

Santo Nino 29 Fed SWD #1

API: 30-015-28689

Eddy County, NM

Work Plan

Mike Bratcher Environmental Specialist NM Oil Conservation District – Division 2 Artesia, NM 88210

RE: Mewbourne, Santo Nino 29 Fed SWD #1 – Remediation Work Plan UL/G, Section 29, T18S R30E

Mr. Bratcher,

Mewbourne has retained Diversified Field Service, Inc. (DFSI) to address environmental issues for the site detailed herein.

The site is located southwest of Loco Hills, NM, in Eddy County. The spill occurred on June 13, 2015, and a C-141 was drafted on June 18, 2015. The spill was the result of a lightning strike, causing the battery to catch fire, which burned a hole in the corner of the containment. The fire department was immediately contacted and vacuum trucks arrived to clean up the spill as soon as the location was deemed safe. An estimated total of 1,170 bbls of produced water was released, with an estimated 1,170 recovered by vacuum trucks. All visually contaminated soil was hauled to an approved NM state disposal site.

Site Assessment and Delineation

Basin Environmental Service Technologies responded to the spill and sampled 8 points of the area. Clean samples were taken to a commercial laboratory for confirmation. Those results are attached on the site diagram.

On November 10, 2015, Diversified Environmental Services responded to the spill location to drill vertically to obtain confirmation samples in the areas of SP #5 and SP #8. These points were labeled SB #1 and SB #2. DFSI personnel encountered drill refusal at SB #1 at 75' BGS. The sample at 75' BGS was taken to a commercial laboratory for confirmation. A sample was taken at 53' at SB #2, and that sample was taken to a commercial laboratory for confirmation as well. Those results are attached. Each sample was tested for chloride levels as well as BTEX. The BTEX samples were performed using a Mini Rae Photoionization Detector (PID).

DFSI has conducted a groundwater study of the area and has determined that according to the Conoco-Phillips depth-to-groundwater map, the average depth to groundwater for this area is 101 feet below ground surface. Therefore, no eminent danger of groundwater impact or threat to life is anticipated.

Conclusion

After careful review DFSI on behalf of Mewbourne would like to propose the following:

DFSI proposes to remove the contaminated soil in the areas of SP #1, SP #2, SP #5 and SP #8 to 4' BGS; then install a 20-mil liner or impervious river rock, and backfill with native topsoil. In the area of SP #3, DFSI will excavate to 1' BGS and backfill with native topsoil. In the areas of SP #4, SP #6 and SP #7, DFSI will excavate to 2' BGS and backfill with native topsoil. The spill area on the lease road will be scraped and fresh caliche will be brought in.

The pasture area will be seeded with a BLM approved seed mix. All contaminated materials will be hauled to an approved NM state disposal.

Following the approval of the above plan, DFSI will submit all proper closure documentation to the NMOCD and BLM in accordance to the State and Federal Guidelines set forth.

Please feel free to contact me with any questions concerning this remediation plan request.

Sincerely,

Michael Burton

Michael Burton Environmental Operations Director Diversified Field Service, Inc. 206 West Snyder Hobbs, NM 88240

Office: (575)964-8394 Mobile: (575)390-5454 Fax: (575)964-8396 Email: <u>Mburton@diversifiedfsi.com</u>

cc Shelly Tucker BLM

Attachments: Site/Sample Map Sample Data Initial C-141 Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1220 S. St. Fran	icis Dr., Santa	a Fe, NM 87505	5			e, NM 875									
			Rele				orrective A	ction							
						OPERA				al Report	П	Final Repor			
							Contact: Zack Thomas								
		0 Hobbs NM		No. 575-393-590											
Facility Nat	me: Santo	Nino 29 Fed	SWD #1			Facility Typ	e: Producing Oi	il Well							
Surface Ow	ner: BLM			Mineral C)wner:	BLM			API No	. 30-015-2	8689				
						N OF REI	FASE								
Unit Letter G							th/South Line Feet from the East/V			County Eddy					
			L	atitude32.72	0294	_ Longitud	e103.992032	2							
				NAT	URE	OF REL	EASE								
Type of Rele							Release: 1170 bb			Recovered:					
Source of Re	lease: Wate	er Tank				Date and F	Iour of Occurrenc	e	Date and 6-13-15	Hour of Dis 7:00	-				
Was Immedi	ate Notice (Given?				If YES, To			0 15 15	7.00	pin				
		\boxtimes	Yes	No 🗌 Not R	equired	Jim Amos	(BLM)								
By Whom?							Iour 6-14-15	11:30							
Was a Water	course Read	ched?	Yes 🛛	No		If YES, Volume Impacting the Watercourse.									
If a Waterco	urse was Im	pacted, Descr	ibe Fully.*	ç.											
Cause of leal Fire departm	c: The tank ent was imr		truck by li tacted and	ghtning. Upon bo vacuum trucks ar			y caught fire and ll as soon as the lo				the con	tainment.			
any visually	contaminate		ten to an a	pproved NMOCI			hind location. Vac remediation will l								
regulations a public health should their or the enviro	ll operators or the enviroperations h nment. In a	are required t ronment. The nave failed to a	o report ar acceptanc adequately OCD accep	nd/or file certain i ce of a C-141 repo investigate and r	elease n ort by th emediat	otifications a e NMOCD m e contaminati	knowledge and u nd perform correc arked as "Final R ion that pose a thr ie the operator of	ctive acti eport" de reat to gr	ons for rele oes not rele ound water	eases which ieve the ope r, surface w	n may en crator of ater, hu	ndanger f liability man health			
	1	1					OIL CON	SERV	ATION	DIVISI	ON				
Signature:	5	Thomas	as	1											
Printed Nam	e: Zack Tho	omas				Approved by	Environmental S	pecialist							
Title: Enviro	nmental Re	р.				Approval Da	te:	ŀ	Expiration	Date:					
E-mail Addr	ess: zthoma	s@mewbourn	e.com			Conditions of Approval:				Attached	1 🗆				
Date: 6-18-1	5			Phone: 575-602-	2188										

Initial Sampling Data

3 7	193	an inter	Pe	oint 1	-	1.18		1200			12.3				124 M	5. GB	1.2.2	11 Mar		
Start and	Cl-	GRO	DRO	В	T	our Williams The	x		EX ME	CI-	GRO	DRO	oint 2 B	T	E	х вт	EX	and the	空傳	ALC: N
Surface		<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3	Surface	and so the second	10000	And I American Street	Constant of	1210	- Barris	1.97 2.	Solar Carlos		223	and the second
3' 4'	14730 15293	7 23	11	1	- Strat	3.52		Par -	5'	9440		100		See.	16	Store		and the second	Solt	
5'	11182	AN AN	12 192-1		1.1	E and	1120	1.500	6' 7'	16854 13231	and the second		Carl	1	-	in the	No.	1	No.	Sector
6'	8832	2 Hall	Star 1	33					8'	8973	Shin.	and a	21.1	P			2.94	3.27	15.0	
7' 8'	4469 2229	144	Se.	100	E	1	1200	STR.	9'	5113	Sec.	Title.	1	29	32	in the second	22 (24)	S.M.		24
8 9'	463	1	24	1.18	1913	S.A.	2.20	25	10'	2279	-	121-2	No.	12:47	-		Ser.			1
10'	468	1.1.50	1225	1.5	N. Car	2.2.2	Sai	12.	11' 12'	281 240	<10	(10	-0.05	<0.0F	<0.0F	<0.15 <0	3		100	2.2
11'	240	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3	Sin Star	240	~10	~10	NU.U5	<0.05	<0.05	~0.15 ~0			-16	13.5
1150	Carlin C	1:20	7:20	Poir	nt 3			5.27	Car in SP	ale.	123			the second	Poi	nt 4	1			1
T Contraction	Cl-	PID	GRO	DRO	В	1.78	E		BTEX	ale.	1	CI-	PID	GRO	DRO	LA TOMES IS	т	E)	(В	TEX
Surface 1'	272 2760		<10 <10	<10 170	<0.05	<0.05	<0.05 <0.05	and the second second	<0.3 <0.3	S	urface	9600	1279	<10	<10	<0.05 <	<0.05 <	0.05 <0.	.15 <	0.3
1.5'	<16	1.1	<10	<10	Carl Street	<0.05	and the second	And Parks	<0.3	-	2'	1300	1	<10	22.4			0.05 <0.		0.3
	2.25	a thi	-	oint 5	Sec.	The	12.3	A SPACE	and the second second	3.0	2.5'	<16	1.6	<10	<10	<0.05 <	<0.05 <	0.05 <0.	.15 <).3
STANT?	CI-	GRO	DRO	B	т	E	x	BTEX	2 and a series	5.5	1. 1.	-30 20	1	23	Poi		13.5	2.Mg	-	
Surface	2440		P. Later I.	<0.05								Cl-	-	A REPORT OF	DRO			E	ALC: NO	EX
9'	6701	1000	1	13-5						112	Surface	e 960 24(2	1 M. 12	<0.05 <0 <0.05 <0	1000	0.05 <0		A
10' 11'	11050 12147	15		1.80	State .					1		24	E	10	10 4	0.05 <0	.05 <1	J. US <1), 12 <l< td=""><td></td></l<>	
12'	15556	and a	14							1000		1000	1.1.4	State of the local division of the local div	Point 7		Sale.	Serve.	223	12' .
13'	14405	All.	12:13						al .	A.C.	C	CI-	PID		DRO	a state of the	and in case		1.2. 1.2.	TEX
14'	13720	1000	a.s.	25	10		4	1 7		7	Surface 2'	8000 2160	arra	<10	<10 		ALL PROPERTY.	<0.05 <0 <0.05 <0	and the second second	0.3 0.3
15' 16'	15030 3978	Carlos -	See.		1		-			22	2.5'	<16	1.3	<10	<10	<0.05	CONTRACTOR OF	Contraction of the local division of the loc	A CHANGE STREET	0.3
10	3610		- The	A REAL PROPERTY AND	122	1	(-	D C		14:50	1	in the	1.2.3		"Let	13kg	as a	ALL A	# 1 A
18'	3737)		6	0	100	and the	100	33	12.00		12	State -	To the se	Eq.
19'	5642	10.3	199	-			/				A.S.	150	5-2	1	1	Mis 28	1622		Sec.	12 2
20' 21'	5330 6558		100	1.25		1	/		1 2			1.10	- Tran	12	14:39	N. S.	Lage ?	and a second	Call Call	ALC: NO
		197	1	125	1		(15.31	0	12		2		-	A	4. 4. M.	We for		1920	and a
15-25	ta 16		and the second	-/		/			4				100		1	-	Same	Call.	10.2	
SEE.	1	Carles -	. 22.5		(1	(-			3	/		1.13.00	1. 1	-	A.L.	1	and the
Margar	Start.	Con al	100		8	5		-	11	12 Star		1	-			Point	8	Y		
The sea	Ser al	Ear	Con the	(1		1	a state	To The	See.	397	1	1 and	CI-	GRO	DRO E		E	x	BTEX
1 State	1000	1	は東京		Sal.	1		7	Sec. Sec.	Calo .	232		face 2	100.00	<10	329 <0.	.05 <0.	05 <0.0	05 <0.1	5 <0.3
2423		REE	SCA.			5			A Statest	122	- alter	ALC: NO.		4227 1934	and.	1. 200	a the	1	Mr.S.	2 23
C.L.C.		34	1.27	SALE	1292	16.0		1.9	STR. TO		The second	10000	A PERSONAL PROPERTY AND	1934 1491	N.C.	Seren a	194	E. C	Sec.	- 14
		Ler	gend			K	V	034	Carlos a	100-	i R	2	12'	1685	17 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1.4	2 auto		
	SAMP		-			A. S. S.		ET3	Marsh .	. 30	P. Y.	A STATE	and the second	1966	The	Sar	Salah)	30	A CAN	1
1	ELEC					1		17.5	and the second	- 2	dial.	and the second second		1890 1340	<10	<10 <0.	.05 <0.	05 <0.0	15 <0.1	: <0.2
1.00	CONT					3		15	125	20	S. Carl		and the long	4454	2.50	122				R ANY A
24	OVER				LINE	and the second se		the second se	ner: BLM		a state	and the second	L7'	6198	1751			il and	12.25	
52	SURF								1 Ft	and a	50%	and the second second	A. 18 31 1.4	6726	223	grand 1	in.	50		1000
16	STAIN					1000		1.3.40	DATA		Traine	State of Lot	Acres in the local division in the	5265 3595		-0-	199	12		194
THE REAL PROPERTY.	10.1	7.10	al tar L	Print 10	the set		CI-F	IELI	DATA	1.10	124	State of the second	1000	4329	127	Star D		TAR		1
			•					1												
Basi	n E	nv	Iro	nn	10				MEWB							ergrou				
S	-				10	*		SA	NTO	NI	NO	29	9			spatial leed to				d
S			3			2		_	_		_	_				ieeu iu	ne li		enne	u.
*	Effe	ctive	Sol	ution	S			C C.	DERA	പാ) VV L	ש #	T	GP	S Cent	er Stain:	32.719	856 -10	03.9921	04
1						5			ULG SE	Стт		20		0		50	100		N A	
Ch					oi	e.			ULG 36 T-18-9					H	HE	-	Fe	eet	w	E
Ser	1Ce	T	ch	no	10.2			т	EDDY CC							/30/15 KL e: 7/17/15				1 -
		-						1	ייייריי		11,1	N IVI				. Weinhe			S	

Diversified Environmental Services

11/9/2015

SP Date:

Company Name:

Mewbourne

Santo Nino 29 Federal SWD #1 Rel Date: Location Name: SB1 PID SB2 CHL PID SP3 CHL SP4 CHL SP5 CHL PID CHL PID PID 25' 20' 1,544 2,376 21' 2,238 30' 1,441 35' 22' 2,363 1,669 25' 2,092 40' 1,505 45' 30' 3,869 431 50' 438 35' 1,176 53' 40' 944 292 45' 1,255 50' 991 53' 240 55' 724 60' 551 65' 968 826 70' 411 75' 75' 320

Lab Confirmation Sample
Field Sampling
Needs Delineation and confirmation samples

Page 1



November 11, 2015

ZACK THOMAS MEWBOURNE OIL COMPANY P. O. BOX 5270 HOBBS, NM 88240

RE: SANTO NINO 29 FED SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 11/10/15 15:20.

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 accreditated 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)

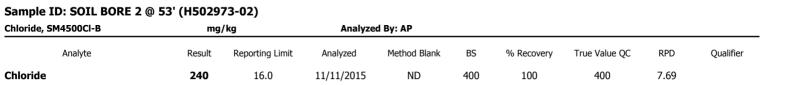
Accreditation applies to public drinking water matrices.

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. Keine

Celey D. Keene Lab Director/Quality Manager





Notes and Definitions

- 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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Loratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



November 12, 2015

ZACK THOMAS MEWBOURNE OIL COMPANY P. O. BOX 5270 HOBBS, NM 88240

RE: SANTO NINO 29 FED SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 11/11/15 15:57.

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 accreditated 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. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

MEWBOURNE OIL COMPANY ZACK THOMAS P. O. BOX 5270 HOBBS NM, 88240 Fax To: (575) 937-6252

Received:	11/11/2015	Sampling Date:	11/09/2015
Reported:	11/12/2015	Sampling Type:	Soil
Project Name:	SANTO NINO 29 FED SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: SOIL BORE 1 @ 75' (H502994-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	11/12/2015	ND	416	104	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatscever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including those of use, or loss of profits incurred by client, its subsidiaries, affiliates or successor arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

- 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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Loratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager