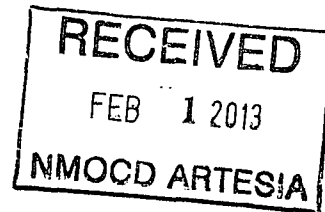


30-015-40497



Mewbourne Oil Co

Eddy County, New Mexico

Sec 19-18S-30E

Aries 19 IL Fed Com #1H

Wellbore #1

Design: Wellbore #1

DDC Survey Report

11 December, 2012



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Aries 19 IL Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3494.0usft (Patterson #46)
Site:	Sec 19-18S-30E	MD Reference:	WELL @ 3494.0usft (Patterson #46)
Well:	Aries 19 IL Fed Com #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	System Datum:	Mean Sea Level
Map System:	US State Plane 1927 (Exact solution)		
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Sec 19-18S-30E		
Site Position:		Northing:	629,625.90 usft
From:	Map	Easting:	601,928.40 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 43' 49.796 N
		Longitude:	104° 0' 6.741 W
		Grid Convergence:	0.18 °

Well:	Aries 19 IL Fed Com #1H				
Well Position	+N-S	0.0 usft	Northing:	629,625.90 usft	Latitude: 32° 43' 49.796 N
	+E-W	0.0 usft	Easting:	601,928.40 usft	Longitude: 104° 0' 6.741 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level: 3,474.0 usft

Wellbore:	Wellbore #1
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/15/2012	7.65	60.55	48,731

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)	Direction (°)
	0.0	0.0	0.0	343.01

Survey Program	Date	From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
	12/11/2012	100.0	7,487.0	Gyro (Wellbore #1)	Good_gyro	Good Gyro
		7,620.0	12,933.0	MWD (Wellbore #1)	MWD default	MWD - Standard

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	0.37	196.47	100.0	-0.3	-0.1	-0.3	0.37	0.37	0.00
200.0	0.52	198.91	200.0	-1.0	-0.3	-0.9	0.15	0.15	2.44
300.0	0.45	211.71	300.0	-1.8	-0.7	-1.5	0.13	-0.07	12.80
400.0	0.38	224.52	400.0	-2.4	-1.1	-2.0	0.12	-0.07	12.81
500.0	0.28	205.82	500.0	-2.8	-1.5	-2.3	0.15	-0.10	-18.70
600.0	0.17	187.12	600.0	-3.2	-1.6	-2.6	0.13	-0.11	-18.70
700.0	0.19	157.75	700.0	-3.5	-1.5	-2.9	0.09	0.02	-29.37
800.0	0.17	148.39	800.0	-3.8	-1.4	-3.2	0.04	-0.02	-9.36
900.0	0.31	186.53	900.0	-4.2	-1.4	-3.6	0.21	0.14	38.14

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Aries 19 IL Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3494.0usft (Patterson #46)
Site:	Sec 19-18S-30E	MD Reference:	WELL @ 3494.0usft (Patterson #46)
Well:	Aries 19 IL Fed Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	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)
1,000.0	0.45	264.67	1,000.0	-4.5	-1.8	-3.8	0.49	0.14	78.14
1,100.0	0.76	336.83	1,100.0	-3.9	-2.4	-3.0	0.76	0.31	72.16
1,200.0	1.07	38.99	1,200.0	-2.6	-2.1	-1.9	0.98	0.31	62.16
1,300.0	1.07	49.48	1,300.0	-1.2	-0.8	-1.0	0.20	0.00	10.49
1,400.0	1.07	49.97	1,399.9	0.0	0.6	-0.2	0.01	0.00	0.49
1,500.0	1.05	46.05	1,499.9	1.2	2.0	0.6	0.08	-0.02	-3.92
1,600.0	1.08	42.13	1,599.9	2.5	3.3	1.5	0.08	0.03	-3.92
1,700.0	1.19	43.96	1,699.9	4.0	4.6	2.4	0.12	0.11	1.83
1,800.0	1.27	45.79	1,799.9	5.5	6.2	3.5	0.09	0.08	1.83
1,900.0	1.14	46.32	1,899.8	7.0	7.7	4.4	0.13	-0.13	0.53
2,000.0	1.06	46.84	1,999.8	8.3	9.1	5.3	0.08	-0.08	0.52
2,100.0	0.84	40.71	2,099.8	9.5	10.2	6.1	0.24	-0.22	-6.13
2,200.0	0.62	34.58	2,199.8	10.5	11.0	6.8	0.23	-0.22	-6.13
2,300.0	0.82	33.91	2,299.8	11.5	11.7	7.6	0.20	0.20	-0.67
2,400.0	0.98	33.24	2,399.8	12.8	12.6	8.6	0.16	0.16	-0.67
2,500.0	1.05	29.49	2,499.8	14.3	13.5	9.8	0.10	0.07	-3.75
2,600.0	1.15	25.75	2,599.7	16.0	14.4	11.1	0.12	0.10	-3.74
2,700.0	0.97	27.09	2,699.7	17.7	15.2	12.5	0.18	-0.18	1.34
2,800.0	0.79	28.43	2,799.7	19.0	15.9	13.6	0.18	-0.18	1.34
2,900.0	1.03	32.90	2,899.7	20.4	16.7	14.6	0.25	0.24	4.47
3,000.0	1.28	37.37	2,999.7	22.1	17.9	15.9	0.27	0.25	4.47
3,100.0	1.11	36.29	3,099.7	23.7	19.2	17.1	0.17	-0.17	-1.08
3,200.0	0.94	35.22	3,199.6	25.2	20.2	18.2	0.17	-0.17	-1.07
3,300.0	0.88	30.70	3,299.6	26.5	21.1	19.2	0.09	-0.06	-4.52
3,400.0	0.84	26.18	3,399.6	27.8	21.8	20.2	0.08	-0.04	-4.52
3,500.0	0.73	15.10	3,499.6	29.1	22.3	21.3	0.19	-0.11	-11.08
3,600.0	0.62	4.02	3,599.6	30.2	22.5	22.4	0.17	-0.11	-11.08
3,700.0	0.69	359.55	3,699.6	31.4	22.5	23.4	0.09	0.07	-4.47
3,800.0	0.72	355.09	3,799.6	32.6	22.4	24.6	0.06	0.03	-4.46
3,900.0	0.93	354.62	3,899.6	34.1	22.3	26.0	0.21	0.21	-0.47
4,000.0	1.17	354.16	3,999.6	35.9	22.1	27.8	0.24	0.24	-0.46
4,100.0	1.54	334.52	4,099.5	38.1	21.5	30.2	0.59	0.37	-19.64
4,200.0	1.90	314.89	4,199.5	40.5	19.7	33.0	0.69	0.36	-19.63
4,300.0	1.74	323.75	4,299.4	42.9	17.6	35.9	0.32	-0.16	8.86
4,400.0	1.57	332.62	4,399.4	45.3	16.1	38.6	0.31	-0.17	8.87
4,500.0	1.34	332.06	4,499.4	47.6	14.9	41.1	0.23	-0.23	-0.56
4,600.0	1.11	331.49	4,599.3	49.5	13.9	43.2	0.23	-0.23	-0.57
4,700.0	1.71	338.15	4,699.3	51.7	12.9	45.7	0.62	0.60	6.66
4,800.0	2.31	344.80	4,799.2	55.0	11.8	49.2	0.64	0.60	6.65
4,900.0	2.28	348.11	4,899.2	58.9	10.9	53.2	0.14	-0.03	3.31
5,000.0	2.24	351.41	4,999.1	62.8	10.2	57.1	0.14	-0.04	3.30
5,100.0	2.46	346.70	5,099.0	66.8	9.4	61.2	0.29	0.22	-4.71
5,200.0	2.68	341.98	5,198.9	71.1	8.2	65.6	0.31	0.22	-4.72

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Aries 19 IL Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3494.0usft (Patterson #46)
Site:	Sec 19-18S-30E	MD Reference:	WELL @ 3494.0usft (Patterson #46)
Well:	Aries 19 IL Fed Com #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	2.70	342.96	5,298.8	75.6	6.8	70.3	0.05	0.02	0.98
5,400.0	2.74	343.95	5,398.7	80.1	5.4	75.1	0.06	0.04	0.99
5,500.0	2.86	343.46	5,498.6	84.8	4.0	80.0	0.12	0.12	-0.49
5,600.0	3.01	342.96	5,598.4	89.7	2.6	85.1	0.15	0.15	-0.50
5,700.0	3.06	344.86	5,698.3	94.8	1.1	90.4	0.11	0.05	1.90
5,800.0	3.12	346.76	5,798.1	100.0	-0.2	95.7	0.12	0.06	1.90
5,900.0	3.00	341.32	5,898.0	105.2	-1.7	101.1	0.31	-0.12	-5.44
6,000.0	2.88	335.87	5,997.9	109.9	-3.6	106.2	0.30	-0.12	-5.45
6,100.0	2.88	331.36	6,097.7	114.4	-5.8	111.1	0.23	0.00	-4.51
6,200.0	2.87	324.85	6,197.6	118.7	-8.4	116.0	0.33	-0.01	-6.51
6,300.0	2.79	317.95	6,297.5	122.6	-11.5	120.6	0.35	-0.08	-6.90
6,400.0	2.71	311.05	6,397.4	125.9	-14.9	124.8	0.34	-0.08	-6.90
6,500.0	2.41	311.06	6,497.3	128.8	-18.3	128.6	0.30	-0.30	0.01
6,600.0	2.10	311.08	6,597.2	131.4	-21.3	131.9	0.31	-0.31	0.02
6,700.0	2.05	310.90	6,697.1	133.8	-24.0	135.0	0.05	-0.05	-0.18
6,800.0	1.99	310.71	6,797.1	136.1	-26.7	138.0	0.06	-0.06	-0.19
6,900.0	2.08	299.80	6,897.0	138.1	-29.5	140.7	0.40	0.09	-10.91
7,000.0	2.16	288.89	6,996.9	139.7	-32.9	143.2	0.41	0.08	-10.91
7,100.0	1.67	288.58	7,096.9	140.7	-36.1	145.1	0.49	-0.49	-0.31
7,200.0	1.18	288.26	7,196.9	141.5	-38.4	146.6	0.49	-0.49	-0.32
7,300.0	1.05	292.45	7,296.8	142.2	-40.3	147.7	0.15	-0.13	4.19
7,400.0	0.92	286.64	7,396.8	142.8	-41.9	148.8	0.16	-0.13	-5.81
TIE ON @ 7487' MD / 7484' TVD									
7,487.0	1.53	270.47	7,483.8	143.0	-43.7	149.5	0.80	0.70	-18.59
7,620.0	1.50	261.00	7,616.8	142.7	-47.2	150.3	0.19	-0.02	-7.12
7,652.0	0.30	196.90	7,648.8	142.6	-47.6	150.3	4.36	-3.75	-200.31
7,683.0	0.60	161.30	7,679.8	142.3	-47.6	150.0	1.28	0.97	-114.84
7,715.0	2.60	254.90	7,711.7	142.0	-48.3	149.9	8.45	6.25	292.50
7,747.0	6.70	268.10	7,743.6	141.7	-50.8	150.4	13.16	12.81	41.25
7,778.0	10.80	273.40	7,774.3	141.9	-55.5	151.9	13.47	13.23	17.10
7,810.0	14.80	276.20	7,805.5	142.5	-62.6	154.5	12.65	12.50	8.75
7,842.0	18.80	276.20	7,836.1	143.5	-71.8	158.2	12.50	12.50	0.00
7,873.0	22.40	274.70	7,865.1	144.5	-82.6	162.3	11.74	11.61	-4.84
7,905.0	26.50	274.70	7,894.2	145.6	-95.8	167.2	12.81	12.81	0.00
CROSSED LEASE LINE @ 7928' MD / 7915' TVD									
7,928.0	29.45	274.25	7,914.5	146.4	-106.6	171.2	12.84	12.81	-1.94
7,937.0	30.60	274.10	7,922.3	146.8	-111.1	172.8	12.84	12.82	-1.70
7,969.0	34.30	273.70	7,949.3	147.9	-128.2	178.9	11.58	11.56	-1.25
8,000.0	38.00	273.90	7,974.4	149.1	-146.4	185.4	11.94	11.94	0.65
8,032.0	41.70	274.00	7,998.9	150.5	-166.9	192.8	11.56	11.56	0.31
8,064.0	45.90	273.90	8,022.0	152.1	-189.0	200.7	13.13	13.13	-0.31
8,096.0	50.30	274.00	8,043.4	153.7	-212.7	209.2	13.75	13.75	0.31
8,127.0	54.50	274.00	8,062.3	155.4	-237.2	218.0	13.55	13.55	0.00
8,159.0	58.90	274.50	8,079.9	157.4	-263.9	227.7	13.81	13.75	1.56

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Aries 19 IL Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3494.0usft (Patterson #46)
Site:	Sec 19-18S-30E	MD Reference:	WELL @ 3494.0usft (Patterson #46)
Well:	Aries 19 IL Fed Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	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)
8,191.0	62.30	274.40	8,095.6	159.6	-291.7	237.9	10.63	10.63	-0.31
8,223.0	65.30	274.30	8,109.7	161.7	-320.3	248.3	9.38	9.38	-0.31
8,254.0	68.80	273.90	8,121.8	163.8	-348.8	258.6	11.35	11.29	-1.29
8,286.0	72.50	273.60	8,132.4	165.8	-378.9	269.3	11.60	11.56	-0.94
8,318.0	75.40	273.80	8,141.2	167.7	-409.6	280.1	9.08	9.06	0.63
CROSSED HARDLINE @ 8350' MD / 8148' TVD									
8,350.0	79.00	274.50	8,148.3	170.0	-440.7	291.4	11.45	11.25	2.19
8,381.0	83.30	275.00	8,153.1	172.5	-471.2	302.7	13.96	13.87	1.61
8,403.0	86.50	274.80	8,155.0	174.4	-493.1	310.9	14.57	14.55	-0.91
8,482.0	89.80	270.90	8,157.6	178.3	-571.9	337.7	6.46	4.18	-4.94
8,513.0	89.90	271.80	8,157.7	179.1	-602.9	347.5	2.92	0.32	2.90
8,545.0	89.80	271.80	8,157.7	180.1	-634.9	357.8	0.31	-0.31	0.00
8,577.0	89.80	271.60	8,157.9	181.0	-666.9	368.0	0.62	0.00	-0.63
8,608.0	89.60	272.50	8,158.0	182.1	-697.8	378.1	2.97	-0.65	2.90
8,672.0	90.00	273.80	8,158.2	185.6	-761.7	400.2	2.13	0.63	2.03
8,735.0	90.80	275.40	8,157.8	190.7	-824.5	423.4	2.84	1.27	2.54
8,799.0	91.00	275.20	8,156.8	196.6	-888.3	447.6	0.44	0.31	-0.31
8,862.0	90.90	274.70	8,155.8	202.0	-951.0	471.2	0.81	-0.16	-0.79
8,926.0	91.30	274.80	8,154.5	207.3	-1,014.8	494.9	0.64	0.63	0.16
8,989.0	91.40	274.70	8,153.0	212.6	-1,077.5	518.2	0.22	0.16	-0.16
9,052.0	89.70	274.20	8,152.4	217.4	-1,140.4	541.3	2.81	-2.70	-0.79
9,116.0	89.60	273.40	8,152.8	221.7	-1,204.2	564.0	1.26	-0.16	-1.25
9,179.0	91.20	273.90	8,152.4	225.7	-1,267.1	586.2	2.66	2.54	0.79
9,242.0	92.00	273.40	8,150.6	229.7	-1,329.9	608.4	1.50	1.27	-0.79
9,305.0	92.70	272.80	8,148.0	233.1	-1,392.8	630.0	1.46	1.11	-0.95
9,369.0	91.70	273.40	8,145.6	236.6	-1,456.6	652.0	1.82	-1.56	0.94
9,432.0	90.40	273.80	8,144.4	240.5	-1,519.5	674.1	2.16	-2.06	0.63
9,496.0	90.80	273.00	8,143.8	244.3	-1,583.4	696.4	1.40	0.63	-1.25
9,559.0	89.80	271.80	8,143.4	247.0	-1,646.3	717.4	2.48	-1.59	-1.90
9,622.0	89.10	272.50	8,144.0	249.3	-1,709.3	738.0	1.57	-1.11	1.11
9,686.0	89.10	273.30	8,145.0	252.6	-1,773.2	759.8	1.25	0.00	1.25
9,749.0	90.40	273.50	8,145.3	256.3	-1,836.1	781.8	2.09	2.06	0.32
9,813.0	92.00	274.50	8,144.0	260.8	-1,899.9	804.7	2.95	2.50	1.56
9,876.0	92.00	274.80	8,141.8	265.9	-1,962.7	827.9	0.48	0.00	0.48
9,939.0	92.20	274.20	8,139.5	270.8	-2,025.4	851.0	1.00	0.32	-0.95
10,003.0	92.60	274.00	8,136.8	275.4	-2,089.2	874.0	0.70	0.63	-0.31
10,066.0	91.20	273.70	8,134.7	279.6	-2,152.0	896.4	2.27	-2.22	-0.48
10,129.0	89.90	273.60	8,134.1	283.6	-2,214.9	918.6	2.07	-2.06	-0.16
10,192.0	88.90	274.90	8,134.8	288.3	-2,277.7	941.4	2.60	-1.59	2.06
10,256.0	88.80	275.10	8,136.0	293.9	-2,341.5	965.4	0.35	-0.16	0.31
10,319.0	90.10	274.30	8,136.6	299.0	-2,404.2	988.7	2.42	2.06	-1.27
10,383.0	91.70	274.40	8,135.6	303.9	-2,468.0	1,012.0	2.50	2.50	0.16
10,446.0	91.60	274.90	8,133.8	309.0	-2,530.8	1,035.2	0.81	-0.16	0.79

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Aries 19 IL Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3494.0usft (Patterson #46)
Site:	Sec 19-18S-30E	MD Reference:	WELL @ 3494.0usft (Patterson #46)
Well:	Aries 19 IL Fed Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	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)
10,509.0	92.60	275.20	8,131.5	314.5	-2,593.5	1,058.8	1.66	1.59	0.48
10,572.0	91.50	274.90	8,129.3	320.1	-2,656.2	1,082.5	1.81	-1.75	-0.48
10,636.0	91.80	274.50	8,127.4	325.3	-2,720.0	1,106.1	0.78	0.47	-0.63
10,699.0	91.90	273.40	8,125.4	329.6	-2,782.8	1,128.6	1.75	0.16	-1.75
10,763.0	91.30	272.80	8,123.6	333.1	-2,846.7	1,150.6	1.33	-0.94	-0.94
10,795.0	91.50	272.30	8,122.8	334.5	-2,878.7	1,161.3	1.68	0.63	-1.56
10,827.0	91.10	272.20	8,122.1	335.8	-2,910.6	1,171.8	1.29	-1.25	-0.31
10,858.0	90.70	273.30	8,121.6	337.3	-2,941.6	1,182.3	3.78	-1.29	3.55
10,890.0	90.30	274.40	8,121.3	339.4	-2,973.5	1,193.7	3.66	-1.25	3.44
10,922.0	90.30	275.50	8,121.2	342.2	-3,005.4	1,205.7	3.44	0.00	3.44
10,986.0	90.70	274.30	8,120.6	347.6	-3,069.1	1,229.5	1.98	0.63	-1.88
11,049.0	90.60	274.70	8,119.9	352.6	-3,131.9	1,252.6	0.65	-0.16	0.63
11,112.0	89.80	275.00	8,119.7	357.9	-3,194.7	1,276.0	1.36	-1.27	0.48
11,175.0	90.30	274.20	8,119.6	363.0	-3,257.5	1,299.2	1.50	0.79	-1.27
11,238.0	90.70	274.80	8,119.1	367.9	-3,320.3	1,322.3	1.14	0.63	0.95
11,301.0	91.30	275.30	8,118.0	373.4	-3,383.1	1,346.0	1.24	0.95	0.79
11,364.0	91.60	274.90	8,116.4	379.0	-3,445.8	1,369.6	0.79	0.48	-0.63
11,427.0	91.70	276.10	8,114.6	385.1	-3,508.5	1,393.7	1.91	0.16	1.90
11,490.0	91.90	275.50	8,112.6	391.4	-3,571.1	1,418.1	1.00	0.32	-0.95
11,554.0	90.90	274.80	8,111.0	397.2	-3,634.8	1,442.3	1.91	-1.56	-1.09
11,617.0	91.20	276.10	8,109.9	403.2	-3,697.5	1,466.3	2.12	0.48	2.06
11,681.0	91.60	277.00	8,108.3	410.5	-3,761.1	1,491.9	1.54	0.63	1.41
11,744.0	92.60	277.50	8,106.0	418.4	-3,823.6	1,517.7	1.77	1.59	0.79
11,808.0	93.20	278.00	8,102.7	427.0	-3,886.9	1,544.5	1.22	0.94	0.78
11,840.0	92.50	278.00	8,101.2	431.5	-3,918.5	1,558.0	2.19	-2.19	0.00
11,871.0	91.00	277.60	8,100.2	435.7	-3,949.2	1,571.0	5.01	-4.84	-1.29
11,903.0	90.20	277.40	8,099.9	439.9	-3,981.0	1,584.2	2.58	-2.50	-0.63
11,935.0	89.20	276.90	8,100.0	443.8	-4,012.7	1,597.3	3.49	-3.13	-1.56
11,967.0	88.80	276.30	8,100.6	447.5	-4,044.5	1,610.1	2.25	-1.25	-1.88
11,998.0	88.80	276.00	8,101.3	450.8	-4,075.3	1,622.3	0.97	0.00	-0.97
12,030.0	88.90	275.10	8,101.9	453.9	-4,107.2	1,634.6	2.83	0.31	-2.81
12,061.0	89.30	274.80	8,102.4	456.6	-4,138.0	1,646.2	1.61	1.29	-0.97
12,093.0	90.10	274.20	8,102.5	459.1	-4,169.9	1,657.9	3.12	2.50	-1.88
12,125.0	89.50	273.30	8,102.7	461.2	-4,201.9	1,669.2	3.38	-1.88	-2.81
12,156.0	88.90	271.80	8,103.1	462.6	-4,232.8	1,679.6	5.21	-1.94	-4.84
12,187.0	89.60	271.70	8,103.5	463.5	-4,263.8	1,689.5	2.28	2.26	-0.32
12,219.0	90.50	271.60	8,103.5	464.5	-4,295.8	1,699.8	2.83	2.81	-0.31
12,251.0	91.50	272.30	8,102.9	465.6	-4,327.8	1,710.2	3.81	3.13	2.19
12,283.0	91.40	273.30	8,102.1	467.1	-4,359.7	1,721.0	3.14	-0.31	3.13
12,314.0	91.10	274.20	8,101.4	469.1	-4,390.7	1,732.0	3.06	-0.97	2.90
12,345.0	90.60	274.40	8,101.0	471.5	-4,421.6	1,743.2	1.74	-1.61	0.65
12,377.0	90.00	274.90	8,100.8	474.1	-4,453.5	1,755.0	2.44	-1.88	1.56
12,409.0	91.00	275.90	8,100.5	477.1	-4,485.3	1,767.2	4.42	3.13	3.13

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Aries 19 IL Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3494.0usft (Patterson #46)
Site:	Sec 19-18S-30E	MD Reference:	WELL @ 3494.0usft (Patterson #46)
Well:	Aries 19 IL Fed Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

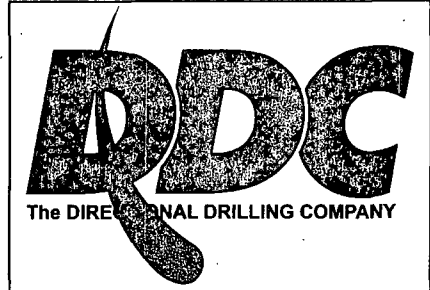
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,440.0	91.10	275.70	8,100.0	480.2	-4,516.2	1,779.2	0.72	0.32	-0.65
12,471.0	91.20	274.90	8,099.3	483.1	-4,547.0	1,791.0	2.60	0.32	-2.58
12,534.0	90.80	273.00	8,098.2	487.4	-4,609.9	1,813.5	3.08	-0.63	-3.02
12,598.0	91.70	272.20	8,096.8	490.3	-4,673.8	1,835.0	1.88	1.41	-1.25
12,661.0	91.70	271.00	8,095.0	492.1	-4,736.7	1,855.0	1.90	0.00	-1.90
12,724.0	91.60	269.00	8,093.1	492.1	-4,799.7	1,873.5	3.18	-0.16	-3.17
12,787.0	91.70	267.00	8,091.3	489.9	-4,862.6	1,889.7	3.18	0.16	-3.17
12,850.0	91.60	264.90	8,089.5	485.4	-4,925.4	1,903.9	3.34	-0.16	-3.33
12,882.0	91.70	264.10	8,088.6	482.4	-4,957.3	1,910.2	2.52	0.31	-2.50
BIT PROJECTION @ 12933' MD / 8087' TVD									
12,933.0	91.70	264.10	8,087.1	477.1	-5,008.0	1,920.0	0.00	0.00	0.00

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,487.0	7,483.8	143.0	-43.7	TIE ON @ 7487' MD / 7484' TVD
7,928.0	7,914.5	146.4	-106.6	CROSSED LEASE LINE @ 7928' MD / 7915' TVD
8,350.0	8,148.3	170.0	-440.7	CROSSED HARDLINE @ 8350' MD / 8148' TVD
12,933.0	8,087.1	477.1	-5,008.0	BIT PROJECTION @ 12933' MD / 8087' TVD

Checked By: _____	Approved By: _____	Date: _____
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Company Name: Mewbourne Oil Co
 Aries 19 IL Fed Com #1H
 Eddy County, New Mexico
 Rig: Patterson #46
 Created By: Guthrey Johnson
 Date: 12/11/2012

Aries 19 IL Fed Com #1H
 Eddy County, New Mexico
 Q120068 & WT-12867
 Design #2



Mewbourne Oil Company

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: Aries 19 IL Fed Com #1H

Ground Level: 3474.0		Easting: 601928.40		Latitude: 32° 43' 49.796 N		Longitude: 104° 0' 6.741 W	
+N/-S	+E/-W	North	East	Lat	Long		
0.0	0.0	629625.90	601928.40	32° 43' 49.796 N	104° 0' 6.741 W		

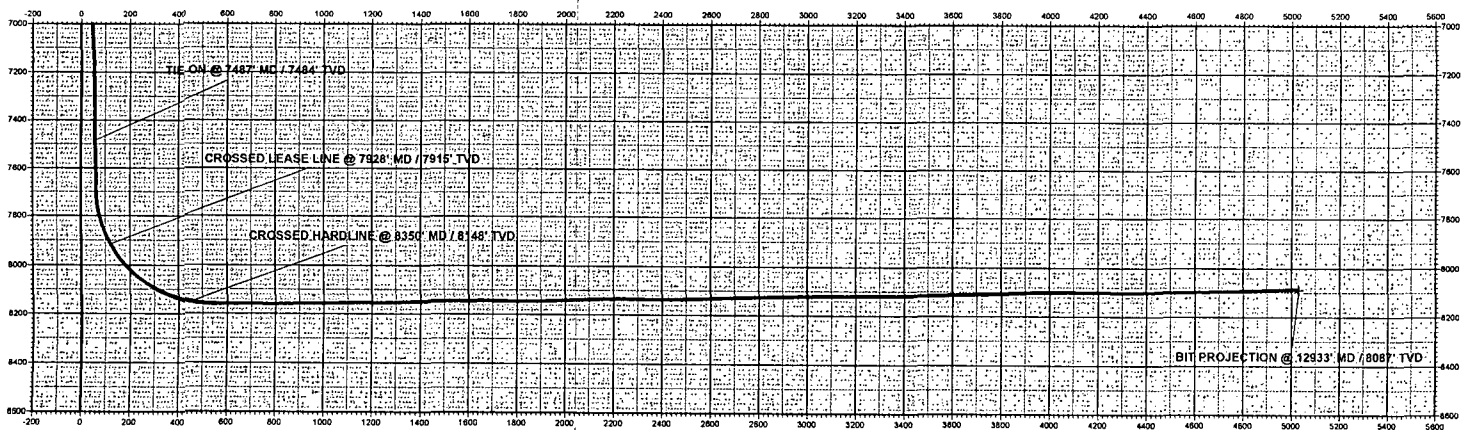
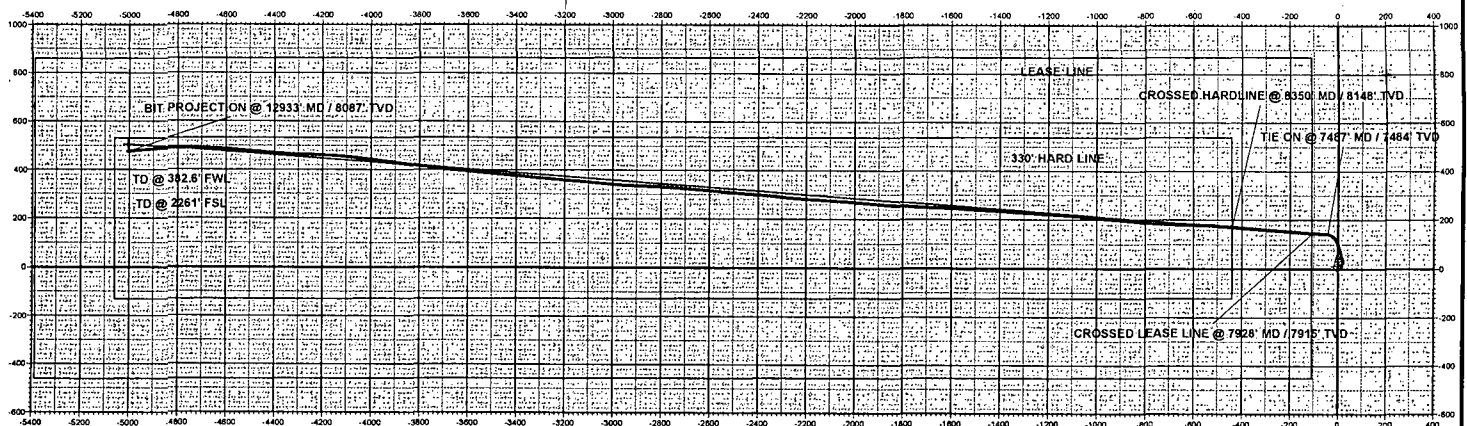
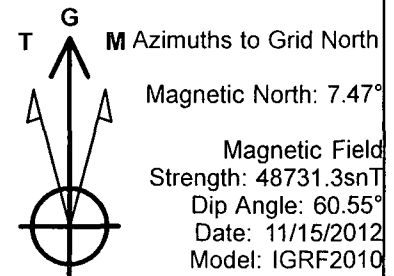
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	North	East	Lat	Long
PBH: Aries 19 Fed Com #1H	8089.0	606.5	-5005.2	630132.40	896923.20	32° 43' 54.960 N	104° 1' 5.317 W

- plan hits target center

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
7487.0	1.53	270.47	7483.8	143.0	-43.7	149.5	188.3	TIE ON @ 7487' MD / 7484' TVD
7928.0	29.45	274.25	7914.5	146.4	-105.6	171.2	252.3	CROSSED LEASE LINE @ 7928' MD / 7915' TVD
8350.0	79.00	274.60	8148.3	170.0	-440.7	291.4	587.0	CROSSED HARDLINE @ 8350' MD / 8148' TVD
12933.0	81.70	264.10	8087.1	477.1	-5008.0	1920.0	5168.3	BIT PROJECTION @ 12933' MD / 8087' TVD



Vertical Section at 275.78° (200 usf/in)