

OPERATOR
WELL/LEASE
COUNTY

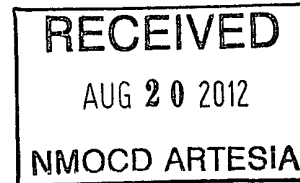
MEWBOURNE OIL COMPANY
LAYLA 35 2H
EDDY

075-0086

STATE OF NEW MEXICO
DEVIATION REPORT

30-015-38675

118	0.78
332	0.83
615	0.57
996	1.87
1,188	1.22
1,440	0.47
1,856	1.00
2,236	2.94
2,627	2.04
2,755	1.25
3,167	0.40
3,581	0.44
3,900	0.22
4,314	0.33
4,727	0.45
5,046	0.88
5,362	1.16
5,680	1.54



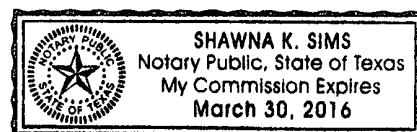
STATE OF TEXAS

COUNTY OF MIDLAND

BY: Kyle Hollingsworth

The foregoing instrument was acknowledged before me on 10/08/12, by
Kyle Hollingsworth on behalf of Patterson-UTI Drilling Company LLC.

Shawna K. Sims
Notary Public for Midland County, Texas
My Commission Expires:





Company: MEWBOURNE OIL COMPANY

Lease/Well: LAYLA/35 No. 002H

Rig Name: PATTERSON 75

State/County: NEW MEXICO/EDDY

Latitude: 32.16

GRID North is 0.16 Degrees East of True North

VS-Azi: 0.00 Degrees



Depth Reference : 20'

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: layla 35#2h_ed.ut

Minimum Curvature Method

Report Date/Time: 6/14/2012 / 11:41

Vaughn Energy Services

Woodward, OK

580-254-5000

Surveyor: Nick Harding

Layla 35 No. 002H / API 30-015-38675

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	0.54	350.99	100.00	0.46	-0.07	0.46	0.47	350.99	0.54
200.00	1.12	340.69	199.99	1.85	-0.47	1.85	1.91	345.72	0.60
300.00	1.10	346.16	299.97	3.71	-1.03	3.71	3.85	344.55	0.11
400.00	0.95	339.75	399.95	5.43	-1.54	5.43	5.64	344.12	0.19
500.00	0.32	18.34	499.95	6.47	-1.75	6.47	6.70	344.90	0.73
600.00	0.58	171.39	599.94	6.23	-1.58	6.23	6.43	345.75	0.88
700.00	0.97	177.62	699.94	4.87	-1.47	4.87	5.09	343.22	0.40
800.00	1.33	141.46	799.92	3.12	-0.71	3.12	3.20	347.16	0.79
900.00	1.49	183.60	899.89	0.91	-0.07	0.91	0.91	355.80	1.03
1000.00	1.54	169.71	999.85	-1.71	0.09	-1.71	1.72	176.91	0.37
1100.00	1.33	178.98	1099.82	-4.20	0.35	-4.20	4.21	175.19	0.32
1200.00	1.04	196.41	1199.80	-6.22	0.12	-6.22	6.23	178.91	0.46
1300.00	0.80	174.15	1299.79	-7.79	-0.07	-7.79	7.79	180.49	0.43
1400.00	0.81	191.13	1399.78	-9.17	-0.13	-9.17	9.17	180.82	0.24
1500.00	0.85	190.79	1499.77	-10.59	-0.41	-10.59	10.60	182.20	0.04
1600.00	0.98	214.76	1599.76	-12.03	-1.03	-12.03	12.07	184.92	0.40
1700.00	1.33	200.05	1699.74	-13.82	-1.92	-13.82	13.95	187.91	0.45
1800.00	1.38	194.47	1799.71	-16.07	-2.62	-16.07	16.28	189.25	0.14

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	1.52	187.05	1899.68	-18.55	-3.08	-18.55	18.81	189.43	0.23
2000.00	2.34	158.65	1999.62	-21.77	-2.50	-21.77	21.91	186.55	1.24
2100.00	2.72	149.70	2099.52	-25.72	-0.56	-25.72	25.73	181.24	0.55
2200.00	2.69	155.99	2199.41	-29.92	1.60	-29.92	29.96	176.94	0.30
2300.00	3.40	142.77	2299.27	-34.43	4.35	-34.43	34.70	172.80	0.99
2400.00	3.89	135.16	2399.07	-39.20	8.54	-39.20	40.12	167.71	0.69
2500.00	3.12	117.59	2498.88	-42.87	13.35	-42.87	44.90	162.71	1.31
2600.00	2.28	113.25	2598.77	-44.91	17.59	-44.91	48.23	158.62	0.87
2700.00	1.70	117.16	2698.71	-46.38	20.73	-46.38	50.80	155.91	0.59
2800.00	1.61	117.88	2798.67	-47.71	23.29	-47.71	53.09	153.98	0.10
2900.00	1.24	119.68	2898.64	-48.90	25.47	-48.90	55.13	152.49	0.37
3000.00	0.97	114.64	2998.62	-49.78	27.17	-49.78	56.72	151.37	0.28
3100.00	0.78	123.24	3098.61	-50.51	28.51	-50.51	58.00	150.56	0.23
3200.00	0.79	133.70	3198.60	-51.35	29.57	-51.35	59.26	150.06	0.14
3300.00	0.68	124.89	3298.59	-52.17	30.56	-52.17	60.46	149.64	0.15
3400.00	0.61	125.15	3398.58	-52.82	31.48	-52.82	61.49	149.20	0.07
3500.00	0.44	130.47	3498.58	-53.37	32.21	-53.37	62.34	148.89	0.18
3600.00	0.37	136.34	3598.58	-53.85	32.72	-53.85	63.02	148.72	0.08
3700.00	0.18	147.10	3698.58	-54.21	33.03	-54.21	63.48	148.65	0.20
3800.00	0.12	160.06	3798.58	-54.44	33.15	-54.44	63.74	148.66	0.07
3900.00	0.11	190.54	3898.58	-54.64	33.16	-54.64	63.91	148.74	0.06
4000.00	0.08	183.05	3998.58	-54.80	33.14	-54.80	64.04	148.83	0.04
4100.00	0.15	211.09	4098.58	-54.98	33.07	-54.98	64.16	148.97	0.09
4200.00	0.33	251.83	4198.57	-55.18	32.73	-55.18	64.16	149.33	0.24
4300.00	0.33	236.20	4298.57	-55.43	32.21	-55.43	64.11	149.84	0.09
4400.00	0.34	236.96	4398.57	-55.76	31.72	-55.76	64.15	150.37	0.01
4500.00	0.50	213.49	4498.57	-56.29	31.22	-56.29	64.37	150.98	0.23
4600.00	0.71	219.95	4598.56	-57.13	30.58	-57.13	64.80	151.84	0.22
4700.00	0.84	206.18	4698.55	-58.27	29.86	-58.27	65.47	152.87	0.23
4800.00	0.95	236.39	4798.54	-59.39	28.84	-59.39	66.02	154.09	0.48
4900.00	0.81	237.55	4898.53	-60.23	27.55	-60.23	66.23	155.42	0.14
5000.00	0.88	243.60	4998.52	-60.95	26.27	-60.95	66.37	156.68	0.11
5100.00	0.64	245.27	5098.51	-61.52	25.08	-61.52	66.44	157.82	0.24
5200.00	0.61	233.64	5198.50	-62.07	24.14	-62.07	66.60	158.75	0.13
5300.00	0.77	257.56	5298.50	-62.54	23.05	-62.54	66.65	159.77	0.33
5400.00	0.86	251.13	5398.49	-62.92	21.68	-62.92	66.55	160.99	0.12
5500.00	0.87	242.08	5498.48	-63.52	20.30	-63.52	66.69	162.28	0.14
5600.00	0.76	211.61	5598.47	-64.44	19.28	-64.44	67.27	163.34	0.44
5700.00	0.79	210.41	5698.46	-65.61	18.58	-65.61	68.19	164.19	0.03

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	0.73	187.49	5798.45	-66.84	18.15	-66.84	69.26	164.81	0.31
5900.00	1.06	184.31	5898.44	-68.40	17.99	-68.40	70.72	165.26	0.34
5965.00	1.04	188.33	5963.43	-69.58	17.86	-69.58	71.84	165.60	0.12

Mewbourne Oil Co

Eddy County, New Mexico

Sec 35 23W-28E

Layla 35 #2H

Wellbore #1

Survey: MWD

DDC Survey Report

25 June, 2012



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Layla 35 #2H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3018 + 20' KB @ 3038 0usft (Patterson UTI #75)
Site:	Sec 35 23W-28E	MD Reference:	GL 3018 + 20' KB @ 3038 0usft (Patterson UTI #75)
Well:	Layla 35 #2H	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 35 23W-28E		
Site Position:		Northing:	461,407 18 usft
From:	Map	Easting:	584,793.84 usft
Position Uncertainty:	0 0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 16' 5 618 N
		Longitude:	104° 3' 32.396 W
		Grid Convergence:	0.15 °

Well	Layla 35 #2H		
Well Position	+N/-S	0 0 usft	Northing: 461,407 18 usft
	+E/-W	0 0 usft	Easting: 584,793.84 usft
Position Uncertainty	0 0 usft	Wellhead Elevation:	usft
		Latitude:	32° 16' 5.618 N
		Longitude:	104° 3' 32.396 W
		Ground Level:	3,018 0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	3/1/2012	7.73
			Dip Angle (°)
			60.13
			Field Strength (nT)
			48,520

Design	Wellbore #1		
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Audit Notes:			
Version:	1 0	Phase:	ACTUAL
		Tie On Depth:	0.0

Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0 0	0 0	180.44

Survey Program	Date 6/25/2012		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
100 0	5,965.0	VES Gyro (Wellbore #1)	Good_gyro
6,076.0	11,135.0	MWD (Wellbore #1)	MWD default
			Description
			Good Gyro
			MWD - Standard

Survey			
Measured Depth	Inclination	Azimuth	Vertical Depth
(usft)	(°)	(°)	(usft)
			+N/-S
			(usft)
			+E/-W
			(usft)
			Vertical Section
			(usft)
			Dogleg Rate
			(°/100usft)
			Build Rate
			(°/100usft)
			Turn Rate
			(°/100usft)

TIE IN @ 5965' MD / 5963' TVD

5,965.0	1.04	188 33	5,963 4	-69 5	17.9	69 4	0.00	0.00	0 00
6,076 0	1.30	194 20	6,074 4	-71 8	17.5	71 6	0.26	0.23	5 29
6,108 0	2.20	192 90	6,106 4	-72 7	17.2	72 6	2 82	2 81	-4.06
6,139 0	5 10	193.80	6,137 3	-74 6	16.8	74 5	9 36	9.35	2 90
6,171 0	8 40	194 50	6,169 1	-78.3	15.8	78 1	10 32	10 31	2.19
6,203 0	11.70	192.00	6,200.6	-83 7	14 6	83 6	10.40	10.31	-7.81
6,235.0	15 80	190.10	6,231.7	-91 2	13 1	91.1	12 89	12 81	-5 94

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Layla 35 #2H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3018 + 20' KB @ 3038.0usft (Patterson UTI #75)
Site:	Sec 35 23W-28E	MD Reference:	GL 3018 + 20' KB @ 3038.0usft (Patterson UTI #75)
Well:	Layla 35 #2H	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)
6,267.0	19.10	192.50	6,262.2	-100.6	11.2	100.5	10.55	10.31	7.50
6,299.0	22.10	188.30	6,292.2	-111.7	9.2	111.6	10.45	9.38	-13.13
6,330.0	25.10	183.00	6,320.6	-124.0	8.1	123.9	11.84	9.68	-17.10
6,362.0	28.30	180.80	6,349.1	-138.4	7.6	138.3	10.46	10.00	-6.88
CROSSED HARD LINE @ 6375' MD / 6361' TVD									
6,375.0	29.56	180.84	6,360.5	-144.6	7.5	144.6	9.69	9.69	0.33
6,394.0	31.40	180.90	6,376.9	-154.3	7.4	154.2	9.69	9.69	0.30
6,426.0	33.90	181.50	6,403.8	-171.5	7.0	171.5	7.88	7.81	1.88
6,457.0	36.90	181.60	6,429.1	-189.5	6.5	189.4	9.68	9.68	0.32
6,489.0	39.80	180.90	6,454.2	-209.3	6.1	209.3	9.16	9.06	-2.19
6,522.0	42.80	181.60	6,479.0	-231.1	5.6	231.1	9.20	9.09	2.12
6,553.0	45.50	183.20	6,501.2	-252.7	4.7	252.6	9.42	8.71	5.16
6,585.0	48.40	184.70	6,523.1	-276.0	3.1	276.0	9.69	9.06	4.69
6,617.0	51.40	185.20	6,543.7	-300.4	1.0	300.4	9.45	9.38	1.56
6,649.0	54.30	185.20	6,563.0	-325.8	-1.4	325.8	9.06	9.06	0.00
6,680.0	56.90	184.10	6,580.5	-351.3	-3.4	351.3	8.88	8.39	-3.55
6,713.0	59.40	182.40	6,597.9	-379.3	-5.0	379.3	8.75	7.58	-5.15
6,745.0	61.60	181.20	6,613.7	-407.1	-5.9	407.1	7.61	6.88	-3.75
6,777.0	64.70	181.20	6,628.1	-435.6	-6.5	435.7	9.69	9.69	0.00
6,809.0	67.70	181.20	6,641.0	-464.9	-7.1	464.9	9.38	9.38	0.00
6,840.0	71.40	180.40	6,651.9	-493.9	-7.5	494.0	12.18	11.94	-2.58
6,872.0	73.90	179.60	6,661.4	-524.5	-7.5	524.5	8.17	7.81	-2.50
6,904.0	76.20	179.60	6,669.7	-555.4	-7.3	555.4	7.19	7.19	0.00
6,936.0	79.20	180.10	6,676.5	-586.7	-7.2	586.7	9.50	9.38	1.56
6,968.0	82.90	180.80	6,681.5	-618.3	-7.4	618.3	11.76	11.56	2.19
6,993.0	86.50	181.40	6,683.8	-643.1	-7.9	643.2	14.60	14.40	2.40
7,090.0	90.60	181.70	6,686.2	-740.1	-10.5	740.1	4.24	4.23	0.31
7,154.0	89.80	178.60	6,686.0	-804.1	-10.7	804.1	5.00	-1.25	-4.84
7,217.0	89.70	178.70	6,686.3	-867.0	-9.2	867.1	0.22	-0.16	0.16
7,280.0	89.30	178.10	6,686.8	-930.0	-7.5	930.0	1.14	-0.63	-0.95
7,343.0	89.30	178.00	6,687.6	-993.0	-5.3	993.0	0.16	0.00	-0.16
7,406.0	88.60	177.60	6,688.8	-1,055.9	-2.9	1,055.9	1.28	-1.11	-0.63
7,469.0	88.20	177.60	6,690.5	-1,118.8	-0.3	1,118.8	0.63	-0.63	0.00
7,532.0	89.50	178.60	6,691.8	-1,181.8	1.8	1,181.7	2.60	2.06	1.59
7,596.0	89.30	178.80	6,692.5	-1,245.8	3.3	1,245.7	0.44	-0.31	0.31
7,660.0	90.50	179.20	6,692.6	-1,309.7	4.4	1,309.7	1.98	1.88	0.63
7,724.0	90.10	178.70	6,692.2	-1,373.7	5.6	1,373.7	1.00	-0.63	-0.78
7,787.0	89.90	178.50	6,692.2	-1,436.7	7.1	1,436.6	0.45	-0.32	-0.32
7,851.0	89.50	179.50	6,692.6	-1,500.7	8.2	1,500.6	1.68	-0.63	1.56
7,914.0	89.70	180.50	6,693.0	-1,563.7	8.2	1,563.6	1.62	0.32	1.59
7,977.0	88.30	180.20	6,694.1	-1,626.7	7.8	1,626.6	2.27	-2.22	-0.48
8,041.0	90.70	182.60	6,694.7	-1,690.7	6.3	1,690.6	5.30	3.75	3.75

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Layla 35 #2H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3018 + 20' KB @ 3038.0usft (Patterson UTI #75)
Site:	Sec 35 23W-28E	MD Reference:	GL 3018 + 20' KB @ 3038.0usft (Patterson UTI #75)
Well:	Layla 35 #2H	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)	
8,104.0	90.80	182.80	6,693.8	-1,753.6	3.3	1,753.5	0.35	0.16	0.32	
8,168.0	90.20	183.20	6,693.3	-1,817.5	0.0	1,817.4	1.13	-0.94	0.63	
8,232.0	90.40	182.40	6,692.9	-1,881.4	-3.2	1,881.4	1.29	0.31	-1.25	
8,296.0	90.40	182.80	6,692.5	-1,945.3	-6.1	1,945.3	0.62	0.00	0.63	
8,359.0	88.00	182.40	6,693.4	-2,008.3	-8.9	2,008.3	3.86	-3.81	-0.63	
8,423.0	86.70	181.80	6,696.3	-2,072.2	-11.3	2,072.2	2.24	-2.03	-0.94	
8,487.0	86.50	180.20	6,700.1	-2,136.0	-12.4	2,136.1	2.52	-0.31	-2.50	
8,550.0	88.30	180.10	6,703.0	-2,199.0	-12.6	2,199.0	2.86	2.86	-0.16	
8,614.0	90.90	180.80	6,703.4	-2,263.0	-13.1	2,263.0	4.21	4.06	1.09	
8,677.0	91.30	180.70	6,702.2	-2,325.9	-13.9	2,326.0	0.65	0.63	-0.16	
8,740.0	91.10	180.50	6,700.9	-2,388.9	-14.5	2,389.0	0.45	-0.32	-0.32	
8,804.0	90.20	180.00	6,700.2	-2,452.9	-14.8	2,453.0	1.61	-1.41	-0.78	
8,867.0	89.30	179.90	6,700.5	-2,515.9	-14.8	2,516.0	1.44	-1.43	-0.16	
8,931.0	88.00	179.90	6,702.0	-2,579.9	-14.7	2,579.9	2.03	-2.03	0.00	
8,995.0	90.30	181.70	6,702.9	-2,643.9	-15.6	2,643.9	4.56	3.59	2.81	
9,058.0	89.90	180.90	6,702.8	-2,706.9	-17.0	2,706.9	1.42	-0.63	-1.27	
9,122.0	87.70	180.90	6,704.1	-2,770.8	-18.0	2,770.9	3.44	-3.44	0.00	
9,185.0	88.50	180.30	6,706.2	-2,833.8	-18.6	2,833.9	1.59	1.27	-0.95	
9,249.0	88.00	180.30	6,708.2	-2,897.8	-19.0	2,897.8	0.78	-0.78	0.00	
9,312.0	88.10	180.30	6,710.3	-2,960.7	-19.3	2,960.8	0.16	0.16	0.00	
9,376.0	88.60	180.40	6,712.2	-3,024.7	-19.7	3,024.8	0.80	0.78	0.16	
9,440.0	89.50	181.00	6,713.2	-3,088.7	-20.5	3,088.7	1.69	1.41	0.94	
9,503.0	89.90	181.40	6,713.6	-3,151.7	-21.8	3,151.7	0.90	0.63	0.63	
9,568.0	89.40	182.00	6,714.0	-3,216.6	-23.7	3,216.7	1.20	-0.77	0.92	
9,632.0	88.90	181.90	6,714.9	-3,280.6	-25.9	3,280.7	0.80	-0.78	-0.16	
9,695.0	88.40	181.50	6,716.4	-3,343.5	-27.8	3,343.7	1.02	-0.79	-0.63	
9,758.0	89.60	179.90	6,717.5	-3,406.5	-28.5	3,406.6	3.17	1.90	-2.54	
9,822.0	87.20	179.00	6,719.3	-3,470.5	-27.9	3,470.6	4.00	-3.75	-1.41	
9,886.0	89.40	179.30	6,721.2	-3,534.5	-27.0	3,534.6	3.47	3.44	0.47	
9,949.0	88.40	179.10	6,722.4	-3,597.4	-26.1	3,597.5	1.62	-1.59	-0.32	
10,013.0	90.50	180.90	6,723.0	-3,661.4	-26.1	3,661.5	4.32	3.28	2.81	
10,076.0	91.20	180.40	6,722.1	-3,724.4	-26.8	3,724.5	1.37	1.11	-0.79	
10,140.0	90.20	181.50	6,721.3	-3,788.4	-27.9	3,788.5	2.32	-1.56	1.72	
10,203.0	90.40	181.30	6,721.0	-3,851.4	-29.4	3,851.5	0.45	0.32	-0.32	
10,267.0	89.90	181.20	6,720.8	-3,915.4	-30.8	3,915.5	0.80	-0.78	-0.16	
10,331.0	89.80	182.00	6,721.0	-3,979.3	-32.6	3,979.5	1.26	-0.16	1.25	
10,394.0	90.20	182.60	6,721.0	-4,042.3	-35.1	4,042.4	1.14	0.63	0.95	
10,457.0	89.10	180.40	6,721.3	-4,105.3	-36.8	4,105.4	3.90	-1.75	-3.49	
10,521.0	86.90	178.30	6,723.6	-4,169.2	-36.1	4,169.4	4.75	-3.44	-3.28	
10,584.0	87.30	179.60	6,726.8	-4,232.1	-34.9	4,232.3	2.16	0.63	2.06	
10,648.0	87.30	179.60	6,729.8	-4,296.0	-34.5	4,296.2	0.00	0.00	0.00	
10,712.0	89.20	180.40	6,731.7	-4,360.0	-34.5	4,360.2	3.22	2.97	1.25	

DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Layla 35 #2H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3018 + 20' KB @ 3038.0usft (Patterson UTI #75)
Site:	Sec 35 23W-28E	MD Reference:	GL 3018 + 20' KB @ 3038.0usft (Patterson UTI #75)
Well:	Layla 35 #2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000 1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,776.0	90.50	180.70	6,731.9	-4,424.0	-35.1	4,424.1	2.08	2.03	0.47	
10,839.0	90.30	180.90	6,731.5	-4,487.0	-35.9	4,487.1	0.45	-0.32	0.32	
10,902.0	88.90	179.40	6,731.9	-4,550.0	-36.1	4,550.1	3.26	-2.22	-2.38	
10,966.0	90.60	179.60	6,732.2	-4,614.0	-35.6	4,614.1	2.67	2.66	0.31	
11,029.0	90.90	180.00	6,731.4	-4,677.0	-35.3	4,677.1	0.79	0.48	0.63	
11,093.0	91.10	179.70	6,730.2	-4,741.0	-35.2	4,741.1	0.56	0.31	-0.47	
TD @ 11135' MD / 6729' TVD										
11,135.0	91.10	179.70	6,729.4	-4,783.0	-34.9	4,783.1	0.00	0.00	0.00	

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
5,965.0	5,963.4	-69.5	17.9	TIE IN @ 5965' MD / 5963' TVD	
6,375.0	6,360.5	-144.6	7.5	CROSSED HARD LINE @ 6375' MD / 6361' TVD	
11,135.0	6,729.4	-4,783.0	-34.9	TD @ 11135' MD / 6729' TVD	

Checked By: _____ Approved By: _____ Date: _____

Company Name: Mewbourne Oil Co
Layla 35 #2H
Eddy County, New Mexico
Rig: Patterson UTI #75
Created By: DINA CHANCE
Date: 06/25/2012

Layla 35 #2H
Eddy County, New Mexico
Q120178 & WT-12357

Mewbourne Oil Co.



Azimuths to Grid North

Magnetic North. 7.58°

Magnetic Field

Strength. 48520.5nT

Dip Angle. 60.13°

Date: 3/1/2012

Model. IGRF2010

PROJECT DETAILS: Eddy County, New Mexico

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

WELL DETAILS Layla 35 #2H

Ground Level 3018.0
+N/-S +E/-W Northing Easting Latitude Longitude
0.0 0.0 461407.18 584793.84 32°16'5.618 N 104°3'32.398 W

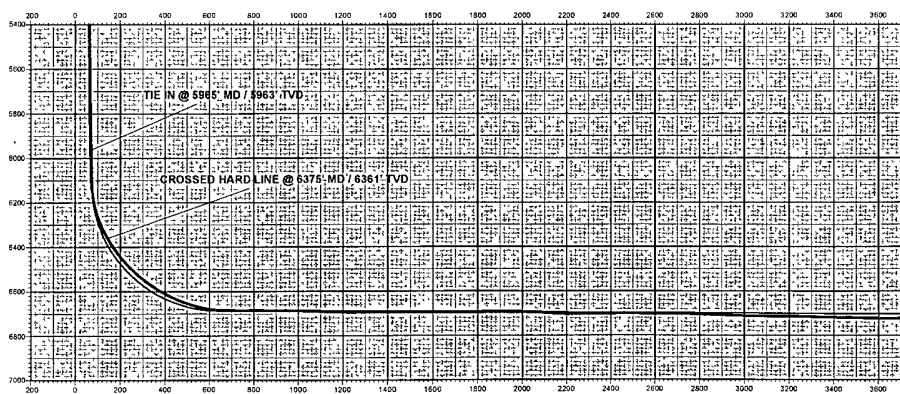
ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
5965.0	1.04	188.33	5963.4	-69.6	17.9	69.4	110.3	TIE IN @ 5965' MD / 5963' TVD
6375.0	29.56	180.84	6360.5	-144.6	7.5	144.6	188.5	CROSSED HARD LINE @ 6375' MD / 6361' TVD
11135.0	91.19	179.70	6729.4	-4783.0	-34.9	4783.1	4826.3	TD @ 11135' MD / 6729' TVD

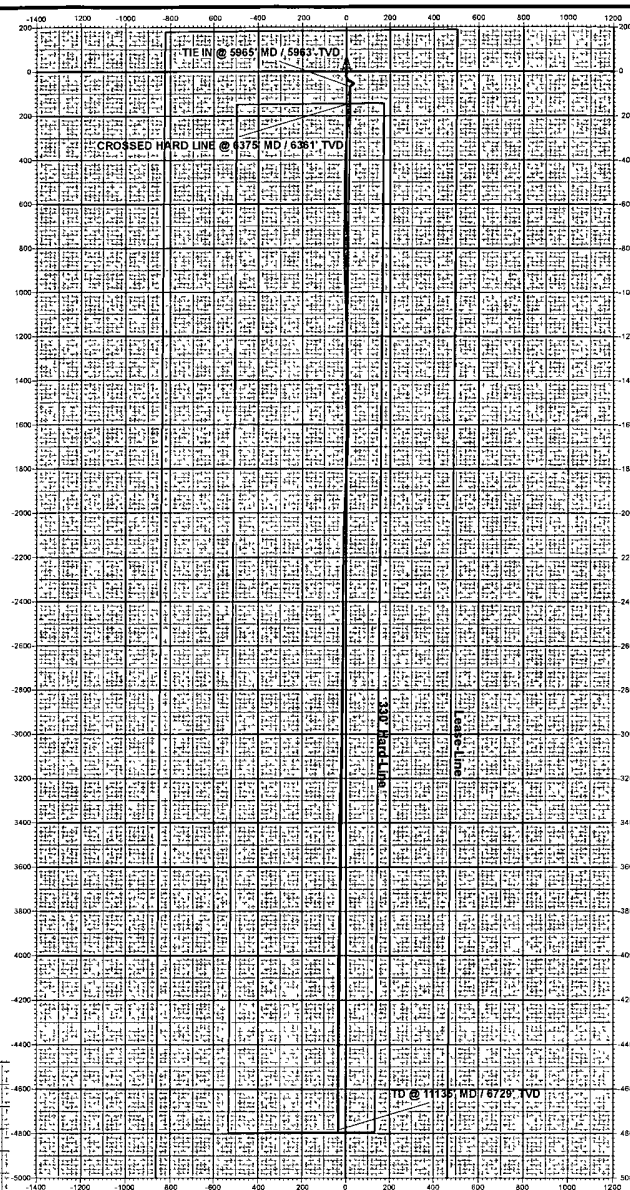
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBH-L Layla 35#2H Design #1	6708.0	-4794.4	-36.7	456612.73	584757.13	32°15'19.172 N	104°3'32.967 W

- plan hits target center



Vertical Section at 180.44° (200 usf/m)



Operating Company Mewbourne
 Well Name & Number Layla 35 2H
 Sales Ticket Number 4743795
 Date 6/24/2012

Company Rep Larry Johnson
 Field Loving
 BOT Service Rep Armando Gonzalez
 District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	P-110	6.276	6.151		0.03826	7,043.00	9,960	6,230	
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,301.74	12,410	10,680	
Bott Liner											
TVD		6,708.00		KOP		6,115.00		Open Hole	6.125	Casing Vol. (bbl)	260.1
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	JR Setting Sleeve_RH Profile	6798.26							

Zone Length										
30 144.1	JR Sleeve_S3 Hyd Set Packer	6798.26	8.63	5.813	3.875					
	4-1/2-13.5 LTC Nipple	6806.89	8.11	5.000	3.920					
	8 Joints of 4-1/2-13.5 LTC Casing	6815.00	324.70	5.000	3.920					
	3.625 EX Frac Sleeve	7139.70	3.90	5.750		3.525	2375	316	260	
	1 Joint of 4-1/2-13 5 LTC Casing	7143.60	43.53	5.000	3.920					
29 94.43	Baker Open Hole Packer	7187.13	3.89	5.820	3.875		2154			
	1 Joints of 4-1/2-13 5 LTC Casing	7191.02	43.53	5.000	3.920					
	3 500 EX-C Frac Sleeve	7234.55	3.55	5.750		3.448	2375	302	260	
	1 Joint of 4-1/2-13.5 LTC Casing	7238.10	43.46	5.000	3.920					
	Baker Open Hole Packer	7281.56	3.89	5.820	3.875		2154			
28 138	2 Joints of 4-1/2-13 5 LTC Casing	7285.45	87.03	5.000	3.920					
	3 438 EX-C Frac Sleeve	7372.48	3.55	5.750		3.385	2375	291	260	
	1 Joint of 4-1/2-13 5 LTC Casing	7376.03	43.54	5.000	3.920					
	Baker Open Hole Packer	7419.57	3.89	5.820	3.875		2154			
	2 Joints of 4-1/2-13.5 LTC Casing	7423.46	86.86	5.000	3.920					
27 137.8	3.375 EX_C Frac Sleeve	7510.32	3.55	5.750		3.323	2375	281	260	
	1 Joint of 4-1/2-13.5 LTC Casing	7513.87	43.52	5.000	3.920					
	Baker Open Hole Packer	7557.39	3.89	5.820	3.875		2154			
	1 Joints of 4-1/2-13.5 LTC Casing	7561.28	43.56	5.000	3.920					
	3 313 EX-C Frac Sleeve	7604.84	3.55	5.750		3.260	2375	270	260	
26 94.54	1 Joints of 4-1/2-13.5 LTC Casing	7608.39	43.54	5.000	3.920					
	Baker Open Hole Packer	7651.93	3.89	5.820	3.875		2154			

Operating Company Mewbourne
 Well Name & Number Layla 35 2H
 Sales Ticket Number 4743795
 Date 6/24/2012

Company Rep Larry Johnson
 Field Loving
 BOT Service Rep Armando Gonzalez
 District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	P-110	6 276	6.151		0.03826	7,043.00	9,960	6,230	
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,301.74	12,410	10,680	
Bott Liner											
TVD		6,708.00		KOP		6,115.00		Open Hole	6.125	Casing Vol. (bbl)	260.1
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)
25 138.1			2 Joints of 4-1/2-13.5 LTC Casing	7655.82	87.11	5.000	3.920				
			3.250 EX-C Frac Sleeve	7742.93	3.55	5.750		3.198	2375	260	260
			1 Joint of 4-1/2-13.5 LTC Casing	7746.48	43.54	5.000	3.920				
			Baker Open Hole Packer	7790.02	3.89	5.820	3.875		2154		
24 137.9			2 Joints of 4-1/2-13.5 LTC Casing	7793.91	86.73	5.000	3.920				
			3.188 EX-C Frac Sleeve	7880.64	3.55	5.750		3.135	2375	250	260
			1 Joints of 4-1/2-13.5 LTC Casing	7884.19	43.74	5.000	3.920				
			Baker Open Hole Packer	7927.93	3.89	5.820	3.875		2154		
23 138			2 Joints of 4-1/2-13.5 LTC Casing	7931.82	87.08	5.000	3.920				
			3.125 EX-C Frac Sleeve	8018.90	3.55	5.750		3.073	2375	240	260
			1 Joint of 4-1/2-13.5 LTC Casing	8022.45	43.44	5.000	3.920				
			Baker Open Hole Packer	8065.89	3.89	5.820	3.875		2154		
22 94.43			1 Joints of 4-1/2-13.5 LTC Casing	8069.78	43.45	5.000	3.920				
			3.063 EX-C Frac Sleeve	8113.23	3.55	5.750		3.010	2375	230	260
			1 Joints of 4-1/2-13.5 LTC Casing	8116.78	43.54	5.000	3.920				
			Baker Open Hole Packer	8160.32	3.89	5.820	3.875		2154		
21 137.8			2 Joints of 4-1/2-13.5 LTC Casing	8164.21	86.91	5.000	3.920				
			3.000 EX-C Frac sleeve	8251.12	3.55	5.750		2.948	2375	221	260
			1 Joint of 4-1/2-13.5 LTC Casing	8254.67	43.49	5.000	3.920				
			Baker Open Hole Packer	8298.16	3.89	5.820	3.875		2154		
20 137.9			2 Joints of 4-1/2-13.5 LTC Casing	8302.05	86.95	5.000	3.920				
			2.938 EX-C Frac Sleeve	8389.00	3.55	5.750		2.885	2375	212	260
			1 Joints of 4-1/2-13.5 LTC Casing	8392.55	43.50	5.000	3.920				
			Baker Open Hole Packer	8436.05	3.89	5.820	3.875		2154		
19			2 Joint of 4-1/2-13.5 LTC Casing	8439.94	86.93	5.000	3.920				
			2.875 EX-C Frac Sleeve	8526.87	3.55	5.750		2.823	2375	203	260

Operating Company Mewbourne
 Well Name & Number Layla 35 2H
 Sales Ticket Number 4743795
 Date 6/24/2012

Company Rep Larry Johnson
 Field Loving
 BOT Service Rep Armando Gonzalez
 District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	P-110	6.276	6.151		0.03826	7,043.00	9,960	6,230	
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,301.74	12,410	10,680	
Bott Liner											
TVD		6,708.00		KOP		6,115.00	Open Hole		6.125	Casing Vol. (bbl)	260.1
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)
137.9		1 Joints of 4-1/2-13.5 LTC Casing	8530.42	43.48	5.000	3.920				
		Baker Open Hole Packer	8573.90	3.89	5.820	3.875		2154		
		2 Joint of 4-1/2-13.5 LTC Casing	8577.79	86.99	5.000	3.920				
18		2.813 EX_C Frac Sleeve	8664.78	3.55	5.750		2.760	2375	194	260
137.9		1 Joints of 4-1/2-13.5 LTC Casing	8668.33	43.42	5.000	3.920				
		Baker Open Hole Packer	8711.75	3.89	5.820	3.875		2154		
		1 Joint of 4-1/2-13.5 LTC Casing	8715.64	43.47	5.000	3.920				
17		2.750 EX_C Frac Sleeve	8759.11	3.55	5.750		2.698	2375	185	260
138.2		2 Joints of 4-1/2-13.5 LTC Casing	8762.66	87.26	5.000	3.920				
		Baker Open Hole Packer	8849.92	3.89	5.820	3.875		2154		
		1 Joint of 4-1/2-13.5 LTC Casing	8853.81	43.55	5.000	3.920				
16		2.688 EX_C Frac Sleeve	8897.36	3.55	5.750		2.635	2375	177	260
181.4		3 Joints of 4-1/2-13.5 LTC Casing	8900.91	130.36	5.000	3.920				
		Baker Open Hole Packer	9031.27	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	9035.16	129.42	5.000	3.920				
15		2.625 EX_C Frac Sleeve	9164.58	3.55	5.750		2.573	2375	168	260
223.9		2 Joint of 4-1/2-13.5 LTC Casing	9168.13	87.03	5.000	3.920				
		Baker Open Hole Packer	9255.16	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9259.05	87.08	5.000	3.920				
14		2.563 EX_C Frac Sleeve	9346.13	3.55	5.750		2.510	2375	160	260
181.5		2 Joints of 4-1/2-13.5 LTC Casing	9349.68	86.96	5.000	3.920				
		Baker Open Hole Packer	9436.64	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9440.53	87.06	5.000	3.920				
13		2.500 EX_C Frac Sleeve	9527.59	3.55	5.750		2.448	2375	152	260
181.4		2 Joint of 4-1/2-13.5 LTC Casing	9531.14	86.89	5.000	3.920				
		Baker Open Hole Packer	9618.03	3.89	5.820	3.875		2154		

Operating Company Mewbourne
 Well Name & Number Layla 35 2H
 Sales Ticket Number 4743795
 Date 6/24/2012

Company Rep Larry Johnson
 Field Loving
 BOT Service Rep Armando Gonzalez
 District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	P-110	6.276	6.151		0.03826	7,043.00	9,960	6,230	
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,301.74	12,410	10,680	
Bott Liner											
TVD		6,708.00		KOP		6,115.00		Open Hole	6.125	Casing Vol. (bbl)	260.1
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)
12	138.3		1 Joints of 4-1/2-13.5 LTC Casing	9621.92	43.53	5.000	3.920				
			2.438 EX_C Frac Sleeve	9665.45	3.55	5.750		2.386	2375	145	260
11	94.53		2 Joints of 4-1/2-13.5 LTC Casing	9669.00	87.31	5.000	3.920				
			Baker Open Hole Packer	9756.31	3.89	5.820	3.875		2154		
10	137.8		1 Joints of 4-1/2-13.5 LTC Casing	9760.20	43.52	5.000	3.920				
			2.375 EX_C Frac Sleeve	9803.72	3.55	5.750		2.323	2375	137	260
9	138.3		1 Joint of 4-1/2-13.5 LTC Casing	9807.27	43.57	5.000	3.920				
			Baker Open Hole Packer	9850.84	3.89	5.820	3.875		2154		
8	137.9		1 Joints of 4-1/2-13.5 LTC Casing	9854.73	43.36	5.000	3.920				
			2.313 EX_C Frac Sleeve	9898.09	3.55	5.750		2.261	2375	130	260
7	137.3		2 Joints of 4-1/2-13.5 LTC Casing	9901.64	86.95	5.000	3.920				
			Baker Open Hole Packer	9988.59	3.89	5.820	3.875		2154		
6			2 Joints of 4-1/2-13.5 LTC Casing	9992.48	86.98	5.000	3.920				
			2.250 BS Frac Sleeve	10079.46	3.90	5.750		2.150	2286	115	260
			1 Joint of 4-1/2-13.5 LTC Casing	10083.36	43.52	5.000	3.920				
			Baker Open Hole Packer	10126.88	3.89	5.820	3.875		2154		
			1 Joints of 4-1/2-13.5 LTC Casing	10130.77	43.50	5.000	3.920				
			2.125 BS Frac Sleeve	10174.27	3.90	5.750		2.025	2286	102	260
			2 Joint of 4-1/2-13.5 LTC Casing	10178.17	86.63	5.000	3.920				
			Baker Open Hole Packer	10264.80	3.89	5.820	3.875		2154		
			1 Joints of 4-1/2-13.5 LTC Casing	10268.69	43.50	5.000	3.920				
			2.000 BS Frac Sleeve	10312.19	3.90	5.750		1.900	2286	90	260
			2 Joints of 4-1/2-13.5 LTC Casing	10316.09	85.98	5.000	3.920				
			Baker Open Hole Packer	10402.07	3.89	5.820	3.875		2154		
			1 Joints of 4-1/2-13.5 LTC Casing	10405.96	43.53	5.000	3.920				
			1.875 BS Frac Sleeve	10449.49	3.90	5.750		1.775	2286	79	260

Company Rep	Larry Johnson
Field	Loving
BOT Service Rep	Armando Gonzalez
District Location	Odessa, Texas, USA

[illegible]