

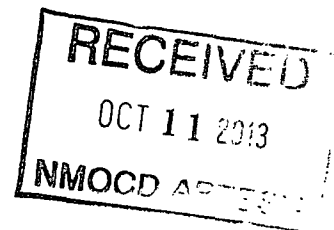
OPERATOR MEWBORNE OIL COMPANY
WELL/LEASE SAN LORENZO 9 MD FEE 001H
COUNTY EDDY

075-0098

STATE OF NEW MEXICO
DEVIATION REPORT

30015 41305

225	0.64
420	1.38
657	1.00
911	0.79
1,152	0.30
1,343	0.30
1,451	0.90
1,835	1.10
1,899	2.40
1,969	1.70
2,186	4.40
2,548	3.50
2,992	2.10
3,406	0.80
3,788	0.60
4,200	1.00
4,614	1.20
4,995	1.60
5,441	1.40
5,788	1.80
6,107	2.30
6,551	0.89
6,994	1.13



STATE OF TEXAS

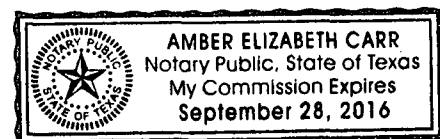
BY: Steve Moore

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on
Steve Moore on behalf of Patterson-UTI Drilling Company LLC.

9/10/13, by

Amber Elizabeth Carr
Notary Public for Midland County, Texas
My Commission Expires:





Company: Mewbourne Oil Company
Lease/Well: San Lorenzo 9 MD Fee/No 001H

Rig Name: Patterson Rig #75
State/County: New Mexico/Eddy
Latitude: 32.14, Longitude: -104.10
GRID North is 0.12 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : RKB = 22 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: san lorenzo 9 md fee #1h_01.ut

Minimum Curvature Method

Report Date/Time: 8/22/2013 / 08:58

Vaughn Energy Services

Ft.Worth, TX

817-741-3610

Surveyor: Kenny Gabel

San Lorenzo 9 MD Fee No 001H / API 30-015-41305

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	0.38	105.96	100.00	-0.09	0.32	-0.09	0.33	105.96	0.38
200.00	0.79	178.10	199.99	-0.87	0.66	-0.87	1.09	143.03	0.77
300.00	1.13	126.12	299.98	-2.14	1.48	-2.14	2.60	145.46	0.90
400.00	0.63	113.17	399.97	-2.94	2.78	-2.94	4.04	136.65	0.54
500.00	0.62	152.87	499.96	-3.64	3.53	-3.64	5.06	135.88	0.42
600.00	0.97	151.09	599.96	-4.85	4.18	-4.85	6.40	139.27	0.35
700.00	1.09	152.90	699.94	-6.44	5.02	-6.44	8.16	142.06	0.13
800.00	1.15	132.67	799.92	-7.96	6.19	-7.96	10.09	142.14	0.40
900.00	0.97	114.66	899.90	-9.00	7.70	-9.00	11.84	139.45	0.38
1000.00	0.26	28.26	999.90	-9.15	8.58	-9.15	12.54	136.86	0.99
1100.00	0.29	252.70	1099.90	-9.03	8.44	-9.03	12.36	136.94	0.51
1200.00	0.59	203.70	1199.90	-9.58	7.99	-9.58	12.47	140.18	0.46
1300.00	0.48	158.45	1299.89	-10.45	7.94	-10.45	13.12	142.78	0.43
1400.00	0.28	207.99	1399.89	-11.06	7.98	-11.06	13.63	144.19	0.37
1500.00	0.69	352.34	1499.89	-10.67	7.78	-10.67	13.21	143.91	0.94
1600.00	0.58	339.70	1599.88	-9.60	7.52	-9.60	12.20	141.91	0.18
1700.00	0.82	281.61	1699.87	-8.99	6.65	-8.99	11.18	143.48	0.71
1800.00	0.64	356.37	1799.87	-8.29	5.92	-8.29	10.18	144.45	0.89
1900.00	1.54	19.76	1899.85	-6.47	6.34	-6.47	9.06	135.58	0.98
2000.00	1.95	87.57	1999.81	-5.13	8.49	-5.13	9.92	121.17	1.97

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
2100.00	2.50	102.56	2099.74	-5.54	12.31	-5.54	13.50	114.21	0.80
2200.00	4.51	100.82	2199.55	-6.75	18.30	-6.75	19.51	110.24	2.01
2300.00	5.49	101.78	2299.16	-8.46	26.85	-8.46	28.15	107.50	0.99
2400.00	4.74	107.90	2398.77	-10.71	35.47	-10.71	37.05	106.80	0.93
2500.00	4.46	107.62	2498.44	-13.16	43.11	-13.16	45.07	106.98	0.28
2600.00	3.51	109.02	2598.20	-15.33	49.71	-15.33	52.02	107.14	0.96
2700.00	3.28	111.66	2698.02	-17.39	55.26	-17.39	57.93	107.47	0.28
2800.00	2.49	115.53	2797.90	-19.38	59.88	-19.38	62.94	107.93	0.81
2900.00	2.83	105.36	2897.79	-20.97	64.22	-20.97	67.56	108.08	0.58
3000.00	2.23	107.88	2997.69	-22.22	68.45	-22.22	71.96	107.98	0.61
3100.00	2.27	110.25	3097.62	-23.50	72.16	-23.50	75.89	108.04	0.10
3200.00	2.34	111.83	3197.53	-24.95	75.91	-24.95	79.90	108.19	0.09
3300.00	1.90	121.66	3297.47	-26.57	79.21	-26.57	83.55	108.55	0.57
3400.00	0.92	128.62	3397.43	-27.94	81.25	-27.94	85.92	108.98	0.99
3500.00	0.97	107.80	3497.42	-28.70	82.68	-28.70	87.52	109.15	0.34
3600.00	0.69	93.52	3597.41	-29.00	84.09	-29.00	88.95	109.03	0.35
3700.00	1.06	135.11	3697.40	-29.69	85.34	-29.69	90.36	109.18	0.71
3800.00	0.91	135.40	3797.39	-30.91	86.55	-30.91	91.90	109.65	0.15
3900.00	0.90	136.97	3897.37	-32.05	87.64	-32.05	93.32	110.09	0.03
4000.00	0.65	191.03	3997.36	-33.18	88.07	-33.18	94.12	110.64	0.74
4100.00	0.33	214.28	4097.36	-33.98	87.80	-33.98	94.15	111.15	0.36
4200.00	0.45	131.12	4197.36	-34.48	87.93	-34.48	94.45	111.41	0.53
4300.00	0.68	143.32	4297.35	-35.21	88.58	-35.21	95.33	111.68	0.25
4400.00	1.09	177.02	4397.34	-36.64	88.99	-36.64	96.23	112.38	0.65
4500.00	1.22	180.34	4497.32	-38.65	89.03	-38.65	97.06	113.47	0.15
4600.00	1.42	212.74	4597.30	-40.76	88.36	-40.76	97.30	114.77	0.76
4700.00	0.85	186.30	4697.28	-42.54	87.61	-42.54	97.39	115.90	0.76
4800.00	1.59	185.56	4797.25	-44.65	87.39	-44.65	98.13	117.06	0.74
4900.00	1.45	200.42	4897.22	-47.21	86.81	-47.21	98.82	118.54	0.41
5000.00	1.38	193.44	4997.19	-49.57	86.09	-49.57	99.34	119.93	0.18
5100.00	1.30	202.36	5097.16	-51.79	85.38	-51.79	99.86	121.24	0.23
5200.00	1.49	203.17	5197.13	-54.04	84.44	-54.04	100.25	122.62	0.19
5300.00	1.59	204.84	5297.10	-56.49	83.34	-56.49	100.69	124.13	0.11
5400.00	1.70	209.09	5397.06	-59.05	82.04	-59.05	101.08	125.75	0.16
5500.00	1.47	185.71	5497.02	-61.62	81.19	-61.62	101.93	127.20	0.68
5600.00	1.58	191.11	5596.98	-64.25	80.80	-64.25	103.23	128.49	0.18
5700.00	1.60	211.75	5696.95	-66.78	79.80	-66.78	104.05	129.92	0.57
5800.00	1.60	184.31	5796.91	-69.35	78.96	-69.35	105.09	131.29	0.76
5900.00	1.73	189.34	5896.87	-72.23	78.61	-72.23	106.76	132.58	0.20
6000.00	1.14	214.35	5996.83	-74.55	77.80	-74.55	107.75	133.78	0.84
6100.00	1.27	202.01	6096.81	-76.40	76.82	-76.40	108.34	134.84	0.29
6200.00	1.42	163.40	6196.79	-78.61	76.76	-78.61	109.87	135.68	0.90

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
6300.00	1.51	128.48	6296.76	-80.61	78.15	-80.61	112.27	135.89	0.88
6400.00	0.54	129.19	6396.74	-81.72	79.54	-81.72	114.04	135.78	0.97
6500.00	0.71	215.89	6496.74	-82.52	79.54	-82.52	114.61	136.06	0.87
6600.00	0.86	260.58	6596.73	-83.15	78.43	-83.15	114.30	136.67	0.61
6700.00	1.36	213.91	6696.71	-84.26	77.03	-84.26	114.16	137.57	0.99
6800.00	1.12	175.77	6796.69	-86.22	76.44	-86.22	115.22	138.44	0.84
6900.00	1.45	168.56	6896.66	-88.43	76.76	-88.43	117.10	139.04	0.36
7000.00	1.35	209.99	6996.64	-90.69	76.42	-90.69	118.59	139.88	0.99
7100.00	0.74	245.21	7096.62	-91.98	75.25	-91.98	118.84	140.71	0.86
7200.00	0.63	277.32	7196.61	-92.18	74.12	-92.18	118.28	141.20	0.39
7306.00	2.08	232.03	7302.58	-93.29	72.02	-93.29	117.85	142.33	1.60

Mewbourne Oil Co

Eddy County, New Mexico

Sec 9-25S-28E

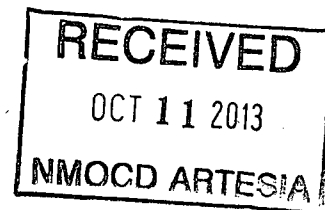
San Lorenzo 9 MD Fee #1H

Wellbore #1

Design: Wellbore #1

DDC Survey Report

23 August, 2013



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well San Lorenzo 9 MD Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3020.0usft (Patterson)
Site:	Sec 9-25S-28E	MD Reference:	WELL @ 3020.0usft (Patterson)
Well:	San Lorenzo 9 MD Fee #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project	Eddy County, New Mexico		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Sec 9-25S-28E		
Site Position:		Northing:	413,906.40 usft
From:	Map	Easting:	576,749.14 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 8' 15.729 N
		Longitude:	104° 5' 7.369 W
		Grid Convergence:	0.13 °

Well	San Lorenzo 9 MD Fee #1H		
Well Position	+N/-S	0.0 usft	Northing: 413,876.80 usft
	+E/-W	0.0 usft	Easting: 572,449.90 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 8' 15.531 N
		Longitude:	104° 5' 57.372 W
		Ground Level:	3,000.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	7/25/2013	7.56
			Dip Angle
			(°)
			59.96
			Field Strength
			(nT)
			48,298

Design	Wellbore #1		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			359.48

Survey Program	Date 8/23/2013		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
100.0	7,306.0 Gyro (Wellbore #1)		Good_gyro
7,451.0	12,740.0 MWD (Wellbore #1)		MWD default
			Description
			Good Gyro
			MWD - Standard

Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate
(usft)			(usft)			(usft)	(°/100usft)	(°/100usft)	(°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.38	105.96	100.0	-0.1	0.3	-0.1	0.38	0.38	0.00
200.0	0.79	178.10	200.0	-0.9	0.7	-0.9	0.76	0.41	72.14
300.0	1.13	126.12	300.0	-2.1	1.5	-2.2	0.90	0.34	-51.98
400.0	0.63	113.17	400.0	-2.9	2.8	-3.0	0.53	-0.50	-12.95
500.0	0.62	152.87	500.0	-3.6	3.5	-3.7	0.42	-0.01	39.70
600.0	0.97	151.09	600.0	-4.9	4.2	-4.9	0.35	0.35	-1.78
700.0	1.09	152.90	699.9	-6.4	5.0	-6.5	0.12	0.12	1.81
800.0	1.15	132.67	799.9	-8.0	6.2	-8.0	0.40	0.06	-20.23
900.0	0.97	114.66	899.9	-9.0	7.7	-9.1	0.38	-0.18	-18.01

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well San Lorenzo 9 MD Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3020.0usft (Patterson)
Site:	Sec 9-25S-28E	MD Reference:	WELL @ 3020.0usft (Patterson)
Well:	San Lorenzo 9 MD Fee #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)
1,000.0	0.26	28.26	999.9	-9.2	8.6	-9.2	0.99	-0.71	-86.40
1,100.0	0.29	252.70	1,099.9	-9.0	8.5	-9.1	0.51	0.03	-135.56
1,200.0	0.59	203.70	1,199.9	-9.6	8.0	-9.7	0.46	0.30	-49.00
1,300.0	0.48	158.45	1,299.9	-10.4	8.0	-10.5	0.42	-0.11	-45.25
1,400.0	0.28	207.99	1,399.9	-11.0	8.0	-11.1	0.37	-0.20	49.54
1,500.0	0.69	352.34	1,499.9	-10.7	7.8	-10.7	0.93	0.41	144.35
1,600.0	0.58	339.70	1,599.9	-9.6	7.5	-9.7	0.18	-0.11	-12.64
1,700.0	0.82	281.61	1,699.9	-9.0	6.7	-9.0	0.71	0.24	-58.09
1,800.0	0.64	356.37	1,799.9	-8.3	5.9	-8.3	0.90	-0.18	74.76
1,900.0	1.54	19.76	1,899.8	-6.5	6.3	-6.5	0.99	0.90	23.39
2,000.0	1.95	87.57	1,999.8	-5.1	8.5	-5.2	1.98	0.41	67.81
2,100.0	2.50	102.56	2,099.7	-5.5	12.3	-5.6	0.80	0.55	14.99
2,200.0	4.51	100.82	2,199.5	-6.7	18.3	-6.9	2.01	2.01	-1.74
2,300.0	5.49	101.78	2,299.2	-8.4	26.9	-8.7	0.98	0.98	0.96
2,400.0	4.74	107.90	2,398.8	-10.7	35.5	-11.0	0.93	-0.75	6.12
2,500.0	4.46	107.62	2,498.4	-13.1	43.1	-13.5	0.28	-0.28	-0.28
2,600.0	3.51	109.02	2,598.2	-15.3	49.7	-15.8	0.95	-0.95	1.40
2,700.0	3.28	111.66	2,698.0	-17.4	55.3	-17.9	0.28	-0.23	2.64
2,800.0	2.49	115.53	2,797.9	-19.4	59.9	-19.9	0.81	-0.79	3.87
2,900.0	2.83	105.36	2,897.8	-21.0	64.2	-21.5	0.58	0.34	-10.17
3,000.0	2.23	107.88	2,997.7	-22.2	68.5	-22.8	0.61	-0.60	2.52
3,100.0	2.27	110.25	3,097.6	-23.5	72.2	-24.1	0.10	0.04	2.37
3,200.0	2.34	111.83	3,197.5	-24.9	75.9	-25.6	0.09	0.07	1.58
3,300.0	1.90	121.66	3,297.5	-26.6	79.2	-27.3	0.57	-0.44	9.83
3,400.0	0.92	128.62	3,397.4	-27.9	81.3	-28.7	0.99	-0.98	6.96
3,500.0	0.97	107.80	3,497.4	-28.7	82.7	-29.4	0.35	0.05	-20.82
3,600.0	0.69	93.52	3,597.4	-29.0	84.1	-29.7	0.35	-0.28	-14.28
3,700.0	1.06	135.11	3,697.4	-29.7	85.4	-30.5	0.71	0.37	41.59
3,800.0	0.91	135.40	3,797.4	-30.9	86.6	-31.7	0.15	-0.15	0.29
3,900.0	0.90	136.97	3,897.4	-32.0	87.7	-32.8	0.03	-0.01	1.57
4,000.0	0.65	191.03	3,997.4	-33.2	88.1	-34.0	0.74	-0.25	54.06
4,100.0	0.33	214.28	4,097.4	-34.0	87.8	-34.8	0.37	-0.32	23.25
4,200.0	0.45	131.12	4,197.4	-34.5	88.0	-35.3	0.53	0.12	-83.16
4,300.0	0.68	143.32	4,297.4	-35.2	88.6	-36.0	0.26	0.23	12.20
4,400.0	1.09	177.02	4,397.3	-36.6	89.0	-37.4	0.65	0.41	33.70
4,500.0	1.22	180.34	4,497.3	-38.6	89.1	-39.4	0.15	0.13	3.32
4,600.0	1.42	212.74	4,597.3	-40.7	88.4	-41.5	0.76	0.20	32.40
4,700.0	0.85	186.30	4,697.3	-42.5	87.6	-43.3	0.76	-0.57	-26.44
4,800.0	1.59	185.56	4,797.3	-44.6	87.4	-45.4	0.74	0.74	-0.74
4,900.0	1.45	200.42	4,897.2	-47.2	86.8	-48.0	0.42	-0.14	14.86
5,000.0	1.38	193.44	4,997.2	-49.6	86.1	-50.3	0.19	-0.07	-6.98
5,100.0	1.30	202.36	5,097.2	-51.8	85.4	-52.6	0.22	-0.08	8.92
5,200.0	1.49	203.17	5,197.1	-54.0	84.5	-54.8	0.19	0.19	0.81

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well San Lorenzo 9 MD Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3020.0usft (Patterson)
Site:	Sec 9-25S-28E	MD Reference:	WELL @ 3020.0usft (Patterson)
Well:	San Lorenzo 9 MD Fee #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)
5,300.0	1.59	204.84	5,297.1	-56.5	83.4	-57.2	0.11	0.10	1.67
5,400.0	1.70	209.09	5,397.1	-59.0	82.1	-59.8	0.16	0.11	4.25
5,500.0	1.47	185.71	5,497.0	-61.6	81.2	-62.3	0.68	-0.23	-23.38
5,600.0	1.58	191.11	5,597.0	-64.2	80.8	-65.0	0.18	0.11	5.40
5,700.0	1.60	211.75	5,696.9	-66.8	79.8	-67.5	0.57	0.02	20.64
5,800.0	1.60	184.31	5,796.9	-69.4	79.0	-70.1	0.76	0.00	-27.44
5,900.0	1.73	189.34	5,896.9	-72.2	78.6	-72.9	0.20	0.13	5.03
6,000.0	1.14	214.35	5,996.8	-74.5	77.8	-75.3	0.85	-0.59	25.01
6,100.0	1.27	202.01	6,096.8	-76.4	76.8	-77.1	0.29	0.13	-12.34
6,200.0	1.42	163.40	6,196.8	-78.6	76.8	-79.3	0.90	0.15	-38.61
6,300.0	1.51	128.48	6,296.8	-80.6	78.2	-81.3	0.88	0.09	-34.92
6,400.0	0.54	129.19	6,396.7	-81.7	79.6	-82.5	0.97	-0.97	0.71
6,500.0	0.71	215.89	6,496.7	-82.5	79.6	-83.3	0.87	0.17	86.70
6,600.0	0.86	260.58	6,596.7	-83.2	78.5	-83.9	0.61	0.15	44.69
6,700.0	1.36	213.91	6,696.7	-84.3	77.1	-85.0	0.99	0.50	-46.67
6,800.0	1.12	175.77	6,796.7	-86.2	76.5	-86.9	0.84	-0.24	-38.14
6,900.0	1.45	168.56	6,896.7	-88.4	76.8	-89.1	0.37	0.33	-7.21
7,000.0	1.35	209.99	6,996.6	-90.7	76.5	-91.4	0.99	-0.10	41.43
7,100.0	0.74	245.21	7,096.6	-92.0	75.3	-92.7	0.86	-0.61	35.22
7,200.0	0.63	277.32	7,196.6	-92.2	74.2	-92.9	0.39	-0.11	32.11
Tie In @ 7306' MD / 7303' TVD									
7,306.0	2.08	232.03	7,302.6	-93.3	72.1	-94.0	1.60	1.37	-42.73
7,451.0	1.90	219.30	7,447.5	-96.8	68.5	-97.4	0.33	-0.12	-8.78
7,483.0	1.90	224.90	7,479.5	-97.6	67.7	-98.2	0.58	0.00	17.50
7,515.0	1.80	297.80	7,511.5	-97.7	66.9	-98.3	6.87	-0.31	227.81
7,547.0	4.80	347.40	7,543.4	-96.2	66.2	-96.8	12.13	9.38	155.00
7,579.0	8.40	359.90	7,575.2	-92.5	65.9	-93.1	12.05	11.25	39.06
7,611.0	12.10	4.40	7,606.7	-86.8	66.2	-87.4	11.82	11.56	14.06
7,643.0	15.30	4.60	7,637.8	-79.3	66.7	-79.9	10.00	10.00	0.63
7,674.0	17.80	3.80	7,667.5	-70.5	67.4	-71.1	8.10	8.06	-2.58
7,707.0	21.20	3.80	7,698.6	-59.5	68.1	-60.1	10.30	10.30	0.00
7,739.0	24.40	3.00	7,728.1	-47.1	68.8	-47.7	10.05	10.00	-2.50
7,771.0	28.10	3.40	7,756.8	-33.0	69.6	-33.6	11.58	11.56	1.25
7,803.0	30.60	1.80	7,784.7	-17.3	70.3	-18.0	8.19	7.81	-5.00
7,834.0	33.70	2.20	7,810.9	-0.8	70.9	-1.5	10.02	10.00	1.29
7,866.0	36.70	2.50	7,837.1	17.6	71.7	16.9	9.39	9.38	0.94
7,898.0	39.40	2.20	7,862.2	37.3	72.5	36.6	8.46	8.44	-0.94
7,930.0	42.20	0.40	7,886.5	58.2	73.0	57.5	9.49	8.75	-5.63
7,961.0	44.40	358.80	7,909.0	79.5	72.8	78.8	7.93	7.10	-5.16
7,993.0	47.00	358.80	7,931.4	102.3	72.3	101.7	8.13	8.13	0.00
8,025.0	50.20	358.80	7,952.5	126.3	71.8	125.7	10.00	10.00	0.00
8,057.0	53.30	358.30	7,972.3	151.5	71.2	150.8	9.76	9.69	-1.56
8,089.0	55.90	357.20	7,990.9	177.5	70.1	176.9	8.59	8.13	-3.44

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well San Lorenzo 9 MD Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3020.0usft (Patterson)
Site:	Sec 9-25S-28E	MD Reference:	WELL @ 3020.0usft (Patterson)
Well:	San Lorenzo 9 MD Fee #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)
CROSSED HARDLINE @ 8092' MD / 7992.6' TVD									
8,092.0	56.16	357.26	7,992.6	180.0	70.0	179.4	8.89	8.75	1.93
8,121.0	58.70	357.80	8,008.2	204.4	69.0	203.8	8.89	8.75	1.87
8,152.0	61.80	358.00	8,023.5	231.3	68.0	230.7	10.02	10.00	0.65
8,184.0	64.90	358.10	8,037.9	259.9	67.0	259.3	9.69	9.69	0.31
8,215.0	67.60	358.10	8,050.4	288.3	66.1	287.6	8.71	8.71	0.00
8,247.0	70.90	358.30	8,061.7	318.2	65.1	317.6	10.33	10.31	0.63
8,279.0	73.60	358.50	8,071.5	348.6	64.3	348.0	8.46	8.44	0.63
8,311.0	76.60	358.30	8,079.7	379.5	63.4	378.9	9.39	9.38	-0.63
8,342.0	79.70	358.60	8,086.1	409.9	62.6	409.3	10.04	10.00	0.97
8,374.0	82.90	359.70	8,090.9	441.5	62.1	440.9	10.56	10.00	3.44
8,457.0	87.80	0.20	8,097.6	524.2	62.1	523.6	5.93	5.90	0.60
8,489.0	87.70	359.70	8,098.9	556.2	62.0	555.6	1.59	-0.31	-1.56
8,553.0	89.20	0.40	8,100.6	620.1	62.1	619.5	2.59	2.34	1.09
8,616.0	89.60	0.20	8,101.3	683.1	62.4	682.5	0.71	0.63	-0.32
8,679.0	90.00	0.40	8,101.5	746.1	62.8	745.5	0.71	0.63	0.32
8,742.0	90.20	359.50	8,101.4	809.1	62.7	808.5	1.46	0.32	-1.43
8,806.0	90.70	359.40	8,100.9	873.1	62.1	872.5	0.80	0.78	-0.16
8,869.0	91.00	359.70	8,100.0	936.1	61.6	935.5	0.67	0.48	0.48
8,932.0	91.40	358.80	8,098.6	999.1	60.8	998.5	1.56	0.63	-1.43
8,996.0	90.00	359.20	8,097.9	1,063.1	59.6	1,062.5	2.28	-2.19	0.63
9,059.0	90.00	359.00	8,097.9	1,126.1	58.7	1,125.5	0.32	0.00	-0.32
9,123.0	90.40	358.80	8,097.6	1,190.1	57.4	1,189.5	0.70	0.63	-0.31
9,185.0	89.60	358.30	8,097.6	1,252.0	55.9	1,251.5	1.52	-1.29	-0.81
9,249.0	89.60	357.60	8,098.1	1,316.0	53.6	1,315.4	1.09	0.00	-1.09
9,312.0	89.70	357.10	8,098.5	1,378.9	50.7	1,378.4	0.81	0.16	-0.79
9,375.0	90.20	356.50	8,098.5	1,441.8	47.1	1,441.3	1.24	0.79	-0.95
9,439.0	90.30	356.70	8,098.2	1,505.7	43.3	1,505.3	0.35	0.16	0.31
9,502.0	90.80	356.40	8,097.6	1,568.6	39.6	1,568.2	0.93	0.79	-0.48
9,565.0	90.00	356.70	8,097.2	1,631.5	35.8	1,631.1	1.36	-1.27	0.48
9,628.0	90.00	357.20	8,097.2	1,694.4	32.4	1,694.0	0.79	0.00	0.79
9,692.0	90.20	357.20	8,097.1	1,758.3	29.3	1,758.0	0.31	0.31	0.00
9,755.0	89.20	358.60	8,097.4	1,821.3	27.0	1,820.9	2.73	-1.59	2.22
9,818.0	88.80	358.50	8,098.5	1,884.2	25.4	1,883.9	0.65	-0.63	-0.16
9,881.0	89.00	358.50	8,099.7	1,947.2	23.7	1,946.9	0.32	0.32	0.00
9,945.0	89.40	358.50	8,100.6	2,011.2	22.1	2,010.9	0.63	0.63	0.00
10,008.0	89.80	358.80	8,101.1	2,074.2	20.6	2,073.9	0.79	0.63	0.48
10,071.0	89.80	358.60	8,101.3	2,137.1	19.1	2,136.9	0.32	0.00	-0.32
10,135.0	90.10	359.00	8,101.3	2,201.1	17.8	2,200.9	0.78	0.47	0.63
10,198.0	90.30	358.60	8,101.1	2,264.1	16.5	2,263.9	0.71	0.32	-0.63
10,261.0	90.70	359.40	8,100.6	2,327.1	15.4	2,326.9	1.42	0.63	1.27
10,324.0	90.80	359.00	8,099.7	2,390.1	14.5	2,389.9	0.65	0.16	-0.63
10,388.0	91.10	359.40	8,098.7	2,454.1	13.6	2,453.8	0.78	0.47	0.63
10,451.0	89.50	358.60	8,098.3	2,517.1	12.5	2,516.8	2.84	-2.54	-1.27

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well San Lorenzo 9 MD Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3020.0usft (Patterson)
Site:	Sec 9-25S-28E	MD Reference:	WELL @ 3020.0usft (Patterson)
Well:	San Lorenzo 9 MD Fee #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)	
10,514.0	89.40	358.80	8,098.9	2,580.0	11.1	2,579.8	0.35	-0.16	0.32	
10,578.0	89.90	359.40	8,099.3	2,644.0	10.1	2,643.8	1.22	0.78	0.94	
10,641.0	90.00	359.50	8,099.4	2,707.0	9.5	2,706.8	0.22	0.16	0.16	
10,704.0	90.30	359.20	8,099.2	2,770.0	8.8	2,769.8	0.67	0.48	-0.48	
10,768.0	90.60	359.20	8,098.7	2,834.0	7.9	2,833.8	0.47	0.47	0.00	
10,831.0	90.80	359.40	8,098.0	2,897.0	7.1	2,896.8	0.45	0.32	0.32	
10,895.0	90.10	359.70	8,097.5	2,961.0	6.6	2,960.8	1.19	-1.09	0.47	
10,958.0	90.20	0.20	8,097.3	3,024.0	6.5	3,023.8	0.81	0.16	0.79	
11,021.0	89.60	359.40	8,097.4	3,087.0	6.3	3,086.8	1.59	-0.95	-1.27	
11,085.0	89.60	359.70	8,097.8	3,151.0	5.8	3,150.8	0.47	0.00	0.47	
11,148.0	89.30	359.40	8,098.5	3,214.0	5.3	3,213.8	0.67	-0.48	-0.48	
11,211.0	89.60	359.40	8,099.1	3,277.0	4.7	3,276.8	0.48	0.48	0.00	
11,275.0	89.90	358.80	8,099.3	3,341.0	3.7	3,340.8	1.05	0.47	-0.94	
11,338.0	90.20	359.00	8,099.3	3,404.0	2.4	3,403.8	0.57	0.48	0.32	
11,401.0	90.50	358.80	8,098.9	3,466.9	1.2	3,466.8	0.57	0.48	-0.32	
11,465.0	90.80	358.50	8,098.2	3,530.9	-0.3	3,530.8	0.66	0.47	-0.47	
11,528.0	91.10	358.10	8,097.1	3,593.9	-2.1	3,593.8	0.79	0.48	-0.63	
11,591.0	90.60	358.60	8,096.2	3,656.9	-4.0	3,656.7	1.12	-0.79	0.79	
11,654.0	90.60	358.00	8,095.5	3,719.8	-5.8	3,719.7	0.95	0.00	-0.95	
11,718.0	89.60	359.40	8,095.4	3,783.8	-7.3	3,783.7	2.69	-1.56	2.19	
11,781.0	89.70	358.60	8,095.8	3,846.8	-8.4	3,846.7	1.28	0.16	-1.27	
11,844.0	89.90	358.80	8,096.0	3,909.8	-9.8	3,909.7	0.45	0.32	0.32	
11,908.0	89.90	359.40	8,096.1	3,973.8	-10.8	3,973.7	0.94	0.00	0.94	
11,971.0	88.60	0.60	8,097.0	4,036.8	-10.8	4,036.7	2.81	-2.06	1.90	
12,034.0	88.80	0.60	8,098.4	4,099.7	-10.1	4,099.7	0.32	0.32	0.00	
12,097.0	89.40	0.90	8,099.4	4,162.7	-9.3	4,162.6	1.06	0.95	0.48	
12,161.0	89.30	0.90	8,100.1	4,226.7	-8.3	4,226.6	0.16	-0.16	0.00	
12,224.0	89.40	0.90	8,100.8	4,289.7	-7.3	4,289.6	0.16	0.16	0.00	
12,287.0	89.90	0.80	8,101.2	4,352.7	-6.4	4,352.6	0.81	0.79	-0.16	
12,350.0	90.10	1.50	8,101.2	4,415.7	-5.1	4,415.5	1.16	0.32	1.11	
12,414.0	90.20	1.60	8,101.0	4,479.7	-3.4	4,479.5	0.22	0.16	0.16	
12,477.0	90.40	1.10	8,100.7	4,542.6	-1.9	4,542.5	0.85	0.32	-0.79	
12,541.0	90.50	0.90	8,100.2	4,606.6	-0.8	4,606.4	0.35	0.16	-0.31	
12,604.0	90.00	0.80	8,099.9	4,669.6	0.1	4,669.4	0.81	-0.79	-0.16	
12,692.0	90.20	0.90	8,099.8	4,757.6	1.4	4,757.4	0.25	0.23	0.11	
TD @ 12740' MD / 8099.6' TVD										
12,740.0	90.20	0.90	8,099.6	4,805.6	2.2	4,805.4	0.00	0.00	0.00	

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well San Lorenzo 9 MD Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3020.0usft (Patterson)
Site:	Sec 9-25S-28E	MD Reference:	WELL @ 3020.0usft (Patterson)
Well:	San Lorenzo 9 MD Fee #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

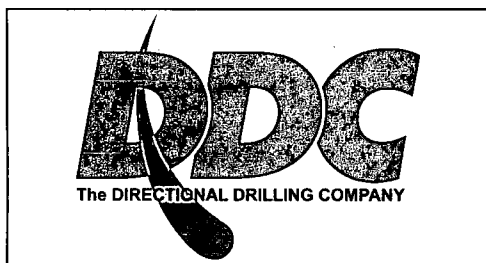
Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,306.0	7,302.6	-93.3	72.1	Tie In @ 7306' MD / 7303' TVD
8,092.0	7,992.6	180.0	70.0	CROSSED HARDLINE @ 8092' MD / 7992.6' TVD
12,740.0	8,099.6	4,805.6	2.2	TD @ 12740' MD / 8099.6' TVD

Checked By: _____ Approved By: _____ Date: _____

Company Name: Mewbourne Oil Co
 San Lorenzo 9 MD Fee #1H
 Eddy County, New Mexico
 Rig: Patterson #75
 Created By: TIFFANI MIZELL
 Date: 8/23/2013

San Lorenzo 9 MD Fee #1H
 Eddy County, New Mexico
 Q130362 & WT-13595
 Design #2

Mewbourne Oil Company



Azimuths to Grid North

Correction: 7.44°

Magnetic Field
 Strength: 48298.4snT
 Dip Angle: 59.96°
 Date: 7/25/2013
 Model: IGRF2010

PROJECT DETAILS: Eddy County, New Mexico

Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico East 3001
 System Datum: Mean Sea Level

WELL DETAILS: San Lorenzo 9 MD Fee #1H

	Ground Level:	3000.0			
+N-S	+E-W	North	East	Latitude	Longitude
0.0	0.0	413876.80	572449.90	32° 8' 15.531" N	104° 5' 57.372" W

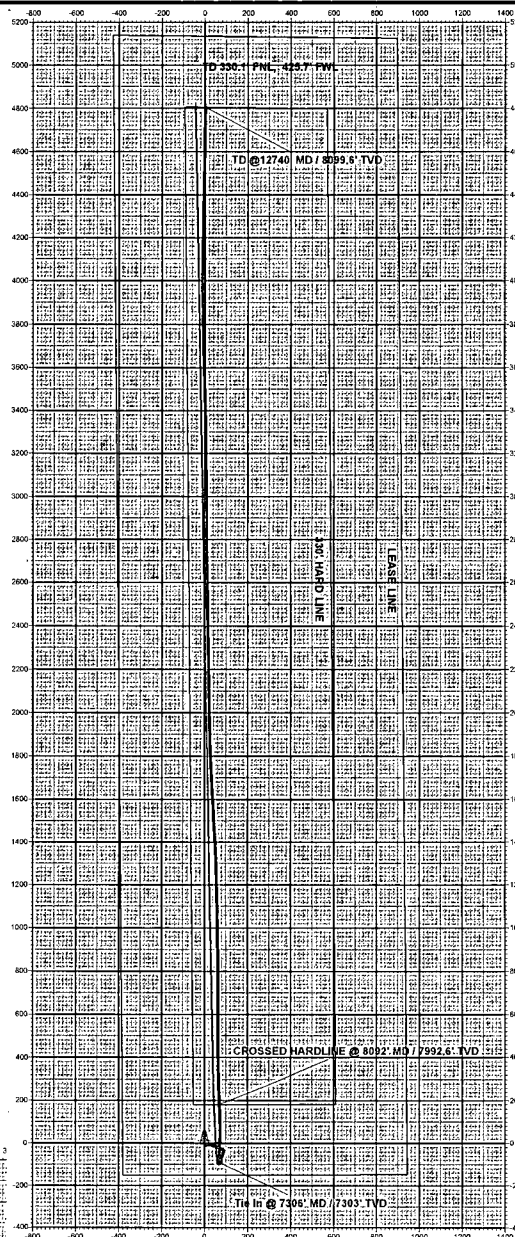
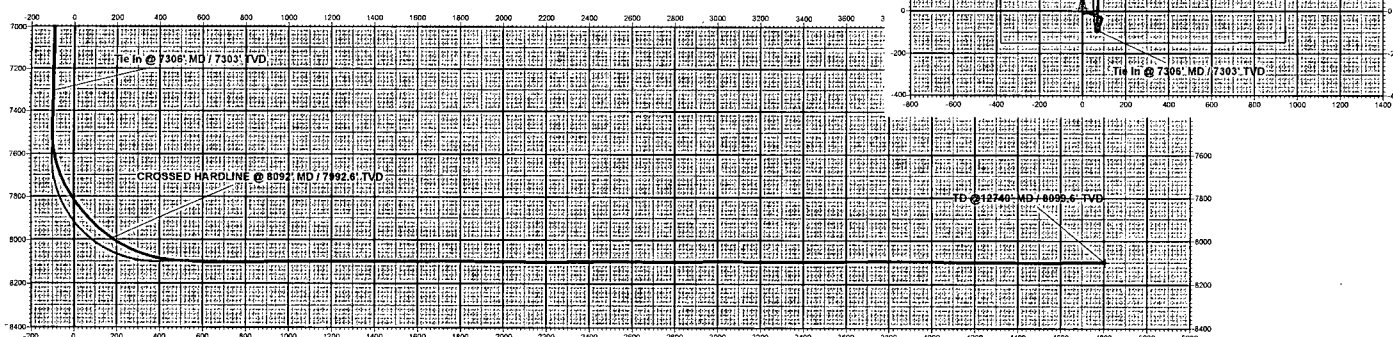
DESIGN TARGET DETAILS

Name	TVD	+N-S	+E-W	North	East	Latitude	Longitude
PBHL San Lorenzo 9 MD Fee #1H Design #1 8100.0	4805.8	-43.6	418682.70	572406.31	32° 9' 3.093" N	104° 5' 57.757" W	

- plan hits target center

ANNOTATIONS

MD	Inc	Azi	TVD	+N-S	+E-W	V-Sect	Departure	Annotation
7306.0	2.08	232.03	7302.6	-83.3	72.1	-94.0	181.5	Tie In @ 7306' MD / 7303' TVD
8092.0	56.16	357.25	7992.6	180.0	70.0	178.4	467.3	CROSSED HARDLINE @ 8092' MD / 7992.6' TVD
12740.0	90.20	.90	8095.6	4805.6	2.2	4805.1	5094.0	TD @ 12740' MD / 8095.6' TVD



Operating Company Mewbourne
 Well Name & Number San Lorenzo 9 MD Fee #1H
 Sales Ticket Number 5733837
 Date 8/21/2013

Company Rep George
 Field 0
 BOT Service Rep Hector R Magallanes
 District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	80000	6.276	6.151	0	0.03826	8,427.00	7,240	5,410	
Top Liner	4.500	11.60	110000	4.000	3.875	LT&C	0.01554	4,497.69	10,690	7,580	
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-	
TVD		8,100.00		KOP		7,501.00		Open Hole	6.125	Casing Vol. (bbl)	314.2
Carry Fluid Weight (ppg)			8.6		Propant Content (ppa)			8612.36	Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ. (BBL)
Liner Top	1	JR Setting Sleeve_RH Profile	8212.31	4.00						

Zone Length										
30	H40940010	S3 Hyd Set Casing Packer	8216.31	5.57	5.813	3.813				
165.4		4-1/2-13.5 LTC Nipple	8221.88	6.75	4.500	3.813				
		7 Joints of 4-1/2-13.5 LTC Casing	8228.63	282.81	4.500	3.875				
		3.625 EX Frac Sleeve Zone 30	8511.44	3.90	5.625		3.525	2286		132
		2 Joints of 4-1/2-13.5 LTC Casing	8515.34	78.19	4.500	3.875				
29	H409360008	582 OH PACKER 29	8593.53	3.89	5.820	3.875		2154		
133.5		1 Joints of 4-1/2-13.5 LTC Casing	8597.42	41.68	4.500	3.875				
		3.50 EXC Frac Sleeve Zone 29	8639.10	3.53	5.625		3.448	2375		134
		2 Joints of 4-1/2-13.5 LTC Casing	8642.63	80.48	4.500	3.875				
28	H409360008	582 OH PACKER 28	8723.11	3.89	5.820	3.875		2154		
160.8		2 Joints of 4-1/2-13.5 LTC Casing	8727.00	75.88	4.500	3.875				
		3.438 EXC Frac Sleeve Zone 28	8802.88	3.53	5.625		3.385	2375		136
		2 Joints of 4-1/2-13.5 LTC Casing	8806.41	73.59	4.500	3.875				
27	H409360008	582 OH PACKER 27	8880.00	3.89	5.820	3.875		2154		
136.4		1 Joints of 4-1/2-13.5 LTC Casing	8883.89	41.83	4.500	3.875				
		3.375 EXC Frac Sleeve Zone 27	8925.72	3.53	5.625		3.323	2375		138
		2 Joints of 4-1/2-13.5 LTC Casing	8929.25	83.29	4.500	3.875				
26	H409360008	582 OH PACKER 26	9012.54	3.89	5.820	3.875		2154		
180.3		2 Joints of 4-1/2-13.5 LTC Casing	9016.43	83.95	4.500	3.875				
		3.313 EXC Frac Sleeve Zone 26	9100.38	3.53	5.625		3.260	2375		141
		2 Joints of 4-1/2-13.5 LTC Casing	9103.91	85.06	4.500	3.875				
	H409360008	582 OH PACKER 25	9188.97	3.89	5.820	3.875		2154		

Operating Company Mewbourne
 Well Name & Number San Lorenzo 9 MD Fee #1H
 Sales Ticket Number 5733837
 Date 8/21/2013

Company Rep George
 Field 0
 BOT Service Rep Hector R Magallanes
 District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	80000	6.276	6.151	0	0.03826	8,427.00	7,240	5,410	
Top Liner	4.500	11.60	110000	4.000	3.875	LT&C	0.01554	4,497.69	10,690	7,580	
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-	
TVD		8,100.00		KOP		7,501.00		Open Hole	6.125	Casing Vol. (bbl)	314.2
Carry Fluid Weight (ppg)			8.6		Propant Content (ppa)			8612.36	Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Displ. (BBL)
25 132.1		1 Joints of 4-1/2-13.5 LTC Casing	9192.86	43.18	4.500	3.875				
		3.250 EXC Frac Sleeve Zone 25	9236.04	3.53	5.625		3.198	2375		143
		2 Joints of 4-1/2-13.5 LTC Casing	9239.57	77.56	4.500	3.875				
24 132.1	H409360008	582 OH PACKER 24	9317.13	3.89	5.820	3.875		2154		
		1 Joints of 4-1/2-13.5 LTC Casing	9321.02	41.92	4.500	3.875				
		3.188 EXC Frac Sleeve Zone 24	9362.94	3.53	5.625		3.135	2375		145
23 178.9		2 Joints of 4-1/2-13.5 LTC Casing	9366.47	78.91	4.500	3.875				
	H409360008	582 OH PACKER 23	9445.38	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9449.27	83.68	4.500	3.875				
22 131.8		3.125 EXC Frac Sleeve Zone 23	9532.95	3.53	5.625		3.073	2375		148
		2 Joints of 4-1/2-13.5 LTC Casing	9536.48	83.90	4.500	3.875				
	H409360008	582 OH PACKER 22	9620.38	3.89	5.820	3.875		2154		
21 125.3		1 Joints of 4-1/2-13.5 LTC Casing	9624.27	41.00	4.500	3.875				
		3.063 EXC Frac Sleeve 22	9665.27	3.53	5.625		3.010	2375		150
		2 Joints of 4-1/2-13.5 LTC Casing	9668.80	79.53	4.500	3.875				
20 161.8	H409360008	582 OH PACKER 21	9748.33	3.89	5.820	3.875		2154		
		1 Joints of 4-1/2-13.5 LTC Casing	9752.22	37.89	4.500	3.875				
		3.00 EXC Frac Sleeve 21	9790.11	3.53	5.625		2.948	2375		152
19		2 Joints of 4-1/2-13.5 LTC Casing	9793.64	76.06	4.500	3.875				
	H409360008	582 OH PACKER 20	9869.70	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9873.59	74.57	4.500	3.875				
		2.938 EXC Frac Sleeve Zone 20	9948.16	3.53	5.625		2.885	2375		154
		2 Joints of 4-1/2-13.5 LTC Casing	9951.69	75.94	4.500	3.875				
	H409360008	582 OH PACKER 19	10027.63	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	10031.52	76.35	4.500	3.875				
		2.875 EXC Frac Sleeve Zone 19	10107.87	3.53	5.625		2.823	2375		157

Operating Company Mewbourne
Well Name & Number San Lorenzo 9 MD Fee #1H
Sales Ticket Number 5733837
Date 8/21/2013

Company Rep George
Field 0
BOT Service Rep Hector R Magallanes
District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	80000	6.276	6.151	0	0.03826	8,427.00	7,240	5,410
Top Liner	4.500	11.60	110000	4.000	3.875	LT&C	0.01554	4,497.69	10,690	7,580
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-

--- TVD	-8,100.00	KOP	7,501.00	Open Hole	6.125	Casing Vol. (bbl)	314.2
---------	-----------	-----	----------	-----------	-------	-------------------	-------

Carry Fluid Weight (ppg)	8.6	Propan Content (ppa)	8612.36	Max Drill Out Size	0
--------------------------	-----	----------------------	---------	--------------------	---

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ (BBL)
163.5		2 Joints of 4-1/2-13.5 LTC Casing	10111.40	75.81	4.500	3.875				
	H409360008	582 OH PACKER 18	10187.21	3.89	5.820	3.875		2154		
		1 Joints of 4-1/2-13.5 LTC Casing	10191.10	37.88	4.500	3.875				
18		2.813 EXC Frac Sleeve Zone 18	10228.98	3.53	5.625		2.760	2375		159
125.4		2 Joints of 4-1/2-13.5 LTC Casing	10232.51	76.16	4.500	3.875				
	H409360008	582 OH PACKER 17	10308.67	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	10312.56	75.98	4.500	3.875				
17		2.750 EXC Frac Sleeve Zone 17	10388.54	3.53	5.625		2.698	2375		161
163.3		2 Joints of 4-1/2-13.5 LTC Casing	10392.07	76.05	4.500	3.875				
	H409360008	582 OH PACKER 16	10468.12	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	10472.01	76.05	4.500	3.875				
16		2.688 EXC Frac Sleeve Zone 16	10548.06	3.53	5.625		2.635	2375		163
163.4		2 Joints of 4-1/2-13.5 LTC Casing	10551.59	75.99	4.500	3.875				
	H409360008	582 OH PACKER 15	10627.58	3.89	5.820	3.875		2154		
		1 Joints of 4-1/2-13.5 LTC Casing	10631.47	38.35	4.500	3.875				
15		2.625 EXC Frac Sleeve Zone 15	10669.82	3.53	5.625		2.573	2375		165
124		2 Joints of 4-1/2-13.5 LTC Casing	10673.35	74.30	4.500	3.875				
	H409360008	582 OH PACKER 14	10747.65	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	10751.54	75.64	4.500	3.875				
14		2.563 EXC Frac Sleeve Zone 14	10827.18	3.53	5.625		2.510	2375		168
163.4		2 Joints of 4-1/2-13.5 LTC Casing	10830.71	76.43	4.500	3.875				
	H409360008	582 OH PACKER 13	10907.14	3.89	5.820	3.875		2154		
		1 Joints of 4-1/2-13.5 LTC Casing	10911.03	37.91	4.500	3.875				
13		2.50 EXC Frac Sleeve Zone 13	10948.94	3.53	5.625		2.448	2375		170
125.5		2 Joints of 4-1/2-13.5 LTC Casing	10952.47	76.31	4.500	3.875				
	H409360008	582 OH PACKER 12	11028.78	3.89	5.820	3.875		2154		

Operating Company Mewbourne
 Well Name & Number San Lorenzo 9 MD Fee #1H
 Sales Ticket Number 5733837
 Date 8/21/2013

Company Rep George
 Field 0
 BOT Service Rep Hector R Magallanes
 District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	80000	6.276	6.151	0	0.03826	8,427.00	7,240	5,410	
Top Liner	4.500	11.60	110000	4.000	3.875	LT&C	0.01554	4,497.69	10,690	7,580	
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-	
TVD		8,100.00		KOP		7,501.00		Open Hole	6.125	Casing Vol. (bbl)	314.2
Carry Fluid Weight (ppg)			8.6		Propant Content (ppa)			8612.36	Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ. (BBL)
12 160.6		2 Joints of 4-1/2-11.60 J55 Casing	11032.67	73.06	4.500	3.875				
		2.438 EXC Frac Sleeve Zone 12	11105.73	3.53	5.625		2.386	2375		172
		2 Joints of 4-1/2-13.5 LTC Casing	11109.26	76.19	4.500	3.875				
	H409360008	582 OH PACKER 11	11185.45	3.89	5.820	3.875		2154		
11 163.7		2 Joints of 4-1/2-13.5 LTC Casing	11189.34	76.01	4.500	3.875				
		2.375 EXC Frac Sleeve Zone 11	11265.35	3.53	5.625		2.323	2375		175
		2 Joints of 4-1/2-13.5 LTC Casing	11268.88	76.41	4.500	3.875				
	H409360008	582 OH PACKER 10	11345.29	3.89	5.820	3.875		2154		
10 125.6		1 Joints of 4-1/2-13.5 LTC Casing	11349.18	38.17	4.500	3.875				
		2.313 EXC Frac Sleeve Zone 10	11387.35	3.53	5.625		2.261	2375		177
		2 Joints of 4-1/2-13.5 LTC Casing	11390.88	76.10	4.500	3.875				
	H409360008	582 OH PACKER 9	11466.98	3.89	5.820	3.875		2154		
9 161.5		2 Joints of 4-1/2-13.5 LTC Casing	11470.87	75.94	4.500	3.875				
		2.25 EX Frac Sleeve Zone 9	11546.81	3.53	5.625		2.150	2286		179
		2 Joints of 4-1/2-13.5 LTC Casing	11550.34	74.26	4.500	3.875				
	H409360008	582 OH PACKER 8	11624.60	3.89	5.820	3.875		2154		
8 163.7		2 Joints of 4-1/2-13.5 LTC Casing	11628.49	76.21	4.500	3.875				
		2.125 EX Frac Sleeve Zone 8	11704.70	3.53	5.625		2.025	2286		182
		2 Joints of 4-1/2-13.5 LTC Casing	11708.23	76.15	4.500	3.875				
	H409360008	582 OH PACKER 7	11784.38	3.89	5.820	3.875		2154		
7 124.5		1 Joints of 4-1/2-13.5 LTC Casing	11788.27	37.77	4.500	3.875				
		2.000 EX Frac Sleeve Zone 7	11826.04	3.53	5.625		1.900	2286		184
		2 Joints of 4-1/2-13.5 LTC Casing	11829.57	75.44	4.500	3.875				
	H409360008	582 OH PACKER 6	11905.01	3.89	5.820	3.875		2154		
6		2 Joints of 4-1/2-13.5 LTC Casing	11908.90	76.36	4.500	3.875				
		1.875 EX Frac Sleeve Zone 6	11985.26	3.53	5.625		1.775	2286		186

Company Rep	George
Field	0
BOT Service Rep	Hector R Magallanes
District Location	Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	80000	6.276	6.151	0	0.03826	8,427.00	7,240	5,410	
Top Liner	4.500	11.60	110000	4.000	3.875	LT&C	0.01554	4,497.69	10,690	7,580	
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-	
TVD	8,100.00		KOP		7,501.00		Open Hole	6.125	Casing Vol. (bbl)	314.2	
Carry Fluid Weight (ppg)			8.6		Propant Content (ppa)			8612.36	Max Drill Out Size		0

[illegible]