

NM OIL CONSERVATION

ARTESIA DISTRICT

SEP 15 2016

RECEIVED

30-015-43517

Mewbourne Oil Company

Eddy County, New Mexico

Sec 13, T26S, R29E

Fuller 13/24 W1LM Fed Com #3H

Wellbore #1

Design: Wellbore #1

DDC Survey Report

10 February, 2016





DDC
Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Fuller 13/24 W1LM Fed Com #3H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2982.0usft (Patterson #231)
Site:	Sec 13, T26S, R29E	MD Reference:	WELL @ 2982.0usft (Patterson #231)
Well:	Fuller 13/24 W1LM Fed Com #3H	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 13, T26S, R29E		
Site Position:		Northing:	379,076.30 usft
From:	Map	Easting:	620,635.10 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 2' 29.752 N
		Longitude:	103° 56' 38.424 W
		Grid Convergence:	0.21 °

Well	Fuller 13/24 W1LM Fed Com #3H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 2' 29.858 N
		Longitude:	103° 56' 35.871 W
		Ground Level:	2,957.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	12/21/2015	7.27
			Dip Angle (°)
			59.85
			Field Strength (nT)
			47,945

Design	Wellbore #1		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
			Direction (°)
			180.01

Survey Program	Date 2/10/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
100.0	9,640.0	GYRO (Wellbore #1)	Good_gyro
9,836.0	17,830.0	MWD (Wellbore #1)	MWD default
			Description
			Good Gyro
			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	0.27	312.74	100.0	0.2	-0.2	-0.2	0.27	0.27	0.00
	200.0	0.63	330.80	200.0	0.8	-0.6	-0.8	0.38	0.36	18.06
	300.0	0.59	314.78	300.0	1.6	-1.2	-1.6	0.17	-0.04	-16.02
	400.0	0.51	303.70	400.0	2.3	-2.0	-2.3	0.13	-0.08	-11.08
	500.0	1.78	256.26	500.0	2.1	-3.9	-2.1	1.48	1.27	-47.44
	600.0	2.24	238.69	599.9	0.7	-7.0	-0.7	0.76	0.46	-17.57
	700.0	2.68	226.91	699.8	-1.9	-10.4	1.9	0.67	0.44	-11.78
	800.0	2.68	222.02	799.7	-5.2	-13.7	5.2	0.23	0.00	-4.89
	900.0	2.68	226.17	899.6	-8.6	-16.9	8.6	0.19	0.00	4.15



DDC
Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Fuller 13/24 W1LM Fed Com #3H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2982.0usft (Patterson #231)
Site:	Sec 13, T26S, R29E	MD Reference:	WELL @ 2982.0usft (Patterson #231)
Well:	Fuller 13/24 W1LM Fed Com #3H	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	2.71	230.50	999.5	-11.7	-20.5	11.7	0.21	0.03	4.33
1,100.0	2.98	229.50	1,099.4	-14.9	-24.3	14.9	0.27	0.27	-1.00
1,200.0	3.13	224.90	1,199.2	-18.5	-28.2	18.5	0.29	0.15	-4.60
1,300.0	3.49	225.66	1,299.1	-22.6	-32.3	22.6	0.36	0.36	0.76
1,400.0	3.57	219.39	1,398.9	-27.1	-36.4	27.1	0.39	0.08	-6.27
1,500.0	3.54	224.93	1,498.7	-31.7	-40.6	31.7	0.34	-0.03	5.54
1,600.0	3.26	229.13	1,598.5	-35.7	-44.9	35.7	0.37	-0.28	4.20
1,700.0	3.18	226.57	1,698.3	-39.5	-49.1	39.5	0.16	-0.08	-2.56
1,800.0	2.79	230.32	1,798.2	-43.0	-53.0	43.0	0.44	-0.39	3.75
1,900.0	2.15	233.24	1,898.1	-45.6	-56.3	45.6	0.65	-0.64	2.92
2,000.0	1.69	232.51	1,998.1	-47.7	-59.0	47.7	0.46	-0.46	-0.73
2,100.0	1.44	229.96	2,098.0	-49.4	-61.1	49.4	0.26	-0.25	-2.55
2,200.0	1.42	229.72	2,198.0	-51.0	-63.0	51.0	0.02	-0.02	-0.24
2,300.0	1.53	227.96	2,297.9	-52.7	-65.0	52.7	0.12	0.11	-1.76
2,400.0	1.28	200.79	2,397.9	-54.6	-66.4	54.6	0.70	-0.25	-27.17
2,500.0	2.32	143.17	2,497.9	-57.3	-65.5	57.3	1.96	1.04	-57.62
2,600.0	3.11	137.95	2,597.8	-60.9	-62.5	60.9	0.83	0.79	-5.22
2,700.0	3.82	140.76	2,697.6	-65.5	-58.6	65.5	0.73	0.71	2.81
2,800.0	5.32	128.26	2,797.3	-70.9	-52.8	71.0	1.79	1.50	-12.50
2,900.0	5.78	128.84	2,896.8	-77.0	-45.3	77.0	0.46	0.46	0.58
3,000.0	4.39	130.23	2,996.4	-82.6	-38.4	82.6	1.40	-1.39	1.39
3,100.0	2.96	143.33	3,096.2	-87.1	-34.0	87.2	1.65	-1.43	13.10
3,200.0	1.56	137.77	3,196.1	-90.2	-31.5	90.2	1.42	-1.40	-5.56
3,300.0	1.33	136.08	3,296.1	-92.1	-29.8	92.1	0.23	-0.23	-1.69
3,400.0	1.22	138.49	3,396.1	-93.7	-28.3	93.7	0.12	-0.11	2.41
3,500.0	1.25	134.44	3,496.0	-95.3	-26.8	95.3	0.09	0.03	-4.05
3,600.0	1.32	127.17	3,596.0	-96.7	-25.1	96.7	0.18	0.07	-7.27
3,700.0	1.06	141.88	3,696.0	-98.1	-23.6	98.2	0.40	-0.26	14.71
3,800.0	0.85	146.40	3,796.0	-99.5	-22.6	99.5	0.22	-0.21	4.52
3,900.0	0.79	154.39	3,896.0	-100.7	-21.9	100.7	0.13	-0.06	7.99
4,000.0	0.75	160.63	3,996.0	-102.0	-21.4	102.0	0.09	-0.04	6.24
4,100.0	0.73	163.39	4,095.9	-103.2	-21.0	103.2	0.04	-0.02	2.76
4,200.0	0.58	175.62	4,195.9	-104.3	-20.8	104.3	0.20	-0.15	12.23
4,300.0	0.56	203.39	4,295.9	-105.3	-20.9	105.3	0.27	-0.02	27.77
4,400.0	0.36	245.08	4,395.9	-105.8	-21.4	105.9	0.38	-0.20	41.69
4,500.0	0.51	279.73	4,495.9	-105.9	-22.2	105.9	0.30	0.15	34.65
4,600.0	0.90	266.26	4,595.9	-105.9	-23.4	105.9	0.42	0.39	-13.47
4,700.0	0.88	269.21	4,695.9	-105.9	-24.9	105.9	0.05	-0.02	2.95
4,800.0	1.06	263.68	4,795.9	-106.1	-26.6	106.1	0.20	0.18	-5.53
4,900.0	0.88	259.78	4,895.9	-106.3	-28.3	106.3	0.19	-0.18	-3.90
5,000.0	1.03	260.58	4,995.9	-106.6	-29.9	106.6	0.15	0.15	0.80
5,100.0	0.97	260.08	5,095.8	-106.9	-31.6	106.9	0.06	-0.06	-0.50
5,200.0	1.25	234.87	5,195.8	-107.6	-33.4	107.6	0.56	0.28	-25.21



DDC Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Fuller 13/24 W1LM Fed Com #3H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2982.0usft (Patterson #231)
Site:	Sec 13, T26S, R29E	MD Reference:	WELL @ 2982.0usft (Patterson #231)
Well:	Fuller 13/24 W1LM Fed Com #3H	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	1.11	237.14	5,295.8	-108.8	-35.1	108.8	0.15	-0.14	2.27
5,400.0	0.60	207.84	5,395.8	-109.8	-36.1	109.8	0.66	-0.51	-29.30
5,500.0	0.49	164.50	5,495.8	-110.7	-36.3	110.7	0.42	-0.11	-43.34
5,600.0	0.32	154.76	5,595.8	-111.3	-36.0	111.3	0.18	-0.17	-9.74
5,700.0	0.53	138.50	5,695.8	-111.9	-35.6	111.9	0.24	0.21	-16.26
5,800.0	0.71	135.45	5,795.8	-112.7	-34.9	112.7	0.18	0.18	-3.05
5,900.0	0.55	168.95	5,895.8	-113.6	-34.3	113.6	0.39	-0.16	33.50
6,000.0	0.84	199.44	5,995.8	-114.8	-34.5	114.8	0.46	0.29	30.49
6,100.0	1.03	176.28	6,095.8	-116.4	-34.7	116.4	0.42	0.19	-23.16
6,200.0	1.24	162.42	6,195.7	-118.3	-34.3	118.3	0.34	0.21	-13.86
6,300.0	1.37	167.22	6,295.7	-120.5	-33.7	120.5	0.17	0.13	4.80
6,400.0	1.22	192.40	6,395.7	-122.7	-33.7	122.7	0.58	-0.15	25.18
6,500.0	1.36	213.20	6,495.7	-124.7	-34.5	124.7	0.49	0.14	20.80
6,600.0	1.38	221.57	6,595.6	-126.6	-36.0	126.6	0.20	0.02	8.37
6,700.0	1.51	210.83	6,695.6	-128.7	-37.5	128.7	0.30	0.13	-10.74
6,800.0	1.40	205.07	6,795.6	-130.9	-38.7	130.9	0.18	-0.11	-5.76
6,900.0	1.51	186.99	6,895.5	-133.3	-39.3	133.3	0.47	0.11	-18.08
7,000.0	2.54	147.44	6,995.5	-136.5	-38.3	136.5	1.68	1.03	-39.55
7,100.0	2.81	135.00	7,095.4	-140.1	-35.4	140.1	0.64	0.27	-12.44
7,200.0	1.70	60.57	7,195.3	-141.1	-32.4	141.1	2.87	-1.11	-74.43
7,300.0	1.54	25.34	7,295.3	-139.2	-30.5	139.2	0.99	-0.16	-35.23
7,400.0	2.55	340.05	7,395.2	-135.8	-30.7	135.9	1.83	1.01	-45.29
7,500.0	2.37	332.30	7,495.1	-131.9	-32.4	131.9	0.38	-0.18	-7.75
7,600.0	2.76	311.99	7,595.0	-128.5	-35.1	128.5	0.98	0.39	-20.31
7,700.0	4.57	304.73	7,694.8	-124.6	-40.2	124.6	1.86	1.81	-7.26
7,800.0	4.81	305.54	7,794.5	-119.9	-46.9	119.9	0.25	0.24	0.81
7,900.0	4.86	317.35	7,894.1	-114.3	-53.2	114.4	0.99	0.05	11.81
8,000.0	4.64	328.13	7,993.8	-107.8	-58.2	107.8	0.92	-0.22	10.78
8,100.0	4.89	336.67	8,093.4	-100.4	-62.0	100.5	0.75	0.25	8.54
8,200.0	4.12	335.88	8,193.1	-93.3	-65.2	93.3	0.77	-0.77	-0.79
8,300.0	0.46	308.10	8,293.0	-89.7	-66.9	89.7	3.72	-3.66	-27.78
8,400.0	1.93	217.17	8,393.0	-90.8	-68.3	90.8	1.99	1.47	-90.93
8,500.0	3.08	237.55	8,492.9	-93.6	-71.6	93.6	1.44	1.15	20.38
8,600.0	3.56	233.55	8,592.8	-96.9	-76.3	96.9	0.53	0.48	-4.00
8,700.0	2.24	255.06	8,692.6	-99.2	-80.7	99.3	1.69	-1.32	21.51
8,800.0	1.20	225.88	8,792.6	-100.5	-83.4	100.5	1.33	-1.04	-29.18
8,900.0	1.68	234.04	8,892.5	-102.1	-85.3	102.1	0.52	0.48	8.16
9,000.0	1.51	239.59	8,992.5	-103.6	-87.6	103.6	0.23	-0.17	5.55
9,100.0	1.57	275.88	9,092.5	-104.1	-90.1	104.1	0.96	0.06	36.29
9,200.0	1.50	279.20	9,192.4	-103.8	-92.8	103.8	0.11	-0.07	3.32
9,300.0	0.99	270.82	9,292.4	-103.5	-94.9	103.6	0.54	-0.51	-8.38
9,400.0	0.92	214.89	9,392.4	-104.2	-96.2	104.2	0.90	-0.07	-55.93
9,500.0	1.07	245.40	9,492.4	-105.2	-97.6	105.3	0.54	0.15	30.51



DDC Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Fuller 13/24 W1LM Fed Com #3H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2982.0usft (Patterson #231)
Site:	Sec 13, T26S, R29E	MD Reference:	WELL @ 2982.0usft (Patterson #231)
Well:	Fuller 13/24 W1LM Fed Com #3H	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)
9,600.0	1.19	253.73	9,592.4	-105.9	-99.4	105.9	0.20	0.12	8.33
Tie into Gyro @ 9640' MD / 9632' TVD									
9,640.0	0.96	260.66	9,632.4	-106.1	-100.1	106.1	0.66	-0.58	17.33
9,836.0	1.10	258.60	9,828.3	-106.7	-103.6	106.7	0.07	0.07	-1.05
9,867.0	0.70	258.60	9,859.3	-106.8	-104.1	106.8	1.29	-1.29	0.00
9,899.0	2.80	159.60	9,891.3	-107.6	-104.0	107.6	9.35	6.56	-309.38
9,930.0	9.50	154.20	9,922.1	-110.6	-102.6	110.6	21.67	21.61	-17.42
9,965.0	12.60	153.10	9,956.5	-116.6	-99.6	116.6	8.88	8.86	-3.14
9,997.0	12.80	155.10	9,987.7	-122.9	-96.6	123.0	1.51	0.63	6.25
10,029.0	13.80	154.90	10,018.8	-129.6	-93.4	129.6	3.13	3.13	-0.63
10,060.0	16.60	152.80	10,048.7	-136.9	-89.9	136.9	9.20	9.03	-6.77
10,092.0	19.60	155.40	10,079.1	-145.9	-85.5	145.9	9.71	9.38	8.13
10,124.0	22.80	160.20	10,109.0	-156.6	-81.2	156.6	11.37	10.00	15.00
10,155.0	25.50	161.90	10,137.3	-168.6	-77.1	168.6	8.99	8.71	5.48
10,187.0	28.10	160.40	10,165.8	-182.2	-72.4	182.2	8.39	8.13	-4.69
10,218.0	31.00	158.60	10,192.8	-196.5	-67.1	196.5	9.78	9.35	-5.81
10,249.0	34.10	158.80	10,218.9	-212.1	-61.0	212.1	10.01	10.00	0.65
10,281.0	36.50	159.30	10,245.0	-229.3	-54.4	229.3	7.55	7.50	1.56
10,312.0	38.50	159.50	10,269.6	-247.0	-47.7	247.0	6.46	6.45	0.65
Crossed Hard Line @ 10342' MD / 10293' TVD									
10,342.0	40.94	157.52	10,292.7	-264.8	-40.7	264.8	9.15	8.12	-6.58
10,344.0	41.10	157.40	10,294.2	-266.0	-40.2	266.1	9.15	8.18	-6.24
10,376.0	43.30	157.70	10,317.9	-285.9	-32.0	285.9	6.90	6.88	0.94
10,407.0	46.40	156.10	10,339.9	-306.0	-23.4	306.0	10.64	10.00	-5.16
10,438.0	49.00	159.50	10,360.8	-327.2	-14.8	327.2	11.67	8.39	10.97
10,470.0	50.90	160.50	10,381.3	-350.3	-6.4	350.3	6.40	5.94	3.13
10,502.0	54.00	158.80	10,400.8	-374.0	2.4	374.0	10.56	9.69	-5.31
10,533.0	57.00	159.50	10,418.4	-397.9	11.5	397.9	9.85	9.68	2.26
10,564.0	59.40	159.60	10,434.7	-422.6	20.7	422.6	7.75	7.74	0.32
10,596.0	63.10	161.10	10,450.1	-449.0	30.1	449.0	12.27	11.56	4.69
10,627.0	66.80	161.40	10,463.3	-475.6	39.2	475.6	11.97	11.94	0.97
10,659.0	69.80	162.50	10,475.1	-503.9	48.4	503.9	9.90	9.38	3.44
10,690.0	72.30	164.00	10,485.1	-531.9	56.8	531.9	9.27	8.06	4.84
10,721.0	74.80	163.00	10,493.9	-560.4	65.3	560.4	8.64	8.06	-3.23
10,753.0	76.40	164.40	10,501.9	-590.2	74.0	590.2	6.55	5.00	4.38
10,785.0	79.20	166.50	10,508.6	-620.5	81.8	620.4	10.85	8.75	6.56
10,816.0	82.10	167.20	10,513.7	-650.2	88.8	650.2	9.62	9.35	2.26
10,845.0	84.60	166.90	10,517.0	-678.3	95.2	678.3	8.68	8.62	-1.03
10,889.0	90.40	169.00	10,519.0	-721.3	104.4	721.3	14.02	13.18	4.77
10,920.0	93.70	169.30	10,517.9	-751.7	110.2	751.7	10.69	10.65	0.97
11,014.0	94.70	175.30	10,511.0	-844.6	122.8	844.5	6.45	1.06	6.38
11,046.0	92.50	175.10	10,509.0	-876.4	125.5	876.4	6.90	-6.88	-0.63
11,078.0	92.10	175.10	10,507.7	-908.2	128.2	908.2	1.25	-1.25	0.00
11,109.0	92.00	176.40	10,506.6	-939.1	130.5	939.1	4.20	-0.32	4.19



DDC
Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Fuller 13/24 W1LM Fed Com #3H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2982.0usft (Patterson #231)
Site:	Sec 13, T26S, R29E	MD Reference:	WELL @ 2982.0usft (Patterson #231)
Well:	Fuller 13/24 W1LM Fed Com #3H	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)
11,141.0	91.30	176.50	10,505.6	-971.1	132.5	971.0	2.21	-2.19	0.31
11,172.0	90.70	177.20	10,505.1	-1,002.0	134.2	1,002.0	2.97	-1.94	2.26
11,203.0	88.90	178.10	10,505.2	-1,033.0	135.4	1,033.0	6.49	-5.81	2.90
11,235.0	89.70	179.20	10,505.6	-1,065.0	136.2	1,064.9	4.25	2.50	3.44
11,266.0	90.00	179.90	10,505.7	-1,096.0	136.4	1,095.9	2.46	0.97	2.26
11,298.0	89.10	179.20	10,505.9	-1,128.0	136.7	1,127.9	3.56	-2.81	-2.19
11,329.0	88.10	180.70	10,506.7	-1,159.0	136.7	1,158.9	5.81	-3.23	4.84
11,361.0	88.60	180.20	10,507.6	-1,190.9	136.5	1,190.9	2.21	1.56	-1.56
11,393.0	88.20	180.40	10,508.5	-1,222.9	136.3	1,222.9	1.40	-1.25	0.63
11,424.0	86.90	179.00	10,509.8	-1,253.9	136.5	1,253.9	6.16	-4.19	-4.52
11,456.0	87.10	179.30	10,511.5	-1,285.9	136.9	1,285.8	1.13	0.63	0.94
11,487.0	87.20	178.80	10,513.0	-1,316.8	137.5	1,316.8	1.64	0.32	-1.61
11,518.0	88.60	178.60	10,514.2	-1,347.8	138.2	1,347.8	4.56	4.52	-0.65
11,550.0	90.40	180.20	10,514.5	-1,379.8	138.5	1,379.7	7.53	5.63	5.00
11,581.0	91.90	180.20	10,513.8	-1,410.8	138.4	1,410.7	4.84	4.84	0.00
11,613.0	92.80	180.20	10,512.5	-1,442.7	138.3	1,442.7	2.81	2.81	0.00
11,676.0	93.00	182.70	10,509.3	-1,505.6	136.7	1,505.6	3.98	0.32	3.97
11,739.0	90.90	183.90	10,507.2	-1,568.5	133.1	1,568.5	3.84	-3.33	1.90
11,770.0	88.70	185.00	10,507.3	-1,599.4	130.7	1,599.4	7.93	-7.10	3.55
11,865.0	89.40	186.90	10,508.9	-1,693.9	120.8	1,693.8	2.13	0.74	2.00
11,959.0	88.40	185.30	10,510.7	-1,787.3	110.8	1,787.3	2.01	-1.06	-1.70
12,054.0	89.20	185.30	10,512.7	-1,881.9	102.0	1,881.9	0.84	0.84	0.00
12,149.0	89.00	184.60	10,514.2	-1,976.5	93.8	1,976.5	0.77	-0.21	-0.74
12,243.0	90.50	184.10	10,514.6	-2,070.2	86.7	2,070.2	1.68	1.60	-0.53
12,338.0	91.40	185.80	10,513.0	-2,164.9	78.5	2,164.9	2.02	0.95	1.79
12,431.0	91.40	185.70	10,510.7	-2,257.4	69.2	2,257.4	0.11	0.00	-0.11
12,526.0	90.30	185.10	10,509.3	-2,351.9	60.3	2,351.9	1.32	-1.16	-0.63
12,620.0	89.10	183.70	10,509.8	-2,445.7	53.1	2,445.6	1.96	-1.28	-1.49
12,714.0	89.10	181.80	10,511.3	-2,539.5	48.5	2,539.5	2.02	0.00	-2.02
12,808.0	91.40	182.30	10,510.9	-2,633.5	45.2	2,633.5	2.50	2.45	0.53
12,902.0	92.30	183.00	10,507.8	-2,727.3	40.8	2,727.3	1.21	0.96	0.74
12,996.0	91.70	182.00	10,504.6	-2,821.2	36.7	2,821.2	1.24	-0.64	-1.06
13,091.0	92.50	182.70	10,501.1	-2,916.0	32.9	2,916.0	1.12	0.84	0.74
13,186.0	88.70	180.70	10,500.1	-3,010.9	30.0	3,010.9	4.52	-4.00	-2.11
13,280.0	92.30	182.00	10,499.3	-3,104.9	27.8	3,104.9	4.07	3.83	1.38
13,374.0	93.20	183.60	10,494.8	-3,198.7	23.2	3,198.7	1.95	0.96	1.70
13,469.0	91.80	182.50	10,490.6	-3,293.4	18.2	3,293.4	1.87	-1.47	-1.16
13,563.0	89.60	183.70	10,489.5	-3,387.3	13.1	3,387.3	2.67	-2.34	1.28
13,657.0	90.30	184.40	10,489.5	-3,481.1	6.5	3,481.1	1.05	0.74	0.74
13,752.0	89.50	184.40	10,489.7	-3,575.8	-0.8	3,575.8	0.84	-0.84	0.00
13,846.0	89.60	183.60	10,490.4	-3,669.5	-7.4	3,669.5	0.86	0.11	-0.85
13,940.0	88.70	181.40	10,491.8	-3,763.4	-11.5	3,763.4	2.53	-0.96	-2.34
14,035.0	90.70	181.30	10,492.3	-3,858.4	-13.7	3,858.4	2.11	2.11	-0.11



DDC Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Fuller 13/24 W1LM Fed Com #3H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2982.0usft (Patterson #231)
Site:	Sec 13, T26S, R29E	MD Reference:	WELL @ 2982.0usft (Patterson #231)
Well:	Fuller 13/24 W1LM Fed Com #3H	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)	
14,129.0	89.90	183.40	10,491.8	-3,952.3	-17.6	3,952.3	2.39	-0.85	2.23	
14,223.0	87.80	181.60	10,493.7	-4,046.2	-21.7	4,046.2	2.94	-2.23	-1.91	
14,318.0	90.90	180.70	10,494.8	-4,141.2	-23.6	4,141.2	3.40	3.26	-0.95	
14,413.0	90.70	180.90	10,493.5	-4,236.1	-24.9	4,236.2	0.30	-0.21	0.21	
14,507.0	91.80	181.80	10,491.4	-4,330.1	-27.1	4,330.1	1.51	1.17	0.96	
14,601.0	89.70	180.40	10,490.2	-4,424.1	-28.9	4,424.1	2.68	-2.23	-1.49	
14,695.0	90.30	177.60	10,490.2	-4,518.0	-27.3	4,518.0	3.05	0.64	-2.98	
14,789.0	90.40	179.20	10,489.6	-4,612.0	-24.7	4,612.0	1.71	0.11	1.70	
14,884.0	91.70	178.30	10,487.9	-4,707.0	-22.6	4,707.0	1.66	1.37	-0.95	
14,978.0	92.90	179.70	10,484.1	-4,800.9	-20.9	4,800.9	1.96	1.28	1.49	
15,073.0	93.80	179.70	10,478.6	-4,895.7	-20.4	4,895.7	0.95	0.95	0.00	
15,194.0	91.40	177.10	10,473.1	-5,016.5	-17.1	5,016.5	2.92	-1.98	-2.15	
15,289.0	90.20	176.20	10,471.7	-5,111.3	-11.5	5,111.3	1.58	-1.26	-0.95	
15,384.0	90.80	176.70	10,470.9	-5,206.1	-5.6	5,206.1	0.82	0.63	0.53	
15,479.0	91.40	177.60	10,469.1	-5,301.0	-0.9	5,301.0	1.14	0.63	0.95	
15,573.0	89.30	177.60	10,468.5	-5,394.9	3.0	5,394.9	2.23	-2.23	0.00	
15,668.0	89.20	177.20	10,469.8	-5,489.8	7.3	5,489.8	0.43	-0.11	-0.42	
15,762.0	91.00	179.90	10,469.6	-5,583.8	9.7	5,583.8	3.45	1.91	2.87	
15,857.0	93.60	181.30	10,465.8	-5,678.7	8.7	5,678.7	3.11	2.74	1.47	
15,951.0	91.30	177.80	10,461.8	-5,772.6	9.5	5,772.6	4.45	-2.45	-3.72	
16,046.0	90.60	177.90	10,460.2	-5,867.5	13.0	5,867.5	0.74	-0.74	0.11	
16,140.0	90.10	177.80	10,459.6	-5,961.4	16.5	5,961.4	0.54	-0.53	-0.11	
16,235.0	90.00	179.00	10,459.5	-6,056.4	19.2	6,056.4	1.27	-0.11	1.26	
16,329.0	91.40	179.70	10,458.4	-6,150.4	20.3	6,150.4	1.67	1.49	0.74	
16,424.0	90.70	179.30	10,456.6	-6,245.3	21.1	6,245.3	0.85	-0.74	-0.42	
16,519.0	91.10	178.10	10,455.2	-6,340.3	23.2	6,340.3	1.33	0.42	-1.26	
16,613.0	89.10	175.60	10,455.0	-6,434.2	28.4	6,434.1	3.41	-2.13	-2.66	
16,708.0	87.80	175.10	10,457.6	-6,528.8	36.1	6,528.8	1.47	-1.37	-0.53	
16,802.0	87.50	175.10	10,461.4	-6,622.4	44.1	6,622.4	0.32	-0.32	0.00	
16,896.0	90.00	179.30	10,463.5	-6,716.2	48.7	6,716.2	5.20	2.66	4.47	
16,990.0	88.30	180.20	10,464.9	-6,810.2	49.1	6,810.2	2.05	-1.81	0.96	
17,085.0	91.40	180.70	10,465.1	-6,905.2	48.4	6,905.2	3.31	3.26	0.53	
17,180.0	91.20	179.90	10,463.0	-7,000.2	47.9	7,000.2	0.87	-0.21	-0.84	
17,274.0	93.50	179.50	10,459.1	-7,094.1	48.4	7,094.1	2.48	2.45	-0.43	
17,369.0	91.40	179.50	10,455.0	-7,189.0	49.2	7,189.0	2.21	-2.21	0.00	
17,464.0	88.20	180.60	10,455.4	-7,284.0	49.1	7,284.0	3.56	-3.37	1.16	
17,559.0	90.20	182.50	10,456.7	-7,378.9	46.6	7,378.9	2.90	2.11	2.00	
17,653.0	90.30	181.80	10,456.3	-7,472.8	43.0	7,472.8	0.75	0.11	-0.74	
17,748.0	87.70	177.80	10,457.9	-7,567.8	43.4	7,567.8	5.02	-2.74	-4.21	
17,775.0	90.70	178.80	10,458.3	-7,594.8	44.2	7,594.8	11.71	11.11	3.70	
TD @ 17830' MD / 10458' TVD										
17,830.0	90.70	178.80	10,457.6	-7,649.8	45.3	7,649.8	0.00	0.00	0.00	



DDC
Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Fuller 13/24 W1LM Fed Com #3H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2982.0usft (Patterson #231)
Site:	Sec 13, T26S, R29E	MD Reference:	WELL @ 2982.0usft (Patterson #231)
Well:	Fuller 13/24 W1LM Fed Com #3H	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)	
9,640.0	9,632.4	-106.1	-100.1	Tie into Gyro @ 9640' MD / 9632' TVD
10,342.0	10,292.7	-264.8	-40.7	Crossed Hard Line @ 10342' MD / 10293' TVD
17,830.0	10,457.6	-7,649.8	45.3	TD @ 17830' MD / 10458' TVD

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------



January 13, 2016

Mewbourne Oil Company
701 S. Cecil
Hobbs, New Mexico 88240

Attn: Jake Nave

Re: Fuller 13 24 W1LM Federal Com No 003H

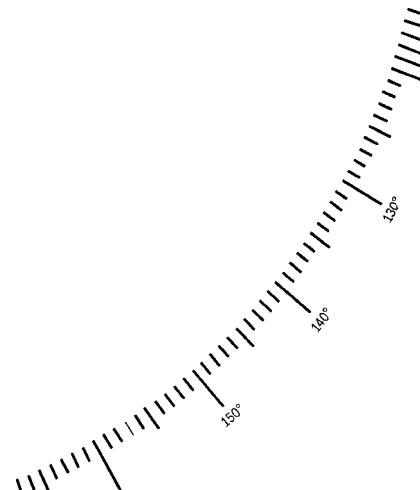
Please find enclosed a copy of the survey from 0' to 9640' ran on the above referenced well.

If I can be of any further service please do not hesitate to call me at 800-606-4976.

Sincerely,



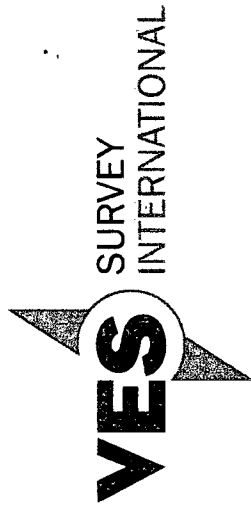
Jennifer Byerly
Operations





Company: Mewbourne Oil
Lease/Well: Fuller 13 24 W1LM Federal Com No/003H

Rig Name: Patterson 231
State/County: New Mexico/Eddy
VS-Azi: 180.01 Degrees
Latitude: 32.04161, Longitude: -103.94365
Grid North = True North -0.21 degs (NAD 27)
Grid Correction Applied = -0.21 degs



Depth Reference : RKB = 26 feet

DRILLOG HA GYRO SURVEY CALCULATIONS
Filename: gyro survey.ut
Minimum Curvature Method
Report Date/Time: 1/13/2016 / 13:09

VES Survey International
Midland, Texas
432-563-5444

Surveyor: Adam Askew

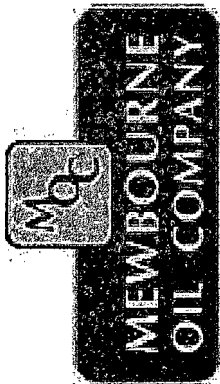
Fuller 13 24 W1LM Federal Com No 003H / API 30-015-43517

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	0.27	312.74	100.00	0.16	-0.17	-0.16	0.23	312.74	0.27
200.00	0.63	330.80	200.00	0.80	-0.61	-0.80	1.00	322.45	0.38
300.00	0.59	314.78	299.99	1.64	-1.24	-1.64	2.06	322.73	0.17
400.00	0.51	303.70	399.99	2.25	-1.98	-2.25	2.99	318.60	0.14
500.00	1.78	256.26	499.97	2.12	-3.86	-2.12	4.40	298.80	1.49
600.00	2.24	238.69	599.90	0.74	-7.04	-0.73	7.08	275.96	0.76
700.00	2.68	226.91	699.81	-1.88	-10.42	1.88	10.59	259.78	0.67
800.00	2.68	222.02	799.70	-5.21	-13.69	5.22	14.65	249.16	0.23
900.00	2.68	226.17	899.59	-8.57	-16.95	8.57	18.99	243.17	0.19
1000.00	2.71	230.50	999.48	-11.69	-20.46	11.70	23.56	240.25	0.21
1100.00	2.98	229.50	1099.36	-14.89	-24.26	14.89	28.47	238.46	0.27
1200.00	3.13	224.90	1199.22	-18.51	-28.16	18.51	33.70	236.69	0.29
1300.00	3.49	225.66	1299.05	-22.57	-32.26	22.57	39.37	235.03	0.36
1400.00	3.57	219.39	1398.86	-27.10	-36.41	27.10	45.39	233.35	0.39
1500.00	3.54	224.93	1498.67	-31.69	-40.57	31.69	51.48	232.01	0.34
1600.00	3.26	229.13	1598.49	-35.73	-44.90	35.74	57.38	231.48	0.37

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	Dqleg Severity Deg/100
1700.00	3.18	226.57	1698.34	-39.50	-49.06	39.51	62.99	231.16	0.17
1800.00	2.79	230.32	1798.20	-42.96	-52.95	42.97	68.18	230.95	0.44
1900.00	2.15	233.24	1898.11	-45.64	-56.33	45.65	72.49	230.98	0.65
2000.00	1.69	232.51	1998.05	-47.66	-59.00	47.67	75.84	231.07	0.47
2100.00	1.44	229.96	2098.01	-49.36	-61.13	49.37	78.57	231.08	0.26
2200.00	1.42	229.72	2197.98	-50.97	-63.04	50.98	81.06	231.04	0.01
2300.00	1.53	227.96	2297.95	-52.67	-64.98	52.68	83.64	230.97	0.12
2400.00	1.28	200.79	2397.92	-54.61	-66.37	54.62	85.94	230.55	0.71
2500.00	2.32	143.17	2497.88	-57.27	-65.55	57.28	87.04	228.85	1.96
2600.00	3.11	137.95	2597.76	-60.91	-62.52	60.92	87.28	225.75	0.82
2700.00	3.82	140.76	2697.58	-65.50	-58.59	65.51	87.88	221.82	0.73
2800.00	5.32	128.26	2797.26	-70.95	-52.84	70.96	88.47	216.68	1.80
2900.00	5.78	128.84	2896.79	-76.98	-45.28	76.99	89.31	210.46	0.46
3000.00	4.39	130.23	2996.40	-82.61	-38.43	82.62	91.11	204.95	1.40
3100.00	2.96	143.33	3096.19	-87.16	-33.97	87.16	93.54	201.29	1.64
3200.00	1.56	137.77	3196.11	-90.23	-31.51	90.24	95.58	199.25	1.42
3300.00	1.33	136.08	3296.08	-92.08	-29.79	92.08	96.78	197.93	0.23
3400.00	1.22	138.49	3396.05	-93.71	-28.28	93.72	97.89	196.79	0.13
3500.00	1.25	134.44	3496.03	-95.27	-26.80	95.28	98.97	195.71	0.09
3600.00	1.32	127.17	3596.00	-96.73	-25.10	96.74	99.94	194.55	0.17
3700.00	1.06	141.88	3695.98	-98.16	-23.61	98.16	100.96	193.52	0.40
3800.00	0.85	146.40	3795.97	-99.50	-22.63	99.51	102.05	192.81	0.23
3900.00	0.79	154.39	3895.96	-100.74	-21.92	100.75	103.10	192.28	0.13
4000.00	0.75	160.63	3995.95	-101.98	-21.41	101.98	104.20	191.86	0.09
4100.00	0.73	163.39	4095.94	-103.21	-21.01	103.21	105.32	191.51	0.04
4200.00	0.58	175.62	4195.94	-104.33	-20.79	104.33	106.38	191.27	0.20
4300.00	0.56	203.39	4295.93	-105.29	-20.94	105.29	107.35	191.25	0.28
4400.00	0.36	245.08	4395.93	-105.87	-21.42	105.88	108.02	191.44	0.38
4500.00	0.51	279.73	4495.92	-105.93	-22.15	105.93	108.22	191.81	0.30
4600.00	0.90	266.26	4595.92	-105.91	-23.37	105.91	108.46	192.45	0.43
4700.00	0.88	269.21	4695.90	-105.97	-24.93	105.97	108.86	193.24	0.05
4800.00	1.06	263.68	4795.89	-106.08	-26.62	106.09	109.37	194.09	0.20
4900.00	0.88	259.78	4895.88	-106.32	-28.29	106.32	110.02	194.90	0.19
5000.00	1.03	260.58	4995.86	-106.60	-29.93	106.61	110.73	195.69	0.15
5100.00	0.97	260.08	5095.85	-106.90	-31.66	106.90	111.49	196.50	0.06
5200.00	1.25	234.87	5195.83	-107.67	-33.39	107.68	112.73	197.23	0.56
5300.00	1.11	237.14	5295.81	-108.83	-35.10	108.83	114.35	197.88	0.15
5400.00	0.60	207.84	5395.80	-109.82	-36.16	109.83	115.62	198.23	0.65
5500.00	0.49	164.50	5495.79	-110.70	-36.29	110.70	116.50	198.15	0.42

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
5600.00	0.32	154.76	5595.79	-111.36	-36.06	111.37	117.06	197.94	0.19
5700.00	0.53	138.50	5695.79	-111.96	-35.63	111.97	117.50	197.65	0.25
5800.00	0.71	135.45	5795.78	-112.75	-34.89	112.76	118.03	197.19	0.18
5900.00	0.55	168.95	5895.77	-113.67	-34.36	113.68	118.75	196.82	0.40
6000.00	0.84	199.44	5995.77	-114.84	-34.51	114.85	119.91	196.73	0.46
6100.00	1.03	176.28	6095.75	-116.43	-34.70	116.43	121.49	196.60	0.42
6200.00	1.24	162.42	6195.74	-118.35	-34.31	118.36	123.23	196.17	0.35
6300.00	1.37	167.22	6295.71	-120.54	-33.72	120.55	125.17	195.63	0.17
6400.00	1.22	192.40	6395.68	-122.74	-33.69	122.75	127.28	195.35	0.58
6500.00	1.36	213.20	6495.66	-124.78	-34.57	124.78	129.47	195.48	0.49
6600.00	1.38	221.57	6595.63	-126.67	-36.02	126.68	131.69	195.87	0.20
6700.00	1.51	210.83	6695.60	-128.70	-37.49	128.71	134.05	196.24	0.30
6800.00	1.40	205.07	6795.57	-130.93	-38.68	130.94	136.53	196.46	0.18
6900.00	1.51	186.99	6895.54	-133.34	-39.36	133.35	139.03	196.44	0.47
7000.00	2.54	147.44	6995.48	-136.52	-38.32	136.52	141.79	195.68	1.68
7100.00	2.81	135.00	7095.37	-140.12	-35.40	140.13	144.52	194.18	0.64
7200.00	1.70	60.57	7195.31	-141.13	-32.37	141.13	144.79	192.92	2.87
7300.00	1.54	25.34	7295.27	-139.19	-30.51	139.19	142.49	192.36	0.99
7400.00	2.55	340.05	7395.21	-135.89	-30.69	135.89	139.31	192.73	1.83
7500.00	2.37	332.30	7495.12	-131.97	-32.41	131.97	135.89	193.80	0.37
7600.00	2.76	311.99	7595.02	-128.53	-35.16	128.53	133.25	195.30	0.98
7700.00	4.57	304.73	7694.81	-124.65	-40.23	124.66	130.98	197.89	1.86
7800.00	4.81	305.54	7794.48	-119.94	-46.91	119.95	128.79	201.36	0.25
7900.00	4.86	317.35	7894.13	-114.39	-53.19	114.40	126.15	204.94	0.99
8000.00	4.64	328.13	7993.78	-107.84	-58.20	107.85	122.54	208.35	0.92
8100.00	4.89	336.67	8093.44	-100.49	-62.02	100.50	118.09	211.68	0.75
8200.00	4.12	335.88	8193.13	-93.29	-65.18	93.30	113.80	214.94	0.78
8300.00	0.46	308.10	8293.03	-89.76	-66.96	89.78	111.99	216.72	3.72
8400.00	1.93	217.17	8393.01	-90.86	-68.30	90.87	113.67	216.93	1.99
8500.00	3.08	237.55	8492.92	-93.64	-71.58	93.66	117.87	217.39	1.43
8600.00	3.56	233.55	8592.75	-96.93	-76.34	96.94	123.38	218.22	0.54
8700.00	2.24	255.06	8692.62	-99.28	-80.73	99.29	127.96	219.12	1.69
8800.00	1.20	225.88	8792.58	-100.51	-83.36	100.53	130.58	219.67	1.32
8900.00	1.68	234.04	8892.55	-102.10	-85.30	102.12	133.04	219.88	0.52
9000.00	1.51	239.59	8992.51	-103.63	-87.62	103.64	135.71	220.22	0.23
9100.00	1.57	275.88	9092.47	-104.16	-90.12	104.17	137.73	220.87	0.96
9200.00	1.50	279.20	9192.44	-103.81	-92.77	103.82	139.22	221.79	0.11
9300.00	0.99	270.82	9292.41	-103.58	-94.93	103.60	140.51	222.50	0.54
9400.00	0.92	214.89	9392.40	-104.23	-96.26	104.25	141.88	222.72	0.90

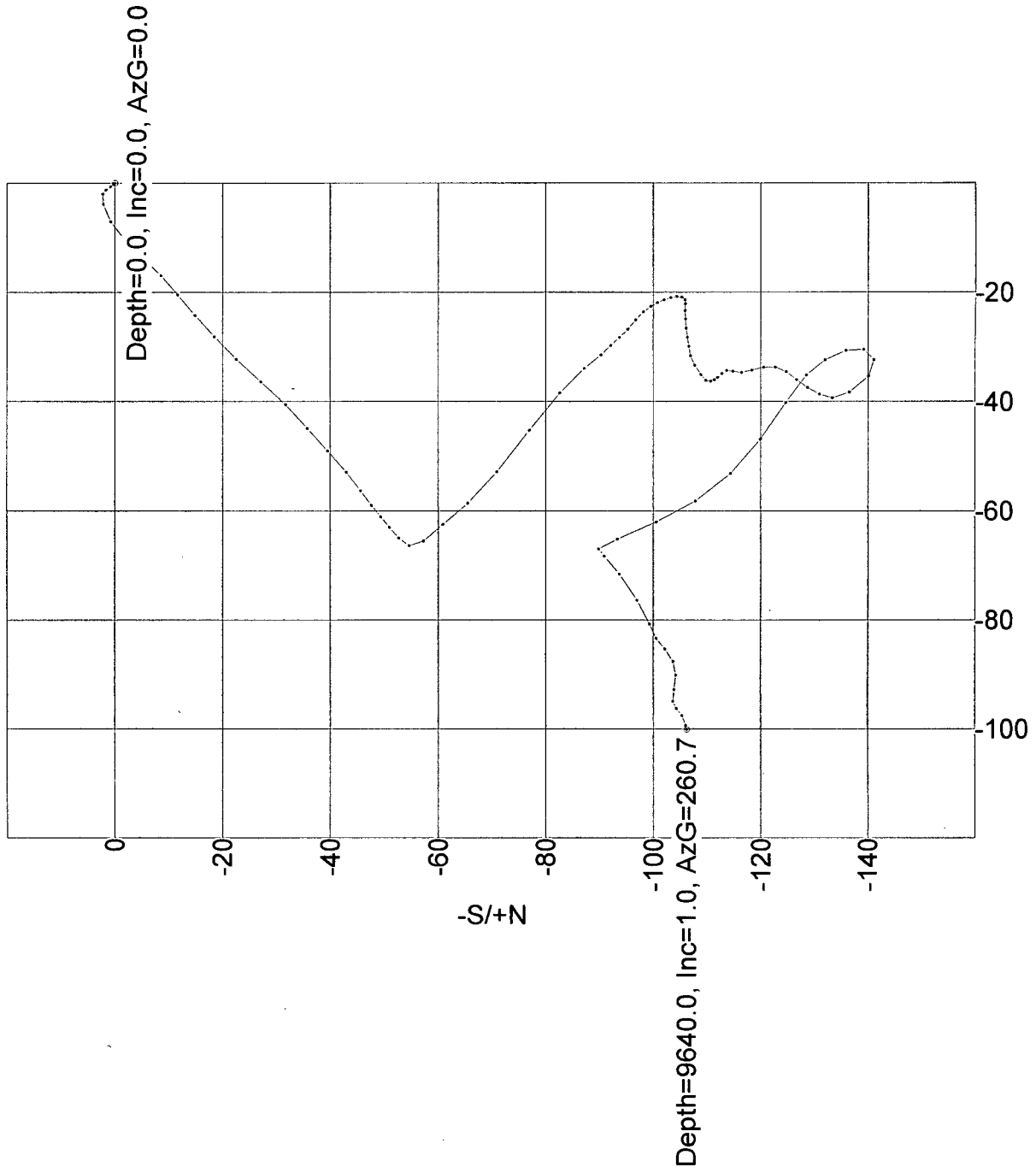
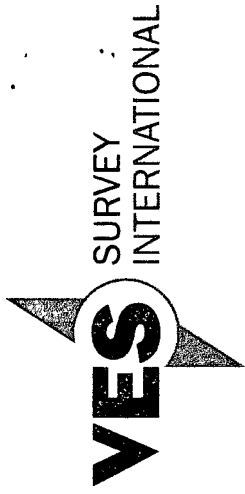
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dqleg Severity Deg/100
9500.00	1.07	245.40	9492.39	-105.28	-97.57	105.29	143.54	222.82	0.54
9600.00	1.19	253.73	9592.37	-105.96	-99.41	105.97	145.29	223.17	0.21
9640.00	0.96	260.66	9632.36	-106.13	-100.14	106.15	145.92	223.34	0.66



VES Survey International
Midland, Texas
432-563-5444

Surveyor: Adam Askew

Fuller 13 24 W1LM Federal Com No 003H / API 30-015-43517





I Adam Askew certify that I am employed by VES Survey International. That I did on the day(s) of 01/07/16 through 01/07/16 conduct or supervise the taking of a Rate Gyro survey from a depth of 0.00 feet to a depth of 9,640.00 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Mewbourne Oil for the Fuller 13/24 W1LM Fed Com Well # 3H API # 30-015-43517 in Eddy County / Parish New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Vaughn Energy Services

A handwritten signature in black ink, appearing to be "Adam Askew", written over a horizontal line.

Adam Askew
Service Technician
Vaughn Energy Services



I Adam Askew certify that I am employed by VES Survey International. That I did on the day(s) of 01/07/16 through 01/07/16 conduct or supervise the taking of a Rate Gyro survey from a depth of 0.00 feet to a depth of 9,640.00 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Mewbourne Oil for the Fuller 13/24 W1LM Fed Com Well # 3H API # 30-015-43517 in Eddy County / Parish New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Vaughn Energy Services

A handwritten signature in black ink, appearing to be "A. Askew", written over a horizontal line.

Adam Askew
Service Technician
Vaughn Energy Services

OPERATOR
WELL/LEASE
COUNTY

MEWBOURNE OIL COMPANY
FULLER 13/24 W1LM FED COM 3H
EDDY

231-0025

STATE OF NEW MEXICO
DEVIATION REPORT

342

0.52

NM OIL CONSERVATION
ARTESIA DISTRICT
SEP 15 2016

RECEIVED

NM OIL CONSERVATION
ARTESIA DISTRICT
SEP 15 2016

RECEIVED

STATE OF TEXAS

COUNTY OF MIDLAND

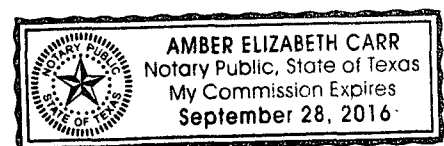
BY: *Dora Garcia*

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

2/16/16

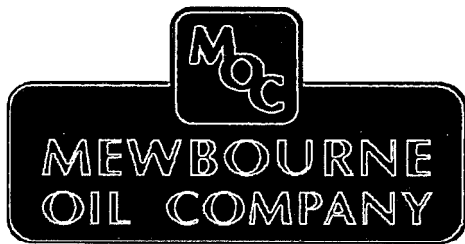
, by

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



Company Name: Mewbourne Oil Company
Fuller 13/24 W1LM Fed Com #3H
Eddy County, New Mexico
Rig: Patterson #231
Created By: Shane Robbins
Date: 2/10/2016

Fuller 13/24 W1LM Fed Com #3H
Eddy County, New Mexico
Q150875 & WT-160007
Design #2



Azimuths to Grid North

Correction: 7.07°

Magnetic Field

Strength: 47945.4snT

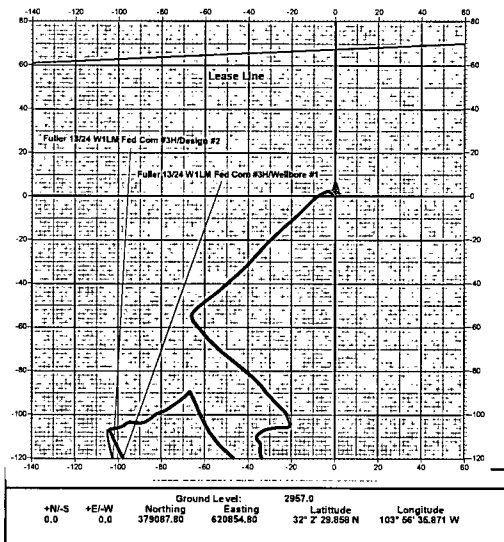
Dip Angle: 59.85°

Date: 12/21/2015

Model: IGRF2015

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



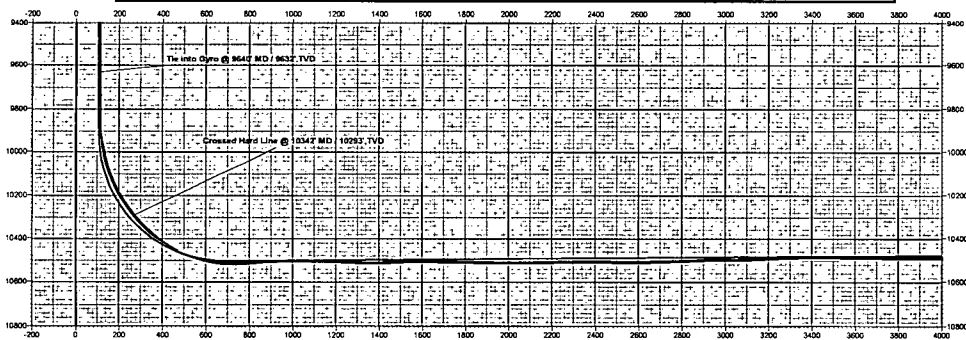
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	North	East	Latitude	Longitude
PBHL Fuller 13/24 W1LM Fed Com #3H	10450.0	-7662.5	-111.9	371425.30	620742.90	32° 1' 14.030 N	103° 56' 37.492 W

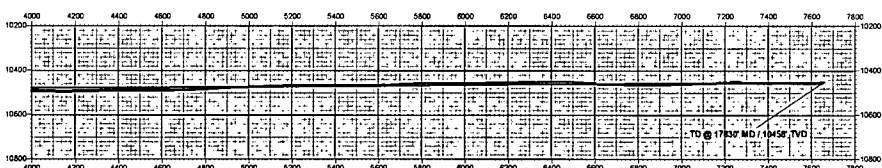
- plan hits target center

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
9640.0	0.86	260.66	9632.4	-106.1	-100.1	106.1	320.7	Tie into Gyro @ 9640' MD / 9632' TVD
10342.0	40.94	157.52	10293.7	-264.8	-40.7	264.8	435.4	Crossed Hard Line @ 10342' MD / 10293' TVD
17839.0	80.70	178.89	10451.6	-7649.9	46.3	7649.9	7913.6	TD @ 17839' MD / 10451' TVD



Vertical Section at 180.84° (200 usft/in)



Vertical Section at 180.84° (200 usft/in)

