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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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division

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Form C-141

Revised October 10, 2003

30-015 Closu	-029	196	Rele	ase Notific	ation	and Co	rrective A	ctio	n			
Closu	re For	3 relea	ses			OPERAT			☐ Initia	l Report	\boxtimes	Final Report
Name of Co	mpany Co	OG OPERA' as, Suite 130	TING LL				nicia Carrillo lo. 432-685-433	22				
		orth Central		u, 1 <i>X</i> /9/01			e Tank Battery					
Surface Ow	ner			Mineral O	wner				Lease N	[o.		
						OF REI	EASE					
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/West Line		County		ty
P	16	17S	29E	660		South	660		East		Eddy	/
			La	titude		Longitud	e					
				NAT	URE	OF RELI	EASE					
Type of Rele							Release See Belo		Volume S			
Source of Re	elease - See	Below				Date and H See Below	our of Occurrence	e	Date and	Hour of Dis	covery-	- See Below
Was Immedi	ate Notice (Yes [No Not Re	quired	If YES, To Mike Brate	Whom? her w/OCD					
By Whom?							lour - See Below					
Was a Water	course Read		Yes ⊠	1 No		If YES, Vo	lume Impacting the	he Wa	tercourse.			
If a Watercon	urse was Im	pacted, Descr										
		, p	,,									
'												
Dogoriho Cou	use of Probl	em and Reme	dial Antic	n Takan *		<u> </u>						
As detailed i	n Closure R	eport Dated J	une 5, 200	9, there have been								
1 st spill: 6/16	5/08, 400 bb ter from FV	l. produced w VKN (mostly (ater from contained	water transfer pum inside firewall), so	ip failur ome ove	e (contained rspray, recov	inside firewall), re ered 15 bbl. 3 rd s	ecover	ed 400 bbl. : 0/06/08, 450	2 nd spill: 7/ bbl water/o	14/08, : oil from	20 bbl.
overflow, (co	ontained ins	ide firewall),	recovered									
,		essed and exca										
		and Cleanup		ken.* essed by Tetra Tec	h and is	mnacted areas	were excavated	and th	e material ha	uled off		
) See attached	report. The	urrected area.	s were ass	ossed by Tolla Tee	n and n	inputited areas	word excuration	una m	e material na	aica oii.		E
		_										
				e is true and completed in the complete is true and complete in the contract of the contract of the complete is true and complete is tr								
public health	or the envi	ronment. The	e acceptan	ce of a C-141 repo	rt by the	e NMOCD m	arked as "Final R	eport"	does not reli	ieve the ope	rator of	f liability
				investigate and restance of a C-141 i								
		ws and/or regi										
		ブ 1					OIL CON	SER'	<u>VATION</u>	DIVISIO	<u> </u>	
Signature: / IM X !!												
Printed Nam	e: Tim Ree	d (Agent for (COG)			Approved by	Digitical Dipersis	Gy./4	DEMIN	we_		
Title: Senior	Project Ma	nager				Approval Da	SEP 3 0 20	09	Expiration	Date: N	A	
E-mail Addr	ess: timothy	y.reed@tetrate	ech.com			Conditions o	f Approval: 10	X -		Attached	ı 🗀	-
Date: 6/05/0				Phone:(432)682-4	4559							
* Attach Add	itional She	ets If Necess	sary						2 K	P-186		
2RP-199 2RP-345												
•									2BP	'-345		



JUN 17 2009

June 5, 2009

Mr. Mike Bratcher New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau 1301 W. Grand Ave. Artesia, New Mexico 88210

Re: Assessment and Closure Report – for the COG Operating, LLC, GJ North Central Tank Battery Facility, Located in Unit Letter P, Section 16, Township 17 South, Range 29 East, Eddy County, New Mexico.

Dear Mr. Bratcher:

Tetra Tech (Formerly Highlander Environmental Corp.) was contacted by COG Operating, LLC to investigate a series of spills (3) that occurred at the GJ North Central Tank Battery. The tank battery is located in Unit Letter P, Section 16, Township 17 South, Range 29 East, Eddy County, New Mexico. The site coordinates are N 32.82837°, W 104.07338°. The Site is shown on Figures 1and 2.

Background

Spill #1

The original spill was discovered on June 16, 2008. According to the C-141 (Initial) included in Appendix A, the spill was caused by a mechanical failure inside the pump motor. Approximately 400 barrels of produced water spilled into the facility berm and 400 barrels were recovered. The spill was fully contained inside the facility berm. The spill location is shown on Figure 3.

Spill #2

Remediation of this spill was essentially completed, when a second spill occurred on July 13, 2008. This spill was caused by a micro switch malfunction on a vessel allowing pressure to build in the vessel, which opened the pressure relief valve. Approximately 20 barrels of produced water was released and the liquids were contained within the facility berm. Approximately 15 barrels were recovered with a vacuum truck. Additionally, there was an area of overspray, which measured 80' x 150' (heavier overspray) and 100' x 150' (lighter overspray). The spill location is shown on Figure 4. The C-141 (initial) is included in Appendix A.



Spill #3

Remediation of this spill was essentially completed, when a third spill occurred on October 6, 2008. This spill was caused when a water transfer pump broke down. Approximately 450 barrels of oil and produced water was released and the liquids were contained within the facility berm. Approximately 445 barrels were recovered with a vacuum truck. The spill location is shown on Figure 5. The C-141 (Initial and Final) are included in Appendix A. All three of these spills had common overlapping areas of impact.

Groundwater and Regulatory

A water well located in Section 22, Township 18 South, Range 29 East, was measured using a steel tape to gauge the depth to water. The water well was not in use at the time and the static depth to water was measured at approximately 82.0' below ground surface (bgs).

A risk-based evaluation was performed for the Site in accordance with the 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 on the regional groundwater data, the proposed RRAL for TPH is 1,000 mg/kg.

Assessment and Corrective Action

Spill #1

COG supervised the removal of impacted soil from inside the tank battery berm. Approximately 3 to 4 inches of soil was removed from the impacted area. The excavated material was placed on plastic to be hauled to disposal.

On June 17, 2008 Tetra Tech personnel inspected the facility and collected confirmation samples for TPH, BTEX and chloride. A total of seven (7) auger holes were placed in the impacted area. All the 0-1' grab samples analyzed, exhibited concentrations below the RRAL for TPH and BTEX. However chloride concentrations were elevated in the 0-1' surface sample. The concentrations ranged from 22,400 mg/kg to 7,320 mg/kg in auger holes (AH-1 thru AH-7). Auger holes (AH-1, AH- 2, and AH-3) still showed elevated concentrations in the 1'-1.5' interval ranging form 2,650 mg/kg to 555 mg/kg. Auger holes (AH-4 thru AH-7) exhibited concentrations below 250 mg/kg in the 1'-1.5' interval. At the 2'-2.5' interval, only auger hole AH-1 exceeded the 250 mg/kg with a concentration of 545 mg/kg. Due to auger refusal, deeper samples were not obtained. The sample locations and spill area are shown on Figure 3. The sample analyses are summarized in Table 1. Copies of the laboratory reports and chain of custody documents are included in Appendix B. Based on the results, no additional activities were performed at the facility excavation.

Spill #2

On July 22, 2008, samples were collected from the spill area. A total of thirteen



(13) auger holes were placed in the impacted area. The sample locations are shown on Figure 4. The soil samples were analyzed for TPH (Modified 8015), BTEX (8021 B), and Chloride (SM 4500-Cl B).

Auger holes (AH-1 through AH-7) were placed inside the facility berm. Auger holes (AH-8 through AH-13) were placed in the area affected by the overspray northwest of the facility. Of the thirteen auger holes placed in the affected areas, five auger holes (AH-1, AH-3, AH-5, AH-6, and AH-7) exhibited concentrations that exceeded the RRAL for TPH in the 0-1' interval. The TPH concentrations ranged from to 1,405 mg/kg to 8,806 mg/kg. The deeper samples at 1'-1.5' below ground surface exhibited concentrations below the RRAL for TPH.

The total BTEX levels in auger holes (AH-5 and AH-7) at 0-1.0' exceeded the RRAL level with concentrations of 106.76 mg/kg and 244.2 mg/kg, respectively. The benzene concentrations in auger hole (AH-7) also exceeded the RRAL with 11.3 mg/kg in the 0-1.0' interval. Both auger holes, (AH-5 and AH-7), did not exhibit BTEX concentrations above the RRAL levels in the 1'-1.5' interval.

The chloride concentrations at the site were vertically defined at depths of 1' to 2' below surface. Chloride concentrations ranged from less than 100 mg/kg to 6,710 mg/kg in (AH-7, 1'-1.5'). The chloride concentrations in auger holes (AH-8 through AH-13) were below the reporting limit. The highest chloride impact was encountered in auger holes (AH-5, AH-6 and AH-7). The sample analyses are summarized in Table 2. Copies of the laboratory reports and chain of custody documents are included in appendix B.

On July 22, 2008, when Tetra Tech inspected the site, COG had begun cleanup activities with the removal of the oily pea gravel in and around the production equipment. In addition COG also supervised the removal of impacted soil from inside the tank battery berm. Approximately 1.0' of soil was removed from the impacted area. The excavated material was hauled to CRI (Controlled Recovery Inc.) for disposal. On August 14, 2008 Tetra Tech supervised the brush hogging of the vegetation and the tilling of the soils affected by the overspray.

Spill #3

On October 21, 2008 Tetra Tech personnel inspected the facility and collected samples for TPH, BTEX and chloride. A total of twelve (12) auger holes were placed in the impacted area. TPH concentrations exceeded the RRAL to depths ranging from 1.0' to 2.0' in AH-1, AH-10, AH-11 and AH-12, as well as BTEX in AH-1, AH-11 and AH-12. Chloride concentrations were defined in all auger holes to below 250 mg/kg with the exceptions of AH-3, which exhibited a chloride concentration of 512 mg/kg at 2.0' and AH-4 which declined to 348 mg/kg at 5.0'. The impacted soils were excavated to depths ranging from 1.0'-5.0', as shown on Figure 5. The sample analyses are summarized in Table 3. Copies of the laboratory reports and chain of custody documents are included in appendix B.

Conclusions

The remedial activities performed at the site, leaves no residual TPH or BTEX concentrations that exceed the RRAL. The minimal chloride residue in the area of auger



holes AH-3 and AH-4, were left in-situ. However, based on the depth to groundwater, declining chloride concentrations, and the limited area of impact, the residual chloride concentrations do not appear to be an issue. Based upon the results of the assessment work and remediation performed at this site, COG requests closure of the 3 spills at this site. The C-141 (Final) covering all 3 spills are included in Appendix A. If you have any question or comments concerning the assessment or the activities performed at the Site, please call me at (432) 682-4559.

Respectfully submitted,

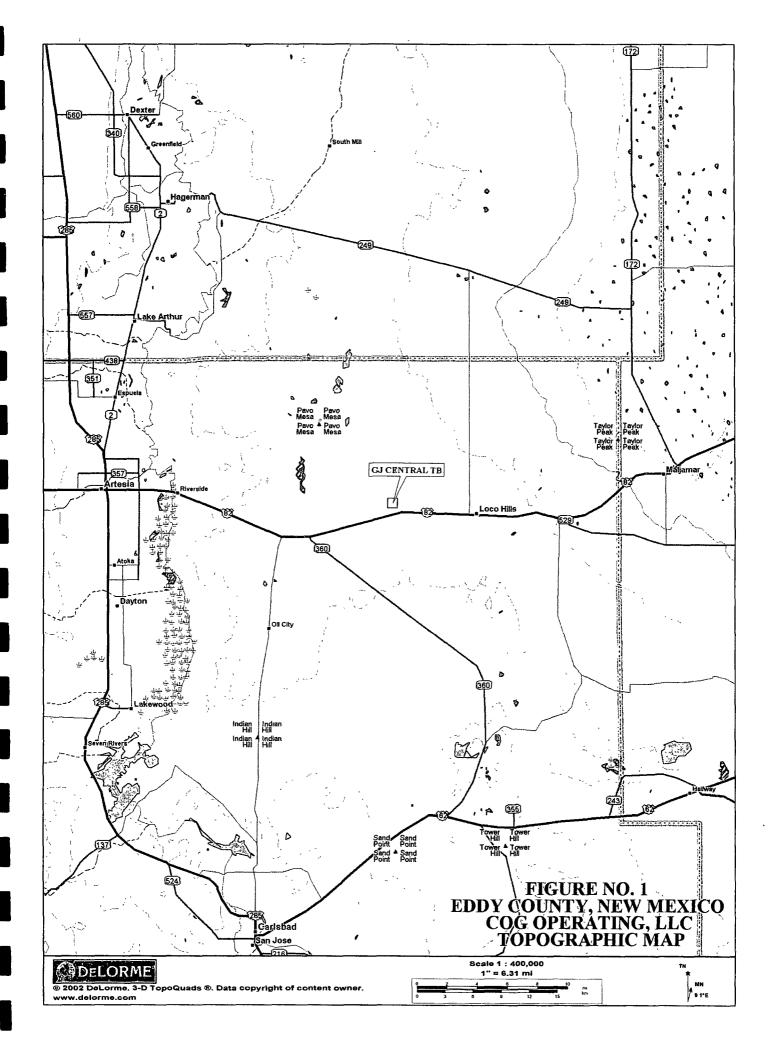
Tetra Tech Inc.

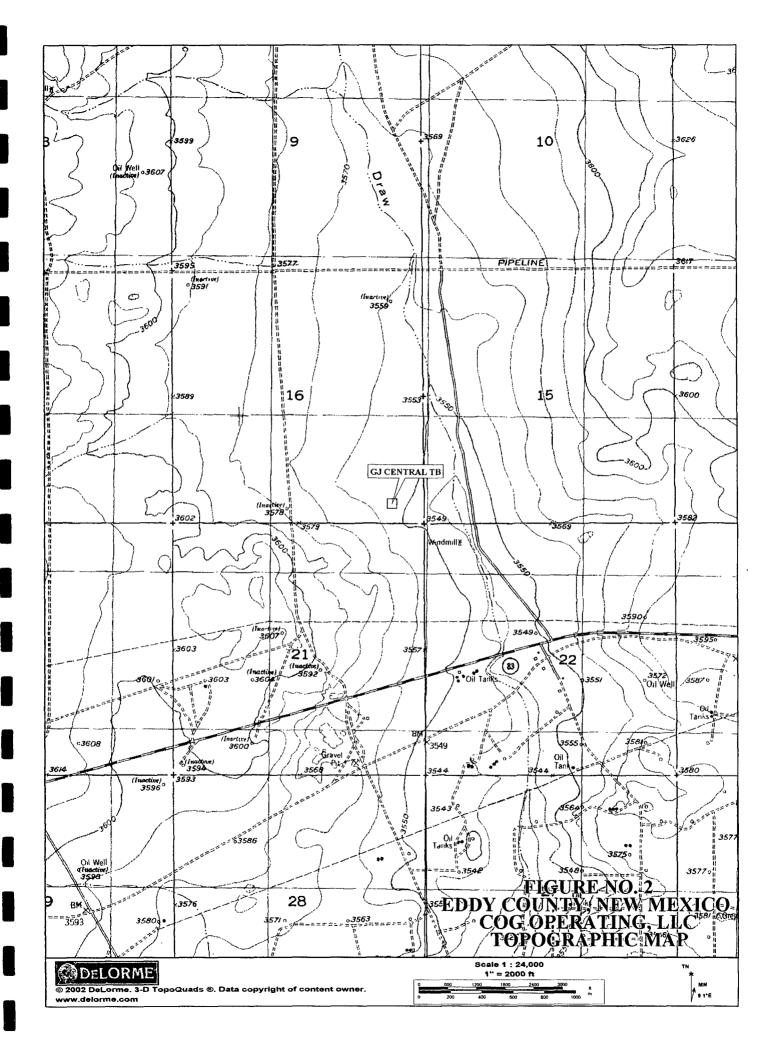
Tim Reed, P.G.

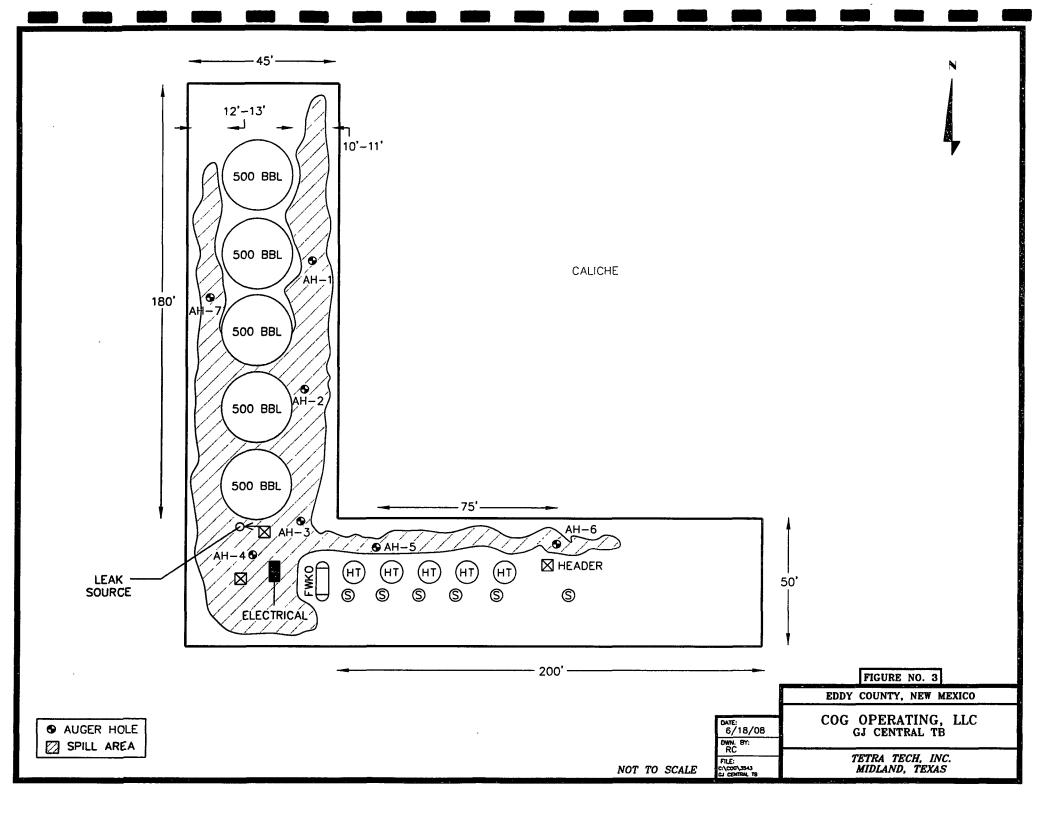
Senior Project Manager

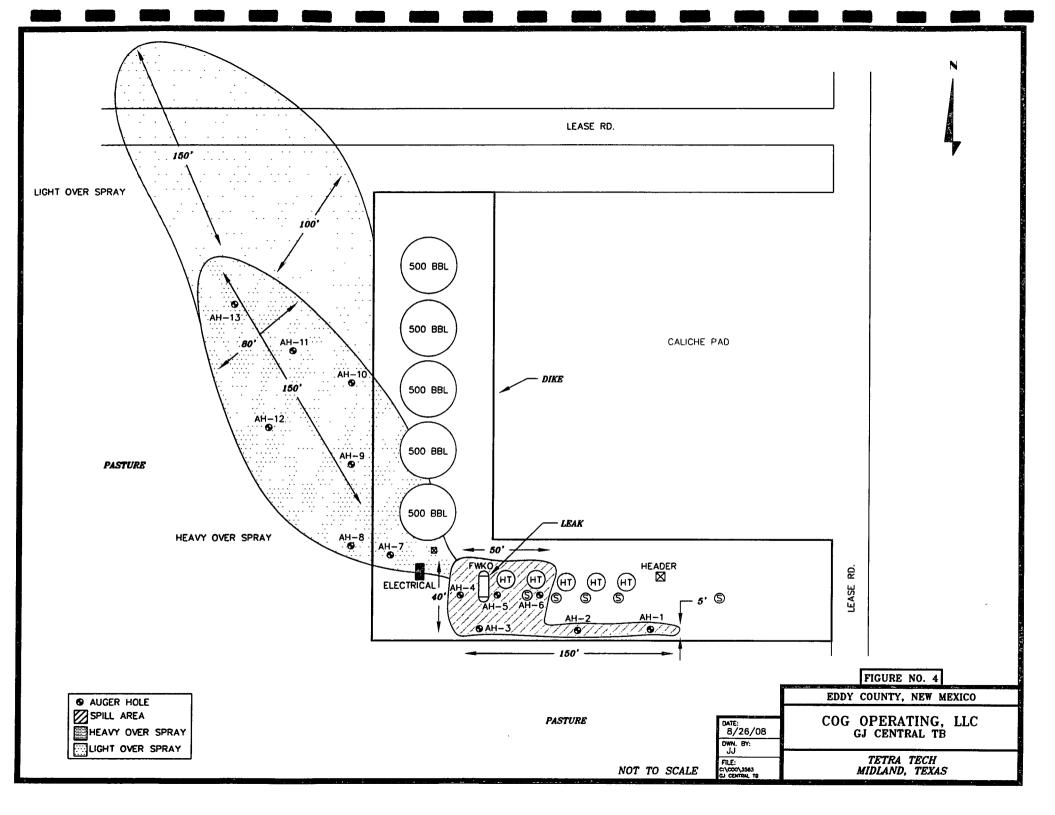
cc: Pat Ellis - COG

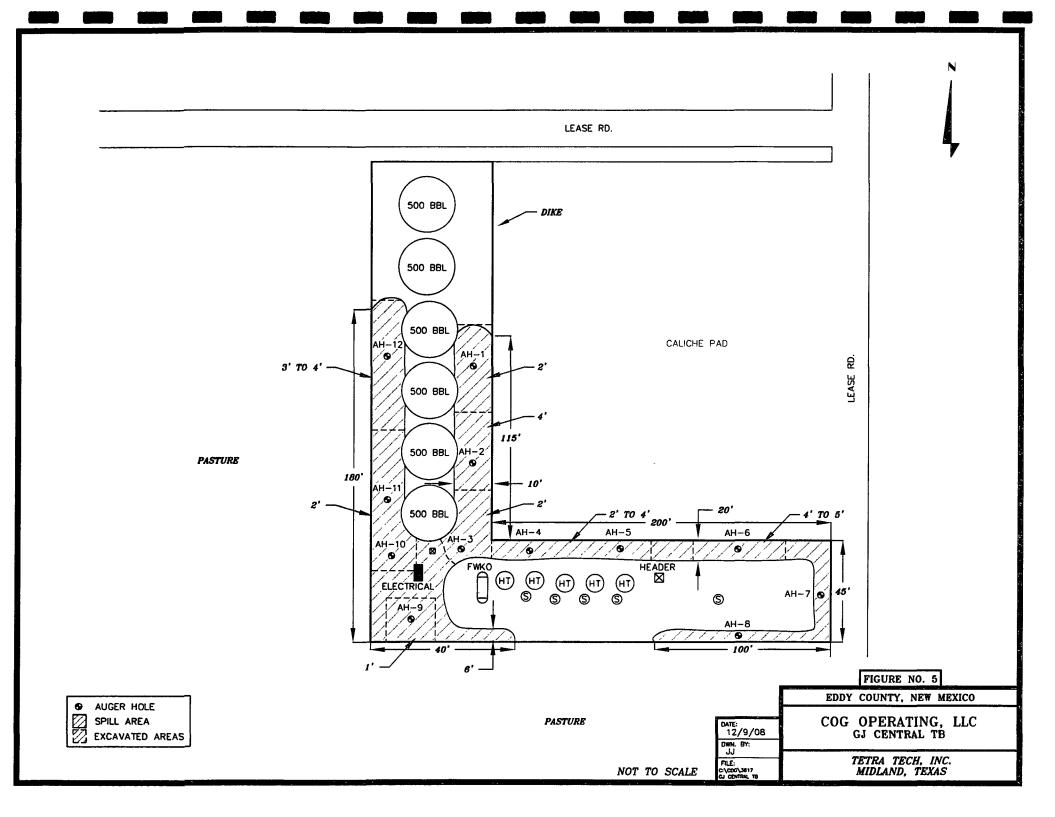
FIGURES











TABLES

Table 1 COG Operating G.J. Central Tank Battery (Spill #1)

Eddy County, New Mexico

Sample	Date	Sample	Soil	Status	-	TPH (mg/kg	<u>;</u>)	Benzene	Toluene	Ethlybenzene	Xylene	Chloride
ID	Sampled	Depth (ft)	In-Situ	Removed	DRO	GRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
										-		
AH-1	6/17/2008	0-1	X	=	<50.0	2.91	2.91	< 0.0100	< 0.0100	< 0.0100	0.0162	22,400
		1-1.5	X		-			-	-	-	-	2,650
		1.5-2.0	X		_	_	_	-	-	_	-	545
AH-2	6/17/2008	0-1	X		<50.0	3.99	3.99	<0.0100	<0.0100	<0.0100	0.0123	20,100
		1-1.5	X		-	-	_	-	_	-	-	555
		1.5-2.0	X		-	-	_	-	-	-	-	<100
AH-3	6/17/2008	0-1	X		<50.0	<1.00	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	17,000
		1-1.5	X		-	-	-	-	-	-	-	691
		1.5-2.0	X		-	-	_	-	_	-	-	132
AH-4	6/17/2008	0-1	X		<50.0	<1.00	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	14,000
		1-1.5	X		-	-	-	-	_	-	-	<100
		1.5-2.0	X		-	-	_	-	-	-	_	127
AH-5	6/17/2008	0-1	X		<50.0	<1.00	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	9,680
		1-1.5	X		-	-	-	-	-	-	-	<100
		1.5-2.0	X		-	-	_	-	-	-	-	<100
AH-6	6/17/2008	0-1	X		<50.0	<1.00	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	13,500
		1-1.5	X		-	-	-	-	-	-		<100
		1.5-2.0	X		-	_	_	<u>-</u>	-	<u>-</u>	-	<100
AH-7	6/17/2008	0-1	X		105	44.1	149.1	<0.0200	<0.0200	0.0713	0.212	7,320
		1-1.5	Х			-	-	-		-	_	225
		1.5-2.0	X		-	-	-	-			-	<100
	() No. A						,					

(-) Not Analyzed

Table 2 COG Operating G.J. Central Tank Battery (Spill #2) Eddy County, New Mexico

Sample	Date	Sample	Soil	Status		TPH (mg/k	g)	Benzene	Toluene	Ethlybenzene	Xylene	Chloride
ID	Sampled	Depth (ft)	In-Situ	Removed	DRO	GRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
			······································									3 3/
AH-1	7/22/2008	0-1		X	3,350	604	3,954	< 0.0500	0.241	3.84	6.83	<100
		1-1.5	X		<50.0	14.1	14.1	-	-	-	-	170
AH-2	7/22/2008	0-1		X	689	79.2	768.2	< 0.0200	< 0.0200	< 0.0200	0.0388	340
	<u></u>	1-1.5	X		-	-	-	-	-	-	•	<100
AH-3	7/22/2008	0-1		X	7,860	946	8,806	< 0.0500	0.738	3.18	4.63	705
		1-1.5	X		<50.0	37.8	37.8	-	-	-	<u> </u>	<100
	T/02/2000	0.1		77	250	21.	201.6					106
AH-4	7/22/2008	0-1	X	X	250	31.6	281.6		-	-	-	196
		1-1.5	X			-	-	-	-	-	-	<100
AH-5	7/22/2008	0-1		X	4,240	2,050	6,290	0.366	21.5	27.5	57.4	1,570
An-5	1/22/2008	1-1.5	X	^	<50.0	44.3	44.3	<0.0100	<0.0100	0.0390	0.0911	1,580
		2-2.5'	$\frac{X}{X}$		-			-0.0100	-	0.0390	0.0911	<25.0
		2-2.5	71				<u> </u>					125.0
AH-6	7/22/2008	0-1		X	1,170	235	1,405	< 0.0100	< 0.0100	0.0424	0.0913	3,120
	7,2	1-1.5	X		<50.0	81.7	81.7	-	-	-		326
							1					
AH-7	7/22/2008	0-1		X	3,400	3,420	6,820	11.3	97.6	67.5	67.8	1,180
		1-1.5		X	<50.0	47.0	47.0	0.0111	0.0362	0.0666	0.0954	6,710
		2-2.5	X		-	-	-	-	-	-	-	<100
AH-8	7/22/2008	0-1	X		534	9.04	543.04		-	-	_	<100
		1-1.5	X		-	-	-	-	-	-	-	<100
	- (- 0 (0 0 0 0											
AH-9	7/22/2008	0-1	X		555	6.39	561.39	-	-	-	-	<100
		1-1.5	X		-		-	-	-	-	-	<100
ATT 10	7/22/2008	0-1	v		<50.0	3.66	3.66					<100
AH-10	1/22/2008	1-1.5	X X		<30.0 -	3.00	3.00	<u> </u>	-	-	-	<100
		1-1.5	Λ				-	-	-	-	-	~100
AH-11	7/22/2008	0-1	X		<50.0	2.39	2.39	-	-	-		<100
4 414-11	1,22,2000	1-1.5	X			-	-		-	-	-	<100
		 										1.00
AH-12	7/22/2008	0-1	X		<50.0	4.72	4.72	-	-	-	-	<100
		1-1.5	X		-	-	-	-	-	-	-	<100
AH-13	7/22/2008	0-1	X		<50.0	1.99	1.99	-	-	-	-	<100
	() Net Applyment	1-1.5	X		-	-	-	-	-	-	-	<100

(-) Not Analyzed

Table 3 COG GJ Central Tank Battery (Spill #3) Eddy County, NM

Sample	Date	Sample	Soil	Status		TPH (mg/kg	;)	Benzene	Toluene	Ethlybenzene	Xylene	Chloride
ID	Sampled	Depth (ft)	In-Situ	Removed	DRO	GRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
AH-1	10/21/08	0-1		X	9,170	4,170	13,340	44.2	205	83.6	144	3,580
		1-1.5		X	<50.0	46.1	46.1	-	_	-	-	4,550
_		2-2.5	X		<50.0	6.01	6.01	_	-	-	-	<100
AH-2	10/21/08	0-1		X	<50.0	18.0	18.0		<u> </u>	-		2,430
		1-1.5		X	-	-	-	-	_	- 1	-	782
		2-2.5	,	X	-	-	_	-	-	-	-	1,130
		3-3.5		Х	-	-	-	-	-	-	-	5,810
		4-4.5	X		-	-	<u>-</u>	-		_	-	<100
AH-3	10/21/08	0-1		X	<50.0	5.67	5.67	-	-	-	_	6,350
		1-1.5		X	-	•	-	-	_	-	-	1,820
		2-2.5	X		-	_	-	-	-	-	-	512
AH-4	10/21/08	0-1		X	143	74.0	217	0.0136	0.250	0.560	1.21	8,850
		1-1.5		Х	-	-	_	-	-	-	-	8,220
		2-2.5		X	-	-	-	-	_	-	-	1,930
		3-3.5		X	-	-	•		-	-	-	2,320
		4-4.5		X	-	-	-	-	_	-	-	1,460
		5-5.5	X			-	_	-	-	-	-	348
AH-5	10/21/08	0-1	·	X	<50.0	24.6	24.6	-	_	-	-	8,720
		1-1.5		X	-	-	-	-	-	_	_	5,500
		2-2.5		X	<u>-</u>	-	-	-	-	-	_	1,260
		3-3.5	X		-	-		-	-	-	-	<100
						-						

⁽⁻⁾ Not Analyzed

Table 3 COG GJ Central Tank Battery (Spill #3) Eddy County, NM

Sample	Date	Sample	Soil	Status		TPH (mg/kg	g)	Benzene	Toluene	Ethlybenzene	Xylene	Chloride
ID	Sampled	Depth (ft)	In-Situ	Removed	DRO	GRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
AH-6	10/21/08	0-1		X	<50.0	4.87	4.87	-		-	-	2,290
		1-1.5		X	-	-	-	-	-	-	-	3,880
		2-2.5		X	-	-	-	-		-	.*.	5,450
		3-3.5		X	-	-	-	-	-	-	<u>-</u>	5,160
		4-4.5		X	1	-	-	-	-	-	-	938
		4.5-5	X		_	-	-	-	-	-	-	104
AH-7	10/21/08	0-1	X		<50.0	<1.00	<50.0	_	-		-	135
		1-1.5	X		-	-	-	-	•	-	•	166
AH-8	10/21/08	0-1	X		<50.0	<1.00	<50.0	-		-	_	203
AIPo	10/21/00	1-1.5	X		-	-	-	-		-	-	<100
AH-9	10/21/08	0-1		X	<50.0	7.58	7.58	-	_	-	•	1,840
, III ,	10/21/00	1-1.5	X		-	-	-	-	-	-		<100
AH-10	10/21/08	0-1		X	3,220	274	3,494	1.50	8.61	0.708	12.7	1,360
		1-1.5		X	<50.0	1.58	1.58	-	-	-	-	4,170
		2-2.5	X		-	-	_	-	-	-	-	<100
AH-11	10/21/08	0-1		X	3,850	2,440	6,290	38.3	146	82.3	114	519
		1-1.5		X	711	1,770	2,481	-	-	-	-	1,230
		2-2.5		X	<50.0	19.2	19.2	-	-	-	-	409
		3-3.5	X		-	-	-	-		•	-	<100
AH-12	10/21/08	0-1		X	1,980	494	2,474	2.50	25.3	17.4	37.9	2,590
		1-1.5		Х	<50.0	6.62	6.62	-	-	-	-	1,810
		2-2.5		X	-	-	-	-	-	-	-	3,460
		3-3.5		X	-	-	-	-	_	-	-	1,580
		4-4.5	X		-	-	-	-	-	-		176

⁽⁻⁾ Not Analyzed

APPENDIX A NMOCD FORM C-141

<u>District 1</u> 1625 N. French Dr., Hobbs, NM 88240 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

Revised October 10, 2003

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Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

						OPERA.	<u>rok</u>		Initia	l Report	<u> </u>	Final P	leport
Name of Co					Contact Kanicia Carrillo Telephone No. 432-685-4332								
				nd, TX 79701									
Facility Nan	ne GJN	orth Central	Battery	,	F	acility Typ	e Oil Well – Ta	nk Battery				-	
Surface Own	ner			Mineral C)wner			Le	ase N	o.			
				LOCA	TION	OF REI	LEASE						
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/West I	Line	County			
	16	17S	29E	660	South 660			East	İ	Edd	v		
				titude		Longitud			1				
			LA		URE	_ Longitud OF RELI							
Type of Relea	ase Produ	ced Water			0111		Release 400 bbi	s Vol	ume R	ecovered 4	00 bbl:	s	
Source of Re	lease w	ater transfer p	ump				our of Occurrence			Hour of Disc			
		<u> </u>					Approx 3:00am	06/	16/08	7:00am			
Was Immedia	ate Notice		Yes [No Not Re	equired	If YES, To Left messa	· whom? ge w/ Mike Bratcl	her					1
By Whom?	Kanicia Ca	rrillo				Date and F	lour 06/16/08	3:00pm					\dashv
Was a Water		hed?				If YES, Vo	lume Impacting t	he Watercou	rse.				
			Yes 🗵										
If a Watercou	irse was Im	pacted, Descr	ibe Fully.	•			_						
		em and Reme		n Taken.* We replaced a cou	ınlina in	the number	otor						
Mechanica i	anuic of the	c water transit	л ришр.	we replaced a col	ւթյուց ու	tue bambs u	iotoi.			•			
				,									
		and Cleanup A		ken.* battery. We are	aumanth.	romavina a	I flyid from the or	round and sui	:11				
				t and soil samples		removing a	a timo itom me 8	round and w	III exca	avate and rer	nove c	ontamin	ateo
I hereby certi	fy that the i	information gi	ven above	e is true and comp	lete to th	e best of my	knowledge and u	nderstand tha	at purs	uant to NM(OCD n	les and	$\overline{}$
regulations al	l operators	are required to	o report ai	nd/or file certain r	elease no	tifications a	nd perform correc	tive actions f	for rele	ases which	may en	danger	
				ce of a C-141 repo									
				investigate and rotance of a C-141									ıtn
		ws and/or regu											
							OIL CONS	<u>SERVAT</u>	<u>ION</u>	<u>DIVISIO</u>	<u>N</u>		
Signature:	Signature: K												
						Approved by	District Supervise	or:					
Printed Name	: Kanicia	Carrillo											
Title: Regula	tory Analy	st				Approval Dat	e:	Expir	ation l	Date:			
E-mail Addre	es konrill	O@conchores	Ources co			Conditions of	- Anneovel						
P-man Vadio	as. Kealil	io ageonemores	our ces.00	145	`	JOHUHHOHS O	Approvat:			Attached			and the same of th
	16/08			132-685-4332						<u> </u>			
Attach Addit	tional Shee	ets If Necess	ary										

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

Submit 2 Copies to appropriate District Office in accordance with Rule 1 16 on back side of form

Release Notification and Corrective Action

				LLC Contact Kanicia Carrillo					Final Repo			
Name of Co	mpany C	OG OPERA	TING LI	C		-						
Address 550	W. Texa	s, Suite 1300) Midlan	d, TX 79701			lo. 432-685-43:					
Facility Nan	ne -GJ We	est Coop Uni	t #52			Facility Typ	e – Oil/GJ Nortl	h Centr	al Battery			
Surface Owi	ner-State			Mineral O	wner				Lease N	lo. API# 30	-015-	02996
		-		LOCA	TION	OF REI	EASE					
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/W	est Line	County		TV
	7-7											
P	16	17S	29E	660	So	uth	660	Eas	st	Edd	/	
			Lat	itude		Longitud	e					
				NAT	URE	OF RELI	EASE					
Type of Relea		uced Water				Volume of Release 20bbls est Volume Recovered 1.					15bbl	
Source of Re	ease l	Free Water Kr	ock-out			1	lour of Occurrenc	e		Hour of Disc		
W I 4:-	4- Nation C	7:0				7/13/08 If YES, To	Unknown		7/13/08	9:00an	MSI	<u>.</u>
Was Immedia	tte Notice C		Yes	No 🗌 Not Re	quired	V/M Mik						
By Whom?	Kanicia Ca	rrillo			-	Date and H	Iour 7/14/08 3:3	30pm	·	* * *		
Was a Water		hed?				If YES, Vo	lume Impacting t	he Wate	rcourse.			
			Yes 🛚	No								
If a Watercou	irse was Im	pacted, Descri	ibe Fully.*									,_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Describe Cau	se of Proble	em and Remed	dial Action	Taken.*								
Micro switch	malfunctio	n on vessel, p	ressure on	vessel increased	to maxi	mum level an	d opened pressure	e relief v	alve. The I	iquid on the	surfac	e was picked
up.		·				•						
Describe Are	a Affected	and Cleanup A	Action Tak	en.*								
			. 11 . 4 . 1	001 1001 8			. 41 - 1 - 1	A 11		!!4		16.4
				00'x100' sq ft are ibmit chlorides an			adjoining pasture.	All con	itaminated	son and grav	ei wii	i be aug up
una romo va		2										
T b b	C. 41-44-	: C	aba	is true and comp	lata ta t	ha hast of mu	Impuladas and u	ndarata.	ad that miles	went to NIM	OCD.	ulas and
				id/or file certain r								
public health	or the envi	ronment. The	acceptance	e of a C-141 repo	rt by th	e NMOCD m	arked as "Final R	eport" d	oes not rel	ieve the oper	ator o	fliability
should their o	perations h	ave failed to a	adequately	investigate and r	emediat	e contaminati	on that pose a thr	eat to gr	ound water	r, surface wa	ter, hu	man health
				tance of a C-141	report d	oes not reliev	e the operator of	responsi	bility for c	ompliance v	ith an	y other
federal, state, or local laws and/or regulations. OIL CONSERVATION DIVISION												
	i/ - ·	/ .					OIL COIN	DLIC V	AHON	DIVIDIC	11	
Signature:	<u> </u>											
Printed Name	e: Kanicia	Carrillo				Approved by	District Supervis	ог:				
Title: Regulatory Analyst						Approval Da	te:		Expiration	Date:		
	E-mail Address: kcarrillo@conchoresources.com					Conditions of	Approvai:			Attached		
	Date: 7/15/08 Phone: 432-685-4332											·····

<u>District I</u> 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

State of New Mexico **Energy Minerals and Natural Resources**

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Form C-141

Revised October 10, 2003

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

PMCB-09273 54661

30-013	5-029	96	Rel	ease Notific	ation	and Co	rrective A	ction		·		
AMUS 0927						OPERA	ror		⊠ Initia	al Report	□ F	Final Repo
		OG OPERA					anicia Carrillo			****		
		s, Suite 130 EST COOP		nd, TX 79701		elephone Nacility Typ	No. 432-685-43	32				
		LSI COOI	OIR JZ			active 1 yr	C- Dattery					
Surface Ow	ner			Mineral C)wner				Lease N	lo. API# 30	0-015-0	2996
			7			OF RE						
Unit Letter	Section	Township	Range	Feet from the	North/S	South Line	Feet from the	East/W	est Line	County		
_P	16	178	29E	660	South		660	East		Eddy		<u>.</u>
			La	rtitude		_ Longitud	le					
				TAN	URE	OF REL	EASE					
Type of Rele							Release- 450bbl			Recovered-		
Source of Re	lease- wate	er tank				Date and H 10/6/08- 9:	lour of Occurrenc 00am	e-	Date and 10/6/08-2	Hour of Dis	covery	
Was Immedi	ate Notice (If YES, To						
D 770	W :: 0		Yes L	No Not R	equired	Mike Brate		10				
By Whom? Was a Water	course Rea	erriio ched?					lour 10/06/08 5		rcourse.			
Was a Watercourse Reached? ☐ Yes ☒ No ☐ Yes ☒ No												
If a Watercon	urse was Im	pacted, Descr	ibe Fully.	*								
			:									
Describe Cat	ise of Probl	em and Reme	dial Activ	n Taken *	·							
				ump was repa	aired.							
	_	-	:									
Describe Are	a Affected	and Cleanup	Action Ta	ken.*								· · · · · · · · · · · · · · · · · · ·
Leak was	containe	ed to inside	the Bt	y firewall. Al	l water	was reme	oved from ins	side the	e firewa	ll. Tetra	Tech w	vill send
soil samp	les and fi	inal report	•									
				e is true and comp	_							
regulations a	II operators or the envi	are required to ronment. The	o report a acceptan	nd/or file certain r ice of a C-141 repr	elease no ort by the	tifications as NMOCD m	nd periorm correct arked as "Final R	tive action eport* de	ons for rel ses not rel	eases which ieve the one	may end	langer iability
should their	operations l	nave failed to a	adequately	y investigate and r	emediate	contaminati	on that pose a thr	eat to gn	ound water	r, surface wa	ater, hum	an health
federal, state	nment. In a , or local la	ws and/or regi	oco acce _l ulations.	ptance of a C-141	report do	es not reliev	e the operator of	responsil	bility for c	ompliance v	with any o	other
						···	OIL CON	SERV	ATION	DIVISIO	N	
Signature:	<u> </u>		<u> </u>									
Printed Name	er Vaniain	Camilla				Approved by	District Supervis	or:				
Printed Name	c. Kamcia	Carnilo					<u></u>					
Title: Regula	atory Analy	st			/	Approval Dat	e:	E	xpiration	Date:		
E-mail Addre	ss: kcamili	lo@conchores	sources.co	m		Conditions of	Approval:			Attached		
Date: 10/07/	08	Phone	: 432-685	5-4332		A	FApproval: Sted for reco NMOCD Leoe Closu	rd		, macket		
* Attach Addi				**************************************			NMOCD		CED 3	A 2000		
		u				@ Tin	ie of closu	re	oer o	₩ ∠UUJ ₩		
Kele	ease t	#3 if.	3 .				•		PA	211		
PMCA		=						0	///	-34	2	

APPENDIX B SUMMARY REPORT June 24, 2008 Report Date: June 24, 2008 Work Order: 8061825 Page Number: 1 of 4 3543 COG/G.J. Central TB Eddy County, NM

Summary Report

Ike Tavarez Highlander Environmental Services 1910 N. Big Spring Street Midland, TX, 79705

Report Date: June 24, 2008

Work Order: 8061825

Project Location: Eddy County, NM Project Name: COG/G.J. Central TB

Project Number: 3543

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
163875	SB-1 0-1.0'	soil	2008-06-17	00:00	2008-06-18
163876	SB-1 1.0-1.5'	soil	2008-06-17	00:00	2008-06-18
163877	SB-1 1.5-2.0'	soil	2008-06-17	00:00	2008-06-18
163878	SB-2 0-1.0'	soil	2008-06-17	00:00	2008-06-18
163879	SB-2 1.0-1.5'	soil	2008-06-17	00:00	2008-06-18
163880	SB-2 1.5-2.0'	soil	2008-06-17	00:00	2008-06-18
163881	SB-3 0-1.0'	soil	2008-06-17	00:00	2008-06-18
163882	SB-3 1.0-1.5'	soil	2008-06-17	00:00	2008-06-18
163883	SB-3 1.5-2.0'	soil	2008-06-17	00:00	2008-06-18
163884	SB-4 0-1.0'	soil	2008-06-17	00:00	2008-06-18
163885	SB-4 1.0-1.5'	soil	2008-06-17	00:00	2008-06-18
163886	SB-4 1.5-2.0'	soil	2008-06-17	00:00	2008-06-18
163887	SB-5 0-1.0'	soil	2008-06-17	00:00	2008-06-18
163888	SB-5 1.0-1.5'	soil	2008-06-17	00:00	2008-06-18
163889	SB-5 1.5-2.0'	soil	2008-06-17	00:00	2008-06-18
163890	SB-6 0-1.0'	soil	2008-06-17	00:00	2008-06-18
163891	SB-6 1.0-1.5'	soil	2008-06-17	00:00	2008-06-18
163892	SB-6 1.5-2.0'	soil	2008-06-17	00:00	2008-06-18
163893	SB-7 0-1.0'	soil	2008-06-17	00:00	2008-06-18
163894	SB-7 1.0-1.5'	soil	2008-06-17	00:00	2008-06-18
163895	SB-7 1.5-2.0'	soil	2008-06-17	00:00	2008-06-18

]	BTEX		TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
163875 - SB-1 0-1.0'	< 0.0100	< 0.0100	< 0.0100	0.0162	< 50.0	2.91
163878 - SB-2 0-1.0'	< 0.0100	< 0.0100	< 0.0100	0.0123	< 50.0	3.99
163881 - SB-3 0-1.0'	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 50.0	<1.00
163884 - SB-4 0-1.0'	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 50.0	<1.00

continued ...

Report Date: June 24, 2008

Work Order: 8061825

Page Number: 2 of 4

COG/G.J. Central TB

Eddy County, NM

... continued

BTEX

BTEX

TPH DRO

TPH GRO

GRO

Sample - Field Code

(mg/Kg)

				TPH DRO	TPH GRO	
	Benzene	Toluene	Ethylbenzene	Xylene	DRO	$_{ m GRO}$
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
163887 - SB-5 0-1.0'	< 0.0100	< 0.0100	< 0.0100	< 0.0100	<50.0	<1.00
163890 - SB-6 0-1.0'	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 50.0	< 1.00
163893 - SB-7 0-1.0'	< 0.0200	< 0.0200	0.0713	0.212	105	44.1

_				
Param	Flag	Result	Units	RL
Chloride		22400	mg/Kg	2.00

Sample: 163876 - SB-1 1.0-1.5'						
Param	Flag	Result	Units	RL		
Chloride		2650	mg/Kg	2.00		

Sample: 163877 - SB-1 1.5-2.0'		

Param	Flag	Result	${f Units}$	RL
Chloride		545	mg/Kg	2.00
	•			

Sample: 163878 - SB-2 0-1.0'							
Param	Flag	Result	Units	RL			
Chloride		20100	mg/Kg	2.00			

Sample: 163879	- SB-2 1.0-1.5'			
Param	Flag	Result	Units	m RL
Chloride		555	mg/Kg	2.00

Sample: 163880	- SB-2 1.5-2.0'			
Param	Flag	Result	Units	RL
Chloride		<100	mg/Kg	2.00

Sample: 163881 - SB-3 0-1.0'

Sample: 163875 - SB-1 0-1.0'

Report Date: June 24, 2008 3543		Work Order: 8061825 COG/G.J. Central TB		Page Number: 3 of 4 Eddy County, NM	
Param	Flag	Result	Units	RL	
Chloride		17000	mg/Kg	2.00	
Sample: 163882 - SB-3	1.0-1.5'				
Param	Flag	Result	Units	RL	
Chloride		691	mg/Kg	2.00	
Sample: 163883 - SB-3	1.5-2.0'				
Param	Flag	Result	Units	RL	
Chloride		132	mg/Kg	2.00	
Sample: 163884 - SB-4	0-1.0'				
Param	Flag	Result	Units	RL	
Chloride		14000	mg/Kg	2.00	
Sample: 163885 - SB-4	1.0-1.5'				
Param	Flag	Result	Units	m RL	
Chloride		<100	mg/Kg	2.00	
Sample: 163886 - SB-4	1.5-2.0'				
Param	Flag	Result	Units	RL	
Chloride		127	mg/Kg	2.00	
Sample: 163887 - SB-5	0-1.0'				
Param	Flag	Result	Units	RL	
Chloride		9680	mg/Kg	2.00	
Sample: 163888 - SB-5	1.0-1.5'				
Param Chloride	Flag	Result	\mathbf{Units}	RL	

Report Date: June 24, 2008 3543	Work Order: 8061825 COG/G.J. Central TB		Number: 4 of 4 dy County, NM
Sample: 163889 - SB-5 1.5-2.0'			
Param Flag	Result	Units	RL
Chloride	<100	mg/Kg	2.00
Sample: 163890 - SB-6 0-1.0'			
Param Flag	Result	Units	RL
Chloride	13500	mg/Kg	2.00
Sample: 163891 - SB-6 1.0-1.5'			
Param Flag	Result	Units	RL
Chloride	<100	mg/Kg	2.00
Param Flag Chloride	Result <100	Units mg/Kg	RL 2.00
Sample: 163893 - SB-7 0-1.0' Param Flag Chloride	Result 7320	Units mg/Kg	RL 2.00
		3/ 3	
Sample: 163894 - SB-7 1.0-1.5'	•		
Param Flag	Result	Units	RL
Chloride	225	mg/Kg	2.00
Sample: 163895 - SB-7 1.5-2.0'			
Param Flag	Result	Units	RL
Chloride	<100	mg/Kg	2.00

SUMMARY REPORT November 4, 2008 Report Date: November 4, 2008

115-6403617

Work Order: 8102420 COG/GS West Co-op Unit 52 CTB Page Number: 1 of 8 Eddy Co., NM

Summary Report

Ike Tavarez Tetra Tech

1910 N. Big Spring Street Midland, TX 79705 Report Date: November 4, 2008

Work Order: 8102420

Project Location: Eddy Co., NM

Project Name: COG/GS West Co-op Unit 52 CTB

Project Number: 115-6403617

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	$\mathbf{Received}$
177271	AH-1 0-1'	soil	2008-10-21	00:00	2008-10-24
177272	AH-1 1'-1.5'	soil	2008-10-21	00:00	2008-10-24
177273	AH-1 2'-2.5'	soil	2008-10-21	00:00	2008-10-24
177274	AH-2 0-1'	soil	2008-10-21	00:00	2008-10-24
177275	AH-2 1'-1.5'	\mathbf{soil}	2008-10-21	00:00	2008-10-24
177276	AH-2 2'-2.5'	soil	2008-10-21	00:00	2008-10-24
177277	AH-2 3'-3.5'	soil	2008-10-21	00:00	2008-10-24
177278	AH-2 4'-4.5'	soil	2008-10-21	00:00	2008-10-24
177279	AH-3 0-1'	soil	2008-10-21	00:00	2008-10-24
177280	AH-3 1'-1.5'	soil	2008-10-21	00:00	2008-10-24
177281	AH-3 2'-2.5'	soil	2008-10-21	00:00	2008-10-24
177282	AH-4 0-1'	soil	2008-10-21	00:00	2008-10-24
177283	AH-4 1'-1.5'	soil	2008-10-21	00:00	2008-10-24
177284	AH-4 2'-2.5'	soil	2008-10-21	00:00	2008-10-24
177285	AH-4 3'-3.5'	soil	2008-10-21	00:00	2008-10-24
177286	AH-4 4'-4.5'	soil	2008-10-21	00:00	2008-10-24
177287	AH-4 5'-5.5'	soil	2008-10-21	00:00	2008-10-24
177288	AH-5 0-1'	soil	2008-10-21	00:00	2008-10-24
177289	AH-5 1'-1.5'	soil	2008-10-21	00:00	2008-10-24
177290	AH-5 2'-2.5'	soil	2008-10-21	00:00	2008-10-24
177291	AH-5 3'-3.5'	soil	2008-10-21	00:00	2008-10-24
177292	AH-6 0-1'	soil	2008-10-21	00:00	2008-10-24
177293	AH-6 1'-1.5'	soil	2008-10-21	00:00	2008-10-24
177294	AH-6 2'-2.5'	soil	2008-10-21	00:00	2008-10-24
177295	AH-6 3'-3.5'	soil	2008-10-21	00:00	2008-10-24
177296	AH-6 4'-4.5'	soil	2008-10-21	00:00	2008-10-24
177297	AH-6 4.5'-5'	soil	2008-10-21	00:00	2008-10-24
177298	AH-7 0-1'	soil	2008-10-21	00:00	2008-10-24
177299	AH-7 1'-1.5'	soil	2008-10-21	00:00	2008-10-24
177300	AH-8 0-1'	soil	2008-10-21	00:00	2008-10-24

Report Date: November 4, 2008 115-6403617

AH-12 4'-4.5'

177315

Work Order: 8102420 COG/GS West Co-op Unit 52 CTB

2008-10-21

00:00

Page Number: 2 of 8

Eddy Co., NM

2008-10-24

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
177301	AH-8 1'-1.5'	soil	2008-10-21	00:00	2008-10-24
177302	AH-9 0-1'	soil	2008-10-21	00:00	2008-10-24
177303	AH-9 1'-1.5'	soil	2008-10-21	00:00	2008-10-24
177304	AH-10 0-1'	soil	2008-10-21	00:00	2008-10-24
177305	AH-10 1'-1.5'	soil	2008-10-21	00:00	2008-10-24
177306	AH-10 2'-2.5'	soil	2008-10-21	00:00	2008-10-24
177307	AH-11 0-1'	soil	2008-10-21	00:00	2008-10-24
177308	AH-11 1'-1.5'	soil	2008-10-21	00:00	2008-10-24
177309	AH-11 2'-2.5'	soil	2008-10-21	00:00	2008-10-24
177310	AH-11 3'-3.5'	soil	2008-10-21	00:00	2008-10-24
177311	AH-12 0-1'	soil	2008-10-21	00:00	2008-10-24
177312	AH-12 1'-1.5'	soil	2008-10-21	00:00	2008-10-24
177313	AH-12 2'-2.5'	soil	2008-10-21	00:00	2008-10-24
177314	AH-12 3'-3.5'	soil	2008-10-21	00:00	2008-10-24

soil

]	BTEX		TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	DRO	$_{ m GRO}$
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
177271 - AH-1 0-1'	44.2	205	83.6	144	9170	4170
177272 - AH-1 1'-1.5'					< 50.0	46.1
177273 - AH-1 2'-2.5'			•	ĺ	< 50.0	6.01
177274 - AH-2 0-1'					< 50.0	18.0
177279 - AH-3 0-1'					< 50.0	5.67
177282 - AH-4 0-1'	0.0136	0.250	0.560	1.21	143	74.0
177288 - AH-5 0-1'					< 50.0	24.6
177292 - AH-6 0-1'					< 50.0	4.87
177298 - AH-7 0-1'					< 50.0	< 1.00
177300 - AH-8 0-1'					< 50.0	<1.00
177302 - AH-9 0-1'					< 50.0	7.58
177304 - AH-10 0-1'	1.50	8.61	0.708	12.7	3220	274
177305 - AH-10 1'-1.5'					< 50.0	1.58
177307 - AH-11 0-1'	38.3	146	82.3	114	3850	2440
177308 - AH-11 1'-1.5'					711	1770
177309 - AH-11 2'-2.5'					< 50.0	19.2
177311 - AH-12 0-1'	2.50	25.3	17.4	37.9	1980	494
177312 - AH-12 1'-1.5'					< 50.0	6.62

Sample: 177271 - AH-1 0-1'

Param	Flag	Result	Units	RL
Chloride		3580	mg/Kg	2.00

Sample: 177272 - AH-1 1'-1.5'

Param	Flag	Result	Units	\mathbf{RL}
Chloride		4550	mg/Kg	2.00

Report Date: November 4, 2008 Work Order: 8102420 Page Number: 3 of 8 115-6403617 COG/GS West Co-op Unit 52 CTB Eddy Co., NM Sample: 177273 - AH-1 2'-2.5' Param Result Units RLFlag <100 Chloride mg/Kg 2.00 Sample: 177274 - AH-2 0-1' Result Units RLParam Flag 2430 Chloride 2.00 mg/Kg Sample: 177275 - AH-2 1'-1.5' Result Units RLParam Flag Chloride 782 2.00 mg/Kg Sample: 177276 - AH-2 2'-2.5' Result Units RLParam Flag 1130 Chloride mg/Kg 2.00Sample: 177277 - AH-2 3'-3.5' Param Flag Result Units RLChloride 5810 mg/Kg 2.00 Sample: 177278 - AH-2 4'-4.5' Flag Result Units RLParam Chloride <100 mg/Kg 2.00 Sample: 177279 - AH-3 0-1' Result Flag Units RLParam 6350 Chloride mg/Kg 2.00 Sample: 177280 - AH-3 1'-1.5' Param Result Units RLChloride 1820 mg/Kg 2.00

Report Date: November 4, 2008 Work Order: 8102420 Page Number: 4 of 8 115-6403617 COG/GS West Co-op Unit 52 CTB Eddy Co., NM Sample: 177281 - AH-3 2'-2.5' Param Result Units RLFlag Chloride 512 mg/Kg 2.00 Sample: 177282 - AH-4 0-1' Flag Result Units RLParam Chloride 8850 mg/Kg 2.00 Sample: 177283 - AH-4 1'-1.5' Result Units Param RLFlag 8220 Chloride mg/Kg 2.00 Sample: 177284 - AH-4 2'-2.5' Result Units RLParam Flag 1930 Chloride 2.00 mg/Kg Sample: 177285 - AH-4 3'-3.5' Param Result Units RLFlag 2320 Chloride mg/Kg 2.00Sample: 177286 - AH-4 4'-4.5' Result Units RLParam Flag 1460 Chloride mg/Kg 2.00Sample: 177287 - AH-4 5'-5.5' Units Param Result RLFlag Chloride 348 mg/Kg 2.00 Sample: 177288 - AH-5 0-1' Param Flag Result Units RLChloride 8720 mg/Kg 2.00

Report Date: November 4, 2008 Work Order: 8102420 Page Number: 5 of 8 115-6403617 COG/GS West Co-op Unit 52 CTB Eddy Co., NM Sample: 177289 - AH-5 1'-1.5' Result Units RLParam Flag mg/Kg Chloride 5500 2.00 Sample: 177290 - AH-5 2'-2.5' Param Result Units RLFlag Chloride 1260 2.00 mg/Kg Sample: 177291 - AH-5 3'-3.5' Units RLParam Result Flag Chloride <100 mg/Kg 2.00 Sample: 177292 - AH-6 0-1' Units RLParam Flag Result Chloride 2290 mg/Kg 2.00 Sample: 177293 - AH-6 1'-1.5' Result Units RLParam Flag $\overline{\text{Chloride}}$ 3880 2.00 mg/Kg Sample: 177294 - AH-6 2'-2.5' Result Units RLParam Chloride 5450 mg/Kg 2.00Sample: 177295 - AH-6 3'-3.5' Flag Units RLParam Result Chloride 5160 mg/Kg 2.00 Sample: 177296 - AH-6 4'-4.5' Units Param Result RLChloride 938 mg/Kg 2.00

Report Date: November 4, 2008 Work Order: 8102420 Page Number: 6 of 8 115-6403617 COG/GS West Co-op Unit 52 CTB Eddy Co., NM Sample: 177297 - AH-6 4.5'-5' Param Flag Result Units RLmg/Kg Chloride 104 2.00 Sample: 177298 - AH-7 0-1' Result Units RLParam Flag Chloride $\overline{135}$ mg/Kg 2.00 Sample: 177299 - AH-7 1'-1.5' Units Param Result RLChloride 166 mg/Kg 2.00 Sample: 177300 - AH-8 0-1' Param Result Units RLChloride $20\overline{3}$ mg/Kg 2.00 Sample: 177301 - AH-8 1'-1.5' Result Units RLParam Flag Chloride <100 2.00 mg/Kg Sample: 177302 - AH-9 0-1' Result Units RLParam Chloride 1840 mg/Kg 2.00 Sample: 177303 - AH-9 1'-1.5' Result Units RLParam Flag Chloride <100 mg/Kg 2.00 Sample: 177304 - AH-10 0-1' Param Result Units RLChloride 1360 mg/Kg 2.00

Report Date: November 4, 2008 115-6403617		Work Order: 8102420 COG/GS West Co-op Unit 52 CTB		Page Number: 7 of 8 Eddy Co., NM	
Sample: 177305 -	AH-10 1'-1.5'				
Param	Flag	\mathbf{Result}	Units	RL	
Chloride		4170	mg/Kg	2.00	
Sample: 177306 -	AH-10 2'-2.5'				
Param	Flag	Result	Units	RL	
Chloride		<100	mg/Kg	2.00	
Sample: 177307 -	AH-11 0-1'	•			
Param	Flag	Result	Units	RL	
Chloride		519	mg/Kg	2.00	
Sample: 177308 -	AH-11 1'-1.5'				
Param	Flag	Result	Units	RL	
Chloride		1230	mg/Kg	2.00	
Sample: 177309 -	· AH-11 2'-2.5'				
Param	Flag	Result	Units	RL	
Chloride		409	mg/Kg	2.00	
Sample: 177310 -	· AH-11 3'-3.5'				
Param	Flag	Result	Units	RL	
Chloride		<100	mg/Kg	2.00	
Sample: 177311 -	- AH-12 0-1'				
Param	Flag	Result	Units	RL	
Chloride		2590	mg/Kg	2.00	
Sample: 177312 -	- AH-12 1'-1.5'				
Param	Flag	Result	Units	RL	
Chloride		1810	mg/Kg	2.00	

Report Date: November 4, 2008 115-6403617		Work Order: 8102420 COG/GS West Co-op Unit 52 CTB		Page Number: 8 of 8 Eddy Co., NM			
Sample: 177313 - AH-12 2'-2.5'							
Param	Flag	Result	Units	RL			
Chloride		3460	mg/Kg	2.00			
Param Chloride	Flag	Result 1580	Units mg/Kg	RL 2.00			
	21005		mg/Kg				
C1 177917	ATT 10 4) 4 F1						
Sample: 177315	- An-12 4'-4.5'						
Param	Flag	\mathbf{Result}	Units	RL			

176

mg/Kg

2.00

Chloride

SUMMARY REPORT November 19, 2008

Report Date: November 19, 2008 3563

Work Order: 8072330 COG/G.J. Central TB (Spill #2) Page Number: 1 of 5 Eddy Co, NM

Report Date: November 19, 2008

Work Order: 8072330

Summary Report

Ray Taylor Tetra Tech

1910 N. Big Spring Street Midland, TX 79705

Project Location: Eddy Co, NM

Project Name: COG/G.J. Central TB (Spill #2)

Project Number: 3563

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
168019	AH-1 (0-1')	soil	2008-07-22	00:00	2008-07-23
168020	AH-1 1-1.5'	soil	2008-07-22	00:00	2008-07-23
168021	AH-2 0-1'	soil	2008-07-22	00:00	2008-07-23
168022	AH-2 1-1.5'	soil	2008-07-22	00:00	2008-07-23
168023	AH-3 0-1'	soil	2008-07-22	00:00	2008-07-23
168024	AH-3 1-1.5'	soil	2008-07-22	00:00	2008-07-23
168026	AH-4 0-1'	soil	2008-07-22	00:00	2008-07-23
168027	AH-4 1-1.5'	soil	2008-07-22	00:00	2008-07-23
168028	AH-5 0-1'	soil	2008-07-22	00:00	2008-07-23
168029	AH-5 1-1.5'	soil	2008-07-22	00:00	2008-07-23
168030	AH-5 2-2.5'	soil	2008-07-22	00:00	2008-07-23
168031	AH-6 0-1'	soil	2008-07-22	00:00	2008-07-23
168032	AH-6 1-1.5'	soil	2008-07-22	00:00	2008-07-23
168033	AH-7 0-1'	soil	2008-07-22	00:00	2008-07-23
168034	AH-7 1-1.5'	soil	2008-07-22	00:00	2008-07-23
168035	AH-7 2-2.5'	soil	2008-07-22	00:00	2008-07-23
168036	AH-8 0-1'	soil	2008-07-22	00:00	2008-07-23
168037	AH-8 1-1.5'	soil	2008-07-22	00:00	2008-07-23
168038	AH-9 0-1'	soil	2008-07-22	00:00	2008-07-23
168039	AH-9 1-1.5'	soil	2008-07-22	00:00	2008-07-23
168040	AH-10 0-1'	soil	2008-07-22	00:00	2008-07-23
168041	AH-10 1-1.5'	soil	2008-07-22	00:00	2008-07-23
168042	AH-11 0-1'	soil	2008-07-22	00:00	2008-07-23
168043	AH-11 1-1.5'	soil	2008-07-22	00:00	2008-07-23
168044	AH-12 0-1'	soil	2008-07-22	00:00	2008-07-23
168045	AH-12 1-1.5'	soil	2008-07-22	00:00	2008-07-23
168046	AH-13 0-1'	soil	2008-07-22	00:00	2008-07-23
168047	AH-13 1-1.5'	soil	2008-07-22	00:00	2008-07-23

Report Date: November 19, 2008

3563

Work Order: 8072330 Page Number: 2 of 5 COG/G.J. Central TB (Spill #2) Eddy Co, NM

		I	BTEX		TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
168019 - AH-1 (0-1')	< 0.0500	0.241	3.84	6.83	3350	604
168020 - AH-1 1-1.5'					< 50.0	14.1
168021 - AH-2 0-1'	< 0.0200	< 0.0200	< 0.0200	0.0388	689	79.2
168023 - AH-3 0-1'	< 0.0500	0.738	3.18	4.63	7860	946
168024 - AH-3 1-1.5'					< 50.0	37.8
168026 - AH-4 0-1'					250	31.6
168028 - AH-5 0-1'	0.366	21.5	27.5	57.4	4240	2050
168029 - AH-5 1-1.5'	< 0.0100	< 0.0100	0.0390	0.0911	< 50.0	44.3
168031 - AH-6 0-1'	< 0.0100	< 0.0100	0.0424	0.0913	1170	235
168032 - AH-6 1-1.5'					< 50.0	81.7
168033 - AH-7 0-1'	11.3	97.6	67.5	67.8	3400	3420
168034 - AH-7 1-1.5'	0.0111	0.0362	0.0666	0.0954	< 50.0	47.0
168036 - AH-8 0-1'					534	9.04
168038 - AH-9 0-1'					555	6.39
168040 - AH-10 0-1'					< 50.0	3.66
168042 - AH-11 0-1'					< 50.0	2.39
168044 - AH-12 0-1'					< 50.0	4.72
168046 - AH-13 0-1'					< 50.0	1.99

Sample: 168019 - AH-1 (0-1')

Param	Flag	Result	Units	RL
Chloride		<100	mg/Kg	2.00

Sample: 168020 - AH-1 1-1.5'

Param	Flag	Result	Units	RL
Chloride		170	mg/Kg	2.00

Sample: 168021 - AH-2 0-1'

Param	Flag	Result	Units	RL
Chloride		340	mg/Kg	2.00

Sample: 168022 - AH-2 1-1.5'

Param	Flag	Result	Units	m RL
Chloride		<100	mg/Kg	2.00

Sample: 168023 - AH-3 0-1'

Report Date: November 3563	er 19, 2008	Work Order: 807233 COG/G.J. Central TB (S ₁		Page Number: 3 of 5 Eddy Co, NM
Param	Flag	Result	Units	RL
Chloride		705	mg/Kg	2.00
Sample: 168024 - A	H-3 1-1.5'			
Param	Flag	Result	Units	RL
Chloride		<100	mg/Kg	2.00
Sample: 168026 - A	H-4 0-1'			
Param	Flag	Result	Units	RL
Chloride		196	${ m mg/Kg}$	2.00
Sample: 168027 - A	H-4 1-1.5'			
Param	Flag	Result	Units	RL
Chloride		<100	mg/Kg	2.00
Sample: 168028 - A	H-5 0-1'			
Param	Flag	Result	Units	RL
Chloride		1570	mg/Kg	2.00
Sample: 168029 - A	H-5 1-1.5'			
Param	Flag	Result	Units	RL
Chloride		1580	mg/Kg	2.00
Sample: 168030 - A	H-5 2-2.5'			
Param	Flag	Result	Units	RL
Chloride	0	<100	mg/Kg	2.00
Sample: 168031 - A	H-6 0-1'		•	
Param	Flag	Result	Units	RL
Chloride	1 1008	3120	mg/Kg	2.00

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

Report Date: November 19, 2008 Work Order: 8072330 Page Number: 4 of 5 COG/G.J. Central TB (Spill #2) Eddy Co, NM 3563 Sample: 168032 - AH-6 1-1.5' Param Result Units RLFlag 326 Chloride mg/Kg 2.00 Sample: 168033 - AH-7 0-1' Flag Result Units Param RL1180 Chloride mg/Kg 2.00 Sample: 168034 - AH-7 1-1.5' Result Units RLParam Flag 6710 Chloride mg/Kg 2.00 Sample: 168035 - AH-7 2-2.5' Result Units RLParam Chloride <100 mg/Kg 2.00 Sample: 168036 - AH-8 0-1' Units Param Result RLFlag <100 Chloride mg/Kg 2.00 Sample: 168037 - AH-8 1-1.5' Result Units RLParam Chloride <100 mg/Kg 2.00 Sample: 168038 - AH-9 0-1' Result Units RLParam Flag Chloride <100 mg/Kg 2.00 Sample: 168039 - AH-9 1-1.5' Param Result Units RLChloride <100 mg/Kg 2.00

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

Report Date: November 19, 2008 3563	Work Order: 8072330 COG/G.J. Central TB (Spil	1 #2)	Page Number: 5 of 5 Eddy Co, NM
Sample: 168040 - AH-10 0-1'			
Param Flag	Result	Units	$^{-}$ RL
Chloride	<100	mg/Kg	2.00
Sample: 168041 - AH-10 1-1.5'			
Param Flag	Result	Units	RL
Chloride	<100	mg/Kg	2.00
Sample: 168042 - AH-11 0-1'			
Param Flag	Result	Units	RL
Chloride	<100	mg/Kg	2.00
Sample: 168043 - AH-11 1-1.5'			
Param Flag	Result	Units	RL
Chloride	<100	mg/Kg	2.00
Sample: 168044 - AH-12 0-1'			
Param Flag	Result	Units	RL
Chloride	<100	mg/Kg	2.00
Sample: 168045 - AH-12 1-1.5'			
Param Flag	Result	Units	RL
Chloride	<100	mg/Kg	2.00
Sample: 168046 - AH-13 0-1'			
Param Flag	Result	Units	RL
Chloride	<100	mg/Kg	2.00
Sample: 168047 - AH-13 1-1.5'			
Param Flag	Result	Units	m RL
Chloride	<100	mg/Kg	2.00

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

APPENDIX C GROUNDWATER DATA

Water Well Data Average Depth to Groundwater (ft) COG - GJ Tank Battery, Eddy County, New Mexico

	16 \$	South	2	28 East			16 9	South	29	East	<u> </u>		16	South	3	30 East	
	5	4	3	2	1	6	5	4	3	2	1	6	5	4	3	2	1
	8	9	10	11	12	7	8	9	10	11	12	7	8	9	10	11	1
8	17	16	15	14	13	18	17	16	15	14	13	18	17	16	15	14	1
9	20	21	22	23	24	19	20	21	22	23	24	19	20	21	22	23	2
)	29	61 28	27	26	25	110 30	29	28	27	26	25	30	29	28	27	26	2
1	32	33	34	35	36	31	32	33	34	35	36	31	32	33	34	35	3
	17 :	South		28 East	<u></u>	<u> </u>	17 \$	South	29	East		L	17 :	South		30 East	
	5	4	3	2	1	6	5	4	3	2	1	6	5	4	3	2	71
	8	9	10	11	12	7	8	9	10	11	12	7	8	9	10	11	1
3	17	16	15	14	13	18	17	16	15	14	13	18	17	16	15	14	1
9	20	21	22 79	23	24	19	20	SITE 21	22 80	23	24	19	20	21	22	23	2
)	29	28	27	26	25	30	29	28	82 27	26	25	30	29	28	27	26	2
1	32	33	34 53	35	36	31	32	33	34	35	36	31	32	33	34	35	3
	18 9	South		28 East	<u></u>	<u> </u>	18 5	South	29	East		<u> </u>	18 :	South		30 East	-
	5	4	3	2	1	6	5	4	3	2	1	6	5	4	3	2	1
	8	9	10	11	12	7	8	9	10	11	12	7	8	9	10	11	1
8	17	16	15	14	13	18	17	16	15	14	13	18	17	16	15	14	1
9	20	21 225	22	23	24	19	20	21	22	23	24	19	20	21	22	23	2
0	29	28	27	26	25	30	29	28	27	26	25	30	29	28	27	26	2
31	32	33	34	35	36	31	32	33	34	35	36	31	32	33	34	35	3

- 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 Static Level Water well measure by Tetra Tech (6/17/08)



USGS Home Contact USGS Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Ground Water

Geographic Area: **New Mexico**

GO

News: Recent changes

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site no list =

• 324855104093101

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 324855104093101 17S.28E.22.34242

Available data for this site

Ground-water: Field measurements



GO

Eddy County, New Mexico Hydrologic Unit Code 13060011

Latitude 32°48'55", Longitude 104°09'31" NAD27 Land-surface elevation 3,578 feet above sea level NGVD29

The depth of the well is 95.00 feet below land surface. This well is completed in the ALLUVIUM, BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

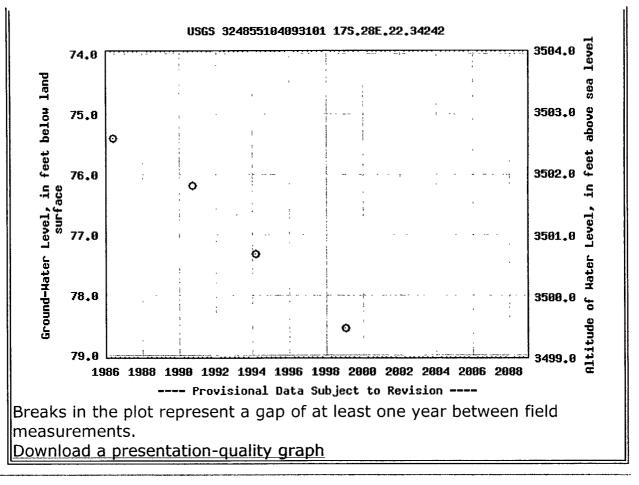
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<u>U.S. Department of the Interior</u> | <u>U.S. Geological Survey</u> **Title: Ground water for New Mexico: Water Levels URL: http://waterdata.usgs.gov/nm/nwis/gwlevels?**

USA gov

Page Contact Information: New Mexico NWISWeb Maintainer

Page Last Modified: 2008-10-17 15:01:37 EDT

1.93 1.83 nadww01

	WAT	TER LEVEL				
LOCATION NUMBER	BELOW LAND SURFACE (feet)	DATE OF MEASUREMENT	YIELD (g.p.m.)	METHOD OF LIFT	USE OF WATER	REMARKS
17.28.2.240	27.6	Dec. 1, 1948	3	W	S	Depth to water measured while pumping.
14.220	80	-	61	W	S & D	Driller: Cy Hinshaw. See analysis, Table
19.200	224.3	Dec. 2, 1948	1.2	W	S	Depth to water measured while pumping.
22.230	45.5	Dec. 1, 1948		N	N	Abandoned stock well.
17.29.22.110	79.7	Nov. 29, 1948	3 E.	W	N S	Depth to water measured while pump ing.
29.400	210	Dec. 3, 1948	1.1	W	S	do.
17.31.34.000	271+	Dec. 6, 1948	3.5	W	S	do. See analysis, Table 3.
18.21.13.310	505		10 R.	W	S & D	Formerly C.C.C. well. Cased to 30 ft.
27.440	530	_		W	S	Cased to 120 ft.
32.430	800 (?)	-	12 R.	W	S & D	Lowered cylinder 5 ft. in 1948 because water level declined. Cased to 380 ft
18.23.6.140	44 0	Jan. 12, 1950		W	S & D	
18.25.23.111	117.8	Jan. 1950	-	W	S	

See explanation at beginning of table. 1 Measured Dec. 3, 1948.

TABLE 1. RECORDS OF WELLS IN EDDY COUNTY, NEW MEXICO. (Continued)

	OWNER	DATE	TOPOGRAPHIC	ALTITUDE ABOVE SEA	DEPTH OF	DIAMETER	PRINCIPAL WATER	R-BEARING BED
LOCATION NUMBER	OR NAME	COM- PLETED	SITUATION	LEVEL (feet)	WELL (feet)	of well (inches)	CHARACTER OF MATERIAL	GEOLOGIC UNIT
17.28.2.240	Hal Bogle	_	Flat between mesas	-	_	6 (?)	Redbeds (?)	Dockum (?)
14.220	do.		Rolling	_		7	do.	do.
19.200	do.	_	do.		-	8	Redbeds, gypsum (?)	Chalk Bluff or Rustler
22.230	-	_	Flat between mesas	-		6	Redbeds (?)	Rustler or Dockum (?)
17.29.22.110		, -	Bear Grass draw	3,550	-	6	do.	Dockum (?)
29.400	Bishop (?)	~ .	Flat	-		7	do.	do.
17.31.34.000			Rolling .		_	6 (?)	Redbeds	Dockum
18.21.13.310	Andy Teel ⁹	1915	-	4,100	520	8`´	Limestone	San Andres
27.440	do.	1947	Broad valley	4,200	667	10	do.	do.
32.430	George Teel	1946	Rolling	4,300	815	6	do.	do.
18.23.6.140	Couhape Bros.	1941	S. of Rio Penasco	4,060	500	10	do.	do.
18.25.23.111	G. M. Phelps	-	Blackdom Terrace	-	-	-	Alluvium (?)	Quaternary (?)

See explanation at beginning of table.

+4326854399

T-257 P 02/02 F-230

MANUEL 1
1625 N French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District II
1000 Rio Bruzos Road, Aztec, NM 87410
District IV
1220 S St. Francis Dr., Santa Fe, NM 87505

EEQ BAIDOF II. II

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

is	EB0819251557	Rele	ase Nomiica	tion	i and Co	rrective A	ction	
n	SEB 08 1925 1355				OPERA	FOR	🛚 lnit	ial Report 🔲 Final Report
	me of Company, COG O					anicia Carrillo		
	dress 550 W. Texas, Suite		i, TX 79701			lo. 432-685-43		
1.8	cility Name GJ North Ce	ntrai Battery			Facility Typ	e Oil Well - T	ank Battery	
Sı	rface Owner		Mineral Ow	ner			Lease	No.
	30-015-02996	•	LOCAT	ייי	OF REI	TRANT		
Ür	it Letter Section Towns	ship Range			South Line	Feet from the	East/West Line	County
-		July Italige				i soi iloni ilo	Last West Line	County
	16 175	S 29E	660	Son	uth	660	East	Eddy
		Lati	tude		Longitud	e		
			NATU	RE	of Reli	EASE		
	pc of Release Produced Wa			,		Rolease 400 bb		Recovered 400 bbls
50	urce of Release water tran	sfer pump				our of Occurrenc Approx 3:00am		Hour of Discovery 7:00am
W	s Immediate Notice Given?			· *	If YES, To		00/10/00	7.00411
		🛛 Yes 🔲	No 🔲 Not Requ	ired	Left messag	ge w/ Mike Bratc	her	
	Whom? Kanicia Carnllo				··	our 06/16/08		
W	as a Watercourse Reached?	☐ Yes 🏻	No		If YES, Vo	lume Impacting t	he Watercourse.	
			No					
If	Watercourse was Impacted,	Describe Fully.*	~ 11	Ħ	1 %	3	ROM WEL	LFILE
			SPILL	• •	1 4	COPY F	ROM WILL	
					(OO		
De	scribe Cause of Problem and	Remedial Action	Token *	·				-
	chanical failure of the water t			ng in	the pumps me	otor.		
		, ,	•	_	• •			<i>'</i>
De	scribe Area Affected and Clos	nun Action Take	n *					
ΑI	fluid was contained within th	e firewall at the b	nattery. We are our	rently	removing all	fluid from the g	round and will exc	eavate and remove contaminated
	Highlander Environmental						•	1
								Ì
				. ,				
	creby certify that the informat							
	ulations all operators are requiplic health or the environment.							
shu	uld their operations have faile	ed to adequately i	nvestigate and reme	ediațe	contamination	n that pose a thre	at to ground water	r, surface water, human health
or ; fed	the environment. In addition, eral, state, or local laws and/o	NMOCD accepts r regulations.	ince of a C-141 rep	ort do	es not relieve	the operator of t	esponsibility for c	compliance with any other
		, , , , , , , , , , , , , , , , , , , ,		T		OIL CONS	SERVATION	DIVISION
C:	nature: K	· ·					,	Remediation Actions to be completed and
31/	materic.		, <u>, , , , , , , , , , , , , , , , , , </u>	\dashv	innroved by I	District Supervise	Gumbu	Final C-141 submitted with confirmation
Pri	nted Name. Kanicia Carrillo				thhiosed by i	Sistince Substation	" 5B	analyses/documentation on or before the Expiration Date.
Tir	le: Regulatory Analyst			ا ا	Innequal Date	7-10-08	Funication	Date: 9-12-08
111	;e; regulatory relatival				thbioadt tydic	· P OPUR	EXPIRATION	Date: 4-17-08
E-r	nail Address: kcarrillo@conc	horesources.com			Conditions of			Attached
Юa	te. 06/16/08	Phone: 42	2•685-4332			or before		2RP-186
	ach Additional Sheets If No	**	2,00,7-4332	— ին	nalized and subm	itted for approval to t	he Division	ZRF 100
+					mmarizing all ac	tions taken and/or to	be taken to mitigate	Notify OCD 48 hours prior to
				The	e plan must inclu	de general site charac		obtaining samples where analyses
							remediation methods, -TEX, Chlorides or an	are to be presented to OCD
				oth	er COCs as appli	cable Please use the	"Guidelines for	
	1			doc	cument may be fo	ound at the following		
				ı <u>htt</u> ı	p.//www.emnrd.s	tate nm us/ocd/docun	nents/7C_spilli pdf	

1625 N French Dr., Hobbs, NM 88240 District III

1000 Rio Brazos Road, Aztec, NM 87410

District IV

1000 Rio Brazos Road, Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Sunta Fe, NM 87505

SEB 0819834779

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Revised October 10, 2003

Form C-141

Submit 2 Copies to appropriate
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with Rule 116 on back side of form

. <	ERNAI	98347	17	Rele	ease Notifi	catio	n and Co	rrective A	ctio	1				
i		14834					OPERA?	COR		M Initia	al Rep	ort	F	inal Repor
Nan	ne of Co	mpany (OG OPERA	TING L	LC 22913	2	Contact K	anicia Carrillo	***********					
					d, TX 79701		Telephone No. 432-685-4332 Facility Type - Oil/GJ North Central Battery							
			est Coop Un	- Oll/GJ Nort	h Cent	ral Battery	<i>r</i> !							
Sur	ace Ow	ner-State			Mineral (Owner		,		Lease N	lo. Al	'I# 30-	015-02	996
		·												
Unit	Letter	Section	Township	Range	Feet from the	North.	South Line	Feet from the	East/\	West Line	Coun	ity		
	,	16	178	29E	660	So	uth	660	E	ıst		Eddy		
				Lat	titude		_ Longitud	e						
					NAT	URE	OF RELI	EASE						
	Type of Release Produced Water Volume of Release 20bbls est Volume Recovered 15bbls													
Sou	ce of Re	leaso i	Free Water Ki	nock-out	v		Date and H 7/13/08	our of Occurrence Unknown	¢	Date and 1 7/13/08		f Disco :00am		
Was	lmmedia	ite Notice (Yes [No Not R	equired	If YES, To V/M Mike	Whom?						
Ву V	√hom?	Kanicia Ca	rrillo				Date and H	our 7/14/08 3:3	30pm		1			
Was	a Water	course Reac	hed?	Yes 🗵	No		If YES, Vo	lume Impacting #	he War	rcourso.				
Ifa	Vatercou	rse was Imp	pacted, Descri	be Fully.*		~								
		·		N.1	1 # 2 %	35	COP	Y FROM V	WEL	LFILE				
				Pill					•					
Desc	ribe Cau	se of Proble	m and Remed	lial Action	Taken.*		· · · · · · · · · · · · · · · · · · ·	······································						
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up.	O SWILE!		i vii veasei, þi	C3341C OII	ACTOR Uthicitaca	MY THEME	10461 11116	obened bicasitic	101101	atte. The h	quia U	,, MIC 31	411800 11	an pronou
Dosc	ribe Area	Allected a	nd Cleanup A	ction Tak	en.*	· · · · · · · · · · · · · · · · · · ·				······································				
AHH	กบid was	contained	inside the fire	wali. A 10	0'x 100' so ft are	a was sto	raved in the a	djoining pasture	All con	taminated s	oil and	i eravel	will be	dug up
					bmit chlorides an			-Variable						
								mowledge and un						
publi	c health	or the envir	onment. The	acceptance	of a C-141 repo	n by the	NMOCD ma	d perform correct rked as "Final Re	port" d	oes not relie	eve the	Operat	or of lia	bility
shou	d their o	perations ha	eve failed to a	doquately	investigate and re	emediate	contaminatio	n that pose a thre	at to gr	ound water,	surfac	e water	r, humar	n health
			s and/or regu		ance of a C-141	oport #	es not reneve	the operator of re	eabousi	Difffy for co	mbiiti	HC WILL	n any ou	ici
										ATION	DIVI	SION	1	
Signature:														
	- ,	Kanicia C	Салтіllo			7	Approved by District Supervisor: Gum by)		
		ory Analys				1	Approval Date: 7-16-08							
			@conchoresc	ources.com	1		Conditions of Approval:					ا در دو	-7	
							SEE ATTACHED				Alla	ched (20	0.1	99
Date:		/15/08 onal Shee	is If Nocessa		ne: 432-685-433	<u>- </u>		ULATIONS				<u> </u>	<u>r - 1.</u>	3. 5

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson

Joanna Prukop Cabinet Secretary Reese Fullerton Deputy Cabinet Secretary Mark Fesmire
Division Director
Oil Conservation Division



CERTIFIED MAIL—Return Receipt Requested 7007 2680 0001 6451 2681

July 16, 2008

COG Operating LLC ATTN: Kanicia Carrillo 550 W Texas, suite 1300 Midland, TX 79701

COPY FROM WELL FILE

RE:

GJ West COOP Unit 052 30-015-02996 P-16-17S-29E Eddy County, New Mexico

Dear Operator:

This office is in receipt of your C-141 on the produced water release, at this facility.

NMOCD Rule 19.15.3.116 states in part "...The responsible person must complete **division approved corrective action** for releases which endanger public health or the environment. Releases will be addressed in accordance with a <u>remediation plan</u> submitted to and approved by the division or with an abatement plan submitted in accordance with Section 19 of 19.15.1 NMAC."

Information and tools for proper corrective action may be found in the Environmental Handbook on our web site at the following link:

http://www.emnrd.state.nm.us/ocd/documents/7C spill1.pdf

The following actions are required to be addressed in the remediation plan:

- Determine the horizontal and vertical delineation of the spill by sampling.
- Prepare a sketch of the site indicating where and at what depths the samples were taken.
- Submit laboratory results of sampling as well as the proposed remediation with the plan.

Remediation requirements may be subject to other federal, state and local laws or regulations.

Within 30 days, on or before August 19, 2008, completion of a remediation work plan should be finalized and submitted to the Division, summarizing all actions taken or to be taken to mitigate environmental damage related to the leak, spill or release, for approval.

Please be advised that NMOCD acceptance and/or approval of documents or work plans 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 and/or approval of documents or work plans do not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

If I may be of further assistance with this matter or should you have any questions, please feel free to contact me.

Sincerely,

Sherry Bonham

NMOCD District II, Artesia (505) 748-1283 ext 109

E-mail: sherry.bonham@state.nm.us

District I
1625 N. French Dr., Hobbs, NM 88240
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State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Form C-141 Revised October 10, 2003

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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30-010	5-029	96	Rele	ease Notific	catio	on and Co	orrective A	ction)			
MUB 09273 53379						OPERA	ror		☐ Initial Report ☐ Final Repo			
Name of Company COG OPERATING LLC 229/37						Contact Kanicia Carrillo						
Address 550 W. Texas, Suite 1300 Midland, TX 79701						Telephone No. 432-685-4332						
Facility Name – GJ WEST COOP Unit 52						Facility Type- Battery						
Surface Owner Mineral Owner						Lease No. API# 30-015-02996						
				LOCA	ATIC	N OF RE	LEASE					
Unit Letter	Section	Township	Range	Feet from the	-	h/South Line		West Line	County			
P	16	17S	29E	660	Sout	th 660 East			Eddy			
			La	titude		Longitud	le					-
			•	NAT	TIRI	E OF REL						
Type of Release- Water/oil						Volume of Release- 450bbls Volume Recovered- 445bbls						
Source of Release- water/on						Date and Hour of Occurrence-			Date and Hour of Discovery			
						10/6/08- 9:00am 10/6/08-2:00 pm						
Was Immedia	ate Notice C		Yes [No Not Re	equirec	If YES, To Mike Brate						
By Whom? Kanicia Carrillo						Date and Hour 10/06/08 5:10 pm						
Was a Watercourse Reached? ☐ Yes ☒ No						If YES, Volume Impacting the Watercourse.						
If a Watercou	ree was Im	nacted Descr	ibe Fully	*								
I a watercook	iist was iiiq	parau, Dusa	ioc i uny.									
]												
			:									
Describe Cau	se of Proble	and Reme	dial Actio	n Taken.*				·				
			•	ump was repa	ired.							
			*									
5 - 7 - 4	- A 65 A	1.01	· · · · · · · · · · · · · · · · · · ·									
Describe Area				ven. v firewall. All	lavot	ar was rame	aved from inc	ida th	a firaux	il Toten	Cook :	usill cond
soil sampl				inewaii. Ai	wau	ci was ichic	oved Holli His	iue ui	e liiewa	ui. Ieua .	i echi	will send
Son Sampi	es anu m	nai report.										
I hereby certif	fy that the i	nformation gi	ven above	is true and comp	lete to	the best of my	knowledge and u	nderstar	nd that pur	suant to NM	OCD ru	iles and
regulations al	l operators a	are required to coment. The	report ar	nd/or file certain re ce of a C-141 repo	cicase :	notifications ar he NIMOCO m	ad perform correct	trve acti	ons for rel	eases which	may en	danger Linkilier
should their o	perations ha	ave failed to a	dequately	investigate and n	emedia	te contaminati	on that pose a thre	ant to gr	ound water	r. surface wa	ator or ter, hur	nan health
or the environ	ment. In ac	Idition, NMO	CD accep	tance of a C-141	report (does not relieve	e the operator of r	esponsi	bility for c	ompliance w	ith any	other
federal, state,	or local law	s and/or regu	lations.									
						OIL CONSERVATION DIVISION						
Signature:			-		ļ							
Printed Name: Kanicia Carrillo						Approved by	District Superviso	or:				
Title: Regulatory Analyst						Annual Data						
THE. REGULA	wiy Analys	<u> </u>				Approval Date	<u> </u>] 1	expiration	Date:		
E-mail Addres	ss: kcarrillo	@conchoreso	ources.com	n		Conditions of	Approval:			Attached		
Date: 10204		PM	122 /40	4222				1		Attached	Ц	
Date: 10/07/0 Attach Addit			432-685-	4332	1	Accep	ted for reco	a		<u> </u>		
·	VIRE SIDE	1 TOO GOOD	y			6 - 1	NMOCD eofelosu		SEP 3	0 2009		
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Release #3 of 3 PMCD 09273 54661 2RP-345