Schlumberger

11/13/07

30-039-29707

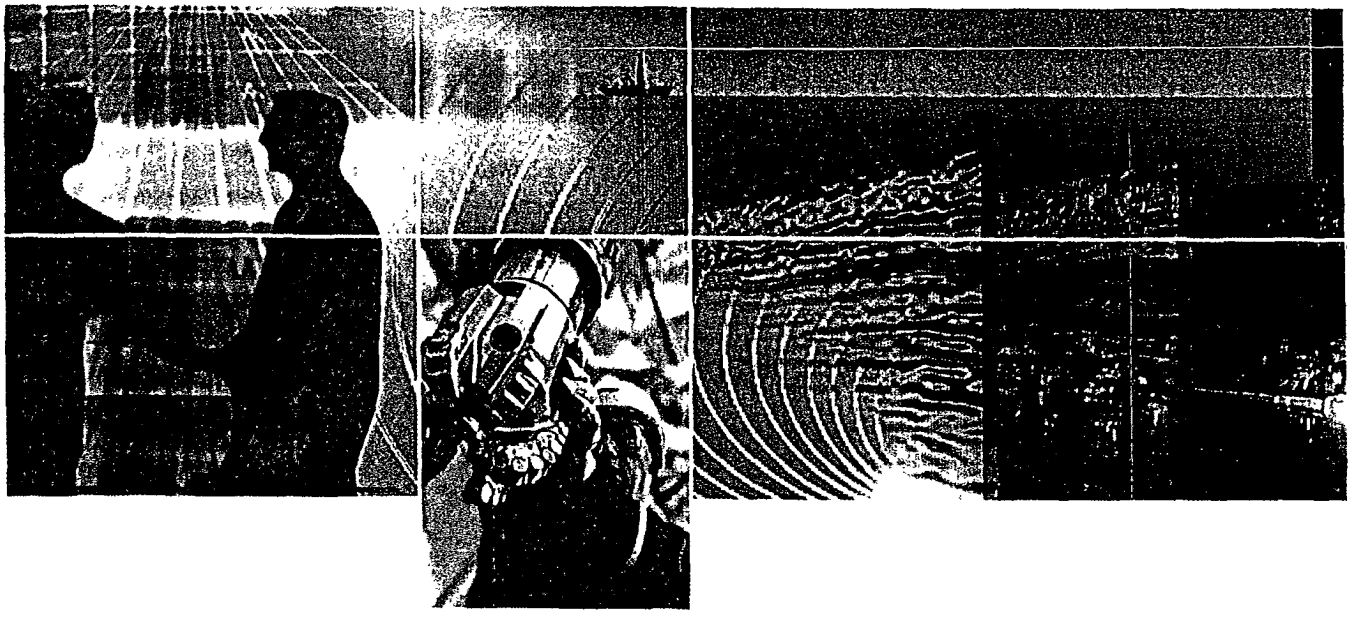
Sec 24
Surface 760N 2540E

Upper Lateral
md 3990 — Top Perf. 719S 1976E Sec 13
TVD 3264
md 7624 — BHL 999N 1087E
TVD 3189

Lower lat.
md 4215 — Top Perf 916S 1902E Sec 13
TVD 3232
md 6639 — BHL 1969N 1267E
TVD 3295

Energen Resources
Navajo Lake 100
S24 T32N R6W
Rio Arriba Co., NM
Aztec 222

End of Well Report | Drilling & Measurements

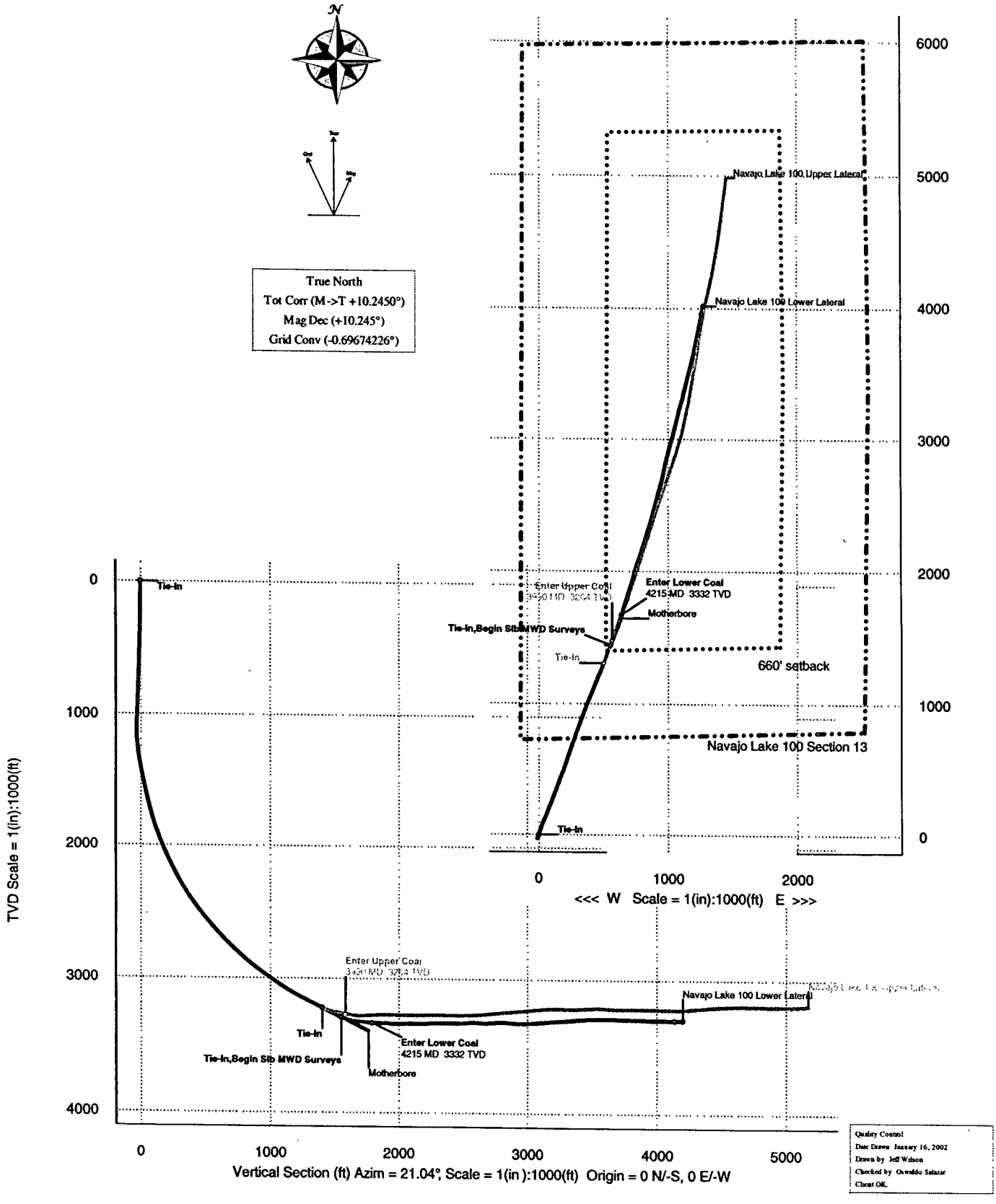


Schlumberger

Energen Resources

WELL	FIELD	STRUCTURE
Navajo Lake 100	County Rio Arriba, NM	Energen 24-32N-6W

Magnetic Parameters				Surface Location				Miscellaneous			
Model: BGGM 2005	Dip: 63.864°	Date: October 29, 2007		Lat: N36 58 16.795	Northing: 2174917.02 ftUS	NAD83 New Mexico State Planes, Central Zone, US Feet		Slot: Energen 24-32N-6W	TVD Ref: RKB (6667.00 ft above MSL)		
	Mag Dec: +10.245°	FS: 51299.5 nT		Lon: W107 24 30.248	Easting: 1302026.08 ftUS	Grid Conv: -0.69674226°	Scale Fact: 1.000031013	Plan: Navajo Lake 100 Lower Lateral	Survey Date: October 29, 2007		



Quality Control
Date Drawn January 16, 2002
Drawn by Jeff Wilson
Checked by Oswaldo Salazar
Client OK

Schlumberger

Navajo Lake 100 Lower Lateral Final Survey Report

Report Date:	October 31, 2007	Survey / DLS Computation Method:	Minimum Curvature / Lubinski
Client:	Energen Resources	Vertical Section Azimuth:	21.040°
Field:	NM, Rio Arriba (NAD83)	Vertical Section Origin:	N 0.000 ft, E 0.000 ft
Structure / Slot:	Energen 24-32N-6W / Energen 24-32N-6W (Navajo Lake 100	TVD Reference Datum:	RKB
Well:	Navajo Lake 100	TVD Reference Elevation:	6667.0 ft relative to MSL
Borehole:	Lower Lateral	Sea Bed / Ground Level Elevation:	6652.000 ft relative to MSL
UWI/API#:		Magnetic Declination:	10.245°
Survey Name / Date:	Navajo Lake 100 LL jsw 29 Oct. 07 / October 29, 2007	Total Field Strength:	51299.529 nT
Tort / AHD / DDI / ERD ratio:	309.455° / 4275.02 ft / 6.420 / 1.280	Magnetic Dip:	63.864°
Grid Coordinate System:	NAD83 New Mexico State Planes, Central Zone, US Feet	Declination Date:	October 29, 2007
Location Lat/Long:	N 36 58 16.795, W 107 24 30.248	Magnetic Declination Model:	BGGM 2005
Location Grid N/E Y/X:	N 2174917.020 ftUS, E 1302026.058 ftUS	North Reference:	True North
Grid Convergence Angle:	-0.69674226°	Total Corr Mag North -> True North:	+10.245°
Grid Scale Factor:	1.00003101	Local Coordinates Referenced To:	Well Head

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	DLS (deg/100 ft)	Northing (ftUS)	Easting (ftUS)	Latitude	Longitude
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2174917.02	1302026.06	N 36 58 16.795	W 107 24 30.248
Tie-In	3.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	2174917.02	1302026.06	N 36 58 16.795	W 107 24 30.248
	103.00	0.40	196.56	103.00	-0.35	-0.33	-0.10	0.40	2174916.69	1302025.95	N 36 58 16.792	W 107 24 30.249
	203.00	0.80	196.56	202.99	-1.39	-1.34	-0.40	0.40	2174915.69	1302025.64	N 36 58 16.782	W 107 24 30.253
	303.00	1.21	196.56	302.98	-3.14	-3.02	-0.90	0.41	2174914.01	1302025.12	N 36 58 16.765	W 107 24 30.259
	403.00	1.61	196.56	402.95	-5.59	-5.38	-1.60	0.40	2174911.66	1302024.39	N 36 58 16.742	W 107 24 30.268
	483.00	1.93	196.56	482.91	-8.06	-7.75	-2.30	0.40	2174909.30	1302023.66	N 36 58 16.719	W 107 24 30.276
	503.00	1.95	197.11	502.90	-8.73	-8.39	-2.50	0.14	2174908.66	1302023.46	N 36 58 16.712	W 107 24 30.279
	603.00	2.03	199.75	602.84	-12.20	-11.69	-3.60	0.12	2174905.38	1302022.32	N 36 58 16.680	W 107 24 30.292
	703.00	2.11	202.17	702.77	-15.81	-15.06	-4.89	0.12	2174902.02	1302020.98	N 36 58 16.646	W 107 24 30.308
	798.00	2.20	204.29	797.70	-19.38	-18.34	-6.30	0.13	2174898.76	1302019.53	N 36 58 16.614	W 107 24 30.326
	803.00	2.20	204.42	802.70	-19.57	-18.52	-6.38	0.10	2174898.58	1302019.45	N 36 58 16.612	W 107 24 30.327
	903.00	2.20	207.11	902.63	-23.40	-21.97	-8.05	0.10	2174895.15	1302017.74	N 36 58 16.578	W 107 24 30.347
	1003.00	2.20	209.81	1002.55	-27.20	-25.35	-9.88	0.10	2174891.80	1302015.87	N 36 58 16.545	W 107 24 30.370
	1043.00	2.20	210.88	1042.52	-28.72	-26.67	-10.65	0.10	2174890.48	1302015.08	N 36 58 16.531	W 107 24 30.379
	1073.00	1.41	218.44	1072.51	-29.64	-27.45	-11.18	2.74	2174889.70	1302014.55	N 36 58 16.524	W 107 24 30.386
	1103.00	0.62	269.33	1102.50	-30.05	-27.75	-11.57	3.76	2174889.42	1302014.15	N 36 58 16.521	W 107 24 30.391
	1133.00	1.32	352.91	1132.50	-29.80	-27.40	-11.78	4.65	2174889.76	1302013.95	N 36 58 16.524	W 107 24 30.393
	1164.00	2.81	6.62	1163.48	-28.75	-26.30	-11.73	5.03	2174890.87	1302014.01	N 36 58 16.535	W 107 24 30.393
	1194.00	4.31	11.81	1193.42	-26.93	-24.46	-11.42	5.11	2174892.70	1302014.34	N 36 58 16.553	W 107 24 30.389
	1203.00	4.67	12.96	1202.39	-26.23	-23.77	-11.27	4.12	2174893.38	1302014.50	N 36 58 16.560	W 107 24 30.387
	1225.00	5.54	15.15	1224.31	-24.29	-21.88	-10.79	4.05	2174895.28	1302015.01	N 36 58 16.579	W 107 24 30.381
	1255.00	6.77	17.35	1254.13	-21.08	-18.79	-9.88	4.17	2174898.35	1302015.95	N 36 58 16.609	W 107 24 30.370
	1286.00	7.83	18.75	1284.88	-17.15	-15.05	-8.66	3.47	2174902.08	1302017.22	N 36 58 16.646	W 107 24 30.355
	1303.00	8.50	19.41	1301.71	-14.74	-12.76	-7.87	3.98	2174904.35	1302018.04	N 36 58 16.669	W 107 24 30.345
	1315.00	8.97	19.81	1313.57	-12.92	-11.05	-7.26	3.95	2174906.06	1302018.67	N 36 58 16.686	W 107 24 30.337
	1346.00	10.20	20.25	1344.14	-7.76	-6.20	-5.49	3.97	2174910.89	1302020.50	N 36 58 16.734	W 107 24 30.316
	1376.00	10.64	20.86	1373.64	-2.33	-1.12	-3.58	1.51	2174915.95	1302022.46	N 36 58 16.784	W 107 24 30.292
	1406.00	11.08	21.13	1403.10	3.32	4.16	-1.56	1.48	2174921.20	1302024.55	N 36 58 16.836	W 107 24 30.267
	1436.00	11.17	21.04	1432.54	9.11	9.56	0.53	0.31	2174926.57	1302026.70	N 36 58 16.890	W 107 24 30.242
	1465.00	11.61	21.83	1460.97	14.84	14.89	2.62	1.61	2174931.88	1302028.86	N 36 58 16.942	W 107 24 30.216
	1496.00	11.96	21.13	1491.32	21.17	20.78	4.94	1.22	2174937.74	1302031.25	N 36 58 17.001	W 107 24 30.187
	1503.00	12.04	20.92	1498.16	22.62	22.14	5.46	1.30	2174939.09	1302031.79	N 36 58 17.014	W 107 24 30.181
	1526.00	12.31	20.25	1520.65	27.47	26.68	7.17	1.32	2174943.61	1302033.55	N 36 58 17.059	W 107 24 30.160
	1556.00	12.66	20.42	1549.94	33.96	32.76	9.42	1.17	2174949.67	1302035.88	N 36 58 17.119	W 107 24 30.132
	1586.00	12.84	20.95	1579.20	40.58	38.96	11.76	0.72	2174955.83	1302038.29	N 36 58 17.180	W 107 24 30.103
	1603.00	13.13	20.75	1595.76	44.40	42.53	13.12	1.73	2174959.38	1302039.69	N 36 58 17.216	W 107 24 30.086
	1617.00	13.37	20.60	1609.39	47.61	45.53	14.25	1.73	2174962.37	1302040.86	N 36 58 17.245	W 107 24 30.072
	1647.00	13.72	20.51	1638.55	54.64	52.11	16.72	1.17	2174968.92	1302043.41	N 36 58 17.310	W 107 24 30.042
	1677.00	14.16	21.04	1667.67	61.86	58.86	19.28	1.53	2174975.65	1302046.05	N 36 58 17.377	W 107 24 30.010
	1707.00	14.60	20.60	1696.73	69.31	65.83	21.93	1.51	2174982.58	1302048.79	N 36 58 17.446	W 107 24 29.978
	1738.00	15.21	20.25	1726.69	77.29	73.30	24.71	1.99	2174990.02	1302051.66	N 36 58 17.520	W 107 24 29.943
	1767.00	15.39	19.90	1754.66	84.94	80.49	27.34	0.70	2174997.17	1302054.37	N 36 58 17.591	W 107 24 29.911
	1796.00	16.00	20.69	1782.58	92.78	87.85	30.06	2.23	2175004.50	1302057.18	N 36 58 17.664	W 107 24 29.878
	1803.00	16.28	20.98	1789.30	94.73	89.66	30.75	4.16	2175006.31	1302057.90	N 36 58 17.682	W 107 24 29.869
	1827.00	17.24	21.92	1812.28	101.65	96.10	33.28	4.16	2175012.72	1302060.51	N 36 58 17.745	W 107 24 29.838
	1857.00	18.64	23.50	1840.82	110.88	104.63	36.86	4.94	2175021.19	1302064.18	N 36 58 17.830	W 107 24 29.794
	1888.00	19.70	25.78	1870.11	121.04	113.87	41.10	4.19	2175030.39	1302068.54	N 36 58 17.921	W 107 24 29.741
	1903.00	19.92	25.96	1884.22	126.11	118.45	43.32	1.52	2175034.94	1302070.82	N 36 58 17.966	W 107 24 29.714
	1918.00	20.14	26.14	1898.31	131.22	123.06	45.58	1.52	2175039.52	1302073.13	N 36 58 18.012	W 107 24 29.686
	1949.00	20.49	24.47	1927.38	141.96	132.79	50.18	2.18	2175049.20	1302077.85	N 36 58 18.108	W 107 24 29.630
	1979.00	21.28	23.68	1955.41	152.63	142.56	54.54	2.80	2175058.91	1302082.33	N 36 58 18.205	W 107 24 29.576
	2010.00	21.98	22.71	1984.23	164.05	153.06	59.04	2.54	2175069.36	1302086.95	N 36 58 18.309	W 107 24 29.520
	2040.00	22.86	22.44	2011.96	175.49	163.63	63.43	2.95	2175079.87	1302091.47	N 36 58 18.413	W 107 24 29.466

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	DLS (deg/100 ft)	Northing (ftUS)	Easting (ftUS)	Latitude	Longitude
	2071.00	23.74	21.74	2040.43	187.75	174.99	68.04	2.98	2175091.17	1302096.22	N 36 58 18.525	W 107 24 29.410
	2101.00	24.45	21.21	2067.82	200.00	186.39	72.52	2.47	2175102.52	1302100.84	N 36 58 18.638	W 107 24 29.354
	2103.00	24.50	21.23	2069.64	200.83	187.16	72.82	2.53	2175103.29	1302101.15	N 36 58 18.646	W 107 24 29.351
	2131.00	25.15	21.48	2095.05	212.58	198.11	77.10	2.35	2175114.18	1302105.57	N 36 58 18.754	W 107 24 29.298
	2161.00	25.76	21.74	2122.14	225.47	210 10	81.85	2.07	2175126.11	1302110.46	N 36 58 18.872	W 107 24 29.239
	2193.00	26.38	22.01	2150.88	239.54	223.15	87.09	1.97	2175139.10	1302115.86	N 36 58 19 002	W 107 24 29.175
	2203.00	26.58	22.07	2159.83	243.99	227.28	88.77	2.02	2175143.21	1302117.58	N 36 58 19.042	W 107 24 29.154
	2224.00	27.00	22.18	2178.58	253.46	236.05	92.33	2.01	2175151.93	1302121.25	N 36 58 19.129	W 107 24 29.110
	2256.00	27.87	21.83	2206.98	268.20	249.72	97.85	2.77	2175165.54	1302126.94	N 36 58 19.264	W 107 24 29.042
	2287.00	28.67	21.48	2234.28	282.88	263.36	103 27	2.64	2175179.11	1302132.53	N 36 58 19.399	W 107 24 28.975
	2303.00	29.17	21.34	2248.29	290.62	270.57	106.10	3.15	2175186.28	1302135.44	N 36 58 19.470	W 107 24 28.941
	2318.00	29.63	21.21	2261.35	297.98	277.43	108.77	3.10	2175193.11	1302138.19	N 36 58 19.538	W 107 24 28.908
	2350.00	30 95	21.21	2288.99	314.12	292.47	114.61	4.13	2175208.09	1302144.22	N 36 58 19.687	W 107 24 28.836
	2381.00	32.10	21.21	2315.41	330.33	307.58	120.47	3.71	2175223.13	1302150.26	N 36 58 19.836	W 107 24 28.763
	2403.00	32.64	20.97	2333.99	342.11	318.57	124.71	2.52	2175234.06	1302154.64	N 36 58 19.945	W 107 24 28.711
	2413.00	32.89	20.86	2342.40	347.52	323.63	126.64	2.57	2175239.10	1302156.63	N 36 58 19.995	W 107 24 28.687
	2444.00	33.85	20.51	2368.29	364.57	339.58	132.66	3.16	2175254.97	1302162.84	N 36 58 20.153	W 107 24 28.613
	2474.00	34.91	20.42	2393.05	381.51	355.45	138.59	3.54	2175270.77	1302168.96	N 36 58 20.310	W 107 24 28.540
	2505.00	36.05	20.60	2418.29	399.50	372.31	144.89	3.69	2175287.55	1302175.47	N 36 58 20.476	W 107 24 28.463
	2535.00	37.02	21.13	2442.40	417.36	388.99	151.25	3.40	2175304.16	1302182.03	N 36 58 20.641	W 107 24 28.384
	2567.00	37.72	20.60	2467.83	436.78	407.14	158.17	2.41	2175322.22	1302189.17	N 36 58 20.821	W 107 24 28.299
	2598.00	38.78	20.60	2492.17	455.97	425.11	164.92	3.42	2175340.10	1302196.14	N 36 58 20.998	W 107 24 28.216
	2603.00	38.94	20.61	2496.07	459.11	428.04	166.03	3.20	2175343.02	1302197.28	N 36 58 21.027	W 107 24 28.202
	2629.00	39.75	20.69	2516.17	475.59	443.47	171.84	3.12	2175358.38	1302203.28	N 36 58 21.180	W 107 24 28.130
	2661.00	40.36	20.51	2540.67	496.19	462.74	179.08	1.94	2175377.56	1302210.76	N 36 58 21.371	W 107 24 28.041
	2691.00	40.54	20.69	2563.49	515.65	480.96	185.93	0.72	2175395.70	1302217.83	N 36 58 21.551	W 107 24 27.957
	2703.00	40.73	20.49	2572.60	523.46	488.28	188.68	1.92	2175402.98	1302220.67	N 36 58 21.623	W 107 24 27.923
	2723.00	41.06	20.16	2587.72	536.56	500.56	193.23	1.97	2175415.20	1302225.36	N 36 58 21.744	W 107 24 27.867
	2753.00	41.42	19.90	2610.28	556.33	519.14	200.00	1.33	2175433.70	1302232.36	N 36 58 21.928	W 107 24 27.783
	2784.00	42.12	19.90	2633.40	576.98	538.55	207.03	2.26	2175453.03	1302239.63	N 36 58 22.120	W 107 24 27.697
	2803.00	42.70	20.11	2647.43	589.79	550.59	211.41	3.14	2175465.02	1302244.16	N 36 58 22.239	W 107 24 27.643
	2816.00	43.09	20.25	2656.95	598.64	558.90	214.47	3.09	2175473.29	1302247.31	N 36 58 22.321	W 107 24 27.605
	2864.00	44.58	19.46	2691.57	631.87	590.17	225.75	3.31	2175504.42	1302258.98	N 36 58 22.630	W 107 24 27.466
	2894.00	44.93	19.63	2712.88	652.99	610.07	232.82	1.23	2175524.23	1302266.29	N 36 58 22.827	W 107 24 27.379
	2903.00	45.12	19.55	2719.24	659.35	616.07	234.96	2.20	2175530.21	1302268.49	N 36 58 22.887	W 107 24 27.353
	2924.00	45.55	19.37	2734.00	674.28	630.15	239.93	2.14	2175544.23	1302273.64	N 36 58 23.026	W 107 24 27.291
	2955.00	46.34	19.28	2755.56	696.55	651.18	247.30	2.56	2175565.16	1302281.27	N 36 58 23.234	W 107 24 27.200
	2985.00	47.48	19.10	2776.05	718.45	671.87	254.50	3.83	2175585.76	1302288.72	N 36 58 23.438	W 107 24 27.112
	3003.00	48.01	19.08	2788.15	731.76	684.46	258.86	2.95	2175598.30	1302293.23	N 36 58 23.563	W 107 24 27.058
	3015.00	48.36	19.06	2796.16	740.70	692.91	261.78	2.92	2175606.72	1302296.26	N 36 58 23.646	W 107 24 27.022
	3046.00	49.15	19.49	2816.59	764.00	714.91	269.48	2.75	2175628.62	1302304.22	N 36 58 23.864	W 107 24 26.927
	3075.00	49.59	19.35	2835.48	786.00	735.67	276.80	1.56	2175649.29	1302311.79	N 36 58 24.069	W 107 24 26.837
	3106.00	50.21	20.26	2855.44	809.70	757.98	284.83	3.01	2175671.50	1302320.09	N 36 58 24.290	W 107 24 26.738
	3136.00	51.09	20.75	2874.47	832.90	779.71	292.96	3.19	2175693.13	1302328.48	N 36 58 24.504	W 107 24 26.638
	3167.00	52.23	20.95	2893.70	857.21	802.43	301.61	3.71	2175715.74	1302337.41	N 36 58 24.729	W 107 24 26.531
	3197.00	53.20	20.86	2911.87	881.08	824.73	310.13	3.24	2175737.94	1302346.20	N 36 58 24.950	W 107 24 26.426
	3203.00	53.41	20.82	2915.45	885.89	829.22	311.84	3.54	2175742.41	1302347.97	N 36 58 24.994	W 107 24 26.405
	3228.00	54.26	20.65	2930.21	906.08	848.10	318.99	3.44	2175761.20	1302355.34	N 36 58 25.181	W 107 24 26.317
	3258.00	54.78	20.32	2947.62	930.51	870.98	327.54	1.95	2175783.98	1302364.17	N 36 58 25.407	W 107 24 26.212
	3288.00	55.40	19.92	2964.79	955.10	894.08	336.00	2.34	2175806.98	1302372.91	N 36 58 25.635	W 107 24 26.107
	3303.00	55.48	20.22	2973.30	967.45	905.69	340.24	1.73	2175818.53	1302377.29	N 36 58 25.750	W 107 24 26.055
	3319.00	55.57	20.53	2982.35	980.64	918.05	344.83	1.69	2175830.84	1302382.04	N 36 58 25.872	W 107 24 25.999
	3349.00	55.40	20.42	2999.35	1005.36	941.21	353.48	0.64	2175853.89	1302390.96	N 36 58 26.101	W 107 24 25.892
	3379.00	56.10	21.14	3016.24	1030.16	964.39	362.27	3.06	2175876.96	1302400.04	N 36 58 26.331	W 107 24 25.784
	3410.00	56.72	21.68	3033.39	1055.98	988.43	371.70	2.47	2175900.89	1302409.76	N 36 58 26.568	W 107 24 25.667
	3442.00	57.51	22.24	3050.76	1082.85	1013.35	381.75	2.87	2175925.69	1302420.11	N 36 58 26.815	W 107 24 25.544
	3472.00	58.56	22.81	3066.64	1108.29	1036.86	391.50	3.85	2175949.08	1302430.15	N 36 58 27.047	W 107 24 25.423
	3504.00	59.62	22.50	3083.08	1135.74	1062.20	402.08	3.42	2175974.28	1302441.03	N 36 58 27.298	W 107 24 25.293
	3535.00	61.03	22.34	3098.43	1162.66	1087.10	412.35	4.57	2175999.05	1302451.61	N 36 58 27.544	W 107 24 25.167
	3567.00	61.99	22.22	3113.69	1190.78	1113.12	423.01	3.02	2176024.95	1302462.59	N 36 58 27.801	W 107 24 25.035
	3598.00	62.43	22.71	3128.15	1218.20	1138.47	433.49	1.99	2176050.16	1302473.37	N 36 58 28.052	W 107 24 24.906
	3603.00	62.64	22.61	3130.45	1222.63	1142.56	435.20	4.56	2176054.24	1302475.13	N 36 58 28.092	W 107 24 24.885
	3629.00	63.75	22.09	3142.18	1245.83	1164.02	444.02	4.63	2176075.59	1302484.22	N 36 58 28.304	W 107 24 24.776
	3661.00	63.93	22.36	3156.29	1274.55	1190.61	454 89	0.94	2176102.05	1302495.40	N 36 58 28.567	W 107 24 24.642
	3692.00	63.93	22.09	3169.91	1302.39	1216.39	465.42	0.78	2176127.69	1302506.25	N 36 58 28.822	W 107 24 24.513
	3703.00	64.09	22.06	3174.73	1312.27	1225.55	469.14	1.48	2176136.81	1302510.08	N 36 58 28.913	W 107 24 24.467
	3722.00	64.37	22.01	3182.99	1329.38	1241.41	475.55	1.49	2176152.59	1302516.69	N 36 58 29.070	W 107 24 24.388
	3752.00	64.46	22.27	3195.95	1356.43	1266.47	485.75	0.84	2176177.53	1302527.19	N 36 58 29.317	W 107 24 24.262
	3783.00	64.28	21.74	3209.35	1384.38	1292.39	496.22	1.65	2176203.32	1302537.98	N 36 58 29.574	W 107 24 24.133
	3803.00	64.22	21.29	3218.04	1402.39	1309.15	502.83	2.05	2176219.99	1302544.79	N 36 58 29.739	W 107 24 24.051
	3814.00	64.19	21.04	3222.83	1412.30	1318.38	506.41	2.06	2176229.18	1302548.47	N 36 58 29.831	W 107 24 24.007

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	DLS (deg/100 ft)	Northing (ftUS)	Easting (ftUS)	Latitude	Longitude
	3844.00	63.66	20.42	3236.02	1439.24	1343.58	515.95	2.56	2176254.27	1302558.32	N 36 58 30.080	W 107 24 23.890
	3874.00	64.37	20.51	3249.16	1466.21	1368.85	525.37	2.38	2176279.42	1302568.05	N 36 58 30.330	W 107 24 23.774
	3905.00	64.81	20.86	3262.46	1494.21	1395.04	535.27	1.75	2176305.49	1302578.26	N 36 58 30.589	W 107 24 23.652
	3914.00	64.81	20.92	3266.29	1502.35	1402.65	538.17	0.60	2176313.07	1302581.26	N 36 58 30.664	W 107 24 23.616
	3934.00	64.81	21.04	3274.81	1520.45	1419.55	544.65	0.54	2176329.88	1302587.94	N 36 58 30.831	W 107 24 23.536
Tie-In,Begin Slb MWD Surveys	3965.00	64.98	20.95	3287.96	1548.52	1445.76	554.71	0 61	2176355.97	1302598.32	N 36 58 31.090	W 107 24 23.412
	4039.00	76.96	20.39	3312.04	1618.35	1511.10	579.34	16.20	2176421.00	1302623.75	N 36 58 31.736	W 107 24 23.109
	4071.00	81.89	20.16	3317.91	1649.79	1540.60	590.24	15.42	2176450.37	1302635.01	N 36 58 32.028	W 107 24 22.974
	4098.00	84.65	19.97	3321.08	1676.60	1565.78	599.44	10.25	2176475.44	1302644.51	N 36 58 32.277	W 107 24 22.861
	4129.00	85.52	19.76	3323.73	1707.48	1594.83	609.93	2.89	2176504.36	1302655.36	N 36 58 32.564	W 107 24 22.732
	4158.00	83.76	19.57	3326.44	1736.34	1622.02	619.65	6.10	2176531.43	1302665.40	N 36 58 32.833	W 107 24 22.612
Top of Lower Coal	*4215.00*	*85.00*	*19.19*	*3332.02*	*1793.04*	*1675.53*	*638.47*	*2.27*	*2176584.71*	*1302684.88*	*N 36 58 33.362*	*W 107 24 22.380*
	4220.00	85.11	19.16	3332.46	1798.02	1680.23	640.11	2.27	2176589.39	1302686.57	N 36 58 33.408	W 107 24 22.360
	4286.00	92.34	18.73	3333.92	1863.92	1742.60	661.52	10.97	2176651.50	1302708.74	N 36 58 34.025	W 107 24 22.096
	4347.00	84.46	18.69	3335.62	1924.80	1800.31	681.06	12.92	2176708.96	1302728.98	N 36 58 34.596	W 107 24 21.855
	4378.00	86.59	17.70	3338.04	1955.66	1829.67	690.71	7.57	2176738.20	1302738.99	N 36 58 34.886	W 107 24 21.736
	4408.00	89.97	17.80	3338.94	1985.59	1858.22	699.85	11.27	2176766.65	1302748.48	N 36 58 35.168	W 107 24 21.623
	4445.00	92.13	18.34	3338.27	2022.54	1893.39	711.33	6.02	2176801.67	1302760.38	N 36 58 35.516	W 107 24 21.482
	4476.00	92.89	17.16	3336.91	2053.45	1922.88	720.77	4.52	2176831.05	1302770.18	N 36 58 35.807	W 107 24 21.366
	4509.00	90.24	15.91	3336.01	2086.34	1954.50	730.15	8.88	2176862.56	1302779.95	N 36 58 36.120	W 107 24 21.250
	4540.00	88.49	16.08	3336.35	2117.21	1984.30	738.70	5.67	2176892.25	1302788.85	N 36 58 36.415	W 107 24 21.145
	4576.00	88.59	15.50	3337.27	2153.05	2018.93	748.49	1.63	2176926.76	1302799.06	N 36 58 36.757	W 107 24 21.024
	4603.00	91.34	17.55	3337.28	2179.96	2044.81	756.17	12.70	2176952.54	1302807.06	N 36 58 37.013	W 107 24 20.929
	4638.00	94.16	20.03	3335.60	2214.89	2077.90	767.43	10.72	2176985.50	1302818.72	N 36 58 37.340	W 107 24 20.791
	4667.00	93.89	20.87	3333.57	2243.82	2105.01	777.53	3.04	2177012.48	1302829.15	N 36 58 37.608	W 107 24 20.666
	4702.00	94.16	17.39	3331.11	2278.70	2137.99	788.97	9.95	2177045.32	1302840.99	N 36 58 37.934	W 107 24 20.525
	4732.00	90.96	20.98	3329.77	2308.65	2166.28	798.82	16.02	2177073.49	1302851.18	N 36 58 38.214	W 107 24 20.404
	4765.00	86.11	17.05	3330.62	2341.60	2197.46	809.56	18.91	2177104.53	1302862.31	N 36 58 38.522	W 107 24 20.271
	4793.00	87.63	19.28	3332.14	2369.52	2224.02	818.28	9.63	2177130.99	1302871.35	N 36 58 38.785	W 107 24 20.164
	4826.00	89.59	15.74	3332.95	2402.44	2255.47	828.20	12.26	2177162.32	1302881.65	N 36 58 39.096	W 107 24 20.041
	4857.00	91.41	17.39	3332.67	2433.35	2285.18	837.04	7.92	2177191.92	1302890.85	N 36 58 39.390	W 107 24 19.933
	4888.00	92.24	19.34	3331.69	2464.29	2314.59	846.80	6.83	2177221.21	1302900.97	N 36 58 39.680	W 107 24 19.812
	4920.00	93.06	15.15	3330.21	2496.18	2345.11	856.28	13.33	2177251.61	1302910.81	N 36 58 39.982	W 107 24 19.695
	4954.00	93.96	17.88	3328.13	2530.01	2377.64	865.92	8.44	2177284.03	1302920.85	N 36 58 40.304	W 107 24 19.577
	4982.00	93.82	18.39	3326.23	2557.91	2404.19	874.62	1.88	2177310.47	1302929.87	N 36 58 40.566	W 107 24 19.469
	5017.00	89.14	13.24	3325.32	2592.73	2437.84	884.14	19.88	2177343.99	1302939.81	N 36 58 40.899	W 107 24 19.352
	5048.00	85.80	15.94	3326.69	2623.50	2467.80	891.94	13.85	2177373.86	1302947.97	N 36 58 41.195	W 107 24 19.256
	5079.00	87.69	14.29	3328.45	2654.28	2497.68	900.01	8.09	2177403.64	1302956.40	N 36 58 41.491	W 107 24 19.156
	5109.00	91.41	14.43	3328.69	2684.07	2526.73	907.45	12.41	2177432.60	1302964.19	N 36 58 41.778	W 107 24 19.065
	5145.00	94.10	14.78	3326.96	2719.80	2561.53	916.52	7.54	2177467.29	1302973.68	N 36 58 42.122	W 107 24 18.953
	5173.00	94.96	18.05	3324.74	2747.61	2588.30	924.40	12.04	2177493.96	1302981.90	N 36 58 42.387	W 107 24 18.856
	5207.00	92.24	15.64	3322.61	2781.45	2620.77	934.23	10.68	2177526.31	1302992.12	N 36 58 42.708	W 107 24 18.735
	5236.00	90.00	16.24	3322.04	2810.33	2648.65	942.20	8.00	2177554.09	1303000.42	N 36 58 42.983	W 107 24 18.636
	5272.00	85.18	14.73	3323.55	2846.12	2683.30	951.80	14.03	2177588.62	1303010.44	N 36 58 43.326	W 107 24 18.518
	5298.00	84.90	11.18	3325.80	2871.76	2708.54	957.60	13.65	2177613.79	1303016.56	N 36 58 43.576	W 107 24 18.447
	5332.00	86.73	10.95	3328.28	2905.15	2741.81	964.11	5.42	2177646.99	1303023.47	N 36 58 43.905	W 107 24 18.366
	5365.00	89.14	12.42	3329.47	2937.69	2774.11	970.79	8.55	2177679.20	1303030.54	N 36 58 44.224	W 107 24 18.284
	5398.00	91.38	13.25	3329.32	2970.35	2806.28	978.12	7.24	2177711.28	1303038.26	N 36 58 44.542	W 107 24 18.194
	5428.00	92.31	15.96	3328.36	3000.14	2835.29	985.68	9.55	2177740.20	1303046.17	N 36 58 44.829	W 107 24 18.101
	5460.00	93.48	15.42	3326.74	3031.96	2866.06	994.32	4.03	2177770.86	1303055.19	N 36 58 45.133	W 107 24 17.994
	5491.00	93.86	13.37	3324.76	3062.69	2896.02	1002.01	6.71	2177800.73	1303063.24	N 36 58 45.429	W 107 24 17.899
	5525.00	94.20	16.26	3322.37	3096.40	2928.81	1010.68	8.54	2177833.41	1303072.31	N 36 58 45.753	W 107 24 17.792
	5556.00	94.48	16.21	3320.02	3127.20	2958.49	1019.33	0.92	2177862.98	1303081.32	N 36 58 46.047	W 107 24 17.686
	5591.00	95.17	13.85	3317.08	3161.88	2992.17	1028.37	7.00	2177896.55	1303090.77	N 36 58 46.380	W 107 24 17.574
	5619.00	94.75	16.67	3314.66	3189.63	3019.08	1035.71	10.15	2177923.36	1303098.44	N 36 58 46.646	W 107 24 17.484
	5654.00	92.79	13.54	3312.35	3224.37	3052.79	1044.81	10.53	2177956.96	1303107.94	N 36 58 46.979	W 107 24 17.372
	5683.00	93.24	16.16	3310.83	3253.15	3080.78	1052.23	9.15	2177984.86	1303115.71	N 36 58 47.256	W 107 24 17.280
	5718.00	94.41	11.58	3308.49	3287.79	3114.67	1060.60	13.48	2178018.65	1303124.49	N 36 58 47.591	W 107 24 17.177
	5747.00	95.13	15.31	3306.08	3316.43	3142.77	1067.32	13.06	2178046.67	1303131.55	N 36 58 47.869	W 107 24 17.094
	5782.00	95.06	13.24	3302.97	3351.05	3176.56	1075.91	5.89	2178080.35	1303140.55	N 36 58 48.203	W 107 24 16.988
	5808.00	94.65	13.51	3300.77	3376.73	3201.76	1081.91	1.89	2178105.48	1303146.85	N 36 58 48.452	W 107 24 16.914
	5845.00	94.27	16.49	3297.89	3413.40	3237.39	1091.45	8.10	2178140.99	1303156.83	N 36 58 48.804	W 107 24 16.797
	5875.00	95.03	17.18	3295.46	3443.22	3266.01	1100.11	3.42	2178169.50	1303165.84	N 36 58 49.087	W 107 24 16.690
	5907.00	92.79	15.91	3293.28	3475.05	3296.61	1109.20	8.04	2178199.99	1303175.30	N 36 58 49.390	W 107 24 16.578
	5937.00	91.34	12.87	3292.20	3504.82	3325.64	1116.65	11.22	2178228.94	1303183.10	N 36 58 49.677	W 107 24 16.486
	5961.00	91.34	13.66	3291.64	3528.60	3349.00	1122.16	3.29	2178252.22	1303188.89	N 36 58 49.908	W 107 24 16.418
	5989.00	89.83	13.54	3291.35	3556.36	3376.21	1128.74	5.41	2178279.35	1303195.81	N 36 58 50.177	W 107 24 16.337
	6023.00	90.93	14.48	3291.13	3590.10	3409.20	1136.97	4.26	2178312.24	1303204.44	N 36 58 50.503	W 107 24 16.236
	6052.00	90.24	13 03	3290.83	3618.86	3437.36	1143.87	5.54	2178340.32	1303211.67	N 36 58 50.782	W 107 24 16.151
	6086.00	89.31	14.31	3290.96	3652.58	3470.40	1151.90	4.65	2178373.25	1303220.11	N 36 58 51.108	W 107 24 16.052
	6116.00	88.35	15.56	3291.58	3682.41	3499.38	1159.63	5.25	2178402.14	1303228.19	N 36 58 51.395	W 107 24 15.956

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	DLS (deg/100 ft)	Northing (ftUS)	Easting (ftUS)	Latitude	Longitude
	6153.00	86.76	15.66	3293.15	3719.20	3534.98	1169.58	4.31	2178437.62	1303238 57	N 36 58 51.747	W 107 24 15.834
	6180.00	89.31	15.16	3294.08	3746.06	3560.99	1176.75	9.62	2178463.54	1303246.06	N 36 58 52.004	W 107 24 15.745
	6213.00	92.06	11.79	3293.68	3778.76	3593.07	1184.44	13.18	2178495.53	1303254.13	N 36 58 52.321	W 107 24 15.651
	6244.00	90.14	14.96	3293.09	3809.47	3623.22	1191.60	11.95	2178525.59	1303261.67	N 36 58 52.619	W 107 24 15.562
	6278.00	88.18	10.07	3293.59	3843.08	3656.40	1198.97	15.49	2178558.67	1303269.44	N 36 58 52.947	W 107 24 15.472
	6306.00	88.21	12.90	3294.47	3870.67	3683.82	1204.54	10.10	2178586.03	1303275.34	N 36 58 53.218	W 107 24 15.403
	6339.00	87.01	13.34	3295 85	3903.33	3715.93	1212.02	3.87	2178618.05	1303283.22	N 36 58 53.536	W 107 24 15.311
	6370.00	86.49	12.61	3297.60	3933.97	3746.09	1218.97	2.89	2178648.12	1303290.53	N 36 58 53 834	W 107 24 15.225
	6404.00	89.97	11.06	3298.65	3967.51	3779.35	1225.94	11.20	2178681.29	1303297.90	N 36 58 54.163	W 107 24 15.139
	6433.00	91.34	12.27	3298.32	3996.12	3807.74	1231.81	6.30	2178709.61	1303304.11	N 36 58 54.444	W 107 24 15.067
	6468.00	89.07	9.99	3298.20	4030.60	3842.08	1238.56	9.19	2178743.87	1303311.28	N 36 58 54.783	W 107 24 14.983
	6498.00	87.56	13.40	3299.08	4060.18	3871.44	1244.64	12.43	2178773.15	1303317.72	N 36 58 55.074	W 107 24 14.909
	6530.00	88.56	10.55	3300.16	4091.76	3902.72	1251.27	9.43	2178804.35	1303324.73	N 36 58 55.383	W 107 24 14.827
	6558.00	90.79	11.66	3300.32	4119.34	3930.20	1256.66	8.90	2178831.76	1303330.46	N 36 58 55.654	W 107 24 14.760
Last Slb MWD Surveys	6576.00	91.38	11.54	3299.98	4137.09	3947.82	1260.28	3.34	2178849.34	1303334.29	N 36 58 55.829	W 107 24 14.716
Projected TD	6639.00	91.38	11.54	3298.46	4199.21	4009.53	1272.88	0.00	2178910.89	1303347.64	N 36 58 56.439	W 107 24 14.560

Survey Type: Definitive 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
0.00	3.00	Act-Stns	SLB_ZERO-Depth Only	Motherbore -> Motherbore MWD 0' to 4200'
3.00	15.00	Act-Stns	SLB_MWD-STD-Depth Only	Motherbore -> Motherbore MWD 0' to 4200'
15.00	3965.00	Act-Stns	SLB_MWD-STD	Motherbore -> Motherbore MWD 0' to 4200'
3965.00	6576.00	Act-Stns	SLB_MWD-STD	Lower Lateral -> Navajo Lake 100 LL jsw 29 Oct. 07
6576.00	6639.00	Act-Stns	SLB_BLIND+TREND	Lower Lateral -> Navajo Lake 100 LL jsw 29 Oct. 07

Schlumberger

Navajo Lake 100 Upper Lateral Final Survey Report

Report Date:	October 31, 2007	Survey / DLS Computation Method:	Minimum Curvature / Lubinski
Client:	Energen Resources	Vertical Section Azimuth:	15.280°
Field:	NM, Rio Arriba (NAD83)	Vertical Section Origin:	N 0.000 ft, E 0.000 ft
Structure / Slot:	Energen 24-32N-6W / Energen 24-32N-6W (Navajo Lake 100	TVD Reference Datum:	RKB
Well:	Navajo Lake 100	TVD Reference Elevation:	6667.0 ft relative to MSL
Borehole:	Upper Lateral	Sea Bed / Ground Level Elevation:	6652.000 ft relative to MSL
UWI/API#:		Magnetic Declination:	10.271°
Survey Name / Date:	Navajo Lake 100 Upper Lateral MWD 0' to 7624' / October 18, 2007	Total Field Strength:	51282.272 nT
Tort / AHD / DDI / ERD ratio:	265.459° / 5272.47 ft / 6.512 / 1.608	Magnetic Dip:	63.841°
Grid Coordinate System:	NAD83 New Mexico State Planes, Central Zone, US Feet	Declination Date:	October 18, 2007
Location Lat/Long:	N 36 58 16.795, W 107 24 30.248	Magnetic Declination Model:	BGGM 2005
Location Grid N/E Y/X:	N 2174917.020 ftUS, E 1302026.058 ftUS	North Reference:	True North
Grid Convergence Angle:	-0.69674226°	Total Corr Mag North -> True North:	+10.271°
Grid Scale Factor:	1.00003101	Local Coordinates Referenced To:	Well Head

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	DLS (deg/100 ft)	Northing (ftUS)	Easting (ftUS)	Latitude	Longitude
Projected-Up	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2174917.02	1302026.06	N 36 58 16.795	W 107 24 30.248
Tie-In	3.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	2174917.02	1302026.06	N 36 58 16.795	W 107 24 30.248
	103.00	0.40	196.56	103.00	-0.35	-0.33	-0.10	0.40	2174916.69	1302025.95	N 36 58 16.792	W 107 24 30.249
	203.00	0.80	196.56	202.99	-1.40	-1.34	-0.40	0.40	2174915.69	1302025.64	N 36 58 16.782	W 107 24 30.253
	303.00	1.21	196.56	302.98	-3.15	-3.02	-0.90	0.41	2174914.01	1302025.12	N 36 58 16.765	W 107 24 30.259
	403.00	1.61	196.56	402.95	-5.61	-5.38	-1.60	0.40	2174911.66	1302024.39	N 36 58 16.742	W 107 24 30.268
	483.00	1.93	196.56	482.91	-8.08	-7.75	-2.30	0.40	2174909.30	1302023.66	N 36 58 16.719	W 107 24 30.276
	503.00	1.95	197.11	502.90	-8.76	-8.39	-2.50	0.14	2174908.66	1302023.46	N 36 58 16.712	W 107 24 30.279
	603.00	2.03	199.75	602.84	-12.22	-11.69	-3.60	0.12	2174905.38	1302022.32	N 36 58 16.680	W 107 24 30.292
	703.00	2.11	202.17	702.77	-15.82	-15.06	-4.89	0.12	2174902.02	1302020.98	N 36 58 16.646	W 107 24 30.308
	798.00	2.20	204.29	797.70	-19.35	-18.34	-6.30	0.13	2174898.76	1302019.53	N 36 58 16.614	W 107 24 30.326
	803.00	2.20	204.42	802.70	-19.54	-18.52	-6.38	0.10	2174898.58	1302019.45	N 36 58 16.612	W 107 24 30.327
	903.00	2.20	207.11	902.63	-23.32	-21.97	-8.05	0.10	2174895.15	1302017.74	N 36 58 16.578	W 107 24 30.347
	1003.00	2.20	209.81	1002.55	-27.05	-25.35	-9.88	0.10	2174891.80	1302015.87	N 36 58 16.545	W 107 24 30.370
	1043.00	2.20	210.88	1042.52	-28.54	-26.67	-10.65	0.10	2174890.48	1302015.08	N 36 58 16.531	W 107 24 30.379
	1073.00	1.41	218.44	1072.51	-29.43	-27.45	-11.18	2.74	2174889.70	1302014.55	N 36 58 16.524	W 107 24 30.386
	1103.00	0.62	269.33	1102.50	-29.81	-27.75	-11.57	3.76	2174889.42	1302014.15	N 36 58 16.521	W 107 24 30.391
	1133.00	1.32	352.91	1132.50	-29.54	-27.40	-11.78	4.65	2174889.76	1302013.95	N 36 58 16.524	W 107 24 30.393
	1164.00	2.81	6.62	1163.48	-28.46	-26.30	-11.73	5.03	2174890.87	1302014.01	N 36 58 16.535	W 107 24 30.393
	1194.00	4.31	11.81	1193.42	-26.61	-24.46	-11.42	5.11	2174892.70	1302014.34	N 36 58 16.553	W 107 24 30.389
	1203.00	4.67	12.96	1202.39	-25.90	-23.77	-11.27	4.12	2174893.38	1302014.50	N 36 58 16.560	W 107 24 30.387
	1225.00	5.54	15.15	1224.31	-23.94	-21.88	-10.79	4.05	2174895.28	1302015.01	N 36 58 16.579	W 107 24 30.381
	1255.00	6.77	17.35	1254.13	-20.73	-18.79	-9.88	4.17	2174898.35	1302015.95	N 36 58 16.609	W 107 24 30.370
	1286.00	7.83	18.75	1284.88	-16.80	-15.05	-8.66	3.47	2174902.08	1302017.22	N 36 58 16.646	W 107 24 30.355
	1303.00	8.50	19.41	1301.71	-14.39	-12.76	-7.87	3.98	2174904.35	1302018.04	N 36 58 16.669	W 107 24 30.345
	1315.00	8.97	19.81	1313.57	-12.57	-11.05	-7.26	3.95	2174906.06	1302018.67	N 36 58 16.686	W 107 24 30.337
	1346.00	10.20	20.25	1344.14	-7.43	-6.20	-5.49	3.97	2174910.89	1302020.50	N 36 58 16.734	W 107 24 30.316
	1376.00	10.64	20.86	1373.64	-2.02	-1.12	-3.58	1.51	2174915.95	1302022.46	N 36 58 16.784	W 107 24 30.292
	1406.00	11.08	21.13	1403.10	3.60	4.16	-1.56	1.48	2174921.20	1302024.55	N 36 58 16.836	W 107 24 30.267
	1436.00	11.17	21.04	1432.54	9.36	9.56	0.53	0.31	2174926.57	1302026.70	N 36 58 16.890	W 107 24 30.242
	1465.00	11.61	21.83	1460.97	15.05	14.89	2.62	1.61	2174931.88	1302028.86	N 36 58 16.942	W 107 24 30.216
	1496.00	11.96	21.13	1491.32	21.35	20.78	4.94	1.22	2174937.74	1302031.25	N 36 58 17.001	W 107 24 30.187
	1503.00	12.04	20.92	1498.16	22.80	22.14	5.46	1.30	2174939.09	1302031.79	N 36 58 17.014	W 107 24 30.181
	1526.00	12.31	20.25	1520.65	27.63	26.68	7.17	1.32	2174943.61	1302033.55	N 36 58 17.059	W 107 24 30.160
	1556.00	12.66	20.42	1549.94	34.09	32.76	9.42	1.17	2174949.67	1302035.88	N 36 58 17.119	W 107 24 30.132
	1586.00	12.84	20.95	1579.20	40.68	38.96	11.76	0.72	2174955.83	1302038.29	N 36 58 17.180	W 107 24 30.103
	1603.00	13.13	20.75	1595.76	44.48	42.53	13.12	1.73	2174959.38	1302039.69	N 36 58 17.216	W 107 24 30.086
	1617.00	13.37	20.60	1609.39	47.67	45.53	14.25	1.73	2174962.37	1302040.86	N 36 58 17.245	W 107 24 30.072
	1647.00	13.72	20.51	1638.55	54.67	52.11	16.72	1.17	2174968.92	1302043.41	N 36 58 17.310	W 107 24 30.042
	1677.00	14.16	21.04	1667.67	61.86	58.86	19.28	1.53	2174975.65	1302046.05	N 36 58 17.377	W 107 24 30.010
	1707.00	14.60	20.60	1696.73	69.28	65.83	21.93	1.51	2174982.58	1302048.79	N 36 58 17.446	W 107 24 29.978
	1738.00	15.21	20.25	1726.69	77.22	73.30	24.71	1.99	2174990.02	1302051.66	N 36 58 17.520	W 107 24 29.943
	1767.00	15.39	19.90	1754.66	84.85	80.49	27.34	0.70	2174997.17	1302054.37	N 36 58 17.591	W 107 24 29.911
	1796.00	16.00	20.69	1782.58	92.66	87.85	30.06	2.23	2175004.50	1302057.18	N 36 58 17.664	W 107 24 29.878
	1803.00	16.28	20.98	1789.30	94.60	89.66	30.75	4.16	2175006.31	1302057.90	N 36 58 17.682	W 107 24 29.869
	1827.00	17.24	21.92	1812.28	101.48	96.10	33.28	4.16	2175012.72	1302060.51	N 36 58 17.745	W 107 24 29.838
	1857.00	18.64	23.50	1840.82	110.64	104.63	36.86	4.94	2175021.19	1302064.18	N 36 58 17.830	W 107 24 29.794
	1888.00	19.70	25.78	1870.11	120.68	113.87	41.10	4.19	2175030.39	1302068.54	N 36 58 17.921	W 107 24 29.741
	1903.00	19.92	25.96	1884.22	125.68	118.45	43.32	1.52	2175034.94	1302070.82	N 36 58 17.966	W 107 24 29.714
	1918.00	20.14	26.14	1898.31	130.73	123.06	45.58	1.52	2175039.52	1302073.13	N 36 58 18.012	W 107 24 29.686
	1949.00	20.49	24.47	1927.38	141.32	132.79	50.18	2.18	2175049.20	1302077.85	N 36 58 18.108	W 107 24 29.630
	1979.00	21.28	23.68	1955.41	151.89	142.56	54.54	2.80	2175058.91	1302082.33	N 36 58 18.205	W 107 24 29.576
	2010.00	21.98	22.71	1984.23	163.21	153.06	59.04	2.54	2175069.36	1302086.95	N 36 58 18.309	W 107 24 29.520
	2040.00	22.86	22.44	2011.96	174.56	163.63	63.43	2.95	2175079.87	1302091.47	N 36 58 18.413	W 107 24 29.466

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	DLS (deg/100 ft)	Northing (ftUS)	Easting (ftUS)	Latitude	Longitude
	2071.00	23.74	21.74	2040.43	186.73	174.99	68.04	2.98	2175091.17	1302096.22	N 36 58 18.525	W 107 24 29.410
	2101.00	24.45	21.21	2067.82	198 91	186.39	72.52	2.47	2175102.52	1302100.84	N 36 58 18.638	W 107 24 29.354
	2103.00	24.50	21.23	2069.64	199.73	187.16	72.82	2.53	2175103.29	1302101.15	N 36 58 18.646	W 107 24 29.351
	2131.00	25.15	21.48	2095.05	211.42	198.11	77.10	2.35	2175114.18	1302105.57	N 36 58 18.754	W 107 24 29.298
	2161.00	25.76	21.74	2122.14	224.24	210.10	81.85	2.07	2175126.11	1302110.46	N 36 58 18.872	W 107 24 29.239
	2193.00	26.38	22.01	2150.88	238.21	223.15	87.09	1.97	2175139.10	1302115.86	N 36 58 19.002	W 107 24 29.175
	2203.00	26.58	22.07	2159.83	242.64	227.28	88.77	2.02	2175143.21	1302117.58	N 36 58 19.042	W 107 24 29.154
	2224.00	27.00	22.18	2178.58	252.03	236.05	92.33	2.01	2175151.93	1302121.25	N 36 58 19.129	W 107 24 29.110
	2256.00	27.87	21.83	2206.98	266 68	249.72	97.85	2 77	2175165.54	1302126.94	N 36 58 19.264	W 107 24 29.042
	2287.00	28.67	21.48	2234.28	281.27	263.36	103.27	2.64	2175179.11	1302132.53	N 36 58 19.399	W 107 24 28.975
	2303.00	29.17	21.34	2248.29	288.96	270.57	106.10	3.15	2175186.28	1302135.44	N 36 58 19.470	W 107 24 28.941
	2318.00	29.63	21.21	2261.35	296.28	277.43	108.77	3.10	2175193.11	1302138.19	N 36 58 19.538	W 107 24 28.908
	2350.00	30.95	21.21	2288.99	312.34	292.47	114.61	4.13	2175208.09	1302144.22	N 36 58 19.687	W 107 24 28.836
	2381.00	32.10	21.21	2315.41	328.46	307.58	120.47	3.71	2175223.13	1302150 26	N 36 58 19.836	W 107 24 28.763
	2403.00	32.64	20.97	2333.99	340.18	318.57	124.71	2.52	2175234.06	1302154.64	N 36 58 19.945	W 107 24 28.711
	2413.00	32.89	20.86	2342.40	345 56	323.63	126.64	2.57	2175239.10	1302156.63	N 36 58 19.995	W 107 24 28.687
	2444.00	33.85	20.51	2368.29	362.54	339.58	132.66	3.16	2175254.97	1302162.84	N 36 58 20.153	W 107 24 28.613
	2474.00	34.91	20.42	2393.05	379.41	355.45	138.59	3.54	2175270.77	1302168.96	N 36 58 20.310	W 107 24 28.540
	2505.00	36.05	20.60	2418.29	397.33	372.31	144.89	3.69	2175287.55	1302175.47	N 36 58 20.476	W 107 24 28.463
	2535.00	37.02	21.13	2442.40	415.10	388 99	151.25	3.40	2175304.16	1302182.03	N 36 58 20.641	W 107 24 28.384
	2567.00	37.72	20.60	2467.83	434.43	407.14	158.17	2.41	2175322.22	1302189.17	N 36 58 20.821	W 107 24 28.299
	2598.00	38.78	20.60	2492.17	453.54	425.11	164.92	3.42	2175340.10	1302196.14	N 36 58 20.998	W 107 24 28.216
	2603.00	38.94	20.61	2496.07	456.66	428.04	166.03	3.20	2175343.02	1302197.28	N 36 58 21.027	W 107 24 28.202
	2629.00	39.75	20.69	2516.17	473.08	443.47	171.84	3.12	2175358.38	1302203.28	N 36 58 21.180	W 107 24 28.130
	2661.00	40.36	20.51	2540.67	493.58	462.74	179.08	1.94	2175377.56	1302210.76	N 36 58 21.371	W 107 24 28.041
	2691.00	40.54	20.69	2563.49	512.96	480.96	185.93	0.72	2175395.70	1302217.83	N 36 58 21.551	W 107 24 27.957
	2703.00	40.73	20.49	2572.60	520.74	488.28	188.68	1.92	2175402.98	1302220.67	N 36 58 21.623	W 107 24 27.923
	2723.00	41.06	20.16	2587.72	533.78	500.56	193.23	1.97	2175415.20	1302225.36	N 36 58 21.744	W 107 24 27.867
	2753.00	41.42	19.90	2610.28	553.49	519.14	200.00	1.33	2175433.70	1302232.36	N 36 58 21.928	W 107 24 27.783
	2784.00	42.12	19.90	2633.40	574.08	538.55	207.03	2.26	2175453.03	1302239.63	N 36 58 22.120	W 107 24 27.697
	2803.00	42.70	20.11	2647.43	586.85	550.59	211.41	3.14	2175465.02	1302244.16	N 36 58 22.239	W 107 24 27.643
	2816.00	43.09	20.25	2656.95	595.66	558.90	214.47	3.09	2175473.29	1302247.31	N 36 58 22.321	W 107 24 27.605
	2864.00	44.58	19.46	2691.57	628.80	590.17	225.75	3.31	2175504.42	1302258.98	N 36 58 22.630	W 107 24 27.466
	2894.00	44.93	19.63	2712.88	649.86	610.07	232.82	1.23	2175524.23	1302266.29	N 36 58 22.827	W 107 24 27.379
	2903.00	45.12	19.55	2719.24	656.21	616.07	234.96	2.20	2175530.21	1302268.49	N 36 58 22.887	W 107 24 27.353
	2924.00	45.55	19.37	2734.00	671.11	630.15	239.93	2.14	2175544.23	1302273.64	N 36 58 23.026	W 107 24 27.291
	2955.00	46.34	19.28	2755.56	693.33	651.18	247.30	2.56	2175565.16	1302281.27	N 36 58 23.234	W 107 24 27.200
	2985.00	47.48	19.10	2776.05	715.19	671.87	254.50	3.83	2175585.76	1302288.72	N 36 58 23.438	W 107 24 27.112
	3003.00	48.01	19.08	2788.15	728.48	684.46	258.86	2.95	2175598.30	1302293.23	N 36 58 23.563	W 107 24 27.058
	3015.00	48.36	19.06	2796.16	737.41	692.91	261.78	2.92	2175606.72	1302296.26	N 36 58 23.646	W 107 24 27.022
	3046.00	49.15	19.49	2816.59	760.66	714.91	269.48	2.75	2175628.62	1302304.22	N 36 58 23.864	W 107 24 26.927
	3075.00	49.59	19.35	2835.48	782.61	735.67	276.80	1.56	2175649.29	1302311.79	N 36 58 24.069	W 107 24 26.837
	3106.00	50.21	20.26	2855.44	806.25	757.98	284.83	3.01	2175671.50	1302320.09	N 36 58 24.290	W 107 24 26.738
	3136.00	51.09	20.75	2874.47	829.35	779.71	292.96	3.19	2175693.13	1302328.48	N 36 58 24.504	W 107 24 26.638
	3167.00	52.23	20.95	2893.70	853.55	802.43	301.61	3.71	2175715.74	1302337.41	N 36 58 24.729	W 107 24 26.531
	3197.00	53.20	20.86	2911.87	877.30	824.73	310.13	3.24	2175737.94	1302346.20	N 36 58 24.950	W 107 24 26.426
	3203.00	53.41	20.82	2915.45	882.09	829.22	311.84	3.54	2175742.41	1302347.97	N 36 58 24.994	W 107 24 26.405
	3228.00	54.26	20.65	2930.21	902.18	848.10	318 99	3.44	2175761.20	1302355.34	N 36 58 25.181	W 107 24 26.317
	3258.00	54.78	20.32	2947.62	926.51	870.98	327.54	1.95	2175783.98	1302364.17	N 36 58 25.407	W 107 24 26.212
	3288 00	55.40	19.92	2964.79	951.02	894.08	336.00	2.34	2175806.98	1302372.91	N 36 58 25.635	W 107 24 26.107
	3303.00	55.48	20.22	2973.30	963.33	905.69	340.24	1.73	2175818.53	1302377.29	N 36 58 25.750	W 107 24 26.055
	3319.00	55.57	20.53	2982.35	976.47	918.05	344.83	1.69	2175830.84	1302382.04	N 36 58 25.872	W 107 24 25.999
	3349.00	55.40	20.42	2999.35	1001.09	941.21	353.48	0.64	2175853.89	1302390.96	N 36 58 26.101	W 107 24 25.892
	3379.00	56.10	21.14	3016.24	1025.77	964.39	362.27	3.06	2175876.96	1302400.04	N 36 58 26.331	W 107 24 25.784
	3410.00	56.72	21.68	3033.39	1051.45	988.43	371.70	2.47	2175900.89	1302409.76	N 36 58 26.568	W 107 24 25.667
	3442.00	57.51	22.24	3050.76	1078.14	1013.35	381.75	2.87	2175925.69	1302420.11	N 36 58 26.815	W 107 24 25.544
	3472.00	58.56	22.81	3066.64	1103.38	1036.86	391.50	3.85	2175949.08	1302430.15	N 36 58 27.047	W 107 24 25.423
	3504.00	59.62	22.50	3083.08	1130.61	1062.20	402.08	3.42	2175974.28	1302441.03	N 36 58 27.298	W 107 24 25.293
	3535.00	61.03	22.34	3098.43	1157.34	1087.10	412.35	4.57	2175999.05	1302451.61	N 36 58 27.544	W 107 24 25.167
	3567.00	61.99	22.22	3113.69	1185.25	1113.12	423.01	3.02	2176024.95	1302462.59	N 36 58 27.801	W 107 24 25.035
	3598.00	62.43	22.71	3128.15	1212.46	1138.47	433.49	1.99	2176050.16	1302473.37	N 36 58 28.052	W 107 24 24.906
	3603.00	62.64	22.61	3130.45	1216.86	1142.56	435.20	4.56	2176054.24	1302475.13	N 36 58 28.092	W 107 24 24.885
	3629.00	63.75	22.09	3142.18	1239.89	1164.02	444.02	4.63	2176075.59	1302484.22	N 36 58 28.304	W 107 24 24.776
	3661.00	63.93	22.36	3156.29	1268.40	1190.61	454.89	0.94	2176102.05	1302495.40	N 36 58 28.567	W 107 24 24.642
	3692.00	63.93	22.09	3169.91	1296.04	1216.39	465.42	0.78	2176127.69	1302506.25	N 36 58 28.822	W 107 24 24.513
	3703.00	64.09	22.06	3174.73	1305.86	1225.55	469.14	1.48	2176136.81	1302510.08	N 36 58 28.913	W 107 24 24.467
	3722.00	64.37	22.01	3182.99	1322.85	1241.41	475.55	1.49	2176152.59	1302516.69	N 36 58 29.070	W 107 24 24.388
	3752.00	64.46	22.27	3195.95	1349.72	1266.47	485.75	0.84	2176177.53	1302527.19	N 36 58 29.317	W 107 24 24.262
	3783.00	64.28	21.74	3209.35	1377.47	1292.39	496.22	1.65	2176203.32	1302537.98	N 36 58 29.574	W 107 24 24.133
Tie-In	3803.00	64.22	21.29	3218.04	1395.38	1309.15	502.83	2.05	2176219.99	1302544.79	N 36 58 29.739	W 107 24 24.051
	3825.00	66.89	20.90	3227.15	1415.30	1327.83	510.04	12.24	2176238.59	1302552.22	N 36 58 29.924	W 107 24 23.963

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	DLS (deg/100 ft)	Northing (ftUS)	Easting (ftUS)	Latitude	Longitude
	3855.00	71.70	20.54	3237.75	1443.23	1354.07	519.96	16.07	2176264.71	1302562.46	N 36 58 30.183	W 107 24 23.840
	3888.00	77.83	20.10	3246.42	1474.93	1383.92	531.01	18.62	2176294.42	1302573.88	N 36 58 30.479	W 107 24 23.704
	3914.00	80.60	19.79	3251.28	1500.39	1407.92	539.72	10.72	2176318.32	1302582.88	N 36 58 30.716	W 107 24 23.597
	3945.00	80.01	19.42	3256.50	1530.86	1436.71	549.98	2.24	2176346.98	1302593.48	N 36 58 31.000	W 107 24 23.470
	3971.00	79.55	19.04	3261.12	1556.38	1460.87	558.40	2.28	2176371.03	1302602.20	N 36 58 31.239	W 107 24 23.367
Top of Upper Coal	*3990.00*	*80.14*	*18.78*	*3264.47*	*1575.05*	*1478.56*	*564.47*	*3.40*	*2176388.65*	*1302608.48*	*N 36 58 31.414*	*W 107 24 23.292*
	4009.00	80.74	18.53	3267.62	1593.75	1496.31	570.46	3.40	2176406.33	1302614.69	N 36 58 31.590	W 107 24 23 218
	4040 00	80.08	19.23	3272.78	1624.26	1525.23	580.35	3 08	2176435.13	1302624.93	N 36 58 31.876	W 107 24 23.096
	4082.00	85.83	20.10	3277.93	1665.80	1564.47	594.37	13.84	2176474.19	1302639.43	N 36 58 32.264	W 107 24 22.923
	4114.00	90.65	20 33	3278 92	1697.66	1594.47	605.42	15.08	2176504.06	1302650.84	N 36 58 32.560	W 107 24 22.787
	4144.00	93.85	20.49	3277.74	1727.51	1622.57	615.88	10.68	2176532.02	1302661.64	N 36 58 32.838	W 107 24 22.658
	4177.00	94.27	23.39	3275.40	1760.20	1653.10	628.17	8 86	2176562.40	1302674.30	N 36 58 33.140	W 107 24 22.507
	4208.00	93.55	22.76	3273.29	1790.85	1681.55	640.29	3.08	2176590.71	1302686.77	N 36 58 33.421	W 107 24 22.357
	4241.00	92.68	23.09	3271.49	1823.50	1711.90	653.13	2.82	2176620.90	1302699.98	N 36 58 33.721	W 107 24 22.199
	4272.00	91.75	21.62	3270.30	1854.24	1740.54	664.91	5.61	2176649.40	1302712.10	N 36 58 34.005	W 107 24 22.054
	4308.00	90.10	20.72	3269.72	1890.05	1774.11	677.91	5.22	2176682.81	1302725.51	N 36 58 34.336	W 107 24 21.894
	4338 00	88.28	18.53	3270.14	1919.95	1802 36	687.98	9.49	2176710.93	1302735.93	N 36 58 34.616	W 107 24 21.770
	4370.00	88.73	19.27	3270.97	1951.88	1832.62	698.35	2.71	2176741.07	1302746.66	N 36 58 34.915	W 107 24 21.642
	4400.00	89.59	17.88	3271.41	1981.83	1861.06	707.90	5.45	2176769.39	1302756.56	N 36 58 35.196	W 107 24 21.524
	4435.00	90.03	20.36	3271.53	2016.74	1894.12	719.36	7.20	2176802.31	1302768.42	N 36 58 35.523	W 107 24 21.383
	4463.00	90.24	20.64	3271.46	2044.63	1920.35	729.17	1.25	2176828.42	1302778.55	N 36 58 35.782	W 107 24 21.262
	4496.00	89.83	18.96	3271.44	2077.52	1951.40	740.35	5.24	2176859.33	1302790.10	N 36 58 36.089	W 107 24 21.124
	4526.00	89.79	17.63	3271.54	2107.48	1979.88	749.76	4.44	2176887.70	1302799.86	N 36 58 36.371	W 107 24 21.008
	4560.00	90.14	17.58	3271.56	2141.45	2012 29	760.05	1.04	2176919.98	1302810.54	N 36 58 36.691	W 107 24 20.881
	4593.00	90.34	19.63	3271.43	2174.40	2043.56	770.58	6.24	2176951.12	1302821.45	N 36 58 37.001	W 107 24 20.752
	4626.00	90.31	17.98	3271.24	2207.33	2074.80	781.21	5.00	2176982.23	1302832.47	N 36 58 37.310	W 107 24 20.621
	4655.00	90.45	18.12	3271.05	2236.30	2102.37	790.20	0.68	2177009.69	1302841.79	N 36 58 37.582	W 107 24 20.510
	4689.00	90.45	18.88	3270.78	2270.24	2134.61	800.99	2.24	2177041.80	1302852.97	N 36 58 37.901	W 107 24 20.377
	4718.00	89.31	17.47	3270.84	2299.20	2162.17	810.03	6.25	2177069.24	1302862.35	N 36 58 38.173	W 107 24 20.265
	4752.00	89.35	19.37	3271.24	2333.15	2194.42	820.77	5.59	2177101.36	1302873.48	N 36 58 38.492	W 107 24 20.133
	4781.00	89.72	18.39	3271.47	2362.09	2221.86	830.16	3.61	2177128.68	1302883.20	N 36 58 38.764	W 107 24 20.017
	4815.00	89.90	18.45	3271.59	2396.04	2254.12	840.90	0.56	2177160.81	1302894.33	N 36 58 39.082	W 107 24 19 885
	4844.00	89.86	17.99	3271.65	2425.00	2281.66	849.97	1.59	2177188.24	1302903.73	N 36 58 39.355	W 107 24 19.773
	4878.00	90.38	18.06	3271.58	2458.96	2313.99	860.49	1.54	2177220.45	1302914.65	N 36 58 39.675	W 107 24 19.644
	4907.00	90.31	17.96	3271.40	2487.93	2341.57	869.45	0.42	2177247.91	1302923.95	N 36 58 39.947	W 107 24 19.533
	4941.00	91.93	17.49	3270.74	2521.89	2373.95	879.80	4.96	2177280.16	1302934.69	N 36 58 40.267	W 107 24 19.406
	4969.00	92.37	18.60	3269.69	2549.84	2400.55	888.47	4.26	2177306.66	1302943.68	N 36 58 40.530	W 107 24 19.299
	5002.00	93.89	18.89	3267.88	2582.73	2431.76	899.06	4.69	2177337.73	1302954.65	N 36 58 40.839	W 107 24 19.168
	5033.00	93.96	19.73	3265.76	2613.58	2460.94	909.29	2.71	2177366.80	1302965.23	N 36 58 41.127	W 107 24 19.042
	5069.00	94.17	18.19	3263.21	2649.41	2494.90	920.95	4.31	2177400.61	1302977.31	N 36 58 41.463	W 107 24 18.898
	5099.00	95.89	20.72	3260.58	2679.21	2523.08	930.90	10.17	2177428.66	1302987.60	N 36 58 41.742	W 107 24 18.776
	5129.00	96.13	18.15	3257.44	2708.97	2551.21	940.83	8.56	2177456.68	1302997.87	N 36 58 42.020	W 107 24 18.653
	5159.00	96.41	19.76	3254.16	2738.73	2579.41	950.52	5.42	2177484.76	1303007.90	N 36 58 42.299	W 107 24 18.534
	5192.00	95.13	20.19	3250.84	2771.45	2610.27	961.73	4.09	2177515.48	1303019.49	N 36 58 42.604	W 107 24 18.396
	5218.00	95.24	19.51	3248.49	2797.26	2634.63	970.52	2.64	2177539.72	1303028.58	N 36 58 42.845	W 107 24 18.287
	5252.00	95.27	20.75	3245.38	2830.99	2666.41	982.18	3.63	2177571.37	1303040.61	N 36 58 43.159	W 107 24 18.144
	5280.00	94.27	19.20	3243.05	2858.80	2692.64	991.71	6.57	2177597.48	1303050.46	N 36 58 43.418	W 107 24 18.026
	5311.00	94.20	19.44	3240.76	2889.64	2721.81	1001.94	0.80	2177626.52	1303061.05	N 36 58 43.707	W 107 24 17.900
	5339.00	94.55	20.44	3238.63	2917.47	2748.06	1011.46	3.77	2177652.65	1303070.89	N 36 58 43.966	W 107 24 17.783
	5370.00	96.17	21.15	3235.73	2948.19	2776.91	1022.41	5.70	2177681.37	1303082.19	N 36 58 44.252	W 107 24 17.648
	5399.00	96.17	17.67	3232.61	2976.94	2804.10	1031.99	11.93	2177708.44	1303092.10	N 36 58 44.520	W 107 24 17.530
	5430.00	95.48	17.41	3229.47	3007.75	2833.50	1041.29	2.38	2177737.73	1303101.76	N 36 58 44.811	W 107 24 17.415
	5459.00	95.89	19.39	3226.59	3036.57	2860.88	1050.40	6.94	2177765.00	1303111.20	N 36 58 45.082	W 107 24 17.303
	5492.00	94.20	18.95	3223.69	3069.36	2891.93	1061.19	5.29	2177795.92	1303122.37	N 36 58 45.389	W 107 24 17.170
	5520.00	93.82	15.96	3221.73	3097.27	2918.57	1069.57	10.74	2177822.46	1303131.07	N 36 58 45.652	W 107 24 17.067
	5547.00	94.03	17.51	3219.88	3124.20	2944.37	1077.32	5.78	2177848.16	1303139.14	N 36 58 45.907	W 107 24 16.971
	5582.00	92.31	17.33	3217.95	3159.12	2977.71	1087.78	4.94	2177881.37	1303150.00	N 36 58 46.237	W 107 24 16.842
	5616.00	91.62	16.37	3216.78	3193.09	3010.23	1097.63	3.48	2177913.77	1303160.25	N 36 58 46.558	W 107 24 16 721
	5640.00	89.62	14.24	3216.52	3217.08	3033.38	1103.97	12.17	2177936.84	1303166.86	N 36 58 46.787	W 107 24 16.643
	5674.00	87.45	12.65	3217.39	3251.05	3066.43	1111.87	7.91	2177969.79	1303175.17	N 36 58 47.114	W 107 24 16.545
	5699.00	87.45	12.91	3218.51	3276.00	3090.79	1117.39	1.04	2177994.08	1303180.99	N 36 58 47.355	W 107 24 16.477
	5732.00	89.72	11.34	3219.32	3308.94	3123.04	1124.32	8.36	2178026.25	1303188.31	N 36 58 47.674	W 107 24 16.392
	5759 00	91.34	12.93	3219.07	3335.89	3149.43	1130.00	8.41	2178052.57	1303194.30	N 36 58 47.935	W 107 24 16.322
	5792.00	92.03	11.50	3218 10	3368.83	3181.67	1136.98	4.81	2178084.72	1303201.67	N 36 58 48.254	W 107 24 16.236
	5819.00	92.17	12.13	3217.11	3395.76	3208.08	1142.50	2.39	2178111.06	1303207.52	N 36 58 48.515	W 107 24 16.168
	5852.00	92.51	12.27	3215.76	3428.69	3240.31	1149.47	1.11	2178143.20	1303214.88	N 36 58 48.833	W 107 24 16 082
	5880.00	92.75	13.23	3214.48	3456.63	3267.59	1155.64	3.53	2178170.41	1303221.38	N 36 58 49.103	W 107 24 16.006
	5911.00	93.10	10.62	3212.90	3487.54	3297.88	1162.04	8.48	2178200.62	1303228.15	N 36 58 49.403	W 107 24 15.927
	5939.00	92.44	10.81	3211.54	3515.41	3325.36	1167.24	2.45	2178228.03	1303233.68	N 36 58 49.674	W 107 24 15.863
	5970.00	89.04	8.41	3211.14	3546.25	3355.91	1172.41	13.42	2178258.53	1303239.23	N 36 58 49.976	W 107 24 15.799
	5999.00	87.18	8.01	3212.10	3575.02	3384.60	1176.55	6.56	2178287.16	1303243.72	N 36 58 50.260	W 107 24 15.748
	6032.00	87.01	8.18	3213.77	3607.71	3417.23	1181.19	0.73	2178319.73	1303248.75	N 36 58 50.583	W 107 24 15.691

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	DLS (deg/100 ft)	Northing (ftUS)	Easting (ftUS)	Latitude	Longitude
	6060.00	87.28	10.04	3215.17	3635.52	3444.84	1185.62	6.70	2178347.29	1303253.52	N 36 58 50 856	W 107 24 15.636
	6090.00	87.73	10.45	3216.47	3665.37	3474.33	1190.95	2.03	2178376.71	1303259.20	N 36 58 51.147	W 107 24 15.570
	6119 00	89.52	11.60	3217.17	3694.28	3502.79	1196.49	7.34	2178405.10	1303265.09	N 36 58 51.429	W 107 24 15.502
	6151.00	90.00	11.32	3217.30	3726.21	3534.15	1202.85	1.74	2178436.38	1303271 83	N 36 58 51.739	W 107 24 15.424
	6181.00	90.00	10.35	3217.30	3756.12	3563 61	1208 49	3.23	2178465.78	1303277.83	N 36 58 52.030	W 107 24 15.354
	6213.00	90.24	9.92	3217.24	3787.99	3595 11	1214.12	1.54	2178497.21	1303283.84	N 36 58 52.341	W 107 24 15.285
	6240 00	90.10	10.28	3217.16	3814.88	3621.70	1218.86	1.43	2178523.73	1303288.90	N 36 58 52.604	W 107 24 15.226
	6273.00	90.10	6.98	3217.10	3847.65	3654.32	1223.81	10.00	2178556.29	1303294.25	N 36 58 52.927	W 107 24 15.165
	6302.00	90.00	8.58	3217.07	3876.41	3683.05	1227.73	5.53	2178584 97	1303298.52	N 36 58 53.211	W 107 24 15.117
	6332.00	89.79	6.14	3217.13	3906.12	3712.80	1231.58	8.16	2178614.68	1303302.73	N 36 58 53.505	W 107 24 15.070
	6360.00	89.66	8.51	3217.26	3933.84	3740.57	1235.15	8.48	2178642.40	1303306.64	N 36 58 53.780	W 107 24 15.026
	6390.00	89.52	9.29	3217.48	3963.66	3770.21	1239.79	2.64	2178671.98	1303311.64	N 36 58 54.073	W 107 24 14.968
	6420.00	89.45	9.29	3217.75	3993.49	3799.81	1244.63	0.23	2178701.53	1303316.84	N 36 58 54.365	W 107 24 14.909
	6449.00	88.90	10.18	3218.16	4022.35	3828.39	1249.53	3.61	2178730.05	1303322.09	N 36 58 54.648	W 107 24 14.848
	6478.00	88.83	12.08	3218.74	4051 27	3856.84	1255.13	6.55	2178758.42	1303328.03	N 36 58 54.929	W 107 24 14.779
	6510.00	88.93	12.74	3219.36	4083.22	3888.09	1262.01	2.09	2178789.58	1303335.29	N 36 58 55.238	W 107 24 14.695
	6538.00	88.93	11.86	3219.89	4111.18	3915.44	1267.97	3.14	2178816.86	1303341.58	N 36 58 55.509	W 107 24 14.621
	6571.00	89.00	9.99	3220.48	4144.08	3947.83	1274.22	5.67	2178849.18	1303348.23	N 36 58 55.829	W 107 24 14.544
	6598.00	90.48	10.68	3220.61	4170.98	3974.39	1279.07	6.05	2178875.68	1303353.40	N 36 58 56.091	W 107 24 14.484
	6639.00	93.30	12.98	3219.25	4211.87	4014.49	1287.47	8.87	2178915.68	1303362 28	N 36 58 56.488	W 107 24 14.381
	6666.00	93.96	12.84	3217.54	4238.80	4040.76	1293.49	2.50	2178941.87	1303368.62	N 36 58 56.748	W 107 24 14.306
	6703.00	94.51	13.81	3214.81	4275.67	4076.66	1301.99	3.01	2178977.67	1303377.56	N 36 58 57.103	W 107 24 14.202
	6730.00	94.79	13.44	3212.62	4302.57	4102.82	1308.33	1.71	2179003.74	1303384.22	N 36 58 57.361	W 107 24 14.123
	6764.00	94.79	12.38	3209.78	4336.43	4135.84	1315.90	3.11	2179036.67	1303392.19	N 36 58 57.688	W 107 24 14.030
	6792.00	94.89	13.57	3207.42	4364.30	4163.03	1322.16	4.25	2179063.78	1303398.79	N 36 58 57.957	W 107 24 13.953
	6827.00	95.24	13.65	3204.33	4399.15	4196.91	1330.37	1.03	2179097.57	1303407.40	N 36 58 58.292	W 107 24 13.852
	6855.00	94.20	11.99	3202.03	4427.03	4224.12	1336.56	6.98	2179124.70	1303413.92	N 36 58 58.561	W 107 24 13.776
	6889.00	94.41	11.42	3199.47	4460.87	4257.32	1343.44	1.78	2179157.81	1303421.20	N 36 58 58.889	W 107 24 13.691
	6918.00	94.58	10.48	3197.20	4489.69	4285.71	1348.93	3.28	2179186.13	1303427.04	N 36 58 59.170	W 107 24 13.623
	6950.00	92.51	10.41	3195.22	4521.52	4317.11	1354.72	6.47	2179217.47	1303433.21	N 36 58 59.480	W 107 24 13.552
	6980.00	92.06	9.59	3194.03	4551.37	4346.63	1359.92	3.12	2179246.92	1303438.78	N 36 58 59.772	W 107 24 13.487
	7014.00	92.20	11.58	3192.76	4585.23	4380.03	1366.16	5.86	2179280.24	1303445.42	N 36 59 0.102	W 107 24 13.411
	7042.00	91.00	10.68	3191.98	4613.14	4407.49	1371.57	5.36	2179307.64	1303451.16	N 36 59 0.374	W 107 24 13.344
	7076.00	90.96	10.12	3191.40	4647.01	4440.93	1377.70	1.65	2179341.00	1303457.70	N 36 59 0.704	W 107 24 13.268
	7106.00	89.93	11.19	3191.17	4676.91	4470.41	1383.25	4.95	2179370.41	1303463.61	N 36 59 0.996	W 107 24 13.200
	7138.00	89.24	7.16	3191.40	4708.73	4501.99	1388.35	12.78	2179401.93	1303469.09	N 36 59 1.308	W 107 24 13.137
	7169.00	89.38	8.98	3191.77	4739.48	4532.68	1392.70	5.89	2179432.56	1303473.82	N 36 59 1.611	W 107 24 13.083
	7201.00	89.59	7.99	3192.06	4771.25	4564.33	1397.42	3.16	2179464.15	1303478.92	N 36 59 1.924	W 107 24 13.025
	7232.00	89.69	6.92	3192.25	4801.96	4595.07	1401.45	3.47	2179494.84	1303483.32	N 36 59 2.228	W 107 24 12.976
	7266.00	89.04	8.55	3192.63	4835.66	4628.75	1406.02	5.16	2179528.47	1303488.30	N 36 59 2.561	W 107 24 12.919
	7295.00	89.35	7.31	3193.04	4864.42	4657.47	1410.02	4.41	2179557.14	1303492.65	N 36 59 2.845	W 107 24 12.870
	7333.00	89.52	7.50	3193.41	4902.06	4695.15	1414.92	0.67	2179594.76	1303498.01	N 36 59 3.218	W 107 24 12.809
	7361.00	89.72	7.40	3193.60	4929.80	4722.92	1418.55	0.80	2179622.48	1303501.98	N 36 59 3.492	W 107 24 12.765
	7398.00	89.62	7.33	3193.81	4966.45	4759.61	1423.29	0.33	2179659.11	1303507.17	N 36 59 3.855	W 107 24 12.706
	7429.00	89.93	7.02	3193.93	4997.14	4790.37	1427.16	1.41	2179689.82	1303511.41	N 36 59 4.159	W 107 24 12.658
	7464.00	90.79	8.94	3193.71	5031.85	4825.03	1432.02	6.01	2179724.42	1303516.69	N 36 59 4.502	W 107 24 12.599
	7492.00	91.14	8.33	3193.24	5059.66	4852.71	1436.23	2.51	2179752.04	1303521.23	N 36 59 4.776	W 107 24 12.547
	7527.00	91.69	8.91	3192.38	5094.41	4887.30	1441.47	2.28	2179786.57	1303526.90	N 36 59 5.118	W 107 24 12.482
	7554.00	91.86	6.62	3191.54	5121.16	4914.04	1445.12	8.50	2179813.26	1303530.87	N 36 59 5.382	W 107 24 12.437
	7624.00	92.00	6.62	3189.18	5190.33	4983.53	1453.18	0.20	2179882.66	1303539.78	N 36 59 6.069	W 107 24 12.338

Survey Type: Definitive 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
0.00	3.00	Act-Stns	SLB_ZERO-Depth Only	Motherbore -> Motherbore MWD 0' to 4200'
3.00	15.00	Act-Stns	SLB_MWD-STD-Depth Only	Motherbore -> Motherbore MWD 0' to 4200'
15.00	3803.00	Act-Stns	SLB_MWD-STD	Motherbore -> Motherbore MWD 0' to 4200'
3803.00	3971.00	Act-Stns	SLB_MWD-INC_ONLY	Upper Lateral -> Navajo Lake 100 Upper Lateral MWD 0' to 7624'
3971.00	7554.00	Act-Stns	SLB_MWD-STD	Upper Lateral -> Navajo Lake 100 Upper Lateral MWD 0' to 7624'
7554.00	7624.00	Act-Stns	SLB_BLIND+TREND	Upper Lateral -> Navajo Lake 100 Upper Lateral MWD 0' to 7624'