

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised August 1, 2011

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO.
30-015-40749

5. Indicate Type of Lease

STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

San Lorenzo 9 MD Fee

8. Well Number 1H

9. OGRID Number

14744

10. Pool name or Wildcat

San Lorenzo; Bone Spring 53600

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Mewbourne Oil Company

3. Address of Operator

PO Box 5270, Hobbs, New Mexico

4. Well Location

Unit Letter M : 150 feet from the South line and 660 feet from the West line

Section 9 Township 25S Range 28E NMPM Eddy County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

3005' GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☒

PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ P AND A ☐

CASING/CEMENT JOB ☐

OTHER: ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Please see attached.

Including name change to San Lorenzo "9" NC Fee #1H.

If you have any questions, please call Johnny Burnett or Micky Young.

Need property codes

RECEIVED

JAN 18 2013

NMOCD ARTESIA

Spud Date: 01/04/13

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Jackie Lathan TITLE Hobbs Regulatory DATE 01/18/13

Type or print name Jackie Lathan E-mail address: jlathan@mewbourne.com PHONE: 575-393-5905

For State Use Only

APPROVED BY: T. C. Shapard TITLE Geologist DATE 1/18/2013

Conditions of Approval (if any):

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Chama Rd., Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 E. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015- A0749	Pool Code 53600	Pool Name SAN LORENZO Bone Spring
Property Code 39A71	Property Name SAN LORENZO 9 MD NC Fee	Well Number 1H
OGRID No. 14744	Operator Name MEWBOURNE OIL COMPANY	Elevation 3005.0'

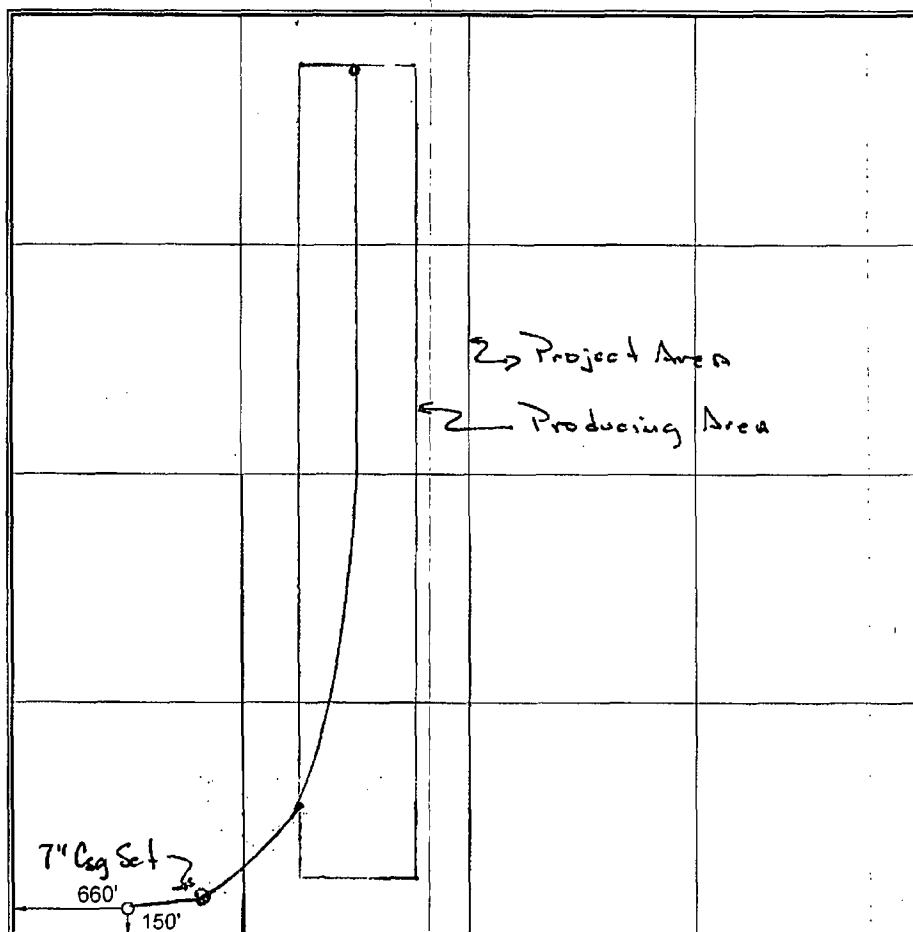
Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	9	25 S	28 E		150	SOUTH	660	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	9	25 S	28 E		330	North	1980	West	Eddy
Dedicated Acres 160	Joint or Infill	Consolidated Code	Order No.						

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature *N.M. Young* Date 1/18/13
Print Name N.M. Young
E-mail Address _____

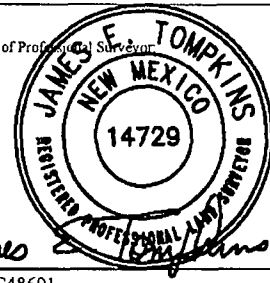
SURVEYORS CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

SEPTEMBER 11, 2012

Date of Survey

Signature and Seal of Professional Surveyor



Job No. WTC48691
JAMES E. TOMPKINS 14729
Certificate Number

Mewbourne Oil Company
P.O. Box 5270
Hobbs, NM 88241

MOC was drilling the San Lorenzo "9" MD Fee #1H when directional equipment failure was encountered. Plans were to drill from unit letter M to unit letter D in a northern direction. While drilling, MOC was unable to keep the direction heading north. After reaching the end of the curve, the equipment showed 88° (2° north of due east). After discussion between MOC and NMOCD-Artesia (Randy Dade and T.C. Shepard), MOC requests changing the proration and producing area to unit letters N to C.

Enclosed, please find the field gyro, current surveys, new C-102 & a new directional plan.

MOC would also like to request a name change to San Lorenzo "9" NC Fee #1H.



Company: Mewbourne
 Lease/Well: San Lorenzo 9 MD FEE/#1H
 Location: S9 T25s R28e
 Rig Name: Patterson 75
 State/County: New Mexico/Eddy
 Latitude: 32.14, Longitude: -104.10
 GRID North is 0.12 Degrees East of True North
 VS-Azi: 359.49 Degrees



FIELD COPY ONLY (NOT DEFINITIVE)

RKB : 22 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: ...o 9 md fee #1h gyro survey.ut
 Minimum Curvature Method
 Report Date/Time: 1/15/2013 / 04:31

Vaughn Energy Services
 12006 East Hwy. 158
 Gardendale, TX 79758
 Dustin Wedel
 (432) 563-5444

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.29	28.62	100.00	0.23	0.12	0.22	0.26	28.62	0.29
200.00	0.45	351.09	200.00	0.84	0.19	0.84	0.86	12.49	0.28
300.00	0.58	347.18	299.99	1.71	0.01	1.71	1.71	0.45	0.13
400.00	0.67	356.97	399.99	2.79	-0.13	2.79	2.79	357.35	0.14
500.00	0.44	18.07	499.98	3.75	-0.04	3.75	3.75	359.38	0.31
600.00	0.35	336.73	599.98	4.39	-0.04	4.39	4.39	359.47	0.29
700.00	0.65	74.50	699.98	4.82	0.39	4.82	4.84	4.59	0.78
800.00	0.95	116.94	799.97	4.60	1.67	4.58	4.90	20.00	0.64
900.00	0.89	121.42	899.96	3.82	3.08	3.79	4.90	38.89	0.09
1000.00	0.76	117.61	999.95	3.11	4.33	3.07	5.33	54.34	0.15
1100.00	0.73	118.34	1099.94	2.50	5.47	2.45	6.02	65.46	0.03
1200.00	0.55	129.03	1199.93	1.89	6.41	1.84	6.68	73.53	0.21
1300.00	0.87	132.05	1299.92	1.08	7.34	1.02	7.42	81.62	0.32
1400.00	0.57	154.74	1399.92	0.12	8.12	0.05	8.12	89.13	0.41
1500.00	0.63	191.28	1499.91	-0.87	8.22	-0.94	8.27	96.05	0.38
1600.00	0.24	216.70	1599.91	-1.58	7.99	-1.65	8.14	101.21	0.43
1700.00	0.51	198.38	1699.91	-2.18	7.72	-2.25	8.02	105.75	0.29
1800.00	1.60	79.22	1799.89	-2.34	8.95	-2.42	9.25	104.67	1.90
1900.00	4.13	90.22	1899.76	-2.10	13.92	-2.22	14.07	98.56	2.58
2000.00	6.01	86.47	1999.37	-1.79	22.74	-1.99	22.81	94.49	1.91
2100.00	5.81	90.49	2098.83	-1.51	33.02	-1.80	33.06	92.62	0.46
2200.00	5.36	92.17	2198.36	-1.73	42.75	-2.11	42.78	92.32	0.48
2300.00	4.90	94.94	2297.96	-2.27	51.67	-2.73	51.72	92.52	0.52
2400.00	3.84	95.06	2397.67	-2.94	59.27	-3.47	59.34	92.84	1.06
2500.00	2.59	93.36	2497.51	-3.37	64.86	-3.94	64.95	92.97	1.26
2600.00	2.04	92.71	2597.43	-3.58	68.89	-4.20	68.98	92.98	0.55
2700.00	1.79	99.60	2697.37	-3.93	72.20	-4.57	72.31	93.11	0.34
2800.00	1.55	92.89	2797.33	-4.26	75.09	-4.92	75.21	93.24	0.31
2900.00	1.70	96.68	2897.29	-4.50	77.92	-5.19	78.05	93.30	0.18
3000.00	1.49	101.06	2997.25	-4.92	80.67	-5.64	80.82	93.49	0.25
3100.00	1.05	109.88	3097.22	-5.48	82.80	-6.21	82.98	93.79	0.47
3200.00	1.39	106.29	3197.20	-6.13	84.83	-6.89	85.05	94.13	0.35
3300.00	1.13	129.78	3297.18	-7.10	86.76	-7.87	87.05	94.68	0.57
3400.00	0.21	147.86	3397.17	-7.88	87.61	-8.66	87.96	95.14	0.94

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
3500.00	0.45	187.98	3497.17	-8.42	87.65	-9.20	88.05	95.49	0.32
3600.00	0.56	159.13	3597.16	-9.27	87.77	-10.05	88.26	96.03	0.28
3700.00	0.36	218.25	3697.16	-9.98	87.75	-10.76	88.32	96.49	0.49
3800.00	0.53	153.00	3797.16	-10.64	87.76	-11.42	88.41	96.91	0.50
3900.00	0.62	190.39	3897.15	-11.59	87.88	-12.37	88.64	97.51	0.38
4000.00	0.53	251.46	3997.15	-12.26	87.34	-13.04	88.20	97.99	0.59
4100.00	0.40	229.67	4097.15	-12.64	86.63	-13.41	87.55	98.30	0.22
4200.00	0.50	239.89	4197.14	-13.09	85.98	-13.85	86.97	98.65	0.12
4300.00	0.50	249.97	4297.14	-13.46	85.20	-14.21	86.25	98.98	0.09
4400.00	0.44	224.03	4397.14	-13.88	84.52	-14.63	85.65	99.33	0.22
4500.00	0.51	216.15	4497.13	-14.52	83.99	-15.27	85.23	99.81	0.10
4600.00	0.48	209.79	4597.13	-15.24	83.52	-15.99	84.90	100.34	0.06
4700.00	0.94	210.65	4697.12	-16.31	82.89	-17.05	84.48	101.13	0.46
4800.00	0.90	191.82	4797.11	-17.78	82.31	-18.52	84.21	102.19	0.30
4900.00	0.96	207.99	4897.10	-19.29	81.76	-20.02	84.00	103.28	0.27
5000.00	1.03	207.35	4997.08	-20.83	80.95	-21.55	83.59	104.43	0.07
5100.00	1.36	207.43	5097.06	-22.67	80.00	-23.39	83.15	105.82	0.33
5200.00	1.20	203.72	5197.03	-24.68	79.03	-25.38	82.80	107.34	0.18
5300.00	1.27	216.26	5297.01	-26.53	77.96	-27.22	82.35	108.79	0.28
5400.00	1.18	212.92	5396.99	-28.29	76.74	-28.97	81.79	110.23	0.12
5500.00	1.42	227.30	5496.96	-29.99	75.27	-30.66	81.03	111.72	0.41
5600.00	1.01	243.76	5596.94	-31.22	73.57	-31.87	79.92	113.00	0.53
5700.00	1.06	239.14	5696.92	-32.08	71.98	-32.72	78.81	114.02	0.09
5800.00	1.24	229.18	5796.90	-33.27	70.37	-33.89	77.84	115.30	0.27
5900.00	1.51	194.21	5896.88	-35.25	69.23	-35.86	77.69	116.98	0.86
6000.00	1.60	208.85	5996.84	-37.75	68.23	-38.35	77.98	118.95	0.41
6100.00	1.44	211.39	6096.81	-40.04	66.91	-40.64	77.97	120.90	0.17
6200.00	1.76	228.54	6196.77	-42.13	65.10	-42.71	77.54	122.91	0.57
6300.00	2.03	226.76	6296.71	-44.36	62.66	-44.92	76.77	125.30	0.27
6400.00	2.11	216.70	6396.65	-47.05	60.27	-47.58	76.46	127.98	0.37
6500.00	2.11	224.22	6496.58	-49.85	57.88	-50.36	76.39	130.73	0.28
6600.00	2.21	232.30	6596.51	-52.35	55.07	-52.84	75.98	133.55	0.32
6700.00	2.12	210.73	6696.44	-55.11	52.61	-55.58	76.19	136.33	0.81
6800.00	2.33	192.65	6796.36	-58.69	51.22	-59.14	77.89	138.89	0.73
6900.00	2.66	206.31	6896.27	-62.75	49.74	-63.20	80.08	141.60	0.68
7000.00	3.08	204.60	6996.14	-67.28	47.59	-67.70	82.41	144.72	0.42
7100.00	2.57	194.54	7096.02	-71.88	45.92	-72.29	85.30	147.43	0.71
7200.00	2.21	216.21	7195.94	-75.60	44.22	-76.00	87.58	149.68	0.96
7300.00	3.05	207.19	7295.83	-79.53	41.86	-79.90	89.87	152.24	0.94
7400.00	2.09	211.19	7395.73	-83.46	39.70	-83.81	92.42	154.56	0.98
7465.00	1.80	215.50	7460.69	-85.30	38.49	-85.64	93.58	155.71	0.51

HORIZONTAL DISPLACEMENT IS
93.58 FEET AT 155.71 DEGREES



SURVEY CALCULATION PROGRAM

TARGET DETAILS

OPERATOR: Mewbourne Oil WELL: San Lorenzo 9 MD #1H LOCATION: Eddy County JOB NUMBER: WT-13038										Supervisors: Tyler Wilson DD Roman Duran DD Todd Davies MWD Jason Briggs MWD George Berryman Co. Rep Joey Dodson Co. Rep Patterson 75 Rig				TARGET N-S Directional TARGET E-W TARGET RADIUS TARGET DISPLACEMENT TARGET CLOSURE TARGET KBTVD Horizontal 8094.10 DIP AZ 359.19 DIP DEG UP+/DN- -0.13 TARGET INCLINATION 89.87 Magnetic Declination 7.54			
Curr<		Prev<		DIFF		S/Ahead		PROJ									
						0.000		36		0.30							
Slide/Seen		A/BR		BRN		JNT		D/S									
0.00		25		0.000		0.00		7.19		0.0		#DIV/0!					
EOC		MD		TVD		Vertical Section		N-S		E-W		Sec/Plane		359.49			
		8370		8095.00		386.80		387.0		20.0							
SVY	NUM	MD	INC	TRUE	COURSE	LENGTH	TVD	SECT	N-S	E-W	DLS/	ABOVE(+)	RIGHT(+)	DIR	CLOSURE		
				AZM	LENGTH						100	BELOW(-)	LEFT(-)	(DEG AZ)	(FEET)		
															BUILD		
															RATE/		
															%/100'		
															WALK		
															RATE/		
															%/100'		
TIE	7465	1.80	215.50	7465.00	7460.69	-85.64	-85.30	38.49	0.51	633.22	37.73	155.71	93.58	#DIV/0!	#DIV/0!		
1	7559	1.50	259.90	94.00	7554.65	-87.04	-86.72	36.42	1.36	539.25	35.65	157.22	94.06	-0.32	1.33		
2	7590	0.60	334.40	31.00	7585.65	-86.96	-86.64	35.95	4.71	508.25	35.18	157.46	93.81	-2.90	4.10		
3	7622	4.20	53.30	32.00	7617.62	-86.12	-85.79	36.82	12.90	476.28	36.05	156.77	93.36	11.25	-9.53		
4	7654	8.40	54.50	32.00	7649.42	-84.08	-83.73	39.66	13.13	444.49	38.92	154.65	92.65	13.13	0.41		
5	7686	12.00	44.80	32.00	7680.91	-80.40	-80.01	43.91	12.43	413.01	43.20	151.24	91.27	11.25	-5.36		
6	7718	15.10	50.50	32.00	7712.02	-75.44	-75.00	49.47	10.54	381.91	48.80	146.59	89.85	9.69	4.17		
7	7749	19.00	55.00	31.00	7741.65	-70.04	-69.53	56.73	13.27	352.29	56.10	140.79	89.74	12.58	4.26		
8	7782	22.90	58.10	33.00	7772.46	-63.65	-63.06	66.58	12.28	321.49	66.02	133.44	91.70	11.82	3.36		
9	7813	26.80	61.50	31.00	7800.59	-57.22	-56.53	77.85	13.39	293.38	77.34	125.99	96.21	12.58	4.61		
10	7845	29.70	60.50	32.00	7828.78	-49.99	-49.19	91.09	9.18	265.21	90.65	118.37	103.52	9.06	-1.48		
11	7877	32.50	63.80	32.00	7856.18	-42.42	-41.48	105.71	10.24	237.83	105.33	111.43	113.56	8.75	5.33		
12	7909	35.90	67.10	32.00	7882.64	-35.12	-34.04	122.07	12.10	211.38	121.76	105.58	126.73	10.62	5.80		
13	7941	38.50	65.30	32.00	7908.13	-27.46	-26.22	139.77	8.81	185.91	139.53	100.63	142.20	8.13	-12.23		
14	7973	41.60	66.40	32.00	7932.62	-19.21	-17.80	158.55	9.94	161.43	158.39	96.41	159.55	9.69	7.95		
15	8005	43.10	67.00	32.00	7956.27	-10.87	-9.28	178.35	4.85	137.80	178.26	92.98	178.59	4.69	4.54		
16	8037	46.00	70.90	32.00	7979.08	-3.01	-1.24	199.30	12.46	115.01	199.28	90.36	199.30	9.06	30.73		
17	8069	49.10	74.80	32.00	8000.68	3.73	5.70	221.86	13.21	93.43	221.90	88.53	221.93	9.69	32.33		
18	8101	53.20	76.80	32.00	8020.75	9.61	11.80	246.01	13.70	73.37	246.11	87.25	246.29	12.81	17.50		
19	8132	57.10	79.00	31.00	8038.46	14.71	17.12	270.88	13.86	55.67	271.02	86.38	271.42	12.58	20.94		
20	8164	61.30	80.40	32.00	8054.84	19.37	22.03	297.92	13.65	39.30	298.10	85.77	298.73	13.13	13.51		
21	8196	65.30	82.60	32.00	8069.22	23.34	26.24	326.19	13.93	24.93	326.41	85.40	327.24	12.50	22.08		
22	8228	69.70	84.10	32.00	8081.46	26.49	29.66	355.54	14.42	12.69	355.79	85.23	356.78	13.75	15.57		
23	8260	74.00	85.90	32.00	8091.43	28.87	32.30	385.83	14.46	2.73	386.10	85.21	387.18	13.44	19.22		
24	8289	78.00	87.20	29.00	8098.44	30.31	33.99	413.91	14.46	-4.28	414.20	85.31	415.30	13.79	15.64		
EOC	8341	86.00	88.00	52.00	8105.67	32.00	36.14	465.32	15.46	-11.51	465.62	85.56	466.72	15.38	5.48		

Mewbourne Oil Co

Eddy County, New Mexico (Nad 83)

Sec 9, T25S, R28E

San Lorenzo 9 NC #1H

Wellbore #1

Plan: Design #5 - NC Unit - 10° Turn

DDC Curve Report

18 January, 2013



DDC Curve Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well San Lorenzo 9 NC #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3025.0usft (Patterson-UTI)
Project:	Eddy County, New Mexico (Nad 83)	MD Reference:	WELL @ 3025.0usft (Patterson-UTI)
Site:	Sec 9, T25S, R28E	North Reference:	Grid
Well:	San Lorenzo 9 NC #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #5 - NC Unit - 10° Turn		

Project:	Eddy County, New Mexico (Nad 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	Sec 9, T25S, R28E		
Site Position:		Northing:	413,937.30 usft
From:	Map	Easting:	613,914.10 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 8' 15.991 N
		Longitude:	104° 5' 55.879 W
		Grid Convergence:	0.12 °

Well:	San Lorenzo 9 NC #1H		
Well Position	+N/-S	0.0 usft	Northing: 413,937.30 usft
	+E/-W	0.0 usft	Easting: 613,914.10 usft
Position Uncertainty	0.0 usft		Latitude: 32° 8' 15.991 N
			Longitude: 104° 5' 55.879 W
		Wellhead Elevation:	Ground Level: 3,005.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2010	10/4/2012	(°) 7.66	(°) 59.98	(nT) 48,378

Design:	Design #5 - NC Unit - 10° Turn			
Audit Notes:				
Version:		Phase:	PLAN	Tie On Depth: 8,260.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	14.87

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
8,260.0	74.00	85.90	8,091.4	32.3	385.8	0.00	0.00	0.00	0.00	
8,312.0	81.50	86.00	8,102.5	35.9	436.5	14.42	14.42	0.19	0.76	
8,391.0	89.40	86.00	8,108.7	41.4	515.0	10.00	10.00	0.00	0.00	
9,219.4	89.87	3.16	8,115.2	581.3	1,047.1	10.00	0.06	-10.00	-90.06	
13,472.1	89.87	3.16	8,125.0	4,827.5	1,281.6	0.00	0.00	0.00	0.00	BHL San Lorenzo 9

DDC Curve Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well San Lorenzo 9 NC #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3025.0usft (Patterson-UTI)
Project:	Eddy County, New Mexico (Nad 83)	MD Reference:	WELL @ 3025.0usft (Patterson-UTI)
Site:	Sec 9, T25S, R28E	North Reference:	Grid
Well:	San Lorenzo 9 NC #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #5 - NC Unit - 10' Turn		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Tie-In to MWD Surveys									
8,260.0	74.00	85.90	8,091.4	32.3	385.8	130.2	14.46	13.46	5.53
8,280.0	76.88	85.94	8,096.5	33.7	405.2	136.5	14.42	14.42	0.20
8,310.0	81.21	86.00	8,102.2	35.7	434.5	146.0	14.42	14.42	0.19
Build @ 10°/100'									
8,312.0	81.50	86.00	8,102.5	35.9	436.5	146.7	14.42	14.42	0.19
8,340.0	84.30	86.00	8,105.9	37.8	464.2	155.7	10.00	10.00	0.00
8,370.0	87.30	86.00	8,108.1	39.9	494.1	165.3	10.00	10.00	0.00
Begin Turn @ 10°/100'									
8,391.0	89.40	86.00	8,108.7	41.4	515.0	172.1	10.00	10.00	0.00
8,400.0	89.40	85.10	8,108.8	42.1	524.0	175.1	10.00	-0.01	-10.00
8,430.0	89.40	82.10	8,109.1	45.4	553.8	186.0	10.00	-0.01	-10.00
8,460.0	89.40	79.10	8,109.4	50.3	583.4	198.3	10.00	0.00	-10.00
8,490.0	89.40	76.10	8,109.8	56.8	612.7	212.1	10.00	0.01	-10.00
8,520.0	89.40	73.10	8,110.1	64.7	641.6	227.2	10.00	0.01	-10.00
Cross 1320' Line									
8,542.2	89.41	70.88	8,110.3	71.6	662.7	239.2	10.00	0.02	-10.00
8,550.0	89.41	70.10	8,110.4	74.2	670.0	243.6	10.00	0.02	-10.00
8,580.0	89.41	67.10	8,110.7	85.1	698.0	261.4	10.00	0.02	-10.00
8,610.0	89.42	64.10	8,111.0	97.5	725.3	280.4	10.00	0.03	-10.00
8,640.0	89.43	61.10	8,111.3	111.3	751.9	300.5	10.00	0.03	-10.00
8,670.0	89.44	58.10	8,111.6	126.5	777.8	321.8	10.00	0.04	-10.00
8,700.0	89.46	55.10	8,111.9	143.0	802.8	344.2	10.00	0.04	-10.00
8,730.0	89.47	52.10	8,112.2	160.8	827.0	367.6	10.00	0.05	-10.00
8,760.0	89.49	49.10	8,112.4	179.9	850.1	392.0	10.00	0.05	-10.00
8,790.0	89.50	46.10	8,112.7	200.1	872.3	417.2	10.00	0.06	-10.00
8,820.0	89.52	43.10	8,113.0	221.4	893.4	443.2	10.00	0.06	-10.00
8,850.0	89.54	40.10	8,113.2	243.9	913.3	470.0	10.00	0.07	-10.00
8,880.0	89.56	37.10	8,113.4	267.3	932.0	497.5	10.00	0.07	-10.00
8,910.0	89.58	34.10	8,113.7	291.7	949.4	525.6	10.00	0.07	-10.00
8,940.0	89.61	31.10	8,113.9	317.0	965.6	554.1	10.00	0.08	-10.00
8,970.0	89.63	28.10	8,114.1	343.1	980.4	583.1	10.00	0.08	-10.00
Cross 330' Hardline / 1650' FWL									
8,991.0	89.65	26.00	8,114.2	361.8	990.0	603.7	10.00	0.08	-10.00
9,000.0	89.66	25.10	8,114.3	369.9	993.9	612.5	10.00	0.09	-10.00
9,030.0	89.68	22.10	8,114.4	397.4	1,005.9	642.2	10.00	0.09	-10.00
9,060.0	89.71	19.10	8,114.6	425.4	1,016.4	672.0	10.00	0.09	-10.00
9,090.0	89.74	16.10	8,114.7	454.0	1,025.5	702.0	10.00	0.09	-10.00
9,120.0	89.77	13.10	8,114.9	483.1	1,033.0	732.0	10.00	0.10	-10.00
9,150.0	89.80	10.10	8,115.0	512.5	1,039.1	761.9	10.00	0.10	-10.00
9,180.0	89.83	7.10	8,115.1	542.1	1,043.6	791.7	10.00	0.10	-10.00
9,210.0	89.86	4.10	8,115.2	572.0	1,046.5	821.3	10.00	0.10	-10.00
End of Turn @ 3.16° Azm.									
9,219.4	89.87	3.16	8,115.2	581.3	1,047.1	830.5	10.00	0.10	-10.00

DDC
Curve Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well San Lorenzo 9 NC #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3025.0usft (Patterson-UTI)
Project:	Eddy County, New Mexico (Nad 83)	MD Reference:	WELL @ 3025.0usft (Patterson-UTI)
Site:	Sec 9, T25S, R28E	North Reference:	Grid
Well:	San Lorenzo 9 NC #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #5 - NC Unit - 10° Turn		

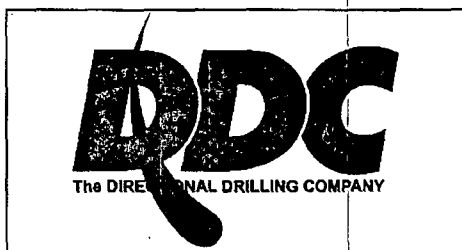
Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
BHL San Lorenzo 9 N	0.00	0.00	8,125.0	4,827.5	1,281.6	418,764.85	615,195.66	32° 9' 3.737 N	104° 5' 40.849 W
- plan misses target center by 4252.7usft at 9219.4usft MD (8115.2 TVD, 581.3 N, 1047.1 E)									
- Point									

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
8,260.0	8,091.4	32.3	385.8	Tie-In to MWD Surveys
8,312.0	8,102.5	35.9	436.5	Build @ 10°/100'
8,391.0	8,108.7	41.4	515.0	Begin Turn @ 10°/100'
8,542.2	8,110.3	71.6	662.7	Cross 1320' Line
8,991.0	8,114.2	361.8	990.0	Cross 330' Hardline / 1650' FWL
9,219.4	8,115.2	581.3	1,047.1	End of Turn @ 3.16° Azm.
13,472.1	8,125.0	4,827.5	1,281.6	PBHL @ 13472' MD / 8125' TVD

Company Name: Mewbourne Oil Co
 San Lorenzo 9 NC #1H
 Eddy County, New Mexico (Nad 83)
 Rig: Patterson-UTI
 Created By: Timothy Wojcik
 Date: 1/18/2013

San Lorenzo 9 NC #1H
 Eddy County, New Mexico (Nad 83)
 Q120737 & WT-13038
 Design #5 - NC Unit - 10° Turn

Mewbourne Oil Company



Azimuths to Grid North

Magnetic North: 7.54°

Magnetic Field

Strength: 48378.3snT

Dip Angle: 59.98°

Date: 10/4/2012

Model: IGRF2010

PROJECT DETAILS: Eddy County, New Mexico (Nad 83)

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Mean Sea Level

WELL DETAILS: San Lorenzo 9 NC #1H

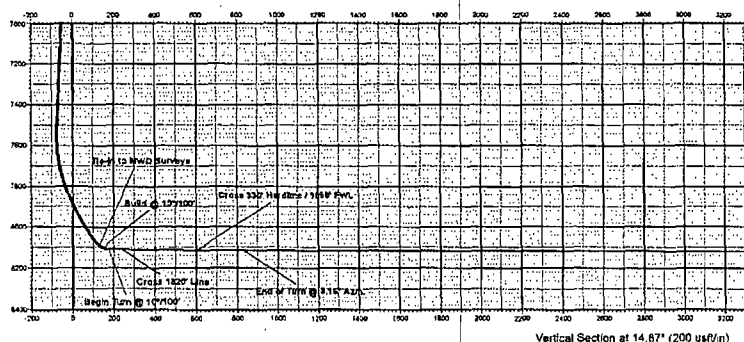
Ground Level: 3066.9
 Northing: 413537.30 Easting: 613914.10 Latitude: 32° 5' 18.891" N Longitude: 104° 5' 58.678" W

DESIGN TARGET DETAILS

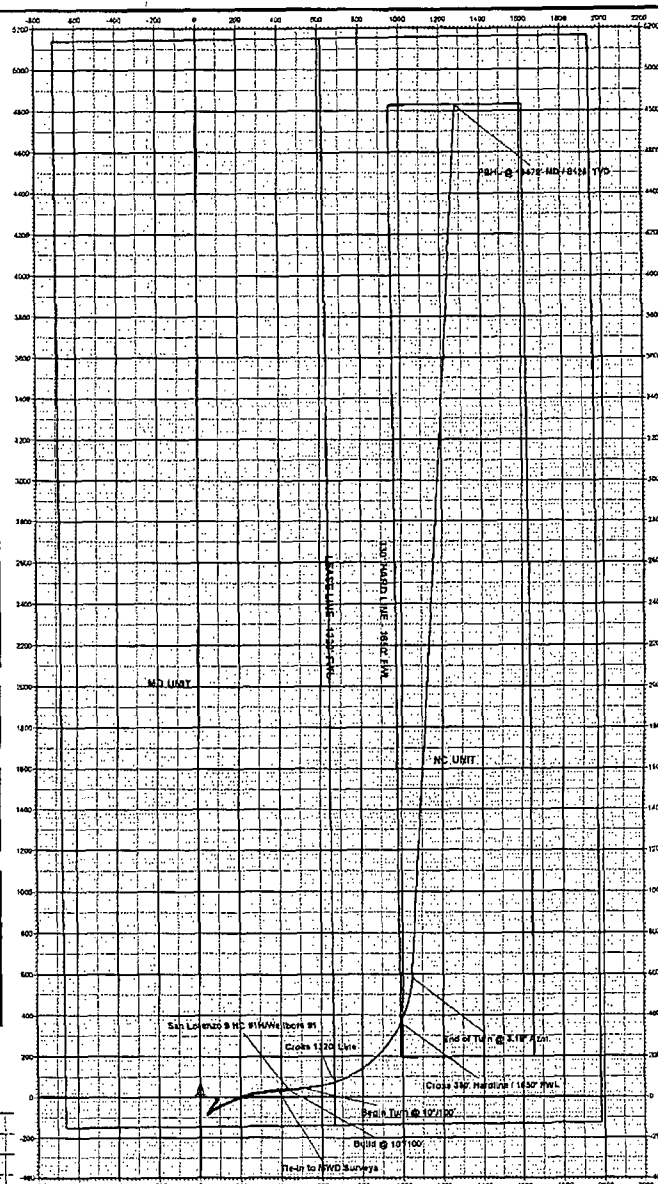
Name	TYD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
BHL San Lorenzo 9 NC #1H	8128.0	4827.5	1281.8	418784.85	616195.66	32° 5' 3.737" N	104° 5' 40.848" W

ANNOTATIONS

MD	Inc	Adj	TYD	+N/-S	+E/-W	Vsect	Departure	Annotation
8280.9	74.00	8580	8091.4	52.3	305.8	130.2	8.0	Tie-in to MWD Surveys
8312.0	91.50	8600	8102.6	36.3	436.5	148.7	64.0	Build @ 10°/100'
8381.0	89.40	8600	8108.7	41.4	616.0	172.1	123.8	Begin turn @ 10°/100'
8462.2	88.41	70.88	8110.3	71.6	662.7	205.2	280.7	Cross 1525' Line
8591.0	89.46	28.00	8114.2	361.8	890.0	603.7	723.4	Cross 330' Hardline / 1650' FWL
9219.4	89.97	3.16	8116.2	981.3	1047.1	857.9	857.9	End of Turn @ 3.16° Azim
13472.1	89.87	2.16	8128.0	4827.5	1281.8	4994.8	610.8	PBHL @ 13472 MD / 8128 TYD



Vertical Section at 14.67° (200 uft/n)



PBHL @ 13472 MD / 8128 TYD