



30 - 045 - 33020
surface 1535/N 1090/E "H"
BHL 1875/N 736/E "H"

Schlumberger

Elliott GC X 1E MWD 0' to 3450' Survey Report

Report Date: July 16, 2006	Survey / DLS Computation Method: Minimum Curvature / Lubinski
Client: BP	Vertical Section Azimuth: 132.810°
Field: NM San Juan County	Vertical Section Origin: N 0.000 ft; E 0.000 ft
Structure / Slot: BP Elliott GC X 1E / BP Elliott GC X 1E	TVD Reference Datum: Rotary Table
Well: Elliott GC X 1E	TVD Reference Elevation: 6204.0 ft relative to MSL
Borehole: Original Hole	Sea Bed / Ground Level Elevation: 6192.000 ft relative to MSL
UWI/API#:	Magnetic Declination: 10.545°
Survey Name / Date: Elliott GC X 1E MWD 0' to Update / July 11, 2006	Total Field Strength: 51296.716 nT
Tort / AHD / DDI / ERD ratio: 52.789° / 540.72 ft / 4.463 / 0.160	Magnetic Dip: 63.691°
Grid Coordinate System: NAD83 New Mexico State Planes, Western Zone, US Feet	Declination Date: July 11, 2006
Location Lat/Long: N 36 49 44.000, W 107 46 51.000	Magnetic Declination Model: BGGM 2006
Location Grid N/E Y/X: N 2121041.772 ftUS, E 2738456.378 ftUS	North Reference: Grid North
Grid Convergence Angle: +0.03146994°	Total Corr Mag North -> Grid North: +10.514°
Grid Scale Factor: 0.99991694	Local Coordinates Referenced To: Well Head

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	Sub-Sea TVD (ft)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Tool Face (deg)
Tie-In	0.00	0.00	0.00	-6204.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	89.51M
	286.00	1.97	89.51	-5918.06	285.94	3.58	0.04	4.92	4.92	89.51	0.69	83.82M
	357.00	4.25	83.82	-5847.17	358.83	6.19	0.34	8.75	8.76	87.80	3.24	79.19M
	444.00	8.07	79.19	-5760.68	443.32	11.93	1.83	17.96	18.05	84.19	4.42	-24.39G
	521.00	10.12	74.00	-5684.65	519.35	18.64	4.71	29.77	30.14	81.02	2.86	93.72G
	649.00	10.10	78.78	-5558.64	645.36	31.06	9.99	51.59	52.55	79.04	0.66	78.31G
	710.00	10.28	82.94	-5498.60	705.40	37.71	11.70	62.24	63.33	79.35	1.24	80.04G
	814.00	10.79	93.29	-5396.34	807.66	51.20	12.28	81.17	82.09	81.40	1.88	67.78G
	896.00	11.82	103.48	-5315.93	888.07	64.44	9.88	97.00	97.50	84.18	2.74	78.57G
	992.00	12.62	115.55	-5222.09	981.91	83.04	3.07	116.03	116.07	88.49	2.78	116.94G
	1057.00	11.93	123.09	-5158.57	1045.43	96.44	-3.66	128.06	128.12	91.64	2.68	104.96G
	1168.00	11.59	144.74	-5049.85	1154.15	118.67	-19.04	144.12	145.37	97.53	3.96	77.02G
	1269.00	11.93	150.61	-4950.97	1253.03	138.53	-36.42	155.10	159.32	103.21	1.23	131.61G
	1393.00	12.93	151.89	-4829.87	1374.13	163.86	-59.80	167.97	178.30	109.60	0.83	-16.20G
	1453.00	13.36	151.15	-4771.45	1432.55	176.80	-71.78	174.50	188.69	112.36	0.75	-45.28G
	1505.00	13.88	149.00	-4720.91	1483.09	188.49	-82.39	180.61	198.52	114.52	1.40	-7.52G
	1550.00	14.33	148.76	-4677.26	1526.74	199.03	-91.78	186.28	207.66	116.23	1.01	26.20G
	1569.00	14.66	149.40	-4658.87	1545.13	203.59	-95.86	188.72	211.67	116.93	1.93	-36.24G
	1635.00	15.44	147.28	-4595.13	1608.87	220.10	-110.44	197.72	226.48	119.19	1.45	54.02G
	1717.00	16.19	150.84	-4516.24	1687.76	241.54	-129.61	209.19	246.09	121.78	1.50	-53.87G
	1758.00	16.45	149.60	-4476.89	1727.11	252.54	-139.61	214.92	256.28	123.01	1.06	58.28G
	1864.00	16.80	151.51	-4375.32	1828.68	281.42	-166.01	229.82	283.51	125.84	0.61	-111.99G
	1971.00	16.54	149.13	-4272.81	1931.19	310.88	-192.68	245.01	311.70	128.18	0.68	-54.76G
	2034.00	16.65	148.59	-4212.44	1991.56	327.97	-208.08	254.31	328.59	129.29	0.30	-153.61G
	2138.00	16.35	148.06	-4112.72	2091.28	356.43	-233.22	269.82	356.64	130.84	0.32	-114.27G
	2223.00	15.80	143.12	-4031.04	2172.96	379.36	-252.63	283.10	379.43	131.74	1.73	102.04G
	2262.00	15.65	146.07	-3993.50	2210.50	389.70	-261.24	289.22	389.74	132.09	2.09	-142.27G
	2276.00	15.56	145.81	-3980.02	2223.98	393.37	-264.36	291.33	393.39	132.22	0.81	-157.54G
	2343.00	14.85	144.66	-3915.36	2288.64	410.53	-278.80	301.35	410.53	132.77	1.15	-128.32G
	2376.00	14.46	142.64	-3883.43	2320.57	418.73	-285.52	306.29	418.73	132.99	1.95	-171.08G
	2426.00	13.72	142.15	-3834.94	2369.06	430.73	-295.16	313.72	430.74	133.25	1.50	178.14G
	2494.00	12.58	142.32	-3768.72	2435.28	445.99	-307.39	323.19	446.03	133.56	1.68	-164.98G
	2616.00	8.79	135.55	-3648.86	2555.14	468.42	-324.57	337.85	468.49	133.85	3.27	-171.59G
	2700.00	5.97	131.52	-3565.56	2638.44	479.20	-332.05	345.62	479.28	133.85	3.41	-175.61G
	2864.00	1.34	115.98	-3401.94	2802.06	489.56	-338.54	353.73	489.63	133.74	2.86	-94.95M
	2968.00	0.15	265.05	-3297.94	2906.06	490.64	-339.09	354.69	490.70	133.71	1.41	-95.02M
	3105.00	0.18	264.98	-3160.94	3043.06	490.37	-339.12	354.29	490.44	133.75	0.02	132.99M
	3307.00	0.11	132.99	-2958.95	3245.05	490.35	-339.28	354.12	490.42	133.77	0.13	153.54M

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Last Survey	3370.00	0.14	153.54	-2895.95	3308.05	490.49	-339.39	354.20	490.55	133.78	0.08	153.54M
Projection to Bit (straight line)	3450.00	0.14	153.54	-2815.95	3388.05	490.67	-339.57	354.28	490.74	133.78	0.00	0.0

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)

0.00

12.00

MD To (ft)

12.00

3450.00

EOU Freq Survey Tool Type

Act-Stns SLB_MWD-STD-Depth Only

Act-Stns SLB_MWD-STD

Borehole -> Survey

Original Hole -> Elliott GC X 1E MWD 0' to Update

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