

15-41730

Mewbourne Oil Co

Eddy County, New Mexico

Sec 35, T23S, R28E

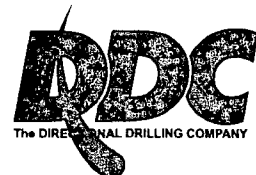
Layla 35 MD Fee #2H

Wellbore #1

Design: Wellbore #1

DDC Survey Report

03 March, 2014



DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Layla 35 MD Fee #2H
Project:	Eddy County New Mexico	TVD Reference:	WELL @ 3038.0usft (Patterson #75)
Site:	Sec 35, T23S, R28E	MD Reference:	WELL @ 3038.0usft (Patterson #75)
Well:	Layla 35 MD Fee #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, T23S, R28E		
Site Position:		Northing:	456,438.18 usft
From:	Map	Easting:	585,924.08 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 15' 16.415 N
		Longitude:	104° 3' 19.382 W
		Grid Convergence:	0.15 °

Well	Layla 35 MD Fee #2H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 15' 16.361 N
		Longitude:	104° 3' 50.352 W
		Ground Level:	3,018.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	1/20/2014	7.50
			Dip Angle
			(°)
			Field Strength
			(nT)
			48,324

Design	Wellbore #1		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			0.12

Survey Program	Date: 3/3/2014		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
100.0	9,800.0	GYRO (Wellbore #1)	Good_gyro
9,869.0	15,225.0	MWD (Wellbore #1)	MWD default
			Description
			Good Gyro
			MWD - Standard

Survey										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Builde	Turn	
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate	
(usft)			(usft)			(usft)	(°/100usft)	(°/100usft)	(°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.26	237.84	100.0	-0.1	-0.2	-0.1	0.26	0.26	0.00	
200.0	0.82	222.03	200.0	-0.8	-0.9	-0.8	0.57	0.56	-15.81	
300.0	0.87	226.80	300.0	-1.8	-1.9	-1.8	0.09	0.05	4.77	
400.0	0.54	267.27	400.0	-2.4	-2.9	-2.4	0.58	-0.33	40.47	
500.0	0.64	289.48	500.0	-2.2	-3.9	-2.2	0.25	0.10	22.21	
600.0	0.89	287.53	600.0	-1.8	-5.2	-1.8	0.25	0.25	-1.95	
700.0	1.13	268.32	699.9	-1.6	-6.9	-1.6	0.41	0.24	-19.21	
800.0	1.15	256.66	799.9	-1.8	-8.9	-1.9	0.23	0.02	-11.66	
900.0	1.25	256.34	899.9	-2.3	-10.9	-2.3	0.10	0.10	-0.32	

DDC
Survey Report



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Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3038.0usft (Patterson) #75)
Site:	Sec 35, T23S, R28E	MD Reference:	WELL @ 3038.0usft (Patterson) #75)
Well:	Layla 35 MD Fee #2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM5000.1, Single User.Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,000.0	1.62	262.74	999.9	-2.8	-13.4	-2.8	0.40	0.37	6.40
1,100.0	1.82	255.16	1,099.8	-3.3	-16.3	-3.4	0.30	0.20	-7.58
1,200.0	1.97	242.67	1,199.8	-4.5	-19.4	-4.6	0.44	0.15	-12.49
1,300.0	2.50	241.38	1,299.7	-6.4	-22.8	-6.4	0.53	0.53	-1.29
1,400.0	2.61	238.17	1,399.6	-8.6	-26.7	-8.7	0.18	0.11	-3.21
1,500.0	2.29	231.43	1,499.5	-11.1	-30.2	-11.1	0.43	-0.32	-6.74
1,600.0	1.97	233.96	1,599.4	-13.3	-33.1	-13.4	0.33	-0.32	2.53
1,700.0	2.08	236.35	1,699.4	-15.3	-36.0	-15.4	0.14	0.11	2.39
1,800.0	1.45	201.96	1,799.3	-17.5	-38.0	-17.6	1.20	-0.63	-34.39
1,900.0	2.27	139.43	1,899.3	-20.2	-37.2	-20.3	2.05	0.82	-62.53
2,000.0	2.86	124.12	1,999.2	-23.1	-33.8	-23.2	0.90	0.59	-15.31
2,100.0	3.50	123.59	2,099.0	-26.2	-29.2	-26.3	0.64	0.64	-0.53
2,200.0	4.82	119.34	2,198.8	-29.9	-23.0	-30.0	1.35	1.32	-4.25
2,300.0	6.02	118.06	2,298.3	-34.5	-14.7	-34.5	1.21	1.20	-1.28
2,400.0	6.87	112.45	2,397.7	-39.2	-4.6	-39.2	1.06	0.85	-5.61
2,500.0	5.96	109.61	2,497.1	-43.2	5.9	-43.2	0.96	-0.91	-2.84
2,600.0	4.19	109.17	2,596.7	-46.2	14.2	-46.2	1.77	-1.77	-0.44
2,700.0	3.28	107.16	2,696.4	-48.2	20.4	-48.2	0.92	-0.91	-2.01
2,800.0	2.75	103.22	2,796.3	-49.6	25.4	-49.6	0.57	-0.53	-3.94
2,900.0	2.27	102.47	2,896.2	-50.6	29.7	-50.5	0.48	-0.48	-0.75
3,000.0	1.75	108.10	2,996.1	-51.5	33.1	-51.4	0.56	-0.52	5.63
3,100.0	1.50	105.59	3,096.1	-52.3	35.8	-52.3	0.26	-0.25	-2.51
3,200.0	1.26	111.11	3,196.1	-53.1	38.1	-53.0	0.27	-0.24	5.52
3,300.0	1.02	122.39	3,296.1	-53.9	39.9	-53.9	0.33	-0.24	11.28
3,400.0	0.92	142.72	3,396.0	-55.1	41.1	-55.0	0.36	-0.10	20.33
3,500.0	0.85	154.61	3,496.0	-56.4	41.9	-56.3	0.20	-0.07	11.89
3,600.0	0.78	147.69	3,596.0	-57.6	42.6	-57.5	0.12	-0.07	-6.92
3,700.0	0.38	147.71	3,696.0	-58.5	43.1	-58.4	0.40	-0.40	0.02
3,800.0	0.19	155.85	3,796.0	-58.9	43.4	-58.8	0.19	-0.19	8.14
3,900.0	0.47	161.06	3,896.0	-59.4	43.6	-59.4	0.28	0.28	5.21
4,000.0	0.13	89.99	3,996.0	-59.8	43.8	-59.7	0.45	-0.34	-71.07
4,100.0	0.22	178.62	4,096.0	-60.0	44.0	-59.9	0.25	0.09	88.63
4,200.0	0.19	92.41	4,196.0	-60.2	44.1	-60.1	0.28	-0.03	-86.21
4,300.0	0.22	91.55	4,296.0	-60.2	44.5	-60.1	0.03	0.03	-0.86
4,400.0	0.36	184.45	4,396.0	-60.6	44.6	-60.5	0.43	0.14	92.90
4,500.0	0.45	163.01	4,496.0	-61.2	44.7	-61.1	0.17	0.09	-21.44
4,600.0	0.45	158.61	4,596.0	-62.0	45.0	-61.9	0.03	0.00	-4.40
4,700.0	0.60	195.41	4,696.0	-62.9	45.0	-62.8	0.36	0.15	36.80
4,800.0	1.44	203.13	4,796.0	-64.5	44.4	-64.4	0.85	0.84	7.72
4,900.0	1.15	199.22	4,896.0	-66.6	43.5	-66.5	0.30	-0.29	-3.91
5,000.0	1.11	221.31	4,995.9	-68.3	42.6	-68.2	0.43	-0.04	22.09
5,100.0	0.96	212.40	5,095.9	-69.7	41.5	-69.6	0.22	-0.15	-8.91
5,200.0	0.79	229.84	5,195.9	-70.9	40.5	-70.8	0.31	-0.17	17.44

DDC
Survey Report



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Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3038.0usft (Patterson #75)
Site:	Sec 35 T23S1R28E	MD Reference:	WELL @ 3038.0usft (Patterson #75)
Well:	Layla 35 MD Fee #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)
5,300.0	0.91	214.85	5,295.9	-72.0	39.5	-71.9	0.25	0.12	-14.99
5,400.0	1.32	231.74	5,395.9	-73.3	38.2	-73.3	0.52	0.41	16.89
5,500.0	1.40	246.26	5,495.8	-74.5	36.1	-74.5	0.35	0.08	14.52
5,600.0	1.41	228.97	5,595.8	-75.8	34.1	-75.8	0.42	0.01	-17.29
5,700.0	1.42	235.67	5,695.8	-77.4	32.2	-77.3	0.17	0.01	6.70
5,800.0	1.37	209.25	5,795.8	-79.1	30.5	-79.0	0.64	-0.05	-26.42
5,900.0	1.14	197.39	5,895.7	-81.1	29.7	-81.0	0.35	-0.23	-11.86
6,000.0	1.55	196.31	5,995.7	-83.3	29.0	-83.3	0.41	0.41	-1.08
6,100.0	1.48	187.36	6,095.7	-85.9	28.4	-85.9	0.25	-0.07	-8.95
6,200.0	1.75	196.99	6,195.6	-88.7	27.8	-88.6	0.38	0.27	9.63
6,300.0	2.80	203.53	6,295.6	-92.4	26.4	-92.3	1.08	1.05	6.54
6,400.0	3.08	197.88	6,395.4	-97.1	24.6	-97.1	0.40	0.28	-5.65
6,500.0	2.58	176.83	6,495.3	-102.0	23.9	-101.9	1.14	-0.50	-21.05
6,600.0	2.28	178.70	6,595.2	-106.2	24.1	-106.1	0.31	-0.30	1.87
6,700.0	2.49	163.23	6,695.1	-110.3	24.7	-110.2	0.67	0.21	-15.47
6,800.0	2.91	124.47	6,795.0	-113.8	27.5	-113.7	1.83	0.42	-38.76
6,900.0	1.72	84.97	6,894.9	-115.1	31.1	-115.0	1.92	-1.19	-39.50
7,000.0	1.02	348.76	6,994.9	-114.1	32.4	-114.0	2.09	-0.70	-96.21
7,100.0	0.76	325.26	7,094.9	-112.7	31.8	-112.6	0.44	-0.26	-23.50
7,200.0	1.08	297.80	7,194.9	-111.7	30.6	-111.6	0.54	0.32	-27.46
7,300.0	0.51	319.12	7,294.9	-110.9	29.5	-110.8	0.63	-0.57	21.32
7,400.0	0.24	288.75	7,394.9	-110.5	29.0	-110.4	0.33	-0.27	-30.37
7,500.0	0.64	145.40	7,494.9	-110.9	29.1	-110.8	0.84	0.40	-143.35
7,600.0	0.87	184.41	7,594.9	-112.1	29.4	-112.0	0.55	0.23	39.01
7,700.0	1.82	174.79	7,694.8	-114.4	29.5	-114.4	0.97	0.95	-9.62
7,800.0	2.06	178.33	7,794.8	-117.8	29.7	-117.8	0.27	0.24	3.54
7,900.0	1.42	175.32	7,894.7	-120.8	29.8	-120.8	0.65	-0.64	-3.01
8,000.0	1.33	134.05	7,994.7	-122.9	30.7	-122.8	0.97	-0.09	-41.27
8,100.0	1.76	138.48	8,094.7	-124.8	32.6	-124.8	0.45	0.43	4.43
8,200.0	1.54	159.10	8,194.6	-127.3	34.1	-127.2	0.63	-0.22	20.62
8,300.0	1.70	149.34	8,294.6	-129.8	35.3	-129.7	0.32	0.16	-9.76
8,400.0	0.39	183.55	8,394.6	-131.4	36.1	-131.3	1.39	-1.31	34.21
8,500.0	0.68	236.34	8,494.6	-132.1	35.6	-132.0	0.54	0.29	52.79
8,600.0	1.29	247.09	8,594.6	-132.8	34.0	-132.8	0.63	0.61	10.75
8,700.0	1.48	208.11	8,694.5	-134.4	32.4	-134.3	0.94	0.19	-38.98
8,800.0	1.79	209.62	8,794.5	-136.9	31.0	-136.8	0.31	0.31	1.51
8,900.0	1.12	193.12	8,894.5	-139.2	30.0	-139.2	0.78	-0.67	-16.50
9,000.0	1.36	226.88	8,994.4	-141.0	28.9	-140.9	0.76	0.24	33.76
9,100.0	1.01	174.43	9,094.4	-142.7	28.1	-142.6	1.09	-0.35	-52.45
9,200.0	1.27	172.34	9,194.4	-144.6	28.4	-144.6	0.26	0.26	-2.09
9,300.0	1.24	182.65	9,294.4	-146.8	28.5	-146.8	0.23	-0.03	10.31
9,400.0	1.04	188.38	9,394.4	-148.8	28.3	-148.7	0.23	-0.20	5.73
9,500.0	1.13	200.52	9,494.3	-150.6	27.8	-150.6	0.25	0.09	12.14

DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Layla 35 MD Fee #2H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3038.0usft (Patterson #75)
Site:	Sec 35, T23S, R28E	MD Reference:	WELL @ 3038.0usft (Patterson #75)
Well:	Layla 35 MD Fee #2H	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)
9,600.0	1.16	201.68	9,594.3	-152.5	27.1	-152.4	0.04	0.03	1.16
9,700.0	1.23	224.26	9,694.3	-154.2	26.0	-154.1	0.47	0.07	22.58
TIE IN @ 9800' MD / 9794' TVD									
9,800.0	0.96	247.10	9,794.3	-155.3	24.4	-155.2	0.51	-0.27	22.84
9,869.0	2.70	327.00	9,863.3	-154.2	23.0	-154.1	3.92	2.52	115.80
9,901.0	6.90	343.70	9,895.1	-151.7	22.1	-151.6	13.70	13.13	52.19
CROSSED LEASE LINE @ 9915' / 9909' TVD									
9,915.3	8.74	345.59	9,909.3	-149.8	21.6	-149.8	13.00	12.88	13.25
9,932.0	10.90	347.00	9,925.8	-147.0	20.9	-147.0	13.00	12.92	8.42
9,964.0	14.40	345.40	9,957.0	-140.2	19.2	-140.2	10.99	10.94	-5.00
9,996.0	16.50	346.70	9,987.8	-132.0	17.2	-131.9	6.65	6.56	4.06
10,027.0	19.10	345.00	10,017.3	-122.8	14.8	-122.7	8.55	8.39	-5.48
10,059.0	21.30	345.00	10,047.4	-112.1	12.0	-112.1	6.88	6.88	0.00
10,091.0	22.70	345.30	10,077.0	-100.5	8.9	-100.5	4.39	4.38	0.94
10,122.0	24.70	345.20	10,105.4	-88.5	5.7	-88.5	6.45	6.45	-0.32
10,154.0	27.70	348.60	10,134.1	-74.7	2.6	-74.7	10.48	9.38	10.63
10,186.0	30.50	352.90	10,162.1	-59.3	0.1	-59.3	10.92	8.75	13.44
10,218.0	33.10	354.80	10,189.3	-42.6	-1.7	-42.6	8.71	8.13	5.94
10,250.0	35.70	358.30	10,215.7	-24.5	-2.8	-24.6	10.21	8.13	10.94
10,281.0	38.40	0.90	10,240.4	-5.9	-2.9	-5.9	10.07	8.71	8.39
10,313.0	41.10	4.00	10,265.0	14.6	-2.0	14.6	10.47	8.44	9.69
10,345.0	43.00	5.30	10,288.8	35.9	-0.3	35.9	6.53	5.94	4.06
10,376.0	45.50	6.00	10,311.0	57.4	1.9	57.4	8.22	8.06	2.26
10,408.0	47.90	6.40	10,333.0	80.6	4.4	80.6	7.55	7.50	1.25
10,439.0	50.20	6.70	10,353.3	103.9	7.0	103.9	7.46	7.42	0.97
10,471.0	53.30	6.90	10,373.1	128.8	10.0	128.8	9.70	9.69	0.63
10,503.0	55.30	6.30	10,391.7	154.6	13.0	154.6	6.43	6.25	-1.88
CROSSED HARD LINE @ 10534' MD / 10409' TVD									
10,533.9	56.75	5.14	10,409.0	180.1	15.6	180.1	5.63	4.69	-3.75
10,535.0	56.80	5.10	10,409.6	181.0	15.6	181.1	5.63	4.70	-3.69
10,610.0	62.90	2.50	10,447.3	245.7	19.9	245.7	8.67	8.13	-3.47
10,642.0	65.00	0.90	10,461.3	274.4	20.7	274.5	7.95	6.56	-5.00
10,674.0	67.70	359.30	10,474.2	303.7	20.8	303.8	9.60	8.44	-5.00
10,705.0	68.90	359.60	10,485.6	332.5	20.5	332.6	3.97	3.87	0.97
10,737.0	69.50	359.80	10,497.0	362.5	20.4	362.5	1.96	1.88	0.63
10,767.0	70.10	359.70	10,507.3	390.6	20.2	390.7	2.02	2.00	-0.33
10,799.0	71.20	0.50	10,518.0	420.8	20.3	420.8	4.17	3.44	2.50
10,830.0	73.40	359.90	10,527.4	450.3	20.4	450.4	7.33	7.10	-1.94
10,862.0	74.30	358.60	10,536.3	481.1	20.0	481.1	4.81	2.81	-4.06
10,894.0	75.10	358.90	10,544.7	511.9	19.3	512.0	2.66	2.50	0.94
10,925.0	77.50	358.20	10,552.1	542.0	18.5	542.1	8.05	7.74	-2.26
10,956.0	79.40	358.00	10,558.3	572.4	17.5	572.4	6.16	6.13	-0.65
10,987.0	87.60	358.60	10,561.8	603.2	16.6	603.2	26.52	26.45	1.94
11,019.0	91.40	359.30	10,562.1	635.1	16.0	635.2	12.07	11.88	2.19

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Layla 35 MD Fee #2H
Project:	Eddy County New Mexico	TVD Reference:	WELL @ 3038.0usft (Patterson #75)
Site:	Sec 35, T23S, R28E	MD Reference:	WELL @ 3038.0usft (Patterson #75)
Well:	Layla 35 MD Fee #2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM5000.1 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)
11,051.0	91.70	0.20	10,561.2	667.1	15.9	667.2	2.96	0.94	2.81
11,082.0	92.00	0.00	10,560.2	698.1	16.0	698.1	1.16	0.97	-0.65
11,114.0	92.00	0.40	10,559.1	730.1	16.1	730.1	1.25	0.00	1.25
11,146.0	92.20	1.00	10,557.9	762.1	16.5	762.1	1.98	0.63	1.88
11,209.0	91.10	0.50	10,556.1	825.0	17.3	825.1	1.92	-1.75	-0.79
11,272.0	91.30	0.40	10,554.8	888.0	17.8	888.1	0.35	0.32	-0.16
11,336.0	89.60	357.80	10,554.3	952.0	16.8	952.0	4.85	-2.66	-4.06
11,399.0	90.70	356.60	10,554.1	1,014.9	13.7	1,014.9	2.58	1.75	-1.90
11,462.0	90.70	355.90	10,553.3	1,077.8	9.6	1,077.8	1.11	0.00	-1.11
11,526.0	90.90	355.40	10,552.4	1,141.6	4.7	1,141.6	0.84	0.31	-0.78
11,589.0	90.00	353.60	10,551.9	1,204.3	-1.3	1,204.3	3.19	-1.43	-2.86
11,653.0	89.90	351.60	10,552.0	1,267.8	-9.6	1,267.7	3.13	-0.16	-3.13
11,716.0	91.40	351.90	10,551.3	1,330.1	-18.6	1,330.1	2.43	2.38	0.48
11,779.0	92.30	352.50	10,549.2	1,392.5	-27.1	1,392.4	1.72	1.43	0.95
11,842.0	92.50	355.30	10,546.6	1,455.1	-33.8	1,455.0	4.45	0.32	4.44
11,906.0	92.30	355.00	10,543.9	1,518.8	-39.2	1,518.7	0.56	-0.31	-0.47
11,969.0	91.70	355.70	10,541.7	1,581.5	-44.3	1,581.4	1.46	-0.95	1.11
12,033.0	92.80	358.00	10,539.2	1,645.4	-47.9	1,645.3	3.98	1.72	3.59
12,096.0	91.40	359.20	10,536.9	1,708.3	-49.4	1,708.2	2.93	-2.22	1.90
12,159.0	89.90	358.90	10,536.2	1,771.3	-50.4	1,771.2	2.43	-2.38	-0.48
12,223.0	90.20	359.90	10,536.1	1,835.3	-51.1	1,835.2	1.63	0.47	1.56
12,286.0	90.30	1.20	10,535.9	1,898.3	-50.5	1,898.2	2.07	0.16	2.06
12,349.0	90.20	2.00	10,535.6	1,961.3	-48.7	1,961.2	1.28	-0.16	1.27
12,413.0	89.10	3.00	10,536.0	2,025.2	-46.0	2,025.1	2.32	-1.72	1.56
12,476.0	89.00	4.30	10,537.0	2,088.1	-41.9	2,088.0	2.07	-0.16	2.06
12,539.0	88.70	4.30	10,538.3	2,150.9	-37.2	2,150.8	0.48	-0.48	0.00
12,603.0	87.50	4.30	10,540.4	2,214.7	-32.4	2,214.6	1.88	-1.88	0.00
12,666.0	88.60	4.00	10,542.6	2,277.5	-27.9	2,277.4	1.81	1.75	-0.48
12,729.0	90.60	4.70	10,543.0	2,340.3	-23.1	2,340.2	3.36	3.17	1.11
12,792.0	89.50	5.30	10,542.9	2,403.0	-17.6	2,403.0	1.99	-1.75	0.95
12,856.0	90.90	6.40	10,542.7	2,466.7	-11.1	2,466.7	2.78	2.19	1.72
12,919.0	89.50	4.70	10,542.5	2,529.4	-5.0	2,529.4	3.50	-2.22	-2.70
12,983.0	90.10	4.00	10,542.7	2,593.2	-0.1	2,593.2	1.44	0.94	-1.09
13,046.0	90.40	4.30	10,542.4	2,656.0	4.4	2,656.0	0.67	0.48	0.48
13,109.0	91.40	2.30	10,541.5	2,718.9	8.1	2,718.9	3.55	1.59	-3.17
13,173.0	89.80	1.00	10,540.8	2,782.9	9.9	2,782.9	3.22	-2.50	-2.03
13,236.0	88.50	0.90	10,541.7	2,845.9	10.9	2,845.9	2.07	-2.06	-0.16
13,299.0	89.80	1.00	10,542.7	2,908.9	12.0	2,908.9	2.07	2.06	0.16
13,363.0	91.80	1.00	10,541.8	2,972.8	13.1	2,972.9	3.13	3.13	0.00
13,426.0	89.80	1.10	10,540.9	3,035.8	14.3	3,035.8	3.18	-3.17	0.16
13,490.0	90.80	1.60	10,540.5	3,099.8	15.8	3,099.8	1.75	1.56	0.78
13,553.0	89.60	2.70	10,540.3	3,162.8	18.1	3,162.8	2.58	-1.90	1.75
13,616.0	90.90	2.90	10,540.1	3,225.7	21.2	3,225.7	2.09	2.06	0.32

DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Layla 35 MD Fee #2H
Project:	Eddy County New Mexico	TVD Reference:	WELL @ 3038.0usft (Patterson #75)
Site:	Sec 35, T23S, R28E	MD Reference:	WELL @ 3038.0usft (Patterson #75)
Well:	Layla 35 MD Fee #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)
13,680.0	90.90	3.50	10,539.0	3,289.6	24.8	3,289.6	0.94	0.00	0.94
13,743.0	90.40	3.30	10,538.3	3,352.5	28.5	3,352.5	0.85	-0.79	-0.32
13,806.0	91.30	3.30	10,537.4	3,415.3	32.1	3,415.4	1.43	1.43	0.00
13,870.0	90.90	4.50	10,536.2	3,479.2	36.5	3,479.3	1.98	-0.63	1.88
13,933.0	92.40	5.20	10,534.4	3,541.9	41.8	3,542.0	2.63	2.38	1.11
13,996.0	91.80	4.90	10,532.0	3,604.6	47.4	3,604.7	1.06	-0.95	-0.48
14,060.0	89.80	6.30	10,531.2	3,668.3	53.6	3,668.4	3.81	-3.13	2.19
14,127.0	86.60	3.90	10,533.3	3,735.0	59.6	3,735.1	5.97	-4.78	-3.58
14,190.0	86.60	5.40	10,537.0	3,797.7	64.7	3,797.8	2.38	0.00	2.38
14,254.0	86.30	5.60	10,541.0	3,861.3	70.8	3,861.4	0.56	-0.47	0.31
14,317.0	86.30	5.30	10,545.0	3,923.9	76.7	3,924.0	0.48	0.00	-0.48
14,380.0	87.70	3.70	10,548.3	3,986.6	81.7	3,986.7	3.37	2.22	-2.54
14,443.0	89.70	4.50	10,549.7	4,049.4	86.2	4,049.6	3.42	3.17	1.27
14,507.0	90.00	6.80	10,549.9	4,113.1	92.5	4,113.3	3.62	0.47	3.59
14,570.0	92.80	9.50	10,548.4	4,175.4	101.4	4,175.6	6.17	4.44	4.29
14,634.0	88.90	6.50	10,547.4	4,238.8	110.3	4,239.0	7.69	-6.09	-4.69
14,697.0	88.90	4.10	10,548.6	4,301.5	116.1	4,301.7	3.81	0.00	-3.81
14,760.0	90.70	7.20	10,548.9	4,364.2	122.3	4,364.4	5.69	2.86	4.92
14,824.0	90.40	7.20	10,548.2	4,427.7	130.4	4,427.9	0.47	-0.47	0.00
14,887.0	88.80	6.20	10,548.7	4,490.2	137.7	4,490.5	2.99	-2.54	-1.59
14,951.0	88.60	4.50	10,550.1	4,553.9	143.7	4,554.2	2.67	-0.31	-2.66
15,014.0	91.70	9.80	10,550.0	4,616.4	151.5	4,616.7	9.75	4.92	8.41
15,078.0	89.90	8.60	10,549.1	4,679.6	161.7	4,679.9	3.38	-2.81	-1.88
15,141.0	89.90	7.70	10,549.2	4,741.9	170.7	4,742.3	1.43	0.00	-1.43
15,175.0	89.60	5.70	10,549.3	4,775.7	174.6	4,776.1	5.95	-0.88	-5.88
TD @ 15225' MD / 10550' TVD									
15,225.0	89.60	5.70	10,549.7	4,825.5	179.6	4,825.8	0.00	0.00	0.00

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,800.0	9,794.3	-155.3	24.4	TIE IN @ 9800' MD / 9794' TVD
9,915.3	9,909.3	-149.8	21.6	CROSSED LEASE LINE @ 9915' / 9909' TVD
10,533.9	10,409.0	180.1	15.6	CROSSED HARD LINE @ 10534' MD / 10409' TVD
15,225.0	10,549.7	4,825.5	179.6	TD @ 15225' MD / 10550' TVD

Checked By: _____ Approved By: _____ Date: _____

RECEIVED
 APR 03 2014
 NMOCD ARTESIA

Company Name: Mewbourne Oil Co
 Layla 35 MD Fee #2H
 Eddy County, New Mexico
 Rig: Patterson #75
 Created By: James Dawson
 Date: 3/3/2014

Layla 35 MD Fee #2H
 Eddy County, New Mexico
 Q130935 & WT-140067
 Design #3

Mewbourne Oil Company

T G M Azimuths to Grid North
 Magnetic North: 7°35'
 Magnetic Field
 Strength: 48323.9snT
 Dip Angle: 60.07°
 Date: 1/20/2014
 Model: IGRF2010

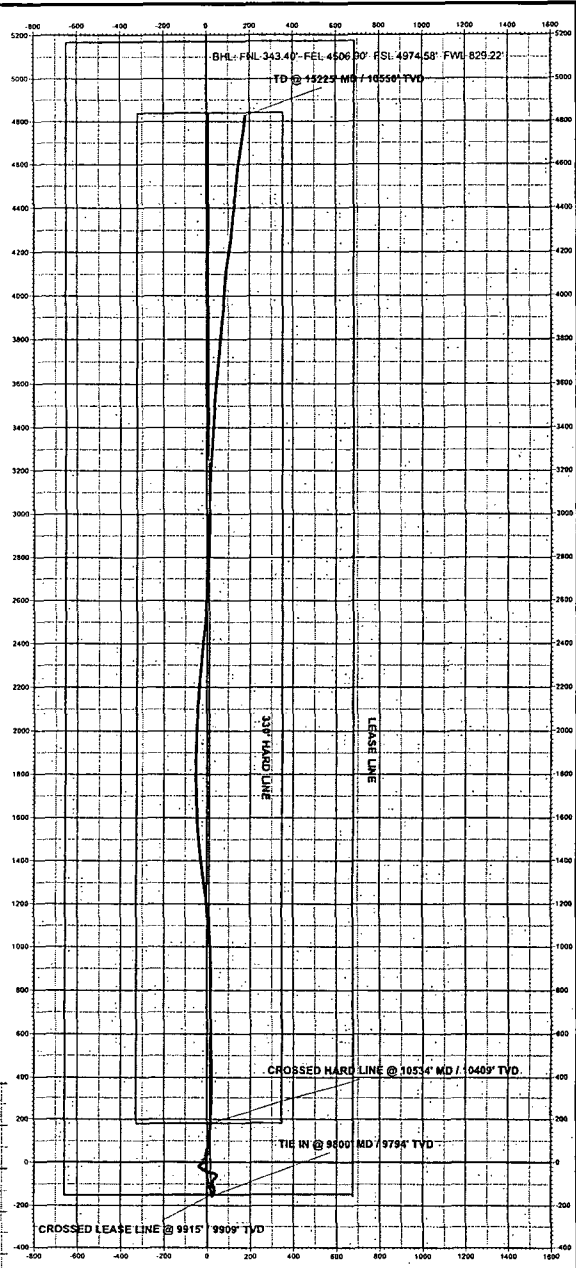
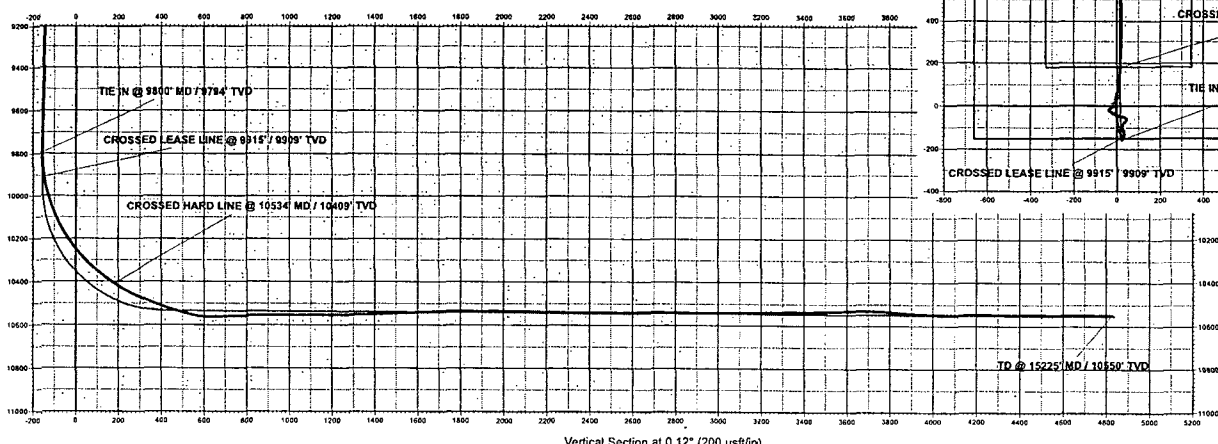


PROJECT DETAILS: Eddy County, New Mexico	
Geodetic System:	US State Plane 1927 (Exact solution)
Datum:	NAD 1927 (NADCON CONUS)
Ellipsoid:	Clarke 1866
Zone:	New Mexico East 3001
System Datum:	Mean Sea Level

WELL DETAILS:		Layla 35 MD Fee #2H		
		Ground Level:	3018.0	
+N/-S	+E/-W	Northing	Easting	Latitude
0.0	0.0	456425.90	593264.70	32° 15' 16.361 N
				Longitude
				104° 3' 50.352 W

DESIGN TARGET DETAILS						
Name	TYD	+N/-S	+E/-W	Northing	Easting	Latitude
PEHL Layla 35 MD Fee #2H DM2	10553.0	4838.3	10.4	461264.17	593275.11	32° 16' 4.341 N
- plan hita target center						104° 3' 50.089 W

ANNOTATIONS									
MD	Inc	Ad	TYD	+N/-S	+E/-W	Vsct	Departure	Annotation	
9800.0	0.36	247.10	9784.3	-155.3	24.4	-155.2	266.7	TIE IN @ 9800' MD / 9784' TYD	
9915.3	8.74	345.59	9909.3	-149.8	21.6	-149.9	273.8	CROSSED LEASE LINE @ 9915' / 9909' TYD	
10533.9	58.75	5.14	10409.0	180.1	15.6	180.1	607.1	CROSSED HARD LINE @ 10534' MD / 10409' TYD	
15225.0	89.60	5.70	10549.7	4825.5	178.8	4825.8	5267.1	TD @ 15225' MD / 10550' TYD	



Vertical Section at 0.12" (200 ual/in)