



MEWBOURNE
OIL COMPANY

NM OIL CONSERVATION
ARTESIA DISTRICT
AUG 31 2015

RECEIVED

15-42407

Mewbourne Oil Company

Eddy County, NM
Layla 35 W20B Fee
No. 3H
OH

Design: OH

EOW Report

13 March, 2015





Mewbourne Oil Company
 Project: Eddy County, NM
 Site: Layla 35 W20B Fee
 Well: No. 3H
 Wellbore: OH
 Design: Plan #2
 Lat: 32° 15' 16.751 N
 Long: 104° 3' 24.677 W
 Pad GL: 3010.00
 KB: WELL @ 3030.00usft (RKB: 20' + GL: 3010')



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSECT
9880.00	1.13	190.87	9877.44	-30.32	-82.25	0.00	0.00	-35.99
10012.50	1.13	190.87	10009.92	-32.89	-82.74	0.00	0.00	-38.58
10522.90	60.00	34.00	10516.50	203.07	79.58	10.00	-157.12	208.13
11050.95	90.00	1.90	10628.80	588.75	195.78	10.00	-51.44	600.57
15267.27	90.00	1.90	10629.00	4802.75	335.70	0.00	0.00	4814.47

WELL DETAILS: No. 3H

+N/-S	+E/-W	Northing	Ground Level:	3010.00	Longitude
0.00	0.00	456470.90	Easting	585469.30	32° 15' 16.751 N
					104° 3' 24.677 W

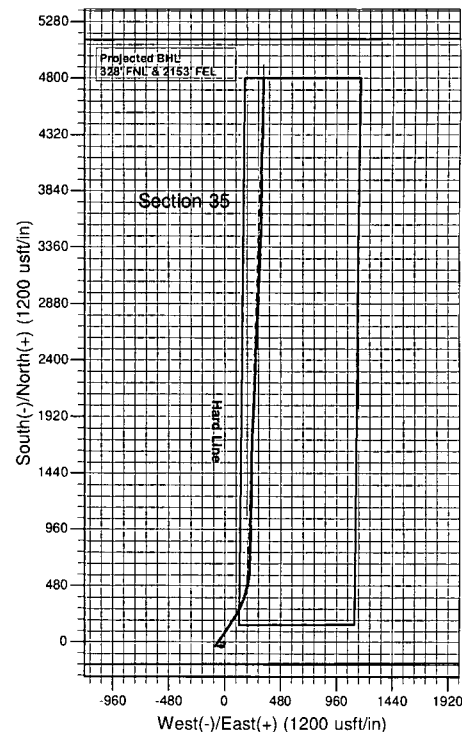
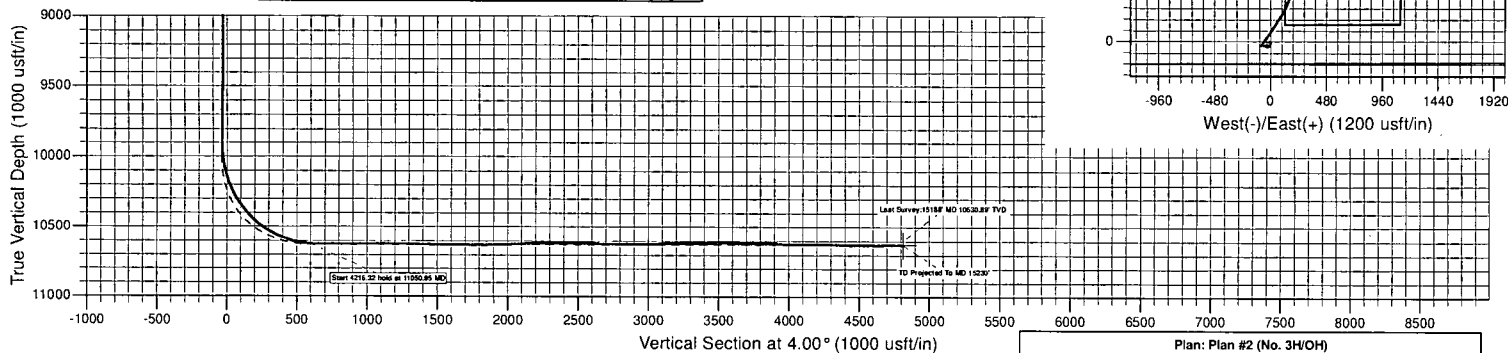
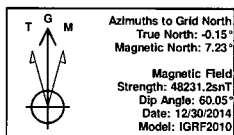
PROJECT DETAILS: Eddy County, NM

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	Northing	Easting	Latitude	Longitude
Layla 35 No. 3H TDPBHL	10629.00	4802.75	335.70	461273.65	585805.00	32° 16' 4.271 N	104° 3' 20.623 W

NOTE: All Lease lines and Hard lines are estimates only
 and are subject to the customers' approval.



Plan: Plan #2 (No. 3H/OH)
 Created By: Chris LeMaster Date: 15:51, April 01 2015

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well No. 3H
Project:	Eddy County, NM	TVD Reference:	WELL @ 3030.00usft (RKB: 20' + GL: 3010')
Site:	Layla 35 W20B Fee	MD Reference:	WELL @ 3030.00usft (RKB: 20' + GL: 3010')
Well:	No. 3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM ON IWSERVER

Project	Eddy County, NM		
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	Layla 35 W20B Fee		
Site Position:		Northing:	456,470.90 usft
From:	Map	Easting:	585,469.30 usft
Position Uncertainty:	3.30 usft	Slot Radius:	13-3/16"
		Latitude:	32° 15' 16.751 N
		Longitude:	104° 3' 24.677 W
		Grid Convergence:	0.15 °

Well	No. 3H		
Well Position	+N/-S	0.00 usft	Northing: 456,470.90 usft
	+E/-W	0.00 usft	Easting: 585,469.30 usft
Position Uncertainty	1.10 usft	Wellhead Elevation:	usft
		Latitude:	32° 15' 16.751 N
		Longitude:	104° 3' 24.677 W
		Ground Level:	3,010.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	12/30/2014	7.38
			Dip Angle (°)
			60.05
			Field Strength (nT)
			48,231

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
		Direction (°)	4.00

Survey Program	Date: 3/8/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
100.00	9,880.00	VES Gyro (OH)	CB-GYRO-MS
9,944.00	15,230.00	MWD Surveys (OH)	MWD
			Description
			Camera based gyro multishot
			MWD - Standard

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.51	267.12	100.00	-0.02	-0.44	-0.05	0.51
200.00	0.83	235.76	199.99	-0.45	-1.49	-0.55	0.48
300.00	1.07	213.93	299.98	-1.63	-2.61	-1.81	0.43
400.00	1.40	172.45	399.96	-3.62	-2.97	-3.82	0.93
500.00	1.72	149.44	499.92	-6.12	-2.04	-6.25	0.70
600.00	0.92	96.06	599.90	-7.50	-0.48	-7.52	1.38
700.00	0.50	343.88	699.89	-7.17	0.19	-7.14	1.20
800.00	0.75	249.68	799.89	-6.97	-0.54	-7.00	0.93
900.00	0.88	155.70	899.88	-7.90	-0.84	-7.94	1.20
1,000.00	0.68	99.51	999.87	-8.70	0.06	-8.67	0.76

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Well:	No. 3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM ON IWSERVER

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
1,100.00	0.46	3.69	1,099.87	-8.40	0.67	-8.33	0.86	
1,200.00	0.81	236.48	1,199.87	-8.39	0.11	-8.36	1.15	
1,300.00	1.10	184.76	1,299.85	-9.73	-0.56	-9.75	0.87	
1,400.00	1.07	94.73	1,399.84	-10.77	0.29	-10.72	1.53	
1,500.00	1.19	33.94	1,499.83	-9.98	1.80	-9.83	1.15	
1,600.00	1.24	316.09	1,599.81	-8.34	1.63	-8.21	1.53	
1,700.00	1.40	250.68	1,699.79	-7.97	-0.27	-7.97	1.43	
1,800.00	1.88	191.46	1,799.75	-9.98	-1.75	-10.08	1.67	
1,900.00	1.55	121.97	1,899.72	-12.30	-0.93	-12.34	1.97	
2,000.00	0.93	56.39	1,999.70	-12.57	0.89	-12.48	1.44	
2,100.00	0.67	336.54	2,099.69	-11.58	1.34	-11.46	1.05	
2,200.00	0.29	113.72	2,199.69	-11.15	1.34	-11.03	0.90	
2,300.00	0.19	10.06	2,299.69	-11.09	1.60	-10.95	0.38	
2,400.00	0.37	11.05	2,399.69	-10.61	1.69	-10.46	0.18	
2,500.00	0.46	15.94	2,499.69	-9.90	1.86	-9.75	0.10	
2,600.00	0.41	344.42	2,599.68	-9.17	1.87	-9.02	0.24	
2,700.00	0.41	316.27	2,699.68	-8.57	1.53	-8.44	0.20	
2,800.00	0.38	322.11	2,799.68	-8.05	1.08	-7.96	0.05	
2,900.00	0.40	337.46	2,899.68	-7.47	0.74	-7.40	0.11	
3,000.00	0.56	323.11	2,999.67	-6.75	0.32	-6.71	0.20	
3,100.00	0.47	313.81	3,099.67	-6.08	-0.27	-6.08	0.12	
3,200.00	0.56	314.57	3,199.66	-5.45	-0.92	-5.50	0.09	
3,300.00	0.61	329.34	3,299.66	-4.65	-1.54	-4.75	0.16	
3,400.00	0.65	337.64	3,399.65	-3.67	-2.03	-3.80	0.10	
3,500.00	0.60	323.00	3,499.65	-2.73	-2.56	-2.90	0.17	
3,600.00	0.45	319.65	3,599.64	-2.01	-3.13	-2.22	0.15	
3,700.00	0.30	316.13	3,699.64	-1.52	-3.56	-1.76	0.15	
3,800.00	0.38	290.79	3,799.64	-1.21	-4.05	-1.49	0.17	
3,900.00	0.45	288.31	3,899.64	-0.97	-4.74	-1.30	0.07	
4,000.00	0.55	289.21	3,999.63	-0.69	-5.56	-1.08	0.10	
4,100.00	0.66	305.30	4,099.63	-0.20	-6.48	-0.65	0.20	
4,200.00	0.55	297.88	4,199.62	0.36	-7.38	-0.16	0.13	
4,300.00	0.33	291.88	4,299.62	0.69	-8.07	0.12	0.22	
4,400.00	0.25	247.95	4,399.62	0.71	-8.54	0.12	0.23	
4,500.00	0.37	228.60	4,499.62	0.42	-8.98	-0.21	0.16	
4,600.00	0.49	242.41	4,599.61	0.01	-9.61	-0.66	0.16	
4,700.00	0.59	248.60	4,699.61	-0.38	-10.46	-1.11	0.12	
4,800.00	0.58	269.92	4,799.60	-0.57	-11.45	-1.36	0.22	
4,900.00	0.98	264.42	4,899.59	-0.65	-12.81	-1.54	0.41	
5,000.00	1.18	255.13	4,999.58	-1.00	-14.65	-2.02	0.27	
5,100.00	1.36	256.38	5,099.55	-1.54	-16.80	-2.71	0.18	
5,200.00	1.13	256.58	5,199.53	-2.05	-18.91	-3.36	0.23	
5,300.00	1.03	238.02	5,299.51	-2.76	-20.64	-4.19	0.36	
5,400.00	1.19	222.19	5,399.49	-4.00	-22.10	-5.53	0.34	

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Well:	No. 3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM ON IWSERVER

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
5,500.00	1.46	232.71	5,499.47	-5.54	-23.81	-7.19	0.36	
5,600.00	1.36	235.10	5,599.43	-6.99	-25.79	-8.78	0.12	
5,700.00	1.33	230.93	5,699.41	-8.40	-27.67	-10.31	0.10	
5,800.00	1.38	216.74	5,799.38	-10.10	-29.29	-12.12	0.34	
5,900.00	1.72	220.84	5,899.34	-12.20	-30.99	-14.33	0.36	
6,000.00	1.60	215.53	5,999.30	-14.47	-32.78	-16.72	0.19	
6,100.00	1.38	197.75	6,099.27	-16.75	-33.96	-19.08	0.51	
6,200.00	1.61	199.17	6,199.23	-19.23	-34.79	-21.61	0.23	
6,300.00	1.53	200.61	6,299.20	-21.80	-35.72	-24.24	0.09	
6,400.00	0.39	95.58	6,399.18	-23.09	-35.85	-25.53	1.67	
6,500.00	0.91	91.37	6,499.18	-23.14	-34.72	-25.51	0.52	
6,600.00	0.99	104.16	6,599.16	-23.37	-33.09	-25.62	0.23	
6,700.00	0.81	124.17	6,699.15	-23.98	-31.67	-26.13	0.36	
6,800.00	1.59	100.01	6,799.13	-24.62	-29.71	-26.63	0.91	
6,900.00	1.51	104.21	6,899.09	-25.18	-27.07	-27.01	0.14	
7,000.00	0.71	103.63	6,999.07	-25.65	-25.19	-27.35	0.80	
7,100.00	1.89	121.54	7,099.05	-26.66	-23.18	-28.21	1.23	
7,200.00	2.99	135.38	7,198.95	-29.38	-19.95	-30.70	1.24	
7,300.00	2.65	150.87	7,298.83	-33.25	-16.99	-34.36	0.83	
7,400.00	2.49	177.00	7,398.74	-37.44	-15.75	-38.45	1.17	
7,500.00	1.60	207.22	7,498.68	-40.85	-16.28	-41.89	1.37	
7,600.00	2.12	251.36	7,598.63	-42.69	-18.67	-43.88	1.48	
7,700.00	2.98	280.24	7,698.53	-42.82	-22.98	-44.31	1.52	
7,800.00	2.79	284.50	7,798.40	-41.74	-27.89	-43.59	0.29	
7,900.00	2.52	284.80	7,898.30	-40.57	-32.37	-42.73	0.27	
8,000.00	2.60	293.38	7,998.20	-39.11	-36.58	-41.57	0.39	
8,100.00	2.75	293.14	8,098.09	-37.27	-40.87	-40.03	0.15	
8,200.00	1.95	294.52	8,198.00	-35.62	-44.62	-38.65	0.80	
8,300.00	1.60	290.65	8,297.96	-34.42	-47.48	-37.65	0.37	
8,400.00	1.78	290.77	8,397.91	-33.38	-50.24	-36.80	0.18	
8,500.00	1.58	304.24	8,497.87	-32.05	-52.83	-35.66	0.44	
8,600.00	1.58	297.81	8,597.83	-30.63	-55.19	-34.41	0.18	
8,700.00	1.63	289.96	8,697.79	-29.50	-57.74	-33.46	0.23	
8,800.00	1.68	292.53	8,797.75	-28.46	-60.43	-32.60	0.09	
8,900.00	1.84	284.56	8,897.70	-27.49	-63.34	-31.84	0.29	
9,000.00	2.22	286.67	8,997.64	-26.53	-66.75	-31.12	0.39	
9,100.00	1.84	285.85	9,097.58	-25.54	-70.15	-30.37	0.38	
9,200.00	1.27	269.36	9,197.54	-25.11	-72.80	-30.13	0.72	
9,300.00	0.82	260.43	9,297.52	-25.24	-74.62	-30.39	0.48	
9,400.00	0.78	252.63	9,397.51	-25.57	-75.97	-30.80	0.12	
9,500.00	0.75	237.83	9,497.51	-26.12	-77.18	-31.44	0.20	
9,600.00	1.03	237.87	9,597.49	-26.94	-78.49	-32.35	0.28	
9,700.00	1.09	249.41	9,697.48	-27.76	-80.14	-33.28	0.22	
9,800.00	1.15	216.17	9,797.46	-28.90	-81.62	-34.52	0.64	
9,880.00	1.13	190.87	9,877.44	-30.32	-82.25	-35.99	0.62	

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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM ON IWSERVER

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
9,944.00	1.50	45.70	9,941.44	-30.36	-81.77	-35.99	3.92
9,976.00	5.20	33.70	9,973.38	-28.86	-80.66	-34.42	11.71
10,007.00	8.00	36.60	10,004.17	-25.96	-78.60	-31.38	9.09
10,039.00	11.00	37.50	10,035.73	-21.75	-75.41	-26.95	9.39
10,071.00	14.00	36.00	10,066.96	-16.19	-71.27	-21.12	9.43
10,102.00	16.20	36.40	10,096.89	-9.68	-66.50	-14.29	7.10
10,134.00	18.80	37.30	10,127.41	-1.98	-60.73	-6.21	8.17
10,166.00	21.60	37.30	10,157.44	6.81	-54.03	3.02	8.75
10,197.00	23.50	36.80	10,186.07	16.30	-46.87	12.99	6.16
10,229.00	26.20	36.30	10,215.10	27.10	-38.87	24.32	8.46
10,261.00	29.50	35.90	10,243.39	39.18	-30.06	36.99	10.33
10,293.00	32.20	35.80	10,270.86	52.48	-20.45	50.92	8.44
10,324.00	34.70	35.30	10,296.72	66.38	-10.52	65.49	8.11
10,356.00	37.80	33.40	10,322.53	82.01	0.14	81.82	10.30
10,388.00	39.80	32.50	10,347.46	98.83	11.04	99.36	6.49
10,419.00	41.00	32.20	10,371.07	115.81	21.79	117.04	3.92
10,451.00	43.70	32.60	10,394.72	134.00	33.35	136.00	8.48
10,483.00	46.20	33.20	10,417.36	152.98	45.63	155.79	7.92
10,514.00	47.10	34.20	10,438.64	171.74	58.14	175.37	3.73
10,546.00	49.90	33.60	10,459.85	191.63	71.50	196.15	8.86
10,578.00	53.20	32.70	10,479.74	212.61	85.20	218.03	10.54
10,610.00	57.40	31.60	10,497.96	234.88	99.19	241.23	13.43
10,623.00	58.50	30.60	10,504.85	244.32	104.88	251.04	10.68
10,700.00	62.90	24.70	10,542.55	303.78	135.95	312.52	8.79
10,732.00	64.90	22.20	10,556.63	330.14	147.38	339.62	9.40
10,764.00	66.50	20.10	10,569.80	357.34	157.89	367.48	7.80
10,795.00	68.80	17.50	10,581.59	384.48	167.13	395.20	10.73
10,827.00	71.30	16.00	10,592.51	413.28	175.79	424.53	8.97
10,859.00	73.40	14.90	10,602.21	442.67	183.91	454.42	7.33
10,890.00	75.80	13.70	10,610.44	471.63	191.29	483.82	8.59
10,922.00	79.10	11.40	10,617.40	502.11	198.08	514.70	12.47
10,954.00	82.40	8.90	10,622.54	533.19	203.64	546.10	12.88
10,986.00	86.20	5.60	10,625.72	564.77	207.65	577.88	15.69
11,017.00	88.30	3.20	10,627.21	595.64	210.03	608.84	10.28
11,049.00	88.50	3.10	10,628.10	627.58	211.78	640.82	0.70
11,081.00	90.00	1.80	10,628.52	659.54	213.15	672.81	6.20
11,144.00	89.50	1.00	10,628.79	722.52	214.69	735.74	1.50
11,239.00	89.40	1.30	10,629.70	817.50	216.60	830.62	0.33
11,334.00	91.00	1.80	10,629.37	912.46	219.17	925.53	1.76
11,428.00	91.00	1.20	10,627.73	1,006.42	221.63	1,019.42	0.64
11,524.00	90.20	0.90	10,626.73	1,102.39	223.39	1,115.29	0.89
11,619.00	89.80	1.10	10,626.73	1,197.38	225.04	1,210.16	0.47
11,714.00	88.10	0.40	10,628.47	1,292.35	226.29	1,304.99	1.94
11,809.00	88.50	0.20	10,631.29	1,387.31	226.78	1,399.75	0.47

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well No. 3H
Project:	Eddy County, NM	TVD Reference:	WELL @ 3030.00usft (RKB: 20' + GL: 3010')
Site:	Layla 35 W20B Fee	MD Reference:	WELL @ 3030.00usft (RKB: 20' + GL: 3010')
Well:	No. 3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM ON IWSERVER

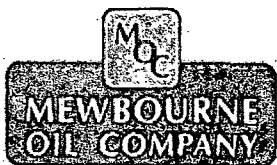
Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
11,904.00	88.90	0.20	10,633.44	1,482.28	227.12	1,494.51	0.42	
11,999.00	89.40	1.80	10,634.85	1,577.25	228.77	1,589.37	1.76	
12,030.00	90.80	2.70	10,634.80	1,608.23	229.99	1,620.35	5.37	
12,062.00	90.30	2.40	10,634.49	1,640.20	231.41	1,652.34	1.82	
12,094.00	88.80	1.10	10,634.74	1,672.18	232.39	1,684.32	6.20	
12,220.00	90.50	3.30	10,635.51	1,798.07	237.23	1,810.24	2.21	
12,315.00	90.90	2.30	10,634.35	1,892.95	241.87	1,905.21	1.13	
12,347.00	91.70	3.10	10,633.62	1,924.90	243.37	1,937.19	3.54	
12,379.00	92.10	3.10	10,632.56	1,956.84	245.10	1,969.17	1.25	
12,410.00	92.50	3.00	10,631.32	1,987.77	246.75	2,000.14	1.33	
12,506.00	93.30	3.10	10,626.46	2,083.51	251.85	2,096.00	0.84	
12,601.00	92.80	2.10	10,621.41	2,178.28	256.16	2,190.84	1.18	
12,696.00	89.80	1.90	10,619.25	2,273.18	259.47	2,285.75	3.16	
12,791.00	89.70	2.40	10,619.67	2,368.12	263.04	2,380.70	0.54	
12,854.00	88.30	2.00	10,620.77	2,431.06	265.45	2,443.65	2.31	
12,886.00	88.30	1.90	10,621.72	2,463.03	266.54	2,475.62	0.31	
12,981.00	89.80	2.00	10,623.29	2,557.95	269.77	2,570.54	1.58	
13,012.00	88.80	2.50	10,623.67	2,588.93	270.99	2,601.52	3.61	
13,076.00	88.00	2.90	10,625.46	2,652.83	274.00	2,665.48	1.40	
13,171.00	89.90	2.60	10,627.20	2,747.70	278.56	2,760.44	2.02	
13,266.00	90.50	1.90	10,626.87	2,842.63	282.29	2,855.39	0.97	
13,361.00	90.60	1.20	10,625.95	2,937.59	284.86	2,950.30	0.74	
13,456.00	90.40	3.50	10,625.12	3,032.50	288.76	3,045.25	2.43	
13,552.00	91.80	3.40	10,623.28	3,128.30	294.53	3,141.23	1.46	
13,647.00	90.60	1.90	10,621.29	3,223.18	298.92	3,236.18	2.02	
13,742.00	88.60	1.40	10,621.96	3,318.13	301.66	3,331.09	2.17	
13,837.00	92.60	3.30	10,620.96	3,413.02	305.55	3,426.02	4.66	
13,869.00	92.90	3.40	10,619.43	3,444.93	307.42	3,457.98	0.99	
13,900.00	91.60	2.80	10,618.21	3,475.86	309.09	3,488.95	4.62	
13,932.00	90.20	2.30	10,617.71	3,507.82	310.52	3,520.94	4.65	
13,963.00	89.10	1.10	10,617.90	3,538.81	311.44	3,551.91	5.25	
13,995.00	88.70	0.40	10,618.51	3,570.80	311.86	3,583.85	2.52	
14,027.00	88.30	0.30	10,619.35	3,602.79	312.05	3,615.78	1.29	
14,058.00	88.60	0.30	10,620.19	3,633.78	312.21	3,646.70	0.97	
14,090.00	89.10	0.70	10,620.83	3,665.77	312.49	3,678.64	2.00	
14,122.00	89.60	1.00	10,621.19	3,697.76	312.97	3,710.59	1.82	
14,153.00	88.30	1.00	10,621.76	3,728.75	313.51	3,741.54	4.19	
14,185.00	88.70	1.00	10,622.60	3,760.74	314.07	3,773.48	1.25	
14,217.00	90.30	0.60	10,622.88	3,792.73	314.51	3,805.43	5.15	
14,248.00	91.30	0.30	10,622.44	3,823.73	314.76	3,836.37	3.37	
14,280.00	89.50	0.20	10,622.22	3,855.72	314.90	3,868.30	5.63	
14,312.00	87.90	1.00	10,622.95	3,887.71	315.23	3,900.23	5.59	
14,345.00	87.30	1.40	10,624.33	3,920.68	315.92	3,933.16	2.18	
14,377.00	87.60	1.60	10,625.75	3,952.63	316.76	3,965.10	1.13	

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well No. 3H
Project:	Eddy County, NM	TVD Reference:	WELL @ 3030.00usft (RKB: 20' + GL: 3010')
Site:	Layla 35 W20B Fee	MD Reference:	WELL @ 3030.00usft (RKB: 20' + GL: 3010')
Well:	No. 3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM ON IWSERVER

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
14,408.00	88.40	1.00	10,626.83	3,983.61	317.46	3,996.05	3.23	
14,440.00	89.10	0.40	10,627.53	4,015.59	317.85	4,027.99	2.88	
14,472.00	89.50	0.30	10,627.92	4,047.59	318.05	4,059.92	1.29	
14,503.00	90.60	1.10	10,627.89	4,078.59	318.43	4,090.87	4.39	
14,535.00	90.70	1.40	10,627.53	4,110.58	319.12	4,122.83	0.99	
14,567.00	89.70	1.90	10,627.42	4,142.57	320.05	4,154.80	3.49	
14,598.00	89.80	2.00	10,627.56	4,173.55	321.10	4,185.78	0.46	
14,630.00	90.30	2.50	10,627.53	4,205.52	322.36	4,217.76	2.21	
14,662.00	90.40	2.90	10,627.33	4,237.49	323.86	4,249.76	1.29	
14,693.00	89.70	3.10	10,627.31	4,268.44	325.49	4,280.75	2.35	
14,725.00	88.30	2.50	10,627.86	4,300.40	327.05	4,312.74	4.76	
14,757.00	87.60	1.40	10,629.01	4,332.36	328.14	4,344.70	4.07	
14,788.00	87.40	1.00	10,630.36	4,363.32	328.79	4,375.63	1.44	
14,820.00	87.60	0.50	10,631.76	4,395.29	329.20	4,407.55	1.68	
14,852.00	88.60	0.70	10,632.82	4,427.27	329.54	4,439.47	3.19	
14,883.00	89.00	0.10	10,633.47	4,458.26	329.76	4,470.40	2.33	
14,947.00	90.00	0.20	10,634.02	4,522.26	329.92	4,534.26	1.57	
15,042.00	91.40	1.30	10,632.86	4,617.24	331.17	4,629.09	1.87	
15,137.00	91.30	1.50	10,630.63	4,712.18	333.49	4,723.97	0.24	
15,188.00	88.10	359.20	10,630.89	4,763.17	333.80	4,774.85	7.73	
Last Survey:15188' MD 10630.89' TVD								
15,230.00	88.10	359.20	10,632.29	4,805.15	333.21	4,816.68	0.00	
TD Projected To MD 15230'								

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
15,188.00	10,630.89	4,763.17	333.80	Last Survey:15188' MD 10630.89' TVD	
15,230.00	10,632.29	4,805.15	333.21	TD Projected To MD 15230'	

Checked By: _____	Approved By: _____	Date: _____
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Company: Mewbourne Oil CO
Lease/Well: Layla 35 W20B Fee/3H

Rig Name: Patterson 444
State/County: New Mexico /Eddy
Latitude: 32.25, Longitude: -104.06
GRID North is 0.15 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : 22.5 FT

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: layla 35 w20b fee 3h-de_01.ut
Minimum Curvature Method
Report Date/Time: 2/20/2015 / 16:16

VES Survey International
(432) 563-5444
West Texas

Surveyor: Javier Estrada
Layla 35 W20B Fee 3H / API 30-015-42407

NM OIL CONSERVATION

ARTESTA DISTRICT

AUG 31 2015

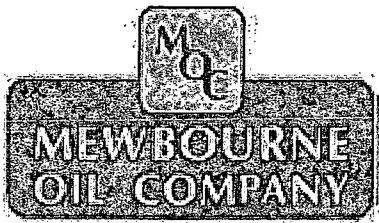
RECEIVED

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	0.51	267.12	100.00	-0.02	-0.44	-0.02	0.44	267.12	0.51
200.00	0.83	235.76	199.99	-0.45	-1.48	-0.45	1.55	253.07	0.48
300.00	1.07	213.93	299.98	-1.64	-2.61	-1.64	3.08	237.89	0.43
400.00	1.40	172.45	399.96	-3.62	-2.97	-3.62	4.68	219.34	0.93
500.00	1.72	149.44	499.92	-6.12	-2.04	-6.12	6.46	198.44	0.70
600.00	0.92	96.06	599.90	-7.51	-0.48	-7.51	7.52	183.63	1.39
700.00	0.50	343.88	699.89	-7.17	0.20	-7.17	7.17	178.38	1.20
800.00	0.75	249.68	799.89	-6.98	-0.53	-6.98	7.00	184.38	0.93
900.00	0.88	155.70	899.88	-7.91	-0.84	-7.91	7.95	186.04	1.19
1000.00	0.68	99.51	999.87	-8.70	0.07	-8.70	8.70	179.56	0.75
1100.00	0.46	3.69	1099.87	-8.40	0.68	-8.40	8.43	175.36	0.86
1200.00	0.81	236.48	1199.87	-8.39	0.12	-8.39	8.39	179.19	1.15
1300.00	1.10	184.76	1299.85	-9.74	-0.55	-9.74	9.75	183.23	0.88
1400.00	1.07	94.73	1399.84	-10.77	0.30	-10.77	10.78	178.39	1.54
1500.00	1.19	33.94	1499.83	-9.99	1.81	-9.99	10.16	169.72	1.15
1600.00	1.24	316.09	1599.81	-8.35	1.64	-8.35	8.51	168.92	1.53
1700.00	1.40	250.68	1699.79	-7.97	-0.27	-7.97	7.98	181.91	1.43
1800.00	1.88	191.46	1799.75	-9.98	-1.74	-9.98	10.13	189.89	1.67

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	1.55	121.97	1899.72	-12.31	-0.92	-12.31	12.34	184.26	1.97
2000.00	0.93	56.39	1999.70	-12.58	0.91	-12.58	12.61	175.88	1.44
2100.00	0.67	336.54	2099.69	-11.59	1.35	-11.59	11.67	173.38	1.04
2200.00	0.29	113.72	2199.69	-11.15	1.35	-11.15	11.24	173.12	0.91
2300.00	0.19	10.06	2299.69	-11.09	1.61	-11.09	11.21	171.74	0.39
2400.00	0.37	11.05	2399.69	-10.61	1.70	-10.61	10.75	170.89	0.17
2500.00	0.46	15.94	2499.69	-9.91	1.87	-9.91	10.08	169.29	0.10
2600.00	0.41	344.42	2599.68	-9.17	1.89	-9.17	9.37	168.37	0.24
2700.00	0.41	316.27	2699.68	-8.57	1.55	-8.57	8.71	169.77	0.20
2800.00	0.38	322.11	2799.68	-8.06	1.10	-8.06	8.13	172.22	0.05
2900.00	0.40	337.46	2899.68	-7.47	0.76	-7.47	7.51	174.16	0.11
3000.00	0.56	323.11	2999.67	-6.76	0.33	-6.76	6.76	177.17	0.20
3100.00	0.47	313.81	3099.67	-6.08	-0.26	-6.08	6.09	182.41	0.13
3200.00	0.56	314.57	3199.66	-5.46	-0.90	-5.46	5.53	189.32	0.09
3300.00	0.61	329.34	3299.66	-4.66	-1.51	-4.66	4.90	198.00	0.16
3400.00	0.65	337.64	3399.65	-3.67	-2.00	-3.67	4.18	208.62	0.10
3500.00	0.60	323.00	3499.65	-2.72	-2.54	-2.72	3.72	222.94	0.17
3600.00	0.45	319.65	3599.64	-2.00	-3.11	-2.00	3.70	237.17	0.15
3700.00	0.30	316.13	3699.64	-1.51	-3.55	-1.51	3.85	246.87	0.15
3800.00	0.38	290.79	3799.64	-1.21	-4.04	-1.21	4.21	253.36	0.17
3900.00	0.45	288.31	3899.64	-0.97	-4.72	-0.97	4.81	258.41	0.07
4000.00	0.55	289.21	3999.63	-0.69	-5.54	-0.69	5.58	262.92	0.10
4100.00	0.66	305.30	4099.63	-0.20	-6.46	-0.20	6.46	268.25	0.20
4200.00	0.55	297.88	4199.62	0.36	-7.35	0.36	7.36	272.80	0.13
4300.00	0.33	291.88	4299.62	0.69	-8.04	0.69	8.07	274.91	0.23
4400.00	0.25	247.95	4399.62	0.72	-8.51	0.72	8.54	274.82	0.23
4500.00	0.37	228.60	4499.62	0.42	-8.95	0.42	8.96	272.71	0.16
4600.00	0.49	242.41	4599.61	0.01	-9.57	0.01	9.57	270.07	0.15
4700.00	0.59	248.60	4699.61	-0.37	-10.43	-0.37	10.44	267.95	0.12
4800.00	0.58	269.92	4799.60	-0.56	-11.42	-0.56	11.44	267.18	0.22
4900.00	0.98	264.42	4899.59	-0.65	-12.78	-0.65	12.80	267.10	0.40
5000.00	1.18	255.13	4999.58	-1.00	-14.63	-1.00	14.67	266.11	0.27
5100.00	1.36	256.38	5099.55	-1.54	-16.78	-1.54	16.85	264.76	0.18
5200.00	1.13	256.58	5199.53	-2.05	-18.90	-2.05	19.01	263.81	0.23
5300.00	1.03	238.02	5299.51	-2.75	-20.62	-2.75	20.81	262.39	0.36
5400.00	1.19	222.19	5399.49	-4.00	-22.09	-4.00	22.45	259.73	0.35
5500.00	1.46	232.71	5499.46	-5.55	-23.80	-5.55	24.44	256.88	0.36
5600.00	1.36	235.10	5599.43	-7.00	-25.79	-7.00	26.73	254.81	0.12
5700.00	1.33	230.93	5699.41	-8.41	-27.67	-8.41	28.92	253.09	0.10

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
5800.00	1.38	216.74	5799.38	-10.10	-29.29	-10.10	30.98	250.96	0.34
5900.00	1.72	220.84	5899.34	-12.20	-30.99	-12.20	33.30	248.50	0.36
6000.00	1.60	215.53	5999.30	-14.47	-32.78	-14.47	35.83	246.18	0.20
6100.00	1.38	197.75	6099.27	-16.75	-33.96	-16.75	37.86	243.74	0.51
6200.00	1.61	199.17	6199.23	-19.23	-34.78	-19.23	39.74	241.07	0.24
6300.00	1.53	200.61	6299.20	-21.81	-35.72	-21.81	41.85	238.59	0.09
6400.00	0.39	95.58	6399.18	-23.09	-35.85	-23.09	42.65	237.21	1.68
6500.00	0.91	91.37	6499.18	-23.15	-34.72	-23.15	41.73	236.31	0.53
6600.00	0.99	104.16	6599.16	-23.37	-33.09	-23.37	40.51	234.76	0.22
6700.00	0.81	124.17	6699.15	-23.98	-31.67	-23.98	39.72	232.87	0.36
6800.00	1.59	100.01	6799.13	-24.62	-29.72	-24.62	38.59	230.37	0.91
6900.00	1.51	104.21	6899.09	-25.18	-27.08	-25.18	36.98	227.08	0.14
7000.00	0.71	103.63	6999.07	-25.65	-25.20	-25.65	35.96	224.49	0.80
7100.00	1.89	121.54	7099.05	-26.66	-23.19	-26.66	35.34	221.01	1.23
7200.00	2.99	135.38	7198.95	-29.39	-19.95	-29.39	35.52	214.17	1.24
7300.00	2.65	150.87	7298.83	-33.27	-16.99	-33.27	37.35	207.05	0.83
7400.00	2.49	177.00	7398.74	-37.46	-15.75	-37.46	40.63	202.80	1.17
7500.00	1.60	207.22	7498.67	-40.86	-16.27	-40.86	43.98	201.71	1.37
7600.00	2.12	251.36	7598.63	-42.69	-18.66	-42.69	46.59	203.61	1.48
7700.00	2.98	280.24	7698.53	-42.82	-22.97	-42.82	48.59	208.21	1.52
7800.00	2.79	284.50	7798.40	-41.75	-27.88	-41.75	50.20	213.74	0.29
7900.00	2.52	284.80	7898.30	-40.58	-32.36	-40.58	51.90	218.57	0.26
8000.00	2.60	293.38	7998.20	-39.12	-36.57	-39.12	53.55	223.07	0.39
8100.00	2.75	293.14	8098.09	-37.28	-40.85	-37.28	55.30	227.62	0.15
8200.00	1.95	294.52	8198.00	-35.63	-44.60	-35.63	57.08	231.38	0.80
8300.00	1.60	290.65	8297.96	-34.44	-47.45	-34.44	58.63	234.03	0.37
8400.00	1.78	290.77	8397.91	-33.39	-50.20	-33.39	60.30	236.37	0.18
8500.00	1.58	304.24	8497.87	-32.06	-52.80	-32.06	61.77	238.73	0.44
8600.00	1.58	297.81	8597.83	-30.64	-55.17	-30.64	63.10	240.95	0.18
8700.00	1.63	289.96	8697.79	-29.51	-57.72	-29.51	64.83	242.92	0.22
8800.00	1.68	292.53	8797.75	-28.46	-60.41	-28.46	66.78	244.77	0.09
8900.00	1.84	284.56	8897.70	-27.50	-63.33	-27.50	69.04	246.53	0.29
9000.00	2.22	286.67	8997.64	-26.54	-66.74	-26.54	71.82	248.32	0.39
9100.00	1.84	285.85	9097.58	-25.54	-70.14	-25.54	74.65	249.99	0.39
9200.00	1.27	269.36	9197.54	-25.12	-72.80	-25.12	77.01	250.96	0.71
9300.00	0.82	260.43	9297.52	-25.25	-74.61	-25.25	78.77	251.30	0.49
9400.00	0.78	252.63	9397.51	-25.57	-75.96	-25.57	80.15	251.40	0.11
9500.00	0.75	237.83	9497.51	-26.12	-77.16	-26.12	81.46	251.30	0.20
9600.00	1.03	237.87	9597.49	-26.94	-78.47	-26.94	82.97	251.05	0.28

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
9700.00	1.09	249.41	9697.48	-27.75	-80.13	-27.75	84.80	250.89	0.22
9800.00	1.15	216.17	9797.46	-28.90	-81.61	-28.90	86.58	250.50	0.64
9880.00	1.13	190.87	9877.44	-30.32	-82.23	-30.32	87.65	249.76	0.62



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