



# CNX WDTN19EHSM Surveys 0ft to 23054ft MD Survey Geodetic Report

(Def Survey)

Report Date: February 21, 2023 - 02:39 PM  
 Client: CNX  
 Field: WV Monongalia County (NAD 27)  
 Structure / Slot: CNX WDTN19 Pad / WDTN19EHSM  
 Well: WDTN19EHSM  
 Borehole: Original Borehole  
 UWI / API#: Unknown / Unknown  
 Survey Name: CNX WDTN19EHSM Surveys 0ft to 23054ft MD  
 Survey Date: December 02, 2022  
 Tort / AHD / DDI / ERD Ratio: 321.099' / 16179.573 ft / 7.175 / 2.020  
 Coordinate Reference System: NAD27 West Virginia State Plane, Northern Zone, US Feet  
 Location Lat / Long: N 39° 41' 36.11824", W 80° 20' 7.70710"  
 Location Grid N/E Y/X: N 435744.198 RUS, E 1764898.448 RUS  
 CRS Grid Convergence Angle: -0.5328"  
 Grid Scale Factor: 0.99994143  
 Version / Patch: 2.10.834.0

Survey / DLS Computation: Minimum Curvature / Lubinski  
 Vertical Section Azimuth: 145.000 ° (Grid North)  
 Vertical Section Origin: 0.000 ft, 0.000 ft  
 TVD Reference Datum: KB  
 TVD Reference Elevation: 1293.000 ft above MSL  
 Seabed / Ground Elevation: 1264.000 ft above MSL  
 Magnetic Declination: -8.913 °  
 Total Gravity Field Strength: 999.3417mgal (9.80665 Based)  
 Gravity Model: GARM  
 Total Magnetic Field Strength: 51783.096 nT  
 Magnetic Dip Angle: 66.370 °  
 Declination Date: December 02, 2022  
 Magnetic Declination Model: HDGM 2022  
 North Reference: Grid North  
 Grid Convergence Used: -0.5328"  
 Total Corr Mag North->Grid North: -8.3804"  
 Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS ("/100ft)	BR ("/100ft)	TR ("/100ft)	Northing (RUS)	Easting (RUS)	Latitude (°)	Longitude (°)
Surface	0.00	0.00	0.00	0.00	-1293.00	0.00	0.00	0.00	N/A	N/A	N/A	435744.20	1764898.45	39.69336618	-80.33547419
	100.00	0.72	253.17	100.00	-1193.00	-0.20	-0.18	-0.60	0.72	0.00	0.00	435744.02	1764897.85	39.69336566	-80.33547633
	125.00	0.25	247.69	125.00	-1168.00	-0.26	-0.25	-0.80	1.89	-1.88	-21.92	435743.95	1764897.65	39.69336548	-80.33547704
	150.00	0.16	212.95	150.00	-1143.00	-0.26	-0.30	-0.87	0.60	-0.36	-138.96	435743.90	1764897.58	39.69336534	-80.33547728
	175.00	0.21	184.51	175.00	-1118.00	-0.21	-0.37	-0.89	0.41	0.20	-113.76	435743.82	1764897.55	39.69336513	-80.33547736
	200.00	0.24	192.02	200.00	-1093.00	-0.14	-0.47	-0.91	0.17	0.12	30.04	435743.73	1764897.54	39.69336486	-80.33547741
	225.00	0.23	204.37	225.00	-1068.00	-0.08	-0.57	-0.94	0.21	-0.04	49.40	435743.63	1764897.51	39.69336460	-80.33547752
	250.00	0.21	210.19	250.00	-1043.00	-0.03	-0.65	-0.98	0.12	-0.08	23.28	435743.55	1764897.46	39.69336436	-80.33547767
	275.00	0.25	228.05	275.00	-1018.00	-0.01	-0.73	-1.05	0.34	0.16	75.44	435743.47	1764897.40	39.69336415	-80.33547790
	300.00	0.25	223.43	300.00	-993.00	0.01	-0.80	-1.13	0.10	0.00	-22.48	435743.40	1764897.32	39.69336394	-80.33547817
	325.00	0.28	206.43	324.99	-968.01	0.05	-0.90	-1.19	0.34	0.12	-68.00	435743.30	1764897.26	39.69336368	-80.33547840
	350.00	0.27	197.99	349.99	-943.01	0.12	-1.01	-1.24	0.17	-0.04	-33.76	435743.19	1764897.21	39.69336338	-80.33547866
	375.00	0.22	195.05	374.99	-918.01	0.18	-1.11	-1.27	0.21	-0.20	-11.76	435743.09	1764897.18	39.69336310	-80.33547886
	400.00	0.31	190.56	399.99	-893.01	0.26	-1.22	-1.29	0.37	0.36	-17.96	435742.97	1764897.16	39.69336279	-80.33547875
	425.00	0.44	212.48	424.99	-868.01	0.34	-1.37	-1.36	0.77	0.52	87.68	435742.83	1764897.09	39.69336238	-80.33547897
	450.00	0.57	228.76	449.99	-843.01	0.39	-1.53	-1.50	0.77	0.52	65.12	435742.66	1764896.95	39.69336193	-80.33547948
	475.00	0.65	241.72	474.99	-818.01	0.39	-1.68	-1.72	0.64	0.32	51.84	435742.52	1764896.73	39.69336151	-80.33548025
	500.00	0.60	240.78	499.99	-793.01	0.36	-1.81	-1.96	0.20	-0.20	-3.76	435742.38	1764896.49	39.69336115	-80.33548110
	525.00	0.39	219.67	524.99	-768.01	0.37	-1.94	-2.13	1.10	-0.84	-84.44	435742.25	1764896.32	39.69336079	-80.33548169
	550.00	0.39	189.59	549.99	-743.01	0.45	-2.09	-2.20	0.81	0.00	-120.32	435742.11	1764896.25	39.69336038	-80.33548193
	575.00	0.41	172.87	574.99	-718.01	0.59	-2.27	-2.20	0.47	0.08	-66.88	435741.93	1764896.25	39.69335990	-80.33548193
	600.00	0.43	181.96	599.99	-693.01	0.75	-2.45	-2.19	0.28	0.08	36.36	435741.75	1764896.26	39.69335940	-80.33548190
	625.00	0.50	181.89	624.99	-668.01	0.91	-2.65	-2.20	0.28	0.28	-0.28	435741.55	1764896.25	39.69335884	-80.33548192
	650.00	0.58	178.57	649.98	-643.02	1.10	-2.89	-2.20	0.34	0.32	-13.28	435741.31	1764896.25	39.69335820	-80.33548195
	675.00	0.60	187.09	674.98	-618.02	1.31	-3.14	-2.21	0.36	0.08	34.08	435741.06	1764896.24	39.69335749	-80.33548195
	700.00	0.68	188.84	699.98	-593.02	1.51	-3.42	-2.25	0.33	0.32	7.00	435740.78	1764896.20	39.69335673	-80.33548208
	725.00	0.82	194.99	724.98	-568.02	1.73	-3.74	-2.32	0.65	0.56	24.60	435740.46	1764896.13	39.69335586	-80.33548231
	750.00	0.68	188.24	749.98	-543.02	1.95	-4.06	-2.39	0.66	-0.56	-27.00	435740.14	1764896.06	39.69335498	-80.33548254
	775.00	0.67	181.68	774.98	-518.02	2.18	-4.35	-2.41	0.31	-0.04	-26.24	435739.85	1764896.04	39.69335417	-80.33548262
	800.00	0.71	188.47	799.97	-493.03	2.41	-4.65	-2.44	0.36	0.16	27.16	435739.55	1764896.01	39.69335335	-80.33548271
	825.00	0.67	194.06	824.97	-468.03	2.62	-4.95	-2.50	0.31	-0.16	22.36	435739.25	1764895.95	39.69335254	-80.33548291
	850.00	0.59	198.45	849.97	-443.03	2.79	-5.21	-2.57	0.37	-0.32	17.56	435738.99	1764895.87	39.69335181	-80.33548317
	875.00	0.53	205.50	874.97	-418.03	2.92	-5.44	-2.66	0.37	-0.24	28.20	435738.76	1764895.78	39.69335119	-80.33548348
	900.00	0.47	200.00	899.97	-393.03	3.04	-5.64	-2.75	0.31	-0.24	-22.00	435738.56	1764895.70	39.69335063	-80.33548378
	925.00	0.50	180.59	924.97	-368.03	3.19	-5.84	-2.79	0.66	0.12	-77.64	435738.36	1764895.66	39.69335007	-80.33548390
	950.00	0.48	183.63	949.97	-343.03	3.36	-6.06	-2.79	0.13	-0.08	12.16	435738.14	1764895.65	39.69334948	-80.33548392
	975.00	0.47	184.57	974.97	-318.03	3.52	-6.26	-2.81	0.05	-0.04	3.76	435737.94	1764895.64	39.69334892	-80.33548397
	1000.00	0.57	179.55	999.97	-293.03	3.70	-6.49	-2.82	0.44	0.40	-20.08	435737.71	1764895.63	39.69334829	-80.33548399
	1025.00	0.62	182.67	1024.96	-268.04	3.91	-6.75	-2.82	0.24	0.20	12.48	435737.45	1764895.63	39.69334758	-80.33548400
	1050.00	0.55	176.21	1049.96	-243.04	4.12	-7.00	-2.82	0.38	-0.28	-25.84	435737.20	1764895.63	39.69334688	-80.33548398
	1075.00	0.44	180.45	1074.96	-218.04	4.30	-7.22	-2.81	0.46	-0.44	16.96	435736.98	1764895.64	39.69334629	-80.33548395
	1100.00	0.40	185.62	1099.96	-193.04	4.44	-7.40	-2.82	0.22	-0.16	20.68	435736.80	1764895.63	39.69334579	-80.33548398

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Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (*100ft)	BR (*100ft)	TR (*100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
Final Gyro	1125.00	0.46	185.10	1124.96	-168.04	4.59	-7.59	-2.84	0.24	0.24	-2.08	435736.61	1764895.61	39.69334527	-80.33548403
	1150.00	0.42	182.58	1149.96	-143.04	4.74	-7.78	-2.85	0.18	-0.16	-10.08	435736.42	1764895.60	39.69334475	-80.33548407
	1155.00	0.35	157.05	1154.96	-138.04	4.77	-7.81	-2.85	3.67	-1.40	-510.60	435736.39	1764895.60	39.69334466	-80.33548405
	1267.00	0.39	186.24	1266.96	-26.04	5.39	-8.51	-2.75	0.17	0.04	26.06	435735.69	1764895.69	39.69334276	-80.33548370
	1361.00	0.34	215.06	1360.96	67.96	5.72	-9.05	-2.95	0.20	-0.05	30.66	435735.15	1764895.50	39.69334125	-80.33548438
	1455.00	0.24	247.02	1454.95	161.95	5.78	-9.36	-3.29	0.20	-0.11	34.00	435734.84	1764895.16	39.69334041	-80.33548558
	1548.00	0.08	30.69	1547.95	254.95	5.71	-9.38	-3.44	0.33	-0.17	154.48	435734.82	1764895.01	39.69334035	-80.33548610
	1642.00	0.50	52.74	1641.95	348.95	5.67	-9.07	-3.08	0.45	0.45	23.46	435735.13	1764895.37	39.69334119	-80.33548483
	1736.00	0.84	35.67	1735.95	442.95	5.42	-8.26	-2.35	0.42	0.36	-18.16	435735.93	1764896.10	39.69334343	-80.33548227
	1831.00	1.12	41.19	1830.93	537.93	4.97	-7.00	-1.33	0.31	0.29	5.81	435737.20	1764897.12	39.69334693	-80.33547870
	1926.00	0.76	18.35	1925.92	632.92	4.37	-5.70	-0.52	0.54	-0.38	-24.04	435738.49	1764897.93	39.69335051	-80.33547586
	2020.00	0.41	344.77	2019.91	726.91	3.68	-4.79	-0.41	0.51	-0.37	-35.72	435739.41	1764898.03	39.69335302	-80.33547551
	2115.00	0.44	356.95	2114.91	821.91	3.05	-4.10	-0.52	0.10	0.03	12.82	435740.10	1764897.93	39.69335492	-80.33547592
	2210.00	0.99	3.37	2209.90	916.90	2.10	-2.91	-0.49	0.58	0.58	6.76	435741.29	1764897.95	39.69335817	-80.33547585
	2304.00	1.33	358.72	2303.88	1010.88	0.56	-1.01	-0.47	0.38	0.36	-4.95	435743.19	1764897.98	39.69336339	-80.33547583
	2399.00	1.08	340.31	2398.86	1105.86	-1.22	0.93	-0.80	0.48	-0.26	-19.38	435745.13	1764897.65	39.69336872	-80.33547706
	2494.00	1.05	331.63	2493.85	1200.85	-2.95	2.54	-1.51	0.17	-0.03	-9.14	435746.74	1764896.94	39.69337312	-80.33547965
	2592.00	0.45	302.78	2591.84	1298.84	-4.20	3.54	-2.26	0.70	-0.61	-29.44	435747.74	1764896.19	39.69337584	-80.33548235
	2686.00	0.40	189.33	2685.84	1392.84	-4.31	3.42	-2.63	0.76	-0.05	-120.69	435747.62	1764895.82	39.69337549	-80.33548364
	2781.00	0.59	152.16	2780.83	1487.83	-3.58	2.66	-2.45	0.38	0.20	-39.13	435746.86	1764896.00	39.69337341	-80.33548299
	2876.00	0.98	150.13	2875.83	1582.83	-2.29	1.52	-1.82	0.41	0.41	-2.14	435745.72	1764896.63	39.69337031	-80.33548071
	2971.00	1.11	108.21	2970.81	1677.81	-0.74	0.53	-0.54	0.80	0.14	-44.13	435744.73	1764897.91	39.69336762	-80.33547613
	3062.00	1.75	88.83	3061.78	1768.78	0.74	0.28	1.69	0.87	0.70	-21.30	435744.48	1764900.13	39.69336700	-80.33546821
	3160.00	1.17	49.65	3159.75	1866.75	1.48	0.96	3.95	1.14	-0.59	-39.98	435745.16	1764902.39	39.69336892	-80.33546021
	3254.00	0.99	317.62	3253.74	1960.74	0.58	2.18	4.13	1.66	-0.19	-97.90	435746.38	1764902.58	39.69337227	-80.33545959
	3349.00	2.27	299.43	3348.70	2055.70	-1.93	3.71	1.94	1.44	1.35	-19.15	435747.91	1764900.39	39.69337642	-80.33546743
	3443.00	3.06	302.54	3442.60	2149.60	-5.93	5.98	-1.80	0.85	0.84	3.31	435750.17	1764896.65	39.69338254	-80.33548078
	3538.00	3.83	309.00	3537.43	2244.43	-11.32	9.34	-6.40	0.91	0.81	6.80	435753.54	1764892.05	39.69339165	-80.33549725
	3632.00	4.59	310.00	3631.17	2338.17	-17.97	13.73	-11.72	0.81	0.81	1.06	435757.93	1764886.73	39.69340357	-80.33551630
	3727.00	5.86	311.00	3725.78	2432.78	-26.35	19.36	-18.30	1.34	1.34	1.05	435763.55	1764880.15	39.69341885	-80.33553984
	3821.00	7.11	313.20	3819.17	2526.17	-36.70	26.49	-26.16	1.36	1.33	2.34	435770.68	1764872.29	39.69343822	-80.33556802
	3916.00	7.58	312.48	3913.39	2620.39	-48.57	34.74	-35.07	0.50	0.49	-0.76	435778.94	1764863.39	39.69346066	-80.33559994
	4011.00	8.67	308.94	4007.44	2714.44	-61.57	43.48	-45.26	1.26	1.15	-3.73	435787.67	1764853.19	39.69348437	-80.33563644
	4105.00	8.32	309.89	4100.41	2807.41	-74.94	52.29	-55.98	0.40	-0.37	1.01	435796.48	1764842.47	39.69350829	-80.33567485
	4199.00	8.42	296.74	4193.42	2900.42	-87.57	59.75	-67.35	2.03	0.11	-13.99	435803.94	1764831.10	39.69352848	-80.33571548
	4292.00	8.39	286.62	4285.42	2992.42	-98.89	64.75	-79.93	1.59	-0.03	-10.88	435808.95	1764818.52	39.69354189	-80.33576036
	4387.00	8.05	279.29	4379.45	3086.45	-108.97	67.81	-93.14	1.16	-0.36	-7.72	435812.00	1764805.31	39.69354995	-80.33580738
	4485.00	8.82	271.82	4476.39	3183.39	-118.26	69.16	-107.42	1.36	0.79	-7.62	435813.35	1764791.03	39.69355328	-80.33585818
	4580.00	9.21	264.87	4570.22	3277.22	-126.41	68.71	-122.27	1.22	0.41	-7.32	435812.90	1764776.18	39.69355167	-80.33591093
	4674.00	8.29	262.35	4663.12	3370.12	-133.27	67.13	-136.48	1.06	-0.98	-1.08	435811.33	1764761.97	39.69354698	-80.33596137
	4769.00	8.93	261.02	4757.05	3464.05	-139.66	65.07	-150.55	0.71	0.67	-1.40	435809.26	1764747.90	39.69354096	-80.33601130
	4863.00	9.57	260.45	4849.83	3556.83	-146.21	62.63	-165.47	0.69	0.68	-0.61	435806.83	1764732.99	39.69353389	-80.33606421
	4958.00	10.56	261.25	4943.37	3650.37	-153.46	60.00	-181.86	1.05	1.04	0.84	435804.19	1764716.60	39.69352624	-80.33612236
	5052.00	11.74	262.62	5035.59	3742.59	-161.70	57.46	-199.85	1.29	1.26	1.46	435801.66	1764698.61	39.69351881	-80.33618623
	5147.00	11.96	262.58	5128.57	3835.57	-170.74	54.95	-219.20	0.23	0.23	-0.04	435799.14	1764679.26	39.69351142	-80.33625489
5241.00	12.55	256.88	5220.43	3927.43	-179.06	51.37	-238.81	1.43	0.63	-6.06	435795.57	1764659.66	39.69350110	-80.33632443	
5336.00	12.04	262.02	5313.25	4020.25	-187.40	47.65	-258.67	1.27	-0.54	5.41	435791.85	1764639.79	39.69349039	-80.33639489	
5431.00	12.87	265.03	5406.02	4113.02	-197.20	45.36	-279.02	1.11	0.87	3.17	435789.56	1764619.44	39.69348358	-80.33646714	
5525.00	11.51	262.12	5497.90	4204.90	-206.71	43.17	-298.74	1.59	-1.45	-3.10	435787.36	1764599.72	39.69347705	-80.33653714	
5620.00	13.47	262.54	5590.64	4297.64	-216.15	40.43	-319.11	2.07	2.06	0.44	435784.63	1764579.36	39.69346902	-80.33660940	
5715.00	13.08	260.39	5683.10	4390.10	-225.88	37.20	-340.68	0.66	-0.41	-2.26	435781.40	1764557.79	39.69345960	-80.33668593	
5810.00	11.71	256.21	5775.89	4482.89	-233.97	33.11	-360.64	1.72	-1.44	-4.40	435777.30	1764537.83	39.69344785	-80.33675673	
Final 3rd Party MWD	5904.00	12.58	254.44	5867.79	4574.79	-240.83	28.09	-379.76	1.01	0.93	-1.88	435772.29	1764518.71	39.69343358	-80.33682452
First SLB_MWD	5953.00	12.74	251.83	5915.59	4622.59	-244.17	24.97	-390.04	1.21	0.33	-5.33	435769.17	1764508.43	39.69342477	-80.33686093
KOP	6047.00	12.69	237.31	6007.31	4714.31	-247.59	16.16	-408.58	3.39	-0.05	-15.45	435760.36	1764489.89	39.69340010	-80.33692652
	6237.00	14.61	268.56	6192.19	4899.19	-261.70	4.27	-450.16	3.96	1.01	16.45	435748.47	1764448.32	39.69336640	-80.33707387
	6331.00	14.60	269.16	6283.15	4990.15	-274.91	3.80	-473.86	0.16	-0.01	0.64	435748.00	1764424.62	39.69336450	-80.33715805
	6426.00	14.79	266.96	6375.04	5082.04	-288.05	2.98	-497.94	0.62	0.20	-2.32	435747.18	1764400.54	39.69336164	-80.33724359
	6521.00	13.73	261.24	6467.12	5174.12	-299.45	0.62	-521.19	1.85	-1.12	-6.02	435744.82	1764377.29	39.69335456	-80.33732614
	6616.00	13.85	260.64	6559.38	5266.38	-309.36	-2.95	-543.55	0.20	0.13	-0.63	435741.25	1764354.93	39.69334420	-80.33740548
	6710.00	13.76	259.92	6650.66	5357.66	-318.93	-6.73	-565.66	0.21	-0.10	-0.77	435737.47	1764332.82	39.69333324	-80.33748390
	6804.00	13.90	258.89	6741.94	5448.94	-328.22	-10.86	-587.75	0.30	0.15	-1.10	435733.33	1764310.74	39.69332133	-80.33756224
	6899.00	13.89	259.79	6834.16	5541.16	-337.62	-15.08	-610.16	0.23	-0.01	0.95	435729.11	1764288.32	39.69330917	-80.33764176
	7089.00	13.95	255.63	7018.58	5725.58	-355.25	-24.81	-654.80	0.53	0.03	-2.19	435719.39	1764243.69	39.69328133	-80.33780003
	7183.00	13.63	255.04	7109.87	5816.87	-363.04	-30.48	-676.47	0.37	-0.34	-0.63	435713.72	1764222.02	39.69326520	-80.33787686
	7278.00	11.24	206.41	7202.88	5909.88	-362.44	-41.69	-691.45	10.95	-2.52	-51.19	435702.51	1764207.04	39.69323404	-80.33792969
	7373.00	18.45	158.05	7294.97	6001.97	-343.28	-64.04	-689.94	14.46	7.59	-50.91	435680.16	1764208.55	39.69317274	-80.33792359
	7468.00	18.75	149.32	7385.03	6092.03	-313.40	-91.12	-676.53	2.95	0.3					

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	7752.00	39.84	154.13	7634.89	6341.89	-185.54	-211.61	-625.70	9.03	8.66	-4.38	435532.60	1764272.78	39.69276927	-80.33769046
	7847.00	48.14	152.34	7703.18	6410.18	-120.30	-270.43	-595.95	8.83	8.74	-1.88	435473.78	1764302.54	39.69260856	-80.33758279
	7941.00	56.84	152.17	7760.37	6467.37	-46.40	-336.36	-561.26	9.26	9.26	-0.18	435407.86	1764337.22	39.69242847	-80.33745736
	8036.00	66.50	154.10	7805.40	6512.40	36.27	-410.89	-523.58	10.32	10.17	2.03	435333.33	1764374.90	39.69222483	-80.33732100
	8131.00	74.80	155.25	7836.85	6543.85	124.55	-491.85	-485.29	8.81	8.74	1.21	435252.38	1764413.18	39.69200357	-80.33718228
	8226.00	76.48	150.35	7860.42	6567.42	215.69	-573.67	-443.23	5.30	1.77	-5.16	435170.57	1764455.25	39.69178004	-80.33703010
	8320.00	82.50	149.62	7877.56	6584.56	307.72	-653.65	-397.01	6.45	6.40	-0.78	435090.58	1764501.46	39.69156164	-80.33686324
	8415.00	82.33	149.72	7890.10	6597.10	401.58	-734.93	-349.46	0.21	-0.18	0.11	435009.31	1764549.01	39.69133973	-80.33669159
	8509.00	83.20	149.41	7901.94	6608.94	494.54	-815.33	-302.22	0.98	0.93	-0.33	434928.91	1764596.24	39.69112023	-80.33652109
Landing Point	8604.00	88.18	146.75	7909.08	6616.08	589.09	-895.70	-252.15	5.94	5.24	-2.80	434848.55	1764646.31	39.69090088	-80.33634051
	8699.00	90.33	144.23	7910.31	6617.31	684.07	-973.97	-198.34	3.49	2.26	-2.65	434770.29	1764700.12	39.69068740	-80.33614673
	8794.00	90.41	145.81	7909.70	6616.70	779.06	-1051.80	-143.88	1.67	0.08	1.66	434692.46	1764754.58	39.69047512	-80.33595065
	8889.00	90.08	145.51	7909.29	6616.29	874.05	-1130.25	-90.29	0.47	-0.35	-0.32	434614.02	1764808.16	39.69026116	-80.33575765
	8984.00	89.89	144.59	7909.32	6616.32	969.05	-1208.11	-35.87	0.99	-0.20	-0.97	434536.16	1764862.58	39.69004879	-80.33556171
	9079.00	89.78	144.69	7909.59	6616.59	1064.05	-1285.59	19.11	0.16	-0.12	0.11	434458.69	1764917.56	39.68983752	-80.33536382
	9174.00	90.79	144.70	7909.12	6616.12	1159.05	-1363.11	74.01	1.06	1.06	0.01	434381.17	1764972.46	39.68962609	-80.33516618
	9268.00	88.78	146.03	7909.47	6616.47	1253.04	-1440.45	127.43	2.56	-2.14	1.41	434303.84	1765025.87	39.68941516	-80.33497382
	9363.00	87.84	145.26	7912.27	6619.27	1347.99	-1518.84	181.02	1.28	-0.99	-0.99	434225.45	1765079.45	39.68920132	-80.33478084
	9458.00	88.13	145.62	7915.61	6622.61	1442.93	-1597.03	234.87	0.49	0.31	0.38	434147.27	1765133.31	39.68898806	-80.33458691
	9553.00	88.63	144.89	7918.32	6625.32	1537.89	-1675.06	289.00	0.92	0.51	-0.77	434069.24	1765187.43	39.68877524	-80.33439204
	9649.00	89.02	144.45	7920.30	6627.30	1633.86	-1753.36	344.50	0.63	0.43	-0.46	433990.94	1765242.93	39.68856170	-80.33419225
	9744.00	88.58	144.04	7922.29	6629.29	1728.84	-1830.44	400.00	0.63	-0.46	-0.43	433913.87	1765298.42	39.68835152	-80.33399252
	9839.00	88.85	143.35	7924.42	6631.42	1823.79	-1906.98	456.23	0.78	0.28	-0.73	433837.34	1765354.65	39.68814284	-80.33379020
	9934.00	87.94	144.48	7927.08	6634.08	1918.73	-1983.72	512.16	1.53	-0.96	1.19	433760.60	1765410.58	39.68793360	-80.33358895
	10029.00	87.30	143.21	7931.03	6638.03	2013.63	-2060.35	568.16	1.50	-0.67	-1.34	433683.97	1765466.57	39.68772464	-80.33338747
	10124.00	87.15	143.65	7935.63	6642.63	2108.48	-2136.56	624.69	0.49	-0.16	0.46	433607.77	1765523.10	39.68751688	-80.33318409
	10219.00	87.81	144.99	7939.80	6646.80	2203.38	-2213.65	680.05	1.57	0.69	1.41	433530.68	1765578.45	39.68730666	-80.33298488
	10314.00	87.71	145.57	7943.52	6650.52	2298.30	-2291.68	734.11	0.62	-0.11	0.61	433452.66	1765632.52	39.68709385	-80.33279021
	10409.00	87.52	145.84	7947.47	6654.47	2393.21	-2370.09	787.60	0.35	-0.20	0.28	433374.25	1765686.00	39.68687994	-80.33259762
	10504.00	87.14	144.98	7951.90	6658.90	2488.11	-2448.21	841.47	0.99	-0.40	-0.91	433296.13	1765739.86	39.68666686	-80.33240364
	10599.00	87.08	144.95	7956.69	6663.69	2582.99	-2525.90	895.94	0.07	-0.06	-0.91	433218.45	1765794.33	39.68645498	-80.33220756
	10694.00	87.12	144.45	7961.49	6668.49	2677.86	-2603.34	950.76	0.53	0.04	-0.53	433141.02	1765849.15	39.68624380	-80.33201022
	10789.00	86.99	144.51	7966.37	6673.37	2772.73	-2680.56	1005.88	0.15	-0.14	0.06	433063.81	1765904.27	39.68603322	-80.33181185
	10884.00	86.98	144.85	7971.37	6678.37	2867.60	-2757.96	1060.73	0.36	-0.01	0.36	432986.40	1765959.11	39.68582212	-80.33161443
	10979.00	87.18	144.05	7976.21	6683.21	2962.47	-2835.15	1115.89	0.87	0.21	-0.84	432909.22	1766014.27	39.68561162	-80.33141591
	11073.00	86.91	145.88	7981.06	6688.06	3056.34	-2912.02	1169.78	1.97	-0.29	1.95	432832.36	1766068.16	39.68540199	-80.33122192
	11168.00	88.26	144.65	7985.06	6692.06	3151.25	-2990.01	1223.86	1.92	1.42	-1.29	432754.37	1766122.23	39.68518925	-80.33102722
	11262.00	88.46	145.38	7989.75	6696.75	3245.21	-3067.00	1277.73	0.80	0.21	-1.29	432677.39	1766176.10	39.68497929	-80.33083329
	11357.00	87.90	146.40	7990.77	6697.77	3340.15	-3145.61	1330.98	1.22	-0.59	1.07	432598.78	1766229.35	39.68476483	-80.33064153
	11451.00	87.91	145.17	7994.20	6701.20	3434.08	-3223.29	1383.80	1.31	0.01	-1.31	432521.10	1766282.16	39.68455293	-80.33045132
	11545.00	88.11	144.97	7997.47	6704.47	3528.02	-3300.31	1437.59	0.30	0.21	-0.21	432444.09	1766335.95	39.68434286	-80.33025769
	11640.00	88.18	144.61	8000.54	6707.54	3622.97	-3377.89	1492.34	0.39	0.07	-0.38	432366.52	1766390.69	39.68413128	-80.33006064
	11734.00	87.74	145.19	8003.89	6710.89	3716.91	-3454.74	1546.35	0.77	-0.47	0.62	432289.66	1766444.71	39.68392167	-80.32986621
	11828.00	89.15	144.40	8006.44	6713.44	3810.87	-3531.52	1600.52	1.72	1.50	-0.84	432212.89	1766498.87	39.68371228	-80.32967124
	11923.00	89.10	144.30	8007.89	6714.89	3905.86	-3608.71	1655.88	0.12	-0.05	-0.11	432135.71	1766554.23	39.68350179	-80.32947202
	12017.00	89.15	145.18	8009.33	6716.33	3999.84	-3685.45	1710.14	0.94	0.05	0.94	432058.97	1766608.49	39.68329248	-80.32927674
	12112.00	89.09	144.50	8010.78	6717.78	4094.83	-3763.11	1764.84	0.72	-0.06	-0.72	431981.32	1766663.18	39.68308069	-80.32907985
	12206.00	89.96	142.99	8011.56	6718.56	4188.80	-3838.90	1820.43	1.85	0.93	-1.61	431905.53	1766718.77	39.68287402	-80.32887989
	12301.00	89.97	144.65	8011.62	6718.62	4283.78	-3915.58	1876.51	1.75	0.01	1.75	431828.85	1766774.84	39.68266495	-80.32867814
	12395.00	90.30	144.29	8011.40	6718.40	4377.77	-3992.08	1931.13	0.52	0.35	-0.38	431752.36	1766829.46	39.68245633	-80.32848157
	12490.00	90.33	141.28	8010.88	6717.88	4472.69	-4067.73	1988.58	3.17	0.03	-3.17	431676.72	1766886.91	39.68225013	-80.32827499
	12584.00	90.42	144.95	8010.26	6717.26	4566.62	-4142.90	2044.99	3.91	0.10	3.90	431601.55	1766943.32	39.68204520	-80.32807212
	12679.00	90.63	144.31	8009.39	6716.39	4661.61	-4220.36	2099.98	0.71	0.22	-0.67	431524.09	1766998.30	39.68183394	-80.32787423
	12773.00	91.09	144.70	8007.98	6714.98	4755.60	-4296.88	2154.55	0.64	0.49	0.41	431447.58	1767052.87	39.68162525	-80.32767785
	12867.00	90.95	144.49	8006.31	6713.31	4849.58	-4373.49	2209.00	0.27	-0.15	-0.22	431370.98	1767107.32	39.68141634	-80.32748190
	12962.00	91.85	144.89	8003.99	6710.99	4944.55	-4450.99	2263.90	1.04	0.95	0.42	431293.48	1767162.21	39.68120497	-80.32728435
	13057.00	91.93	144.77	8000.85	6707.85	5039.50	-4528.60	2318.59	0.15	0.08	-0.13	431215.87	1767216.89	39.68099329	-80.32708751
	13151.00	91.93	143.63	7997.69	6704.69	5133.44	-4604.80	2373.54	1.21	0.00	-1.21	431139.68	1767271.85	39.68078551	-80.32688979
	13245.00	92.10	146.08	7994.38	6701.38	5227.37	-4681.61	2427.61	2.61	0.18	2.61	431062.87	1767325.92	39.68057602	-80.32669518
	13340.00	92.44	147.36	7990.62	6697.62	5322.25	-4760.96	2479.70	1.39	0.36	1.35	430983.52	1767378.00	39.68035949	-80.32650754
	13434.00	92.09	144.50	7986.90	6693.90	5416.15	-4838.76	2532.31	3.06	-0.37	-3.04	430905.73	1767430.61	39.68014725	-80.32631808
	13529.00	91.79	144.95	7983.69	6690.69	5511.10	-4916.27	2587.15	0.57	-0.32	0.47	430828.23	1767485.44	39.67993585	-80.32612076
	13624.00	91.73	144.92	7980.77	6687.77	5606.05	-4993.99	2641.70	0.07	-0.06	-0.03	430750.51	1767539.99	39.67972387	-80.32592442
	13719.00	91.70	145.10	7977.93	6684.93	5701.01	-5071.79	2696.15	0.19	-0.03	0.19	430672.72	1767594.43	39.67951169	-80.32572844

Comments	MD (ft)	Incl (°)	Azlm Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100R)	BR (°/100R)	TR (°/100R)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	14667.00	92.05	144.37	7943.35	6650.35	6648.14	-5852.98	3231.74	0.20	-0.18	-0.07	429891.57	1768129.99	39.67738086	-80.32380027
	14762.00	91.70	144.62	7940.24	6647.24	6743.08	-5930.28	3286.89	0.45	-0.37	0.26	429814.28	1768185.14	39.67716986	-80.32360186
	14857.00	91.32	144.70	7937.74	6644.74	6838.05	-6007.75	3341.82	0.40	0.08	0.08	429736.82	1768240.06	39.67695858	-80.32340419
	14952.00	91.54	144.76	7935.36	6642.36	6933.01	-6085.28	3396.66	0.24	0.23	0.06	429659.28	1768294.90	39.67674470	-80.32320686
	15047.00	91.44	145.27	7932.89	6639.89	7027.98	-6163.09	3451.11	0.55	-0.11	0.54	429581.48	1768349.35	39.67653488	-80.32301089
	15142.00	91.42	146.15	7930.52	6637.52	7122.94	-6241.55	3504.61	0.93	-0.02	0.93	429503.02	1768402.85	39.67632083	-80.32281827
	15237.00	91.61	145.11	7928.01	6635.01	7217.90	-6319.94	3558.22	1.11	0.20	-1.09	429424.64	1768456.45	39.67610699	-80.32262528
	15332.00	91.95	145.74	7925.06	6632.06	7312.86	-6398.12	3612.11	0.75	0.36	0.66	429346.46	1768510.34	39.67589372	-80.32243132
	15427.00	91.29	145.00	7922.38	6629.38	7407.81	-6476.26	3666.07	1.04	-0.69	-0.78	429268.33	1768564.30	39.67568058	-80.32223708
	15522.00	91.20	144.81	7920.31	6627.31	7502.79	-6553.97	3720.88	0.22	-0.09	-0.20	429190.62	1768618.90	39.67546862	-80.32204057
	15617.00	90.98	145.32	7918.50	6625.50	7597.77	-6631.84	3775.07	0.58	-0.23	0.54	429112.76	1768673.29	39.67525623	-80.32184482
	15712.00	90.64	144.97	7917.16	6624.16	7692.76	-6709.79	3829.36	0.51	-0.36	-0.37	429034.82	1768727.57	39.67504360	-80.32164944
	15807.00	90.32	143.88	7916.37	6623.37	7787.75	-6787.05	3884.62	1.20	-0.34	-1.15	428957.56	1768782.83	39.67483289	-80.32145062
	15902.00	90.51	145.14	7915.68	6622.68	7882.75	-6864.40	3939.77	1.34	0.20	1.33	428880.22	1768837.98	39.67462194	-80.32125219
	15997.00	90.93	144.70	7914.48	6621.48	7977.74	-6942.14	3994.36	0.64	0.44	-0.46	428802.48	1768892.57	39.67440991	-80.32105573
	16092.00	90.72	146.29	7913.12	6620.12	8072.72	-7020.41	4048.17	1.69	-0.22	1.67	428724.21	1768946.38	39.67419637	-80.32086205
	16187.00	90.31	144.22	7912.26	6619.26	8167.71	-7098.47	4102.31	2.22	-0.43	-2.18	428646.16	1769000.51	39.67398346	-80.32066721
	16282.00	90.42	146.29	7911.66	6618.66	8262.70	-7176.52	4156.45	2.18	0.12	2.18	428568.11	1769054.65	39.67377054	-80.32047236
	16377.00	90.10	144.64	7911.22	6618.22	8357.70	-7254.78	4210.30	1.77	-0.34	-1.74	428489.86	1769108.50	39.67355707	-80.32027852
	16471.00	90.61	144.42	7910.64	6617.64	8451.69	-7331.33	4264.85	0.59	0.54	-0.23	428413.31	1769163.04	39.67334828	-80.32008228
	16566.00	90.54	145.10	7909.69	6616.69	8546.68	-7408.92	4319.66	0.72	-0.07	0.72	428335.73	1769217.85	39.67313667	-80.31988506
	16661.00	90.34	145.16	7908.96	6615.96	8641.68	-7486.86	4373.97	0.22	-0.21	0.06	428257.79	1769272.15	39.67292407	-80.31968960
	16756.00	90.45	144.08	7908.30	6615.30	8736.68	-7564.31	4428.97	1.14	0.12	-1.14	428180.35	1769327.15	39.67271282	-80.31949171
	16850.00	90.58	145.35	7907.46	6614.46	8830.67	-7641.04	4483.27	1.36	0.14	1.35	428103.62	1769381.45	39.67250355	-80.31929636
	16944.00	90.44	145.16	7906.62	6613.62	8924.66	-7718.27	4536.84	0.25	-0.15	-0.20	428026.39	1769435.01	39.67229286	-80.31910357
	17039.00	90.54	145.33	7905.81	6612.81	9019.66	-7796.32	4590.99	0.21	0.11	0.18	427948.35	1769489.16	39.67207996	-80.31890867
	17134.00	90.67	145.20	7904.81	6611.81	9114.65	-7874.39	4645.12	0.19	0.14	-0.14	427870.29	1769543.29	39.67186701	-80.31871388
	17228.00	90.55	147.35	7903.81	6610.81	9208.62	-7952.56	4697.30	2.29	-0.13	2.29	427792.12	1769595.47	39.67165372	-80.31852598
	17323.00	90.38	141.67	7903.04	6610.04	9303.57	-8029.88	4752.43	5.98	-0.18	-5.98	427714.81	1769650.59	39.67144285	-80.31832766
	17417.00	90.57	144.76	7902.26	6609.26	9397.51	-8105.15	4808.71	3.29	0.20	3.29	427639.54	1769706.87	39.67123762	-80.31812531
	17511.00	90.30	146.22	7901.54	6608.54	9491.50	-8182.60	4861.97	1.58	-0.29	1.55	427562.09	1769760.12	39.67102633	-80.31793364
	17606.00	90.36	141.69	7900.99	6607.99	9586.46	-8259.39	4917.85	4.77	0.06	-4.77	427485.30	1769816.00	39.67081692	-80.31773265
	17701.00	89.92	141.44	7900.76	6607.76	9681.29	-8333.81	4976.90	0.53	-0.46	-0.26	427410.89	1769875.05	39.67061411	-80.31752048
	17795.00	90.60	144.20	7900.34	6607.34	9775.21	-8408.69	5033.70	3.02	0.72	2.94	427336.01	1769931.85	39.67040996	-80.31731630
	17890.00	90.35	145.41	7899.55	6606.55	9870.21	-8486.32	5088.46	1.30	-0.26	1.27	427258.39	1769986.60	39.67021182	-80.31711931
	17985.00	90.03	145.41	7899.23	6606.23	9965.20	-8564.53	5142.39	0.34	-0.34	0.00	427180.19	1770040.52	39.66998467	-80.31692522
	18080.00	90.48	145.72	7898.81	6605.81	10060.20	-8642.88	5196.11	0.58	0.47	0.33	427101.84	1770094.24	39.66977112	-80.31673187
	18175.00	89.95	145.93	7898.45	6605.45	10155.19	-8721.48	5249.47	0.60	-0.56	0.22	427023.25	1770147.48	39.66955670	-80.31653979
	18270.00	89.72	145.24	7898.73	6605.73	10250.18	-8799.85	5303.16	0.77	-0.24	-0.73	426944.88	1770201.29	39.66934289	-80.31634654
	18365.00	89.75	144.90	7898.17	6605.17	10345.18	-8877.73	5357.55	0.36	0.03	-0.36	426867.00	1770255.68	39.66913044	-80.31615082
	18460.00	89.45	145.37	7898.83	6606.83	10440.18	-8955.68	5411.86	0.59	-0.32	0.49	426789.06	1770309.98	39.66891782	-80.31595542
	18555.00	90.15	145.06	7900.16	6607.16	10535.17	-9033.70	5466.06	0.81	0.74	0.81	426711.05	1770364.17	39.66870499	-80.31576039
	18650.00	90.25	145.07	7899.83	6606.83	10630.17	-9111.58	5520.46	0.11	0.11	0.01	426633.17	1770418.57	39.66849254	-80.31556465
	18745.00	90.08	144.53	7899.29	6606.29	10719.17	-9266.02	5629.40	0.30	-0.09	-0.29	426478.74	1770527.51	39.66828013	-80.31537270
	18839.00	89.93	145.22	7899.28	6606.28	10814.17	-9343.72	5684.06	0.74	-0.16	0.73	426401.04	1770582.16	39.66806765	-80.31518095
	18934.00	89.75	145.61	7899.54	6606.54	10909.17	-9421.93	5737.99	0.45	-0.19	0.41	426322.84	1770636.09	39.66785519	-80.31497609
	19029.00	89.65	145.20	7899.03	6606.03	11003.16	-9499.45	5791.15	0.16	-0.11	-0.12	426245.32	1770689.25	39.66764271	-80.31478199
	19123.00	89.65	145.30	7900.62	6607.62	11108.16	-9577.65	5845.10	0.21	0.00	-0.21	426167.13	1770743.19	39.66743023	-80.31459065
	19218.00	89.25	145.11	7901.52	6608.52	11292.15	-9654.83	5898.73	0.47	-0.43	-0.20	426089.95	1770796.82	39.66721775	-80.31439652
	19312.00	89.65	143.70	7903.06	6610.06	11387.13	-9732.07	5954.02	1.53	-0.38	-1.48	426012.72	1770852.11	39.66700527	-80.31420352
	19407.00	88.89	145.21	7904.30	6611.30	11481.12	-9808.55	6008.66	1.77	0.76	1.61	425936.25	1770906.74	39.66679279	-80.31400467
	19501.00	89.60	144.74	7904.57	6611.57	11576.12	-9886.34	6063.18	0.70	0.49	-0.49	425858.46	1770961.26	39.66658031	-80.31380813
	19596.00	90.13	144.88	7904.41	6611.41	11669.11	-9962.34	6116.78	0.16	0.06	0.15	425782.46	1771014.86	39.66636783	-80.31361197
	19689.00	90.64	144.38	7903.78	6610.78	11763.11	-10038.99	6171.19	0.76	0.54	-0.53	425705.81	1771069.26	39.66615535	-80.31341916
	19783.00	90.32	144.27	7902.99	6609.99	11857.10	-10115.35	6226.01	0.36	-0.34	-0.12	425629.46	1771124.08	39.66594287	-80.31322344
	19877.00	90.39	144.65	7902.41	6609.41	11951.09	-10191.84	6280.64	0.41	0.07	0.40	425552.98	1771178.71	39.66573039	-80.31302628
	19971.00	90.39	144.65	7902.41	6609.41	11951.09	-10191.84	6280.64	0.41	0.07	0.40	425552.98	1771178.71	39.66551791	-80.31282957
	20066.00	90.55	144.20	7901.63	6608.63	12046.09	-10269.10	6335.91	0.50	0.17	-0.47	425475.72	1771233.97	39.66530543	-80.31263097
	20160.00	90.77	144.38	7900.55	6607.55	12140.07	-10345.42	6390.77	0.30	0.23	0.19	425399.40	1771288.83	39.66509295	-80.31243366
	20255.00	90.64	144.42	7899.38	6606.38	12235.06	-10422.66	6446.07	0.14	-0.14	0.04	425322.17	1771343.13	39.66488047	-80.31223477
	20349.00	89.83	144.79	7898.99	6605.99	12329.06	-10499.29	6500.51	0.95	-0.86	0.39	425245.55	1771398.57	39.66466799	-80.31203894
	20444.00	89.44	144.84	7898.60	6606.60	12424.05	-10576.93	6555.25	0.41	-0.41	0.05	425167.91	1771453.31	39.66445551	-80.31184202
	20538.00	89.45	144.84	7900.51	6607.51	12518.05	-10653.78	6609.38	0.01	0.00	0.00	425091.07	1771507.43	39.66424303	-80.31164730
	20633.00	89.36	145.97	7901.49	6608.49	12									

Comments	MD (ft)	Incl (°)	Azlm Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (*100ft)	BR (*100ft)	TR (*100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	21575.00	89.40	145.55	7909.32	6616.32	13554.94	-11508.68	7196.22	0.07	0.05	0.04	424236.22	1772094.23	39.66195368	-80.30953562
	21670.00	90.13	145.50	7909.71	6616.71	13649.93	-11586.99	7250.00	0.77	0.77	-0.05	424157.91	1772148.01	39.66174002	-80.30934213
	21857.00	90.25	145.57	7909.09	6616.09	13836.92	-11741.17	7355.82	0.07	0.06	0.04	424003.74	1772253.82	39.66131940	-80.30896135
	21949.00	89.98	145.85	7908.91	6615.91	13928.92	-11817.17	7407.65	0.42	-0.29	0.30	423927.74	1772305.65	39.66111202	-80.30877483
	22043.00	89.81	145.44	7909.08	6616.08	14022.91	-11894.78	7460.70	0.47	-0.18	-0.44	423850.14	1772358.69	39.66090030	-80.30858396
	22136.00	89.95	145.28	7909.27	6616.27	14115.91	-11971.29	7513.56	0.23	0.15	-0.17	423773.63	1772411.55	39.66069155	-80.30839376
	22229.00	90.01	145.54	7909.31	6616.31	14208.91	-12047.85	7566.35	0.29	0.06	0.28	423697.08	1772464.34	39.66048268	-80.30820381
	22323.00	89.58	145.44	7909.64	6616.64	14302.90	-12125.31	7619.61	0.47	-0.46	-0.11	423619.62	1772517.60	39.66027136	-80.30801219
	22416.00	89.54	146.20	7910.36	6617.36	14395.89	-12202.24	7671.86	0.82	-0.04	0.82	423542.69	1772569.84	39.66006145	-80.30782418
	22508.00	89.55	146.62	7911.09	6618.09	14487.86	-12278.88	7722.75	0.46	0.01	0.46	423466.06	1772620.73	39.65985233	-80.30764097
	22602.00	89.35	153.04	7911.99	6618.99	14581.47	-12360.10	7769.97	6.83	-0.21	6.83	423384.85	1772667.94	39.65963053	-80.30747070
	22695.00	89.02	145.26	7913.31	6620.31	14674.15	-12439.87	7817.61	8.37	-0.35	-8.37	423305.08	1772715.59	39.65941272	-80.30729893
	22789.00	89.12	144.95	7914.84	6621.84	14768.13	-12516.96	7871.38	0.35	0.11	-0.33	423228.00	1772769.35	39.65920242	-80.30710551
	22884.00	89.97	144.88	7915.59	6622.59	14863.13	-12594.70	7925.99	0.90	0.89	-0.07	423150.27	1772823.95	39.65899037	-80.30690911
	22978.00	89.92	144.78	7915.68	6622.68	14957.13	-12671.54	7980.13	0.12	-0.05	-0.11	423073.43	1772878.09	39.65878076	-80.30671436
Last SLB_MWD	23029.00	89.68	144.64	7915.86	6622.86	15008.13	-12713.16	8009.59	0.54	-0.47	-0.27	423031.80	1772907.56	39.65866721	-80.30660840
Projection to TD	23054.00	89.68	144.64	7916.00	6623.00	15033.13	-12733.55	8024.06	0.00	0.00	0.00	423011.42	1772922.02	39.65861160	-80.30655636

Survey Type: Def Survey

Survey Error Model: ISCSA Rev 3 \*\*\* 3-D 95.000% Confidence 2.7955 sigma  
 Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	29.000	1/98.425	17.500	13.375	A020Ga_GYRO-NS-Depth Only	Original Borehole / CNX WDTN19EHSM Surveys 0ft to 23054ft MD
	1	29.000	29.000	Act Stns	17.500	13.375	A020Ga_GYRO-NS-Depth Only	Original Borehole / CNX WDTN19EHSM Surveys 0ft to 23054ft MD
	1	29.000	1155.000	Act Stns	17.500	13.375	A020Ga_GYRO-NS	Original Borehole / CNX WDTN19EHSM Surveys 0ft to
	1	1155.000	3100.000	Act Stns	12.250	9.625	A001Mb_MWD	Original Borehole / CNX WDTN19EHSM Surveys 0ft to
	1	3100.000	5953.000	Act Stns	8.750	5.500	A001Mb_MWD	Original Borehole / CNX WDTN19EHSM Surveys 0ft to
	1	5953.000	23054.000	Act Stns	8.500	5.500	B006Mb_MWD+IGRF	Original Borehole / CNX WDTN19EHSM Surveys 0ft to

...CNX WDTN19 Pad\WDTN19EHSM\Original Borehole\CNX WDTN19EHSM Surveys 0ft to 23054ft MD





CNX



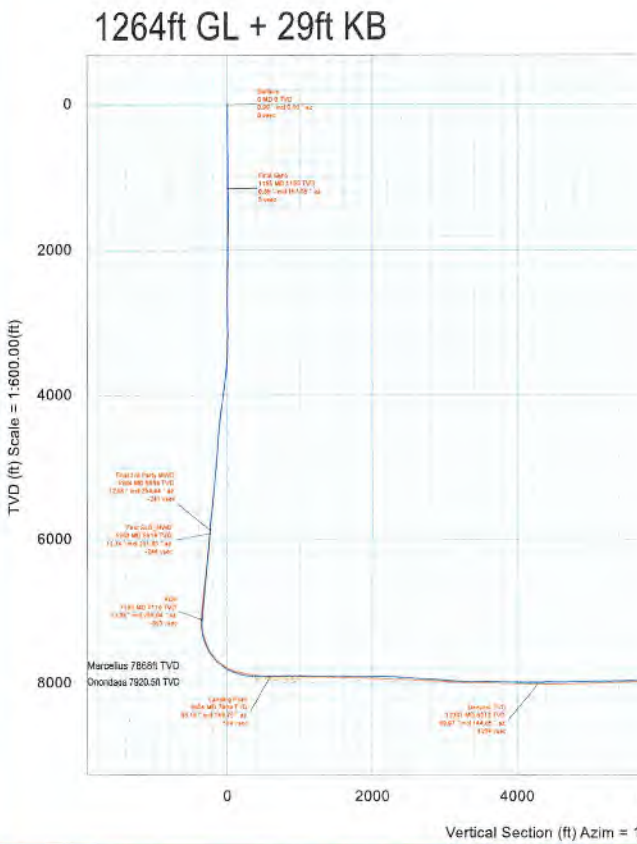
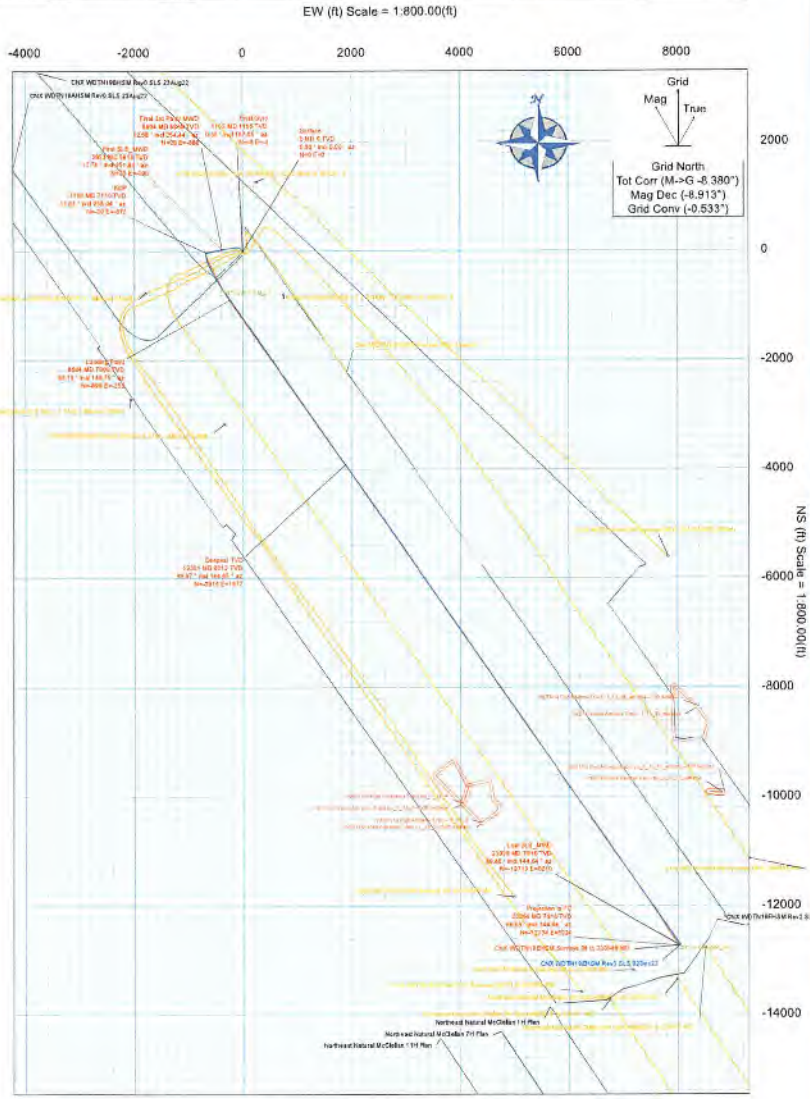
<b>Borehole:</b> Original Borehole	<b>Well:</b> WDTN19EHSM	<b>Field:</b> WV Monongalia County (NAD 27)	<b>Structure:</b> Patterson 873
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<b>Gravity &amp; Magnetic Parameters</b> Model: HDGM 2022 Dip: 66.37° Date: 02-Dec-2022 MagDec: -8.913° FS: 61783.096T Gravity FS: 999.342mgm (9.80665 Based)	<b>Surface Location</b> NAD27 West Virginia State Plane, Northern Zone, US Feet Lat: N 39 41 36.12 Lon: W 80 20 7.71 Northing: 426744.2815 Easting: 1764898.48RUS Grid Conv: -0.5320° Scale Fact: 0.96994143	<b>Miscellaneous</b> Shot: WDTN19EHSM TVD Ref: KB(1293R above MSL) Plan: CNX WDTN19EHSM Surveys Off to 23064R MD
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Well Name	Station	Dimension	Latitude	Longitude	Depth	W 8128 7.71	Other Details	Notes
WDTN19EHSM	1	100	426744.2815	1764898.48RUS	100	1764898.48	100	100
WDTN19EHSM	2	100	426744.2815	1764898.48RUS	200	1764898.48	200	100
WDTN19EHSM	3	100	426744.2815	1764898.48RUS	300	1764898.48	300	100
WDTN19EHSM	4	100	426744.2815	1764898.48RUS	400	1764898.48	400	100
WDTN19EHSM	5	100	426744.2815	1764898.48RUS	500	1764898.48	500	100
WDTN19EHSM	6	100	426744.2815	1764898.48RUS	600	1764898.48	600	100
WDTN19EHSM	7	100	426744.2815	1764898.48RUS	700	1764898.48	700	100
WDTN19EHSM	8	100	426744.2815	1764898.48RUS	800	1764898.48	800	100
WDTN19EHSM	9	100	426744.2815	1764898.48RUS	900	1764898.48	900	100
WDTN19EHSM	10	100	426744.2815	1764898.48RUS	1000	1764898.48	1000	100
WDTN19EHSM	11	100	426744.2815	1764898.48RUS	1100	1764898.48	1100	100
WDTN19EHSM	12	100	426744.2815	1764898.48RUS	1200	1764898.48	1200	100
WDTN19EHSM	13	100	426744.2815	1764898.48RUS	1300	1764898.48	1300	100
WDTN19EHSM	14	100	426744.2815	1764898.48RUS	1400	1764898.48	1400	100
WDTN19EHSM	15	100	426744.2815	1764898.48RUS	1500	1764898.48	1500	100
WDTN19EHSM	16	100	426744.2815	1764898.48RUS	1600	1764898.48	1600	100
WDTN19EHSM	17	100	426744.2815	1764898.48RUS	1700	1764898.48	1700	100
WDTN19EHSM	18	100	426744.2815	1764898.48RUS	1800	1764898.48	1800	100
WDTN19EHSM	19	100	426744.2815	1764898.48RUS	1900	1764898.48	1900	100
WDTN19EHSM	20	100	426744.2815	1764898.48RUS	2000	1764898.48	2000	100

PART No	Survey Point	Vendor/Tool	Mag Dec	Mag Dec	Mag Dec	Mag Dec	Mag Dec	Mag Dec	Mag Dec	Mag Dec	Comments
1	1	1	1	1	1	1	1	1	1	1	
2	2	2	2	2	2	2	2	2	2	2	
3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	

Critical Point	MD	BHCL	AZM	TVD	WSEC	NE95H	EW95H	DLS
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Final Dip	1155.00	0.36	143.05	1154.64	4.77	-7.81	-2.81	1.87
Final 3rd Party MWD	5964.70	12.11	254.44	5887.79	-240.91	28.00	-104.76	1.31
Final SLS_MWD	5453.00	12.74	251.87	5441.54	-244.17	24.87	-104.34	1.21
ICP	7183.00	13.13	251.24	7164.87	-252.04	-28.48	-104.47	0.37
Landmark TVD	8644.00	03.19	145.75	7000.28	588.29	-468.72	-252.15	0.94
Desired TVD	12201.00	08.87	144.85	8011.92	4263.70	-5815.59	1074.51	1.25
Final SLS_MWD	22029.00	08.88	144.84	7913.86	15088.13	-12713.15	8083.59	0.54
Projection to TD	23054.00	08.89	144.74	7913.05	15033.13	-12713.95	8084.29	1.00



09/15/2023