



Lateral: 0		Proposed Direction: 283.9				Dog Leg Severity per: 100 feet		
Measured Depth	Inclination	Azimuth	True Vertical Depth	North/South Coordinate	East/West Coordinate	Vertical Section	Dog Leg Severity	Survey Tool
100	0.54	269.01	100.00	-0.01	-0.47	-0.45	0.54	GYRO
200	0.19	69.08	200.00	0.04	-0.79	0.77	0.72	
300	0.23	229.45	300.00	-0.03	-0.78	-0.75	0.41	
400	0.56	289.28	400.00	0.00	-1.40	1.36	0.49	
500	0.43	233.81	499.99	-0.06	-2.16	-2.08	0.47	
600	0.86	259.10	599.99	-0.42	-3.20	-3.01	0.51	
700	0.99	241.34	699.97	-0.98	-4.70	-4.32	0.31	
800	0.85	236.78	799.96	-1.80	-6.08	-5.46	0.16	
900	0.77	237.82	899.95	-2.56	-7.26	-6.44	0.08	
1000	0.70	208.82	999.94	-3.46	-8.13	-7.06	0.37	
1100	0.84	259.82	1099.94	-4.12	-9.14	-7.89	0.67	
1200	0.38	224.22	1199.93	-4.49	-10.10	-8.72	0.58	
1300	1.25	205.69	1299.92	-5.71	-10.80	-9.11	0.90	
1400	0.65	286.39	1399.91	-6.53	-11.82	-9.90	1.31	
1500	0.49	26.89	1499.90	-5.99	-12.17	-10.37	0.88	
1600	0.66	27.61	1599.90	-5.10	-11.71	-10.14	0.17	
1700	0.88	29.26	1699.89	-3.92	-11.07	-9.80	0.22	
1800	1.25	66.66	1799.87	-2.82	-9.69	-8.73	0.77	
1900	0.22	151.55	1899.87	-2.55	-8.60	-7.73	1.25	
2000	0.47	75.04	1999.86	-2.62	-8.11	-7.24	0.47	
2100	0.70	59.52	2099.86	-2.20	-7.19	-6.45	0.28	
2200	0.72	52.74	2199.85	-1.51	-6.16	-5.62	0.09	
2300	0.75	321.58	2299.85	-0.62	-6.07	-5.74	1.05	
2400	1.29	11.51	2399.83	1.00	-6.25	6.30	0.99	
2500	1.73	348.41	2499.80	3.58	-6.33	7.00	0.74	
2600	2.59	8.39	2599.73	7.29	-6.30	7.87	1.13	
2700	2.74	11.82	2699.62	11.87	-5.48	8.17	0.22	
2800	2.92	4.09	2799.50	16.75	-4.81	8.69	0.42	
2900	3.25	351.20	2899.35	22.09	-5.06	10.22	0.77	
3000	2.87	354.90	2999.21	27.39	-5.72	12.13	0.43	
3100	2.22	5.42	3099.11	31.81	-5.76	13.23	0.80	
3200	2.55	356.61	3199.03	35.96	-5.71	14.18	0.49	
3300	2.01	344.69	3298.95	39.87	-6.30	15.69	0.72	
3400	1.95	339.30	3398.89	43.15	-7.36	17.52	0.20	
3500	2.06	347.69	3498.83	46.50	-8.35	19.28	0.31	
3600	2.42	343.98	3598.75	50.28	-9.32	21.12	0.39	
3700	2.38	321.54	3698.66	53.94	-11.19	23.82	0.93	
3800	3.69	325.83	3798.52	58.23	-14.29	27.86	1.33	
3900	2.96	328.79	3898.35	63.10	-17.43	32.08	0.75	
3986	5.60	304.30	3984.11	67.36	-22.05	37.59	3.67	
4018	8.70	299.00	4015.86	69.42	-25.46	41.39	9.89	
4042	9.60	293.60	4039.55	71.10	-28.88	45.11	5.18	
4058	10.40	287.20	4055.31	72.06	-31.48	47.87	8.55	
4089	9.50	295.40	4085.85	73.98	-36.47	53.17	5.41	
4120	9.40	295.20	4116.43	76.16	-41.07	58.16	0.34	
4151	10.50	289.80	4146.96	78.19	-46.02	63.45	4.65	
4183	10.60	288.60	4178.42	80.12	-51.55	69.29	0.75	
4214	13.60	287.20	4208.73	82.11	-57.74	75.77	9.72	
4246	17.20	289.00	4239.57	84.76	-65.81	84.24	11.35	
4278	21.00	288.30	4269.81	88.10	-75.73	94.67	11.90	
4309	25.60	286.00	4298.27	91.70	-87.45	106.91	15.12	
4340	30.50	283.90	4325.62	95.44	-101.53	121.48	16.12	



4372	35.20	282.30	4352.50	99.35	-118.43	138.83	14.93
4404	40.50	281.10	4377.76	103.32	-137.65	158.44	16.72
4436	46.00	279.90	4401.06	107.30	-159.21	180.32	17.38
4467	51.70	279.20	4421.45	111.17	-182.22	203.59	18.47
4499	56.60	279.50	4440.18	115.38	-207.80	229.43	15.33
4531	61.20	281.10	4456.71	120.29	-234.75	256.77	15.00
4562	66.50	281.70	4470.37	125.79	-262.02	284.56	17.18
4594	71.70	281.80	4481.78	131.88	-291.28	314.43	16.25
4625	76.90	281.80	4490.16	137.98	-320.48	344.24	16.77
4657	82.60	281.20	4495.85	144.25	-351.32	375.69	17.91
4689	88.00	281.00	4498.48	150.39	-382.61	407.53	16.89
4721	93.40	280.10	4498.09	156.25	-414.05	439.46	17.11
4752	98.60	278.10	4494.85	161.12	-444.48	470.17	17.96
4784	103.50	277.80	4488.71	165.47	-475.58	501.40	15.34
4816	107.20	278.10	4480.24	169.73	-506.13	532.09	11.60
4847	106.90	277.80	4471.16	173.83	-535.49	561.56	1.34
4879	107.20	277.60	4461.77	177.93	-565.80	591.98	1.11
4910	107.30	277.30	4452.58	181.77	-595.16	621.40	0.98
4942	107.40	276.70	4443.04	185.49	-625.48	651.72	1.82
4973	107.50	276.60	4433.74	188.92	-654.85	681.06	0.45
5005	107.80	276.40	4424.04	192.37	-685.15	711.30	1.11
5036	107.30	278.60	4414.69	196.23	-714.45	740.67	6.96
5067	106.20	278.30	4405.76	200.59	-743.81	770.22	3.67
5099	105.90	278.40	4396.91	205.06	-774.24	800.83	0.98
5130	105.90	278.10	4388.42	209.33	-803.74	830.49	0.93
5162	107.00	279.70	4379.35	214.08	-834.06	861.07	5.90
5194	105.50	279.50	4370.40	219.20	-864.35	891.70	4.73
5226	106.40	279.50	4361.61	224.28	-894.70	922.38	2.81
5257	108.30	280.10	4352.36	229.32	-923.86	951.89	6.40
5289	107.90	280.10	4342.42	234.65	-953.80	982.24	1.25
5320	107.50	280.10	4333.00	239.83	-982.87	1011.71	1.29
5360	106.90	279.80	4321.17	246.43	-1020.51	1049.83	1.66
5392	106.90	279.80	4311.86	251.64	-1050.68	1080.37	0.00 MWD

Lateral: 1

Proposed Direction: 72.7

Dog Leg Severity per: 100 feet

Measured Depth	Inclination	Azimuth	True Vertical Depth	North/South Coordinate	East/West Coordinate	Vertical Section	Dog Leg Severity	Survey Tool
0	0.00	0.00	87.06	-415.23	-1672.47	1720.29	-1.23	
3900	3.00	328.79	3898.40	63.10	-17.40	2.15	0.80	GYRO
3962	3.30	34.00	3960.32	65.97	-17.24	3.15	5.49	
3983	5.40	33.00	3981.26	67.30	-16.37	4.39	10.01	GYRO
4016	8.90	33.20	4014.00	70.74	-14.12	7.55	10.61	
4044	11.60	31.50	4041.55	74.95	-11.47	11.34	9.70	
4076	12.70	42.20	4072.84	80.30	-7.42	16.79	7.82	
4108	13.20	54.20	4104.03	85.04	-2.09	23.29	8.53	
4140	13.50	64.10	4135.17	88.81	4.23	30.45	7.20	MWD
4171	13.50	72.70	4165.32	91.47	10.94	37.65	6.47	
4203	13.50	77.10	4196.43	93.42	18.15	45.11	3.21	
4234	13.10	75.60	4226.60	95.10	25.08	52.22	1.70	
4266	13.60	71.40	4257.74	97.20	32.16	59.61	3.41	
4297	18.80	68.30	4287.50	100.21	40.26	68.24	17.00	MWD
4329	24.20	69.70	4317.26	104.40	51.21	79.94	16.95	
4360	29.30	71.10	4344.93	109.06	64.35	93.87	16.58	
4391	34.50	73.40	4371.24	114.03	79.95	110.25	17.22	
4423	39.30	73.40	4396.83	119.52	98.36	129.45	15.00	
4455	44.00	74.30	4420.73	125.42	118.78	150.71	14.81	



4487	48.60	74.80	4442.83	131.58	141.08	173.82	14.42	
4518	52.00	74.80	4462.63	137.83	164.09	197.66	10.97	MWD
4550	56.00	75.40	4481.44	144.48	189.11	223.52	12.59	
4582	60.70	76.20	4498.22	151.16	215.51	250.71	14.84	
4614	66.30	76.60	4512.50	157.89	243.33	279.28	17.54	
4645	70.70	76.50	4523.85	164.60	271.38	308.05	14.20	
4677	71.70	76.60	4534.17	171.64	300.84	338.27	3.14	
4708	71.10	76.70	4544.05	178.43	329.42	367.58	1.96	
4739	71.10	76.40	4554.10	185.25	357.95	396.84	0.92	
4770	71.00	76.30	4564.16	192.17	386.44	426.10	0.44	MWD
4800	73.50	76.50	4573.31	198.88	414.21	454.61	8.36	
4831	73.00	76.40	4582.24	205.84	443.07	484.24	1.64	
4863	72.90	76.10	4591.62	213.11	472.78	514.77	0.95	
4894	75.80	75.70	4599.99	220.38	501.73	544.57	9.44	
4926	80.70	75.40	4606.50	228.20	532.06	575.85	15.34	
4957	84.80	74.50	4610.41	236.18	561.75	606.57	13.54	
4988	89.80	72.90	4611.87	244.87	591.46	637.52	16.93	
5019	94.60	73.30	4610.68	253.88	621.09	668.49	15.54	
5050	99.00	73.30	4607.01	262.72	650.57	699.26	14.19	MWD
5082	100.20	73.10	4601.68	271.84	680.77	730.81	3.80	
5114	99.70	73.20	4596.15	280.97	710.94	762.33	1.59	
5145	99.80	74.70	4590.90	289.42	740.30	792.88	4.78	
5175	99.30	74.60	4585.92	297.25	768.83	822.44	1.70	
5207	98.80	74.50	4580.89	305.67	799.29	854.03	1.59	
5239	98.40	74.20	4576.10	314.21	829.76	885.65	1.56	
5270	98.00	74.20	4571.68	322.56	859.28	916.33	1.29	MWD
5302	97.60	74.20	4567.34	331.19	889.78	948.02	1.25	
5333	96.30	74.00	4563.59	339.62	919.38	978.78	4.24	
5364	96.60	74.80	4560.10	347.91	949.05	1009.57	2.74	
5396	97.60	75.50	4556.15	356.05	979.74	1041.30	3.80	
5427	97.20	75.50	4552.16	363.74	1009.50	1072.00	1.29	
5459	96.70	75.20	4548.28	371.78	1040.24	1103.73	1.82	
5491	97.10	75.30	4544.44	379.86	1070.96	1135.47	1.29	MWD
5522	97.10	75.50	4540.61	387.62	1100.73	1166.20	0.64	
5554	98.00	75.60	4536.40	395.53	1131.44	1197.88	2.83	
5585	97.90	75.80	4532.12	403.12	1161.20	1228.54	0.72	
5616	100.00	76.00	4527.29	410.58	1190.89	1259.11	6.80	
5648	99.40	75.60	4521.90	418.32	1221.47	1290.61	2.24	
5680	98.60	74.90	4516.90	426.36	1252.04	1322.18	3.30	
5712	95.00	74.80	4513.11	434.67	1282.70	1353.93	11.25	
5743	91.10	74.50	4511.46	442.86	1312.55	1384.86	12.62	
5774	86.90	74.00	4512.00	451.27	1342.37	1415.84	13.64	
5805	83.40	74.90	4514.62	459.55	1372.13	1446.71	11.65	
5837	79.10	75.20	4519.49	467.71	1402.68	1478.30	13.47	
5869	75.60	74.80	4526.49	475.79	1432.83	1509.50	11.01	
5900	74.90	74.60	4534.39	483.70	1461.75	1539.46	2.34	
5932	72.90	74.00	4543.26	492.02	1491.34	1570.19	6.50	
5963	72.50	73.60	4552.48	500.27	1519.76	1599.78	1.78	
5995	71.80	73.50	4562.29	508.90	1548.98	1630.24	2.21	
6027	71.50	73.60	4572.36	517.50	1578.11	1660.61	0.98	
6058	73.10	74.80	4581.79	525.54	1606.52	1690.13	6.34	
6090	72.80	74.80	4591.17	533.56	1636.05	1720.70	0.94	
6121	72.80	74.20	4600.34	541.47	1664.58	1750.30	1.85	
6153	74.10	75.60	4609.45	549.46	1694.20	1780.95	5.84	
6184	73.80	75.40	4618.02	556.92	1723.04	1810.70	1.15	



6216	73.40	75.00	4627.06	564.76	1752.72	1841.37	1.73
6248	76.20	75.40	4635.45	572.65	1782.57	1872.22	8.83
6279	75.30	74.70	4643.08	580.40	1811.60	1902.24	3.64
6312	75.30	74.10	4651.45	588.98	1842.34	1934.15	1.76
6344	76.50	74.10	4659.25	597.49	1872.19	1965.17	3.75
6374	76.00	73.60	4666.38	605.59	1900.18	1994.31	2.32
6400	75.90	73.20	4672.69	612.80	1924.35	2019.53	1.54
6434	75.90	73.20	4680.97	622.33	1955.92	2052.50	0.00

Lateral: NW

Proposed Direction: 283.9

Dog Leg Severity per: 100 feet

Measured Depth	Inclination	Azimuth	True Vertical Depth	North/South Coordinate	East/West Coordinate	Vertical Section	Dog Leg Severity	Survey Tool
0	0.00	0.00	1949.41	-268.00	2776.48	2759.56	-2.19	
3900	3.00	328.80	3898.40	63.10	-17.40	32.05	0.08	GYRO
3986	5.60	304.30	3984.16	67.39	-22.03	37.58	3.64	
4018	8.70	299.00	4015.90	69.44	-25.44	41.38	9.89	
4042	9.60	293.60	4039.60	71.13	-28.86	45.10	5.18	
4058	10.40	287.20	4055.36	72.09	-31.46	47.86	8.55	
4089	9.50	295.40	4085.89	74.01	-36.45	53.16	5.41	
4098	10.40	287.20	4094.70	74.22	-38.36	50.67	0.00	
4120	9.40	295.20	4116.47	76.19	-41.05	58.15	0.34	
4151	10.50	289.80	4147.01	78.22	-46.00	63.44	4.65	
4183	10.60	288.60	4178.46	80.15	-51.53	69.28	0.75	
4214	13.60	287.20	4208.77	82.14	-57.72	75.76	9.72	
4246	17.20	289.00	4239.62	84.79	-65.79	84.23	11.35	
4278	21.00	288.30	4269.85	88.13	-75.71	94.66	11.90	
4309	25.60	286.00	4298.32	91.72	-87.43	106.90	15.12	
4340	30.50	283.90	4325.67	95.46	-101.51	121.47	16.12	
4372	35.20	282.30	4352.54	99.38	-118.41	138.82	14.93	
4404	40.50	281.10	4377.80	103.35	-137.64	158.43	16.72	
4436	46.00	279.90	4401.10	107.33	-159.19	180.31	17.38	
4467	51.70	279.20	4421.49	111.20	-182.20	203.57	18.47	
4499	56.60	279.50	4440.23	115.41	-207.78	229.42	15.33	
4531	61.20	281.10	4456.75	120.32	-234.73	256.76	15.00	
4562	66.50	281.70	4470.41	125.82	-262.00	284.55	17.18	
4594	71.70	281.80	4481.82	131.90	-291.26	314.42	16.25	
4625	76.90	281.80	4490.21	138.01	-320.46	344.23	16.77	
4657	82.60	281.20	4495.90	144.28	-351.30	375.68	17.91	
4689	88.00	281.00	4498.52	150.42	-382.59	407.52	16.89	
4721	93.40	280.10	4498.13	156.27	-414.03	439.45	17.11	
4752	98.60	278.10	4494.89	161.15	-444.46	470.16	17.96	
4784	103.50	277.80	4488.76	165.49	-475.56	501.39	15.34	
4816	107.20	278.10	4480.29	169.76	-506.11	532.08	11.60	
4847	106.90	277.80	4471.20	173.86	-535.47	561.55	1.34	
4879	107.20	277.60	4461.82	177.96	-565.79	591.97	1.11	
4910	107.30	277.60	4452.63	181.87	-595.13	621.39	0.32	