



TUG HILL
OPERATING

Tug Hill Operating LLC
Well: Greer 1W-13HM
Site: Greer Unit N
Project: Marshall County, WV
Design: rev3

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Annotation
1	6415.00	37.52	232.18	5596.21	-1739.40	-1858.35	0.00	0.00	437.18	Tie in survey @ 6415 MD
2	6490.00	38.16	233.25	5655.44	-1767.27	-1894.96	1.22	46.15	449.64	S/T Begin 10'100' build/turn (90R)
3	6550.00	38.56	242.90	5702.53	-1796.89	-1926.48	10.00	90.00	463.01	Begin 2.16"/100' build/turn
4	6808.23	39.00	251.80	5904.00	-1848.98	-2075.44	2.16	88.94	544.59	Begin 8"/100' build/turn
5	7849.89	91.00	329.91	6388.25	-1422.85	-2775.93	8.00	80.09	1360.48	Begin 91.00° lateral section
6	15060.74	91.00	329.91	6263.00	4815.59	-6390.15	0.00	0.00	8001.49	PBHLTD 15060.74 MD/6263.00 TVD

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	V Sect	Annotation
290.00	0.71	199.13	289.99	-1.70	-0.59	-0.55	MWD surveys
7536.00	66.59	306.84	6382.99	-1798.44	-2550.55	954.63	Survey @ 7536.00 MD 6382.99 TVD
7565.00	69.63	309.12	6393.80	-1781.88	-2571.75	981.53	Chkshot @ 7565 MD
7633.00	69.63	309.12	6417.47	-1741.66	-2621.21	1045.24	Survey projected to 7633.00 MD 6417.47 TVD

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	V Sect	Annotation
6415.00	37.52	232.18	5596.21	-1739.40	-1858.35	437.35	Tie into original hole @ 6415 MD
14914.00	91.34	325.82	6336.42	4756.59	-6342.46	7927.90	Survey @ 14914.00 MD 6336.42 TVD
14978.00	91.34	325.82	6334.92	4809.52	-6378.40	7988.46	Survey projected to 14978.00 MD 6334.92 TVD

Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD83 West Virginia - HARN
Ellipsoid: GRS 1980
Zone: Zone 17N (84 W to 78 W)

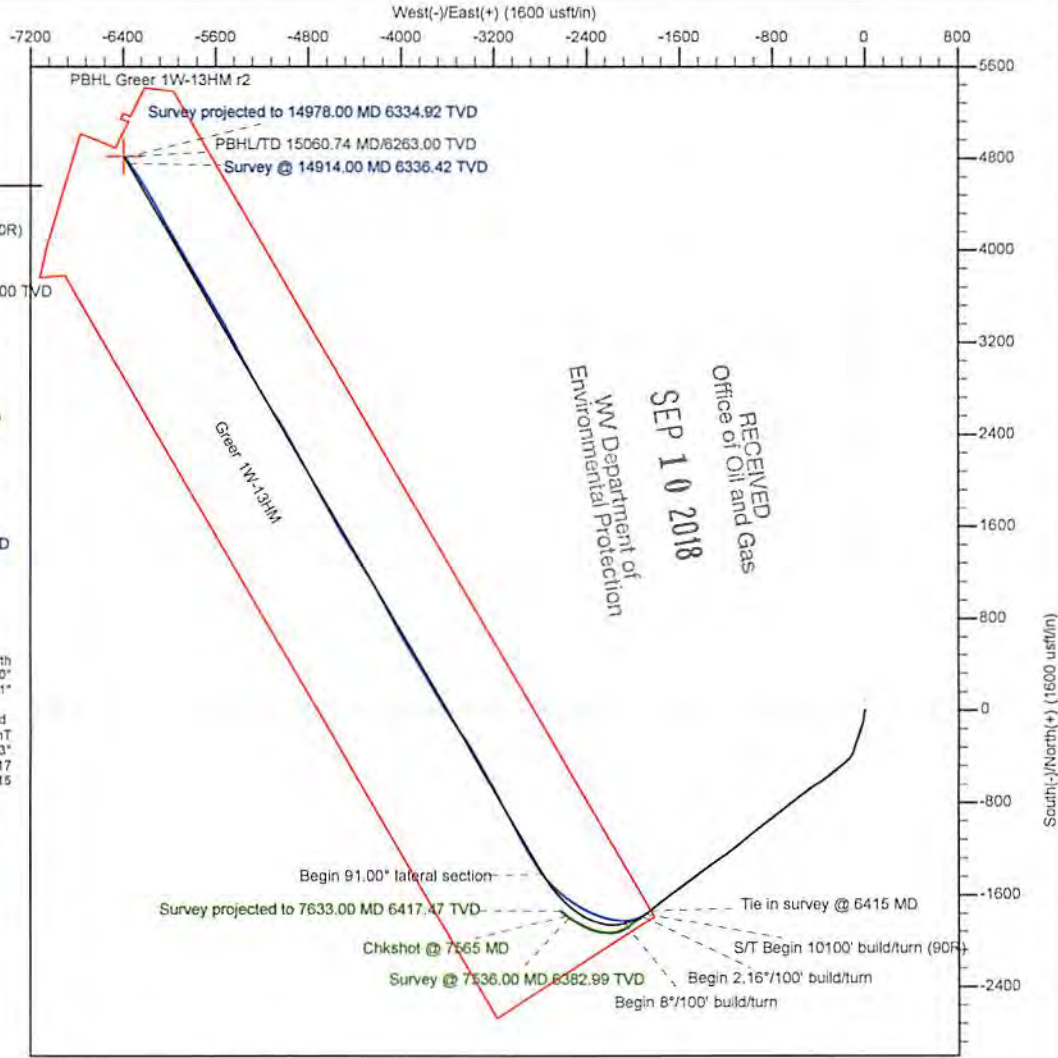
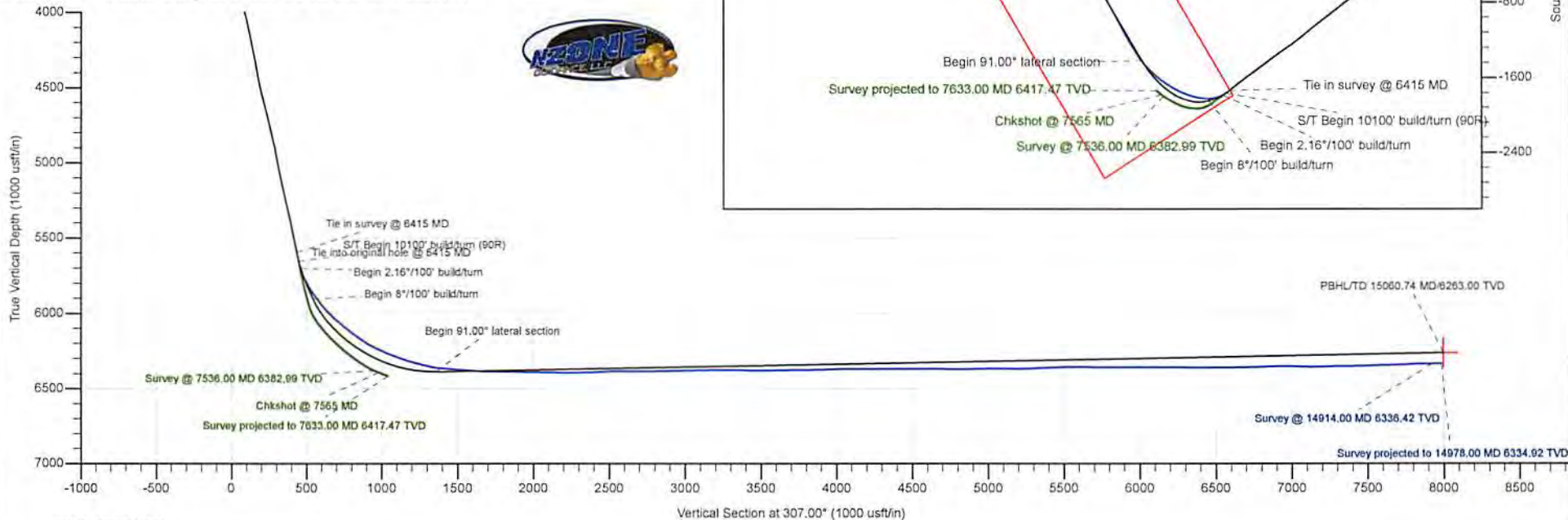
System Datum: Mean Sea Level
Depth Reference: RKB=1254+26 @ 1280.00ustt (Nabors B28)
Surface location
Northing: 14438327.85
Easting: 1686471.20
Latitude: 39.75710028
Longitude: -80.83612865



Azimuths to Grid North
True North: -0.10°
Magnetic North: -8.71°

Magnetic Field
Strength: 52140.3snT
Dip Angle: 66.93°
Date: 9/28/2017
Model: IGRF2015

Total Corr (M->G): To convert a Magnetic Direction to a Grid Direction, Subtract 8.71°



Tug Hill Operating LLC
 Marshall C West Virginia
 Greer Unit N
 Greer 1W-13HM
 Sidetrack 01
 Surveys Sidetrack 01
 4-Oct-17

MD	Inc	Azimuth	TVD	N/S	E/W	VS	DLS	Y	X	Latitude	Longitude	Comment
0	0	0	0	0	0	0	0	0	14438328	1686471	39.7571	-80.8361
290	0.71	199.13	289.99	-1.7	-0.59	-0.55	0.24	14438326	1686471	39.7571	-80.8361	
351	0.62	242.01	350.99	-2.21	-1	-0.53	0.81	14438326	1686470	39.75709	-80.8361	
442	0.4	224.21	441.99	-2.67	-1.66	-0.28	0.3	14438325	1686470	39.75709	-80.8361	
533	0.22	231.92	532.98	-3	-2.02	-0.19	0.2	14438325	1686469	39.75709	-80.8361	
628	0.22	181.59	627.98	-3.3	-2.17	-0.25	0.2	14438325	1686469	39.75709	-80.8361	
723	0.09	199.7	722.98	-3.55	-2.2	-0.38	0.14	14438324	1686469	39.75709	-80.8361	
816	0.22	269.82	815.98	-3.62	-2.4	-0.26	0.22	14438324	1686469	39.75709	-80.8361	
911	0.22	271.4	910.98	-3.62	-2.77	0.03	0.01	14438324	1686468	39.75709	-80.8361	
969	0.4	109.01	968.98	-3.68	-2.69	-0.07	1.06	14438324	1686469	39.75709	-80.8361	
1006	0.09	172.21	1005.98	-3.75	-2.56	-0.21	1	14438324	1686469	39.75709	-80.8361	
1101	0.09	159.82	1100.98	-3.89	-2.52	-0.33	0.02	14438324	1686469	39.75709	-80.8361	
1196	1.68	216.63	1195.97	-5.08	-3.33	-0.4	1.72	14438323	1686468	39.75709	-80.8361	
1291	4.42	201.6	1290.82	-9.6	-5.51	-1.38	2.98	14438318	1686466	39.75707	-80.8361	
1386	7.11	190.8	1385.34	-18.79	-7.96	-4.95	3.04	14438309	1686463	39.75705	-80.8362	
1481	7.29	187.1	1479.59	-30.54	-9.8	-10.55	0.52	14438297	1686461	39.75702	-80.8362	
1576	9.19	186.13	1573.6	-44.07	-11.36	-17.45	2.01	14438284	1686460	39.75698	-80.8362	
1672	12.42	189.3	1667.89	-61.88	-13.85	-26.18	3.42	14438266	1686457	39.75693	-80.8362	
1765	15.11	188.03	1758.21	-83.76	-17.16	-36.7	2.91	14438244	1686454	39.75687	-80.8362	
1859	18.29	193.01	1848.24	-110.27	-22.19	-48.64	3.71	14438218	1686449	39.7568	-80.8362	
1954	19.8	196.09	1938.04	-140.26	-30.01	-60.44	1.91	14438188	1686441	39.75672	-80.8362	
2049	20.11	200.5	2027.34	-171.01	-40.19	-70.82	1.62	14438157	1686431	39.75663	-80.8363	
2143	20.02	201.11	2115.64	-201.16	-51.64	-79.82	0.24	14438127	1686420	39.75655	-80.8363	
2238	18.78	200.19	2205.24	-230.68	-62.78	-88.69	1.34	14438097	1686408	39.75647	-80.8364	
2333	16.48	198.69	2295.77	-257.81	-72.37	-97.35	2.47	14438070	1686399	39.75639	-80.8364	
2428	16.62	196.22	2386.84	-283.61	-80.49	-106.4	0.76	14438044	1686391	39.75632	-80.8364	
2522	17.41	196	2476.72	-310.04	-88.12	-116.21	0.84	14438018	1686383	39.75625	-80.8364	
2572	17.28	196.09	2524.45	-324.37	-92.24	-121.55	0.27	14438003	1686379	39.75621	-80.8365	
2630	16.7	195.61	2579.92	-340.67	-96.87	-127.66	1.03	14437987	1686374	39.75617	-80.8365	
2725	18.21	204.2	2670.56	-367.36	-106.63	-135.93	3.14	14437960	1686365	39.75609	-80.8365	
2820	22.01	213.41	2759.77	-395.78	-122.52	-140.33	5.2	14437932	1686349	39.75601	-80.8366	
2914	25.19	222.31	2845.92	-425.29	-145.7	-139.58	5.07	14437903	1686325	39.75593	-80.8366	
3009	28.28	230.6	2930.79	-454.54	-176.72	-132.42	5.09	14437873	1686294	39.75585	-80.8368	
3103	32.92	232.01	3011.68	-484.42	-214.08	-120.56	4.99	14437843	1686257	39.75577	-80.8369	
3197	37.61	230.2	3088.41	-518.52	-256.27	-107.39	5.11	14437809	1686215	39.75568	-80.837	
3292	36.28	230.29	3164.33	-555.04	-300.17	-94.31	1.4	14437773	1686171	39.75558	-80.8372	
3387	35.4	233.59	3241.35	-589.33	-343.94	-79.99	2.23	14437739	1686127	39.75548	-80.8374	
3482	37.3	236.28	3317.87	-621.65	-390.03	-62.62	2.61	14437706	1686081	39.7554	-80.8375	
3576	38.4	236.02	3392.09	-653.77	-437.93	-43.7	1.18	14437674	1686033	39.75531	-80.8377	
3671	40.21	233.59	3465.6	-688.47	-487.08	-25.33	2.5	14437639	1685984	39.75521	-80.8379	
3766	39.68	232.49	3538.43	-725.14	-535.82	-8.47	0.93	14437603	1685935	39.75511	-80.838	
3860	40.92	232.32	3610.12	-762.23	-583.99	7.67	1.32	14437566	1685887	39.75501	-80.8382	
3955	39.99	231.3	3682.41	-800.34	-632.44	23.44	1.2	14437528	1685839	39.75491	-80.8384	
4050	39.28	230.6	3755.57	-838.51	-679.5	38.05	0.88	14437489	1685792	39.7548	-80.8386	
4144	38.89	230.91	3828.54	-876.01	-725.4	52.14	0.46	14437452	1685746	39.7547	-80.8387	
4240	39.59	232.89	3902.89	-913.47	-773.19	67.76	1.49	14437414	1685698	39.7546	-80.8389	
4334	41.01	232.89	3974.58	-950.15	-821.67	84.4	1.51	14437378	1685650	39.75449	-80.8391	
4429	40.3	231.92	4046.65	-987.9	-870.71	100.85	1	14437340	1685600	39.75439	-80.8392	
4524	41.1	232.4	4118.67	-1025.9	-919.64	117.05	0.9	14437302	1685552	39.75429	-80.8394	
4619	40.21	231.61	4190.74	-1064	-968.41	133.08	1.08	14437264	1685503	39.75418	-80.8396	
4714	39.42	230.6	4263.72	-1102.19	-1015.76	147.91	1.07	14437226	1685455	39.75408	-80.8397	
4808	38.71	230.42	4336.7	-1139.86	-1061.48	161.75	0.76	14437188	1685410	39.75398	-80.8399	
4903	38.09	230.11	4411.15	-1177.58	-1106.85	175.29	0.68	14437150	1685364	39.75387	-80.8401	
4998	38.49	232.89	4485.72	-1214.21	-1152.92	190.03	1.86	14437114	1685318	39.75377	-80.8402	
5093	39.28	235.4	4559.67	-1249.13	-1201.25	207.62	1.86	14437079	1685270	39.75368	-80.8404	
5188	39.51	236.02	4633.09	-1283.1	-1251.06	226.96	0.48	14437045	1685220	39.75358	-80.8406	
5281	38.89	234.39	4705.16	-1316.63	-1299.33	245.32	1.29	14437011	1685172	39.75349	-80.8408	
5376	38.71	234.7	4779.2	-1351.16	-1347.82	263.27	0.28	14436977	1685123	39.7534	-80.8409	
5471	38.8	233.42	4853.28	-1386.06	-1395.97	280.71	0.85	14436942	1685075	39.7533	-80.8411	
5565	36.9	231.39	4927.51	-1421.23	-1441.67	296.05	2.42	14436907	1685030	39.7532	-80.8413	
5660	36.5	232.18	5003.67	-1456.35	-1486.28	310.54	0.65	14436871	1684985	39.75311	-80.8414	
5754	36.19	232.89	5079.39	-1490.24	-1530.5	325.46	0.56	14436838	1684941	39.75302	-80.8416	

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5849	37.38	234.52	5155.47	-1523.9	-1576.35	341.82	1.62	14436804	1684895	39.75292	-80.8417
5944	38.8	234.61	5230.24	-1557.88	-1624.1	359.51	1.5	14436770	1684847	39.75283	-80.8419
6038	38.18	233.51	5303.82	-1592.21	-1671.46	376.67	0.98	14436736	1684800	39.75274	-80.8421
6133	39.28	231.61	5377.93	-1628.35	-1718.64	392.6	1.7	14436700	1684753	39.75264	-80.8423
6227	40.79	230.91	5449.9	-1666.19	-1765.8	407.49	1.68	14436662	1684705	39.75253	-80.8424
6321	38.62	231.79	5522.21	-1703.7	-1812.69	422.36	2.38	14436624	1684659	39.75243	-80.8426
6415	37.52	232.18	5596.21	-1739.4	-1858.35	437.35	1.2	14436588	1684613	39.75233	-80.8428
6501	37.85	234.94	5664.28	-1770.62	-1900.64	452.33	2	14436557	1684571	39.75225	-80.8429
6596	38.2	246.55	5739.21	-1799.09	-1951.51	475.83	7.53	14436529	1684520	39.75217	-80.8431
6691	41.36	257.36	5812.3	-1817.67	-2009.17	510.69	7.99	14436510	1684462	39.75212	-80.8433
6786	42.29	266.67	5883.16	-1826.4	-2071.77	555.43	6.6	14436501	1684399	39.75209	-80.8435
6879	44.7	275.29	5950.68	-1825.21	-2135.64	607.16	6.88	14436503	1684336	39.7521	-80.8437
6972	48.04	284.78	6014.92	-1813.35	-2201.74	667.09	8.21	14436514	1684269	39.75213	-80.844
7066	51.03	289.44	6075.93	-1792.26	-2270.03	734.32	4.93	14436536	1684201	39.75219	-80.8442
7160	52.92	292.6	6133.84	-1765.68	-2339.12	805.49	3.32	14436562	1684132	39.75226	-80.8445
7255	57.54	295.77	6188.02	-1733.67	-2410.25	881.56	5.58	14436594	1684061	39.75235	-80.8447
7349	65.36	303.06	6232.95	-1693.02	-2481.95	963.29	10.75	14436635	1683989	39.75246	-80.845
7443	67.16	307.02	6270.81	-1643.62	-2552.37	1049.26	4.31	14436684	1683919	39.7526	-80.8452
7536	71.3	309.56	6303.78	-1589.73	-2620.58	1136.16	5.13	14436738	1683851	39.75275	-80.8455
7631	74.5	313.5	6331.72	-1529.53	-2688.51	1226.65	5.2	14436798	1683783	39.75291	-80.8457
7726	77.71	319.5	6354.55	-1462.66	-2751.93	1317.54	7	14436865	1683719	39.7531	-80.8459
7821	85.8	327.41	6368.19	-1387.21	-2807.77	1407.54	11.84	14436941	1683663	39.7533	-80.8461
7916	86.11	330.13	6374.89	-1306.19	-2856.89	1495.53	2.87	14437022	1683614	39.75353	-80.8463
8011	86.15	329.78	6381.3	-1224.14	-2904.35	1582.81	0.37	14437104	1683567	39.75375	-80.8465
8106	88.57	331.1	6385.68	-1141.6	-2951.16	1669.87	2.9	14437186	1683520	39.75398	-80.8466
8201	89.76	332.15	6387.06	-1058.02	-2996.3	1756.22	1.67	14437270	1683475	39.75421	-80.8468
8296	88.97	331.8	6388.11	-974.17	-3040.94	1842.33	0.91	14437354	1683430	39.75444	-80.847
8390	88.62	331.1	6390.09	-891.62	-3085.85	1927.88	0.83	14437436	1683385	39.75467	-80.8471
8485	89.05	332.68	6392.02	-807.84	-3130.6	2014.04	1.72	14437520	1683341	39.7549	-80.8473
8580	88.62	331.1	6393.95	-724.07	-3175.35	2100.19	1.72	14437604	1683296	39.75513	-80.8474
8675	89.63	330.66	6395.41	-641.09	-3221.57	2187.05	1.16	14437687	1683250	39.75536	-80.8476
8770	89.89	330.83	6395.8	-558.21	-3268	2274	0.33	14437770	1683203	39.75558	-80.8478
8865	91.91	329.78	6394.31	-475.7	-3315.05	2361.24	2.4	14437852	1683156	39.75581	-80.8479
8960	92.66	329.6	6390.52	-393.75	-3362.96	2448.81	0.81	14437934	1683108	39.75604	-80.8481
9054	92.26	329.34	6386.49	-312.86	-3410.67	2535.6	0.51	14438015	1683061	39.75626	-80.8483
9149	89.27	325.03	6385.22	-233.05	-3462.13	2624.72	5.52	14438095	1683009	39.75648	-80.8484
9244	89.98	326.26	6385.84	-154.63	-3515.73	2714.73	1.49	14438173	1682955	39.75669	-80.8486
9339	90.15	327.23	6385.73	-75.19	-3567.83	2804.15	1.04	14438253	1682903	39.75691	-80.8488
9434	91.16	328.9	6384.65	5.43	-3618.07	2892.79	2.05	14438333	1682853	39.75713	-80.849
9529	91.52	329.25	6382.43	86.9	-3666.88	2980.8	0.53	14438415	1682804	39.75736	-80.8492
9623	91.16	329.6	6380.23	167.81	-3714.68	3067.67	0.53	14438496	1682757	39.75758	-80.8493
9716	90.59	330.75	6378.81	248.48	-3760.93	3153.15	1.38	14438576	1682710	39.7578	-80.8495
9811	91.65	329.87	6376.95	330.99	-3807.98	3240.38	1.45	14438659	1682663	39.75803	-80.8497
9906	88.44	327.58	6376.88	412.17	-3857.28	3328.61	4.15	14438740	1682614	39.75825	-80.8499
10000	88.66	329.16	6379.26	492.18	-3906.56	3416.12	1.7	14438820	1682565	39.75847	-80.85
10096	89.01	330.75	6381.21	575.26	-3954.62	3504.5	1.7	14438903	1682517	39.7587	-80.8502
10190	91.38	331.71	6380.89	657.65	-3999.86	3590.21	2.72	14438985	1682471	39.75893	-80.8504
10283	91.08	331.89	6378.89	739.59	-4043.79	3674.61	0.38	14439067	1682427	39.75915	-80.8505
10378	90.02	332.59	6377.98	823.65	-4088.04	3760.54	1.34	14439151	1682383	39.75938	-80.8507
10473	90.95	331.62	6377.17	907.6	-4132.48	3846.56	1.41	14439235	1682339	39.75961	-80.8508
10568	92	331.01	6374.73	990.92	-4178.06	3933.1	1.28	14439319	1682293	39.75984	-80.851
10663	91.21	330.83	6372.07	1073.91	-4224.22	4019.9	0.85	14439402	1682247	39.76007	-80.8512
10758	89.85	329.52	6371.19	1156.32	-4271.46	4107.23	1.99	14439484	1682200	39.7603	-80.8513
10852	90.42	328.02	6370.97	1236.69	-4320.2	4194.52	1.71	14439565	1682151	39.76052	-80.8515
10947	89.71	326.97	6370.86	1316.81	-4371.25	4283.51	1.33	14439645	1682100	39.76074	-80.8517
11041	90.02	328.11	6371.08	1396.12	-4421.7	4371.53	1.26	14439724	1682050	39.76096	-80.8519
11136	89.36	329.08	6371.6	1477.2	-4471.2	4459.86	1.23	14439805	1682000	39.76118	-80.852
11231	89.58	330.04	6372.47	1559.1	-4519.33	4547.59	1.04	14439887	1681952	39.7614	-80.8522
11326	90.2	330.66	6372.66	1641.66	-4566.32	4634.8	0.92	14439970	1681905	39.76163	-80.8524
11421	89.49	330.92	6372.91	1724.58	-4612.68	4721.73	0.8	14440052	1681859	39.76186	-80.8525
11515	90.11	331.1	6373.24	1806.8	-4658.24	4807.6	0.69	14440135	1681813	39.76208	-80.8527
11609	92.04	331.36	6371.48	1889.18	-4703.47	4893.3	2.07	14440217	1681768	39.76231	-80.8529
11704	90.95	332.06	6369	1972.8	-4748.48	4979.57	1.36	14440301	1681723	39.76254	-80.853
11799	89.32	331.8	6368.78	2056.63	-4793.18	5065.71	1.74	14440384	1681678	39.76277	-80.8532
11894	89.8	331.89	6369.51	2140.38	-4838	5151.92	0.51	14440468	1681633	39.763	-80.8533
11988	90.81	331.27	6369.01	2223.05	-4882.74	5237.4	1.26	14440551	1681588	39.76323	-80.8535
12083	91.74	330.48	6366.89	2306.02	-4928.97	5324.24	1.28	14440634	1681542	39.76346	-80.8537
12176	92.48	330.04	6363.47	2386.71	-4975.07	5409.63	0.93	14440715	1681496	39.76368	-80.8538
12270	91.96	330.92	6359.83	2468.45	-5021.35	5495.78	1.09	14440796	1681450	39.7639	-80.854
12365	89.1	327.32	6358.95	2549.95	-5070.09	5583.76	4.84	14440878	1681401	39.76413	-80.8542

Tie into original hole @ 6415 MD

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12460	89.49	326.35	6360.12	2629.47	-5122.06	5673.11	1.1	14440957	1681349	39.76435	-80.8543
12554	90.11	329.34	6360.44	2709.04	-5172.08	5760.95	3.25	14441037	1681299	39.76456	-80.8545
12648	90.59	330.57	6359.87	2790.41	-5219.14	5847.5	1.4	14441118	1681252	39.76479	-80.8547
12743	89.58	330.92	6359.73	2873.29	-5265.57	5934.46	1.13	14441201	1681206	39.76502	-80.8548
12836	90.11	331.98	6359.98	2954.98	-5310.01	6019.12	1.27	14441283	1681161	39.76524	-80.855
12931	89.54	332.33	6360.27	3038.98	-5354.39	6105.11	0.7	14441367	1681117	39.76547	-80.8552
13026	89.27	332.77	6361.26	3123.28	-5398.18	6190.81	0.54	14441451	1681073	39.7657	-80.8553
13120	89.89	332.42	6361.95	3206.73	-5441.44	6275.58	0.76	14441535	1681030	39.76593	-80.8555
13214	90.11	332.42	6361.95	3290.05	-5484.96	6360.48	0.23	14441618	1680986	39.76616	-80.8556
13309	90.37	331.71	6361.55	3373.98	-5529.46	6446.54	0.8	14441702	1680942	39.76639	-80.8558
13404	89.8	329.6	6361.41	3456.78	-5576.02	6533.55	2.3	14441785	1680895	39.76662	-80.8559
13499	89.36	328.99	6362.1	3538.46	-5624.53	6621.44	0.79	14441866	1680847	39.76684	-80.8561
13594	91.52	330.66	6361.37	3620.58	-5672.27	6708.99	2.87	14441948	1680799	39.76707	-80.8563
13689	92.79	330.04	6357.8	3703.08	-5719.23	6796.15	1.49	14442031	1680752	39.7673	-80.8565
13784	91.69	329.34	6354.09	3785.03	-5767.14	6883.73	1.37	14442113	1680704	39.76752	-80.8566
13878	88.62	328.37	6353.84	3865.47	-5815.75	6970.96	3.43	14442193	1680655	39.76774	-80.8568
13973	88.62	328.9	6356.12	3946.56	-5865.18	7059.24	0.56	14442274	1680606	39.76797	-80.857
14068	90.07	331.19	6357.21	4028.86	-5912.61	7146.65	2.85	14442357	1680559	39.76819	-80.8571
14163	92.18	330.83	6355.34	4111.93	-5958.64	7233.41	2.25	14442440	1680513	39.76842	-80.8573
14257	90.55	329.87	6353.1	4193.6	-6005.13	7319.68	2.01	14442521	1680466	39.76865	-80.8575
14352	89.49	329.95	6353.07	4275.79	-6052.76	7407.18	1.12	14442604	1680418	39.76887	-80.8576
14447	92.18	333.03	6351.69	4359.25	-6098.09	7493.61	4.3	14442687	1680373	39.7691	-80.8578
14542	91.6	329.95	6348.55	4442.67	-6143.4	7580	3.3	14442771	1680328	39.76933	-80.858
14637	91.56	328.37	6345.93	4524.2	-6192.08	7667.95	1.66	14442852	1680279	39.76955	-80.8581
14732	92.48	328.02	6342.58	4604.89	-6242.12	7756.47	1.04	14442933	1680229	39.76978	-80.8583
14825	91.96	326.09	6338.98	4682.87	-6292.65	7843.76	2.15	14443011	1680179	39.76999	-80.8585
14914	91.34	325.82	6336.42	4756.59	-6342.46	7927.9	0.76	14443084	1680129	39.77019	-80.8587 Survey @ 14914.00 MD 6336.42 TVD
14978	91.34	325.82	6334.92	4809.52	-6378.4	7988.46	0	14443137	1680093	39.77034	-80.8588 Survey projected to 14978.00 MD 6334.92 TVD

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to RKB=1254+26 = 1280.00

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from 0.00 E/-W 0.00 N/-S and calculated along an Azimuth of 307.000° (Grid).

Coordinate Zone 17N (84 W to 78 W)5
Central meridian is -81.000°.
Grid Convergence at Surface is 0.105°.

Geomagnetic model is IGRF2015 Date for magnetic data is 9/28/2017
Declination is -8.60 Dip 66.93 field strength is 52140.32

Based upon at a Measured Depth of 14978.00ft.
the Bottom in the Direction of 307.000° (Grid).

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