

Report Date: September 5, 2006 Client: Parallel Petroleum Corp. Field: Eddy County, New Mexico (Parallel Pet.) Structure / Slot: Sec. 12, T19S & R21E - Music Box Fed. #1 / Music Box Federal #1 Well: Music Box Federal #1 Borehole: Music Box FED #1 Sidetrack #1 UWI/API#: Survey Name / Date: MWD Survey / July 10, 2006 Tort / AHD / DBI / ERD ratio: 147.823° / 3912.48 ft / 6.020 / 0.881 Grid Coordinate System: NAD27 New Mexico State Planes, Eastern Zone, US Feet Location Lat/Long: N 32 40 6.324, W 104 44 59.960 Location Grid N/E Y/X: N 607135.200 ftUS, E 371784.300 ftUS Grid Convergence Angle: -0.22490366° Grid Scale Factor: 0.99992792	Survey / DLS Computation Method: Minimum Curvature / Lubinski Vertical Section Azimuth: 0.080° Vertical Section Origin: N 0.000 ft, E 0.000 ft TVD Reference Datum: KB TVD Reference Elevation: 4201.0 ft relative to Sea Bed / Ground Level Elevation: 4187.000 ft relative to Magnetic Declination: 8.756° Total Field Strength: 49262.944 nT Magnetic Dip: 60.511° Declination Date: July 10, 2006 Magnetic Declination Model: BGGM 2006 North Reference: Grid North Total Corr Mag North -> Grid North: +8.981° Local Coordinates Referenced To: Well Head
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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	10.60	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	358.58	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	260.84	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	73.61L
	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

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

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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

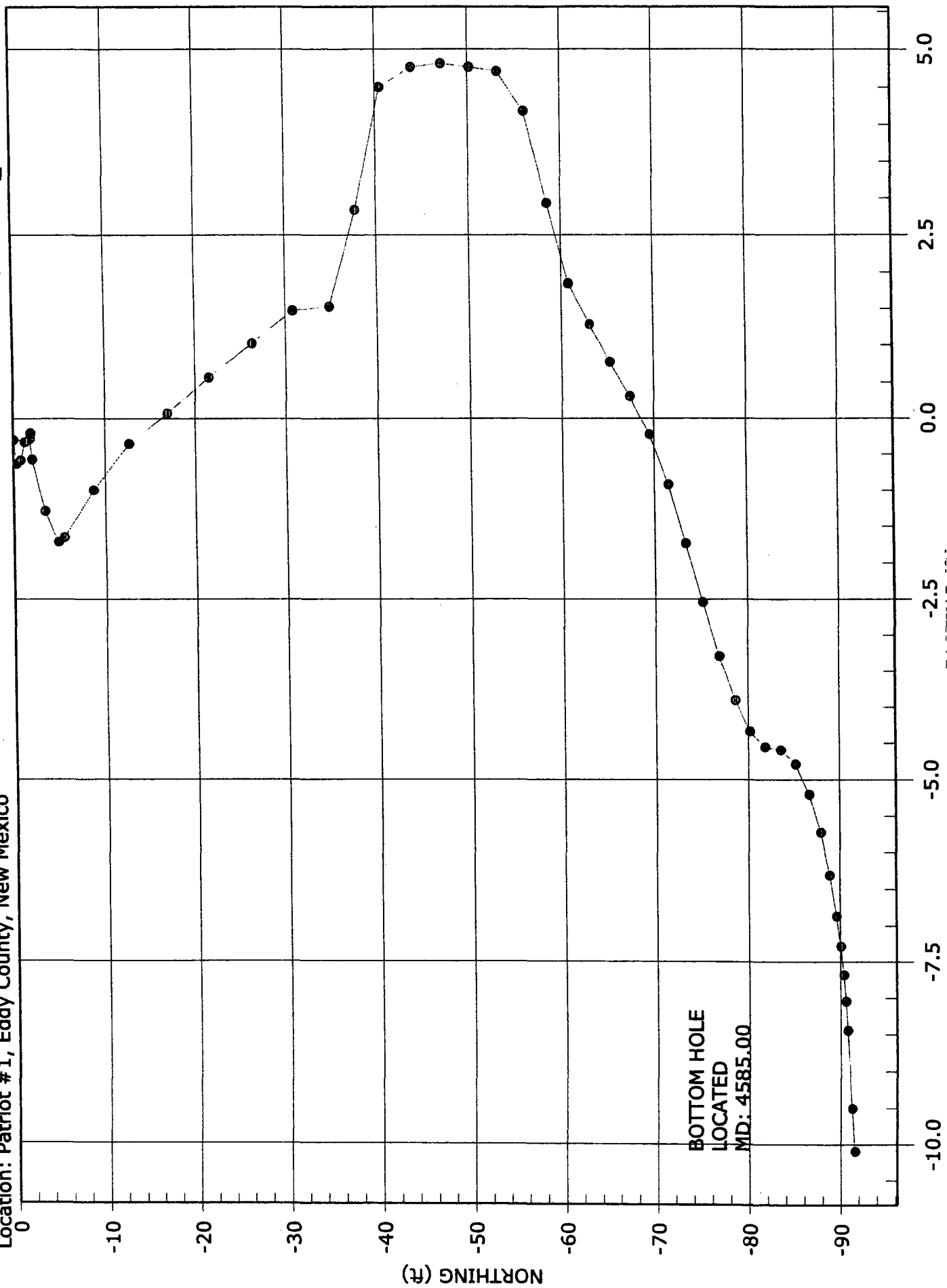
Job Number: MD0706G_221

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
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.

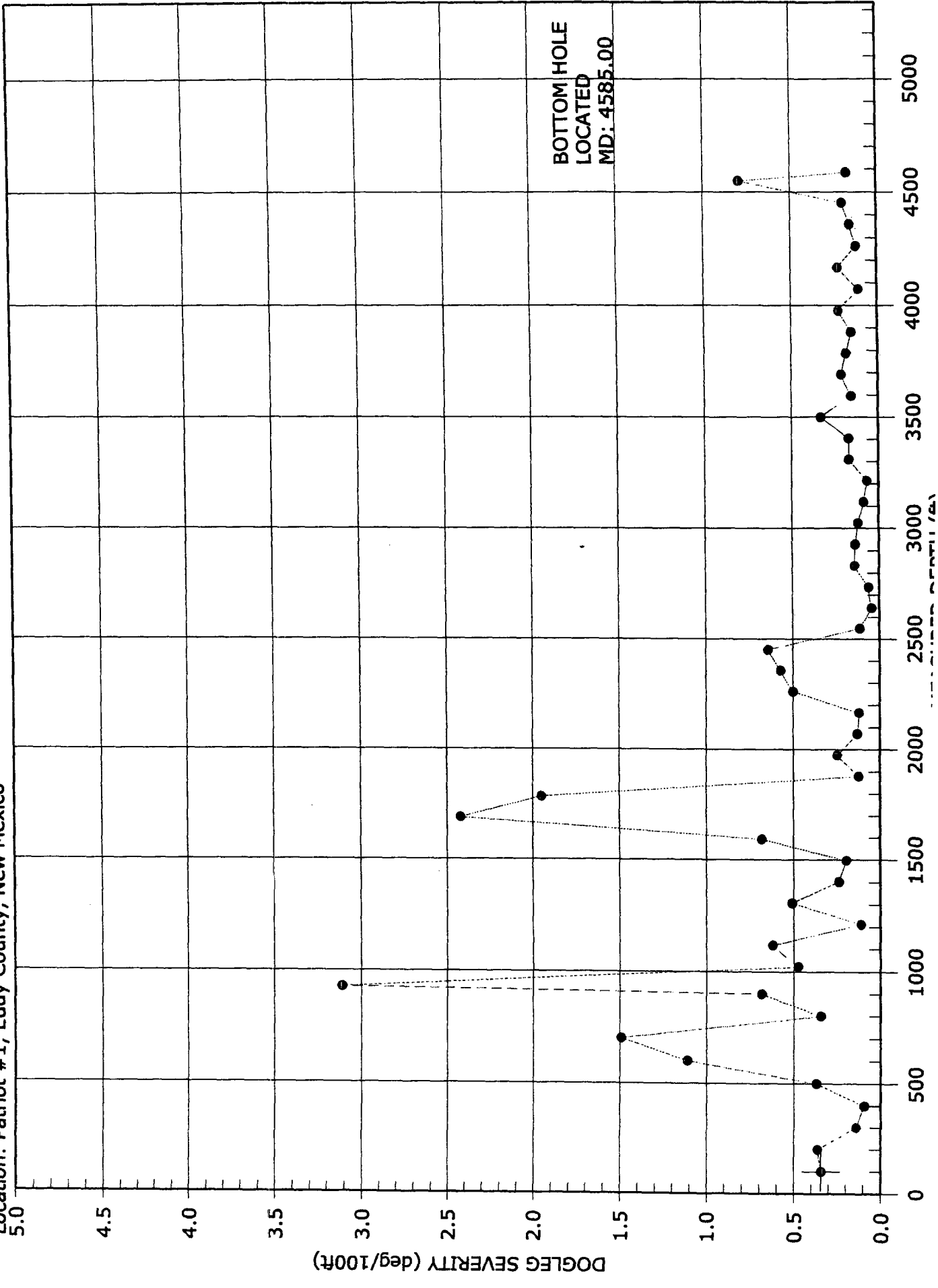
Outrun
Gyrodata
MD0706G_221 DEFINITIVE

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



Outrun
Gyrodata
MD0706G_221 DEFINITIVE

Parallel Petroleum
Well: Music Box Federal No. 1 4-1/2" Drillpipe
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Parallel Petroleum
Well: Music Box Federal
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Outrun
Gyrodata
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