

MWD Survey Survey Report

Report Date: September 5, 2008	Survey / DLS Computation Method: Minimum Curvature / Lubinski
Client: Parallel Petroleum Corp.	Vertical Section Azimuth: 0.080°
Field: Eddy County, New Mexico (Parallel Pet.)	Vertical Section Origin: N 0.000 ft, E 0.000 ft
Structure / Slot: Sec. 12, T19S & R21E - Music Box Fed. #1 / Music Box Federal #1	TVD Reference Datum: KB
Well: Music Box Federal #1	TVD Reference Elevation: 4201.0 ft relative to
Borehole: Music Box FED #1 Sidetrack #1	Sea Bed / Ground Level Elevation: 4187.000 ft relative to
UW/APH:	Magnetic Declination: 8.758°
Survey Name / Date: MWD Survey / July 10, 2008	Total Field Strength: 49282.944 nT
Tort / AHD / DDI / ERD ratio: 147.823° / 3912.48 ft / 6.020 / 0.881	Magnetic Dip: 60.511°
Grid Coordinate System: NAD27 New Mexico State Planes, Eastern Zone, US Feet	Declination Date: July 10, 2006
Location Lat/Long: N 32 40 6.324, W 104 44 59.960	Magnetic Declination Model: BGGM 2006
Location Grid N/E Y/Z: N 607135.200 ftUS, E 371784.300 ftUS	North Reference: Grid North
Grid Convergence Angle: -0.22490366°	Total Corr Mag North -> Grid North: +8.981°
Grid Scale Factor: 0.99992792	Local Coordinates Referenced To: Well Head

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Mag / Grav Tool Face (deg)
Tie-In	3880.80	0.77	206.72	3879.35	-87.91	-87.90	-5.72	88.08	183.73	0.15	333.69M
	3963.00	1.10	333.69	3961.55	-87.69	-87.69	-6.32	87.91	184.12	2.05	353.38M
	3995.00	5.10	353.38	3993.50	-86.01	-86.00	-6.62	86.25	184.40	12.75	6.90R
	4026.00	10.80	356.98	4024.19	-81.79	-81.78	-6.93	82.07	184.85	17.80	4.16R
	4058.00	16.40	358.47	4055.30	-74.33	-74.32	-7.21	74.67	185.54	18.16	0.37R
	4090.00	21.50	358.56	4085.55	-63.94	-63.93	-7.48	64.37	186.67	15.94	3.07L
	4122.00	25.80	358.03	4114.86	-51.11	-51.10	-7.86	51.71	188.75	13.45	1.20R
	4153.00	30.10	358.21	4142.24	-36.60	-36.59	-8.34	37.52	192.84	13.87	6.32R
	4185.00	33.60	358.91	4169.41	-19.72	-19.71	-8.76	21.57	203.96	11.00	10.97R
	4217.00	36.00	359.70	4195.69	-1.46	-1.45	-8.98	9.09	280.84	7.63	6.03R
	4249.00	38.60	0.14	4221.14	17.93	17.94	-9.00	20.07	333.36	8.17	14.56R
	4281.00	41.30	1.20	4245.67	38.47	38.49	-8.75	39.47	347.18	8.70	4.46R
	4312.00	43.60	1.46	4268.54	59.39	59.40	-8.27	59.98	352.08	7.44	HS
	4343.00	46.40	1.46	4290.46	81.30	81.31	-7.71	81.68	354.58	9.03	2.87L
	4376.00	50.40	1.20	4312.37	105.97	105.98	-7.14	106.22	356.15	12.14	1.94R
	4408.00	54.50	1.37	4331.87	131.33	131.34	-6.57	131.50	357.14	12.82	7.42L
	4439.00	58.50	0.76	4348.97	157.17	157.18	-6.09	157.30	357.78	13.01	7.95L
	4471.00	61.85	0.23	4364.88	184.93	184.93	-5.85	185.03	358.19	10.57	7.64R
	4502.00	64.20	0.58	4378.95	212.55	212.56	-5.66	212.63	358.48	7.65	8.26L
	4534.00	66.99	0.14	4392.17	241.69	241.70	-5.48	241.76	358.70	8.81	6.86R
	4565.00	69.80	0.50	4403.58	270.51	270.52	-5.31	270.57	358.87	9.13	2.94R
	4597.00	72.97	0.67	4413.79	300.83	300.84	-5.00	300.88	359.05	9.92	4.97R
	4629.00	75.87	0.93	4422.39	331.65	331.65	-4.57	331.69	359.21	9.10	11.36R
	4661.00	78.90	1.55	4429.37	362.86	362.87	-3.90	362.89	359.38	9.66	4.17L
	4695.00	82.30	1.30	4434.93	396.39	396.40	-3.06	396.41	359.56	10.03	3.84R
	4726.00	86.02	1.55	4438.08	427.22	427.22	-2.30	427.23	359.69	12.03	1.38L
	4758.00	89.76	1.46	4439.26	459.18	459.18	-1.46	459.19	359.82	11.69	HS
	4790.00	91.25	1.46	4438.98	491.17	491.17	-0.64	491.17	359.93	4.66	HS
	4828.00	92.22	1.46	4437.83	529.14	529.14	0.33	529.14	0.04	2.55	12.67L
	4860.00	92.62	1.37	4436.47	561.10	561.10	1.12	561.10	0.11	1.28	19.07R
	4891.00	92.88	1.46	4434.99	592.06	592.06	1.88	592.06	0.18	0.89	69.59L
	4923.00	93.01	1.11	4433.34	624.01	624.01	2.60	624.01	0.24	1.17	57.80R
	4955.00	93.23	1.46	4431.60	655.96	655.95	3.31	655.96	0.29	1.29	152.49R
	4987.00	92.04	2.08	4430.13	687.91	687.90	4.30	687.92	0.36	4.19	163.93L
	5018.00	90.20	1.55	4429.52	718.89	718.88	5.28	718.90	0.42	6.18	127.04L
	5050.00	89.80	1.02	4429.52	750.88	750.87	6.00	750.89	0.46	2.07	73.81L
	5082.00	89.85	0.85	4429.62	782.87	782.87	6.52	782.89	0.48	0.55	59.42L
	5114.00	90.11	0.41	4429.63	814.87	814.86	6.87	814.89	0.48	1.60	HS

5145.00	90.33	0.41	4429.51	845.87	845.86	7.10	845.89	0.48	0.71	28.74R
5177.00	90.64	0.58	4429.24	877.87	877.86	7.37	877.89	0.48	1.10	68.87L
5209.00	90.81	0.14	4428.84	909.87	909.86	7.57	909.89	0.48	1.47	141.50L
5241.00	89.93	359.44	4428.63	941.87	941.86	7.46	941.89	0.45	3.51	LS
5272.00	89.80	359.44	4428.71	972.86	972.85	7.15	972.88	0.42	0.42	26.56L
5304.00	89.98	359.35	4428.77	1004.86	1004.85	6.82	1004.88	0.39	0.63	33.18L
5336.00	90.24	359.18	4428.71	1036.86	1036.85	6.41	1036.87	0.35	0.97	HS
5368.00	90.42	359.18	4428.52	1068.85	1068.85	5.95	1068.86	0.32	0.56	90.00R
5400.00	90.42	359.44	4428.29	1100.85	1100.84	5.56	1100.86	0.29	0.81	22.25R
5431.00	90.64	359.53	4428.00	1131.85	1131.84	5.28	1131.85	0.27	0.77	45.00R
5463.00	90.90	359.79	4427.57	1163.84	1163.84	5.09	1163.85	0.25	1.15	60.94L
5495.00	90.95	359.70	4427.05	1195.84	1195.83	4.95	1195.84	0.24	0.32	171.41L
5558.00	90.42	359.62	4426.30	1258.83	1258.83	4.58	1258.83	0.21	0.85	155.50L
5622.00	89.63	359.26	4426.27	1322.83	1322.82	3.95	1322.83	0.17	1.36	12.84R
5685.00	90.42	359.44	4426.24	1385.82	1385.82	3.24	1385.82	0.13	1.29	68.57L
5749.00	90.73	358.65	4425.60	1449.81	1449.81	2.17	1449.81	0.09	1.33	136.58L
5813.00	89.80	357.77	4425.31	1513.77	1513.77	0.17	1513.77	0.01	2.00	20.17R
5876.00	90.29	357.95	4425.26	1576.72	1576.73	-2.18	1576.73	359.92	0.83	11.59R
5940.00	90.68	358.03	4424.71	1640.68	1640.69	-4.43	1640.69	359.85	0.62	169.00L
6001.00	88.88	357.68	4424.95	1701.63	1701.64	-6.71	1701.65	359.77	3.01	76.54R
6064.00	89.05	358.39	4426.09	1764.58	1764.59	-8.87	1764.62	359.71	1.16	HS
6127.00	89.36	358.39	4426.96	1827.55	1827.56	-10.64	1827.59	359.67	0.49	32.19R
6190.00	89.63	358.56	4427.52	1890.52	1890.54	-12.32	1890.58	359.63	0.51	56.56R
6254.00	89.98	359.09	4427.73	1954.50	1954.52	-13.63	1954.57	359.60	0.99	27.94L
6318.00	90.64	358.74	4427.39	2018.49	2018.51	-14.84	2018.56	359.58	1.17	25.90R
6381.00	90.99	358.91	4428.49	2081.47	2081.49	-16.13	2081.55	359.56	0.62	98.26R
6445.00	90.90	359.53	4425.44	2145.45	2145.48	-17.00	2145.54	359.55	0.98	63.43L
6508.00	90.99	359.35	4424.40	2208.44	2208.46	-17.62	2208.53	359.54	0.32	116.13R
6572.00	90.73	359.88	4423.44	2272.43	2272.45	-18.05	2272.53	359.54	0.92	111.09R
6635.00	90.46	0.58	4422.78	2335.42	2335.45	-17.79	2335.52	359.56	1.19	HS
6699.00	90.81	0.58	4422.07	2399.42	2399.44	-17.15	2399.50	359.59	0.55	14.22R
6761.00	91.52	0.76	4420.81	2461.40	2461.43	-16.42	2461.48	359.62	1.18	124.32R
6825.00	90.68	1.99	4419.58	2525.37	2525.39	-14.89	2525.44	359.66	2.33	169.49L
6889.00	89.71	1.81	4419.37	2589.34	2589.36	-12.76	2589.39	359.72	1.54	105.34R
6952.00	89.54	2.43	4419.78	2652.30	2652.31	-10.43	2652.33	359.77	1.02	63.44L
7016.00	89.98	1.55	4420.05	2716.26	2716.27	-8.21	2716.28	359.83	1.54	82.37R
7081.00	90.11	2.52	4420.00	2781.22	2781.23	-5.90	2781.24	359.88	1.51	85.52L
7167.00	90.20	1.37	4419.76	2867.17	2867.18	-2.99	2867.18	359.94	1.34	116.56R
7230.00	89.67	2.43	4419.83	2930.14	2930.14	-0.90	2930.14	359.98	1.88	119.75R
7294.00	89.63	2.50	4420.23	2994.08	2994.08	1.86	2994.08	0.04	0.13	174.94L
7357.00	88.84	2.43	4421.07	3057.02	3057.02	4.57	3057.02	0.09	1.26	66.92R
7420.00	89.10	3.04	4422.20	3119.94	3119.94	7.57	3119.95	0.14	1.05	141.35R
7484.00	88.90	3.20	4423.32	3183.84	3183.83	11.05	3183.85	0.20	0.40	23.57L
7547.00	89.45	2.96	4424.22	3246.75	3246.73	14.44	3246.77	0.25	0.95	16.19L
7610.00	89.76	2.87	4424.66	3309.67	3309.65	17.64	3309.70	0.31	0.51	81.25R
7672.00	89.80	3.13	4424.90	3371.59	3371.57	20.89	3371.63	0.35	0.42	171.61L
7736.00	89.19	3.04	4425.46	3435.50	3435.47	24.33	3435.56	0.41	0.96	36.10R
7800.00	89.67	3.39	4426.10	3499.40	3499.37	27.92	3499.48	0.46	0.93	83.50L
7863.00	89.80	2.25	4426.39	3562.33	3562.29	31.02	3562.42	0.50	1.82	57.85R
7956.00	90.02	2.60	4426.53	3655.25	3655.20	34.95	3655.37	0.55	0.44	34.73L
8030.00	90.02	2.60	4426.02	3729.19	3729.14	37.98	3729.33	0.58	1.23	---

Projection to TD.

Survey Type: Non-Def Survey

Survey Error Model: SLB ISCWSA version 24 *** 3-D 95.00% Confidence 2.7955 sigma

Surveying Prog:

MD From (ft)

MD To (ft)

EOU Freq

Survey Tool Type

Borehole -> Survey

A Gyrodata Directional Survey

for

PARALLEL PETROLEUM

**Lease: Music Box Federal Well: No. 1, 4-1/2" Drillpipe
Location: Patriot #1, Eddy County, New Mexico**

Job Number: MD0706G_221

Run Date: 04 Jul 2006

Surveyor: James King, Anthony Eaton

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 32.668397 deg. N Longitude: 104.783175 deg. W

Azimuth Correction:

Gyro: 0.24000 deg East to Grid North

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location

A Gyrodata Directional Survey

Parallel Petroleum

Lease: Music Box Federal Well: No. 1, 4-1/2" Drillpipe

Location: Patriot #1, Eddy County, New Mexico

Job Number: MD0706G_221

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	BORE HOLE BEARING deg. min.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
0.00	0.00	0.00	N 0 0 E	0.00	0.00	0.0 0.0	0.00 N 0.00 E
0 TO 4585 FT. DROP RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 4-1/2" DRILLPIPE ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO PATRIOT #1 R.K.B.							
100.00	0.34	258.82	S 78 49 W	0.34	100.00	0.3 258.8	0.06 S 0.29 W
200.00	0.28	188.32	S 8 19 W	0.36	200.00	0.7 240.1	0.36 S 0.62 W
300.00	0.29	159.32	S 20 41 E	0.14	300.00	1.0 214.4	0.83 S 0.57 W
400.00	0.28	140.43	S 39 34 E	0.09	400.00	1.3 194.4	1.26 S 0.32 W
500.00	0.52	184.31	S 4 18 W	0.37	499.99	1.9 186.0	1.90 S 0.20 W
600.00	0.60	355.51	N 4 29 W	1.11	599.99	1.9 188.5	1.83 S 0.27 W
700.00	0.92	197.75	S 17 45 W	1.49	699.99	2.1 195.1	2.07 S 0.56 W
800.00	0.85	219.65	S 39 39 W	0.34	799.98	3.6 200.6	3.41 S 1.28 W
900.00	0.99	176.73	S 3 16 E	0.69	899.96	5.1 199.4	4.85 S 1.71 W
926.22	1.80	172.46	S 7 33 E	3.11	926.18	5.7 196.7	5.48 S 1.64 W
1021.53	2.18	165.46	S 14 32 E	0.48	1021.43	8.8 186.5	8.72 S 0.99 W
1116.84	2.62	174.97	S 5 2 E	0.62	1116.66	12.7 181.6	12.65 S 0.34 W
1212.15	2.53	173.90	S 6 6 E	0.11	1211.87	16.9 179.8	16.91 S 0.07 E
1307.46	3.01	173.89	S 6 6 E	0.51	1307.07	21.5 178.5	21.49 S 0.56 E
1402.77	2.80	175.20	S 4 48 E	0.24	1402.26	26.3 177.8	26.30 S 1.02 E
1498.08	2.63	173.34	S 6 39 E	0.20	1497.46	30.8 177.3	30.79 S 1.47 E
1593.39	2.27	186.04	S 6 2 W	0.68	1592.68	34.9 177.5	34.84 S 1.53 E
1688.70	2.19	123.71	S 56 17 E	2.42	1687.93	37.8 175.7	37.73 S 2.84 E
1784.01	2.10	175.07	S 4 56 E	1.95	1783.18	40.7 173.7	40.48 S 4.50 E
1879.32	1.99	176.03	S 3 58 E	0.12	1878.43	44.1 173.8	43.87 S 4.77 E

A Gyrodata Directional Survey

Parallel Petroleum
Lease: Music Box Federal Well: No. 1, 4-1/2" Drillpipe
Location: Patriot #1, Eddy County, New Mexico
Job Number: MD0706G_221

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	BORE HOLE BEARING deg. min.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
1974.63	1.90	182.43	S 2 26 W	0.25	1973.69	47.3 174.2	47.09 S
2069.94	1.83	179.30	S 0 42 E	0.13	2068.95	50.4 174.6	50.19 S
2165.25	1.79	182.79	S 2 47 W	0.12	2164.21	53.4 174.9	53.19 S
2260.56	1.75	198.27	S 18 16 W	0.50	2259.48	56.2 175.7	56.06 S
2355.87	1.62	216.47	S 36 28 W	0.57	2354.75	58.6 177.1	58.52 S
2451.18	1.46	194.07	S 14 4 W	0.65	2450.02	60.8 178.3	60.78 S
2546.49	1.36	193.11	S 13 7 W	0.11	2545.30	63.1 178.8	63.07 S
2641.80	1.32	193.51	S 13 31 W	0.04	2640.59	65.2 179.3	65.23 S
2737.11	1.32	190.97	S 10 58 W	0.06	2735.87	67.4 179.7	67.38 S
2832.42	1.31	196.85	S 16 51 W	0.14	2831.16	69.5 180.2	69.50 S
2927.73	1.24	201.84	S 21 51 W	0.14	2926.44	71.5 180.7	71.50 S
3023.04	1.17	206.28	S 26 17 W	0.12	3021.73	73.4 181.4	73.33 S
3118.35	1.19	202.37	S 22 22 W	0.09	3117.02	75.2 181.9	75.12 S
3213.66	1.13	203.35	S 23 21 W	0.07	3212.31	77.0 182.5	76.90 S
3308.97	1.06	195.86	S 15 52 W	0.17	3307.60	78.7 182.8	78.61 S
3404.28	0.89	194.97	S 14 58 W	0.17	3402.90	80.3 183.1	80.17 S
3499.59	1.11	181.57	S 1 34 W	0.33	3498.20	81.9 183.2	81.81 S
3594.90	0.96	180.98	S 0 59 W	0.16	3593.49	83.7 183.1	83.53 S
3690.21	1.01	192.50	S 12 30 W	0.21	3688.79	85.3 183.2	85.14 S
3785.52	0.87	198.86	S 18 52 W	0.18	3784.08	86.8 183.4	86.64 S
3880.83	0.77	206.72	S 26 43 W	0.15	3879.38	88.1 183.7	87.90 S
3976.14	0.59	216.78	S 36 47 W	0.23	3974.69	89.1 184.1	88.87 S
4071.45	0.49	219.63	S 39 38 W	0.11	4069.99	89.8 184.4	89.58 S
4166.76	0.28	221.84	S 41 50 W	0.23	4165.30	90.4 184.6	90.07 S
							4.82 E
							4.77 E
							4.71 E
							4.19 E
							2.93 E
							1.84 E
							1.28 E
							0.77 E
							0.31 E
							0.22 W
							0.92 W
							1.73 W
							2.54 W
							3.29 W
							3.91 W
							4.34 W
							4.55 W
							4.59 W
							4.79 W
							5.20 W
							5.72 W
							6.31 W
							6.87 W
							7.28 W

A Gyrodata Directional Survey

Parallel Petroleum

Lease: Music Box Federal Well: No. 1, 4-1/2" Drillpipe

Location: Patriot #1, Eddy County, New Mexico

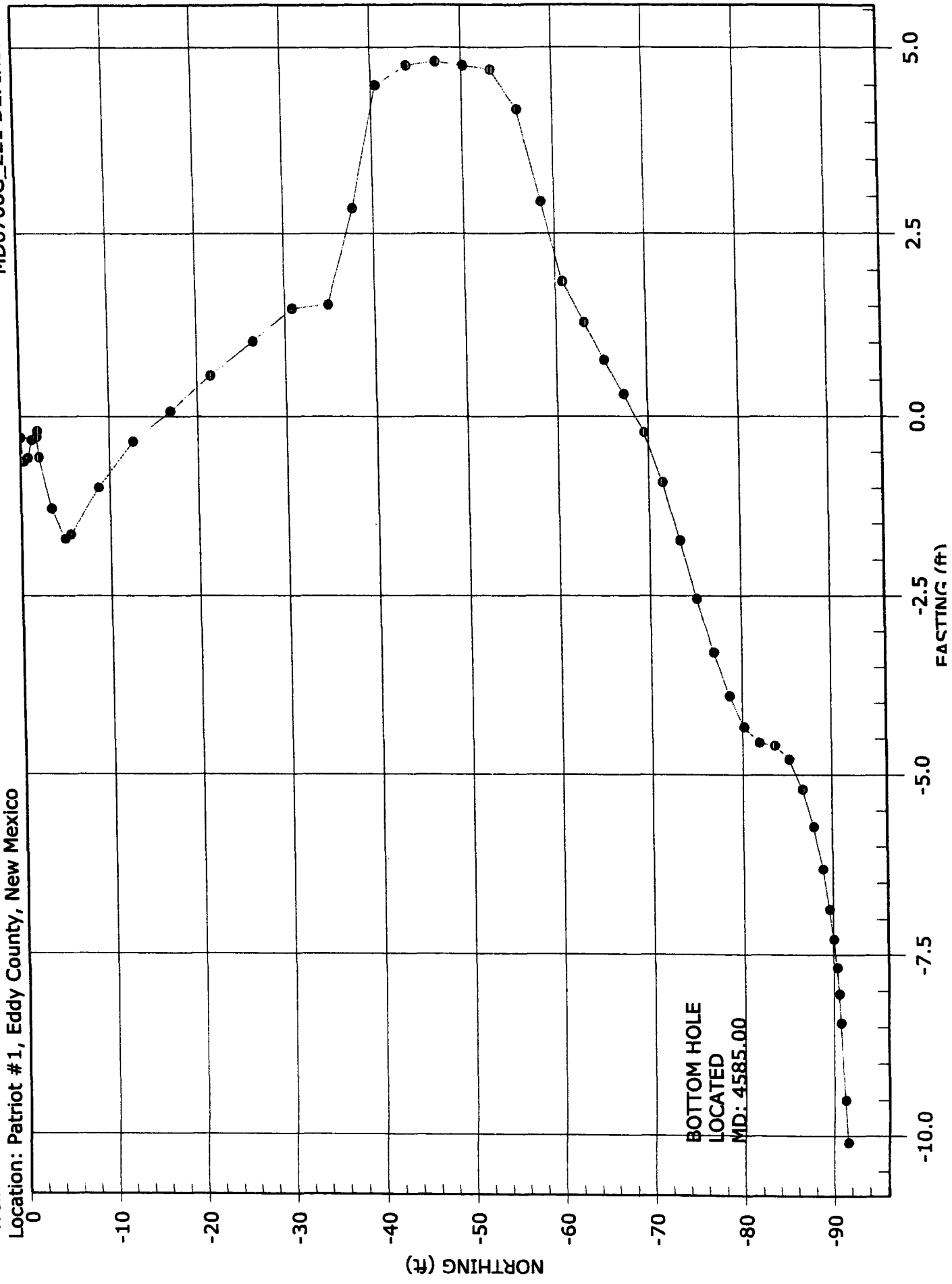
Job Number: MD0706G_221

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	BORE HOLE BEARING deg. min.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
4262.07	0.33	240.86	S 60 51 W	0.12	4260.61	90.7 184.9	90.37 S 7.68 W
4357.38	0.19	230.05	S 50 3 W	0.16	4355.92	91.0 185.1	90.61 S 8.05 W
4452.69	0.34	258.08	S 78 5 W	0.20	4451.23	91.2 185.3	90.77 S 8.44 W
4548.00	1.08	240.94	S 60 57 W	0.80	4546.53	91.8 185.9	91.27 S 9.50 W
4585.00	1.02	242.32	S 62 19 W	0.17	4583.52	92.1 186.3	91.59 S 10.10 W

Final Station Closure: Distance: 92.14 ft Az: 186.29 deg.

Outrun.
Gyrodata
MD0706G_221 DEFINITIVE

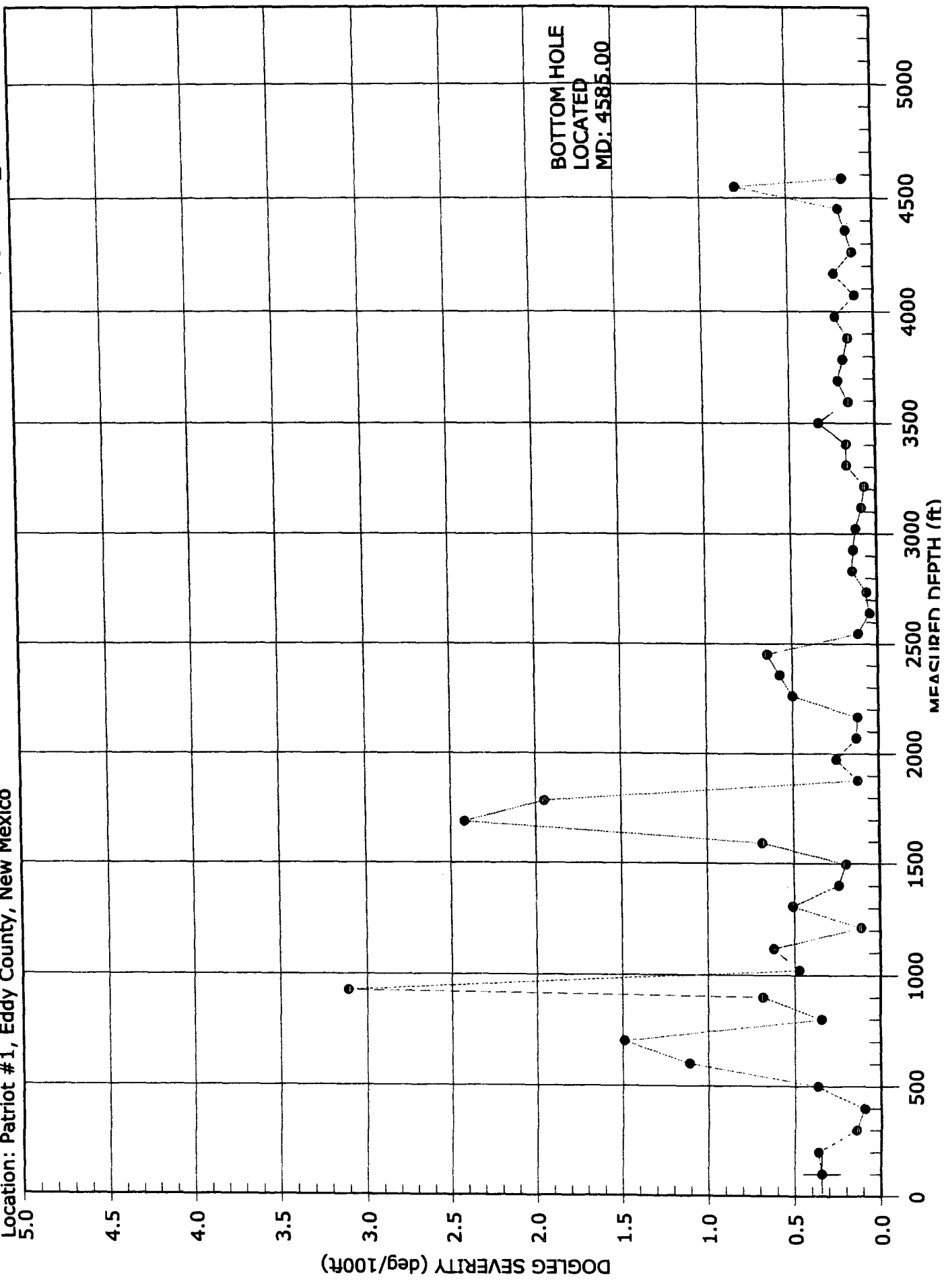
Parallel Petroleum
Well: Music Box Federal No. 1 4-1/2" Drillpipe
Location: Patriot #1, Eddy County, New Mexico



BOTTOM HOLE
LOCATED
MD: 4585.00

Outrun
Gyrodata
MD0706G_221 DEFINITIVE

Parallel Petroleum
Well: Music Box Federal No. 1 4-1/2" Drillpipe
Location: Patriot #1, Eddy County, New Mexico



Parallel Petroleum
Well: Music Box Federal
Location: Patriot #1, Eddy County, New Mexico

MD0706G_221 DEFINITIVE

Outrun
Gyrodata

