SITE INFORMATION

Report Type: Work Plan 1RP-4306

General Site Information:						
Site:	**Federal USA J #001**					
Company:	**COG Operating LLC**					
Section, Township and Range	**Unit P**	**Sec. 30**	**T19S**	**R32E**		
Lease Number:	**API No. 30-025-20367**					
County:	**Lea County**					
GPS:	**32.6269188º N**			**103.799057º W**		
Surface Owner:	**Federal**					
Mineral Owner:						
Directions:						

NMOCD APPROVED Work Plan

Release Data:	
Date Released:	5/31/2016
Type Release:	Oil and Produced Water
Source of Contamination:	Produced water tank - lightning caused fire
Fluid Released:	20 bbls oil and 250 bbls PW
Fluids Recovered:	100 bbls fluid

Official Communication:			
Name:	Robert McNeil		Ike Tavarez
Company:	COG Operating, LLC		Tetra Tech
Address:	One Concho Center		4000 N. Big Spring
	600 W. Illinois Ave.		Ste 401
City:	Midland Texas, 79701		Midland, Texas
Phone number:	(432) 686-3023		(432) 687-8110
Fax:	(432) 684-7137		
Email:	rmcneil@conchoresources.com		Ike.Tavarez@tetratech.com

Ranking Criteria		
Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	20	
50-99 ft	10	
>100 ft.	***0***	*130'*
WellHead Protection:	***Ranking Score***	***Site Data***
Water Source <1,000 ft., Private <200 ft.	*20*	
Water Source >1,000 ft., Private >200 ft.	***0***	*0*
Surface Body of Water:	***Ranking Score***	***Site Data***
<200 ft.	*20*	
200 ft - 1,000 ft.	10	
>1,000 ft.	***0***	0
Total Ranking Score:	***0***	

Acceptable Soil RRAL (mg/kg)		
Benzene	***Total BTEX***	***TPH***
10	50	5,000

TETRA TECH

September 23, 2016

Ms. Lynch, Kristen
Environmental Engineer Specialist
Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

Re: Work Plan for the COG Operating LLC., Federal USA J #001, Unit P, Section 30, Township 19 South, Range 32 East, Lea County, New Mexico. 1 RP #4306

Ms. Kristen:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC., (COG) to review the assessment data and prepare a work plan for a spill that occurred at the Federal USA J #001, Unit P, Section 30, Township 19 South, Range 32 East, Lea County, New Mexico (Site). The spill site coordinates are N 32.6269188º, W 103.799057º. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the release was discovered on May 31, 2016 due to a lighting strike on the produced water tank that caught on fire. The incident released approximately twenty (20) barrels of oil and two hundred (250) barrels of produced water and recovered approximately one hundred (100) barrels of fluid. The area surrounding the facility and pasture was impacted by the fire. The initial C-141 form is included in Appendix A.

Groundwater

No water wells were listed within Section 30. According to the NMOCD groundwater map, the average depth to groundwater in this area is greater than 500'. New Mexico Office of the State Engineer database showed 2 wells in Section 19 and 20 with a reported groundwater depth of 102' and 345', respectively. The groundwater data is shown in Appendix B.

Tetra Tech
4000 North Big Spring, Suite 401, Midland, TX 79705
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 5,000 mg/kg.

Soil Assessment and Analytical Results

On August 9, 2016, COG personnel were onsite to evaluate and sample the release area. A total of eleven (11) boreholes (S1 through S11) were installed to depths from 4.0' to 80' below surface used an air rotary rig 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 borehole locations are shown on Figure 3.

TPH and BTEX

Referring to Table 1, all of the samples were below the BTEX and TPH RRAL's, except for the areas of S3, S9 and S10. Borehole (S3) showed a TPH of 6,760 mg/kg at 0-1' and declined below the RRAL at 2.0' below surface. The areas of S9 and S10 showed TPH spikes above the RRAL at 4.0' of 6,710 mg/kg and 6,270 mg/kg, respectively. The soil samples above at 3.0' and below at 6.0' below surface detected TPH concentrations below the RRAL.

Chlorides

Based on the results, the areas of S2, S5, S7 and S11 did not show a significant chloride impact to the subsurface soils, which appear to have had minimal impact these areas.

In addition, the areas of S1, S3 and S8 also did not show a significant chloride impact to the soils, but did detect chloride spikes at several depth intervals. The areas of S-1 did showed chloride concentrations of 1,090 mg/kg at 1.0', 432 mg/kg at 2.0' and a chloride high of 2,160 mg/kg at 3.0', but declined with depth to 528 mg/kg at 4.0' and 240 mg/kg at 6.0' below surface. The area of S3 did not a significant impact to the shallow soils from 0 to 4.0' below surface with chlorides ranging from 512 mg/kg to 864 mg/kg. However, the chlorides did show a spike at 10.0' of 1,880 mg/kg and immediately declined with depth at 15.0' of 48

mg/kg. Borehole (S8) spiked at 2.0' below and immediately declined to 644 mg/kg at 3.0 and 64 mg/kg at 4.0' below surface.

The deepest chloride impacted areas was encountered in the areas of S4, S6, S9 and S10. The area of S4 showed chloride concentrations ranged from 2,280 mg/kg (0-1') to 5,920 mg/kg (40.0'). The chlorides declined with depth to 496 mg/kg at 70.0' below surface. The area of S6 did not show a significant chloride impact the shallow soils from 0 to 4.0', but the increased with depth with a chloride high of 11,200 mg/kg at 15.0' below surface and then steadily declined with depth to 640 mg/kg at 80.0' below surface. Deeper samples could be collected due to the sand formation caving in collapsing the borehole.

In addition, the areas of S9 and S10 also showed chloride concentrations increase with depth, but both defined at 60.0' and 80.0', respectively. The elevated chloride concentrations detected in the subsurface soils were encountered from 10.0' to 50.0' (S9) and 6.0' to 30.0' (S10).

Work Plan

Based on the results, COG proposes to remove impacted material as highlighted (green) in Table 1 and shown on Figure 4. According to COG, the facility will be re-constructed and plan to install a containment for the facility. Based on the results, shallow excavations will performed in the areas of S1, S3 and S8 to a depth of 1.0' to 3.0' below surface to remove either the TPH impacted soils or the elevated chlorides in the shallow soils.

The areas of S4, S6, S9 and S10 showed a deeper impact to the subsurface soils. These areas will be excavate to a depth of 4.0' below surface and propose to cap the excavation bottoms with a 40 mil liner to prevent vertical migration of the chloride impacted soils. All of the excavated material from these areas will be transported offsite for proper disposal. The excavations will be backfilled with clean soil to grade and properly compacted for the new construction of the facility.

The proposed excavation depths may not be reached due to wall cave ins and safety concerns for onsite personnel. In addition, impacted soil around oil and gas equipment, structures or lines may not be feasible or practicable to be removed due to safely concerns for onsite personnel. As such, Tetra Tech will excavate the impacted 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.

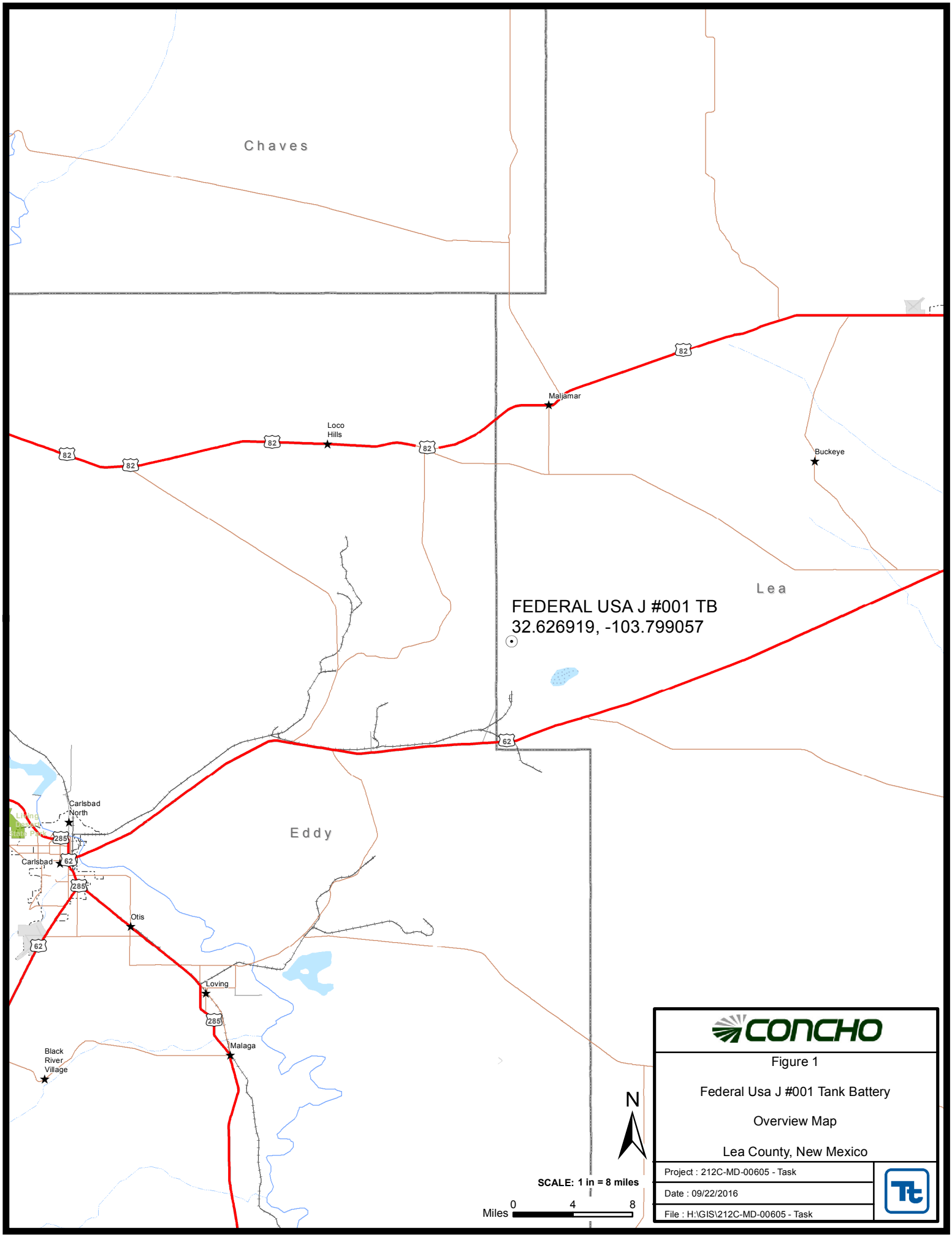
Respectfully submitted,
TETRA TECH

Clair Gonzales,
Geologist I

Ike Tavarez,
Senior Project Manager, P.G.

cc: Robert McNeill – COG
Dakota Neel – COG
Shelly Tucker - BLM

Figures



CONCHO

Figure 1

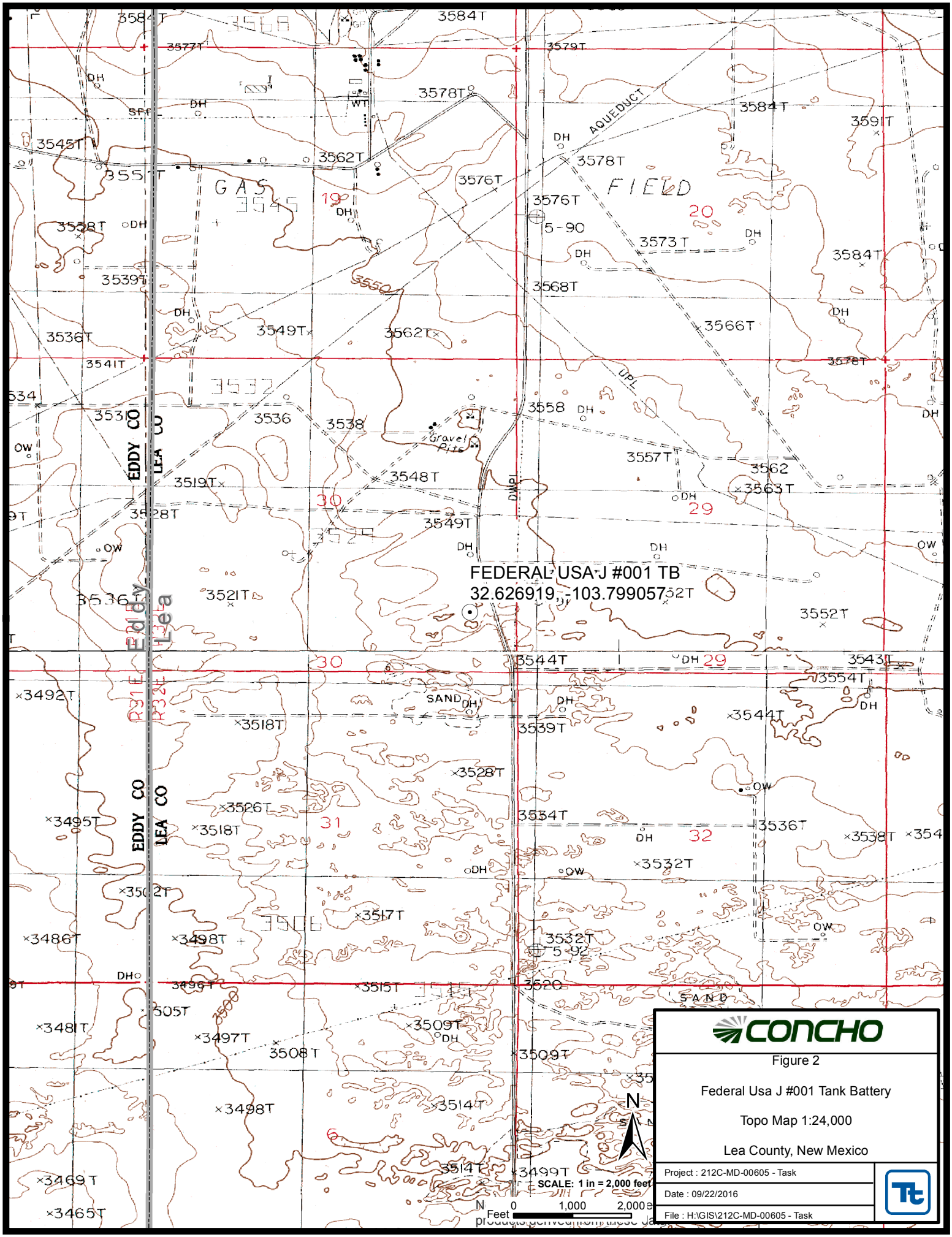
Federal Usa J #001 Tank Battery

Overview Map

Lea County, New Mexico

Project : 212C-MD-00605 - Task	
Date : 09/22/2016	
File : H:\GIS\212C-MD-00605 - Task	

Mapped By: Isabel Marmolejo



CONCHO

Figure 2

Federal Usa J #001 Tank Battery

Topo Map 1:24,000

Lea County, New Mexico

Project : 212C-MD-00605 - Task

Date : 09/22/2016

File : H:\GIS\212C-MD-00605 - Task

Mapped By: Isabel Marmolejo

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Figure 3

Federal Usa J #001 Tank Battery

Spill Assessment Map

Lea County, New Mexico

Project : 212C-MD-00605 - Task

Date : 09/22/2016

File : H:\GIS\212C-MD-00605 - Task

Mapped By: Isabel Marmolejo

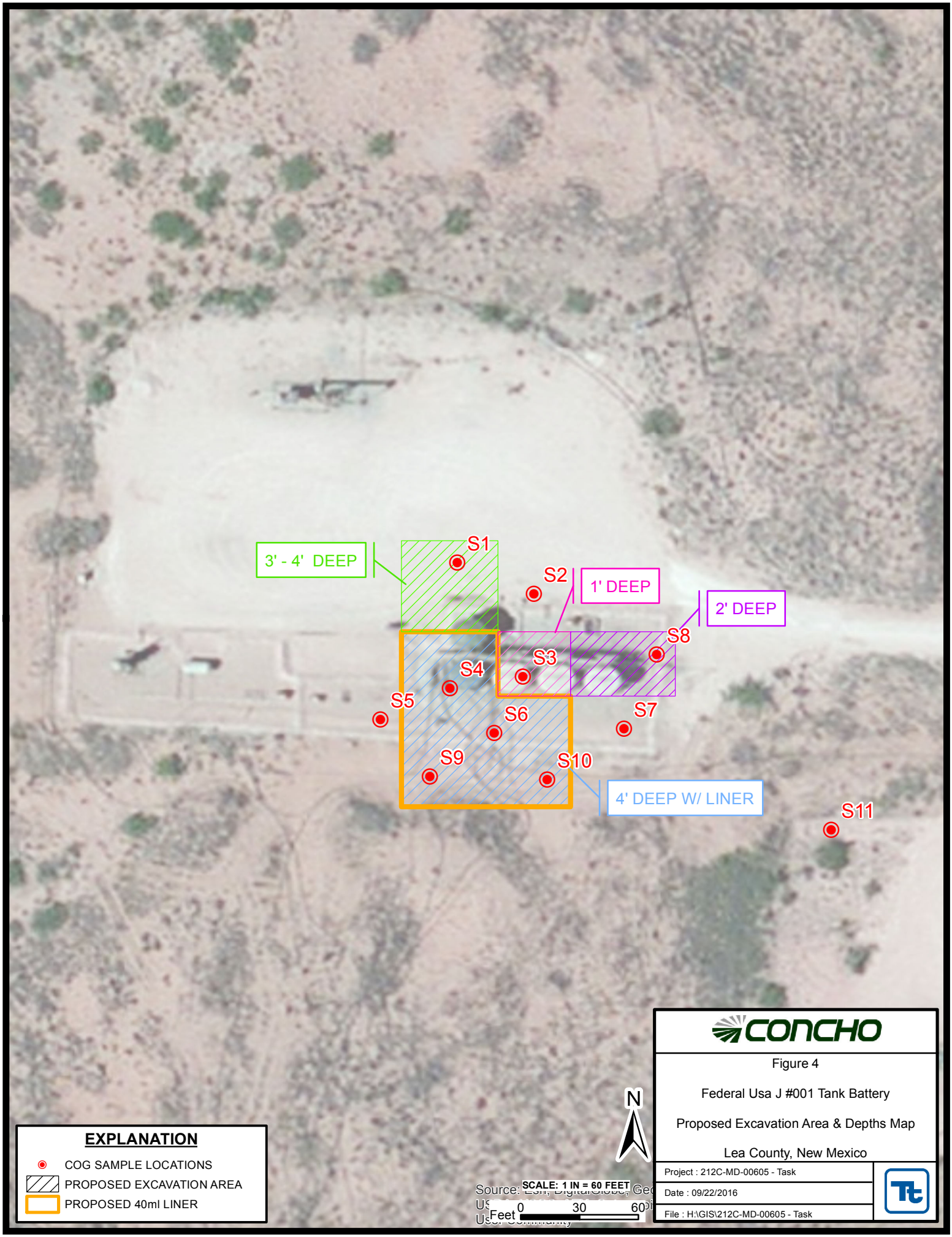

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Figure 4

Federal Usa J #001 Tank Battery

Proposed Excavation Area & Depths Map

Lea County, New Mexico

Project : 212C-MD-00605 - Task

Date : 09/22/2016

File : H:\GIS\212C-MD-00605 - Task

Mapped By: Isabel Marmolejo

Tables

Table 1
COG Operating LLC.
Federal USA J #001
County, New Mexico

Sample ID	Sample Date	Sample 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						
S1	8/9/2016	1	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	1,090
	"	2	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	432
	"	3	X		<10.0	206	206	<0.050	<0.050	<0.050	<0.150	<0.300	2,160
	"	4	X		<10.0	17.0	17.0	<0.050	<0.050	<0.050	<0.150	<0.300	528
	"	6	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	240
	"	8	X		-	-	-	-	-	-	-	-	192
	"	10	X		-	-	-	-	-	-	-	-	-
S2	8/9/2016	1	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
	"	2	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
	"	3	X		<10.0	25.7	25.7	<0.050	<0.050	<0.050	<0.150	<0.300	224
	"	4	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
S3	8/9/2016	1	X		454	6,310	**6,760**	<0.050	0.062	0.814	2.90	3.78	864
	"	2	X		51.7	1,660	1,710	<0.050	0.050	0.454	1.38	1.88	864
	"	3	X		<10.0	24.0	24.0	<0.050	<0.050	<0.050	<0.150	<0.300	688
	"	4	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	512
	"	6	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	608
	"	8	X		-	-	-	-	-	-	-	-	832
	"	10	X		-	-	-	-	-	-	-	-	1,880
	"	15	X		-	-	-	-	-	-	-	-	48.0

Table 1
COG Operating LLC.
Federal USA J #001
County, New Mexico

Sample ID	Sample Date	Sample 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						
S4	8/9/2016	1	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	2,280
	"	2	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	2,520
	"	3	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	2,920
	"	4	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	3,760
	"	6	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	4,160
	"	8	X		-	-	-	-	-	-	-	-	2,800
	"	10	X		-	-	-	-	-	-	-	-	1,720
	"	15	X		-	-	-	-	-	-	-	-	3,560
	"	20	X		-	-	-	-	-	-	-	-	6,320
	"	25	X		-	-	-	-	-	-	-	-	5,280
	"	30	X		-	-	-	-	-	-	-	-	3,000
	"	40	X		-	-	-	-	-	-	-	-	5,920
	"	50	X		-	-	-	-	-	-	-	-	2,480
	"	60	X		-	-	-	-	-	-	-	-	912
	"	65	X		-	-	-	-	-	-	-	-	768
	"	70	X		-	-	-	-	-	-	-	-	496
S5	8/9/2016	1	X		<10.0	44.0	44.0	<0.050	<0.050	<0.050	<0.150	<0.300	544
	"	2	X		<10.0	18.3	18.3	<0.050	<0.050	<0.050	<0.150	<0.300	624
	"	3	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
	"	4	X		<10.0	43.5	43.5	<0.050	<0.050	<0.050	<0.150	<0.300	480
	"	6	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	112
	"	8	X		-	-	-	-	-	-	-	-	32.0

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Federal USA J #001
County, New Mexico

Sample ID	Sample Date	Sample 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						
S6	8/9/2016	1	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	144
	"	2	X		<10.0	302	302	<0.050	<0.050	<0.050	<0.150	<0.300	1,960
	"	3	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	512
	"	4	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	944
	"	6	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	1,840
	"	8	X		-	-	-	-	-	-	-	-	2,840
	"	10	X		-	-	-	-	-	-	-	-	3,600
	"	15	X		-	-	-	-	-	-	-	-	11,200
	"	20	X		-	-	-	-	-	-	-	-	2,120
	"	25	X		-	-	-	-	-	-	-	-	688
	"	30	X		-	-	-	-	-	-	-	-	624
	"	40	X		-	-	-	-	-	-	-	-	2,080
	"	50	X		-	-	-	-	-	-	-	-	1,440
	"	60	X		-	-	-	-	-	-	-	-	864
	"	70	X		-	-	-	-	-	-	-	-	672
	"	80	X		-	-	-	-	-	-	-	-	640

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County, New Mexico

Sample ID	Sample Date	Sample 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						
S7	8/11/2016	1	X		<10.0	95.3	95.3	<0.050	<0.050	<0.050	<0.150	<0.300	240
	"	2	X		<50.0	214	214	<0.050	<0.050	<0.050	<0.150	<0.300	624
	"	3	X		<50.0	515	515	<0.050	<0.050	<0.050	<0.150	<0.300	544
	"	4	X		-	-	-	-	-	-	-	-	304
	"	6	X		-	-	-	-	-	-	-	-	416
	"	8	X		-	-	-	-	-	-	-	-	416
	"	10	X		-	-	-	-	-	-	-	-	464
	"	20	X		-	-	-	-	-	-	-	-	480
	"	25	X		-		-	-	-	-	-	-	384
	"	30	X		-	-	-	-	-	-	-	-	256
	"	40	X		-	-	-	-	-	-	-	-	336
	"	50	X		-	-	-	-	-	-	-	-	192
	"	60	X		-	-	-	-	-	-	-	-	208
	"	70	X		-	-	-	-	-	-	-	-	128
S8	8/11/2016	1	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	624
	"	2	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	3,040
	"	3	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	640
	"	4	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
	"	6	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0

Table 1
COG Operating LLC.
Federal USA J #001
County, New Mexico

Sample ID	Sample Date	Sample 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						
S9	8/11/2016	1	X		<100	1,930	1,930	<0.050	<0.050	0.077	<0.150	<0.300	976
	"	2	X		107	4,460	4,567	<0.050	<0.050	0.585	0.457	1.04	1,010
	"	3	X		<100	1,680	1,680	<0.050	<0.050	0.281	<0.150	<0.300	1,120
	"	4	X		<100	5,710	**5,710**	<0.050	<0.050	0.258	<0.150	<0.300	1,880
	"	6	X		<50.0	515	515	<0.050	<0.050	<0.050	<0.150	<0.300	1,600
	"	8	X		-	-	-	-	-	-	-	-	1,570
	"	10	X		-	-	-	-	-	-	-	-	80.0
	"	15	X		-	-	-	-	-	-	-	-	4,160
	"	20	X		-	-	-	-	-	-	-	-	7,060
	"	25	X		-	-	-	-	-	-	-	-	5,600
	"	30	X		-	-	-	-	-	-	-	-	6,320
	"	40	X		-	-	-	-	-	-	-	-	4,240
	"	50	X		-	-	-	-	-	-	-	-	2,000
	"	60	X		-	-	-	-	-	-	-	-	496

Table 1
COG Operating LLC.
Federal USA J #001
County, New Mexico

Sample ID	Sample Date	Sample 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						
S10	8/11/2016	1	X		<100	3,410	3,410	<0.050	<0.050	0.064	<0.150	<0.300	896
	"	2	X		<100	1,270	1,270	<0.050	<0.050	<0.050	<0.150	<0.300	2,280
	"	3	X		<100	4,000	4,000	<0.050	<0.050	0.053	<0.150	<0.300	1,520
	"	4	X		<100	6,270	**6,270**	<0.050	<0.050	0.106	<0.150	<0.300	800
	"	6	X		<10.0	32.1	32.1	<0.050	<0.050	<0.050	<0.150	<0.300	3,680
	"	8	X		-	-	-	-	-	-	-	-	5,440
	"	10	X		-	-	-	-	-	-	-	-	2,000
	"	15	X		-	-	-	-	-	-	-	-	1,880
	"	20	X		-	-	-	-	-	-	-	-	1,580
	"	25	X		-	-	-	-	-	-	-	-	5,280
	"	30	X		-	-	-	-	-	-	-	-	8,660
	"	40	X		-	-	-	-	-	-	-	-	1,600
	"	50	X		-	-	-	-	-	-	-	-	864
	"	60	X		-	-	-	-	-	-	-	-	624
	"	70	X		-	-	-	-	-	-	-	-	544
	"	80	X		-	-	-	-	-	-	-	-	368
S11	8/11/2016	1	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	96.0
	"	2	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	240
	"	3	X		<10.0	<10.0	<20.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
	"	4	X		-	-	-	-	-	-	-	-	64.0
	"	6	X		-	-	-	-	-	-	-	-	336

(-) Not Analyzed

Proposed Excavation Depths and Transport Soil to Disposal

Proposed Liner and Depth

212C-MD-00605
Cardinal Labs

Appendix A

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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 August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: COG Operating LLC	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-683-7443
Facility Name: FEDERAL USA J #001	Facility Type: Battery

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-025-20367

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	30	19S	32E	990’	South	660’	East	Lea

Latitude 32.6269188 **Longitude** -103.799057

NATURE OF RELEASE

Type of Release: Oil & Produced Water	Volume of Release: 20 bbls Oil ; 250 bbls PW	Volume Recovered: 100 bbls Fluid
Source of Release: Fire	Date and Hour of Occurrence: 5/31/2016 5:00 pm	Date and Hour of Discovery: 5/31/2016 5:00 pm
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Jamie Keyes – NMOCD / Shelly Tucker – BLM	
By Whom? Amanda Trujillo Davis	Date and Hour: 6/1/2016 4:47 PM	
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.*

A fire at this location was reported at approximately 5:00 pm. Fire Crews were dispatched to the location. Lightning stuck the produced water tank. After the fire was extinguished vacuum trucks were dispatched to recover all standing fluid.

Describe Area Affected and Cleanup Action Taken.*

The fire from caused impact to pasture around the facility. A portion of the facility was a total loss. Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Amanda T. Davis	OIL CONSERVATION DIVISION	
Printed Name: Amanda Trujillo Davis	Approved by Environmental Specialist:	
Title: Senior Environmental Coordinator	Approval Date:	Expiration Date:
E-mail Address: atrujillo@concho.com	Conditions of Approval:	Attached ☐
Date: June 8, 2016 Phone: 575-748-6940		

* Attach Additional Sheets If Necessary

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
COG - FEDERAL USA J #001
Lea County, New Mexico

18 South 31 East

6	5	4	3	2	1
7	8	9	10	11	12 400
18	17	16	15 98	14 317	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35 261	36

19 South 31 East

6	5 SITE	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28 180	27	26	25
31	32	33 101	34	35	36 130

20 South 31 East

6	5	4	3	2	1
7	8	9	10 130	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 80

18 South 32 East

6	5	4 65	3	2	1
7 460 82	8	9	10	11	12
18	17	16 84	15	14	13
19	20 164	21	22 429	23	24
30	29	28	27	26	25
31	32	33	34 117	35	36

19 South 32 East

6	5	4	3	2	1
7	8 365	9	10	11	12
18	17	16	15	14	13 135 dry
19 102	20 345	21	22	23	24
30	29	28	27	26	25
31	32	33	34 250	35	36

20 South 32 East

6	5	4	3	2	1 21.8
7	8	9	10	11	12
18 89	17	16	15	14	13
19	20	21	22	23	24
30 9.9	29	28	27 12.3	26	25
31	32	33	34	35	36 46

18 South 33 East

6	5	4	3 60	2	1
7	8 100	9	10 62	11 46	12 143 140
18	17 85	16	15	14 36	13 60
19 >140	20	21	22	23	24 195
30 35	29	28	27	26	25
31	32	33 177	34	35	36

19 South 33 East

6	5	4	3	2	1
7	8	9	10	11	12
18 340	17 116	16	15	14	13
19	20	21	22	23	24
30	29	28 130 dry	27	26 92 85	25
31	32 185	33	34	35	36

20 South 33 East

6	5 325 278	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24 +300
30	29	28	27	26	25
31	32	33	34	35	36

88 New Mexico State Engineers Well Reports
105 USGS Well Reports
90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)
Geology and Groundwater Resources of Eddy County, NM (Report 3)
34 NMOCD - Groundwater Data
123 Tetra Tech installed temporary wells and field water level
143 NMOCD Groundwater map well location

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Depth Well	Depth Water	Water Column
CP 00073	CP	LE		2	4	34	19S	32E	617502	3609301	575		
CP 00075		LE		2	4	34	19S	32E	617502	3609301	575		
CP 00563		LE	1	1	2	19	19S	32E	612118	3613376*	300		
CP 00639		LE		3	1	20	19S	32E	613029	3612880*	350	345	5
CP 00640		LE		2	2	19	19S	32E	612621	3613280*	260	102	158
CP 00812		LE		4	4	01	19S	32E	620623	3616973*	200		

Average Depth to Water: **223 feet**

Minimum Depth: **102 feet**

Maximum Depth: **345 feet**

Record Count: 6

PLSS Search:

Township: 19S **Range:** 32E

***UTM location was derived from PLSS - see Help**

Appendix C