

Mewbourne Oil Co

**Eddy, New Mexico
Section 5-20 S-29 E
Colt "5" Federal #2H**

Wellbore #1

Survey: MWD Surveys

DDC Survey Report

11 September, 2009



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Colt "5" Federal #2H
Project:	Eddy, New Mexico	TVD Reference:	WELL @ 3328.0ft (Patterson UTI #45)
Site:	Section 5-20 S-29 E	MD Reference:	WELL @ 3328.0ft (Patterson UTI #45)
Well:	Colt "5" Federal #2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project:	Eddy, 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 Section 5-20 S-29 E					
Site Position:		Northing:	585,543.79 ft	Latitude:	32° 36' 34.334
From:	Map	Easting:	573,537.79 ft	Longitude:	104° 5' 40.263 W
Position Uncertainty:	0.0 ft	Slot Radius:	0 "	Grid Convergence:	0.13 °

Well	Colt "5" Federal #2H					
Well Position	+N/-S	0.0 ft	Northing:	585,543.79 ft	Latitude:	32° 36' 34.334
	+E/-W	0.0 ft	Easting:	573,537.79 ft	Longitude:	104° 5' 40.263 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	3,310.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF200510	7/20/2009	(°)	(°)	(nT)
			8.07	60.52	49,010

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
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	179.90

Survey Program		Date	9/11/2009	
From	To	Survey (Wellbore)	Tool Name	Description
(ft)	(ft)			
200.0	4,742.0	Gyro (Wellbore #1)	Good_gyro	Good Gyro
4,788.0	12,461.0	MWD Surveys (Wellbore #1)	MWD default	MWD - Standard

Survey	Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
Tie-In										
	4,742.0	4.79	295.93	4,737.4	59.8	8.8	-59.8	0.00	0.00	0.00
	4,788.0	4.50	297.50	4,783.3	61.5	5.5	-61.5	0.69	-0.63	3.41
	4,865.0	4.30	294.70	4,860.1	64.1	0.2	-64.1	0.38	-0.26	-3.64
	4,928.0	3.70	283.50	4,922.9	65.6	-3.9	-65.6	1.56	-0.95	-17.78
	4,992.0	3.90	273.40	4,986.8	66.2	-8.1	-66.2	1.09	0.31	-15.78
	5,056.0	3.40	261.60	5,050.6	66.0	-12.1	-66.1	1.41	-0.78	-18.44
	5,119.0	2.80	248.60	5,113.5	65.2	-15.4	-65.2	1.46	-0.95	-20.63
	5,181.0	3.10	224.60	5,175.5	63.5	-18.0	-63.5	2.03	0.48	-38.71
	5,245.0	1.90	208.60	5,239.4	61.3	-19.7	-61.3	2.15	-1.88	-25.00

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Colt "5" Federal #2H
Project:	Eddy, New Mexico	TVD Reference:	WELL @ 3328.0ft (Patterson UTI #45)
Site:	Section 5-20 S-29 E	MD Reference:	WELL @ 3328.0ft (Patterson UTI #45)
Well:	Colt "5" Federal #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 (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,308.0	1.20	204.60	5,302.4	59.8	-20.5	-59.8	1.12	-1.11	-6.35
5,372.0	1.00	202.90	5,366.4	58.7	-21.0	-58.7	0.32	-0.31	-2.66
5,435.0	1.20	208.30	5,429.4	57.6	-21.5	-57.6	0.36	0.32	8.57
5,498.0	1.50	203.50	5,492.3	56.2	-22.2	-56.3	0.51	0.48	-7.62
5,563.0	1.00	192.30	5,557.3	54.9	-22.6	-54.9	0.85	-0.77	-17.23
5,625.0	0.80	147.80	5,619.3	54.0	-22.5	-54.0	1.14	-0.32	-71.77
5,688.0	1.00	201.50	5,682.3	53.1	-22.5	-53.2	1.32	0.32	85.24
5,783.0	1.10	223.60	5,777.3	51.7	-23.4	-51.7	0.44	0.11	23.26
5,879.0	1.30	233.60	5,873.3	50.4	-24.9	-50.4	0.30	0.21	10.42
6,005.0	1.30	226.00	5,999.2	48.5	-27.1	-48.6	0.14	0.00	-6.03
6,100.0	1.80	239.20	6,094.2	47.0	-29.2	-47.1	0.64	0.53	13.89
6,258.0	1.20	237.90	6,252.2	44.9	-32.7	-44.9	0.38	-0.38	-0.82
6,353.0	1.80	260.10	6,347.1	44.1	-35.0	-44.1	0.87	0.63	23.37
6,417.0	1.00	251.00	6,411.1	43.7	-36.5	-43.8	1.29	-1.25	-14.22
6,480.0	0.20	245.00	6,474.1	43.5	-37.1	-43.6	1.27	-1.27	-9.52
6,544.0	0.80	108.40	6,538.1	43.3	-36.8	-43.4	1.49	0.94	-213.44
6,638.0	1.00	79.70	6,632.1	43.3	-35.4	-43.3	0.52	0.21	-30.53
6,733.0	1.50	80.80	6,727.1	43.6	-33.3	-43.7	0.53	0.53	1.16
6,826.0	1.30	80.80	6,820.0	44.0	-31.1	-44.0	0.22	-0.22	0.00
6,987.0	0.60	43.10	6,981.0	44.9	-28.7	-44.9	0.56	-0.43	-23.42
7,050.0	0.80	26.60	7,044.0	45.5	-28.3	-45.6	0.45	0.32	-26.19
7,146.0	0.50	59.90	7,140.0	46.3	-27.6	-46.4	0.49	-0.31	34.69
7,209.0	0.10	230.13	7,203.0	46.4	-27.4	-46.5	0.95	-0.63	270.21
7,305.0	1.00	219.30	7,299.0	45.7	-28.0	-45.8	0.94	0.94	-11.28
7,329.0	0.90	230.40	7,323.0	45.4	-28.3	-45.5	0.87	-0.42	46.25
7,361.0	2.00	192.80	7,355.0	44.7	-28.6	-44.8	4.37	3.44	-117.50
7,392.0	5.30	183.10	7,385.9	42.8	-28.8	-42.8	10.79	10.65	-31.29
7,424.0	9.10	175.50	7,417.7	38.8	-28.7	-38.8	12.22	11.88	-23.75
7,456.0	13.10	170.90	7,449.1	32.7	-27.9	-32.7	12.79	12.50	-14.38
7,488.0	17.40	168.80	7,479.9	24.4	-26.4	-24.4	13.55	13.44	-6.56
7,519.0	21.60	167.80	7,509.1	14.3	-24.3	-14.3	13.59	13.55	-3.23
7,551.0	24.70	167.30	7,538.6	2.0	-21.6	-2.0	9.71	9.69	-1.56
7,583.0	27.30	168.00	7,567.3	-11.7	-18.6	11.7	8.18	8.13	2.19
7,615.0	28.90	168.40	7,595.5	-26.5	-15.5	26.4	5.03	5.00	1.25
7,646.0	31.30	169.70	7,622.4	-41.7	-12.6	41.7	8.02	7.74	4.19
7,678.0	34.80	172.30	7,649.2	-59.0	-9.9	59.0	11.80	10.94	8.13
7,710.0	38.50	173.40	7,674.9	-77.9	-7.5	77.9	11.74	11.56	3.44
7,742.0	42.20	175.90	7,699.2	-98.5	-5.6	98.5	12.62	11.56	7.81
7,773.0	44.80	177.70	7,721.7	-119.8	-4.4	119.8	9.29	8.39	5.81
7,805.0	47.00	177.70	7,744.0	-142.8	-3.5	142.8	6.88	6.88	0.00
7,837.0	49.10	178.00	7,765.4	-166.6	-2.6	166.6	6.60	6.56	0.94
Cross Hardline @ 7858' MD									
7,858.0	50.61	177.40	7,778.9	-182.6	-2.0	182.6	7.51	7.18	-2.84

DDC
Survey Report



Company: Newbourne Oil Co
Project: Eddy, New Mexico
Site: Section 5-20 S-29 E
Well: Colt "5" Federal #2H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well Colt "5" Federal #2H
WELL @ 3328.0ft (Patterson UTI #45)
WELL @ 3328.0ft (Patterson UTI #45)
Grid
Minimum Curvature
EDM 5000.1 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,869.0	51.40	177.10	7,785.8	-191.2	-1.5	191.2	7.51	7.19	-2.75
7,900.0	54.20	177.10	7,804.6	-215.8	-0.3	215.8	9.03	9.03	0.00
7,932.0	58.20	177.40	7,822.4	-242.4	1.0	242.4	12.52	12.50	0.94
7,964.0	62.10	177.90	7,838.3	-270.1	2.1	270.1	12.26	12.19	1.56
7,996.0	65.90	178.80	7,852.3	-298.9	2.9	298.9	12.14	11.88	2.81
8,027.0	68.50	179.50	7,864.3	-327.4	3.4	327.4	8.64	8.39	2.26
8,059.0	70.50	179.70	7,875.5	-357.4	3.6	357.4	6.28	6.25	0.63
8,098.0	72.70	178.50	7,887.9	-394.4	4.2	394.4	6.35	5.64	-3.08
8,129.0	73.80	178.90	7,896.8	-424.1	4.8	424.1	3.76	3.55	1.29
8,161.0	75.30	178.70	7,905.3	-454.9	5.5	454.9	4.73	4.69	-0.63
8,193.0	77.40	178.90	7,912.9	-486.0	6.1	486.0	6.59	6.56	0.63
8,225.0	79.80	179.10	7,919.2	-517.4	6.7	517.4	7.52	7.50	0.63
8,256.0	82.50	178.70	7,924.0	-548.0	7.3	548.0	8.80	8.71	-1.29
8,288.0	84.30	178.80	7,927.6	-579.8	7.9	579.8	5.63	5.63	0.31
8,320.0	85.40	179.10	7,930.5	-611.6	8.5	611.6	3.56	3.44	0.94
8,352.0	85.70	179.10	7,933.0	-643.5	9.0	643.5	0.94	0.94	0.00
8,383.0	85.90	179.00	7,935.3	-674.4	9.5	674.4	0.72	0.65	-0.32
8,415.0	87.10	179.20	7,937.2	-706.4	10.0	706.4	3.80	3.75	0.63
8,446.0	89.60	180.20	7,938.1	-737.4	10.2	737.4	8.69	8.06	3.23
8,478.0	90.50	180.70	7,938.1	-769.4	10.0	769.4	3.22	2.81	1.56
8,510.0	90.90	181.10	7,937.7	-801.3	9.5	801.4	1.77	1.25	1.25
8,541.0	91.00	181.20	7,937.2	-832.3	8.8	832.3	0.46	0.32	0.32
8,573.0	91.20	180.80	7,936.6	-864.3	8.3	864.3	1.40	0.63	-1.25
8,605.0	89.20	180.60	7,936.5	-896.3	7.9	896.3	6.28	-6.25	-0.63
8,637.0	88.70	180.50	7,937.0	-928.3	7.6	928.3	1.59	-1.56	-0.31
8,668.0	88.80	180.20	7,937.7	-959.3	7.4	959.3	1.02	0.32	-0.97
8,692.0	89.70	179.90	7,938.0	-983.3	7.4	983.3	3.95	3.75	-1.25
8,724.0	90.20	179.60	7,938.1	-1,015.3	7.5	1,015.3	1.82	1.56	-0.94
8,756.0	90.40	179.40	7,937.9	-1,047.3	7.8	1,047.3	0.88	0.63	-0.63
8,788.0	90.60	179.40	7,937.6	-1,079.3	8.1	1,079.3	0.63	0.63	0.00
8,819.0	90.60	179.60	7,937.3	-1,110.3	8.4	1,110.3	0.65	0.00	0.65
8,851.0	90.90	179.50	7,936.9	-1,142.3	8.6	1,142.3	0.99	0.94	-0.31
8,883.0	91.10	179.90	7,936.3	-1,174.3	8.8	1,174.3	1.40	0.63	1.25
8,914.0	90.60	180.10	7,935.8	-1,205.3	8.8	1,205.3	1.74	-1.61	0.65
8,946.0	90.60	179.40	7,935.5	-1,237.3	9.0	1,237.3	2.19	0.00	-2.19
8,979.0	90.40	179.90	7,935.2	-1,270.3	9.2	1,270.3	1.63	-0.61	1.52
9,010.0	90.90	180.10	7,934.9	-1,301.3	9.2	1,301.3	1.74	1.61	0.65
9,042.0	89.60	181.00	7,934.7	-1,333.3	8.8	1,333.3	4.94	-4.06	2.81
9,073.0	89.30	182.10	7,935.0	-1,364.3	8.0	1,364.3	3.68	-0.97	3.55
9,105.0	89.40	182.10	7,935.4	-1,396.2	6.8	1,396.2	0.31	0.31	0.00
9,137.0	89.60	181.40	7,935.7	-1,428.2	5.9	1,428.2	2.27	0.63	-2.19
9,169.0	89.80	181.30	7,935.8	-1,460.2	5.1	1,460.2	0.70	0.63	-0.31
9,200.0	89.10	181.40	7,936.1	-1,491.2	4.4	1,491.2	2.28	-2.26	0.32
9,232.0	88.90	181.50	7,936.7	-1,523.2	3.6	1,523.2	0.70	-0.63	0.31

DDC Survey Report



Company: Mewbourne Oil Co
Project: Eddy, New Mexico
Site: Section 5-20 S-29 E
Well: Colt "5" Federal #2H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Colt "5" Federal #2H
TVD Reference: WELL @ 3328.0ft (Patterson UTI #45)
MD Reference: WELL @ 3328.0ft (Patterson UTI #45)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,264.0	89.00	180.80	7,937.3	-1,555.2	2.9	1,555.2	2.21	0.31	-2.19
9,295.0	89.30	180.80	7,937.7	-1,586.2	2.5	1,586.2	0.97	0.97	0.00
9,327.0	89.60	180.40	7,938.0	-1,618.2	2.2	1,618.2	1.56	0.94	-1.25
9,359.0	89.80	181.00	7,938.2	-1,650.2	1.8	1,650.2	1.98	0.63	1.88
9,391.0	90.10	180.90	7,938.2	-1,682.2	1.2	1,682.2	0.99	0.94	-0.31
9,422.0	90.30	180.60	7,938.1	-1,713.2	0.8	1,713.2	1.16	0.65	-0.97
9,454.0	90.50	180.60	7,937.9	-1,745.1	0.5	1,745.1	0.63	0.63	0.00
9,486.0	89.40	179.50	7,937.9	-1,777.1	0.5	1,777.1	4.86	-3.44	-3.44
9,518.0	88.90	180.10	7,938.4	-1,809.1	0.6	1,809.1	2.44	-1.56	1.88
9,550.0	89.00	179.10	7,939.0	-1,841.1	0.8	1,841.1	3.14	0.31	-3.13
9,581.0	89.10	179.40	7,939.5	-1,872.1	1.2	1,872.1	1.02	0.32	0.97
9,613.0	89.40	179.90	7,939.9	-1,904.1	1.4	1,904.1	1.82	0.94	1.56
9,645.0	89.80	179.40	7,940.2	-1,936.1	1.6	1,936.1	2.00	1.25	-1.56
9,676.0	89.80	179.10	7,940.3	-1,967.1	2.0	1,967.1	0.97	0.00	-0.97
9,708.0	90.20	179.00	7,940.3	-1,999.1	2.5	1,999.1	1.29	1.25	-0.31
9,740.0	90.70	179.40	7,940.0	-2,031.1	3.0	2,031.1	2.00	1.56	1.25
9,772.0	88.80	179.30	7,940.2	-2,063.1	3.3	2,063.1	5.95	-5.94	-0.31
9,803.0	88.30	179.10	7,940.9	-2,094.1	3.8	2,094.1	1.74	-1.61	-0.65
9,835.0	88.40	179.20	7,941.9	-2,126.1	4.2	2,126.1	0.44	0.31	0.31
9,867.0	88.50	178.90	7,942.7	-2,158.1	4.8	2,158.1	0.99	0.31	-0.94
9,899.0	89.10	179.10	7,943.4	-2,190.1	5.3	2,190.1	1.98	1.88	0.63
9,930.0	89.50	179.00	7,943.8	-2,221.0	5.9	2,221.1	1.33	1.29	-0.32
9,962.0	89.70	179.50	7,944.0	-2,253.0	6.3	2,253.0	1.68	0.63	1.56
9,994.0	89.80	179.30	7,944.1	-2,285.0	6.6	2,285.0	0.70	0.31	-0.63
10,026.0	90.10	178.90	7,944.2	-2,317.0	7.1	2,317.0	1.56	0.94	-1.25
10,057.0	90.50	179.40	7,944.0	-2,348.0	7.6	2,348.0	2.07	1.29	1.61
10,089.0	90.80	178.80	7,943.6	-2,380.0	8.1	2,380.0	2.10	0.94	-1.88
10,121.0	91.20	179.50	7,943.1	-2,412.0	8.5	2,412.0	2.52	1.25	2.19
10,153.0	89.80	179.80	7,942.8	-2,444.0	8.7	2,444.0	4.47	-4.38	0.94
10,185.0	89.40	179.90	7,943.0	-2,476.0	8.8	2,476.0	1.29	-1.25	0.31
10,216.0	89.40	180.30	7,943.4	-2,507.0	8.8	2,507.0	1.29	0.00	1.29
10,248.0	89.60	179.70	7,943.6	-2,539.0	8.8	2,539.0	1.98	0.63	-1.88
10,280.0	89.80	180.30	7,943.8	-2,571.0	8.8	2,571.0	1.98	0.63	1.88
10,312.0	89.10	180.60	7,944.1	-2,603.0	8.5	2,603.0	2.38	-2.19	0.94
10,343.0	88.80	180.90	7,944.7	-2,634.0	8.1	2,634.0	1.37	-0.97	0.97
10,375.0	88.80	180.90	7,945.3	-2,666.0	7.6	2,666.0	0.00	0.00	0.00
10,407.0	89.20	180.90	7,945.9	-2,698.0	7.1	2,698.0	1.25	1.25	0.00
10,438.0	89.40	181.00	7,946.3	-2,729.0	6.6	2,729.0	0.72	0.65	0.32
10,470.0	89.50	181.60	7,946.6	-2,761.0	5.9	2,761.0	1.90	0.31	1.88
10,502.0	89.80	181.40	7,946.8	-2,793.0	5.0	2,793.0	1.13	0.94	-0.63
10,534.0	90.20	180.90	7,946.8	-2,824.9	4.4	2,824.9	2.00	1.25	-1.56
10,566.0	89.20	180.90	7,947.0	-2,856.9	3.9	2,856.9	3.13	-3.13	0.00
10,597.0	88.90	181.00	7,947.5	-2,887.9	3.4	2,887.9	1.02	-0.97	0.32

DDC Survey Report



Company: Mewbourne Oil Co
Project: Eddy, New Mexico
Site: Section 5-20 S-29 E
Well: Colt "5" Federal #2H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Colt "5" Federal #2H
TVD Reference: WELL @ 3328.0ft (Patterson UTI #45)
MD Reference: WELL @ 3328.0ft (Patterson UTI #45)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,629.0	89.20	180.90	7,948.0	-2,919.9	2.8	2,919.9	0.99	0.94	-0.31
10,661.0	89.40	180.40	7,948.4	-2,951.9	2.5	2,951.9	1.68	0.63	-1.56
10,693.0	89.40	181.00	7,948.7	-2,983.9	2.1	2,983.9	1.87	0.00	1.88
10,725.0	89.70	180.90	7,949.0	-3,015.9	1.6	3,015.9	0.99	0.94	-0.31
10,756.0	90.20	180.50	7,949.0	-3,046.9	1.2	3,046.9	2.07	1.61	-1.29
10,788.0	90.30	181.10	7,948.9	-3,078.9	0.7	3,078.9	1.90	0.31	1.88
10,820.0	90.60	181.30	7,948.6	-3,110.9	0.1	3,110.9	1.13	0.94	0.63
10,852.0	89.00	181.50	7,948.7	-3,142.9	-0.7	3,142.9	5.04	-5.00	0.63
10,883.0	88.70	181.40	7,949.3	-3,173.9	-1.5	3,173.9	1.02	-0.97	-0.32
10,915.0	88.70	181.10	7,950.1	-3,205.9	-2.2	3,205.8	0.94	0.00	-0.94
10,947.0	88.80	181.00	7,950.8	-3,237.8	-2.8	3,237.8	0.44	0.31	-0.31
10,979.0	89.00	181.10	7,951.4	-3,269.8	-3.4	3,269.8	0.70	0.63	0.31
11,010.0	89.10	181.00	7,951.9	-3,300.8	-3.9	3,300.8	0.46	0.32	-0.32
11,042.0	89.40	181.00	7,952.3	-3,332.8	-4.5	3,332.8	0.94	0.94	0.00
11,074.0	89.50	180.80	7,952.6	-3,364.8	-5.0	3,364.8	0.70	0.31	-0.63
11,105.0	89.80	181.50	7,952.8	-3,395.8	-5.6	3,395.8	2.46	0.97	2.26
11,137.0	90.00	181.00	7,952.9	-3,427.8	-6.3	3,427.8	1.68	0.63	-1.56
11,169.0	90.20	181.50	7,952.8	-3,459.8	-7.0	3,459.8	1.68	0.63	1.56
11,201.0	90.40	181.40	7,952.6	-3,491.8	-7.8	3,491.8	0.70	0.63	-0.31
11,232.0	90.60	181.40	7,952.4	-3,522.8	-8.6	3,522.7	0.65	0.65	0.00
11,264.0	90.60	181.20	7,952.0	-3,554.8	-9.3	3,554.7	0.62	0.00	-0.63
11,296.0	90.50	180.80	7,951.7	-3,586.7	-9.9	3,586.7	1.29	-0.31	-1.25
11,328.0	90.60	181.30	7,951.4	-3,618.7	-10.5	3,618.7	1.59	0.31	1.56
11,359.0	89.10	181.10	7,951.5	-3,649.7	-11.1	3,649.7	4.88	-4.84	-0.65
11,391.0	88.70	180.10	7,952.1	-3,681.7	-11.4	3,681.7	3.37	-1.25	-3.13
11,423.0	88.90	180.00	7,952.8	-3,713.7	-11.5	3,713.7	0.70	0.63	-0.31
11,455.0	89.00	179.70	7,953.4	-3,745.7	-11.4	3,745.7	0.99	0.31	-0.94
11,486.0	88.90	180.00	7,953.9	-3,776.7	-11.3	3,776.7	1.02	-0.32	0.97
11,518.0	89.20	180.10	7,954.5	-3,808.7	-11.3	3,808.7	0.99	0.94	0.31
11,550.0	89.50	179.60	7,954.8	-3,840.7	-11.3	3,840.7	1.82	0.94	-1.56
11,582.0	89.70	179.60	7,955.1	-3,872.7	-11.0	3,872.7	0.63	0.63	0.00
11,645.0	90.30	180.20	7,955.1	-3,935.7	-10.9	3,935.7	1.35	0.95	0.95
11,677.0	90.60	180.40	7,954.8	-3,967.7	-11.1	3,967.7	1.13	0.94	0.63
11,709.0	90.80	180.20	7,954.4	-3,999.7	-11.3	3,999.7	0.88	0.63	-0.63
11,740.0	90.70	180.00	7,954.0	-4,030.7	-11.3	4,030.7	0.72	-0.32	-0.65
11,772.0	90.70	180.00	7,953.6	-4,062.7	-11.3	4,062.7	0.00	0.00	0.00
11,804.0	89.50	179.40	7,953.6	-4,094.7	-11.1	4,094.7	4.19	-3.75	-1.88
11,835.0	89.30	179.10	7,953.9	-4,125.7	-10.7	4,125.7	1.16	-0.65	-0.97
11,867.0	89.80	178.50	7,954.1	-4,157.7	-10.1	4,157.6	2.44	1.56	-1.88
11,899.0	88.40	178.60	7,954.6	-4,189.7	-9.3	4,189.6	4.39	-4.38	0.31
11,931.0	88.10	178.70	7,955.6	-4,221.6	-8.5	4,221.6	0.99	-0.94	0.31
11,962.0	88.20	178.70	7,956.6	-4,252.6	-7.8	4,252.6	0.32	0.32	0.00
11,994.0	88.30	178.60	7,957.6	-4,284.6	-7.0	4,284.6	0.44	0.31	-0.31

DDC Survey Report



Company: Mewbourne Oil Co
Project: Eddy, New Mexico
Site: Section 5-20 S-29 E
Well: Colt "5" Federal #2H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Colt "5" Federal #2H
TVD Reference: WELL @ 3328.0ft (Patterson UTI #45)
MD Reference: WELL @ 3328.0ft (Patterson UTI #45)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,026.0	88.60	178.50	7,958.5	-4,316.6	-6.2	4,316.5	0.99	0.94	-0.31
12,058.0	88.80	178.70	7,959.2	-4,348.5	-5.5	4,348.5	0.88	0.63	0.63
12,090.0	89.30	179.40	7,959.7	-4,380.5	-4.9	4,380.5	2.69	1.56	2.19
12,121.0	89.60	179.00	7,960.0	-4,411.5	-4.5	4,411.5	1.61	0.97	-1.29
12,153.0	89.80	178.90	7,960.2	-4,443.5	-3.9	4,443.5	0.70	0.63	-0.31
12,185.0	89.50	178.60	7,960.4	-4,475.5	-3.2	4,475.5	1.33	-0.94	-0.94
12,216.0	89.50	178.60	7,960.7	-4,506.5	-2.4	4,506.5	0.00	0.00	0.00
12,248.0	88.10	178.30	7,961.3	-4,538.5	-1.6	4,538.5	4.47	-4.38	-0.94
12,280.0	87.70	178.80	7,962.5	-4,570.5	-0.8	4,570.4	2.00	-1.25	1.56
12,312.0	87.70	178.60	7,963.8	-4,602.4	0.0	4,602.4	0.62	0.00	-0.63
12,343.0	87.80	178.60	7,965.0	-4,633.4	0.7	4,633.4	0.32	0.32	0.00
12,375.0	88.10	178.40	7,966.1	-4,665.4	1.5	4,665.4	1.13	0.94	-0.63
12,407.0	88.20	178.60	7,967.2	-4,697.3	2.4	4,697.3	0.70	0.31	0.63
Projection To BIT									
12,461.0	88.20	178.60	7,968.9	-4,751.3	3.7	4,751.3	0.00	0.00	0.00

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
4,742.0	4,737.4	59.8	8.8	Tie-In
7,858.0	7,778.9	-182.6	-2.0	Cross Hardline @ 7858' MD
12,461.0	7,968.9	-4,751.3	3.7	Projection To BIT

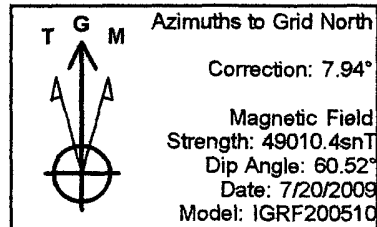
Checked By: _____ Approved By: _____ Date: _____

Colt "5" Federal #2H
Eddy, New Mexico
Q090237 & MI-09205

Company Name: Mewbourne Oil Co
Colt "5" Federal #2H
Eddy, New Mexico
Rig: Patterson UTI #45
Created By: Guthrey Johnson
Date: 8/25/08



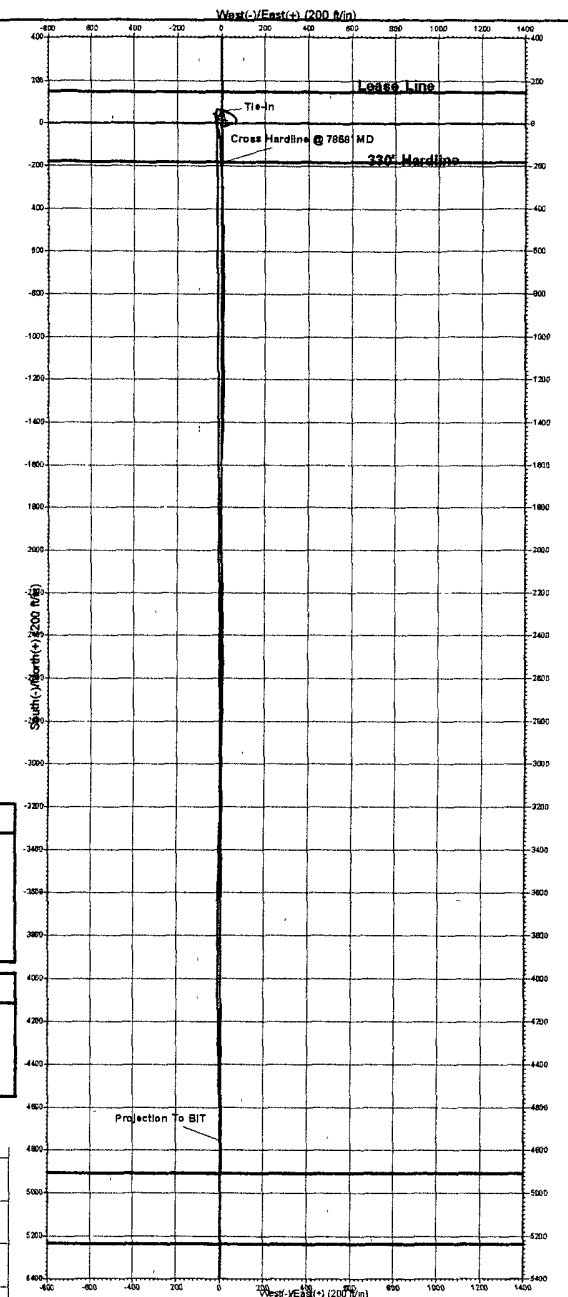
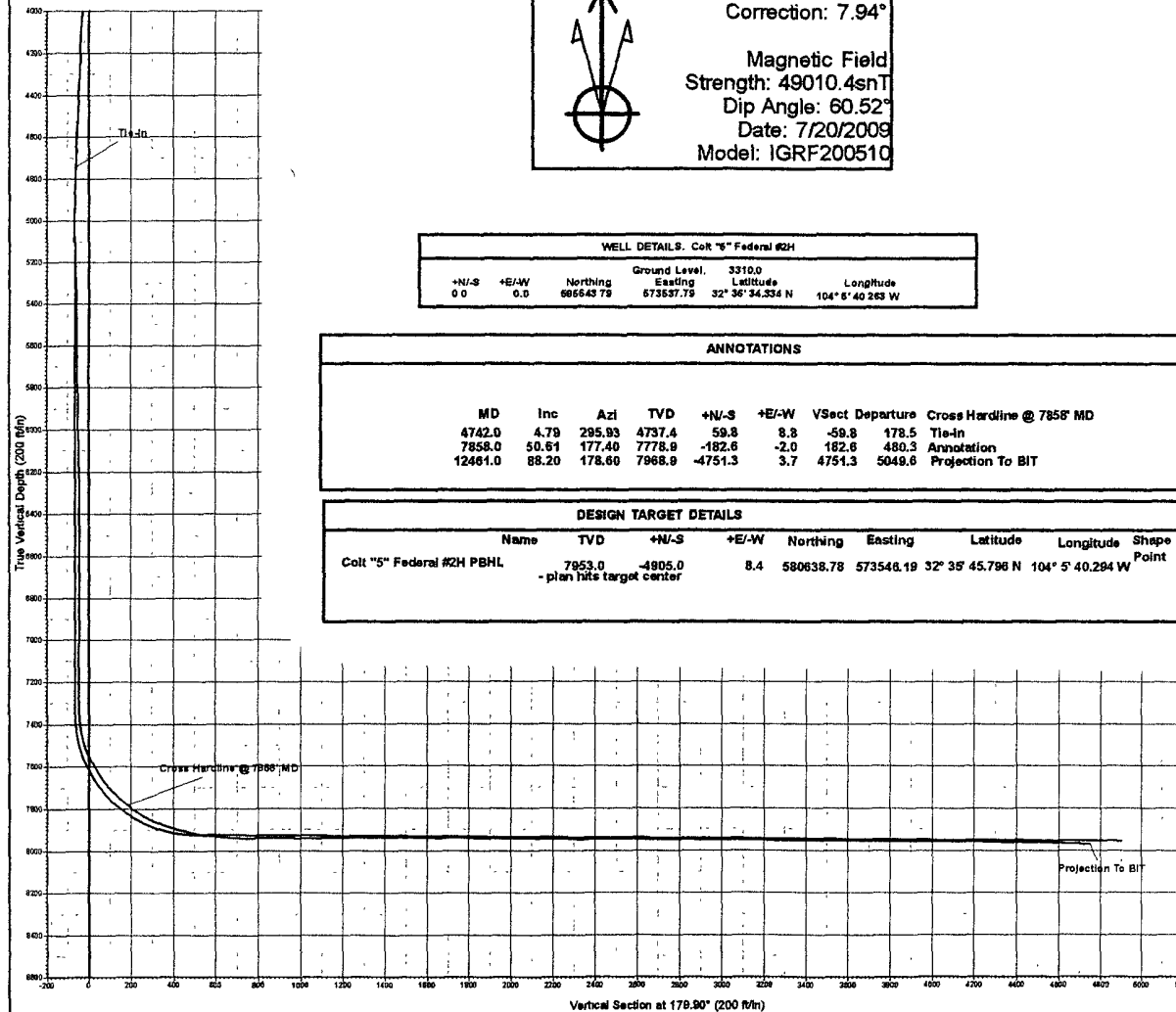
Mewbourne
Oil Company



WELL DETAILS: Colt "5" Federal #2H						
			Ground Level:	3310.0		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.0	0.0	696643.79	573537.79	32° 36' 34.234 N	104° 6' 40.283 W	

ANNOTATIONS							
MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure
4742.0	4.79	295.93	4737.4	59.8	8.8	-59.8	178.5
7858.0	50.61	177.40	7778.9	-182.6	-2.0	182.6	480.3
12461.0	88.20	178.60	7968.9	-4751.3	3.7	4751.3	5049.6
				Cross Hardline @ 7858' MD			
				Tie-in			
				Annotation			
				Projection To BIT			

DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Colt "5" Federal #2H PBHL	7953.0	-4905.0	8.4	580638.78	573548.19	32° 35' 45.796 N	104° 5' 40.294 W	Point
- plan hits target center								



PROJECT DETAILS Eddy, 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