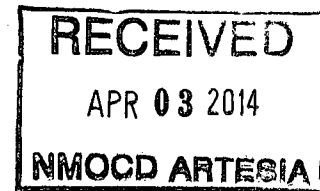


OPERATOR MEWBOURNE OIL COMPANY
WELL/LEASE URSA 27 FED COM #1H
COUNTY LEA

STATE OF NEW MEXICO
DEVIATION REPORT

15-39581

332	2.00
445	2.00
784	1.50
1,145	4.50
1,581	1.00
1,999	0.60
2,360	0.70
2,722	0.40
3,082	0.60
3,443	0.80
3,805	0.50
4,164	6.00
4,525	2.10
4,706	2.70
4,887	2.90
5,068	3.00
5,246	2.70
5,428	3.60
5,609	2.80
5,789	2.40
5,970	2.50
6,148	2.90
6,328	2.90
6,603	2.70
6,888	3.40
6,978	3.10
7,456	3.40
7,644	1.70
DIRECTIONAL	



BY: Cyndi Reynolds

STATE OF TEXAS

COUNTY OF HARRIS

The foregoing instrument was acknowledged before me on
Cyndi Reynolds on behalf of Trinidad Drilling, LP.

Feb. 18th, 2014, by

Kristin Marie Arroyo
Notary Public for Harris County, Texas
My Commission Expires:





COMPANY: Mewbourne Oil Company
 WELL: URSA 27 Federal Com #1H
 COUNTY: Eddy County, New Mexico
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: Trinidad #110

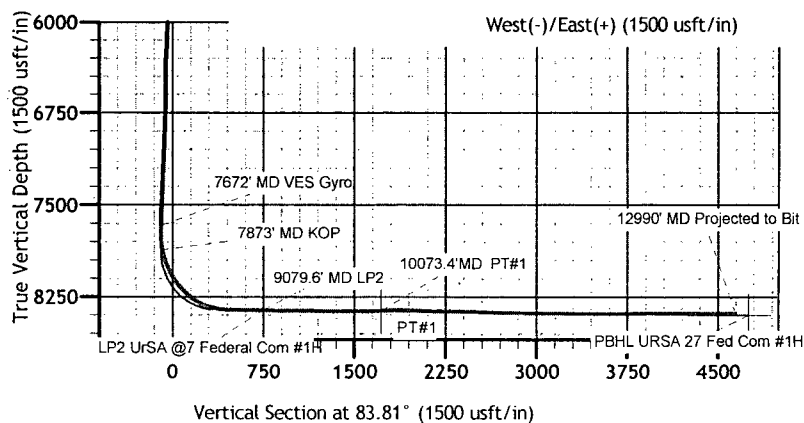
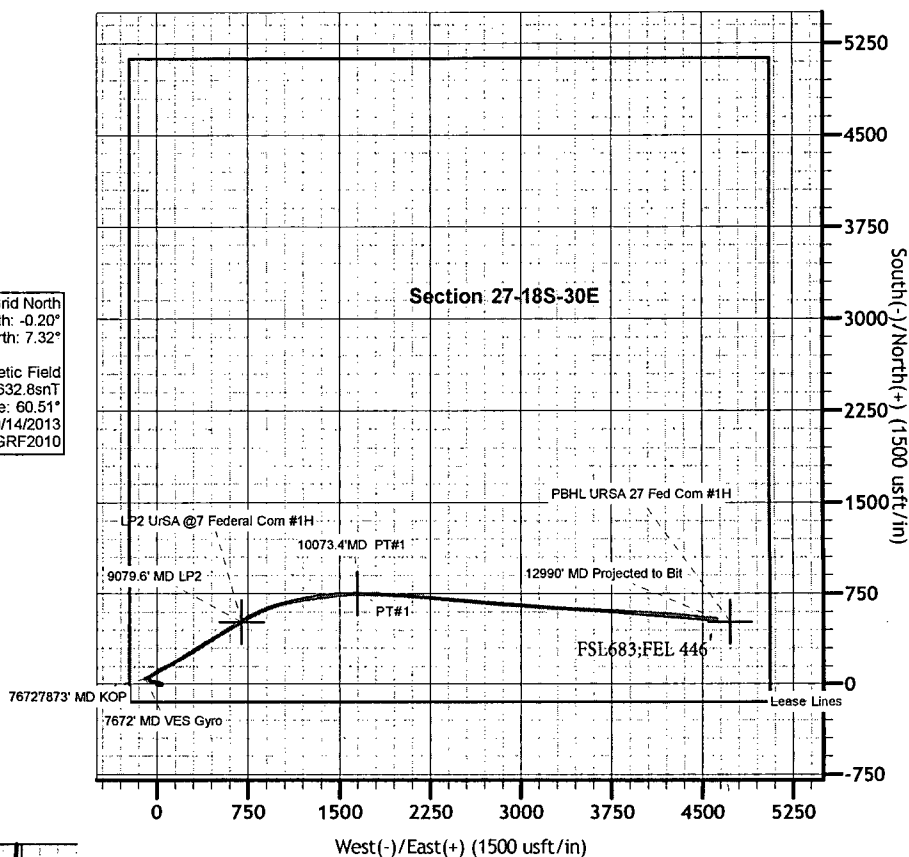
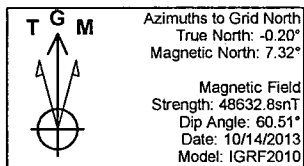


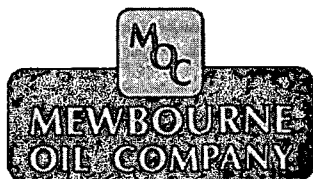
GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.32°

OFFICE: 936.582.7296

GEODETTIC ZONE: New Mexico East 3001							
GL3433 + 20 @ 3453.0usft (Trinidad #110)							
GROUND ELEVATION: 3433.0							
+N-S	+E-W	Northing	Easting	Latitude	Longitude	Slot	
0.0	0.0	622738.41	612627.99	32° 42' 41.293 N	103° 58' 1.763 W		

PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSect	Target
1	7672.0	0.97	202.13	7667.8	44.8	-97.6	0.00	0.00	-92.2	
2	7873.0	0.97	202.13	7868.7	41.7	-98.9	0.00	0.00	-93.8	
3	8624.3	89.38	59.16	8352.6	279.6	309.1	12.00	-142.97	337.4	
4	9079.6	89.38	59.16	8357.5	513.0	700.0	0.00	0.00	751.2	LP2 UrSA @7 Federal Com #1H
5	10073.9	89.38	91.21	8368.1	753.8	1610.5	3.36	90.19	1682.4	
6	10073.4	89.38	91.21	8368.5	753.0	1850.0	0.00	0.00	1721.6	PT#1
7	10417.3	89.40	94.65	8372.2	735.4	1993.4	1.00	89.70	2061.1	
8	13162.1	89.40	94.65	8401.0	513.0	4729.0	0.00	0.00	4756.7	PBHL URSA 27 Fed Com #1H





Mewbourne Oil Company .

Eddy County, New Mexico

Section 27-18S-30E URSA 27 Federal Com #1H

URSA 27 Federal Com #1H

Original Hole

Design: Original Hole

Standard Survey Report

23 January, 2014





Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well URSA 27 Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3433 + 20' @ 3453.0usft (Trinidad #110)
Site:	Section 27-18S-30E URSA 27 Federal Com #1H	MD Reference:	GL3433 + 20' @ 3453.0usft (Trinidad #110)
Well:	URSA 27 Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	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:	Section 27-18S-30E URSA 27 Federal Com #1H
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Site Position:		Northing:	622,738.41 usft	Latitude:	32° 42' 41.293 N
From:	Map	Easting:	612,627.99 usft	Longitude:	103° 58' 1.763 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.20 °

Well	URSA 27 Federal Com #1H					
Well Position	+N/-S	0.0 usft	Northing:	622,738.41 usft	Latitude:	32° 42' 41.293 N
	+E/-W	0.0 usft	Easting:	612,627.99 usft	Longitude:	103° 58' 1.763 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,433.0 usft

Wellbore:	Original Hole
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/14/2013	7.52	60.51	48,633

Design:	Original Hole
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Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	83.81

Survey Program		Date	1/23/2014	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	7,672.0	VES Gyro Survey #1 (Original Hole)	GyroFlex	
7,737.0	12,990.0	MWD Survey #2 (Original Hole)	MWD	MWD - Standard

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)
	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	100.0	1.05	156.76	100.0	-0.8	0.4	0.3	1.05	1.05	0.00
	200.0	1.78	142.83	200.0	-2.9	1.7	1.3	0.80	0.73	-13.93
	300.0	1.92	123.24	299.9	-5.1	4.0	3.4	0.64	0.14	-19.59
	400.0	2.16	106.30	399.8	-6.5	7.2	6.5	0.65	0.24	-16.94
	500.0	1.61	102.09	499.8	-7.3	10.4	9.5	0.57	-0.55	-4.21
	600.0	1.42	103.26	599.8	-7.9	13.0	12.0	0.19	-0.19	1.17
	700.0	1.49	97.50	699.7	-8.4	15.5	14.5	0.16	0.07	-5.76
	800.0	1.36	98.71	799.7	-8.7	17.9	16.9	0.13	-0.13	1.21
	900.0	1.33	96.00	899.7	-9.0	20.3	19.2	0.07	-0.03	-2.71



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well URSA 27-Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Site:	Section 27-18S-30E URSA 27-Federal Com #1H	MD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Well:	URSA 27-Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	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	1.61	109.32	999.6	-9.6	22.7	21.6	0.44	0.28	13.32
1,100.0	1.17	94.29	1,099.6	-10.2	25.1	23.8	0.57	-0.44	-15.03
1,200.0	1.20	87.81	1,199.6	-10.2	27.1	25.9	0.14	0.03	-6.48
1,300.0	0.99	89.81	1,299.6	-10.2	29.1	27.8	0.21	-0.21	2.00
1,400.0	1.31	88.92	1,399.5	-10.1	31.1	29.8	0.32	0.32	-0.89
1,500.0	1.33	73.39	1,499.5	-9.8	33.3	32.1	0.36	0.02	-15.53
1,600.0	0.68	85.70	1,599.5	-9.4	35.0	33.8	0.68	-0.65	12.31
1,700.0	0.74	82.12	1,699.5	-9.3	36.3	35.0	0.07	0.06	-3.58
1,800.0	1.01	39.19	1,799.5	-8.5	37.4	36.3	0.69	0.27	-42.93
1,900.0	0.46	6.20	1,899.5	-7.4	38.0	37.0	0.67	-0.55	-32.99
2,000.0	0.36	15.92	1,999.5	-6.7	38.2	37.2	0.12	-0.10	9.72
2,100.0	0.42	55.05	2,099.5	-6.2	38.6	37.7	0.27	0.06	39.13
2,200.0	0.47	59.63	2,199.5	-5.8	39.2	38.4	0.06	0.05	4.58
2,300.0	0.61	341.76	2,299.5	-5.1	39.4	38.6	0.69	0.14	-77.87
2,400.0	0.41	57.92	2,399.5	-4.4	39.5	38.8	0.65	-0.20	76.16
2,500.0	0.42	39.59	2,499.5	-3.9	40.1	39.4	0.13	0.01	-18.33
2,600.0	0.62	3.24	2,599.5	-3.1	40.3	39.8	0.38	0.20	-36.35
2,700.0	0.11	112.60	2,699.5	-2.6	40.5	40.0	0.66	-0.51	109.36
2,800.0	0.77	336.50	2,799.5	-2.0	40.3	39.8	0.85	0.66	-136.10
2,900.0	0.65	339.14	2,899.4	-0.8	39.8	39.5	0.12	-0.12	2.64
3,000.0	0.65	332.55	2,999.4	0.2	39.4	39.1	0.07	0.00	-6.59
3,100.0	0.41	345.36	3,099.4	1.0	39.0	38.9	0.27	-0.24	12.81
3,200.0	0.67	330.23	3,199.4	1.9	38.6	38.6	0.29	0.26	-15.13
3,300.0	0.23	352.95	3,299.4	2.6	38.3	38.4	0.47	-0.44	22.72
3,400.0	0.10	190.84	3,399.4	2.7	38.3	38.3	0.33	-0.13	-162.11
3,500.0	0.46	223.74	3,499.4	2.3	38.0	38.0	0.38	0.36	32.90
3,600.0	0.72	268.51	3,599.4	2.0	37.1	37.1	0.51	0.26	44.77
3,700.0	0.65	237.44	3,699.4	1.7	36.0	35.9	0.37	-0.07	-31.07
3,800.0	0.55	238.95	3,799.4	1.2	35.1	35.0	0.10	-0.10	1.51
3,900.0	0.72	254.71	3,899.4	0.7	34.1	33.9	0.24	0.17	15.76
4,000.0	0.50	251.36	3,999.4	0.4	33.0	32.9	0.22	-0.22	-3.35
4,100.0	0.20	271.52	4,099.4	0.3	32.4	32.3	0.32	-0.30	20.16
4,200.0	0.83	282.39	4,199.4	0.5	31.6	31.4	0.63	0.63	10.87
4,300.0	0.38	303.30	4,299.4	0.8	30.6	30.5	0.49	-0.45	20.91
4,400.0	1.38	309.65	4,399.4	1.7	29.4	29.4	1.00	1.00	6.35
4,500.0	1.37	299.47	4,499.3	3.1	27.4	27.6	0.24	-0.01	-10.18
4,600.0	2.36	298.97	4,599.3	4.7	24.6	24.9	0.99	0.99	-0.50
4,700.0	2.64	300.38	4,699.2	6.9	20.8	21.4	0.29	0.28	1.41
4,800.0	2.65	303.59	4,799.1	9.3	16.9	17.8	0.15	0.01	3.21
4,900.0	2.69	294.07	4,899.0	11.5	12.8	14.0	0.44	0.04	-9.52
5,000.0	2.86	289.90	4,998.9	13.3	8.3	9.7	0.26	0.17	-4.17
5,100.0	3.10	284.50	5,098.7	14.9	3.3	4.9	0.37	0.24	-5.40
5,200.0	3.09	279.93	5,198.6	16.0	-1.9	-0.2	0.25	-0.01	-4.57



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well URSA 27 Federal Com #1H
Project:	Eddy County New Mexico	TVD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Site:	Section 27-18S-30E URSA 27 Federal Com #1H	MD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Well:	URSA 27 Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	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	2.63	286.65	5,298.5	17.1	-6.8	-4.9	0.57	-0.46	6.72
5,400.0	3.08	270.13	5,398.3	17.8	-11.7	-9.7	0.93	0.45	-16.52
5,500.0	3.21	268.22	5,498.2	17.7	-17.2	-15.1	0.17	0.13	-1.91
5,600.0	2.93	260.50	5,598.0	17.2	-22.5	-20.5	0.50	-0.28	-7.72
5,700.0	2.86	277.66	5,697.9	17.1	-27.5	-25.5	0.87	-0.07	17.16
5,800.0	2.39	268.50	5,797.8	17.4	-32.0	-30.0	0.63	-0.47	-9.16
5,900.0	2.55	277.33	5,897.7	17.6	-36.3	-34.2	0.41	0.16	8.83
6,000.0	2.32	277.46	5,997.6	18.2	-40.5	-38.3	0.23	-0.23	0.13
6,100.0	2.66	283.51	6,097.5	19.0	-44.8	-42.5	0.43	0.34	6.05
6,200.0	2.90	288.51	6,197.4	20.3	-49.4	-47.0	0.34	0.24	5.00
6,300.0	2.77	299.77	6,297.3	22.3	-53.9	-51.2	0.57	-0.13	11.26
6,400.0	2.63	320.61	6,397.2	25.3	-57.5	-54.4	0.99	-0.14	20.84
6,500.0	2.81	340.81	6,497.1	29.4	-59.8	-56.2	0.97	0.18	20.20
6,600.0	2.30	359.80	6,597.0	33.7	-60.6	-56.6	0.98	-0.51	18.99
6,700.0	2.85	341.56	6,696.9	38.1	-61.4	-56.9	0.98	0.55	-18.24
6,800.0	3.37	328.83	6,796.7	42.9	-63.7	-58.7	0.86	0.52	-12.73
6,900.0	2.87	313.54	6,896.6	47.2	-67.0	-61.5	0.97	-0.50	-15.29
7,000.0	2.92	305.05	6,996.5	50.4	-70.9	-65.1	0.43	0.05	-8.49
7,100.0	2.70	289.00	7,096.3	52.6	-75.2	-69.1	0.81	-0.22	-16.05
7,200.0	3.06	271.37	7,196.2	53.4	-80.1	-73.9	0.95	0.36	-17.63
7,300.0	2.01	252.84	7,296.1	53.0	-84.5	-78.3	1.32	-1.05	-18.53
7,400.0	2.84	241.43	7,396.0	51.3	-88.3	-82.3	0.96	0.83	-11.41
7,500.0	2.95	231.29	7,495.9	48.5	-92.5	-86.7	0.52	0.11	-10.14
7,600.0	2.17	243.05	7,595.8	46.0	-96.2	-90.7	0.94	-0.78	11.76
7,672.0	0.97	202.13	7,667.8	44.8	-97.6	-92.2	2.18	-1.67	-56.83
7672 MD VES Gyro									
7,737.0	0.80	186.30	7,732.8	43.9	-97.9	-92.6	0.46	-0.26	-24.35
7,783.0	2.60	73.90	7,778.7	43.8	-96.9	-91.6	6.52	3.91	-244.35
7,828.0	9.00	56.40	7,823.5	46.1	-93.0	-87.5	14.59	14.22	-38.89
7,873.0	13.60	60.90	7,867.6	50.6	-85.4	-79.5	10.40	10.22	10.00
7,918.0	14.80	62.00	7,911.2	55.9	-75.8	-69.3	2.73	2.67	2.44
7,963.0	18.80	60.20	7,954.3	62.2	-64.4	-57.3	8.96	8.89	-4.00
8,008.0	23.40	57.60	7,996.3	70.6	-50.5	-42.6	10.43	10.22	-5.78
8,053.0	27.90	57.40	8,036.8	81.0	-34.1	-25.2	10.00	10.00	-0.44
8,098.0	32.70	58.30	8,075.7	93.1	-14.9	-4.8	10.71	10.67	2.00
8,143.0	36.80	59.90	8,112.6	106.3	7.1	18.5	9.33	9.11	3.56
8,189.0	40.20	62.20	8,148.6	120.1	32.2	44.9	8.02	7.39	5.00
8,234.0	44.10	64.40	8,182.0	133.6	59.2	73.2	9.27	8.67	4.89
8,279.0	49.50	62.00	8,212.8	148.4	88.4	103.9	12.61	12.00	-5.33
8,324.0	53.40	58.60	8,240.8	165.9	119.0	136.2	10.49	8.67	-7.56
8,369.0	58.00	57.90	8,266.2	185.5	150.6	169.7	10.30	10.22	-1.56
8,414.0	63.60	57.90	8,288.1	206.3	183.8	205.0	12.44	12.44	0.00
8,459.0	68.30	58.60	8,306.5	227.9	218.8	242.1	10.54	10.44	1.56



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well URSA 27 Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Site:	Section 27-18S-30E URSA 27 Federal Com #1H	MD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Well:	URSA 27 Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.1 Single User Db

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)
8,504.0	71.80	59.40	8,321.8	249.7	255.0	280.4	7.96	7.78	1.78
8,549.0	75.80	59.20	8,334.4	271.8	292.2	319.8	8.90	8.89	-0.44
8,594.0	79.00	59.70	8,344.2	294.1	330.0	359.8	7.19	7.11	1.11
8,627.0	81.40	59.20	8,349.8	310.6	358.0	389.4	7.42	7.27	-1.52
8,724.0	89.90	58.30	8,357.2	360.8	440.6	476.9	8.81	8.76	-0.93
8,756.0	90.00	57.90	8,357.2	377.7	467.8	505.7	1.29	0.31	-1.25
8,787.0	89.90	57.90	8,357.2	394.1	494.0	533.6	0.32	-0.32	0.00
8,819.0	89.80	57.90	8,357.3	411.1	521.1	562.4	0.31	-0.31	0.00
8,851.0	90.00	58.60	8,357.4	428.0	548.3	591.3	2.28	0.63	2.19
8,882.0	90.20	59.00	8,357.3	444.0	574.8	619.4	1.44	0.65	1.29
8,914.0	90.20	58.80	8,357.2	460.6	602.2	648.4	0.62	0.00	-0.63
8,977.0	89.00	59.20	8,357.6	493.0	656.2	705.6	2.01	-1.90	0.63
9,024.8	88.04	59.35	8,358.9	517.4	697.3	749.0	2.02	-2.00	0.32
LP2 URSA @ 7 Federal Com #1H									
9,072.0	87.10	59.50	8,360.9	541.4	737.9	792.0	2.02	-2.00	0.32
9,167.0	89.30	63.00	8,363.8	587.1	821.2	879.7	4.35	2.32	3.68
9,262.0	90.50	68.30	8,364.0	626.2	907.7	969.9	5.72	1.26	5.58
9,357.0	91.20	74.50	8,362.6	656.5	997.7	1,062.6	6.57	0.74	6.53
9,452.0	87.70	77.80	8,363.5	679.2	1,089.9	1,156.7	5.06	-3.68	3.47
9,547.0	89.50	80.30	8,365.8	697.3	1,183.1	1,251.4	3.24	1.89	2.63
9,642.0	89.30	82.20	8,366.8	711.7	1,277.0	1,346.3	2.01	-0.21	2.00
9,737.0	90.40	82.90	8,367.1	724.1	1,371.2	1,441.2	1.37	1.16	0.74
9,832.0	90.10	82.40	8,366.7	736.2	1,465.4	1,536.2	0.61	-0.32	-0.53
9,927.0	91.20	85.20	8,365.6	746.5	1,559.8	1,631.2	3.17	1.16	2.95
10,017.2	92.82	90.71	8,362.4	749.7	1,649.9	1,721.1	6.36	1.79	6.10
PT#1									
10,022.0	92.90	91.00	8,362.2	749.6	1,654.7	1,725.8	6.36	1.78	6.11
10,117.0	90.90	92.60	8,359.0	746.6	1,749.6	1,819.9	2.70	-2.11	1.68
10,211.0	88.70	93.60	8,359.4	741.5	1,843.4	1,912.6	2.57	-2.34	1.06
10,306.0	87.40	92.90	8,362.6	736.2	1,938.2	2,006.3	1.55	-1.37	-0.74
10,401.0	87.50	93.50	8,366.8	730.9	2,033.0	2,099.9	0.64	0.11	0.63
10,496.0	89.50	94.50	8,369.3	724.2	2,127.7	2,193.4	2.35	2.11	1.05
10,591.0	91.40	94.90	8,368.6	716.5	2,222.4	2,286.7	2.04	2.00	0.42
10,654.0	89.10	95.40	8,368.3	710.8	2,285.1	2,348.4	3.74	-3.65	0.79
10,717.0	87.80	94.50	8,370.0	705.4	2,347.8	2,410.2	2.51	-2.06	-1.43
10,780.0	87.50	94.00	8,372.6	700.7	2,410.6	2,472.1	0.92	-0.48	-0.79
10,843.0	87.90	94.30	8,375.1	696.2	2,473.4	2,534.0	0.79	0.63	0.48
10,874.0	88.90	95.20	8,376.0	693.6	2,504.3	2,564.5	4.34	3.23	2.90
10,969.0	88.20	95.40	8,378.4	684.8	2,598.8	2,657.5	0.77	-0.74	0.21
11,063.0	89.00	95.00	8,380.7	676.3	2,692.4	2,749.6	0.95	0.85	-0.43
11,158.0	90.00	94.90	8,381.5	668.1	2,787.1	2,842.9	1.06	1.05	-0.11
11,252.0	89.30	94.30	8,382.1	660.6	2,880.8	2,935.2	0.98	-0.74	-0.64
11,347.0	89.40	94.20	8,383.1	653.5	2,975.5	3,028.6	0.15	0.11	-0.11
11,442.0	88.70	94.30	8,384.7	646.5	3,070.2	3,122.0	0.74	-0.74	0.11



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well URSA 27 Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Site:	Section 27-18S-30E URSA 27 Federal Com #1H	MD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Well:	URSA 27 Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	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)
11,537.0	89.00	94.20	8,386.6	639.4	3,164.9	3,215.4	0.33	0.32	-0.11
11,632.0	89.90	93.30	8,387.5	633.2	3,259.7	3,309.0	1.34	0.95	-0.95
11,726.0	89.40	92.60	8,388.1	628.4	3,353.6	3,401.8	0.92	-0.53	-0.74
11,821.0	90.00	92.90	8,388.6	623.8	3,448.5	3,495.6	0.71	0.63	0.32
11,916.0	91.40	93.10	8,387.5	618.9	3,543.4	3,589.4	1.49	1.47	0.21
12,011.0	91.10	94.20	8,385.4	612.8	3,638.1	3,683.0	1.20	-0.32	1.16
12,106.0	90.30	93.80	8,384.2	606.2	3,732.9	3,776.5	0.94	-0.84	-0.42
12,201.0	89.70	92.70	8,384.2	600.8	3,827.7	3,870.2	1.32	-0.63	-1.16
12,296.0	89.30	92.20	8,385.0	596.7	3,922.6	3,964.1	0.67	-0.42	-0.53
12,391.0	90.40	93.60	8,385.3	591.9	4,017.5	4,057.9	1.87	1.16	1.47
12,485.0	90.40	94.00	8,384.6	585.7	4,111.3	4,150.5	0.43	0.00	0.43
12,580.0	90.90	93.50	8,383.6	579.5	4,206.1	4,244.1	0.74	0.53	-0.53
12,675.0	90.40	95.20	8,382.5	572.3	4,300.8	4,337.5	1.87	-0.53	1.79
12,770.0	89.00	96.80	8,383.0	562.4	4,395.3	4,430.3	2.24	-1.47	1.68
12,865.0	89.80	96.10	8,384.0	551.7	4,489.7	4,523.0	1.12	0.84	-0.74
12,934.0	89.10	95.00	8,384.6	545.0	4,558.4	4,590.5	1.89	-1.01	-1.59
12,990.0	88.50	94.50	8,385.8	540.4	4,614.2	4,645.5	1.39	-1.07	-0.89

12990' MD Projected to Bit - PBHL URSA 27 Fed Com #1H

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,672.0	7,667.8	44.8	-97.6	7672' MD VES Gyro
12,990.0	8,385.8	540.4	4,614.2	12990' MD Projected to Bit



Mewbourne Oil Company .

Eddy County, New Mexico

Section 27-18S-30E URSA 27 Federal Com #1H

URSA 27 Federal Com #1H

Original Hole

Design: Original Hole

Survey Report - Geographic

23 January, 2014





Stryker Directional Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well: URSA 27 Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Site:	Section 27-18S-30E URSA 27 Federal Com #1H	MD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Well:	URSA 27 Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	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:	Section 27-18S-30E URSA 27 Federal Com #1H
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Site Position:	Map	Northing:	622,738.41 usft	Latitude:	32° 42' 41.293 N
From:		Easting:	612,627.99 usft	Longitude:	103° 58' 1.763 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.20 °

Well: URSA 27 Federal Com #1H						
Well Position	+N/-S	0.0 usft	Northing:	622,738.41 usft	Latitude:	32° 42' 41.293 N
	+E/-W	0.0 usft	Easting:	612,627.99 usft	Longitude:	103° 58' 1.763 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,433.0 usft

Wellbore:	Original Hole
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/14/2013	7.52	60.51	48,633

Design:	Original Hole
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Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	83.81

Survey Program		Date - 1/23/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	7,672.0	VES Gyro Survey #1 (Original Hole)	GyroFlex	
7,737.0	12,990.0	MWD Survey #2 (Original Hole)	MWD	MWD - Standard

Survey	Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
	0.0	0.00	0.00	0.0	0.0	0.0	622,738.41	612,627.99	32° 42' 41.293 N	103° 58' 1.763 W
	100.0	1.05	156.76	100.0	-0.8	0.4	622,737.57	612,628.36	32° 42' 41.285 N	103° 58' 1.759 W
	200.0	1.78	142.83	200.0	-2.9	1.7	622,735.49	612,629.66	32° 42' 41.264 N	103° 58' 1.744 W
	300.0	1.92	123.24	299.9	-5.1	4.0	622,733.33	612,631.99	32° 42' 41.243 N	103° 58' 1.717 W
	400.0	2.16	106.30	399.8	-6.5	7.2	622,731.88	612,635.20	32° 42' 41.229 N	103° 58' 1.679 W
	500.0	1.61	102.09	499.8	-7.3	10.4	622,731.06	612,638.39	32° 42' 41.220 N	103° 58' 1.642 W
	600.0	1.42	103.26	599.8	-7.9	13.0	622,730.48	612,640.97	32° 42' 41.215 N	103° 58' 1.612 W
	700.0	1.49	97.50	699.7	-8.4	15.5	622,730.03	612,643.46	32° 42' 41.210 N	103° 58' 1.582 W
	800.0	1.36	98.71	799.7	-8.7	17.9	622,729.68	612,645.92	32° 42' 41.206 N	103° 58' 1.554 W
	900.0	1.33	96.00	899.7	-9.0	20.3	622,729.38	612,648.25	32° 42' 41.203 N	103° 58' 1.526 W
	1,000.0	1.61	109.32	999.6	-9.6	22.7	622,728.79	612,650.73	32° 42' 41.197 N	103° 58' 1.497 W



Stryker Directional Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well URSA 27 Federal Com #1H
Project:	Eddy County New Mexico	TVD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Site:	Section 27-18S-30E URSA 27 Federal Com #1H	MD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Well:	URSA 27 Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000-1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,100.0	1.17	94.29	1,099.6	-10.2	25.1	622,728.25	612,653.07	32° 42' 41.192 N	103° 58' 1.470 W
1,200.0	1.20	87.81	1,199.6	-10.2	27.1	622,728.21	612,655.14	32° 42' 41.192 N	103° 58' 1.446 W
1,300.0	0.99	89.81	1,299.6	-10.2	29.1	622,728.26	612,657.05	32° 42' 41.192 N	103° 58' 1.423 W
1,400.0	1.31	88.92	1,399.5	-10.1	31.1	622,728.28	612,659.06	32° 42' 41.192 N	103° 58' 1.400 W
1,500.0	1.33	73.39	1,499.5	-9.8	33.3	622,728.64	612,661.31	32° 42' 41.196 N	103° 58' 1.374 W
1,600.0	0.68	85.70	1,599.5	-9.4	35.0	622,729.01	612,663.01	32° 42' 41.199 N	103° 58' 1.354 W
1,700.0	0.74	82.12	1,699.5	-9.3	36.3	622,729.14	612,664.25	32° 42' 41.201 N	103° 58' 1.339 W
1,800.0	1.01	39.19	1,799.5	-8.5	37.4	622,729.92	612,665.44	32° 42' 41.208 N	103° 58' 1.325 W
1,900.0	0.46	6.20	1,899.5	-7.4	38.0	622,731.00	612,666.04	32° 42' 41.219 N	103° 58' 1.318 W
2,000.0	0.36	15.92	1,999.5	-6.7	38.2	622,731.70	612,666.17	32° 42' 41.226 N	103° 58' 1.317 W
2,100.0	0.42	55.05	2,099.5	-6.2	38.6	622,732.21	612,666.56	32° 42' 41.231 N	103° 58' 1.312 W
2,200.0	0.47	59.63	2,199.5	-5.8	39.2	622,732.63	612,667.21	32° 42' 41.235 N	103° 58' 1.304 W
2,300.0	0.61	341.76	2,299.5	-5.1	39.4	622,733.34	612,667.40	32° 42' 41.242 N	103° 58' 1.302 W
2,400.0	0.41	57.92	2,399.5	-4.4	39.5	622,734.04	612,667.54	32° 42' 41.249 N	103° 58' 1.300 W
2,500.0	0.42	39.59	2,499.5	-3.9	40.1	622,734.51	612,668.07	32° 42' 41.253 N	103° 58' 1.294 W
2,600.0	0.62	3.24	2,599.5	-3.1	40.3	622,735.33	612,668.34	32° 42' 41.262 N	103° 58' 1.291 W
2,700.0	0.11	112.60	2,699.5	-2.6	40.5	622,735.84	612,668.46	32° 42' 41.267 N	103° 58' 1.290 W
2,800.0	0.77	336.50	2,799.5	-2.0	40.3	622,736.42	612,668.28	32° 42' 41.272 N	103° 58' 1.292 W
2,900.0	0.65	339.14	2,899.4	-0.8	39.8	622,737.56	612,667.81	32° 42' 41.284 N	103° 58' 1.297 W
3,000.0	0.65	332.55	2,999.4	0.2	39.4	622,738.60	612,667.34	32° 42' 41.294 N	103° 58' 1.303 W
3,100.0	0.41	345.36	3,099.4	1.0	39.0	622,739.44	612,666.99	32° 42' 41.302 N	103° 58' 1.307 W
3,200.0	0.67	330.23	3,199.4	1.9	38.6	622,740.30	612,666.61	32° 42' 41.311 N	103° 58' 1.311 W
3,300.0	0.23	352.95	3,299.4	2.6	38.3	622,741.00	612,666.30	32° 42' 41.318 N	103° 58' 1.315 W
3,400.0	0.10	190.84	3,399.4	2.7	38.3	622,741.12	612,666.26	32° 42' 41.319 N	103° 58' 1.315 W
3,500.0	0.46	223.74	3,499.4	2.3	38.0	622,740.74	612,665.96	32° 42' 41.315 N	103° 58' 1.319 W
3,600.0	0.72	268.51	3,599.4	2.0	37.1	622,740.44	612,665.06	32° 42' 41.312 N	103° 58' 1.329 W
3,700.0	0.65	237.44	3,699.4	1.7	36.0	622,740.11	612,663.95	32° 42' 41.309 N	103° 58' 1.342 W
3,800.0	0.55	238.95	3,799.4	1.2	35.1	622,739.56	612,663.06	32° 42' 41.304 N	103° 58' 1.353 W
3,900.0	0.72	254.71	3,899.4	0.7	34.1	622,739.15	612,662.04	32° 42' 41.300 N	103° 58' 1.365 W
4,000.0	0.50	251.36	3,999.4	0.4	33.0	622,738.84	612,661.02	32° 42' 41.297 N	103° 58' 1.377 W
4,100.0	0.20	271.52	4,099.4	0.3	32.4	622,738.71	612,660.44	32° 42' 41.295 N	103° 58' 1.383 W
4,200.0	0.83	282.39	4,199.4	0.5	31.6	622,738.87	612,659.55	32° 42' 41.297 N	103° 58' 1.394 W
4,300.0	0.38	303.30	4,299.4	0.8	30.6	622,739.21	612,658.57	32° 42' 41.300 N	103° 58' 1.405 W
4,400.0	1.38	309.65	4,399.4	1.7	29.4	622,740.16	612,657.37	32° 42' 41.310 N	103° 58' 1.419 W
4,500.0	1.37	299.47	4,499.3	3.1	27.4	622,741.51	612,655.40	32° 42' 41.323 N	103° 58' 1.442 W
4,600.0	2.36	298.97	4,599.3	4.7	24.6	622,743.10	612,652.56	32° 42' 41.339 N	103° 58' 1.475 W
4,700.0	2.64	300.38	4,699.2	6.9	20.8	622,745.26	612,648.77	32° 42' 41.361 N	103° 58' 1.520 W
4,800.0	2.65	303.59	4,799.1	9.3	16.9	622,747.70	612,644.86	32° 42' 41.385 N	103° 58' 1.565 W
4,900.0	2.69	294.07	4,899.0	11.5	12.8	622,749.94	612,640.79	32° 42' 41.407 N	103° 58' 1.613 W
5,000.0	2.86	289.90	4,998.9	13.3	8.3	622,751.75	612,636.30	32° 42' 41.425 N	103° 58' 1.665 W
5,100.0	3.10	284.50	5,098.7	14.9	3.3	622,753.27	612,631.33	32° 42' 41.440 N	103° 58' 1.723 W
5,200.0	3.09	279.93	5,198.6	16.0	-1.9	622,754.41	612,626.06	32° 42' 41.452 N	103° 58' 1.785 W
5,300.0	2.63	286.65	5,298.5	17.1	-6.8	622,755.54	612,621.21	32° 42' 41.463 N	103° 58' 1.842 W
5,400.0	3.08	270.13	5,398.3	17.8	-11.7	622,756.20	612,616.32	32° 42' 41.470 N	103° 58' 1.899 W
5,500.0	3.21	268.22	5,498.2	17.7	-17.2	622,756.12	612,610.84	32° 42' 41.469 N	103° 58' 1.963 W
5,600.0	2.93	260.50	5,598.0	17.2	-22.5	622,755.61	612,605.52	32° 42' 41.464 N	103° 58' 2.025 W
5,700.0	2.86	277.66	5,697.9	17.1	-27.5	622,755.52	612,600.53	32° 42' 41.464 N	103° 58' 2.084 W
5,800.0	2.39	268.50	5,797.8	17.4	-32.0	622,755.80	612,595.97	32° 42' 41.467 N	103° 58' 2.137 W
5,900.0	2.55	277.33	5,897.7	17.6	-36.3	622,756.03	612,591.68	32° 42' 41.469 N	103° 58' 2.187 W
6,000.0	2.32	277.46	5,997.6	18.2	-40.5	622,756.57	612,587.47	32° 42' 41.475 N	103° 58' 2.237 W
6,100.0	2.66	283.51	6,097.5	19.0	-44.8	622,757.38	612,583.20	32° 42' 41.483 N	103° 58' 2.287 W
6,200.0	2.90	288.51	6,197.4	20.3	-49.4	622,758.73	612,578.55	32° 42' 41.496 N	103° 58' 2.341 W
6,300.0	2.77	299.77	6,297.3	22.3	-53.9	622,760.73	612,574.05	32° 42' 41.516 N	103° 58' 2.394 W
6,400.0	2.63	320.61	6,397.2	25.3	-57.5	622,763.70	612,570.50	32° 42' 41.546 N	103° 58' 2.435 W
6,500.0	2.81	340.81	6,497.1	29.4	-59.8	622,767.79	612,568.24	32° 42' 41.586 N	103° 58' 2.461 W



Stryker Directional Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well:URSA 27 Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Site:	Section 27-18S-30E URSA 27 Federal Com #1H	MD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Well:	URSA 27 Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM:5000.1 Single User.Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,600.0	2.30	359.80	6,597.0	33.7	-60.6	622,772.11	612,567.42	32° 42' 41.629 N	103° 58' 2.471 W
6,700.0	2.85	341.56	6,696.9	38.1	-61.4	622,776.48	612,566.63	32° 42' 41.672 N	103° 58' 2.480 W
6,800.0	3.37	328.83	6,796.7	42.9	-63.7	622,781.35	612,564.32	32° 42' 41.721 N	103° 58' 2.507 W
6,900.0	2.87	313.54	6,896.6	47.2	-67.0	622,785.59	612,560.99	32° 42' 41.763 N	103° 58' 2.545 W
7,000.0	2.92	305.05	6,996.5	50.4	-70.9	622,788.78	612,557.09	32° 42' 41.794 N	103° 58' 2.591 W
7,100.0	2.70	289.00	7,096.3	52.6	-75.2	622,791.01	612,552.77	32° 42' 41.816 N	103° 58' 2.641 W
7,200.0	3.06	271.37	7,196.2	53.4	-80.1	622,791.84	612,547.88	32° 42' 41.825 N	103° 58' 2.699 W
7,300.0	2.01	252.84	7,296.1	53.0	-84.5	622,791.38	612,543.53	32° 42' 41.820 N	103° 58' 2.750 W
7,400.0	2.84	241.43	7,396.0	51.3	-88.3	622,789.68	612,539.68	32° 42' 41.804 N	103° 58' 2.795 W
7,500.0	2.95	231.29	7,495.9	48.5	-92.5	622,786.89	612,535.50	32° 42' 41.776 N	103° 58' 2.844 W
7,600.0	2.17	243.05	7,595.8	46.0	-96.2	622,784.42	612,531.80	32° 42' 41.752 N	103° 58' 2.887 W
7,672.0	0.97	202.13	7,667.8	44.8	-97.6	622,783.24	612,530.36	32° 42' 41.740 N	103° 58' 2.904 W
7672' MD VES Gyro									
7,737.0	0.80	186.30	7,732.8	43.9	-97.9	622,782.28	612,530.10	32° 42' 41.731 N	103° 58' 2.907 W
7,783.0	2.60	73.90	7,778.7	43.8	-96.9	622,782.25	612,531.07	32° 42' 41.731 N	103° 58' 2.896 W
7,828.0	9.00	56.40	7,823.5	46.1	-93.0	622,784.48	612,534.99	32° 42' 41.752 N	103° 58' 2.850 W
7,873.0	13.60	60.90	7,867.6	50.6	-85.4	622,789.00	612,542.54	32° 42' 41.797 N	103° 58' 2.761 W
7,918.0	14.80	62.00	7,911.2	55.9	-75.8	622,794.27	612,552.24	32° 42' 41.849 N	103° 58' 2.647 W
7,963.0	18.80	60.20	7,954.3	62.2	-64.4	622,800.58	612,563.61	32° 42' 41.911 N	103° 58' 2.514 W
8,008.0	23.40	57.60	7,996.3	70.6	-50.5	622,808.98	612,577.46	32° 42' 41.993 N	103° 58' 2.352 W
8,053.0	27.90	57.40	8,036.8	81.0	-34.1	622,819.44	612,593.88	32° 42' 42.096 N	103° 58' 2.159 W
8,098.0	32.70	58.30	8,075.7	93.1	-14.9	622,831.51	612,613.10	32° 42' 42.215 N	103° 58' 1.934 W
8,143.0	36.80	59.90	8,112.6	106.3	7.1	622,844.66	612,635.12	32° 42' 42.345 N	103° 58' 1.675 W
8,189.0	40.20	62.20	8,148.6	120.1	32.2	622,858.50	612,660.18	32° 42' 42.481 N	103° 58' 1.382 W
8,234.0	44.10	64.40	8,182.0	133.6	59.2	622,872.04	612,687.16	32° 42' 42.614 N	103° 58' 1.065 W
8,279.0	49.50	62.00	8,212.8	148.4	88.4	622,886.85	612,716.41	32° 42' 42.759 N	103° 58' 0.722 W
8,324.0	53.40	58.60	8,240.8	165.9	119.0	622,904.31	612,746.95	32° 42' 42.931 N	103° 58' 0.364 W
8,369.0	58.00	57.90	8,266.2	185.5	150.6	622,923.87	612,778.55	32° 42' 43.123 N	103° 57' 59.994 W
8,414.0	63.60	57.90	8,288.1	206.3	183.8	622,944.73	612,811.81	32° 42' 43.329 N	103° 57' 59.603 W
8,459.0	68.30	58.60	8,306.5	227.9	218.8	622,966.35	612,846.75	32° 42' 43.541 N	103° 57' 59.194 W
8,504.0	71.80	59.40	8,321.8	249.7	255.0	622,988.13	612,883.00	32° 42' 43.756 N	103° 57' 58.768 W
8,549.0	75.80	59.20	8,334.4	271.8	292.2	623,010.19	612,920.15	32° 42' 43.973 N	103° 57' 58.333 W
8,594.0	79.00	59.70	8,344.2	294.1	330.0	623,032.50	612,957.97	32° 42' 44.192 N	103° 57' 57.889 W
8,627.0	81.40	59.20	8,349.8	310.6	358.0	623,049.03	612,985.97	32° 42' 44.355 N	103° 57' 57.561 W
8,724.0	89.90	58.30	8,357.2	360.8	440.6	623,099.17	613,068.58	32° 42' 44.848 N	103° 57' 56.592 W
8,756.0	90.00	57.90	8,357.2	377.7	467.8	623,116.08	613,095.74	32° 42' 45.015 N	103° 57' 56.273 W
8,787.0	89.90	57.90	8,357.2	394.1	494.0	623,132.55	613,122.01	32° 42' 45.177 N	103° 57' 55.965 W
8,819.0	89.80	57.90	8,357.3	411.1	521.1	623,149.55	613,149.11	32° 42' 45.344 N	103° 57' 55.647 W
8,851.0	90.00	58.60	8,357.4	428.0	548.3	623,166.39	613,176.32	32° 42' 45.510 N	103° 57' 55.328 W
8,882.0	90.20	59.00	8,357.3	444.0	574.8	623,202.45	613,202.84	32° 42' 45.668 N	103° 57' 55.017 W
8,914.0	90.20	58.80	8,357.2	460.6	602.2	623,198.98	613,230.24	32° 42' 45.830 N	103° 57' 54.696 W
8,977.0	89.00	59.20	8,357.6	493.0	656.2	623,231.43	613,284.24	32° 42' 46.150 N	103° 57' 54.062 W
9,024.8	88.04	59.35	8,358.9	517.4	697.3	623,255.84	613,325.32	32° 42' 46.390 N	103° 57' 53.581 W
LP2:URSA @7 Federal Com #1H									
9,072.0	87.10	59.50	8,360.9	541.4	737.9	623,279.83	613,365.92	32° 42' 46.626 N	103° 57' 53.104 W
9,167.0	89.30	63.00	8,363.8	587.1	821.2	623,325.49	613,449.15	32° 42' 47.075 N	103° 57' 52.128 W
9,262.0	90.50	68.30	8,364.0	626.2	907.7	623,364.64	613,535.66	32° 42' 47.459 N	103° 57' 51.114 W
9,357.0	91.20	74.50	8,362.6	656.5	997.7	623,394.92	613,625.65	32° 42' 47.756 N	103° 57' 50.060 W
9,452.0	87.70	77.80	8,363.5	679.2	1,089.9	623,417.66	613,717.85	32° 42' 47.977 N	103° 57' 48.980 W
9,547.0	89.50	80.30	8,365.8	697.3	1,183.1	623,435.69	613,811.09	32° 42' 48.153 N	103° 57' 47.888 W
9,642.0	89.30	82.20	8,366.8	711.7	1,277.0	623,450.15	613,904.97	32° 42' 48.292 N	103° 57' 46.788 W
9,737.0	90.40	82.90	8,367.1	724.1	1,371.2	623,462.46	613,999.17	32° 42' 48.411 N	103° 57' 45.685 W
9,832.0	90.10	82.40	8,366.7	736.2	1,465.4	623,474.62	614,093.38	32° 42' 48.528 N	103° 57' 44.582 W
9,927.0	91.20	85.20	8,365.6	746.5	1,559.8	623,484.87	614,187.81	32° 42' 48.626 N	103° 57' 43.476 W



Stryker Directional Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well URSA 27 Federal Com #1H
Project:	Eddy County New Mexico	TVD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Site:	Section 27-18S-30E URSA 27 Federal Com #1H	MD Reference:	GL3433 + 20 @ 3453.0usft (Trinidad #110)
Well:	URSA 27 Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,017.2	92.82	90.71	8,362.4	749.7	1,649.9	623,488.09	614,277.89	32° 42' 48.655 N	103° 57' 42.422 W
PT#1									
10,022.0	92.90	91.00	8,362.2	749.6	1,654.7	623,488.02	614,282.65	32° 42' 48.654 N	103° 57' 42.366 W
10,117.0	90.90	92.60	8,359.0	746.6	1,749.6	623,485.04	614,377.55	32° 42' 48.621 N	103° 57' 41.255 W
10,211.0	88.70	93.60	8,359.4	741.5	1,843.4	623,479.96	614,471.40	32° 42' 48.568 N	103° 57' 40.157 W
10,306.0	87.40	92.90	8,362.6	736.2	1,938.2	623,474.57	614,566.19	32° 42' 48.511 N	103° 57' 39.048 W
10,401.0	87.50	93.50	8,366.8	730.9	2,033.0	623,469.28	614,660.95	32° 42' 48.456 N	103° 57' 37.939 W
10,496.0	89.50	94.50	8,369.3	724.2	2,127.7	623,462.65	614,755.68	32° 42' 48.387 N	103° 57' 36.831 W
10,591.0	91.40	94.90	8,368.6	716.5	2,222.4	623,454.87	614,850.35	32° 42' 48.306 N	103° 57' 35.723 W
10,654.0	89.10	95.40	8,368.3	710.8	2,285.1	623,449.21	614,913.09	32° 42' 48.248 N	103° 57' 34.989 W
10,717.0	87.80	94.50	8,370.0	705.4	2,347.8	623,443.78	614,975.83	32° 42' 48.192 N	103° 57' 34.255 W
10,780.0	87.50	94.00	8,372.6	700.7	2,410.6	623,439.11	615,038.61	32° 42' 48.144 N	103° 57' 33.520 W
10,843.0	87.90	94.30	8,375.1	696.2	2,473.4	623,434.56	615,101.39	32° 42' 48.097 N	103° 57' 32.785 W
10,874.0	88.90	95.20	8,376.0	693.6	2,504.3	623,431.99	615,132.27	32° 42' 48.070 N	103° 57' 32.424 W
10,969.0	88.20	95.40	8,378.4	684.8	2,598.8	623,423.22	615,226.83	32° 42' 47.980 N	103° 57' 31.318 W
11,063.0	89.00	95.00	8,380.7	676.3	2,692.4	623,414.70	615,320.42	32° 42' 47.893 N	103° 57' 30.223 W
11,158.0	90.00	94.90	8,381.5	668.1	2,787.1	623,406.51	615,415.06	32° 42' 47.808 N	103° 57' 29.115 W
11,252.0	89.30	94.30	8,382.1	660.6	2,880.8	623,398.97	615,508.75	32° 42' 47.730 N	103° 57' 28.019 W
11,347.0	89.40	94.20	8,383.1	653.5	2,975.5	623,391.93	615,603.49	32° 42' 47.657 N	103° 57' 26.910 W
11,442.0	88.70	94.30	8,384.7	646.5	3,070.2	623,384.89	615,698.21	32° 42' 47.584 N	103° 57' 25.802 W
11,537.0	89.00	94.20	8,386.6	639.4	3,164.9	623,377.85	615,792.93	32° 42' 47.511 N	103° 57' 24.694 W
11,632.0	89.90	93.30	8,387.5	633.2	3,259.7	623,371.64	615,887.72	32° 42' 47.446 N	103° 57' 23.585 W
11,726.0	89.40	92.60	8,388.1	628.4	3,353.6	623,366.80	615,981.59	32° 42' 47.395 N	103° 57' 22.486 W
11,821.0	90.00	92.90	8,388.6	623.8	3,448.5	623,362.24	616,076.48	32° 42' 47.347 N	103° 57' 21.376 W
11,916.0	91.40	93.10	8,387.5	618.9	3,543.4	623,357.27	616,171.34	32° 42' 47.294 N	103° 57' 20.266 W
12,011.0	91.10	94.20	8,385.4	612.8	3,638.1	623,351.23	616,266.13	32° 42' 47.231 N	103° 57' 19.156 W
12,106.0	90.30	93.80	8,384.2	606.2	3,732.9	623,344.60	616,360.89	32° 42' 47.162 N	103° 57' 18.048 W
12,201.0	89.70	92.70	8,384.2	600.8	3,827.7	623,339.21	616,455.73	32° 42' 47.106 N	103° 57' 16.938 W
12,296.0	89.30	92.20	8,385.0	596.7	3,922.6	623,335.15	616,550.64	32° 42' 47.062 N	103° 57' 15.827 W
12,391.0	90.40	93.60	8,385.3	591.9	4,017.5	623,330.35	616,645.52	32° 42' 47.011 N	103° 57' 14.717 W
12,485.0	90.40	94.00	8,384.6	585.7	4,111.3	623,324.12	616,739.31	32° 42' 46.946 N	103° 57' 13.619 W
12,580.0	90.90	93.50	8,383.6	579.5	4,206.1	623,317.90	616,834.10	32° 42' 46.881 N	103° 57' 12.510 W
12,675.0	90.40	95.20	8,382.5	572.3	4,300.8	623,310.70	616,928.81	32° 42' 46.807 N	103° 57' 11.402 W
12,770.0	89.00	96.80	8,383.0	562.4	4,395.3	623,300.77	617,023.29	32° 42' 46.705 N	103° 57' 10.296 W
12,865.0	89.80	96.10	8,384.0	551.7	4,489.7	623,290.10	617,117.68	32° 42' 46.596 N	103° 57' 9.192 W
12,934.0	89.10	95.00	8,384.6	545.0	4,558.4	623,283.43	617,186.35	32° 42' 46.528 N	103° 57' 8.389 W
12,990.0	88.50	94.50	8,385.8	540.4	4,614.2	623,278.79	617,242.15	32° 42' 46.480 N	103° 57' 7.736 W

12990' MD Projected to Bit - PBHL URSA 27 Fed Com #1H

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,672.0	7,667.8	44.8	-97.6	7672' MD VES Gyro
12,990.0	8,385.8	540.4	4,614.2	12990' MD Projected to Bit

Operating Company Mewbourne Oil Co.
Well Name & Number Ursa 27 Fed Com #1H
Sales Ticket Number 610932
Date 1/23/2014

Company Rep Jerry Vanwinkle
Field 18S 30E 27
BOT Service Rep Anthony Thomas
District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	830000	6.276	6.151	LTC / 8RD	0.03826	8,687.00	9,960	6,230
Top Liner	4.000	13.50	422000	3.920	3.795	LTC / 8RD	0.01492	4,531.33	12,410	10,690
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-
TVD	8401.00		KOP		7766.00		Open Hole	6.125	Casing Vol. (bbl)	323.2
Carry Fluid Weight (ppg)			8.4		Propant Content (ppa)				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		8446.67							

Zone Length	JR Sleeve & S3	JR Sleeve and S3	8446.67	8.63						
		Spacer Nipple and Collar	8455.30	8.09						
	7 joints	4 1/2 13.5# casing	8463.39	298.53						
		3.50" EX Frac Sleeve	8761.92	2.40						
	3 Joints	4 1/2 13.5# casing	8764.32	127.91						
		582 OH Packer	8892.23	3.89						
	2 Joints	4 1/2 13.5# casing	8896.12	85.28						
		3.438" EX-C Frac Sleeve	8981.40	2.40						
	3 Joints	4 1/2 13.5# casing	8983.80	127.92						
		582 OH Packer	9111.72	3.89						
	2 Joints	4 1/2 13.5# casing	9115.61	85.28						
		3.375" EX Frac Sleeve	9200.89	2.40						
	3 Joints	4 1/2 13.5# casing	9203.29	127.95						
		582 OH Packer	9331.24	3.89						
	2 Joints	4 1/2 13.5# casing	9335.13	85.26						
		3.313" EX-C Frac Sleeve	9420.39	2.40						
	3 Joints	4 1/2 13.5# casing	9422.79	127.90						
		582 OH Packer	9550.69	3.89						
	2 Joints	4 1/2 13.5# casing	9554.58	85.27						
		3.250" EX Frac Sleeve	9639.85	2.40						
	3 Joints	4 1/2 13.5# casing	9642.25	127.90						
		582 OH Packer	9770.15	3.89						

Operating Company Mewbourne Oil Co.
Well Name & Number Ursa 27 Fed Com #1H
Sales Ticket Number 610932
Date 1/23/2014

Company Rep Jerry Vanwinkle
Field 18S 30E 27
BOT Service Rep Anthony Thomas
District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	830000	6.276	6.151	LTC / 8RD	0.03826	8,687.00	9,960	6,230
Top Liner	4.000	13.50	422000	3.920	3.795	LTC / 8RD	0.01492	4,531.33	12,410	10,690
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-

TVD	8401.00	KOP	7766.00	Open Hole	6.125	Casing Vol. (bbl)	323.2
Carry Fluid Weight (ppg)	8.4	Propan Content (ppa)		Max Drill Out Size	0		

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Displ (BBL)
	3 Joints	4 1/2 13.5# casing	9774.04	127.92						
		3.188" EX-C Frac Sleeve	9901.96	2.40						
	3 Joints	4 1/2 13.5# casing	9904.36	127.88						
		3.82 OH Packer	10032.24	3.89						
	2 Joints	4 1/2 13.5# casing	10036.13	85.27						
		3.125" EX Frac Sleeve	10121.40	2.40						
	3 Joints	4 1/2 13.5# casing	10123.80	127.89						
		3.82 OH Packer	10251.69	3.89						
	2 Joints	4 1/2 13.5# casing	10255.58	85.28						
		3.063" EX-C Frac Sleeve	10340.86	2.40						
	3 Joints	4 1/2 13.5# casing	10343.26	127.92						
		3.82 OH Packer	10471.18	3.89						
	2 Joints	4 1/2 13.5# casing	10475.07	85.28						
		3.00" EX Frac Sleeve	10560.35	2.40						
	3 Joints	4 1/2 13.5# casing	10562.75	127.94						
		3.82 OH Packer	10690.89	3.89						
	2 Joints	4 1/2 13.5# casing	10694.58	85.27						
		2.938" EX-C Frac Sleeve	10779.85	2.40						
	3 Joints	4 1/2 13.5# casing	10782.25	127.94						
		3.82 OH Packer	10910.19	3.89						
	2 Joints	4 1/2 13.5# casing	10914.08	85.30						
		2.875" EX Frac Sleeve	10999.38	2.40						
	3 Joints	4 1/2 13.5# casing	11001.78	127.93						
		3.82 OH Packer	11128.71	3.89						
	2 Joints	4 1/2 13.5# casing	11133.60	85.29						
		2.813" EX-C Frac Sleeve	11218.89	2.40						

Operating Company Mewbourne Oil Co.
Well Name & Number Ursa 27 Fed Com #1H
Sales Ticket Number 610932
Date 1/23/2014

Company Rep Jerry Vanwinkle
Field 18S 30E 27
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District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	830000	6.276	6.151	LTC // 8RD	0.03826	8,687.00	9,960	6,230	
Top Liner	4.000	13.50	422000	3.920	3.795	LTC / 8RD	0.01492	4,531.33	12,410	10,690	
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-	
TVD		8401.00		KOP		7766.00		Open Hole	6.125	Casing Vol. (bbl)	323.2
Carry Fluid Weight (ppg)			8.4		Propant Content (ppa)				Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ (BBL)
	3 Joints	4 1/2 13.5# casing	11221.29	127.91						
		582 OH Packer	11349.20	3.89						
	3 Joints	4 1/2 13.5# casing	11353.09	127.91						
		2.750" EX Frac Sleeve	11481.00	2.40						
	3 Joints	4 1/2 13.5# casing	11483.40	127.92						
		582 OH Packer	11611.32	3.89						
	2 Joints	4 1/2 13.5# casing	11615.21	85.29						
		2.688" EX-C Frac Sleeve	11700.50	2.40						
	3 Joints	4 1/2 13.5# casing	11702.90	124.65						
		582 OH Packer	11827.55	3.89						
	2 Joints	4 1/2 13.5# casing	11831.44	85.30						
		2.625" EX Frac Sleeve	11916.74	2.40						
	3 Joints	4 1/2 13.5# casing	11919.14	127.91						
		582 OH Packer	12047.05	3.89						
	2 Joints	4 1/2 13.5# casing	12050.94	85.27						
		2.563" EX-C Frac Sleeve	12136.21	2.40						
	3 Joints	4 1/2 13.5# casing	12138.61	113.00						
		582 OH Packer	12251.61	3.89						
	3 Joints	4 1/2 13.5# casing	12255.50	116.90						
		2.50" EX Frac Sleeve	12372.40	2.40						
	2 Joints	4 1/2 13.5# casing	12374.80	80.36						
		582 OH Packer	12455.16	3.89						
	3 Joints	4 1/2 13.5# casing	12459.05	118.14						
		2.438" EX-C Frac Sleeve	12577.19	2.40						
	3 Joints	4 1/2 13.5# casing	12579.59	120.85						
		582 OH Packer	12700.44	3.89						

Company Rep	Jerry Vanwinkle
Field	18S 30E 27
BOT Service Rep	Anthony Thomas
District Location	Odessa, TX

[illegible]



Company: Mewbourne
Lease/Well: URSA 27 Federal Com/No. 001H

Rig Name: Trinidad 110
State/County: New Mexico/Eddy
Latitude: 32.71, Longitude: -103.97
GRID North is 0.20 Degrees East of True North
VS-Azi: 83.81 Degrees



RKB : 20 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: ...27 fed com #1h gyro survey.ut

Minimum Curvature Method

Report Date/Time: 2/3/2014 / 11:00

Vaughn Energy Services

Gardendale, TX

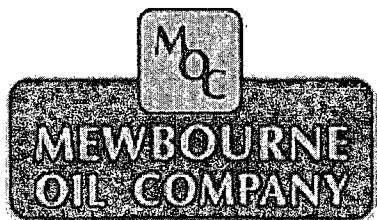
(432) 563-5444

Surveyor: Dustin Wedel

URSA 27 Federal Com No. 001H / API 30-015-39581

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	1.05	156.76	99.99	-0.84	0.36	0.27	0.91	156.76	1.05
200.00	1.78	142.83	199.96	-2.92	1.66	1.34	3.36	150.36	0.81
300.00	1.92	123.24	299.91	-5.08	4.00	3.43	6.47	141.76	0.64
400.00	2.16	106.30	399.85	-6.53	7.21	6.47	9.73	132.14	0.65
500.00	1.61	102.09	499.80	-7.35	10.40	9.55	12.73	125.26	0.57
600.00	1.42	103.26	599.76	-7.93	12.98	12.05	15.21	121.42	0.19
700.00	1.49	97.50	699.73	-8.39	15.48	14.49	17.61	118.44	0.16
800.00	1.36	98.71	799.70	-8.74	17.95	16.91	19.96	115.95	0.13
900.00	1.33	96.00	899.67	-9.04	20.29	19.19	22.21	114.01	0.07
1000.00	1.61	109.32	999.64	-9.62	22.77	21.60	24.72	112.91	0.44
1100.00	1.17	94.29	1099.61	-10.16	25.11	23.87	27.09	112.04	0.57
1200.00	1.20	87.81	1199.59	-10.20	27.18	25.92	29.03	110.57	0.14
1300.00	0.99	89.81	1299.57	-10.16	29.09	27.83	30.81	109.25	0.21
1400.00	1.31	88.92	1399.55	-10.13	31.09	29.82	32.70	108.05	0.32
1500.00	1.33	73.39	1499.52	-9.78	33.35	32.10	34.75	106.35	0.36
1600.00	0.68	85.70	1599.50	-9.40	35.05	33.83	36.29	105.02	0.68
1700.00	0.74	82.12	1699.50	-9.27	36.28	35.07	37.45	104.33	0.07
1800.00	1.01	39.19	1799.49	-8.50	37.48	36.34	38.43	102.78	0.69

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
1900.00	0.46	6.20	1899.48	-7.42	38.08	37.06	38.79	101.02	0.68
2000.00	0.36	15.92	1999.48	-6.72	38.21	37.26	38.79	99.97	0.11
2100.00	0.42	55.05	2099.47	-6.20	38.59	37.70	39.09	99.13	0.27
2200.00	0.47	59.63	2199.47	-5.79	39.25	38.39	39.67	98.39	0.06
2300.00	0.61	341.76	2299.47	-5.08	39.44	38.66	39.76	97.34	0.68
2400.00	0.41	57.92	2399.46	-4.39	39.57	38.87	39.81	96.33	0.64
2500.00	0.42	39.59	2499.46	-3.92	40.11	39.45	40.30	95.58	0.13
2600.00	0.62	3.24	2599.46	-3.09	40.37	39.80	40.49	94.38	0.38
2700.00	0.11	112.60	2699.46	-2.59	40.49	39.97	40.57	93.66	0.67
2800.00	0.77	336.50	2799.45	-2.01	40.31	39.86	40.36	92.86	0.86
2900.00	0.65	339.14	2899.45	-0.86	39.84	39.52	39.85	91.24	0.12
3000.00	0.65	332.55	2999.44	0.17	39.38	39.17	39.38	89.75	0.08
3100.00	0.41	345.36	3099.43	1.02	39.03	38.91	39.04	88.50	0.26
3200.00	0.67	330.23	3199.43	1.87	38.65	38.62	38.69	87.22	0.30
3300.00	0.23	352.95	3299.43	2.58	38.33	38.38	38.42	86.15	0.47
3400.00	0.10	190.84	3399.43	2.69	38.29	38.35	38.38	85.99	0.33
3500.00	0.46	223.74	3499.43	2.31	37.99	38.02	38.06	86.53	0.38
3600.00	0.72	268.51	3599.42	2.00	37.08	37.08	37.14	86.92	0.51
3700.00	0.65	237.44	3699.41	1.68	35.97	35.94	36.01	87.33	0.38
3800.00	0.55	238.95	3799.41	1.12	35.08	35.00	35.10	88.17	0.10
3900.00	0.72	254.71	3899.40	0.71	34.06	33.94	34.07	88.81	0.24
4000.00	0.50	251.36	3999.40	0.40	33.04	32.89	33.05	89.30	0.22
4100.00	0.20	271.52	4099.39	0.27	32.46	32.30	32.46	89.53	0.32
4200.00	0.83	282.39	4199.39	0.43	31.57	31.44	31.58	89.22	0.64
4300.00	0.38	303.30	4299.38	0.76	30.59	30.49	30.60	88.57	0.50
4400.00	1.38	309.65	4399.37	1.72	29.38	29.40	29.43	86.66	1.01
4500.00	1.37	299.47	4499.34	3.07	27.42	27.59	27.59	83.61	0.24
4600.00	2.36	298.97	4599.29	4.66	24.58	24.94	25.02	79.28	0.99
4700.00	2.64	300.38	4699.19	6.82	20.79	21.41	21.88	71.85	0.29
4800.00	2.65	303.59	4799.09	9.26	16.88	17.78	19.25	61.25	0.15
4900.00	2.69	294.07	4898.98	11.50	12.81	13.98	17.21	48.11	0.44
5000.00	2.86	289.90	4998.86	13.30	8.33	9.72	15.69	32.06	0.26
5100.00	3.10	284.50	5098.73	14.82	3.37	4.95	15.20	12.81	0.37
5200.00	3.09	279.93	5198.58	15.97	-1.90	-0.16	16.08	353.22	0.25
5300.00	2.63	286.65	5298.46	17.09	-6.75	-4.86	18.37	338.46	0.57
5400.00	3.08	270.13	5398.33	17.75	-11.63	-9.65	21.22	326.77	0.93
5500.00	3.21	268.22	5498.18	17.67	-17.11	-15.11	24.60	315.92	0.17
5600.00	2.93	260.50	5598.04	17.16	-22.44	-20.46	28.25	307.41	0.50
5700.00	2.86	277.66	5697.91	17.07	-27.43	-25.43	32.31	301.89	0.87



Vaughn Energy Services
Gardendale, TX
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Surveyor: Dustin Wedel
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