

30-015-41776

Mewbourne Oil Co

Eddy County, New Mexico

Sec 7, T25S, R28E

Black Lake 7 MD State Com #1H

Wellbore #1

Design: Wellbore #1

DDC Survey Report

24 March, 2014



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Black Lake 7 MD State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	Well @ 6081.0usft (Patterson #444)
Site:	Sec 7, T25S, R28E	MD Reference:	Well @ 6081.0usft (Patterson #444)
Well:	Black Lake 7 MD State 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		
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 7, T25S, R28E			
Site Position:		Northing:	413,856.40 usft	Latitude: 32° 8' 15.509 N
From:	Map	Easting:	563,555.00 usft	Longitude: 104° 7' 40.824 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.11 °

Well	Black Lake 7 MD State Com #1H			
Well Position	+N/-S	0.0 usft	Northing:	413,851.20 usft
	+E/-W	0.0 usft	Easting:	561,805.50 usft
Position Uncertainty	0.0 usft		Wellhead Elevation:	0.0 usft
			Ground Level:	6,061.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	2/21/2014	7.51	59.94	48,215

Design	Wellbore #1				
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	359.67	

Survey Program	Date	3/24/2014			
From	To	Survey (Wellbore)	Tool Name	Description	
(usft)	(usft)				
100.0	7,275.0	MS Gyro Survey (Wellbore #1)	Good_gyro	Good Gyro	
7,305.0	12,650.0	MWD (Wellbore #1)	MWD default	MWD - Standard	

Survey										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	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	0.54	300.64	100.0	0.2	-0.4	0.2	0.54	0.54	0.00	
200.0	0.53	303.58	200.0	0.7	-1.2	0.7	0.03	-0.01	2.94	
300.0	0.42	276.20	300.0	1.0	-1.9	1.0	0.25	-0.11	-27.38	
400.0	0.47	259.14	400.0	1.0	-2.7	1.0	0.14	0.05	-17.06	
500.0	0.64	264.27	500.0	0.9	-3.7	0.9	0.18	0.17	5.13	
600.0	1.04	271.93	600.0	0.8	-5.1	0.9	0.41	0.40	7.66	
700.0	0.89	267.95	700.0	0.8	-6.8	0.9	0.16	-0.15	-3.98	
800.0	0.90	284.65	799.9	1.0	-8.4	1.1	0.26	0.01	16.70	
900.0	0.93	271.21	899.9	1.2	-9.9	1.3	0.22	0.03	-13.44	

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Black Lake 7 MD State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	Well @ 6081.0usft (Patterson #444)
Site:	Sec 7, T25S, R28E	MD Reference:	Well @ 6081.0usft (Patterson #444)
Well:	Black Lake 7 MD State 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	1.00	250.10	999.9	0.9	-11.6	1.0	0.36	0.07	-21.11
1,100.0	0.88	259.43	1,099.9	0.5	-13.1	0.6	0.19	-0.12	9.33
1,200.0	0.97	261.89	1,199.9	0.2	-14.7	0.3	0.10	0.09	2.46
1,300.0	1.01	253.66	1,299.9	-0.1	-16.4	0.0	0.15	0.04	-8.23
1,400.0	0.87	257.28	1,399.9	-0.5	-18.0	-0.4	0.15	-0.14	3.62
1,500.0	1.04	269.52	1,499.9	-0.7	-19.6	-0.6	0.26	0.17	12.24
1,600.0	1.06	260.94	1,599.8	-0.9	-21.5	-0.7	0.16	0.02	-8.58
1,700.0	1.03	122.77	1,699.8	-1.5	-21.6	-1.4	1.95	-0.03	-138.17
1,800.0	2.01	125.83	1,799.8	-3.0	-19.4	-2.9	0.98	0.98	3.06
1,900.0	3.09	117.19	1,899.7	-5.3	-15.6	-5.2	1.14	1.08	-8.64
2,000.0	5.56	107.55	1,999.4	-8.0	-8.6	-7.9	2.57	2.47	-9.64
2,100.0	7.96	103.63	2,098.7	-11.1	2.7	-11.1	2.44	2.40	-3.92
2,200.0	8.99	103.99	2,197.6	-14.6	17.1	-14.7	1.03	1.03	0.36
2,300.0	6.92	107.77	2,296.6	-18.3	30.4	-18.5	2.13	-2.07	3.78
2,400.0	5.68	111.85	2,396.0	-22.0	40.7	-22.2	1.32	-1.24	4.08
2,500.0	5.14	111.64	2,495.6	-25.5	49.5	-25.8	0.54	-0.54	-0.21
2,600.0	4.34	113.24	2,595.2	-28.6	57.1	-28.9	0.81	-0.80	1.60
2,700.0	3.79	115.91	2,695.0	-31.6	63.6	-31.9	0.58	-0.55	2.67
2,800.0	3.53	115.81	2,794.8	-34.3	69.3	-34.7	0.26	-0.26	-0.10
2,900.0	3.15	116.31	2,894.6	-36.9	74.5	-37.3	0.38	-0.38	0.50
3,000.0	2.66	114.10	2,994.5	-39.1	79.1	-39.5	0.50	-0.49	-2.21
3,100.0	2.14	119.84	3,094.4	-40.9	82.8	-41.4	0.57	-0.52	5.74
3,200.0	1.74	127.88	3,194.3	-42.8	85.7	-43.3	0.48	-0.40	8.04
3,300.0	1.54	121.71	3,294.3	-44.4	88.0	-44.9	0.27	-0.20	-6.17
3,400.0	1.30	125.77	3,394.3	-45.8	90.1	-46.3	0.26	-0.24	4.06
3,500.0	1.21	132.11	3,494.2	-47.2	91.8	-47.7	0.17	-0.09	6.34
3,600.0	1.11	121.51	3,594.2	-48.4	93.4	-48.9	0.24	-0.10	-10.60
3,700.0	0.89	126.79	3,694.2	-49.4	94.8	-49.9	0.24	-0.22	5.28
3,800.0	0.72	134.48	3,794.2	-50.3	95.9	-50.8	0.20	-0.17	7.69
3,900.0	0.93	136.79	3,894.2	-51.3	96.9	-51.9	0.21	0.21	2.31
4,000.0	0.79	130.86	3,994.2	-52.3	98.0	-52.9	0.17	-0.14	-5.93
4,100.0	0.68	153.71	4,094.2	-53.3	98.8	-53.9	0.31	-0.11	22.85
4,200.0	0.74	155.11	4,194.2	-54.4	99.3	-55.0	0.06	0.06	1.40
4,300.0	0.93	147.49	4,294.2	-55.7	100.0	-56.3	0.22	0.19	-7.62
4,400.0	0.88	150.71	4,394.1	-57.1	100.8	-57.7	0.07	-0.05	3.22
4,500.0	0.95	154.78	4,494.1	-58.5	101.6	-59.1	0.10	0.07	4.07
4,600.0	1.18	150.30	4,594.1	-60.1	102.4	-60.7	0.24	0.23	-4.48
4,700.0	1.09	145.19	4,694.1	-61.8	103.5	-62.4	0.14	-0.09	-5.11
4,800.0	0.88	158.12	4,794.1	-63.3	104.3	-63.9	0.30	-0.21	12.93
4,900.0	0.80	155.22	4,894.1	-64.7	104.9	-65.3	0.09	-0.08	-2.90
5,000.0	0.90	137.57	4,994.1	-65.9	105.7	-66.5	0.28	0.10	-17.65
5,100.0	0.83	132.83	5,094.0	-66.9	106.8	-67.6	0.10	-0.07	-4.74
5,200.0	0.93	131.18	5,194.0	-68.0	107.9	-68.6	0.10	0.10	-1.65

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Black Lake 7 MD State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	Well @ 6081.0usft (Patterson #444)
Site:	Sec 7, T25S, R28E	MD Reference:	Well @ 6081.0usft (Patterson #444)
Well:	Black Lake 7 MD State 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	0.91	132.31	5,294.0	-69.0	109.1	-69.7	0.03	-0.02	1.13
5,400.0	0.76	119.98	5,394.0	-69.9	110.3	-70.5	0.23	-0.15	-12.33
5,500.0	0.58	146.99	5,494.0	-70.7	111.1	-71.3	0.36	-0.18	27.01
5,600.0	0.90	156.59	5,594.0	-71.8	111.7	-72.4	0.34	0.32	9.60
5,700.0	0.93	159.89	5,694.0	-73.3	112.3	-73.9	0.06	0.03	3.30
5,800.0	0.84	169.67	5,794.0	-74.8	112.7	-75.4	0.18	-0.09	9.78
5,900.0	0.92	177.57	5,894.0	-76.3	112.9	-76.9	0.15	0.08	7.90
6,000.0	0.87	200.40	5,993.9	-77.8	112.6	-78.5	0.36	-0.05	22.83
6,100.0	0.84	231.04	6,093.9	-79.0	111.8	-79.6	0.45	-0.03	30.64
6,200.0	0.91	221.50	6,193.9	-80.0	110.7	-80.7	0.16	0.07	-9.54
6,300.0	0.83	199.85	6,293.9	-81.3	109.9	-81.9	0.34	-0.08	-21.65
6,400.0	0.78	206.35	6,393.9	-82.6	109.4	-83.2	0.10	-0.05	6.50
6,500.0	0.50	198.80	6,493.9	-83.6	108.9	-84.2	0.29	-0.28	-7.55
6,600.0	1.27	131.44	6,593.9	-84.8	109.6	-85.4	1.17	0.77	-67.36
6,700.0	1.22	127.84	6,693.9	-86.2	111.3	-86.8	0.09	-0.05	-3.60
6,800.0	1.62	118.19	6,793.8	-87.5	113.4	-88.1	0.46	0.40	-9.65
6,900.0	1.74	117.85	6,893.8	-88.9	116.0	-89.5	0.12	0.12	-0.34
7,000.0	1.63	115.13	6,993.7	-90.2	118.6	-90.8	0.14	-0.11	-2.72
7,100.0	1.82	118.46	7,093.7	-91.5	121.3	-92.2	0.21	0.19	3.33
7,200.0	2.25	121.87	7,193.6	-93.3	124.4	-94.0	0.45	0.43	3.41
TIE IN @ 7275' MD / 7269' TVD									
7,275.0	2.66	113.22	7,268.6	-94.8	127.2	-95.5	0.74	0.55	-11.53
7,305.0	3.10	116.70	7,298.5	-95.4	128.6	-96.2	1.58	1.47	11.60
7,337.0	2.20	90.30	7,330.5	-95.8	130.0	-96.6	4.67	-2.81	-82.50
7,368.0	4.50	32.00	7,361.4	-94.8	131.2	-95.5	12.36	7.42	-188.06
7,400.0	5.90	5.10	7,393.3	-92.1	132.0	-92.8	8.67	4.38	-84.06
7,432.0	7.90	350.80	7,425.1	-88.3	131.8	-89.0	8.19	6.25	-44.69
7,463.0	11.80	359.00	7,455.6	-83.0	131.4	-83.8	13.34	12.58	26.45
7,494.0	15.30	4.20	7,485.8	-75.7	131.6	-76.5	11.94	11.29	16.77
7,526.0	17.90	5.00	7,516.4	-66.6	132.4	-67.4	8.16	8.13	2.50
7,557.0	19.00	4.90	7,545.8	-56.9	133.2	-57.6	3.55	3.55	-0.32
7,589.0	20.10	3.90	7,576.0	-46.2	134.1	-47.0	3.59	3.44	-3.13
7,621.0	23.60	5.10	7,605.7	-34.3	135.0	-35.1	11.03	10.94	3.75
7,652.0	23.70	6.20	7,634.1	-21.9	136.2	-22.7	1.46	0.32	3.55
7,662.0	24.50	6.90	7,643.2	-17.9	136.7	-18.7	8.50	8.00	7.00
7,683.0	26.50	7.70	7,662.2	-8.9	137.8	-9.7	9.66	9.52	3.81
7,715.0	29.60	7.40	7,690.4	6.0	139.8	5.2	9.70	9.69	-0.94
7,746.0	31.20	5.00	7,717.1	21.6	141.5	20.8	6.48	5.16	-7.74
7,778.0	32.70	7.10	7,744.3	38.4	143.3	37.6	5.83	4.69	6.56
7,809.0	34.70	4.90	7,770.1	55.5	145.1	54.7	7.56	6.45	-7.10
7,841.0	38.60	5.50	7,795.7	74.5	146.8	73.7	12.24	12.19	1.88
7,872.0	41.80	4.60	7,819.4	94.5	148.6	93.6	10.49	10.32	-2.90
7,905.0	44.90	2.70	7,843.4	117.1	150.0	116.2	10.19	9.39	-5.76

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Black Lake 7 MD State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	Well @ 6081.0usft (Patterson #444)
Site:	Sec 7, T25S, R28E	MD Reference:	Well @ 6081.0usft (Patterson #444)
Well:	Black Lake 7 MD State 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)
7,937.0	49.30	2.60	7,865.2	140.5	151.1	139.6	13.75	13.75	-0.31
7,969.0	54.60	2.60	7,884.9	165.7	152.2	164.8	16.56	16.56	0.00
CROSSED HARD LINE @ 7987' MD / 7895' TVD									
7,986.8	58.10	1.71	7,894.8	180.5	152.8	179.6	20.10	19.67	-4.98
8,000.0	60.70	1.10	7,901.5	191.8	153.1	190.9	20.10	19.69	-4.65
8,032.0	66.10	1.60	7,915.8	220.4	153.7	219.5	16.93	16.88	1.56
8,063.0	71.50	0.00	7,927.0	249.3	154.1	248.4	18.07	17.42	-5.16
8,095.0	77.40	359.00	7,935.6	280.1	153.9	279.2	18.68	18.44	-3.13
8,115.0	81.50	359.10	7,939.3	299.8	153.5	298.9	20.51	20.50	0.50
8,171.0	90.00	358.60	7,943.4	355.6	152.4	354.7	15.20	15.18	-0.89
8,235.0	90.60	358.70	7,943.1	419.5	150.9	418.7	0.95	0.94	0.16
8,330.0	90.90	358.40	7,941.8	514.5	148.5	513.6	0.45	0.32	-0.32
8,425.0	91.30	358.00	7,940.0	609.4	145.5	608.6	0.60	0.42	-0.42
8,520.0	91.30	357.40	7,937.8	704.3	141.7	703.5	0.63	0.00	-0.63
8,615.0	92.30	356.70	7,934.9	799.2	136.8	798.4	1.28	1.05	-0.74
8,710.0	92.40	356.40	7,931.0	893.9	131.1	893.1	0.33	0.11	-0.32
8,804.0	93.00	355.70	7,926.5	987.6	124.6	986.8	0.98	0.64	-0.74
8,899.0	91.40	355.70	7,922.9	1,082.2	117.5	1,081.5	1.68	-1.68	0.00
8,994.0	92.00	354.80	7,920.1	1,176.9	109.7	1,176.2	1.14	0.63	-0.95
9,089.0	92.20	354.40	7,916.6	1,271.4	100.7	1,270.8	0.47	0.21	-0.42
9,184.0	92.10	353.90	7,913.0	1,365.8	91.0	1,365.3	0.54	-0.11	-0.53
9,280.0	90.40	353.60	7,910.9	1,461.2	80.6	1,460.7	1.80	-1.77	-0.31
9,376.0	90.30	352.50	7,910.3	1,556.5	69.0	1,556.1	1.15	-0.10	-1.15
9,472.0	90.60	352.50	7,909.6	1,651.7	56.5	1,651.3	0.31	0.31	0.00
9,568.0	90.90	352.20	7,908.3	1,746.8	43.7	1,746.5	0.44	0.31	-0.31
9,663.0	90.80	351.80	7,906.9	1,840.9	30.5	1,840.7	0.43	-0.11	-0.42
9,759.0	90.70	351.70	7,905.7	1,935.9	16.7	1,935.8	0.15	-0.10	-0.10
9,855.0	90.40	351.00	7,904.8	2,030.8	2.2	2,030.7	0.79	-0.31	-0.73
9,951.0	90.80	351.90	7,903.7	2,125.7	-12.0	2,125.7	1.03	0.42	0.94
10,046.0	90.60	353.50	7,902.6	2,219.9	-24.1	2,220.0	1.70	-0.21	1.68
10,142.0	91.20	353.90	7,901.1	2,315.3	-34.6	2,315.5	0.75	0.63	0.42
10,238.0	89.10	355.00	7,900.8	2,410.9	-43.9	2,411.1	2.47	-2.19	1.15
10,333.0	90.00	356.10	7,901.6	2,505.6	-51.3	2,505.8	1.50	0.95	1.16
10,429.0	89.20	359.20	7,902.2	2,601.5	-55.2	2,601.8	3.33	-0.83	3.23
10,525.0	89.70	359.80	7,903.2	2,697.5	-56.1	2,697.8	0.81	0.52	0.63
10,621.0	90.40	359.80	7,903.1	2,793.5	-56.4	2,793.8	0.73	0.73	0.00
10,717.0	89.40	0.40	7,903.2	2,889.5	-56.2	2,889.8	1.21	-1.04	0.63
10,812.0	90.60	0.90	7,903.2	2,984.5	-55.1	2,984.7	1.37	1.26	0.53
10,908.0	89.30	3.40	7,903.3	3,080.4	-51.5	3,080.6	2.94	-1.35	2.60
11,004.0	87.20	3.70	7,906.3	3,176.2	-45.6	3,176.4	2.21	-2.19	0.31
11,099.0	87.80	3.10	7,910.4	3,270.9	-40.0	3,271.1	0.89	0.63	-0.63
11,193.0	88.30	2.70	7,913.6	3,364.7	-35.2	3,364.9	0.68	0.53	-0.43
11,288.0	89.20	2.50	7,915.7	3,459.6	-30.9	3,459.7	0.97	0.95	-0.21
11,383.0	90.20	2.40	7,916.2	3,554.5	-26.9	3,554.6	1.06	1.05	-0.11

DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Black Lake 7 MD State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	Well @ 6081.0usft (Patterson #444)
Site:	Sec 7, T25S, R28E	MD Reference:	Well @ 6081.0usft (Patterson #444)
Well:	Black Lake 7 MD State 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)
11,478.0	90.00	1.90	7,916.0	3,649.5	-23.3	3,649.5	0.57	-0.21	-0.53
11,572.0	88.70	1.90	7,917.1	3,743.4	-20.2	3,743.4	1.38	-1.38	0.00
11,667.0	89.30	1.40	7,918.7	3,838.3	-17.4	3,838.4	0.82	0.63	-0.53
11,762.0	89.80	1.10	7,919.5	3,933.3	-15.4	3,933.3	0.61	0.53	-0.32
11,857.0	87.00	0.60	7,922.1	4,028.3	-14.0	4,028.3	2.99	-2.95	-0.53
11,952.0	87.60	359.80	7,926.6	4,123.2	-13.6	4,123.2	1.05	0.63	-0.84
12,046.0	88.80	0.10	7,929.6	4,217.1	-13.7	4,217.1	1.32	1.28	0.32
12,141.0	89.80	359.90	7,930.7	4,312.1	-13.7	4,312.1	1.07	1.05	-0.21
12,237.0	91.00	359.80	7,930.0	4,408.1	-14.0	4,408.1	1.25	1.25	-0.10
12,330.0	91.00	1.40	7,928.4	4,501.1	-13.0	4,501.1	1.72	0.00	1.72
12,425.0	90.10	1.40	7,927.5	4,596.0	-10.7	4,596.0	0.95	-0.95	0.00
12,520.0	91.00	0.80	7,926.6	4,691.0	-8.8	4,691.0	1.14	0.95	-0.63
12,595.0	91.80	0.50	7,924.8	4,766.0	-8.0	4,765.9	1.14	1.07	-0.40
TD @ 12650' MD / 7923' TVD									
12,650.0	91.80	0.00	7,923.0	4,821.0	-7.8	4,820.9	0.91	0.00	-0.91

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,275.0	7,268.6	-94.8	127.2	TIE IN @ 7275' MD / 7269' TVD
7,986.8	7,894.8	180.5	152.8	CROSSED HARD LINE @ 7987' MD / 7895' TVD
12,650.0	7,923.0	4,821.0	-7.8	TD @ 12650' MD / 7923' TVD

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

Operating Company Mewbourne Oil Co.
 Well Name & Number Black Lake 7 MD ST Com 1H
 Sales Ticket Number 6248364
 Date 3/20/2014

Company Rep Lynn Simmons
 Field 0
 BOT Service Rep Joseph Haynes
 District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	110000	6.184	6.151	LTC / 8RD	0.03715	8,165.00	11,220	8,530
Top Liner	4.500	13.50	110000	3.920	3.795	LTC / 8RD	0.01492	4,665.19	12,400	10,680
Bott Liner										

TVD	7928.00	KOP	7328.00	Open Hole	6.125	Casing Vol. (bbl)	295.4
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	S-3 Liner Top Hanger w/ JR Sleeve	7951.79	7.85	5.875	3.875		1670		

Zone Length		4-1/2-13.5 LTC Pup Joint	7959.64	8.99	4.500	3.920				
		8 Joints of 4-1/2-13.5 LTC Casing	7968.63	310.59	4.500	3.920				
		3.500 Frac Sleeve	8279.22	2.40	5.750		3.448	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	8281.62	116.73	4.500	3.920				
		582 OH Packer #1	8398.35	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	8402.24	80.28	4.500	3.920				
		3.438 Frac Sleeve	8482.52	2.40	5.750		3.385	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	8484.92	118.02	4.500	3.920				
		582 OH Packer #1	8602.94	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	8606.83	77.90	4.500	3.920				
		3.375 Frac Sleeve	8684.73	2.40	5.750		3.323	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	8687.13	119.91	4.500	3.920				
		582 OH Packer #1	8807.04	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	8810.93	79.59	4.500	3.920				
		3.313 Frac Sleeve	8890.52	2.40	5.750		3.260	2286		
		4 Joints of 4-1/2-13.5 LTC Casing	8892.92	156.47	4.500	3.920				
		582 OH Packer #1	9049.39	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	9053.28	119.40	4.500	3.920				
		3.250 Frac Sleeve	9172.68	2.40	5.750		3.198	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	9175.08	118.15	4.500	3.920				
		582 OH Packer #1	9293.23	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	9297.12	118.08	4.500	3.920				

Operating Company Mewbourne Oil Co.
 Well Name & Number Black Lake 7 MD ST Com 1H
 Sales Ticket Number 6248364
 Date 3/20/2014

Company Rep Lynn Simmons
 Field 0
 BOT Service Rep Joseph Haynes
 District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	110000	6.184	6.151	LTC / 8RD	0.03715	8,165.00	11,220	8,530
Top Liner	4.500	13.50	110000	3.920	3.795	LTC / 8RD	0.01492	4,665.19	12,400	10,680
Bott Liner										

TVD	7928.00	KOP	7328.00	Open Hole	6.125	Casing Vol. (bbl)	295.4
-----	---------	-----	---------	-----------	-------	-------------------	-------

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)
		3'188' Frac Sleeve	9415.20	2.40	5.750		3.135	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	9417.60	80.53	4.500	3.920				
		582 OH Packer #1	9498.13	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	9502.02	119.18	4.500	3.920				
		3'125' Frac Sleeve	9621.20	2.40	5.750		3.073	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	9623.60	119.07	4.500	3.920				
		582 OH Packer #1	9742.67	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	9746.56	117.46	4.500	3.920				
		3'063' Frac Sleeve	9864.02	2.40	5.750		3.010	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	9866.42	116.50	4.500	3.920				
		582 OH Packer #1	9982.92	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9986.81	76.96	4.500	3.920				
		3'000' Frac Sleeve	10063.77	2.40	5.750		2.948	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	10066.17	118.58	4.500	3.920				
		582 OH Packer #1	10184.75	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	10188.64	120.26	4.500	3.920				
		2'938' Frac Sleeve	10308.90	2.40	5.750		2.885	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	10311.30	118.98	4.500	3.920				
		582 OH Packer #1	10430.28	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	10434.17	120.06	4.500	3.920				
		2'875' Frac Sleeve	10554.23	2.40	5.750		2.823	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	10556.63	119.05	4.500	3.920				
		582 OH Packer #1	10675.68	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	10679.57	76.76	4.500	3.920				
		2'813' Frac Sleeve	10756.33	2.40	5.750		2.760	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	10758.73	116.74	4.500	3.920				

Operating Company Mewbourne Oil Co.
 Well Name & Number Black Lake 7 MD ST Com 1H
 Sales Ticket Number 6248364
 Date 3/20/2014

Company Rep Lynn Simmons
 Field 0
 BOT Service Rep Joseph Haynes
 District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse		
Casing	7.000	26.00	110000	6.184	6.151	LTC / 8RD	0.03715	8,165.00	11,220	8,530		
Top Liner	4.500	13.50	110000	3.920	3.795	LTC / 8RD	0.01492	4,665.19	12,400	10,680		
Bott Liner												
TVD		7928.00		KOP		7328.00		Open Hole		6.125	Casing Vol. (bbl)	295.4
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)
		582 OH Packer #1	10875.47	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	10879.36	117.60	4.500	3.920				
		2.750 Frac Sleeve	10996.96	2.40	5.750		2.698	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	10999.36	120.00	4.500	3.920				
		582 OH Packer #1	11119.36	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	11123.25	117.84	4.500	3.920				
		2.688 Frac Sleeve	11241.09	2.40	5.750		2.635	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	11243.49	119.31	4.500	3.920				
		582 OH Packer #1	11362.80	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11366.69	79.73	4.500	3.920				
		2.625 Frac Sleeve	11446.42	2.40	5.750		2.573	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	11448.82	120.06	4.500	3.920				
		582 OH Packer #1	11568.88	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	11572.77	120.26	4.500	3.920				
		2.563 Frac Sleeve	11693.03	2.40	5.750		2.510	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	11695.43	118.67	4.500	3.920				
		582 OH Packer #1	11814.10	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11817.99	78.96	4.500	3.920				
		2.500 Frac Sleeve	11896.95	2.40	5.750		2.448	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	11899.35	117.80	4.500	3.920				
		582 OH Packer #1	12017.15	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	12021.04	117.72	4.500	3.920				
		2.438 Frac Sleeve	12138.76	2.40	5.750		2.386	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	12141.16	119.93	4.500	3.920				
		582 OH Packer #1	12261.09	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	12264.98	120.86	4.500	3.920				

Company Rep	Lynn Simmons
Field	0
BOT Service Rep	Joseph Haynes



Date 3/20/2014

District Location	Odessa, TX
--------------------------	------------

[illegible]

TVD	7928.00	KOP	7328.00	Open Hole	6.125	Casing Vol. (bbl)	295.4
-----	---------	-----	---------	-----------	-------	-------------------	-------

Carry Fluid Weight (ppg)	8.4	Propant Content (ppa)		Max Drill Out Size	0
--------------------------	-----	-----------------------	--	--------------------	---

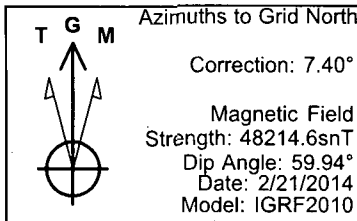
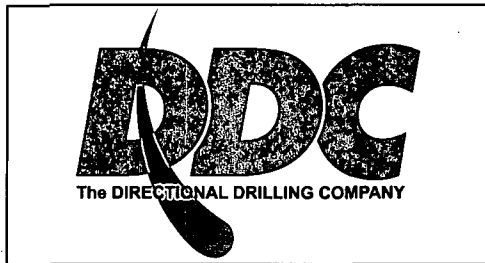
[illegible]

RECEIVED
MAY 07 2014
NMOCD ARTESIA

Company Name: Mewbourne Oil Co
Black Lake 7 MD State Com #1H
Eddy County, New Mexico
Rig: Patterson #444
Created By: James Dawson
Date: 03/24/2014

Black Lake 7 MD State Com #1H
Eddy County, New Mexico
Q140234 & WT-140183
Design #2 - Tied to Gyro

Mewbourne Oil Company



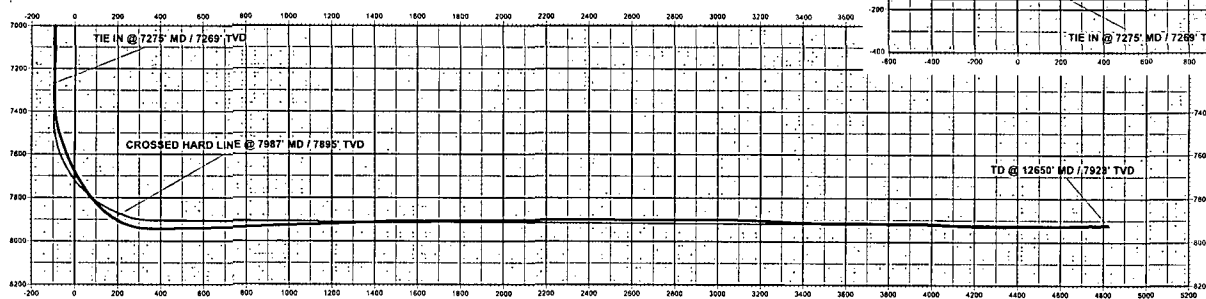
PROJECT DETAILS: Eddy County, New Mexico

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: Black Lake 7 MD State Com #1H					
Ground Level:	6061.0	Latitude	32° 8' 15.490 N	Longitude	104° 8' 1.171 W
+N-S	+E-W	North	East	32° 8' 15.490 N	104° 8' 1.171 W
0.0	0.0	413851.20	561895.50		

DESIGN TARGET DETAILS						
Name	TVD	+N-S	+E-W	North	East	Latitude
PBHL Black Lake 7 MD State Com #1H DRZ226.0		48228.2	-27.9	418679.39	561777.64	32° 8' 3.272 N
- plan hits target center						104° 8' 1.391 W

ANNOTATIONS									
MD	Inc	Azi	TVD	+N-S	+E-W	Vsect	Departure	TIE IN	Annotation
7275.0	2.66	113.22	7269.8	-64.8	127.2	-95.5	214.5	TIE IN @ 7275' MD / 7269' TVD	
7886.8	58.10	1.71	7894.8	189.5	152.8	179.6	486.0	CROSSED HARD LINE @ 7887' MD / 7895' TVD	
12650.0	91.89	0.00	7923.0	4821.0	-7.8	4820.9	5148.8	TD @ 12650' MD / 7923' TVD	



Vertical Section at 359.67° (200 usft/in)

