB**

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

**Sample: 323761 - AH-4 0-1' 0.5' BEB**

Param	Flag	Result	Units	RL
Chloride		437	mg/Kg	4

**Sample: 323762 - AH-4 1-1.5' 0.5' BEB**

Param	Flag	Result	Units	RL
Chloride		795	mg/Kg	4

**Sample: 323763 - AH-4 2-2.5' 0.5' BEB**

Param	Flag	Result	Units	RL
Chloride		1220	mg/Kg	4

**Sample: 323764 - AH-5 0-1' 0.5' BEB**

Param	Flag	Result	Units	RL
Chloride		1140	mg/Kg	4

**Sample: 323765 - AH-5 1-1.5' 0.5' BEB**

Param	Flag	Result	Units	RL
Chloride		1490	mg/Kg	4

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**Sample: 323766 - AH-6 0-1' 0.5' BEB**

Param	Flag	Result	Units	RL
Chloride		1400	mg/Kg	4

**Sample: 323767 - AH-6 1-1.5' 0.5' BEB**

Param	Flag	Result	Units	RL
Chloride		682	mg/Kg	4

**Sample: 323768 - AH-7 0-1' 0.5' BEB**

Param	Flag	Result	Units	RL
Chloride		84.7	mg/Kg	4

**Sample: 323769 - AH-7 1-1.5' 0.5' BEB**

Param	Flag	Result	Units	RL
Chloride		144	mg/Kg	4

**Sample: 323770 - AH-7 2-2.5' 0.5' BEB**

Param	Flag	Result	Units	RL
Chloride		269	mg/Kg	4

**Sample: 323771 - AH-8 0-1' 0.5' BEB**

Param	Flag	Result	Units	RL
Chloride		1520	mg/Kg	4

**Sample: 323772 - AH-8 1-1.5' 0.5' BEB**

Param	Flag	Result	Units	RL
Chloride		129	mg/Kg	4

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**Sample: 323774 - AH-8 3-3.5' 0.5' BEB**

Param	Flag	Result	Units	RL
Chloride		294	mg/Kg	4

**Sample: 323775 - AH-9 0-1' 1' BEB**

Param	Flag	Result	Units	RL
Chloride		498	mg/Kg	4

**Sample: 323776 - AH-9 1-1.5' 1' BEB**

Param	Flag	Result	Units	RL
Chloride		743	mg/Kg	4

**Sample: 323777 - AH-10 0-1' 1' BEB**

Param	Flag	Result	Units	RL
Chloride		291	mg/Kg	4

**Sample: 323778 - AH-10 1-1.5' 1' BEB**

Param	Flag	Result	Units	RL
Chloride		128	mg/Kg	4

**Sample: 323779 - AH-11 0-1' 1' BEB**

Param	Flag	Result	Units	RL
Chloride		547	mg/Kg	4

**Sample: 323780 - AH-11-1.5' 1' BEB**

Param	Flag	Result	Units	RL
Chloride		773	mg/Kg	4

**Sample: 323782 - AH-11 3-3.5' 1' BEB**

Param	Flag	Result	Units	RL
Chloride		24.6	mg/Kg	4

**Sample: 323783 - AH-11 4-4.5' 1' BEB**

Param	Flag	Result	Units	RL
Chloride		24.6	mg/Kg	4

**Sample: 323784 - AH-12 0-1' 1' BEB**

Param	Flag	Result	Units	RL
Chloride		123	mg/Kg	4

**Sample: 323785 - AH-12 1-1.5' 1' BEB**

Param	Flag	Result	Units	RL
Chloride		93.6	mg/Kg	4

**Sample: 323786 - AH-13 0-1' 1' BEB**

Param	Flag	Result	Units	RL
Chloride		1690	mg/Kg	4

**Sample: 323787 - AH-14 0-1' Scrape**

Param	Flag	Result	Units	RL
Chloride		531	mg/Kg	4

**Sample: 323788 - AH-14 1-1.5' Scrape**

Param	Flag	Result	Units	RL
Chloride		157	mg/Kg	4

**Sample: 323789 - AH-14 2-2.5' Scrape**

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

## Bratcher, Mike, EMNRD

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**From:** Tavarez, Ike <Ike.Tavarez@tetrattech.com>  
**Sent:** Tuesday, August 20, 2013 3:41 PM  
**To:** Bratcher, Mike, EMNRD  
**Cc:** Robert Grubbs; Robert McNeill; Michelle Mullins (MMullins@concho.com); Mgdavis@saharatransport.com  
**Subject:** COG Operating - Moody 18 State and Resposada 2 State 2H - Work Plans Approval Request  
**Attachments:** COG - Moody 18 State Com 001 - Work Plan.pdf; COG - Resposada 2 State 2H - Work Plan .pdf

Mike,

Please find the enclosed Work Plans for the above reference spill sites located in Eddy County, New Mexico. The spills have been assessed and the remedial recommendations are included in the work plans. I will mail you a hard copy of the work plans for your files. Once approved, Tetra Tech will schedule the soil remediation and notify you prior to implementing the work plans. Please let me know if you need additional information or call me if you have any questions

**Ike Tavarez, PG | Senior Project Manager**

Main: 432.682.4559 | Fax: 432.682.3946 | Cell: 432.425.3878

[Ike.Tavarez@tetrattech.com](mailto:Ike.Tavarez@tetrattech.com)

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