

30-015-38239

Mewbourne Oil Co

Eddy, New Mexico

Sec 9-20S-25E

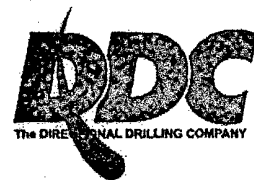
Gunsmoke 9 CD Federal #1H

Wellbore #1

Survey: Gunsmoke 9 CD Federal #1H

DDC Survey Report

04 November, 2010



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Gunsmoke 9 CD Federal #1H
Project:	Eddy, New Mexico	TVD Reference:	WELL @ 3497.0usft (Patterson UTI #101)
Site:	Sec 9-20S-25E	MD Reference:	WELL @ 3497.0usft (Patterson UTI #101)
Well:	Gunsmoke 9 CD Federal #1H	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	Sec 9-20S-25E		
Site Position:		Northing:	579,246.53 usft
From:	Map	Easting:	452,285.51 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 35' 32.491 N
		Longitude:	104° 29' 17.728 W
		Grid Convergence:	-0.08 °

Well	Gunsmoke 9 CD Federal #1H		
Well Position	+N/-S	0.0 usft	Northing: 579,246.53 usft
	+E/-W	0.0 usft	Easting: 452,285.51 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 35' 32.491 N
		Longitude:	104° 29' 17.728 W
		Ground Level:	3,478.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF200510	10/19/2010	(°)
			8.10
			Dip Angle (°)
			60.40
			Field Strength (nT)
			48,834

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 (°)
			270.87

Survey Program	Date 11/4/2010		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
100.0	1,810.0	Scientific Gyro Survey (Wellbore #1)	Good_gyro
1,917.0	4,899.0	Gunsmoke 9 CD Federal #1H (Wellbore #1	MWD default
			Description
			Good Gyro
			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 to Gyro									
1,810.0	0.81	172.21	1,809.6	-30.8	-15.3	14.8	0.00	0.00	0.00
1,917.0	0.60	189.30	1,916.6	-32.1	-15.2	14.8	0.28	-0.20	15.97
1,928.0	0.60	184.40	1,927.6	-32.2	-15.3	14.8	0.47	0.00	-44.55
1,960.0	0.40	207.60	1,959.5	-32.5	-15.3	14.8	0.88	-0.63	72.50
1,992.0	2.80	287.10	1,991.5	-32.3	-16.1	15.6	8.61	7.50	248.44
2,023.0	7.10	290.69	2,022.4	-31.4	-18.6	18.2	13.90	13.87	11.58
2,055.0	11.40	290.10	2,054.0	-29.6	-23.5	23.0	13.44	13.44	-1.84
2,087.0	15.40	287.90	2,085.1	-27.3	-30.5	30.1	12.60	12.50	-6.88
2,119.0	18.80	285.80	2,115.7	-24.5	-39.5	39.1	10.80	10.63	-6.56

DDC Survey Report



Company: Mewbourne Oil Co
Project: Eddy, New Mexico
Site: Sec 9-20S-25E
Well: Gunsmoke 9 CD Federal #1H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Gunsmoke 9 CD Federal #1H
TVD Reference: WELL @ 3497.0usft (Patterson UTI #101)
MD Reference: WELL @ 3497.0usft (Patterson UTI #101)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
2,151.0	22.30	284.80	2,145.7	-21.6	-50.3	50.0	10.99	10.94	-3.13
2,182.0	25.40	284.60	2,174.0	-18.4	-62.4	62.2	10.00	10.00	-0.65
2,214.0	28.70	284.10	2,202.5	-14.8	-76.5	76.3	10.34	10.31	-1.56
2,246.0	31.90	283.00	2,230.1	-11.0	-92.2	92.1	10.15	10.00	-3.44
2,278.0	35.30	282.00	2,256.8	-7.2	-109.5	109.4	10.76	10.63	-3.13
2,310.0	38.20	282.10	2,282.4	-3.2	-128.2	128.2	9.06	9.06	0.31
2,342.0	40.70	280.90	2,307.1	0.8	-148.2	148.2	8.17	7.81	-3.75
2,374.0	43.60	280.70	2,330.8	4.9	-169.3	169.3	9.07	9.06	-0.63
2,406.0	46.20	280.40	2,353.5	9.0	-191.5	191.6	8.15	8.13	-0.94
2,437.0	48.60	279.30	2,374.5	12.9	-213.9	214.1	8.17	7.74	-3.55
2,469.0	52.00	277.60	2,394.9	16.5	-238.3	238.5	11.38	10.63	-5.31
2,501.0	55.00	276.70	2,414.0	19.7	-263.8	264.1	9.64	9.38	-2.81
2,532.0	57.90	276.30	2,431.1	22.6	-289.5	289.8	9.42	9.35	-1.29
2,564.0	60.90	275.60	2,447.4	25.5	-316.9	317.2	9.56	9.38	-2.19
Crossed Section Line @ 2595' MD									
2,594.7	64.07	275.31	2,461.6	28.1	-344.0	344.4	10.35	10.31	-0.94
2,596.0	64.20	275.30	2,462.1	28.2	-345.1	345.5	10.35	10.31	-0.91
2,627.0	67.50	274.90	2,474.8	30.7	-373.3	373.7	10.71	10.65	-1.29
2,659.0	70.60	274.60	2,486.2	33.2	-403.1	403.5	9.73	9.69	-0.94
2,691.0	73.60	273.40	2,496.1	35.3	-433.5	433.9	10.03	9.38	-3.75
2,723.0	76.60	271.40	2,504.3	36.6	-464.4	464.9	11.15	9.38	-6.25
2,754.0	79.90	271.40	2,510.6	37.3	-494.7	495.2	10.65	10.65	0.00
2,786.0	82.90	270.40	2,515.4	37.8	-526.3	526.8	9.87	9.38	-3.13
2,817.0	85.60	270.00	2,518.5	37.9	-557.2	557.7	8.80	8.71	-1.29
2,849.0	87.50	268.60	2,520.4	37.5	-589.1	589.6	7.37	5.94	-4.38
2,881.0	88.30	268.80	2,521.6	36.8	-621.1	621.6	2.58	2.50	0.63
2,913.0	89.60	269.70	2,522.2	36.4	-653.1	653.5	4.94	4.06	2.81
Crossed Hard Line @ 2934' MD									
2,933.9	90.38	269.96	2,522.2	36.3	-674.0	674.4	3.95	3.75	1.25
2,945.0	90.80	270.10	2,522.1	36.3	-685.1	685.5	3.95	3.75	1.25
2,976.0	91.70	271.60	2,521.4	36.8	-716.0	716.5	5.64	2.90	4.84
3,008.0	91.70	271.80	2,520.5	37.7	-748.0	748.5	0.62	0.00	0.63
3,040.0	91.30	271.80	2,519.6	38.7	-780.0	780.5	1.25	-1.25	0.00
3,071.0	91.20	271.60	2,518.9	39.7	-811.0	811.5	0.72	-0.32	-0.65
3,103.0	92.20	271.10	2,518.0	40.4	-842.9	843.5	3.49	3.13	-1.56
3,135.0	92.40	270.70	2,516.7	40.9	-874.9	875.4	1.40	0.63	-1.25
3,164.0	92.20	269.70	2,515.5	41.0	-903.9	904.4	3.51	-0.69	-3.45
3,224.0	90.50	269.70	2,514.1	40.7	-963.9	964.4	2.83	-2.83	0.00
3,281.0	90.20	270.20	2,513.8	40.6	-1,020.9	1,021.4	1.02	-0.53	0.88
3,339.0	89.90	270.40	2,513.7	41.0	-1,078.9	1,079.4	0.62	-0.52	0.34
3,397.0	90.70	270.50	2,513.4	41.4	-1,136.9	1,137.4	1.39	1.38	0.17
3,456.0	90.40	270.40	2,512.9	41.9	-1,195.9	1,196.4	0.54	-0.51	-0.17
3,514.0	90.40	270.40	2,512.5	42.3	-1,253.9	1,254.4	0.00	0.00	0.00

DDC Survey Report



Company: Mewbourne Oil Co
Project: Eddy, New Mexico
Site: Sec 9-20S-25E
Well: Guns smoke 9 CD Federal #1H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Guns smoke 9 CD Federal #1H
TVD Reference: WELL @ 3497.0usft (Patterson UTI #101)
MD Reference: WELL @ 3497.0usft (Patterson UTI #101)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
3,573.0	90.70	270.40	2,511.9	42.7	-1,312.9	1,313.4	0.51	0.51	0.00
3,631.0	90.40	271.10	2,511.3	43.4	-1,370.9	1,371.4	1.31	-0.52	1.21
3,689.0	91.50	270.70	2,510.4	44.4	-1,428.8	1,429.3	2.02	1.90	-0.69
3,745.0	91.60	270.70	2,508.9	45.0	-1,484.8	1,485.3	0.18	0.18	0.00
3,806.0	91.00	269.50	2,507.5	45.1	-1,545.8	1,546.3	2.20	-0.98	-1.97
3,870.0	90.90	269.10	2,506.4	44.4	-1,609.8	1,610.3	0.64	-0.16	-0.63
3,933.0	90.30	269.30	2,505.8	43.5	-1,672.8	1,673.2	1.00	-0.95	0.32
3,997.0	90.00	269.10	2,505.6	42.6	-1,736.8	1,737.2	0.56	-0.47	-0.31
4,060.0	89.80	269.10	2,505.7	41.6	-1,799.8	1,800.2	0.32	-0.32	0.00
4,124.0	89.50	269.00	2,506.1	40.5	-1,863.7	1,864.1	0.49	-0.47	-0.16
4,188.0	90.40	269.10	2,506.1	39.5	-1,927.7	1,928.1	1.41	1.41	0.16
4,252.0	91.00	269.50	2,505.4	38.7	-1,991.7	1,992.1	1.13	0.94	0.63
4,315.0	91.10	270.20	2,504.2	38.5	-2,054.7	2,055.1	1.12	0.16	1.11
4,379.0	91.00	270.50	2,503.0	38.9	-2,118.7	2,119.0	0.49	-0.16	0.47
4,442.0	90.40	270.90	2,502.3	39.7	-2,181.7	2,182.0	1.14	-0.95	0.63
4,506.0	91.50	271.10	2,501.2	40.8	-2,245.7	2,246.0	1.75	1.72	0.31
4,569.0	91.40	271.20	2,499.6	42.1	-2,308.6	2,309.0	0.22	-0.16	0.16
4,633.0	91.00	271.20	2,498.3	43.4	-2,372.6	2,373.0	0.63	-0.63	0.00
4,698.0	91.30	271.10	2,497.0	44.7	-2,437.6	2,438.0	0.49	0.46	-0.15
4,760.0	90.10	270.40	2,496.2	45.5	-2,499.6	2,500.0	2.24	-1.94	-1.13
4,824.0	89.80	270.50	2,496.3	46.0	-2,563.6	2,564.0	0.49	-0.47	0.16
4,855.0	89.60	270.90	2,496.4	46.4	-2,594.6	2,595.0	1.44	-0.65	1.29
TD 4,899.0	89.60	270.90	2,496.7	47.1	-2,638.6	2,639.0	0.00	0.00	0.00

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
1,810.0	1,809.6	-30.8	-15.3	Tie-in to Gyro
2,594.7	2,461.6	28.1	-344.0	Crossed Section Line @ 2595' MD
2,933.9	2,522.2	36.3	-674.0	Crossed Hard Line @ 2934' MD
4,899.0	2,496.7	47.1	-2,638.6	TD

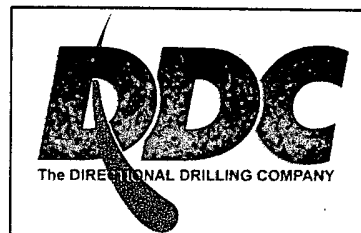
Checked By: _____

Approved By: _____

Date: _____

Gunsmoke 9 CD Federal #1H
Eddy, New Mexico
Q100711 & WT-10507

Mewbourne Oil Company



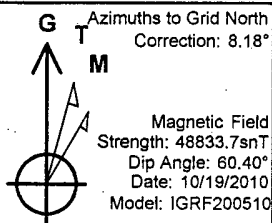
Company Name: Mewbourne Oil Co
Gunsmoke 9 CD Federal #1H
Eddy, New Mexico
Rig: Patterson UTI #101
Created By: Shane Robbins
Date: 11/4/2010

PROJECT DETAILS: Eddy, New Mexico

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1886
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS: Gunsmoke 9 CD Federal #1H

+N/-S	+E/-W	Ground Level	Eastings	Northings	Latitude	Longitude
0.0	0.0	3478.0	579246.52	452285.51	32° 35' 32.492 N	104° 29' 17.728 W

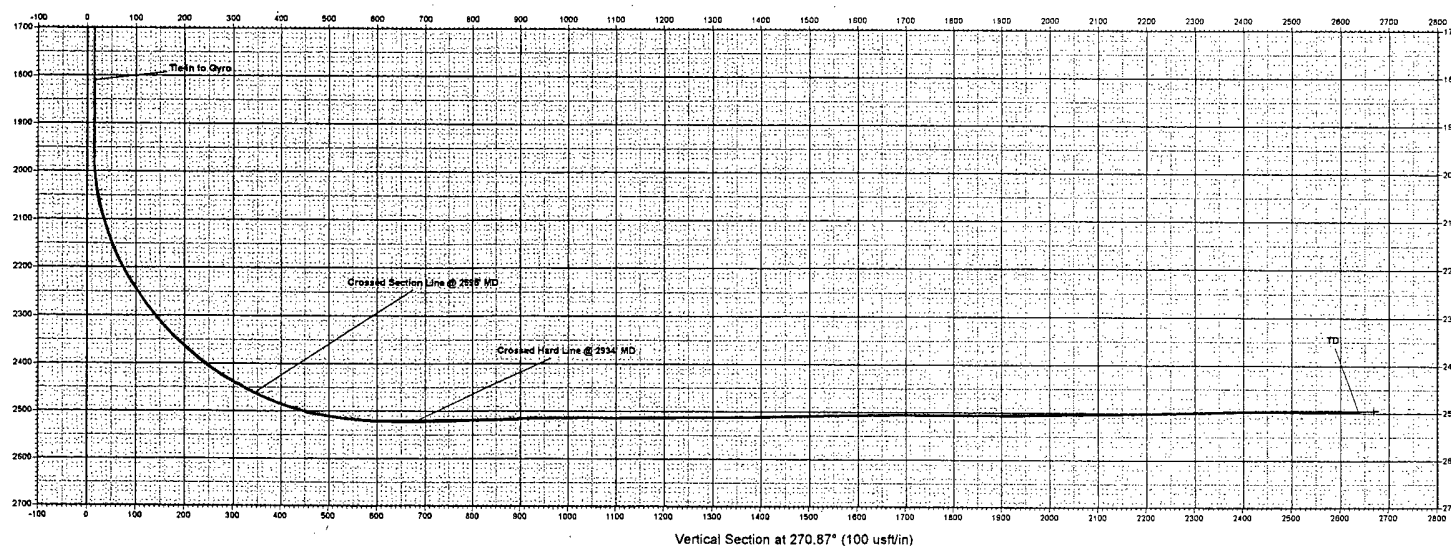
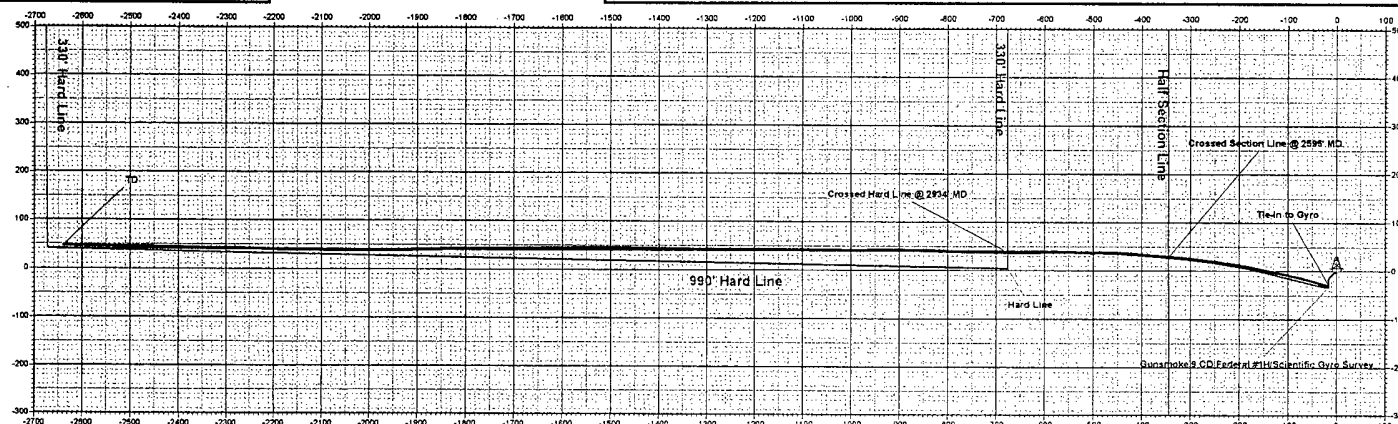


ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	V-Sect	Departure	Annotation
1810.0	0.81	172.21	1809.6	-30.8	-15.3	14.8	38.0	Tie-in to Gyro
2594.7	84.07	275.31	2481.6	28.1	-344.0	344.4	374.8	Crossed Section Line @ 2595' MD
2933.9	90.38	289.98	2522.2	36.3	-674.0	674.4	705.1	Crossed Hard Line @ 2934' MD
4899.0	89.80	276.90	2496.7	47.1	-2638.6	2639.0	2669.9	TD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northings	Eastings	Latitude	Longitude
PSHL Gunsmoke 9 CD Federal #1H Design #2	2495.0	40.4	-2669.8	579288.88	449615.73	32° 35' 32.851 N	104° 29' 48.936 W
- plan hits target center							



Vertical Section at 270.87° (100 usft/in)