

Mewbourne Oil Company

Eddy County, New Mexico

Tonto 31 B2BO Fed #1H

Sec 31, T19S, R33E

SL: 185' FNL & 1910' FEL

BHL: 330' FSL & 1980' FEL

Plan: Design #1

Standard Planning Report

08 January, 2015

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Tonto 31 B2BO Fed #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3599.0usft (Original Well Elev)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3599.0usft (Original Well Elev)
Site:	Tonto 31 B2BO Fed #1H	North Reference:	Grid
Well:	Sec 31, T19S, R33E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FSL & 1980' FEL		
Design:	Design #1		

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	Tonto 31 B2BO Fed #1H		
Site Position:		Northing:	591,078.70 usft
From:	Map	Easting:	695,111.10 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 37' 24.167 N
		Longitude:	103° 41' 58.605 W
		Grid Convergence:	0.34 °

Well	Sec 31, T19S, R33E		
Well Position	+N/-S	0.0 usft	Northing: 591,078.70 usft
	+E/-W	0.0 usft	Easting: 695,111.10 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	3,599.0 usft
		Latitude:	32° 37' 24.167 N
		Longitude:	103° 41' 58.605 W
		Ground Level:	3,579.0 usft

Wellbore	BHL: 330' FSL & 1980' FEL				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.84	60.59	49,018

Design	Design #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	180.53

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
9,486.5	0.00	0.00	9,486.5	0.0	0.0	0.00	0.00	0.00	0.00	
10,233.6	89.64	180.53	9,964.0	-474.5	-4.4	12.00	12.00	0.00	-179.47	
14,526.0	89.64	180.53	9,991.0	-4,766.7	-44.1	0.00	0.00	0.00	0.00	BHL: 330 FSL & 1980

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Site:	Tonto 31 B2BO Fed #1H	North Reference:	Grid
Well:	Sec 31, T19S, R33E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FSL & 1980' FEL		
Design:	Design #1		

Planned 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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SL: 185 FNL & 1910 FEL									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00

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Planned 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	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	0.00
9,200.0	0.00	0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	0.00
9,300.0	0.00	0.00	9,300.0	0.0	0.0	0.0	0.00	0.00	0.00
9,400.0	0.00	0.00	9,400.0	0.0	0.0	0.0	0.00	0.00	0.00
9,486.5	0.00	0.00	9,486.5	0.0	0.0	0.0	0.00	0.00	0.00
KOP @ 9487									
9,500.0	1.62	180.53	9,500.0	-0.2	0.0	0.2	12.00	12.00	0.00
9,600.0	13.62	180.53	9,598.9	-13.4	-0.1	13.4	12.00	12.00	0.00
9,700.0	25.62	180.53	9,693.0	-46.9	-0.4	46.9	12.00	12.00	0.00
9,800.0	37.62	180.53	9,778.0	-99.3	-0.9	99.3	12.00	12.00	0.00
9,868.8	45.87	180.53	9,829.2	-145.0	-1.3	145.0	12.00	12.00	0.00
First Take Point: 330 FNL & 1909 FEL									
9,900.0	49.62	180.53	9,850.2	-168.1	-1.6	168.1	12.00	12.00	0.00
10,000.0	61.61	180.53	9,906.6	-250.5	-2.3	250.5	12.00	12.00	0.00
10,100.0	73.61	180.53	9,944.6	-342.8	-3.2	342.8	12.00	12.00	0.00
10,200.0	85.61	180.53	9,962.6	-441.0	-4.1	441.0	12.00	12.00	0.00

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Wellbore:	BHL: 330' FSL & 1980' FEL		
Design:	Design #1		

Planned 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)
10,233.6	89.64	180.53	9,964.0	-474.5	-4.4	474.5	12.00	12.00	0.00
10,236.6	89.64	180.53	9,964.0	-477.5	-4.4	477.5	0.00	0.00	0.00
LP: 659 FNL & 1920 FEL									
10,300.0	89.64	180.53	9,964.4	-540.9	-5.0	540.9	0.00	0.00	0.00
10,400.0	89.64	180.53	9,965.0	-640.9	-5.9	640.9	0.00	0.00	0.00
10,500.0	89.64	180.53	9,965.7	-740.9	-6.9	740.9	0.00	0.00	0.00
10,600.0	89.64	180.53	9,966.3	-840.9	-7.8	840.9	0.00	0.00	0.00
10,700.0	89.64	180.53	9,966.9	-940.9	-8.7	940.9	0.00	0.00	0.00
10,800.0	89.64	180.53	9,967.6	-1,040.9	-9.6	1,040.9	0.00	0.00	0.00
10,900.0	89.64	180.53	9,968.2	-1,140.9	-10.6	1,140.9	0.00	0.00	0.00
11,000.0	89.64	180.53	9,968.8	-1,240.9	-11.5	1,240.9	0.00	0.00	0.00
11,100.0	89.64	180.53	9,969.4	-1,340.9	-12.4	1,340.9	0.00	0.00	0.00
11,200.0	89.64	180.53	9,970.1	-1,440.9	-13.3	1,440.9	0.00	0.00	0.00
11,300.0	89.64	180.53	9,970.7	-1,540.9	-14.3	1,540.9	0.00	0.00	0.00
11,400.0	89.64	180.53	9,971.3	-1,640.8	-15.2	1,640.9	0.00	0.00	0.00
11,500.0	89.64	180.53	9,972.0	-1,740.8	-16.1	1,740.9	0.00	0.00	0.00
11,600.0	89.64	180.53	9,972.6	-1,840.8	-17.0	1,840.9	0.00	0.00	0.00
11,700.0	89.64	180.53	9,973.2	-1,940.8	-18.0	1,940.9	0.00	0.00	0.00
11,800.0	89.64	180.53	9,973.9	-2,040.8	-18.9	2,040.9	0.00	0.00	0.00
11,900.0	89.64	180.53	9,974.5	-2,140.8	-19.8	2,140.9	0.00	0.00	0.00
12,000.0	89.64	180.53	9,975.1	-2,240.8	-20.7	2,240.9	0.00	0.00	0.00
12,100.0	89.64	180.53	9,975.7	-2,340.8	-21.7	2,340.9	0.00	0.00	0.00
12,200.0	89.64	180.53	9,976.4	-2,440.8	-22.6	2,440.9	0.00	0.00	0.00
12,300.0	89.64	180.53	9,977.0	-2,540.8	-23.5	2,540.9	0.00	0.00	0.00
12,400.0	89.64	180.53	9,977.6	-2,640.8	-24.4	2,640.9	0.00	0.00	0.00
12,500.0	89.64	180.53	9,978.3	-2,740.8	-25.4	2,740.9	0.00	0.00	0.00
12,600.0	89.64	180.53	9,978.9	-2,840.8	-26.3	2,840.9	0.00	0.00	0.00
12,700.0	89.64	180.53	9,979.5	-2,940.8	-27.2	2,940.9	0.00	0.00	0.00
12,800.0	89.64	180.53	9,980.1	-3,040.8	-28.1	3,040.9	0.00	0.00	0.00
12,900.0	89.64	180.53	9,980.8	-3,140.8	-29.1	3,140.9	0.00	0.00	0.00
13,000.0	89.64	180.53	9,981.4	-3,240.7	-30.0	3,240.9	0.00	0.00	0.00
13,100.0	89.64	180.53	9,982.0	-3,340.7	-30.9	3,340.9	0.00	0.00	0.00
13,200.0	89.64	180.53	9,982.7	-3,440.7	-31.8	3,440.9	0.00	0.00	0.00
13,300.0	89.64	180.53	9,983.3	-3,540.7	-32.8	3,540.9	0.00	0.00	0.00
13,400.0	89.64	180.53	9,983.9	-3,640.7	-33.7	3,640.9	0.00	0.00	0.00
13,500.0	89.64	180.53	9,984.5	-3,740.7	-34.6	3,740.9	0.00	0.00	0.00
13,600.0	89.64	180.53	9,985.2	-3,840.7	-35.5	3,840.9	0.00	0.00	0.00
13,700.0	89.64	180.53	9,985.8	-3,940.7	-36.5	3,940.9	0.00	0.00	0.00
13,800.0	89.64	180.53	9,986.4	-4,040.7	-37.4	4,040.9	0.00	0.00	0.00
13,900.0	89.64	180.53	9,987.1	-4,140.7	-38.3	4,140.9	0.00	0.00	0.00
14,000.0	89.64	180.53	9,987.7	-4,240.7	-39.2	4,240.9	0.00	0.00	0.00
14,100.0	89.64	180.53	9,988.3	-4,340.7	-40.2	4,340.9	0.00	0.00	0.00
14,200.0	89.64	180.53	9,988.9	-4,440.7	-41.1	4,440.9	0.00	0.00	0.00
14,300.0	89.64	180.53	9,989.6	-4,540.7	-42.0	4,540.9	0.00	0.00	0.00
14,400.0	89.64	180.53	9,990.2	-4,640.7	-42.9	4,640.9	0.00	0.00	0.00
14,500.0	89.64	180.53	9,990.8	-4,740.7	-43.9	4,740.9	0.00	0.00	0.00
14,526.0	89.64	180.53	9,991.0	-4,766.7	-44.1	4,766.9	0.00	0.00	0.00
BHL: 330 FSL & 1980 FEL									

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Tonto 31 B2BO Fed #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3599.0usft (Original Well Elev)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3599.0usft (Original Well Elev)
Site:	Tonto 31 B2BO Fed #1H	North Reference:	Grid
Well:	Sec 31, T19S, R33E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FSL & 1980' FEL		
Design:	Design #1		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SL: 185 FNL & 1910 FEI - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	591,078.70	695,111.10	32° 37' 24.167 N	103° 41' 58.605 W
KOP @ 9487 - plan hits target center - Point	0.00	0.00	9,486.5	0.0	0.0	591,078.70	695,111.10	32° 37' 24.167 N	103° 41' 58.605 W
First Take Point: 330 FN - plan hits target center - Point	0.00	0.00	9,829.2	-145.0	-1.3	590,933.70	695,109.80	32° 37' 22.733 N	103° 41' 58.630 W
LP: 659 FNL & 1920 FEI - plan hits target center - Point	0.00	0.00	9,964.0	-477.5	-4.4	590,601.20	695,106.70	32° 37' 19.443 N	103° 41' 58.690 W
BHL: 330 FSL & 1980 FI - plan hits target center - Point	0.00	0.00	9,991.0	-4,766.7	-44.1	586,312.00	695,067.00	32° 36' 37.003 N	103° 41' 59.453 W