INTREPID
Directional Drilling Specialists

Survey Report

Report Date:	October 13, 2009	Survey / DLS Computation Method:	Minimum Curvature / Lubinski
Client:	Chesapeake Operating, Inc.	Vertical Section Azimuth:	316.090°
Field:	Marshall County, WV	Vertical Section Origin:	N 0.000 ft, E 0.000 ft
Structure / Slot:	Columbia Gas Transmission #5H / Columbia Gas Transmission #5H	TVD Reference Datum:	RKB
Well:	Columbia Gas Transmission #5H	TVD Reference Elevation:	0.0 ft relative to
Borehole:	Columbia Gas Transmission #5H	Sea Bed / Ground Level Elevation:	0.000 ft relative to
UWI/API#:		Magnetic Declination:	-8.472°
Survey Name / Date:	Columbia Gas Transmission #5H_surveys / October 1, 2009	Total Field Strength:	53063.845 nT
Tort / AHD / DDI / ERD ratio:	245.118° / 5828.70 ft / 6.392 / 0.888	Magnetic Dip:	67.623°
Grid Coordinate System:	NAD27 West Virginia State Planes, Northern Zone, US Feet	Declination Date:	October 01, 2009
Location Lat/Long:	N 39 45 15.851, W 80 36 54.040	Magnetic Declination Model:	IGRF 2005
Location Grid N/E Y/X:	N 458828.538 ftUS, E 1686516.546 ftUS	North Reference:	Grid North
Grid Convergence Angle:	-0.71112389°	Total Corr Mag North -> Grid North:	-7.761°
Grid Scale Factor:	0.99994325	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	197.91M
	100.00	0.83	197.91	100.00	-0.34	-0.69	-0.22	0.72	197.91	0.83	173.74M
	200.00	0.45	173.74	199.99	-1.00	-1.77	-0.40	1.81	192.82	0.46	147.52M
	300.00	0.43	147.52	299.99	-1.67	-2.48	-0.16	2.48	183.66	0.20	62.21M
	400.00	0.41	62.21	399.99	-2.14	-2.63	0.36	2.65	172.20	0.57	88.51M
	500.00	0.60	88.51	499.98	-2.59	-2.44	1.20	2.72	153.86	0.30	99.43M
	600.00	0.37	99.43	599.98	-3.21	-2.48	2.04	3.22	140.59	0.25	59.45M
	700.00	0.32	59.45	699.98	-3.53	-2.40	2.60	3.54	132.65	0.24	64.02M
	800.00	0.90	64.02	799.97	-3.84	-1.91	3.55	4.03	118.29	0.58	50.19M
	900.00	0.22	50.19	899.97	-4.09	-1.44	4.40	4.63	108.15	0.69	69.40M
	1000.00	0.48	69.40	999.96	-4.27	-1.17	4.94	5.08	103.35	0.28	65.77M
	1100.00	0.73	65.77	1099.96	-4.65	-0.76	5.91	5.96	97.35	0.25	74.93M
	1200.00	0.55	74.93	1199.95	-5.10	-0.38	6.96	6.97	93.10	0.21	86.81M
	1300.00	0.24	86.81	1299.95	-5.46	-0.24	7.63	7.63	91.81	0.32	90.19M
	1400.00	0.39	90.19	1399.95	-5.84	-0.23	8.18	8.18	91.61	0.15	15.83M
	1500.00	0.85	15.83	1499.94	-5.70	0.48	8.72	8.74	86.83	0.83	352.68M
	1600.00	0.20	352.68	1599.94	-5.19	1.37	8.90	9.01	81.26	0.67	344.14M
	1700.00	0.72	344.14	1699.93	-4.49	2.15	8.71	8.97	76.15	0.52	336.27M
	1800.00	0.25	336.27	1799.93	-3.73	2.95	8.45	8.95	70.75	0.47	326.85M
	1900.00	0.72	326.85	1899.93	-2.91	3.68	8.02	8.82	65.36	0.48	351.05M
	2041.00	0.71	351.05	2040.92	-1.33	5.28	7.40	9.09	54.47	0.21	51.50M
	2105.00	2.01	51.50	2104.90	-1.11	6.37	8.21	10.40	52.20	2.77	46.74M
	2168.00	4.89	46.74	2167.78	-1.24	8.90	11.03	14.18	51.11	4.59	52.57M
	2232.00	5.57	52.57	2231.51	-1.62	12.66	15.49	20.00	50.74	1.35	10.74R
	2296.00	6.89	54.65	2295.13	-2.54	16.77	21.09	26.94	51.51	2.09	85.73R
	2359.00	7.30	70.19	2357.66	-4.74	20.31	27.93	34.54	53.98	3.11	86.10R
	2423.00	7.51	80.46	2421.12	-8.76	22.38	35.88	42.29	58.05	2.09	140.98R
	2486.00	7.39	81.22	2483.59	-13.42	23.68	43.95	49.92	61.68	0.25	5.72L
	2550.00	8.33	80.57	2546.99	-18.41	25.07	52.59	58.26	64.51	1.48	21.15L
	2614.00	9.92	77.04	2610.18	-23.87	27.07	62.54	68.14	66.60	2.63	17.05L
	2677.00	10.73	75.71	2672.16	-29.56	29.73	73.51	79.29	67.98	1.34	144.21L
	2741.00	10.07	72.94	2735.11	-35.03	32.84	84.63	90.78	68.79	1.29	161.95L
	2805.00	9.86	72.54	2798.14	-40.00	36.13	95.21	101.83	69.22	0.35	73.72L
	2868.00	10.12	68.06	2860.19	-44.47	39.81	105.49	112.75	69.32	1.30	28.36R
	2932.00	10.50	69.18	2923.15	-48.86	43.99	116.15	124.20	69.26	0.67	4.30L
	2995.00	11.28	68.88	2985.02	-53.50	48.25	127.27	136.11	69.24	1.24	58.47R
	3059.00	12.01	74.21	3047.70	-59.07	52.32	139.51	149.00	69.44	2.03	34.04R
	3123.00	12.83	76.67	3110.21	-65.82	55.77	152.84	162.69	69.95	1.52	HS

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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)
	3186.00	12.99	76.67	3171.61	-72.98	59.01	166.53	176.68	70.49	0.25	6.15R
	3250.00	14.05	77.14	3233.84	-80.65	62.40	181.10	191.55	70.99	1.67	59.03R
	3314.00	14.21	78.21	3295.90	-88.83	65.73	196.37	207.08	71.49	0.48	16.71R
	3377.00	14.64	78.72	3356.92	-97.23	68.87	211.75	222.66	71.98	0.71	62.41L
	3441.00	14.87	77.05	3418.81	-105.82	72.29	227.68	238.88	72.38	0.76	113.07L
	3504.00	14.50	73.30	3479.75	-113.59	76.37	243.11	254.83	72.56	1.62	61.11L
	3568.00	14.63	72.38	3541.69	-120.83	81.12	258.49	270.92	72.58	0.41	129.97R
	3632.00	14.19	74.57	3603.68	-128.15	85.65	273.76	286.84	72.63	1.09	140.03L
	3695.00	14.06	74.12	3664.77	-135.43	89.80	288.56	302.21	72.71	0.27	104.00L
	3759.00	13.97	72.54	3726.87	-142.52	94.25	303.41	317.71	72.74	0.61	77.78L
	3822.00	14.06	70.93	3787.99	-149.12	99.03	317.89	332.96	72.70	0.64	89.11R
	3886.00	14.07	72.40	3850.08	-155.84	103.92	332.66	348.51	72.65	0.56	77.28R
	3950.00	14.41	77.49	3912.11	-163.44	108.00	347.85	364.23	72.75	2.03	156.92R
	4015.00	14.22	77.82	3975.09	-171.85	111.44	363.55	380.24	72.96	0.32	104.70L
	4078.00	14.09	75.63	4036.18	-179.70	114.97	378.54	395.61	73.11	0.87	167.04L
	4142.00	13.81	75.36	4098.29	-187.27	118.83	393.48	411.03	73.19	0.45	73.59R
	4206.00	13.87	76.19	4160.44	-194.86	122.60	408.32	426.32	73.29	0.32	64.90R
	4269.00	14.05	77.73	4221.57	-202.65	126.02	423.12	441.49	73.41	0.66	51.85L
	4333.00	14.17	77.11	4283.64	-210.77	129.42	438.35	457.05	73.55	0.30	59.05R
	4396.00	14.40	78.62	4344.70	-218.95	132.69	453.54	472.56	73.69	0.69	50.41L
	4460.00	14.76	76.94	4406.64	-227.41	136.10	469.29	488.63	73.83	0.87	78.23R
	4524.00	14.80	77.67	4468.52	-235.87	139.69	485.22	504.92	73.94	0.30	98.51L
	4587.00	14.67	73.01	4529.45	-243.70	143.74	500.71	520.93	73.98	1.89	119.67L
	4651.00	14.39	70.97	4591.40	-250.72	148.70	515.97	536.97	73.92	0.91	179.56R
	4715.00	12.43	71.04	4653.65	-256.97	153.53	530.01	551.80	73.84	3.06	159.65R
	4778.00	11.51	72.76	4715.28	-262.65	157.60	542.42	564.85	73.80	1.57	45.94R
	4842.00	11.99	75.10	4777.94	-268.74	161.20	554.95	577.89	73.80	1.06	7.11R
	4905.00	13.06	75.69	4839.44	-275.43	164.64	568.17	591.54	73.84	1.71	171.53L
	4969.00	12.91	75.59	4901.81	-282.52	168.21	582.10	605.92	73.88	0.24	48.33L
	5033.00	13.28	73.81	4964.14	-289.46	172.04	596.08	620.41	73.90	0.86	33.76R
	5096.00	13.58	74.66	5025.42	-296.36	176.01	610.17	635.04	73.91	0.57	32.41R
	5160.00	13.97	75.68	5087.58	-303.77	179.91	624.90	650.28	73.94	0.72	176.14R
	5224.00	13.16	75.92	5149.79	-311.21	183.59	639.45	665.28	73.98	1.27	139.47L
	5287.00	12.33	72.51	5211.24	-317.77	187.36	652.82	679.17	73.99	1.78	140.18R
	5351.00	11.87	74.40	5273.82	-323.93	191.18	665.68	692.59	73.98	0.95	28.17R
	5415.00	12.15	75.11	5336.42	-330.32	194.68	678.53	705.90	73.99	0.49	57.15R
	5478.00	12.91	80.06	5397.92	-337.47	197.60	691.87	719.53	74.06	2.09	79.20L
	5542.00	12.95	79.16	5460.30	-345.38	200.18	705.95	733.79	74.17	0.32	62.85L
	5605.00	13.33	76.10	5521.65	-352.86	203.26	719.94	748.08	74.23	1.26	12.85L
	5669.00	14.58	74.97	5583.76	-360.44	207.12	734.88	763.51	74.26	2.00	104.91R
	5733.00	14.54	75.58	5645.70	-368.29	211.21	750.44	779.59	74.28	0.25	140.64L
	5797.00	13.93	73.47	5707.74	-375.79	215.40	765.60	795.33	74.29	1.25	65.27L
	5860.00	14.25	70.78	5768.84	-382.51	220.11	780.20	810.65	74.25	1.16	165.59L
	5924.00	13.61	70.08	5830.96	-388.87	225.27	794.71	826.02	74.17	1.03	76.37L
	5988.00	13.76	67.68	5893.14	-394.73	230.73	808.83	841.10	74.08	0.92	140.74L
	6034.00	11.56	58.02	5938.03	-397.69	235.25	817.81	850.97	73.95	6.62	101.25L
	6066.00	11.38	41.38	5969.40	-398.10	239.31	822.61	856.72	73.78	10.32	64.12L
	6098.00	13.64	25.73	6000.64	-396.52	245.08	826.34	861.92	73.48	12.67	69.20L
	6162.00	17.57	2.62	6062.33	-387.24	261.55	830.06	870.30	72.51	11.38	75.92L
	6193.00	18.88	350.92	6091.79	-379.90	271.18	829.49	872.69	71.90	12.51	71.36L
	6225.00	20.81	338.49	6121.90	-370.39	281.59	826.58	873.23	71.19	14.47	47.55L
	6257.00	22.79	333.15	6151.61	-359.21	292.41	821.70	872.18	70.41	8.75	17.51L
	6289.00	25.37	331.26	6180.82	-346.67	303.95	815.60	870.40	69.56	8.41	15.53L
Tie-In	6321.00	28.26	329.57	6209.38	-332.68	316.50	808.47	868.21	68.62	9.34	85.14L

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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)
	6358.00	28.40	326.80	6241.95	-315.51	331.42	799.21	865.20	67.48	3.57	95.16L
	6390.00	28.30	318.30	6270.12	-300.45	343.45	790.00	861.42	66.50	12.61	57.51L
	6422.00	29.80	313.80	6298.10	-284.92	354.62	779.21	856.11	65.53	8.28	20.54L
	6453.00	32.70	311.80	6324.60	-268.87	365.54	767.40	850.01	64.53	9.93	12.40L
	6483.00	36.50	310.40	6349.29	-251.91	376.72	754.56	843.38	63.47	12.94	2.43R
	6515.00	39.50	310.60	6374.50	-232.30	389.52	739.58	835.89	62.23	9.38	10.82L
	6544.00	42.70	309.70	6396.35	-213.34	401.81	725.01	828.91	61.00	11.22	8.29L
	6571.00	46.70	308.90	6415.54	-194.49	413.83	710.32	822.07	59.78	14.96	12.01R
	6601.00	51.10	310.10	6435.26	-172.04	428.21	692.88	814.52	58.28	14.97	15.04R
	6631.00	55.40	311.50	6453.21	-148.11	443.92	674.70	807.64	56.66	14.81	9.63R
	6662.00	60.00	312.40	6469.77	-121.98	461.43	655.22	801.39	54.85	15.04	15.27R
	6694.00	64.30	313.70	6484.71	-93.73	480.75	634.55	796.10	52.85	13.91	9.95R
	6726.00	69.10	314.60	6497.37	-64.37	501.22	613.47	792.19	50.75	15.22	10.65R
	6757.00	73.70	315.50	6507.25	-35.00	522.01	592.72	789.82	48.63	15.09	7.14R
	6788.00	78.40	316.10	6514.72	-4.92	543.57	571.76	788.91	46.45	15.28	6.04L
	6819.00	83.10	315.60	6519.70	25.66	565.52	550.45	789.18	44.23	15.24	18.00L
	6850.00	87.10	314.30	6522.35	56.54	587.33	528.59	790.17	41.99	13.56	31.43L
	6882.00	88.90	313.20	6523.47	88.49	609.45	505.49	791.80	39.67	6.59	116.57L
	6962.00	88.80	313.00	6525.07	168.36	664.10	447.09	800.57	33.95	0.28	172.88R
	6994.00	88.00	313.10	6525.97	200.31	685.93	423.72	806.25	31.70	2.52	21.04L
	7026.00	89.30	312.60	6526.72	232.25	707.69	400.26	813.04	29.49	4.35	6.34R
	7058.00	90.20	312.70	6526.86	264.19	729.37	376.73	820.92	27.32	2.83	29.05L
	7090.00	91.10	312.20	6526.50	296.12	750.96	353.12	829.84	25.18	3.22	56.30L
	7122.00	91.30	311.90	6525.83	328.03	772.39	329.36	839.68	23.09	1.13	68.19L
	7153.00	91.50	311.40	6525.07	358.93	792.99	306.20	850.05	21.11	1.74	119.73L
	7185.00	90.70	310.00	6524.46	390.78	813.85	281.95	861.31	19.11	5.04	108.43L
	7217.00	90.40	309.10	6524.15	422.57	834.23	257.28	873.00	17.14	2.96	14.04L
	7249.00	90.80	309.00	6523.81	454.33	854.38	232.43	885.44	15.22	1.29	59.03R
	7281.00	91.10	309.50	6523.28	486.10	874.63	207.65	898.94	13.36	1.82	44.99R
	7313.00	91.60	310.00	6522.53	517.89	895.08	183.05	913.61	11.56	2.21	122.00R
	7344.00	91.10	310.80	6521.80	548.73	915.17	159.45	928.96	9.88	3.04	167.47L
	7376.00	90.20	310.60	6521.44	580.59	936.04	135.19	945.75	8.22	2.88	135.00L
	7408.00	89.70	310.10	6521.46	612.43	956.75	110.81	963.15	6.61	2.21	81.87R
	7440.00	89.80	310.80	6521.60	644.27	977.52	86.46	981.33	5.05	2.21	90.00L
	7472.00	89.80	310.50	6521.72	676.13	998.36	62.18	1000.30	3.56	0.94	135.00L
	7503.00	89.70	310.40	6521.85	706.98	1018.47	38.59	1019.20	2.17	0.46	135.00L
	7535.00	89.60	310.30	6522.05	738.82	1039.19	14.20	1039.29	0.78	0.44	14.04L
	7599.00	90.40	310.10	6522.05	802.48	1080.50	-34.68	1081.06	358.16	1.29	82.87L
	7662.00	90.50	309.30	6521.55	865.08	1120.74	-83.15	1123.82	355.76	1.28	116.56L
	7726.00	90.30	308.90	6521.10	928.61	1161.10	-132.82	1168.68	353.47	0.70	39.80R
	7790.00	90.90	309.40	6520.43	992.13	1201.51	-182.45	1215.28	351.37	1.22	95.43R
	7853.00	90.70	311.50	6519.55	1054.82	1242.37	-230.38	1263.55	349.49	3.35	33.69R
	7885.00	91.00	311.70	6519.08	1086.72	1263.62	-254.31	1288.95	348.62	1.13	90.00R
	7917.00	91.00	312.30	6518.52	1118.63	1285.03	-278.08	1314.77	347.79	1.87	153.43R
	7949.00	90.60	312.50	6518.07	1150.56	1306.60	-301.71	1340.98	347.00	1.40	168.69R
	7980.00	89.10	312.80	6518.16	1181.50	1327.60	-324.51	1366.69	346.26	4.93	LS
	8012.00	88.70	312.80	6518.77	1213.44	1349.34	-347.99	1393.49	345.54	1.25	---
	8044.00	88.70	312.80	6519.50	1245.38	1371.08	-371.46	1420.51	344.84	0.00	98.14L
	8076.00	88.60	312.10	6520.25	1277.31	1392.67	-395.06	1447.62	344.16	2.21	71.56R
	8108.00	88.70	312.40	6521.00	1309.23	1414.18	-418.74	1474.87	343.51	0.99	HS
	8139.00	89.50	312.40	6521.49	1340.16	1435.08	-441.63	1501.50	342.89	2.58	56.31R
	8171.00	89.70	312.70	6521.71	1372.10	1456.72	-465.21	1529.20	342.29	1.13	72.90R
	8203.00	90.10	314.00	6521.77	1404.06	1478.69	-488.48	1557.28	341.72	4.25	57.99R
	8235.00	90.60	314.80	6521.57	1436.05	1501.08	-511.34	1585.78	341.19	2.95	90.00R

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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)
	8267.00	90.60	314.90	6521.24	1468.04	1523.64	-534.02	1614.52	340.68	0.31	144.46L
	8299.00	89.90	314.40	6521.10	1500.03	1546.13	-556.79	1643.33	340.20	2.69	LS
	8330.00	89.30	314.40	6521.32	1531.01	1567.82	-578.94	1671.29	339.73	1.94	120.97L
	8362.00	89.00	313.90	6521.79	1562.99	1590.11	-601.89	1700.21	339.27	1.82	119.07L
	8394.00	88.50	313.00	6522.49	1594.95	1612.11	-625.12	1729.07	338.81	3.22	66.81R
	8426.00	89.10	314.40	6523.16	1626.91	1634.21	-648.25	1758.09	338.36	4.76	45.00L
	8457.00	89.30	314.20	6523.59	1657.89	1655.86	-670.43	1786.44	337.96	0.91	75.97R
	8489.00	89.40	314.60	6523.96	1689.88	1678.25	-693.30	1815.81	337.55	1.29	11.31L
	8521.00	89.90	314.50	6524.15	1721.87	1700.70	-716.10	1845.31	337.17	1.59	90.00R
	8553.00	89.90	315.00	6524.21	1753.86	1723.22	-738.83	1874.93	336.79	1.56	HS
	8585.00	90.50	315.00	6524.09	1785.85	1745.85	-761.45	1904.68	336.44	1.87	71.56L
	8616.00	90.70	314.40	6523.77	1816.84	1767.65	-783.49	1933.51	336.10	2.04	68.19R
	8648.00	90.90	314.90	6523.32	1848.83	1790.14	-806.25	1963.32	335.75	1.68	HS
	8679.00	91.10	314.90	6522.78	1879.82	1812.02	-828.20	1992.32	335.44	0.65	90.00L
	8712.00	91.10	314.40	6522.15	1912.80	1835.21	-851.68	2023.20	335.11	1.51	90.00L
	8744.00	91.10	314.10	6521.53	1944.78	1857.53	-874.59	2053.13	334.79	0.94	75.96L
	8776.00	91.20	313.70	6520.89	1976.75	1879.72	-897.65	2083.05	334.47	1.29	149.04R
	8807.00	90.70	314.00	6520.38	2007.72	1901.19	-920.00	2112.09	334.18	1.88	137.49L
	8839.00	89.50	312.90	6520.32	2039.68	1923.20	-943.23	2142.05	333.87	5.09	90.00R
	8871.00	89.50	313.10	6520.60	2071.64	1945.02	-966.63	2171.98	333.57	0.63	90.00R
	8903.00	89.50	313.60	6520.88	2103.60	1966.98	-989.90	2202.03	333.29	1.56	63.44L
	8935.00	89.60	313.40	6521.13	2135.56	1989.01	-1013.11	2232.17	333.01	0.70	45.00R
	8967.00	89.70	313.50	6521.33	2167.53	2011.02	-1036.34	2262.34	332.74	0.44	78.69L
	8998.00	89.80	313.00	6521.46	2198.49	2032.26	-1058.92	2291.59	332.48	1.64	104.04L
	9030.00	89.70	312.60	6521.60	2230.44	2054.00	-1082.40	2321.75	332.21	1.29	LS
	9062.00	89.50	312.60	6521.83	2262.38	2075.66	-1105.96	2351.91	331.95	0.62	156.04R
	9094.00	88.60	313.00	6522.36	2294.32	2097.40	-1129.43	2382.16	331.70	3.08	LS
	9126.00	88.40	313.00	6523.19	2326.26	2119.21	-1152.83	2412.48	331.45	0.62	44.99R
	9158.00	88.50	313.10	6524.06	2358.21	2141.05	-1176.20	2442.86	331.22	0.44	90.00L
	9190.00	88.50	312.80	6524.90	2390.15	2162.85	-1199.62	2473.25	330.99	0.94	HS
	9221.00	88.70	312.80	6525.65	2421.09	2183.90	-1222.36	2502.72	330.76	0.65	63.43L
	9253.00	88.90	312.40	6526.33	2453.02	2205.56	-1245.91	2533.13	330.54	1.40	71.57R
	9285.00	89.10	313.00	6526.88	2484.96	2227.26	-1269.42	2563.61	330.32	1.98	90.00R
	9317.00	89.10	313.50	6527.39	2516.92	2249.18	-1292.72	2594.21	330.11	1.56	51.34L
	9348.00	89.50	313.00	6527.76	2547.88	2270.42	-1315.30	2623.89	329.92	2.07	59.04R
	9380.00	89.80	313.50	6527.96	2579.84	2292.34	-1338.61	2654.56	329.72	1.82	33.69R
	9412.00	90.10	313.70	6527.99	2611.81	2314.41	-1361.78	2685.32	329.53	1.13	108.43L
	9444.00	90.00	313.40	6527.96	2643.77	2336.46	-1384.97	2716.10	329.34	0.99	156.80L
	9476.00	89.30	313.10	6528.16	2675.73	2358.38	-1408.28	2746.86	329.16	2.38	26.56R
	9508.00	89.70	313.30	6528.44	2707.69	2380.29	-1431.61	2777.64	328.98	1.40	26.57R
	9539.00	90.10	313.50	6528.49	2738.66	2401.59	-1454.13	2807.51	328.81	1.44	LS
	9571.00	89.90	313.50	6528.49	2770.62	2423.62	-1477.34	2838.39	328.64	0.62	21.80L
	9603.00	90.90	313.10	6528.27	2802.59	2445.56	-1500.63	2869.26	328.47	3.37	83.65L
	9635.00	91.00	312.20	6527.74	2834.52	2467.24	-1524.16	2900.06	328.29	2.83	96.33R
	9667.00	90.90	313.10	6527.20	2866.46	2488.92	-1547.70	2930.88	328.13	2.83	LS
	9698.00	90.30	313.10	6526.88	2897.42	2510.10	-1570.33	2960.83	327.97	1.94	LS
	9730.00	88.70	313.10	6527.16	2929.37	2531.96	-1593.69	2991.77	327.81	5.00	135.03L
	9762.00	87.80	312.20	6528.14	2961.30	2553.63	-1617.22	3022.65	327.65	3.98	63.43L
	9794.00	88.00	311.80	6529.31	2993.19	2575.03	-1640.98	3053.46	327.49	1.40	90.00R
	9826.00	88.00	312.30	6530.43	3025.10	2596.45	-1664.73	3084.29	327.33	1.56	36.86L
	9858.00	88.40	312.00	6531.43	3057.00	2617.91	-1688.44	3115.17	327.18	1.56	33.69R
	9889.00	88.70	312.20	6532.22	3087.92	2638.69	-1711.44	3145.11	327.03	1.16	75.97R
	9921.00	88.90	313.00	6532.89	3119.85	2660.34	-1734.99	3176.10	326.89	2.58	161.58L
	9953.00	88.00	312.70	6533.75	3151.79	2682.10	-1758.44	3207.14	326.75	2.96	149.06R

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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)
	9985.00	87.50	313.00	6535.01	3183.71	2703.84	-1781.88	3238.19	326.61	1.82	150.30R
	10017.00	86.80	313.40	6536.60	3215.63	2725.72	-1805.18	3269.29	326.48	2.52	63.41R
	10049.00	86.90	313.60	6538.36	3247.55	2747.72	-1828.36	3300.43	326.36	0.70	75.96L
	10080.00	87.00	313.20	6540.01	3278.47	2768.98	-1850.85	3330.60	326.24	1.33	44.97L
	10112.00	87.10	313.10	6541.65	3310.39	2790.84	-1874.16	3361.74	326.12	0.44	44.97L
	10144.00	87.30	312.90	6543.22	3342.30	2812.64	-1897.54	3392.87	325.99	0.88	83.67R
	10208.00	87.40	313.80	6546.18	3406.16	2856.52	-1944.03	3455.28	325.76	1.41	44.98L
	10271.00	87.80	313.40	6548.81	3469.05	2899.93	-1989.61	3516.84	325.55	0.90	6.34R
	10355.00	88.70	313.50	6551.38	3552.92	2957.67	-2050.56	3598.98	325.27	1.08	126.90L
	10399.00	87.80	312.30	6552.72	3596.83	2987.61	-2082.78	3641.95	325.12	3.41	78.69R
	10430.00	87.90	312.80	6553.89	3627.75	3008.56	-2105.60	3672.19	325.01	1.64	71.56R
	10462.00	88.00	313.10	6555.03	3659.68	3030.35	-2129.01	3703.47	324.91	0.99	90.00L
	10494.00	88.00	313.00	6556.15	3691.61	3052.18	-2152.38	3734.77	324.81	0.31	9.46R
	10526.00	88.60	313.10	6557.10	3723.55	3074.01	-2175.75	3766.09	324.71	1.90	33.69R
	10557.00	89.20	313.50	6557.69	3754.51	3095.27	-2198.31	3796.48	324.62	2.33	90.00L
	10589.00	89.20	312.80	6558.14	3786.47	3117.15	-2221.65	3827.84	324.52	2.19	90.00L
	10621.00	89.20	311.80	6558.59	3818.39	3138.69	-2245.32	3859.12	324.42	3.12	101.31L
	10653.00	89.10	311.30	6559.06	3850.29	3159.91	-2269.26	3890.32	324.32	1.59	63.44R
	10685.00	89.80	312.70	6559.37	3882.21	3181.32	-2293.04	3921.59	324.22	4.89	101.31L
	10717.00	89.70	312.20	6559.51	3914.14	3202.92	-2316.65	3952.92	324.12	1.59	93.58L
	10748.00	89.60	310.60	6559.70	3945.03	3223.42	-2339.90	3983.16	324.02	5.17	101.31L
	10780.00	89.40	309.60	6559.98	3976.86	3244.03	-2364.38	4014.23	323.91	3.19	94.77L
	10812.00	89.30	308.40	6560.34	4008.61	3264.16	-2389.25	4045.15	323.80	3.76	84.82L
	10844.00	89.50	306.20	6560.67	4040.23	3283.55	-2414.70	4075.84	323.67	6.90	90.00L
	10907.00	89.50	304.10	6561.22	4102.08	3319.82	-2466.21	4135.62	323.39	3.33	100.32L
	10971.00	89.10	301.90	6562.01	4164.41	3354.67	-2519.87	4195.66	323.09	3.49	90.00R
	11035.00	89.10	302.30	6563.01	4226.50	3388.68	-2574.08	4255.47	322.78	0.62	82.89R
	11098.00	89.30	303.90	6563.89	4287.88	3423.08	-2626.85	4314.84	322.50	2.56	96.35R
	11162.00	89.10	305.70	6564.78	4350.64	3459.60	-2679.40	4375.84	322.24	2.83	81.88R
	11225.00	89.30	307.10	6565.66	4412.73	3496.98	-2730.10	4436.48	322.02	2.24	45.00R
	11276.00	89.90	307.70	6566.02	4463.14	3527.95	-2770.61	4485.84	321.86	1.66	---
Projected TD	11336.00	89.90	307.70	6566.12	4522.50	3564.65	-2818.09	4544.04	321.67	0.00	---

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