

SITE INFORMATION

Report Type: Closure Report

General Site Information:

Site:	Jenkins B Fed #1 Well Site					
Company:	COG Operating LLC					
Section, Township and Range	Unit E	Section 20	T 17S	R 30E		
Lease Number:	API-30-015-04214					
County:	Eddy County					
GPS:	32.82288° N			104.00168° W		
Surface Owner:	Federal					
Mineral Owner:						
Directions:	In Loco Hills, from the intersection of Haggerman Cutoff and 82, travel west on 82 (.91 miles),					
	turn north onto lease road (.22 miles), bare right at the Y and go straight ahead (150 feet) to					
	location					

Release Data:

Date Released:	8/5/2013
Type Release:	Oil and Produced Water
Source of Contamination:	Stuffing Box failure
Fluid Released:	2 bbls of Oil and 6 bbls of Produced Water
Fluids Recovered:	1 bbl of Oil and 4 bbls of Produced Water

Official Communication:

Name:	Robert McNeill	Ike Tavaréz
Company:	COG Operating, LLC	Tetra Tech
Address:	One Concho Center 600 W. Illinois Ave.	4000 N Big Spring St. Suite 401
City:	Midland Texas, 79701	Midland, Texas
Phone number:	(432) 686-3023	(432) 682-4559
Fax:	(432) 684-7137	
Email:	rmcneill@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	
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



December 19, 2014

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

Re: Closure Report for the COG Operating LLC., Jenkins B Fed #1, Unit E, Section 20, 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 Jenkins B Fed #1 located in Unit E, Section 20, Township 17 South, Range 30 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.82288°, W 104.00168°. 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 August 05, 2013, and released approximately two (2) barrels of oil and six (6) barrels of produced water from a stuffing box leak. To alleviate the problem, COG personnel repacked the stuffing box. One (1) barrel of oil and four (4) barrels of produced water were recovered. The spill initiated at the wellhead and ran west on the pad affecting an area 130' X 40'. The initial C-141 form is enclosed in Appendix A.

Groundwater

No water wells were listed within Section 20. According to the NMOCD groundwater map, the average depth to groundwater in this area is greater than 250' 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, ethyl benzene, 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 4, 2013, Tetra Tech personnel inspected and sampled the spill area. Four (4) auger holes (AH-1 and AH-4) 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, all of the auger holes did not exceed the RRAL for TPH and BTEX, with the exception of AH-4. Auger hole (AH-4) showed a shallow impact at 0-1', with concentrations above the RRAL for TPH of 20,183 mg/kg and total BTEX of 59.4 mg/kg, which declined below the RRAL at 1-1.5'.

Auger holes (AH-1, AH-2 and AH-3) did show a chloride impact to the soils. The area of AH-1 was not vertically defined. The areas of AH-2 and AH-3 showed a shallow chloride impact, which declined with depth to 422 mg/kg at 1-1.5' and 498 mg/kg at 2-2.5', respectively. The area of AH-4 did not show a significant chloride to the soils.

Remedial Activities

On January 22, 2014, Tetra Tech supervised the removal of impacted materials as highlighted (green) in Table 1 and shown on Figure 4. To remove the elevated chlorides, the areas of AH-1, AH-2, AH-3 and AH-4 were excavated to depths of approximately 4.0', 2.0', 3.0' and 2.0', respectively.

As discussed in the submitted work plan, a trench was proposed in the area of AH-1 to define extents. Trench (T-1) was installed in the area of AH-1 to define extents. In addition, a Trench (T-2) was also installed in the area of AH-3. As shown in Table 1, T-1 installed in the area of AH-1, showed chloride concentrations somewhat consistent throughout the depth of the trench and was not vertically defined, with a bottom chloride of 7,360 mg/kg at 16.0' below surface. Also, T-2 was not vertically defined showing a bottom trench chloride of 3,360 mg/kg at 14.0'.



Due to elevated chlorides in the areas of AH-1 and AH-3, a 40 mil plastic liner was installed in the bottom of the excavation to cap and prevent vertical migration of contaminated materials left in place. Approximately 880 cubic yards of contaminated soil was hauled off to the proper disposal and the excavated areas were backfilled with clean material to surface grade.

On March 17, 2014, a borehole (BH-1) was installed between the areas of AH-1 and AH-3 to define the chloride extents. The chloride concentrations declined with depth, however showed a chloride of 1,670 mg/kg at 80' below surface. Deeper samples could not be collected to define the extents due the deeper sandy soils collapsing the borehole.

Conclusion

Based on the assessment and remedial actions taken at this site, COG requests closure of this spill issue. A Final C-141 is enclosed in Appendix A. If you have any questions or comments concerning the assessment or the 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
cc: James Amos – BLM

Figures

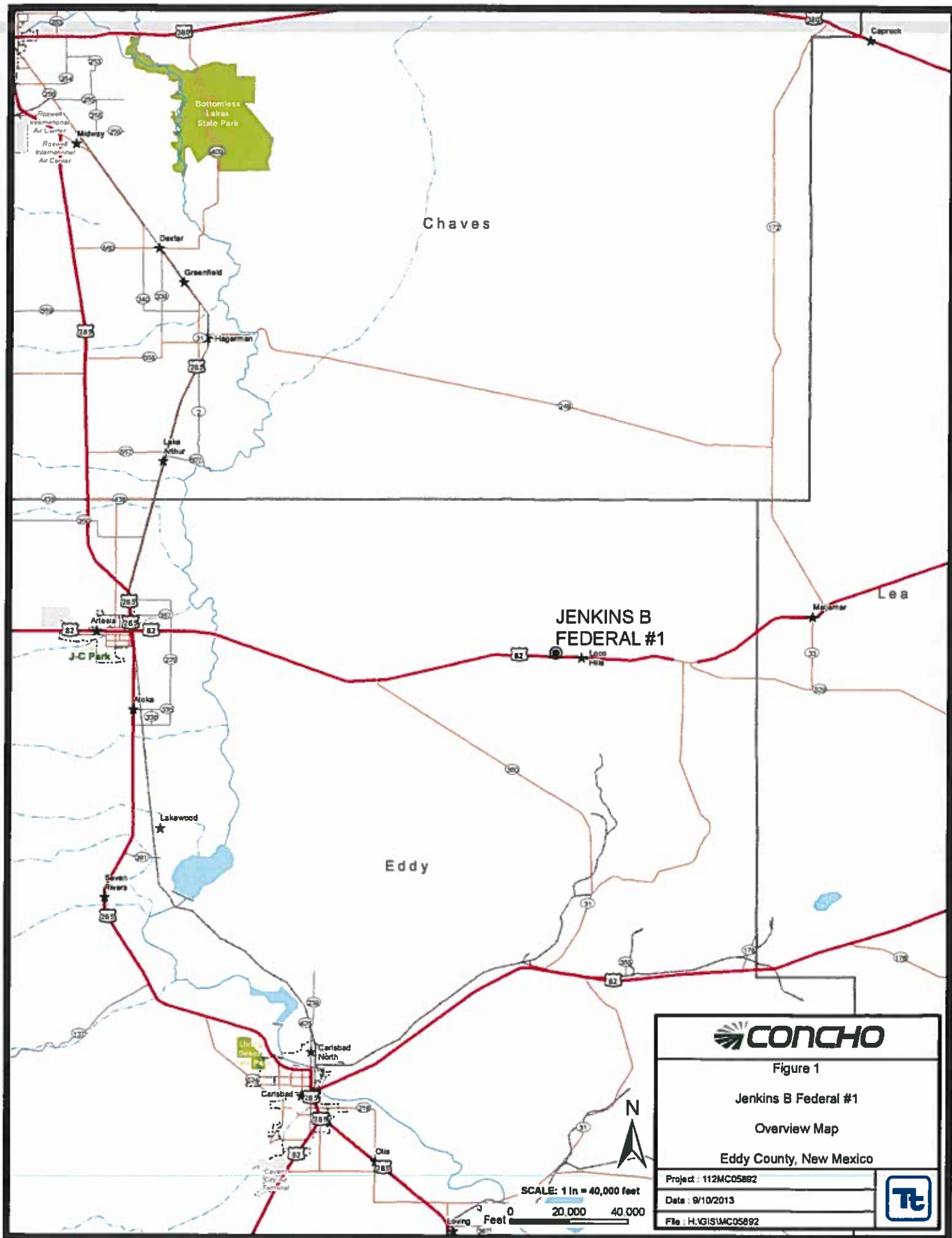


Figure 1

Jenkins B Federal #1

Overview Map

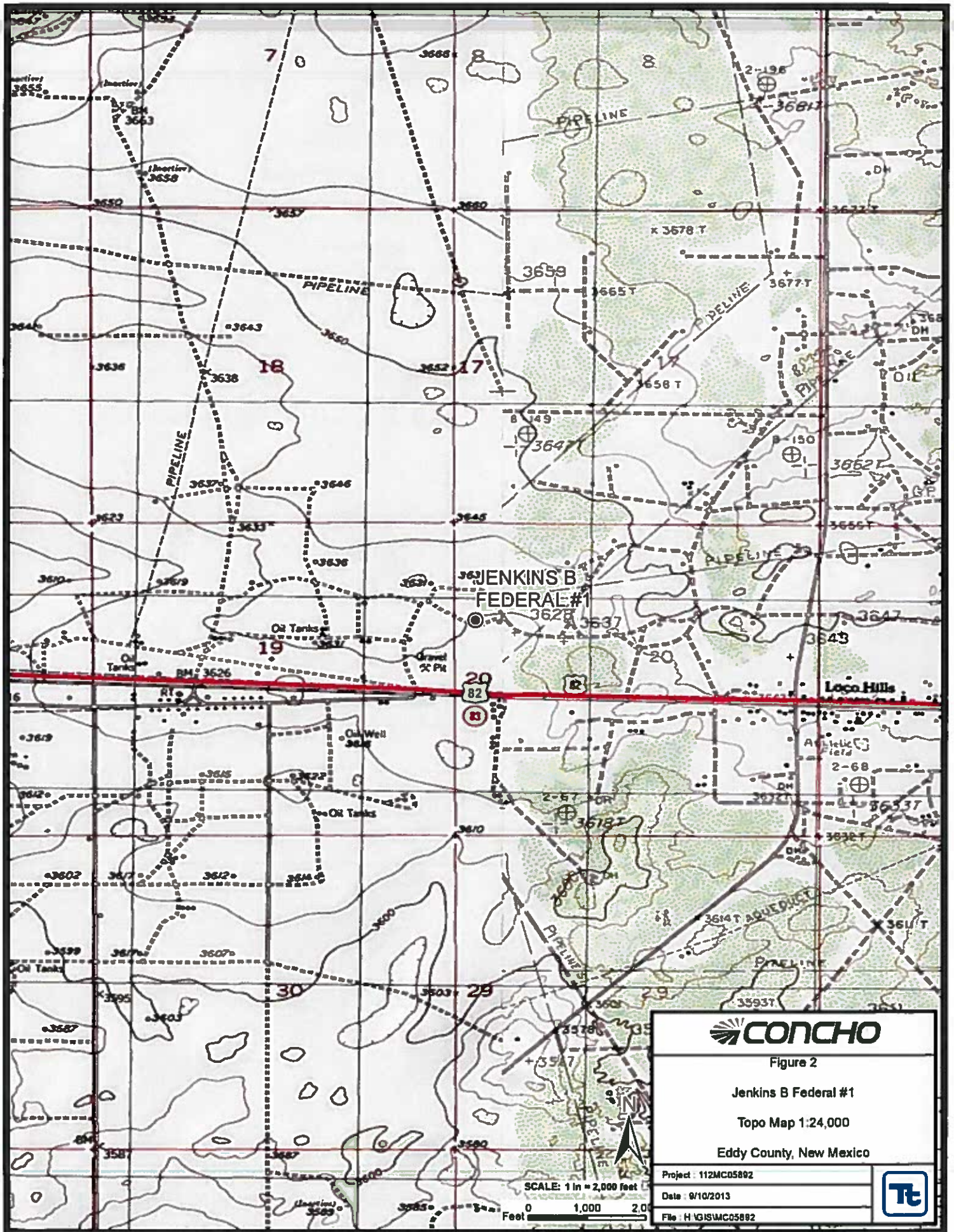
Eddy County, New Mexico

Project : 112MC05892

Date : 9/10/2013

File : H:\GIS\WC05892





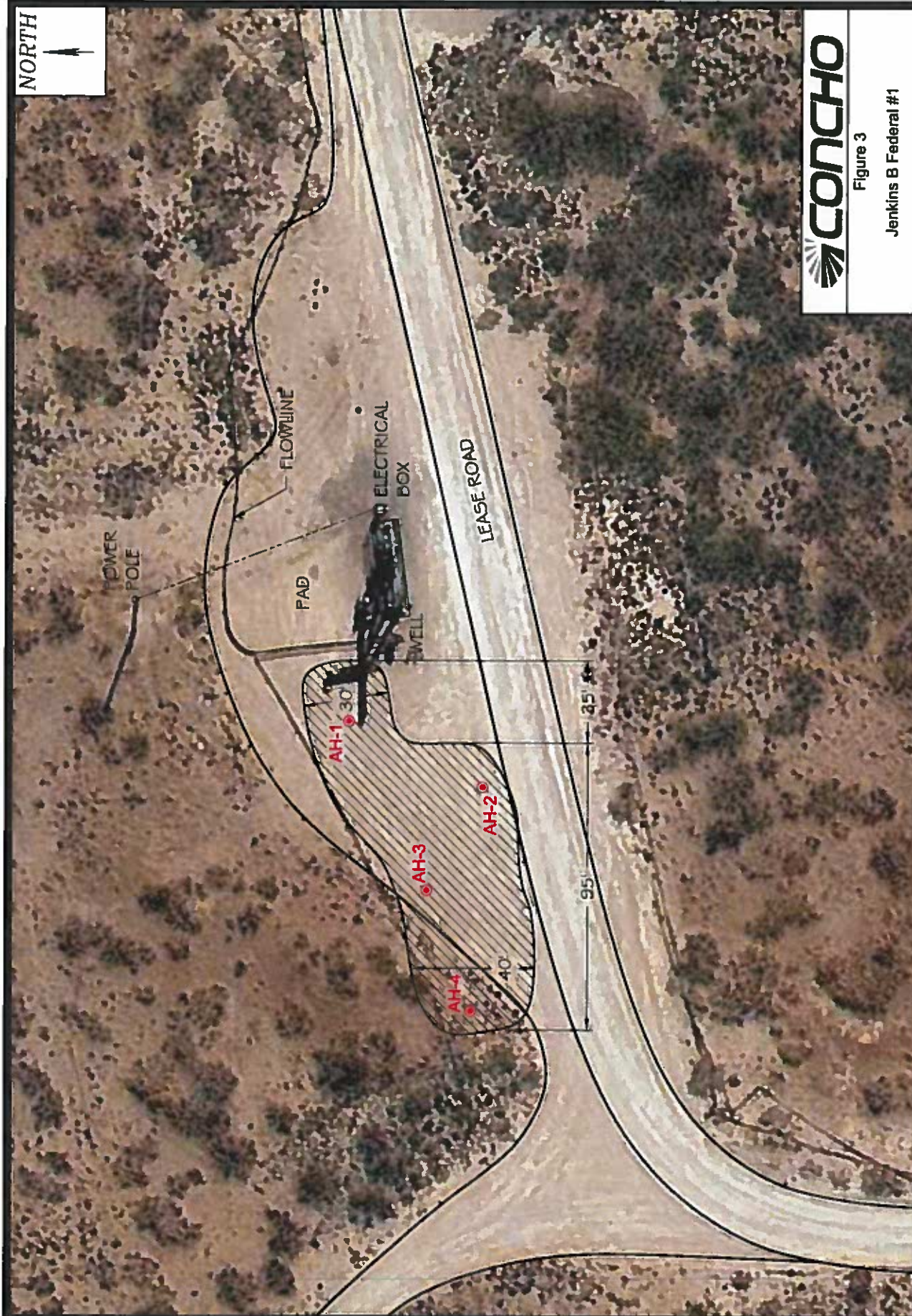


Figure 3

Jenkins B Federal #1

Spill Assessment Aerial Map

Eddy County, New Mexico

Project: 112MC05882

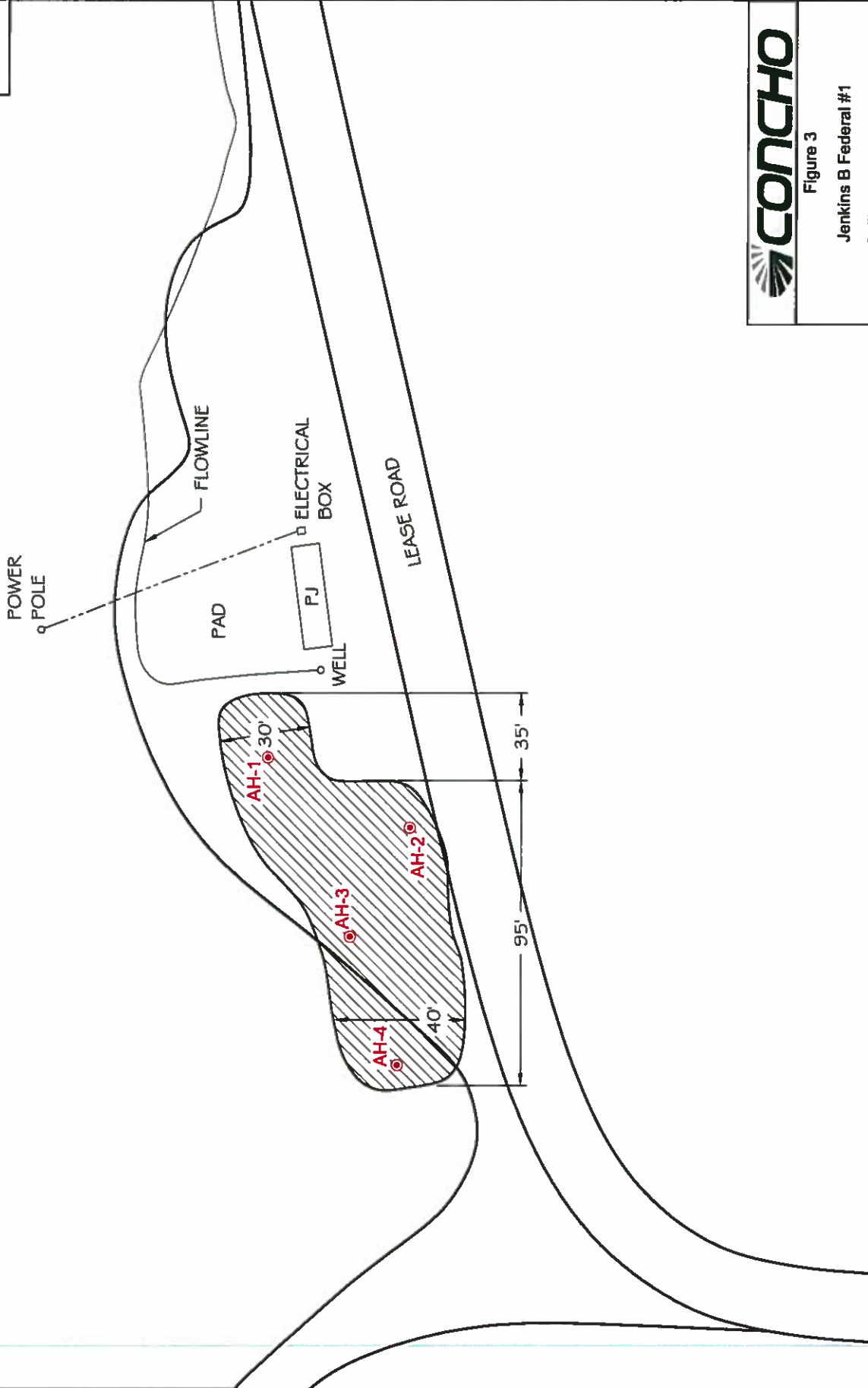
Date: 9/9/2013

File: H:\COG112MC05882\Jenkins B Federal #1

LEGEND

AUGER HOLE SAMPLE LOCATIONS
 SPILL AREA

NORTH



LEGEND

- AUGER HOLE SAMPLE LOCATIONS
- SPILL AREA



Figure 3

Jenkins B Federal #1

Spill Assessment Map

Eddy County, New Mexico

Project:	112MCO5692
Date:	9/9/2013
File:	H:\COG\112MCO5692\Jenkins B Federal #1



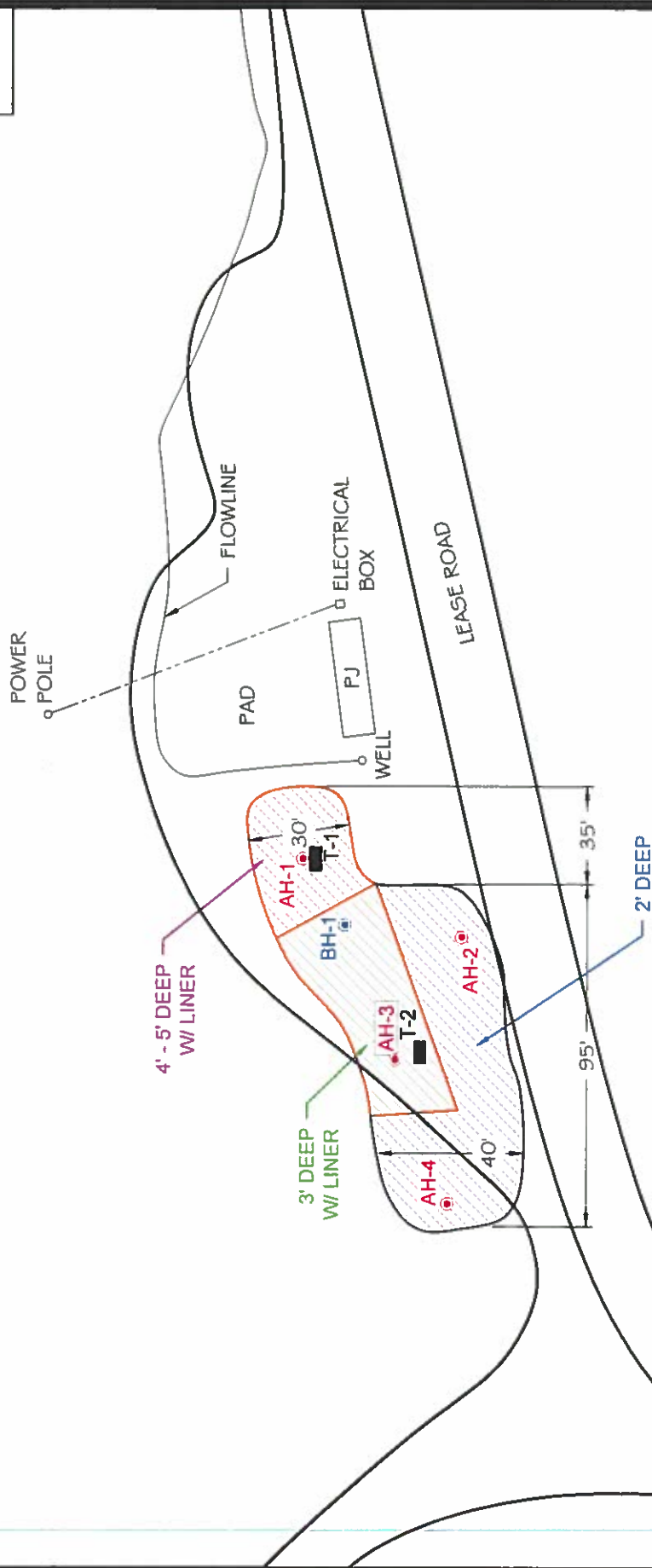


Figure 4

Jenkins B Federal #1
Excavation Areas & Depths Map
Eddy County, New Mexico

Project: 112MCO5892
Date: 12/15/2014
File: H:\COG\112MCO5892\Jenkins B Federal #1



0 20 40
Scale: 1" = 40'-0"

LEGEND

- AUGER HOLE SAMPLE LOCATIONS
- BORE HOLE SAMPLE LOCATIONS
- TRENCH LOCATIONS
- EXCAVATION AREAS & DEPTHS
- INSTALLED 40ML LINER

Tables

Table 1
COG Operating LLC.
Jenkins B Federal #1
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	BEB Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total						
AH-2	9/4/2013	0-1	-		X	<4.00	<50.00	<50.00	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	2,820
	"	1-1.5	-		X	-	-	-	-	-	-	-	-	422
	"	2-2.5	-		X	-	-	-	-	-	-	-	-	589
	"	3-3.5	-		X	-	-	-	-	-	-	-	-	594
AH-2 Bottom Hole	1/28/2014	-	-	X		-	-	-	-	-	-	-	-	1,960
AH-2 South Side Wall	1/28/2014	-	-	X		-	-	-	-	-	-	-	-	1,070
AH-2 East Side Wall	1/28/2014	-	-	X		-	-	-	-	-	-	-	-	1,300
AH-3	9/4/2013	0-1	-		X	<4.00	<50.00	<50.00	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	4,550
	"	1-1.5	-		X	-	-	-	-	-	-	-	-	3,070
	"	2-2.5	-		X	-	-	-	-	-	-	-	-	498
AH-3 North Side Wall	1/28/2014	-	-	X		-	-	-	-	-	-	-	-	1,560
T-2	1/28/2014	4	-	X		-	-	-	-	-	-	-	-	4,800
	"	6	-	X		-	-	-	-	-	-	-	-	1,340
	"	8	-	X		-	-	-	-	-	-	-	-	832
	"	10	-	X		-	-	-	-	-	-	-	-	4,080
	"	12	-	X		-	-	-	-	-	-	-	-	3,640
	"	14	-	X		-	-	-	-	-	-	-	-	3,360
AH-4	9/4/2013	0-1	-		X	783	19,400	20,183	<400	4.27	28.0	28.1	59.4	286
	"	1-1.5	-		X	35.8	227	263	<0.0400	<0.0400	0.370	0.719	1.09	73.9
	"	2-2.5	-	X		-	-	-	-	-	-	-	-	138
AH-4 Bottom Hole	1/28/2014	-	-	X		-	-	-	-	-	-	-	-	464
AH-4 North Side Wall	1/28/2014	-	-	X		-	-	-	-	-	-	-	-	64.0
AH-4 South Side Wall	1/28/2014	-	-	X		-	-	-	-	-	-	-	-	768
AH-4 West Side Wall	1/28/2014	-	-	X		-	-	-	-	-	-	-	-	<16.0

(-) Not Analyzed
(BEB) Below Excavation Bottom
Excavated Depths
40mil Plastic Liner Installed

Table 1
COG Operating LLC.
Jenkins B Federal #1
Eddy County, New Mexico

[illegible]

Photos



View East – Area of AH-1 at 7.0'



View East – Area of AH-2 at 3.0'



View East – Areas of AH-2, AH-3, and AH-4 Excavated



View East – Areas of AH-1 and AH-2 Lined with 40mil Plastic



View East – Excavated Areas Backfilled

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	Jenkins B Federal #001	Facility Type	Well Pad
Surface Owner	Federal	Mineral Owner	
		Lease No. (API#)	30-015-04214

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	20	17S	30E					Eddy

Latitude 32.82288

Longitude 104.00168

NATURE OF RELEASE

Type of Release	Oil and produced water	Volume of Release	2bbls of oil 6bbls of produced water	Volume Recovered	1bbls of oil 4bbls of produced water
Source of Release	Wellhead	Date and Hour of Occurrence	08-05-2013	Date and Hour of Discovery	08-05-2013 11:00am
Was Immediate Notice Given?	☐ Yes ☒ No ☐ Not Required	If YES, To Whom?			
By Whom?		Date and Hour			
Was a Watercourse Reached?	☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

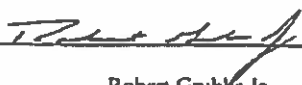
Describe Cause of Problem and Remedial Action Taken.*

Stuffing box leak on the well head due to back pressure. We have repacked the stuffing box.

Describe Area Affected and Cleanup Action Taken.*

Initially 2bbls of oil and 6bbls of produced water were released due a packing leak on the stuffing box. We were able to recover 1bbls of oil and 4bbls of produced water with a vacuum truck. The spill was contained on the location. All free fluid has been recovered. 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 - 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: Robert Grubbs Jr.		Approved by District Supervisor:	
Title: Senior Environmental Coordinator		Approval Date:	Expiration Date:
E-mail Address: rgrubbs@concho.com		Conditions of Approval:	
Date: 8-13-2013 Phone: 432-661-6601		Attached ☐	

* Attach Additional Sheets If Necessary

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
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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	Robert McNeill
Address	600 W. Illinois Ave, Midland, Texas 79701	Telephone No.	(432) 685-4332
Facility Name	Jenkins B Federal #1	Facility Type	Well Pad

Surface Owner: Federal	Mineral Owner	Lease No. (API#) 30-015-04214
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LOCATION OF RELEASE

Unit Letter E	Section 20	Township 17S	Range 30E	Feet from the	North/South Line	Feet from the	East/West Line	County Eddy
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Latitude 32.82288° N Longitude 104.00168° W

NATURE OF RELEASE

Type of Release: Oil and Produced Water	Volume of Release 2bbls of Oil, 6bbls of Produced Water	Volume Recovered 1bbl of Oil, 4bbls of Produced Water
Source of Release: Wellhead	Date and Hour of Occurrence 08/05/2013	Date and Hour of Discovery 08/05/2013 11:00am
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

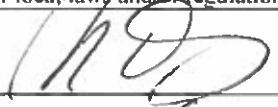
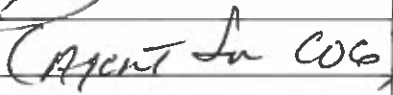
Describe Cause of Problem and Remedial Action Taken.*

Stuffing box leak on the well head due to back pressure. COG personnel repacked the stuffing box.

Describe Area Affected and Cleanup Action Taken.*

Initially 2bbls of oil and 6bbls of produced water were released due to a packing leak on the stuffing box. COG was able to recover 1bbl of oil and 4bbls of produced water with a vacuum truck. The spill was contained on the location and all free fluid was recovered. Tetra Tech inspected site and collected samples to define spills extent. Soil that exceeded RRAL or chloride impacted soil was removed and hauled away for proper disposal. Selected areas were capped with a 40 mil liner. Site was then brought up to surface grade with clean backfill material. Tetra Tech prepared closure report and submitted to NMOCD for review.

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: Ike Tavarez	Approved by District Supervisor: 		
Title: Project Manager	Approval Date:	Expiration Date:	
E-mail Address: Ike.Tavarez@TetraTech.com	Conditions of Approval:		Attached ☐
Date: 12/11/14	Phone: (432) 682-4559		

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
COG - Jenkins B Fed #1
Eddy County, New Mexico

16 South			29 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14 220	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

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

16 South			31 East		
6	5	4	3	2 290	1
7	8	9	10	11	12
18	17	16	15	14 113	13 288
19	20	21	22	23 314	24 299
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 78	23	24
30	29 210	28	27	26	25
31	32	33	34	35	36

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

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

18 South			29 East		
6	5	4	3	2	1
7	8	9	10 95	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

18 South			30 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23 44	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 98	14	13 400
19	20	21	22	23 317	24
30	29	28	27	26	25
31	32	33	34	35	36

- New Mexico State Engineers Well Reports
- USGS Well Reports
- Geology and Groundwater Conditions in Southern Eddy, County, NM
- NMOCD - Groundwater Data
- Field water level
- New Mexico Water and Infrastructure Data System

Appendix C

Summary Report

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

Report Date: September 18, 2013

Work Order: 13090534



Project Location: NM
Project Name: COG/Jenkins B #2
Project Number: TBD

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
341179	AH-1 0-1'	soil	2013-09-04	00:00	2013-09-05
341180	AH-1 1-1.5'	soil	2013-09-04	00:00	2013-09-05
341181	AH-1 2-2.5'	soil	2013-09-04	00:00	2013-09-05
341182	AH-1 3-3.5'	soil	2013-09-04	00:00	2013-09-05
341183	AH-2 0-1'	soil	2013-09-04	00:00	2013-09-05
341184	AH-2 1-1.5'	soil	2013-09-04	00:00	2013-09-05
341185	AH-2 2-2.5'	soil	2013-09-04	00:00	2013-09-05
341186	AH-2 3-3.5'	soil	2013-09-04	00:00	2013-09-05
341187	AH-3 0-1'	soil	2013-09-04	00:00	2013-09-05
341188	AH-3 1-1.5'	soil	2013-09-04	00:00	2013-09-05
341189	AH-3 2-2.5'	soil	2013-09-04	00:00	2013-09-05
341190	AH-4 0-1'	soil	2013-09-04	00:00	2013-09-05
341191	AH-4 1-1.5'	soil	2013-09-04	00:00	2013-09-05
341192	AH-4 2-2.5'	soil	2013-09-04	00:00	2013-09-05

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)
341179 - AH-1 0-1'	<0.400 ¹	0.809	4.94	5.41	4330	175 q*
341183 - AH-2 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
341187 - AH-3 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00 q*
341190 - AH-4 0-1'	<0.400 ²	4.27	26.0	29.1	19400	783
341191 - AH-4 1-1.5'	<0.0400	<0.0400	0.370	0.719	227 q*	35.8

Sample: 341179 - AH-1 0-1'

¹Dilution due to surfactants.

²Dilution due to surfactants.

Param	Flag	Result	Units	RL
Chloride		3470	mg/Kg	4

Sample: 341180 - AH-1 1-1.5'

Param	Flag	Result	Units	RL
Chloride		4730	mg/Kg	4

Sample: 341181 - AH-1 2-2.5'

Param	Flag	Result	Units	RL
Chloride		4350	mg/Kg	4

Sample: 341182 - AH-1 3-3.5'

Param	Flag	Result	Units	RL
Chloride		4910	mg/Kg	4

Sample: 341183 - AH-2 0-1'

Param	Flag	Result	Units	RL
Chloride		2820	mg/Kg	4

Sample: 341184 - AH-2 1-1.5'

Param	Flag	Result	Units	RL
Chloride		422	mg/Kg	4

Sample: 341185 - AH-2 2-2.5'

Param	Flag	Result	Units	RL
Chloride		589	mg/Kg	4

Sample: 341186 - AH-2 3-3.5'

Param	Flag	Result	Units	RL
Chloride		594	mg/Kg	4

Sample: 341187 - AH-3 0-1'

Param	Flag	Result	Units	RL
Chloride		4550	mg/Kg	4

Sample: 341188 - AH-3 1-1.5'

Param	Flag	Result	Units	RL
Chloride		3070	mg/Kg	4

Sample: 341189 - AH-3 2-2.5'

Param	Flag	Result	Units	RL
Chloride		498	mg/Kg	4

Sample: 341190 - AH-4 0-1'

Param	Flag	Result	Units	RL
Chloride		286	mg/Kg	4

Sample: 341191 - AH-4 1-1.5'

Param	Flag	Result	Units	RL
Chloride		73.9	mg/Kg	4

Sample: 341192 - AH-4 2-2.5'

Param	Flag	Result	Units	RL
Chloride		138	mg/Kg	4

Analysis Request of Chain of Custody Record

PAGE: 2 OF: 2

OF: 2

ANALYSIS REQUEST

(Circle or Specify Method No.)



TETRA TECH

**1910 N. Big Spring St.
Midland, Texas 79705**

(432) 682-4559 • Fax (432) 682-3948

CLIENT NAME:		PROJECT NO.:		PROJECT NAME:		SITE MANAGER:	
LAB I.D. NUMBER		DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION
189	9.4	2013		S	X	X	AH-03 2-2.5
190	↓			S	X	X	AH-4 0-1
191	↓			S	X	X	" 1-1.5
192	↓			S	X	X	" 1-2.5
RELINQUISHED BY: (Signature) RELINQUISHED BY: (Signature) RELINQUISHED BY: (Signature) RELINQUISHED BY: (Signature)							
RECEIVING LABORATORY: ADDRESS: CITY: CONTACT:				DATE: TIME: DATE: TIME: DATE: TIME:			
STATE: ZIP: PHONE:				DATE: TIME: DATE: TIME: DATE: TIME:			
SAMPLE CONDITION WHEN RECEIVED: REMARKS:							

RECEIVED BY: (Signature) <i>[Signature]</i>	Date: 9-5-83 Time: 14:10	RECEIVED BY: (Signature) <i>[Signature]</i>	Date: 9-5-83 Time: 14:10	SAMPLED BY: (Print & Initial) NY 3 C69	Date: 9-4-83 Time: 14:13
RELINQUISHED BY: (Signature)	Date: _____ Time: _____	RECEIVED BY: (Signature)	Date: _____ Time: _____	SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS OTHER: _____	APRILL P: _____
RELINQUISHED BY: (Signature)	Date: _____ Time: _____	RECEIVED BY: (Signature)	Date: _____ Time: _____	TETRA TECH CONTACT PERSON:	
RECEIVING LABORATORY:	ADDRESS: _____	RECEIVED BY: (Signature)	Date: _____ Time: _____	Results by:	
CITY: _____	STATE: _____ ZIP: _____	RUSH Charges Authorized: Yes No			
CONTACT: _____	PHONE: _____	DATE: _____ TIME: _____			
SAMPLE CONDITION WHEN RECEIVED:		REMARKS:			

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Summary Report

(Corrected Report)

Ike Tavaroz
Tetra Tech
1901 N. Big Spring St.
Midland, TX 79705

Report Date: April 8, 2014

Work Order: 14031829



Project Location: Eddy Co, NM
Project Name: COG/Jenkins B Federal #1
Project Number: 112MC05892

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
358298	BH-1 6-7'	soil	2014-03-17	00:00	2014-03-18
358299	BH-1 9-10'	soil	2014-03-17	00:00	2014-03-18
358300	BH-1 14-15'	soil	2014-03-17	00:00	2014-03-18
358301	BH-1 19-20'	soil	2014-03-17	00:00	2014-03-18
358302	BH-1 24-25'	soil	2014-03-17	00:00	2014-03-18
358303	BH-1 29-30'	soil	2014-03-17	00:00	2014-03-18
358304	BH-1 39-40'	soil	2014-03-17	00:00	2014-03-18
358305	BH-1 49-50'	soil	2014-03-17	00:00	2014-03-18
358306	BH-1 59-60'	soil	2014-03-17	00:00	2014-03-18
358307	BH-1 69-70'	soil	2014-03-17	00:00	2014-03-18
358308	BH-1 79-80'	soil	2014-03-17	00:00	2014-03-18

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)
358298 - BH-1 6-7'	<0.0200	<0.0200	<0.0200	<0.0200 Q*	<50.0 Q*	<4.00

Sample: 358298 - BH-1 6-7'

Param	Flag	Result	Units	RL
Chloride		1430	mg/Kg	5

Sample: 358299 - BH-1 9-10'

Report Date: April 8, 2014

Work Order: 14031829

Page Number: 2 of 3

Param	Flag	Result	Units	RL
Chloride		3370	mg/Kg	5

Sample: 358300 - BH-1 14-15'

Param	Flag	Result	Units	RL
Chloride		3560	mg/Kg	5

Sample: 358301 - BH-1 19-20'

Param	Flag	Result	Units	RL
Chloride		4090	mg/Kg	5

Sample: 358302 - BH-1 24-25'

Param	Flag	Result	Units	RL
Chloride		3780	mg/Kg	5

Sample: 358303 - BH-1 29-30'

Param	Flag	Result	Units	RL
Chloride		4480	mg/Kg	5

Sample: 358304 - BH-1 39-40'

Param	Flag	Result	Units	RL
Chloride		4820	mg/Kg	5

Sample: 358305 - BH-1 49-50'

Param	Flag	Result	Units	RL
Chloride		6540	mg/Kg	5

Sample: 358306 - BH-1 59-60'

Param	Flag	Result	Units	RL
Chloride		3410	mg/Kg	5

Report Date: April 8, 2014

Work Order: 14031829

Page Number: 3 of 3

Sample: 358307 - BH-1 69-70'

Param	Flag	Result	Units	RL
Chloride		2520	mg/Kg	5

Sample: 358308 - BH-1 79-80'

Param	Flag	Result	Units	RL
Chloride		1670	mg/Kg	5

14031829

Analysis Request of Custody Record

PAGE: 1

OF: 2

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

SITE MANAGER:

 CCG
 Le Taverne

PROJECT NO.:

 12mc05892
 Jenkins B Federal #1

LAB I.D. NUMBER

DATE

TIME

MATRIX

COMB

GRAB

SAMPLE IDENTIFICATION

Eddy Co. NM

Eddy Co. NM

Eddy Co. NM

Eddy Co. NM

Eddy Co. NM

Eddy Co. NM

Eddy Co. NM

Eddy Co. NM

Eddy Co. NM

Eddy Co. NM

350298

3/17

5

K

BH-1

6-7

9-10

14-15

19-20

24-25

29-30

39-40

49-50

59-60

69-70

79-80

89-90

299

300

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ANALYSIS REQUEST

(Circle or Specify Method No.)

PAH 8270	TCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCRP Metals Ag As Ba Cd Vr Pd Hg Se	TCRP Volatiles	TCRP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/824	GC/MS Semi Vol. 8270/825	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
TPH 8015 MOD TX1005 (Ext. to C35)														
BTEX 8021B														
NONE														
ICE														
HNO3														
HCL														
FILTERED (Y/N)														
NUMBER OF CONTAINERS														
PRESERVATIVE METHOD														

 SAMPLED BY: (Print & Initial)
 Date: 3/18/14
 Time: 12:51

 SAMPLE SHIPPED BY: (Circle)
 FEDEX
 HAND DELIVERED
 UPS

 AIRBILL #: _____
 OTHER: _____

 Results by: _____
 RUSH Charges Authorized: Yes No

TETRA TECH CONTACT PERSON: _____

 RECEIVING LABORATORY: _____
 ADDRESS: _____
 CITY: _____
 STATE: _____
 ZIP: _____
 PHONE: _____
 DATE: _____
 TIME: _____

 RECEIVED BY: (Signature)
 Date: 3/18/14
 Time: 12:51

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 Date: 3/18/14
 Time: 12:51

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 Date: 3/18/14
 Time: 12:51

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 Date: 3/18/14
 Time: 12:51

REMARKS: Run deeper samples to Benzene exceeds 10, total BTEX exceeds 50, or TPH exceeds 5,000 mg/kg

SAMPLE CONDITION WHEN RECEIVED: 440

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Midland air

1403/829

Analysis Request of Chain of Custody Record

PAGE: 2 OF: 2

ANALYSIS REQUEST

(Circle or Specify Method No.)

**TETRA TECH**1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

SITE MANAGER:

1403/829
Ike Tavares

PROJECT NO.:

112MC05892 Jenkins B Federal #1

LAB I.D.
NUMBER

DATE

TIME

MATRIX

COMR

GRAB

SAMPLE IDENTIFICATION

Eddy Co. NM

3083/17

5 VBH-1 79-80

NUMBER OF CONTAINERS

FILTERED (Y/N)

HCL

HNO3

ICE

NONE

PRESERVATIVE METHOD

BTEX 80218
 TPH 8015 MOD TX1005 (Ext to C35)
 PAH 8278
 RCRA Metals Ag As Ba Cd Cr Pb Hg Se
 TCLP Metals Ag As Ba Cd Cr Pb Hg Se
 TCLP Volatiles
 TCLP Semi Volatiles
 RCI
 GC/MS Vol. 8240/8260/824
 GC/MS Semi Vol. 8270/625
 PCB's 8080/608
 Pest. 808/608
 Chloride
 Gamma Spec.
 Alpha Beta (Air)
 PLM (Asbestos)
 Major Anions/Cations, pH, TDS

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Date: 3/18/14

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Date: 3/18/14

Time: 12:57

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

4.40

April 14, 2014

IKE TAVAREZ

TETRA TECH

1910 N. BIG SPRING STREET

MIDLAND, TX 79705

RE: COG / JENKINS B FED #1

Enclosed are the results of analyses for samples received by the laboratory on 04/11/14 12:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 IKE TAVAREZ
 1910 N. BIG SPRING STREET
 MIDLAND TX, 79705
 Fax To: (432) 682-3946

 Received: 04/11/2014
 Reported: 04/14/2014
 Project Name: COG / JENKINS B FED #1
 Project Number: 112MCO5892
 Project Location: EDDY COUNTY, NM

 Sampling Date: 01/28/2014
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Celey D. Keene

Sample ID: AH 1 (NSW) (H401109-01)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: AH 1 (ESW) (H401109-02)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1660	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: AH 1 (WSW) (H401109-03)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7640	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: AH 1 (SSW) (H401109-04)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5360	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 IKE TAVAREZ
 1910 N. BIG SPRING STREET
 MIDLAND TX, 79705
 Fax To: (432) 682-3946

 Received: 04/11/2014
 Reported: 04/14/2014
 Project Name: COG / JENKINS B FED #1
 Project Number: 112MCO5892
 Project Location: EDDY COUNTY, NM

 Sampling Date: 01/28/2014
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Celey D. Keene

Sample ID: AH 2 (BOTTOM HOLE) (H401109-05)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1960	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: AH 2 (SSW) (H401109-06)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1070	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: AH 2 (ESW) (H401109-07)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1300	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: AH 3 (NORTH SIDE WALL/NSW) (H401109-08)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1560	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: AH 4 (BOTTOM HOLE) (H401109-09)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 IKE TAVAREZ
 1910 N. BIG SPRING STREET
 MIDLAND TX, 79705
 Fax To: (432) 682-3946

 Received: 04/11/2014
 Reported: 04/14/2014
 Project Name: COG / JENKINS B FED #1
 Project Number: 112MCO5892
 Project Location: EDDY COUNTY, NM

 Sampling Date: 01/28/2014
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Celey D. Keene

Sample ID: AH 4 (NSW) (H401109-10)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: AH 4 (SSW) (H401109-11)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	768	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: AH 4 (WSW) (H401109-12)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: T-1 (AH-1) 0' (H401109-13)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	52000	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: T-1 (AH-1) 2' EB (H401109-14)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7040	16.0	04/14/2014	ND	400	100	400	0.00	I-02

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 IKE TAVAREZ
 1910 N. BIG SPRING STREET
 MIDLAND TX, 79705
 Fax To: (432) 682-3946

 Received: 04/11/2014
 Reported: 04/14/2014
 Project Name: COG / JENKINS B FED #1
 Project Number: 112MCO5892
 Project Location: EDDY COUNTY, NM

 Sampling Date: 01/28/2014
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Celey D. Keene

Sample ID: T-1 (AH-1) 4' EB (H401109-15)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4800	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: T-1 (AH-1) 6' EB (H401109-16)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6160	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: T-1 (AH-1) 8' EB (H401109-17)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6880	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: T-1 (AH-1) 10' EB (H401109-18)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6880	16.0	04/14/2014	ND	400	100	400	0.00	I-02

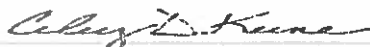
Sample ID: T-1 (AH-1) 12' EB (H401109-19)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9600	16.0	04/14/2014	ND	400	100	400	0.00	I-02

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 IKE TAVAREZ
 1910 N. BIG SPRING STREET
 MIDLAND TX, 79705
 Fax To: (432) 682-3946

 Received: 04/11/2014
 Reported: 04/14/2014
 Project Name: COG / JENKINS B FED #1
 Project Number: 112MCO5892
 Project Location: EDDY COUNTY, NM

 Sampling Date: 01/28/2014
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Celey D. Keene

Sample ID: T-1 (AH-1) 14' EB (H401109-20)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6400	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: T-1 (AH-1) 16' EB (H401109-21)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7360	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: T-2 (AH-3) 4' EB (H401109-22)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4800	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: T-2 (AH-3) 6' EB (H401109-23)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1340	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: T-2 (AH-3) 8' EB (H401109-24)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	04/14/2014	ND	400	100	400	0.00	I-02

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 IKE TAVAREZ
 1910 N. BIG SPRING STREET
 MIDLAND TX, 79705
 Fax To: (432) 682-3946

 Received: 04/11/2014
 Reported: 04/14/2014
 Project Name: COG / JENKINS B FED #1
 Project Number: 112MCO5892
 Project Location: EDDY COUNTY, NM

 Sampling Date: 01/28/2014
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Celey D. Keene

Sample ID: T-2 (AH-3) 10' EB (H401109-25)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4080	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: T-2 (AH-3) 12' EB (H401109-26)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3640	16.0	04/14/2014	ND	400	100	400	0.00	I-02

Sample ID: T-2 (AH-3) 14' EB (H401109-27)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3360	16.0	04/14/2014	ND	400	100	400	0.00	I-02

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- I-02 This result was analyzed outside of the EPA recommended holding time.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- * Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

PAGE: 2 OF: 3

ANALYSIS REQUEST

(Circle or Specify Method No.)



4481109-

Ike Jones

11/2 mcos 092	06 - Jenkins B Ford #1
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[illegible]

--	--

SAMPLE ID#

NONE	
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BTEX 8021B
TPH 8015 MOD. TX1005 (Ext. to C35)
PAH 8270
RCRA Metals Ag As Ba Cd Cr Pb Hg Se
TCLP Metals Ag As Ba Cd Vr Pd Hg Se
TCLP Volatiles
TCLP Semi Volatiles
RCI
GC/MS Vol. 8240/8260/824
GC/MS Semi. Vol. 8270/825
PCB's 8080/808
Pest. 808/608
Chloride
Gamma Spec.
Alpha Beta (Air)
PLM (Asbestos)
Major Anions/Cations, pH, TDS

	Date	DEPTH IN METER	NO. OF SAMPLES	TEST RESULTS	REMARKS	SAMPLED BY: (Print & Initial)	Date
11	1/20	5	x	AH 4 (SSW)	-		
12		5	x	(WSW)	-		
13		5	x	T-1 (AH1) D ¹	-		
14		5	x	2' EB	-		
15		5	x	4' EB	-		
16		5	x	6' EB	-		
17		5	x	8' EB	-		
18		5	x	10' EB	-		
19		5	x	12' EB	-		
20		5	x	14' EB	-		

1000

1

2

11

1

Analysis Request of Chain of Custody Record



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

4401109-

CLIENT NAME:

COS

SITE MANAGER:

The Project

PROJECT NO.:

12-MC-05-0812

PROJECT NAME:

COS - Soling B Fed #1

LAB I.D. NUMBER

DATE

TIME

MATRIX

COMP.

GRAB

SAMPLE IDENTIFICATION

NUMBER OF CONTAINERS

FILTERED (Y/N)

HCL

HNO3

ICE

NONE

PRESERVATIVE METHOD

BTEX 8021B

TPH 8015 MOD. TX1005 (Ext. to C35)

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8240/8260/824

GC/MS Semi. Vol. 8270/825

PCB's 8080/608

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

PAGE: 3

OF: 3

ANALYSIS REQUEST
(Circle or Specify Method No.)

21	1/8	X	T-1 (AH1) 16' EB	1			X
22	1/8	X	T-2 (AH3) 4' EB	1			X
23	1/8	X	6' EB	1			X
24	1/8	X	8' EB	1			X
25	1/8	X	10' EB	1			X
26	1/8	X	12' EB	1			X
27	1/8	X	14' EB	1			X

SAMPLED BY: (Print & Initial)
Date: 2-27-14

RELINQUISHED BY: (Signature)	Date: 1/8/12	Time: 12:14	RECEIVED BY: (Signature)	Date: 1/8/12	Time: 12:14
RELINQUISHED BY: (Signature)	Date: 1/8/12	Time: 12:14	RECEIVED BY: (Signature)	Date: 1/8/12	Time: 12:14
RELINQUISHED BY: (Signature)	Date: 1/8/12	Time: 12:14	RECEIVED BY: (Signature)	Date: 1/8/12	Time: 12:14
RECEIVING LABORATORY: (Signature)	Date: 1/8/12	Time: 12:14	RECEIVED BY: (Signature)	Date: 1/8/12	Time: 12:14
ADDRESS: COS	STATE: TX	ZIP: 79705	DATE: 1/8/12	TIME: 12:14	
CITY: Midland	PHONE: (432) 682-4559				
SAMPLE CONDITION WHEN RECEIVED: 17.4°C #54					
REMARKS:					