

Liburton Drilling System

Survey Report

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Date: 9/18/98

Wellpath ID: survey

Measured Depth (ft)	Incl (deg.)	Drift Dir. (qdeg)	Course Length (ft)	TVD (ft)	Vertical Section (ft)	T O T A L Rectangular Offsets (ft) (ft)		DLS (dg/100ft)
6030.00	0.50	S 15.00 E	238.00	6029.69	-9.98	30.60 N	2.03 E	0.20
6286.00	0.50	N 19.00 E	256.00	6285.68	-10.60	30.57 N	2.68 E	0.37
6490.00	0.25	S 84.00 E	204.00	6489.68	-11.52	31.37 N	3.41 E	0.25
FIRST MWD SURVEY								
6595.00	0.10	S 85.00 E	105.00	6594.68	-11.82	31.34 N	3.73 E	0.14
6626.00	0.60	S 50.70 W	31.00	6625.68	-11.70	31.23 N	3.63 E	2.18
6656.00	1.60	S 65.60 W	30.00	6655.67	-11.14	30.96 N	3.13 E	3.44
6687.00	2.40	S 72.30 W	31.00	6686.65	-10.06	30.58 N	2.12 E	2.68
6717.00	3.30	S 75.60 W	30.00	6716.61	-8.57	30.18 N	0.68 E	3.05
6748.00	4.10	S 80.30 W	31.00	6747.55	-6.58	29.77 N	1.27W	2.76
6780.00	5.10	S 79.40 W	32.00	6779.45	-4.02	29.31 N	3.80W	3.13
6810.00	5.60	S 77.30 W	30.00	6809.31	-1.23	28.75 N	6.54W	1.79
6840.00	6.30	S 75.20 W	30.00	6839.15	1.88	28.00 N	9.56W	2.44
6870.00	6.50	S 76.80 W	30.00	6868.97	5.22	27.20 N	12.80W	0.89
6902.00	7.00	S 75.70 W	32.00	6900.74	8.98	26.30 N	16.45W	1.61
6934.00	7.50	S 75.00 W	32.00	6932.49	13.02	25.28 N	20.36W	1.59
6964.00	7.90	S 75.00 W	30.00	6962.22	17.04	24.24 N	24.24W	1.33
6994.00	8.40	S 75.30 W	30.00	6991.92	21.29	23.15 N	28.35W	1.67
7026.00	9.30	S 75.00 W	32.00	7023.53	26.22	21.89 N	33.11W	2.82
7056.00	10.10	S 73.10 W	30.00	7053.10	31.27	20.49 N	37.97W	2.87
7087.00	10.90	S 73.10 W	31.00	7083.58	36.92	18.85 N	43.38W	2.58
7117.00	11.70	S 73.50 W	30.00	7113.00	42.79	17.16 N	49.01W	2.68
7146.00	12.10	S 73.40 W	29.00	7141.38	48.77	15.46 N	54.74W	1.38
7177.00	12.10	S 74.70 W	31.00	7171.69	55.27	13.68 N	60.99W	0.88
7207.00	12.00	S 74.50 W	30.00	7201.03	61.53	12.01 N	67.03W	0.36
7238.00	12.10	S 73.80 W	31.00	7231.35	68.00	10.24 N	73.25W	0.57
7269.00	12.30	S 72.40 W	31.00	7261.65	74.55	8.34 N	79.52W	1.15
7301.00	12.40	S 72.00 W	32.00	7292.91	81.39	6.25 N	86.03W	0.41
7332.00	12.60	S 71.70 W	31.00	7323.17	88.09	4.16 N	92.41W	0.68
7362.00	12.40	S 72.20 W	30.00	7352.46	94.57	2.14 N	98.58W	0.76
7392.00	12.30	S 73.50 W	30.00	7381.77	100.99	0.25 N	104.71W	0.98
7423.00	12.00	S 73.60 W	31.00	7412.07	107.51	1.60 S	110.97W	0.97
7455.00	12.20	S 73.50 W	32.00	7443.36	114.21	3.49 S	117.41W	0.63
7486.00	12.80	S 72.40 W	31.00	7473.63	120.92	5.46 S	123.82W	2.08
7516.00	12.80	S 72.40 W	30.00	7502.88	127.56	7.47 S	130.15W	0.00
7545.00	13.00	S 71.70 W	29.00	7531.15	134.03	9.47 S	136.31W	0.88
7577.00	12.70	S 72.20 W	32.00	7562.35	141.14	11.67 S	143.08W	1.00