

A Gyrodata Directional Survey

Field Copy Only, not definitive

for

PARALLEL PETROLEUM

Location: J W #4, EDDY COUNTY, NEW MEXICO
Lease: MAIL BOX 1921-23 Well: # 1, 4-1/2" DRILLPIPE

Job Number: MD1106G_319

Run Date: 11/29/2006 1:43:22 AM

Surveyor: THOMAS BOWDEN

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 32.651667 deg. N Longitude: 104.770833 deg. E

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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MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. feet	AZIMUTH deg.	HORIZONTAL COORDINATES feet	
0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.00 N	0.00 E
175.36 TO 3963 FT. RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 4-1/2" DRILLPIPE ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO J W 4 R.K.B (+18')								
175.36	1.11	346.22	0.63	175.35	1.7	346.2	1.65 N	0.41 W
271.02	1.21	0.48	0.32	270.99	3.6	350.2	3.57 N	0.62 W
366.68	1.20	358.17	0.05	366.63	5.6	353.4	5.59 N	0.64 W
462.34	1.43	4.19	0.27	462.26	7.8	355.7	7.78 N	0.59 W
558.00	2.07	35.23	1.17	557.88	10.4	2.7	10.38 N	0.49 E
653.66	2.45	34.68	0.41	653.47	13.7	11.1	13.47 N	2.65 E
749.32	2.55	40.47	0.28	749.03	17.6	17.2	16.77 N	5.20 E
844.98	2.55	40.58	0.01	844.60	21.5	21.7	20.01 N	7.97 E
940.64	3.43	35.59	0.95	940.13	26.4	24.7	23.95 N	11.02 E
1036.30	3.64	33.62	0.25	1035.61	32.2	26.5	28.80 N	14.36 E
1131.96	3.55	33.58	0.09	1131.08	38.1	27.6	33.79 N	17.68 E
1227.62	3.26	33.71	0.30	1226.57	43.8	28.4	38.52 N	20.82 E
1323.28	3.59	40.10	0.53	1322.06	49.4	29.4	43.08 N	24.26 E
1418.94	3.34	37.58	0.31	1417.54	55.2	30.4	47.58 N	27.89 E
1514.60	2.41	37.81	0.97	1513.08	59.9	31.0	51.38 N	30.83 E
1610.26	2.08	39.71	0.35	1608.67	63.6	31.4	54.30 N	33.17 E
1705.92	1.78	36.06	0.35	1704.28	66.8	31.7	56.84 N	35.15 E
1801.58	1.46	32.95	0.34	1799.90	69.5	31.8	59.06 N	36.69 E
1897.24	1.14	28.29	0.35	1895.53	71.7	31.8	60.92 N	37.80 E

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1992.90	0.94	25.12	0.22	1991.18	73.4 31.7	62.46 N 38.58 E
2088.56	0.83	25.14	0.11	2086.83	74.9 31.6	63.79 N 39.21 E
2184.22	0.50	24.60	0.34	2182.48	76.0 31.5	64.80 N 39.67 E
2279.88	0.38	51.04	0.24	2278.14	76.7 31.5	65.38 N 40.10 E
2375.54	0.38	50.97	0.00	2373.79	77.3 31.7	65.78 N 40.59 E
2471.20	0.23	85.55	0.24	2469.45	77.7 31.9	65.99 N 41.03 E
2566.86	0.39	99.25	0.19	2565.11	77.9 32.2	65.95 N 41.55 E
2662.52	0.49	71.81	0.24	2660.77	78.4 32.6	66.03 N 42.26 E
2758.18	0.51	61.25	0.10	2756.42	79.1 33.0	66.36 N 43.02 E
2853.84	0.54	46.90	0.14	2852.08	79.9 33.2	66.88 N 43.73 E
2949.50	0.34	14.96	0.33	2947.74	80.6 33.2	67.46 N 44.13 E
3045.16	0.33	3.01	0.07	3043.40	81.1 33.0	68.01 N 44.22 E
3140.82	0.30	4.03	0.04	3139.05	81.6 32.9	68.53 N 44.25 E
3236.48	0.06	173.39	0.38	3234.71	81.8 32.8	68.73 N 44.28 E
3332.14	0.14	171.63	0.08	3330.37	81.6 32.9	68.56 N 44.30 E
3427.80	0.39	208.71	0.31	3426.03	81.2 32.9	68.16 N 44.16 E
3523.46	1.03	206.68	0.66	3521.69	80.0 33.0	67.10 N 43.62 E
3619.12	1.02	205.54	0.02	3617.33	78.3 33.2	65.57 N 42.86 E
3714.78	0.92	206.66	0.11	3712.98	76.7 33.3	64.11 N 42.15 E
3810.44	0.73	211.60	0.22	3808.63	75.4 33.4	62.90 N 41.49 E
3906.10	0.65	209.43	0.09	3904.28	74.2 33.5	61.92 N 40.91 E
3938.00	0.63	201.88	0.27	3936.18	73.9 33.5	61.60 N 40.75 E

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3948.00	0.57	198.34	0.69	3946.18	73.8 33.5	61.50 N 40.72 E

Final Station Closure: Distance: 73.76 ft Az: 33.51 deg.

SLB MWD Survey Survey Report

Report Date: December 11, 2006	Survey / DLS Computation Method: Minimum Curvature / Lubinski
Client: Parallel Petroleum Corp.	Vertical Section Azimuth: 90.000°
Field: Eddy County, New Mexico (Parallel Pet.)	Vertical Section Origin: N 0.000 ft, E 0.000 ft
Structure / Slot: Sec. 23, T19S & R21E - Mail Box 1921 - 23 Fed. #1 / Mail Box 1921-23 Federal #1	TVD Reference Datum: KB
Well: Mail Box 1921 - 23 Fed. #1	TVD Reference Elevation: 4238.0 ft relative to
Borehole: Mail Box Fed #1 (Original Hole)	Sea Bed / Ground Level Elevation: 4238.000 ft relative to
UWVAP#:	Magnetic Declination: 8.729°
Survey Name / Date: Mail Box Fed. #1 SLB MWD SVY. / November 30, 2006	Total Field Strength: 49222.277 nT
Tort / AHD / DDI / ERD ratio: 145.549° / 4030.44 ft / 6.031 / 0.908	Magnetic Dip: 60.496°
Grid Coordinate System: NAD27 New Mexico State Planes, Eastern Zone, US Feet	Declination Date: November 30, 2006
Location Lat/Long: N 32 39 4.613, W 104 46 14.751	Magnetic Declination Model: BGGM 2006
Location Grid N/E Y/X: N 600924.700 ftUS, E 365365.400 ftUS	North Reference: Grid North
Grid Convergence Angle: -0.23600804°	Total Corr Mag North -> Grid North: +8.965°
Grid Scale Factor: 0.99992985	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/Gyro Data SVY.	3948.00	0.57	198.34	3946.18	40.72	61.50	40.72	73.76	33.51	0.69	106.49M
	3973.00	2.10	106.49	3971.17	41.12	61.25	41.12	73.77	33.87	8.78	94.13M
	4005.00	5.83	94.13	4003.09	43.30	60.97	43.30	74.78	35.38	11.89	4.96L
	4037.00	10.29	91.97	4034.77	47.78	60.75	47.78	77.29	38.18	13.97	2.42L
	4068.00	15.03	91.20	4065.00	54.57	60.57	54.57	81.53	42.02	15.30	3.10L
	4100.00	20.04	90.41	4095.51	64.21	60.45	64.21	88.18	46.73	15.67	0.68L
	4131.00	25.47	90.26	4124.08	76.19	60.38	76.19	97.21	51.61	17.52	10.31R
	4163.00	29.99	91.90	4152.40	91.07	60.08	91.07	109.11	56.59	14.32	18.64R
	4195.00	33.79	94.19	4179.57	107.95	59.16	107.95	123.10	61.27	12.46	18.34R
	4227.00	37.42	96.16	4205.58	126.50	57.47	126.50	138.94	65.57	11.90	19.28R
	4259.00	40.86	97.99	4230.40	146.53	54.97	146.53	156.51	69.44	11.34	16.48R
	4290.00	44.37	99.47	4253.21	167.27	51.78	167.27	175.10	72.80	11.77	11.50R
	4321.00	48.66	100.63	4274.54	189.41	47.85	189.41	195.36	75.82	14.10	12.02R
	4352.00	53.83	101.99	4293.94	213.11	43.10	213.11	217.42	78.57	17.02	12.48R
	4383.00	58.26	103.14	4311.25	238.20	37.50	238.20	241.13	81.05	14.62	15.08R
	4414.00	61.36	104.09	4326.83	264.24	31.19	264.24	266.07	83.27	10.34	9.22R
	4446.00	64.82	104.71	4341.32	291.87	24.09	291.87	292.86	85.28	10.95	5.43R
	4477.00	68.95	105.13	4353.48	319.41	16.75	319.41	319.85	87.00	13.38	3.23R
	4507.00	73.20	105.38	4363.21	346.78	9.28	346.78	346.91	88.47	14.19	1.71L
	4538.00	76.45	105.28	4371.32	375.64	1.37	375.64	375.64	89.79	10.49	7.56R
	4569.00	79.79	105.73	4377.70	404.86	-6.73	404.86	404.92	90.95	10.87	1.09R
	4585.00	81.88	105.77	4380.25	420.06	-11.02	420.06	420.21	91.50	13.06	34.37R
	4598.00	83.10	106.61	4381.95	432.44	-14.62	432.44	432.69	91.94	11.36	8.90L
	4629.00	87.38	105.94	4384.52	462.09	-23.27	462.09	462.68	92.88	13.97	44.26L
	4660.00	88.92	104.44	4385.52	491.99	-31.39	491.99	492.99	93.65	6.93	47.86L
	4691.00	89.11	104.23	4386.06	522.02	-39.06	522.02	523.48	94.28	0.91	117.65R
	4720.00	89.00	104.44	4386.54	550.11	-46.24	550.11	552.05	94.80	0.82	81.54L
	4751.00	89.14	103.50	4387.04	580.19	-53.72	580.19	582.67	95.29	3.07	60.34L
	4782.00	89.59	102.71	4387.38	610.38	-60.75	610.38	613.40	95.68	2.93	101.89L
	4813.00	89.35	101.57	4387.67	640.69	-67.27	640.69	644.21	95.99	3.76	123.32L
	4844.00	88.66	100.52	4388.21	671.11	-73.21	671.11	675.09	96.23	4.05	132.85L
	4875.00	87.90	99.70	4389.14	701.61	-78.65	701.61	706.01	96.40	3.61	19.25L
	4937.00	89.59	99.11	4390.50	762.76	-88.78	762.76	767.91	96.64	2.89	114.06L
	4999.00	88.80	97.34	4391.37	824.12	-97.65	824.12	829.88	96.76	3.13	100.26L
	5060.00	88.52	95.79	4392.79	884.70	-104.62	884.70	890.86	96.74	2.58	84.72L
	5091.00	88.62	94.71	4393.57	915.56	-107.45	915.56	921.84	96.69	3.50	123.21L
	5153.00	87.94	93.67	4395.43	977.36	-111.98	977.36	983.76	96.54	2.00	97.13L
	5215.00	87.70	91.74	4397.79	1039.24	-114.91	1039.24	1045.58	96.31	3.13	124.43L
	5278.00	86.77	90.38	4400.83	1102.16	-116.07	1102.16	1108.25	96.01	2.61	5.42R
	5340.00	88.14	90.51	4403.58	1164.09	-116.55	1164.09	1169.91	95.72	2.22	5.19L
	5402.00	88.80	90.45	4405.23	1226.07	-117.07	1226.07	1231.65	95.45	1.07	28.94R
	5465.00	90.41	91.34	4405.67	1289.06	-118.05	1289.06	1294.45	95.23	2.92	68.07L
	5529.00	90.72	90.57	4405.04	1353.05	-119.12	1353.05	1358.28	95.03	1.30	61.70L
	5593.00	90.86	90.31	4404.16	1417.04	-119.61	1417.04	1422.08	94.82	0.46	90.00L
	5657.00	90.86	90.25	4403.19	1481.03	-119.93	1481.03	1485.88	94.63	0.09	113.37L
	5721.00	90.51	89.44	4402.43	1545.02	-119.75	1545.02	1549.66	94.43	1.38	124.51R

