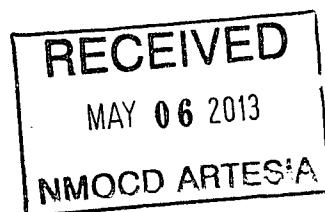


30-015-40242



Mewbourne Oil Co

Eddy County, New Mexico

Sec 31-19S-29E

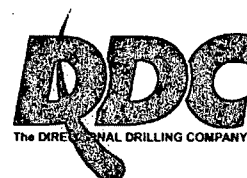
Ruger 31MP Fed #1H

Wellbore #1

Survey: MWD

DDC Survey Report

03 April, 2013



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Ruger 31 MP Fed #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3315.0usft (Patterson)
Site:	Sec 31-19S-29E	MD Reference:	WELL @ 3315.0usft (Patterson)
Well:	Ruger 31 MP Fed #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 31-19S-29E		
Site Position:		Northing:	586,420.00 usft
From:	Map	Easting:	565,319.60 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 36' 43.178 N
		Longitude:	104° 7' 16.322 W
		Grid Convergence:	0.11 °

Well	Ruger 31 MP Fed #1H		
Well Position	+N/-S	0.0 usft	Northing: 586,420.00 usft
	+E/-W	0.0 usft	Easting: 565,319.60 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 36' 43.178 N
		Longitude:	104° 7' 16.322 W
		Ground Level:	3,295.0 usft

Wellbore	Wellbore #1		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/11/2013	7.66	60.41	48,616

Design	Wellbore #1		
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Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	87.21

Survey Program		Date	4/3/2013	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	8,259.0	GYRO (Wellbore #1)	Good_gyro	Good Gyro
8,440.0	13,365.0	MWD (Wellbore #1)	MWD default	MWD - Standard

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)
TIE IN @ 8259' MD//8252.3' TVD										
	8,259.0	1.46	278.16	8,252.3	217.8	-17.5	-6.9	0.00	0.00	0.00
	8,440.0	1.10	50.00	8,433.3	219.3	-18.4	-7.8	1.29	-0.20	72.84
	8,471.0	4.60	79.80	8,464.2	219.7	-17.0	-6.3	11.89	11.29	96.13
	8,503.0	8.00	80.30	8,496.0	220.3	-13.5	-2.8	10.63	10.63	1.56
	8,535.0	11.60	77.00	8,527.6	221.4	-8.2	2.6	11.38	11.25	-10.31
	8,566.0	15.30	74.60	8,557.7	223.2	-1.2	9.6	12.07	11.94	-7.74
	8,598.0	18.90	74.90	8,588.3	225.6	7.9	18.8	11.25	11.25	0.94
	8,630.0	22.50	77.60	8,618.2	228.3	18.8	29.9	11.64	11.25	8.44
	8,661.0	26.20	80.20	8,646.5	230.7	31.4	42.6	12.42	11.94	8.39

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Ruger 31 MP Fed #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3315.0usft (Patterson)
Site:	Sec 31-19S-29E	MD Reference:	WELL @ 3315.0usft (Patterson)
Well:	Ruger 31 MP Fed #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)
8,693.0	30.00	81.90	8,674.7	233.1	46.3	57.6	12.13	11.88	5.31
8,725.0	33.70	83.50	8,701.9	235.2	63.0	74.4	11.86	11.56	5.00
8,757.0	37.40	85.40	8,727.9	237.0	81.5	93.0	12.07	11.56	5.94
8,788.0	40.70	86.80	8,752.0	238.3	101.0	112.5	11.02	10.65	4.52
8,820.0	44.30	87.60	8,775.6	239.4	122.6	134.1	11.38	11.25	2.50
8,852.0	47.80	87.40	8,797.8	240.4	145.6	157.1	10.95	10.94	-0.63
8,883.0	51.30	87.30	8,817.9	241.5	169.2	180.7	11.29	11.29	-0.32
8,916.0	55.30	87.00	8,837.6	242.8	195.6	207.2	12.14	12.12	-0.91
8,947.0	60.40	87.20	8,854.1	244.1	221.8	233.4	16.46	16.45	0.65
8,979.0	66.70	88.10	8,868.3	245.3	250.4	262.1	19.85	19.69	2.81
CROSSED HARDLINE @ 9010' MD / 8879.1' TVD									
9,010.0	72.70	89.40	8,879.1	245.9	279.5	291.1	19.75	19.35	4.19
9,042.0	79.00	91.30	8,886.9	245.7	310.5	322.1	20.51	19.69	5.94
9,140.0	87.10	92.50	8,898.8	242.5	407.6	418.9	8.35	8.27	1.22
9,172.0	86.60	92.40	8,900.5	241.1	439.5	450.8	1.59	-1.56	-0.31
9,203.0	87.60	92.40	8,902.1	239.8	470.5	481.6	3.23	3.23	0.00
9,235.0	89.10	93.20	8,903.0	238.3	502.4	513.4	5.31	4.69	2.50
9,267.0	90.80	93.80	8,903.0	236.3	534.4	545.2	5.63	5.31	1.88
9,299.0	91.00	94.30	8,902.5	234.0	566.3	577.0	1.68	0.63	1.56
9,330.0	91.20	94.60	8,901.9	231.6	597.2	607.7	1.16	0.65	0.97
9,362.0	91.10	94.30	8,901.3	229.2	629.1	639.5	0.99	-0.31	-0.94
9,394.0	90.90	94.40	8,900.7	226.7	661.0	671.2	0.70	-0.63	0.31
9,426.0	90.80	94.30	8,900.3	224.3	692.9	703.0	0.44	-0.31	-0.31
9,458.0	90.50	94.50	8,899.9	221.8	724.8	734.7	1.13	-0.94	0.63
9,489.0	91.40	93.80	8,899.4	219.6	755.7	765.5	3.68	2.90	-2.26
9,553.0	91.50	93.80	8,897.8	215.4	819.5	829.0	0.16	0.16	0.00
9,584.0	91.40	93.10	8,897.0	213.5	850.5	859.9	2.28	-0.32	-2.26
9,616.0	91.10	92.20	8,896.3	212.0	882.4	891.7	2.96	-0.94	-2.81
9,648.0	90.10	90.30	8,895.9	211.3	914.4	923.6	6.71	-3.13	-5.94
9,680.0	88.10	89.40	8,896.4	211.4	946.4	955.6	6.85	-6.25	-2.81
9,743.0	89.00	89.90	8,898.0	211.8	1,009.4	1,018.5	1.63	1.43	0.79
9,807.0	89.20	89.00	8,899.0	212.4	1,073.4	1,082.4	1.44	0.31	-1.41
9,870.0	89.20	90.20	8,899.9	212.8	1,136.4	1,145.4	1.90	0.00	1.90
9,933.0	89.20	90.90	8,900.8	212.2	1,199.4	1,208.3	1.11	0.00	1.11
9,996.0	88.70	90.20	8,902.0	211.6	1,262.3	1,271.2	1.37	-0.79	-1.11
10,060.0	90.00	90.70	8,902.7	211.1	1,326.3	1,335.0	2.18	2.03	0.78
10,123.0	90.90	90.50	8,902.2	210.5	1,389.3	1,397.9	1.46	1.43	-0.32
10,186.0	89.60	90.00	8,901.9	210.2	1,452.3	1,460.8	2.21	-2.06	-0.79
10,248.0	89.00	89.80	8,902.7	210.3	1,514.3	1,522.8	1.02	-0.97	-0.32
10,311.0	89.80	89.90	8,903.3	210.5	1,577.3	1,585.7	1.28	1.27	0.16
10,374.0	90.00	89.20	8,903.4	211.0	1,640.3	1,648.6	1.16	0.32	-1.11
10,437.0	90.00	89.00	8,903.4	212.0	1,703.3	1,711.6	0.32	0.00	-0.32
10,500.0	90.20	88.80	8,903.3	213.2	1,766.3	1,774.6	0.45	0.32	-0.32

DDC Survey Report



Company:	Mewbourne Oil Co.	Local Co-ordinate Reference:	Well Ruger 31 MP Fed #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3315.0usft (Patterson)
Site:	Sec 31-19S-29E	MD Reference:	WELL @ 3315.0usft (Patterson)
Well:	Ruger 31 MP Fed #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)
10,564.0	90.80	89.90	8,902.8	213.9	1,830.3	1,838.5	1.96	0.94	1.72
10,627.0	91.50	89.50	8,901.5	214.2	1,893.3	1,901.5	1.28	1.11	-0.63
10,690.0	90.10	89.20	8,900.6	214.9	1,956.3	1,964.4	2.27	-2.22	-0.48
10,754.0	88.60	89.10	8,901.4	215.9	2,020.3	2,028.4	2.35	-2.34	-0.16
10,818.0	89.50	90.60	8,902.4	216.0	2,084.2	2,092.3	2.73	1.41	2.34
10,881.0	89.40	92.50	8,903.0	214.3	2,147.2	2,155.1	3.02	-0.16	3.02
10,944.0	88.70	93.10	8,904.1	211.3	2,210.1	2,217.8	1.46	-1.11	0.95
10,976.0	88.20	93.30	8,904.9	209.5	2,242.1	2,249.6	1.68	-1.56	0.63
11,008.0	88.90	94.00	8,905.7	207.4	2,274.0	2,281.4	3.09	2.19	2.19
11,040.0	89.20	94.90	8,906.3	205.0	2,305.9	2,313.1	2.96	0.94	2.81
11,071.0	89.30	95.80	8,906.7	202.1	2,336.8	2,343.8	2.92	0.32	2.90
11,103.0	90.50	95.70	8,906.7	198.9	2,368.6	2,375.5	3.76	3.75	-0.31
11,135.0	92.40	95.50	8,905.9	195.7	2,400.4	2,407.1	5.97	5.94	-0.63
11,166.0	93.20	95.10	8,904.4	192.9	2,431.3	2,437.8	2.88	2.58	-1.29
11,198.0	93.80	94.60	8,902.5	190.2	2,463.1	2,469.4	2.44	1.88	-1.56
11,230.0	92.80	94.00	8,900.6	187.8	2,494.9	2,501.1	3.64	-3.13	-1.88
11,262.0	91.50	93.40	8,899.4	185.7	2,526.8	2,532.9	4.47	-4.06	-1.88
11,293.0	90.20	92.60	8,899.0	184.1	2,557.8	2,563.7	4.92	-4.19	-2.58
11,325.0	89.90	91.90	8,898.9	182.8	2,589.8	2,595.6	2.38	-0.94	-2.19
11,357.0	89.90	91.90	8,899.0	181.8	2,621.8	2,627.5	0.00	0.00	0.00
11,388.0	89.80	91.90	8,899.1	180.8	2,652.7	2,658.4	0.32	-0.32	0.00
11,420.0	90.10	92.00	8,899.1	179.7	2,684.7	2,690.3	0.99	0.94	0.31
11,483.0	91.30	90.90	8,898.3	178.1	2,747.7	2,753.1	2.58	1.90	-1.75
11,547.0	90.90	89.50	8,897.1	177.9	2,811.7	2,817.0	2.27	-0.63	-2.19
11,610.0	88.30	89.40	8,897.5	178.5	2,874.7	2,879.9	4.13	-4.13	-0.16
11,673.0	87.30	88.80	8,899.9	179.4	2,937.6	2,942.9	1.85	-1.59	-0.95
11,705.0	86.90	88.60	8,901.6	180.2	2,969.6	2,974.8	1.40	-1.25	-0.63
11,737.0	87.90	89.30	8,903.0	180.8	3,001.5	3,006.8	3.81	3.13	2.19
11,769.0	89.40	90.10	8,903.8	180.9	3,033.5	3,038.7	5.31	4.69	2.50
11,800.0	90.30	90.90	8,903.9	180.7	3,064.5	3,069.7	3.88	2.90	2.58
11,864.0	90.80	91.10	8,903.2	179.5	3,128.5	3,133.5	0.84	0.78	0.31
11,927.0	90.90	90.90	8,902.3	178.4	3,191.5	3,196.4	0.35	0.16	-0.32
11,991.0	90.50	89.40	8,901.5	178.3	3,255.5	3,260.3	2.43	-0.63	-2.34
12,054.0	90.90	89.60	8,900.8	178.8	3,318.5	3,323.2	0.71	0.63	0.32
12,085.0	91.30	89.80	8,900.2	179.0	3,349.5	3,354.2	1.44	1.29	0.65
12,149.0	90.30	89.50	8,899.3	179.4	3,413.5	3,418.1	1.63	-1.56	-0.47
12,212.0	90.20	87.70	8,899.0	180.9	3,476.4	3,481.1	2.86	-0.16	-2.86
12,244.0	90.20	87.10	8,898.9	182.4	3,508.4	3,513.1	1.87	0.00	-1.88
12,276.0	90.20	88.10	8,898.8	183.7	3,540.4	3,545.1	3.12	0.00	3.13
12,307.0	89.10	89.50	8,899.0	184.4	3,571.4	3,576.1	5.74	-3.55	4.52
12,339.0	88.40	89.40	8,899.7	184.7	3,603.4	3,608.1	2.21	-2.19	-0.31
12,371.0	88.40	89.20	8,900.5	185.0	3,635.3	3,640.0	0.62	0.00	-0.63
12,402.0	89.60	90.50	8,901.1	185.1	3,666.3	3,671.0	5.71	3.87	4.19
12,434.0	91.50	91.70	8,900.8	184.5	3,698.3	3,702.9	7.02	5.94	3.75

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Ruger 31 MP Fed #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3315.0usft (Patterson)
Site:	Sec 31-19S-29E	MD Reference:	WELL @ 3315.0usft (Patterson)
Well:	Ruger 31 MP Fed #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)
12,466.0	90.80	90.70	8,900.1	183.8	3,730.3	3,734.8	3.81	-2.19	-3.13
12,496.0	89.70	90.20	8,900.0	183.6	3,760.3	3,764.8	4.03	-3.67	-1.67
12,528.0	88.90	89.40	8,900.4	183.7	3,792.3	3,796.8	3.54	-2.50	-2.50
12,560.0	88.20	89.30	8,901.2	184.1	3,824.3	3,828.7	2.21	-2.19	-0.31
12,587.0	89.00	89.50	8,901.9	184.4	3,851.3	3,855.7	3.05	2.96	0.74
12,619.0	89.80	89.70	8,902.2	184.6	3,883.3	3,887.7	2.58	2.50	0.63
12,682.0	89.90	90.10	8,902.4	184.7	3,946.3	3,950.6	0.65	0.16	0.63
12,745.0	91.00	89.50	8,901.9	184.9	4,009.3	4,013.5	1.99	1.75	-0.95
12,808.0	91.30	89.00	8,900.6	185.7	4,072.3	4,076.5	0.93	0.48	-0.79
12,871.0	91.10	89.60	8,899.3	186.5	4,135.2	4,139.4	1.00	-0.32	0.95
12,935.0	89.90	90.20	8,898.7	186.6	4,199.2	4,203.3	2.10	-1.88	0.94
12,967.0	88.90	90.80	8,899.1	186.3	4,231.2	4,235.3	3.64	-3.13	1.88
12,998.0	88.60	90.80	8,899.7	185.9	4,262.2	4,266.2	0.97	-0.97	0.00
13,029.0	88.70	90.90	8,900.5	185.5	4,293.2	4,297.1	0.46	0.32	0.32
13,061.0	88.90	90.50	8,901.1	185.1	4,325.2	4,329.1	1.40	0.63	-1.25
13,092.0	89.70	90.70	8,901.5	184.7	4,356.2	4,360.0	2.66	2.58	0.65
13,124.0	90.30	90.80	8,901.5	184.3	4,388.2	4,392.0	1.90	1.88	0.31
13,156.0	91.60	90.40	8,901.0	184.0	4,420.2	4,423.9	4.25	4.06	-1.25
13,188.0	91.50	90.20	8,900.1	183.8	4,452.2	4,455.8	0.70	-0.31	-0.63
13,219.0	90.90	90.10	8,899.5	183.7	4,483.2	4,486.8	1.96	-1.94	-0.32
13,283.0	89.90	90.20	8,899.0	183.6	4,547.2	4,550.7	1.57	-1.56	0.16
13,314.0	90.50	90.30	8,898.9	183.4	4,578.2	4,581.7	1.96	1.94	0.32
TD @ 13365' MD / 8898.5' TVD									
13,365.0	90.50	90.30	8,898.5	183.2	4,629.2	4,632.6	0.00	0.00	0.00

Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
8,259.0	8,252.3	217.8	-17.5	TIE IN @ 8259' MD / 8252.3' TVD
9,010.0	8,879.1	245.9	279.5	CROSSED HARDLINE @ 9010' MD / 8879.1' TVD
13,365.0	8,898.5	183.2	4,629.2	TD @ 13365' MD / 8898.5' TVD

Checked By: _____ Approved By: _____ Date: _____