



# Verdad Resources LLC

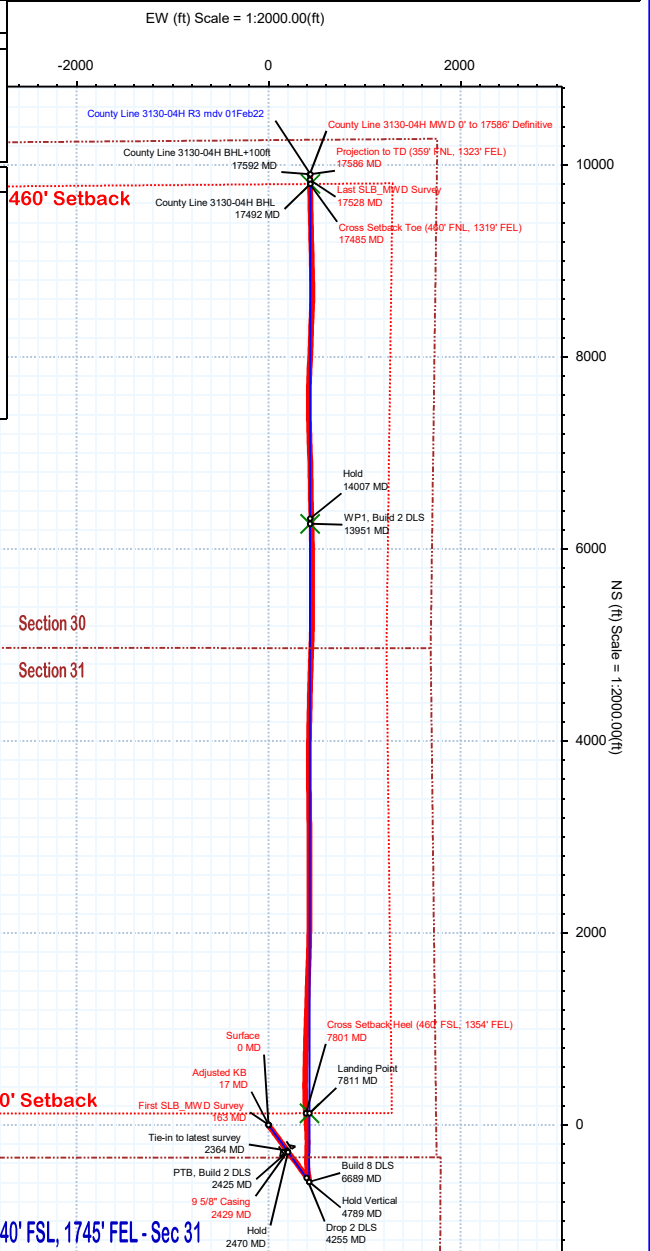
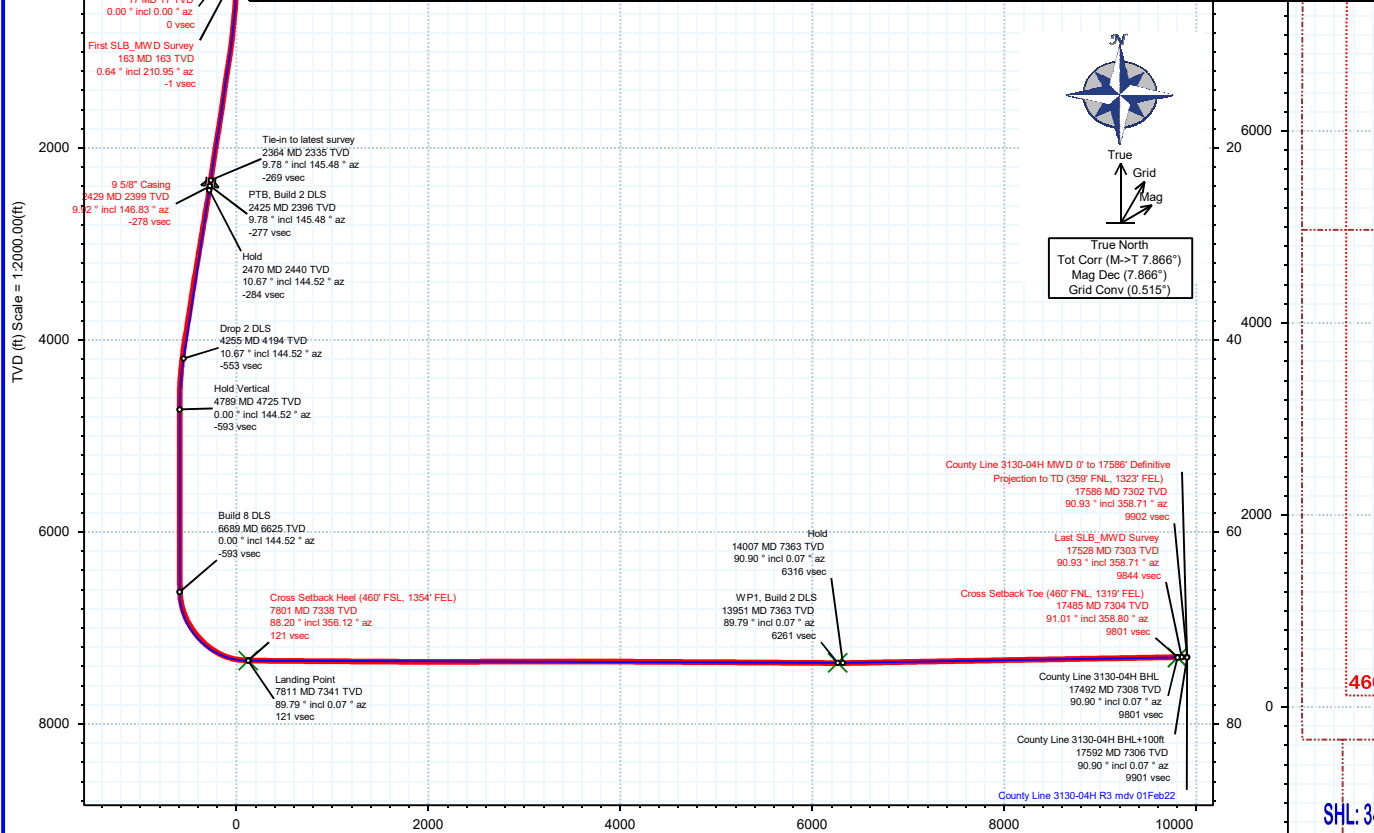


Borehole:	Well:	Field:	Structure:
Original Hole	County Line 3130-04H	CO, Weld County (NAD 83 NZ) - 2019	Verdad Resources 31-01N-65W (County Line Pad)

Gravity & Magnetic Parameters	Surface Location	NAD83 Colorado State Plane, Northern Zone, US Feet	Miscellaneous
Model: HDGM 2021 Dip: 66.228° Date: 01-Feb-2022	Lat: N 40 0 5.25 Northing: 1244379.7ftUS Grid Conv: 0.5146°	Scale Fact: 0.99996626	Slot: County Line 3130-04H TVD Ref: KB 21ft(5058ft above MSL)
MagDec: 7.866° FS: 51620.32nT Gravity FS: 998.983mgn (9.80665 Based)	Lon: W 104 42 12.61 Easting: 3223133.61ftUS		Plan: County Line 3130-04H MWD 0' to 17586' Definitive

Target Description	Latitude	Longitude	North	East	TVD	VSec	N(+)S(-)	E(+)W(-)
County Line Pad - Sec 31-30 - CL	N 40 0 5.24	W 104 42 16.28	1244376.89	3222848.38	5058.00	-0.60	-0.25	-285.26
County Line Pad - Sec 31-30 - 460' SB	N 40 0 5.24	W 104 42 13.00	1244379.39	3223103.61	5058.00	-0.07	-0.04	-30.00
County Line Pad - Sec 31-30-06-07	N 40 0 5.24	W 104 42 16.28	1244376.89	3222848.38	5058.00	-0.60	-0.25	-285.26
County Line 3130-04H BHL	N 40 1 42.10	W 104 42 7.01	1254183.64	3223480.97	7308.00	9801.29	9800.77	435.42
County Line 3130-04H TPZ	N 40 0 6.43	W 104 42 7.16	1244503.65	3223556.55	7341.00	120.66	120.15	424.04
County Line 3130-04H WP1	N 40 1 7.11	W 104 42 7.07	1250643.25	3223508.61	7363.00	6260.67	6260.15	431.26

Target Description	Latitude	Longitude	North	East	TVD	VSec	N(+)S(-)	E(+)W(-)
County Line Pad - Sec 31-30 - CL	N 40 0 5.24	W 104 42 16.28	1244376.89	3222848.38	5058.00	-0.60	-0.25	-285.26
County Line Pad - Sec 31-30 - 460' SB	N 40 0 5.24	W 104 42 13.00	1244379.39	3223103.61	5058.00	-0.07	-0.04	-30.00
County Line Pad - Sec 31-30-06-07	N 40 0 5.24	W 104 42 16.28	1244376.89	3222848.38	5058.00	-0.60	-0.25	-285.26
County Line 3130-04H BHL	N 40 1 42.10	W 104 42 7.01	1254183.64	3223480.97	7308.00	9801.29	9800.77	435.42
County Line 3130-04H TPZ	N 40 0 6.43	W 104 42 7.16	1244503.65	3223556.55	7341.00	120.66	120.15	424.04
County Line 3130-04H WP1	N 40 1 7.11	W 104 42 7.07	1250643.25	3223508.61	7363.00	6260.67	6260.15	431.26



## County Line 3130-04H MWD 0' to 17586' Definitive Survey Geodetic Report

(Def Survey)

**Report Date:** February 14, 2022 - 11:58 AM  
**Client:** Verdad Resources LLC  
**Field:** CO, Weld County (NAD 83 NZ) - 2019  
**Structure / Slot:** Verdad Resources 31-01N-65W (County Line Pad) / County Line 3130-04H  
**Well:** County Line 3130-04H  
**Borehole:** Original Hole  
**UWI / API#:** Unknown / 05-123-51164  
**Survey Name:** County Line 3130-04H MWD 0' to 17586' Definitive  
**Survey Date:** February 01, 2022  
**Tort / AHD / DDI / ERD Ratio:** 193.554 ° / 11230.179 ft / 6.715 / 1.525  
**Coordinate Reference System:** NAD83 Colorado State Plane, Northern Zone, US Feet  
**Location Lat / Long:** N 40° 0' 5.24520", W 104° 42' 12.61224"  
**Location Grid N/E Y/X:** N 1244379.701 ftUS, E 3223133.615 ftUS  
**CRS Grid Convergence Angle:** 0.5146 °  
**Grid Scale Factor:** 0.99996626  
**Version / Patch:** 2.10.824.0

**Survey / DLS Computation:** Minimum Curvature / Lubinski  
**Vertical Section Azimuth:** 0.070 ° (True North)  
**Vertical Section Origin:** 0.000 ft, 0.000 ft  
**TVD Reference Datum:** KB 21ft  
**TVD Reference Elevation:** 5058.000 ft above MSL  
**Seabed / Ground Elevation:** 5037.000 ft above MSL  
**Magnetic Declination:** 7.866 °  
**Total Gravity Field Strength:** 998.9825mgn (9.80665 Based)  
**Gravity Model:** GARM  
**Total Magnetic Field Strength:** 51620.320 nT  
**Magnetic Dip Angle:** 66.228 °  
**Declination Date:** February 01, 2022  
**Magnetic Declination Model:** HDGM 2021  
**North Reference:** True North  
**Grid Convergence Used:** 0.0000 °  
**Total Corr Mag North→True North:** 7.8657 °  
**Local Coord Referenced To:** Well Head

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	1244379.70	3223133.61	40.001457	-104.703503
Adjusted KB	17.00	0.00	0.00	17.00	0.00	0.00	0.00	0.00	1244379.70	3223133.61	40.001457	-104.703503
First SLB_MWD Survey	163.00	0.64	210.95	163.00	-0.70	-0.70	-0.42	0.44	1244379.00	3223133.20	40.001455	-104.703505
	191.00	0.47	234.00	191.00	-0.90	-0.90	-0.59	0.99	1244378.79	3223133.03	40.001455	-104.703506
	222.00	0.65	233.63	221.99	-1.08	-1.08	-0.84	0.58	1244378.61	3223132.79	40.001454	-104.703506
	252.00	0.84	206.61	251.99	-1.38	-1.38	-1.07	1.31	1244378.31	3223132.55	40.001453	-104.703507
	283.00	0.99	210.00	282.99	-1.81	-1.81	-1.31	0.51	1244377.88	3223132.32	40.001452	-104.703508
	312.00	1.40	190.91	311.98	-2.38	-2.38	-1.50	1.95	1244377.31	3223132.14	40.001450	-104.703509
	342.00	1.78	170.64	341.97	-3.20	-3.20	-1.49	2.24	1244376.49	3223132.15	40.001448	-104.703509
	372.00	2.44	167.47	371.95	-4.28	-4.28	-1.28	2.23	1244375.41	3223132.37	40.001445	-104.703508
	402.00	2.79	157.26	401.92	-5.58	-5.58	-0.86	1.94	1244374.12	3223132.81	40.001442	-104.703506
	432.00	3.57	154.23	431.87	-7.09	-7.09	-0.17	2.66	1244372.61	3223133.51	40.001438	-104.703504
	462.00	4.66	151.68	461.79	-9.00	-9.01	0.81	3.68	1244370.70	3223134.51	40.001432	-104.703500
	492.00	5.20	148.26	491.68	-11.23	-11.23	2.11	2.05	1244368.49	3223135.82	40.001426	-104.703496
	522.00	5.85	145.21	521.54	-13.64	-13.65	3.69	2.38	1244366.09	3223137.43	40.001420	-104.703490
	552.00	6.46	145.12	551.37	-16.28	-16.29	5.53	2.03	1244363.47	3223139.29	40.001412	-104.703484
	582.00	6.80	144.73	581.17	-19.11	-19.12	7.52	1.14	1244360.65	3223141.31	40.001405	-104.703477
	612.00	7.16	142.90	610.95	-22.05	-22.06	9.68	1.41	1244357.73	3223143.49	40.001396	-104.703469
	642.00	7.40	141.10	640.71	-25.04	-25.06	12.02	1.10	1244354.75	3223145.86	40.001388	-104.703461
	672.00	7.51	137.42	670.45	-27.99	-28.00	14.56	1.63	1244351.83	3223148.42	40.001380	-104.703451
	702.00	7.77	137.46	700.19	-30.92	-30.94	17.25	0.87	1244348.92	3223151.15	40.001372	-104.703442
	732.00	7.67	137.00	729.91	-33.88	-33.90	19.99	0.39	1244345.98	3223153.91	40.001364	-104.703432
	762.00	7.88	136.20	759.64	-36.82	-36.85	22.78	0.79	1244343.06	3223156.72	40.001356	-104.703422
	792.00	8.02	136.03	789.35	-39.81	-39.84	25.66	0.47	1244340.10	3223159.63	40.001348	-104.703412
	822.00	8.17	136.93	819.05	-42.87	-42.90	28.56	0.65	1244337.06	3223162.56	40.001339	-104.703401
	852.00	8.33	139.70	848.74	-46.08	-46.12	31.43	1.43	1244333.87	3223165.45	40.001330	-104.703391
	882.00	8.51	141.95	878.42	-49.48	-49.52	34.20	1.25	1244330.49	3223168.26	40.001321	-104.703381
	912.00	8.54	142.62	908.09	-53.00	-53.04	36.92	0.35	1244327.00	3223171.01	40.001311	-104.703372
	942.00	8.94	143.12	937.74	-56.63	-56.67	39.67	1.36	1244323.39	3223173.79	40.001301	-104.703362
	972.00	9.51	143.37	967.35	-60.48	-60.53	42.55	1.90	1244319.56	3223176.70	40.001291	-104.703352
	1002.00	10.12	144.62	996.91	-64.61	-64.67	45.55	2.15	1244315.45	3223179.75	40.001279	-104.703341
	1032.00	10.45	145.30	1026.43	-68.99	-69.05	48.63	1.17	1244311.09	3223182.86	40.001267	-104.703330
	1062.00	10.73	146.04	1055.92	-73.54	-73.60	51.74	1.04	1244306.57	3223186.01	40.001255	-104.703319
	1092.00	10.94	145.60	1085.38	-78.20	-78.27	54.91	0.75	1244301.93	3223189.22	40.001242	-104.703307
	1122.00	10.79	145.20	1114.84	-82.85	-82.92	58.12	0.56	1244297.30	3223192.47	40.001229	-104.703296
	1152.00	10.87	145.76	1144.31	-87.49	-87.57	61.31	0.44	1244292.69	3223195.71	40.001217	-104.703285
	1182.00	11.09	145.21	1173.76	-92.20	-92.28	64.55	0.81	1244288.01	3223198.99	40.001204	-104.703273
	1212.00	11.02	144.63	1203.20	-96.90	-96.98	67.85	0.44	1244283.33	3223202.33	40.001191	-104.703261
	1242.00	10.96	142.48	1232.65	-101.50	-101.58	71.25	1.38	1244278.76	3223205.77	40.001178	-104.703249
	1272.00	10.88	142.44	1262.11	-106.00	-106.09	74.71	0.27	1244274.29	3223209.28	40.001166	-104.703237
	1302.00	10.84	142.50	1291.57	-110.48	-110.57	78.16	0.14	1244269.84	3223212.72	40.001153	-104.703224
	1332.00	10.85	142.12	1321.04	-114.94	-115.04	81.61	0.24	1244265.40	3223216.25	40.001141	-104.703212
	1362.00	10.26	142.21	1350.53	-119.28	-119.38	84.98	1.97	1244261.09	3223219.66	40.001129	-104.703200
	1392.00	9.96	143.98	1380.06	-123.48	-123.59	88.14	1.44	1244256.91	3223222.86	40.001118	-104.703189
	1422.00	10.00	144.93	1409.61	-127.71	-127.82	91.16	0.56	1244252.71	3223225.92	40.001106	-104.703178
	1452.00	9.78	143.94	1439.16	-131.90	-132.01	94.16	0.93	1244248.54	3223228.95	40.001095	-104.703167
	1482.00	9.88	144.84	1468.72	-136.06	-136.18	97.14	0.61	1244244.41	3223231.97	40.001083	-104.703157
	1512.00	9.70	144.48	1498.29	-140.21	-140.34	100.09	0.63	1244240.27	3223234.96	40.001072	-104.703146
	1542.00	9.65	143.78	1527.86	-144.30	-144.42	103.05	0.43	1244236.21	3223237.95	40.001061	-104.703136
	1572.00	10.11	143.70	1557.42	-148.44	-148.57	106.09	1.53	1244232.09	3223241.03	40.001049	-104.703125
	1602.00	10.41	143.95	1586.94	-152.75	-152.89	109.25	1.01	1244227.81	3223244.22	40.001037	-104.703113
	1632.00	10.86	143.74	1616.42	-157.22	-157.36	112.51	1.51	1244223.37	3223247.53	40.001025	-104.703102
	1662.00	10.71	143.60	1645.89	-161.74	-161.88	115.84	0.51	1244218.87	3223250.90	40.001013	-104.703090
	1692.00	10.65	143.47	1675.37	-166.21	-166.35	119.14	0.22	1244214.43	3223254.24	40.001000	-104.703078
	1722.00	10.93	143.90	1704.84	-170.73	-170.88	122.47	0.97	1244209.94	3223257.61	40.000988	-104.703066
	1752.00	11.08	143.15	1734.29	-175.33	-175.48	125.87	0.69	1244205.36	3223261.05	40.000975	-104.703054
	1782.00	11.23	142.76	1763.72	-179.96	-180.11	129.37	0.56	1244200.76	3223264.59	40.000963	-104.703042
	1812.00	11.43	142.69	1793.14	-184.64	-184.80	132.94	0.67	1244196.11	3223268.20	40.000950	-104.703029
	1842.00	11.37	142.64	1822.55	-189.35	-189.52	136.53	0.20	1244191.42	3223271.84	40.000937	-104.703016
	1872.00	11.66	142.45	1851.94	-194.10	-194.27	140.18	0.97	1244186.70	3223275.53	40.000924	-104.703003
	1902.00	12.05	143.69	1881.30	-199.02	-199.20	143.88	1.55	1244181.81	3223279.27	40.000910	-104.702990
	1932.00	11.57	144.50	1910.67	-203.99	-204.17	147.48	1.69	1244176.87	3223282.92	40.000897	-104.702977
	1962.00	11.31	145.22	1940.07	-208.85	-209.04	150.91	0.99	1244172.03	3223286.39	40.000883	-104.702965
	1992.00	11.17	145.56	1969.50	-213.66	-213.85	154.23	0.52	1244167.25	3223289.75	40.000870	-104.702953
	2022.00	11.35	145.15	1998.92	-218.48	-218.67	157.56	0.66	1244162.46	3223293.12	40.000857	-104.702941
	2052.00	10.85	144.56	2028.36	-223.20	-223.39	160.88	1.71	1244157.77	3223296.49	40.000844	-104.702929
	2082.00	10.33	145.36	2057.85	-227.70	-227.91	164.05	1.80	1244153.29	3223299.70	40.000831	-104.702918
	2112.00	10.30	146.28	2087.36	-232.15	-232.35	167.07	0.56	1244148.87	3223302.75	40.000819	-104.702907
	2142.00	10.55	144.83	2116.87	-236.62	-236.83	170.14	1.21	1244144.42	3223305.86	40.000807	-104.702896
	2172.00	10.63	145.93	2146.35	-241.15	-241.36	173.27	0.72	1244139.91	3223309.04	40.000794	-104.702885
	2202.00	10.39	145.37	2175.85	-245.66	-245.88	176.36	0.87	1244135.42	3223312.17	40.000782	-104.702874
	2232.00	9.89	145.39	2205.38	-250.01	-250.23	179.36	1.67	1244131.10	3223315.20	40.000770	-104.702863
	2262.00	9.89	145.61	2234.94	-254.25	-254.47	182.27	0.13	1244126.88	3223318.16	40.000758	-104.702853
	2292.00	9.74	145.42	2264.50	-258.46	-258.69	185.17	0.51	1244122.69	3223321.09	40.000747	-104.702842
	2322.00	9.90	146.03	2294.06	-262.69	-262.92	188.05	0.64	1244118.49	3223324.01	4	

	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
9 5/8" Casing	2364.00	9.78	145.48	2335.44	-268.60	-268.84	192.09	0.10	1244112.61	3223328.11	40.000719	-104.702818
	2429.00	9.92	146.83	2399.48	-277.83	-278.07	198.28	0.41	1244103.43	3223334.38	40.000694	-104.702796
	2498.00	10.07	148.22	2467.44	-287.92	-288.17	204.71	0.41	1244093.39	3223340.90	40.000666	-104.702773
	2588.00	13.22	141.76	2555.58	-302.68	-302.95	215.23	3.78	1244078.71	3223351.55	40.000625	-104.702735
	2678.00	11.96	142.32	2643.41	-318.13	-318.41	227.29	1.40	1244063.36	3223363.75	40.000583	-104.702692
	2767.00	11.81	141.98	2730.51	-332.58	-332.88	238.54	0.19	1244048.99	3223375.12	40.000543	-104.702652
	2856.00	11.71	142.95	2817.64	-346.95	-347.26	249.59	0.25	1244034.71	3223386.30	40.000504	-104.702613
	2946.00	12.38	138.08	2905.66	-361.41	-361.73	261.54	1.35	1244020.35	3223398.38	40.000464	-104.702570
	3035.00	11.95	141.95	2992.66	-375.75	-376.08	273.59	1.04	1244006.10	3223410.57	40.000425	-104.702527
	3125.00	11.97	141.65	3080.71	-390.39	-390.74	285.13	0.07	1243991.55	3223422.23	40.000384	-104.702486
	3215.00	11.47	146.13	3168.83	-405.13	-405.49	295.91	1.16	1243976.90	3223433.14	40.000344	-104.702447
	3304.00	11.09	145.95	3256.11	-419.56	-419.93	305.63	0.43	1243962.54	3223443.00	40.000304	-104.702412
	3394.00	10.99	145.60	3344.45	-433.80	-434.19	315.32	0.14	1243948.38	3223452.81	40.000265	-104.702378
	3483.00	11.06	144.46	3431.80	-447.73	-448.13	325.08	0.26	1243934.52	3223462.69	40.000227	-104.702343
	3573.00	10.95	142.53	3520.15	-461.53	-461.94	335.29	0.43	1243920.81	3223473.03	40.000189	-104.702307
	3662.00	10.82	143.13	3607.55	-474.91	-475.33	345.45	0.19	1243907.51	3223483.31	40.000152	-104.702270
	3752.00	10.90	145.03	3695.94	-488.63	-489.06	355.40	0.41	1243893.87	3223493.38	40.000114	-104.702235
	3842.00	10.99	144.81	3784.30	-502.60	-503.05	365.22	0.11	1243879.97	3223503.32	40.000076	-104.702200
	3931.00	10.87	145.10	3871.69	-516.40	-516.86	374.91	0.15	1243866.25	3223513.14	40.000038	-104.702165
	4021.00	10.98	143.57	3960.05	-530.24	-530.72	384.85	0.35	1243852.48	3223523.20	40.000000	-104.702130
	4110.00	10.93	144.64	4047.43	-543.93	-544.41	394.77	0.24	1243838.87	3223533.24	39.999963	-104.702094
	4200.00	9.02	144.78	4136.07	-556.64	-557.13	403.77	2.12	1243826.24	3223542.36	39.999928	-104.702062
	4289.00	7.63	150.29	4224.13	-567.46	-567.97	410.72	1.80	1243815.47	3223549.41	39.999898	-104.702037
	4379.00	6.19	148.97	4313.48	-576.80	-577.31	416.19	1.61	1243806.17	3223554.95	39.999872	-104.702018
	4468.00	5.30	146.62	4402.03	-584.34	-584.85	420.92	1.03	1243798.67	3223559.75	39.999852	-104.702001
	4558.00	2.27	153.24	4491.82	-589.40	-589.92	424.01	3.39	1243793.64	3223562.89	39.999838	-104.701990
	4647.00	0.11	352.75	4580.80	-590.88	-591.40	424.79	2.67	1243792.16	3223563.69	39.999834	-104.701987
	4737.00	0.05	292.49	4670.80	-590.78	-591.30	424.75	0.11	1243792.26	3223563.64	39.999834	-104.701987
	4826.00	0.05	221.52	4759.80	-590.80	-591.32	424.69	0.07	1243792.24	3223563.58	39.999834	-104.701988
	4915.00	0.03	187.16	4848.80	-590.85	-591.37	424.66	0.04	1243792.19	3223563.55	39.999834	-104.701988
	5005.00	0.02	276.38	4938.80	-590.87	-591.39	424.63	0.04	1243792.17	3223563.53	39.999834	-104.701988
	5094.00	0.02	303.20	5027.80	-590.86	-591.38	424.60	0.01	1243792.18	3223563.49	39.999834	-104.701988
	5184.00	0.06	242.78	5117.80	-590.87	-591.39	424.55	0.05	1243792.17	3223563.44	39.999834	-104.701988
	5273.00	0.10	353.63	5206.80	-590.81	-591.33	424.50	0.15	1243792.23	3223563.39	39.999834	-104.701988
	5362.00	0.35	322.21	5295.80	-590.51	-591.03	424.32	0.30	1243792.53	3223563.21	39.999835	-104.701989
	5452.00	0.10	313.88	5385.80	-590.24	-590.76	424.10	0.28	1243792.80	3223562.98	39.999835	-104.701990
	5542.00	0.01	181.80	5475.80	-590.15	-590.67	423.98	0.06	1243792.89	3223562.87	39.999836	-104.701990
	5630.00	0.02	264.35	5565.80	-590.16	-590.67	423.96	0.03	1243792.88	3223562.85	39.999836	-104.701990
	5717.00	0.03	137.08	5655.80	-590.17	-590.68	423.96	0.05	1243792.86	3223562.85	39.999835	-104.701990
	5807.00	0.04	121.43	5745.80	-590.21	-590.72	424.00	0.02	1243792.83	3223562.89	39.999835	-104.701990
	5897.00	0.08	96.18	5835.80	-590.23	-590.75	424.09	0.05	1243792.81	3223562.98	39.999835	-104.701990
	5986.00	0.12	75.77	6009.80	-590.21	-590.73	424.24	0.06	1243792.83	3223563.13	39.999835	-104.701989
	6076.00	0.13	66.19	6098.80	-590.15	-590.67	424.42	0.02	1243792.89	3223563.31	39.999836	-104.701988
	6165.00	0.04	180.23	6187.80	-590.14	-590.66	424.51	0.16	1243792.90	3223563.40	39.999836	-104.701988
	6254.00	0.01	318.89	6277.80	-590.16	-590.68	424.51	0.05	1243792.88	3223563.40	39.999836	-104.701988
	6343.00	0.07	332.09	6366.80	-590.11	-590.63	424.48	0.07	1243792.93	3223563.37	39.999836	-104.701988
	6433.00	0.10	11.28	6456.80	-589.99	-590.51	424.47	0.07	1243793.05	3223563.36	39.999836	-104.701988
	6523.00	0.06	282.50	6545.80	-589.90	-590.42	424.44	0.13	1243793.14	3223563.33	39.999836	-104.701988
	6612.00	2.11	358.41	6635.78	-588.23	-588.75	424.35	2.33	1243794.80	3223563.22	39.999841	-104.701989
	6702.00	9.80	347.80	6724.23	-579.18	-579.70	422.70	8.69	1243803.84	3223561.49	39.999866	-104.701995
	6881.00	17.46	349.53	6811.63	-558.39	-558.90	418.62	8.52	1243824.60	3223557.23	39.999923	-104.702009
	6971.00	24.67	351.29	6895.56	-526.51	-527.02	413.32	8.04	1243856.43	3223551.64	40.000010	-104.702028
	7060.00	30.98	352.11	6974.23	-485.43	-485.93	407.36	7.10	1243897.47	3223545.30	40.000123	-104.702049
	7150.00	37.60	355.11	7048.55	-435.08	-435.57	401.83	7.59	1243947.77	3223539.33	40.000261	-104.702069
	7239.00	42.60	359.18	7116.62	-377.86	-378.35	399.08	6.34	1244004.96	3223536.06	40.000418	-104.702079
	7329.00	50.25	2.59	7178.62	-312.74	-313.23	400.21	8.93	1244070.09	3223536.61	40.000597	-104.702075
	7418.00	57.11	1.76	7231.31	-241.12	-241.61	402.91	7.75	1244141.73	3223538.66	40.000794	-104.702065
7508.00	63.82	359.38	7275.65	-162.87	-163.36	403.64	7.80	1244219.98	3223538.69	40.010009	-104.702063	
7597.00	72.49	357.42	7308.74	-80.38	-80.87	401.29	9.95	1244302.44	3223535.60	40.012335	-104.702071	
7687.00	81.46	356.71	7329.00	7.09	6.61	396.80	10.00	1244389.87	3223530.32	40.014755	-104.702087	
7776.00	87.73	355.93	7337.37	95.46	94.99	391.11	7.10	1244478.19	3223523.84	40.017188	-104.702107	
Cross Setback Heel (460' FSL, 1354' FEL)	7801.34	88.20	356.12	7338.27	120.73	120.25	389.35	1.97	1244503.44	3223521.85	40.017877	-104.702114
7866.00	89.37	356.60	7339.65	185.23	184.76	385.24	1.97	1244567.91	3223517.17	40.019644	-104.702128	
7955.00	88.98	358.83	7340.92	274.14	273.68	381.69	2.54	1244656.79	3223512.82	40.022208	-104.702141	
8045.00	89.76	359.31	7341.92	364.12	363.66	380.23	1.01	1244746.75	3223510.55	40.024555	-104.702146	
8134.00	89.43	0.93	7342.55	453.12	452.65	380.42	1.86	1244835.74	3223509.94	40.027700	-104.702145	
8224.00	89.40	1.32	7343.47	543.10	542.63							

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	11893.00	89.60	1.36	7352.07	4211.37	4210.86	423.84	0.37	1248594.05	3223519.60	40.013016	-104.701990
	11983.00	89.59	1.33	7352.71	4301.35	4300.83	425.95	0.04	1248684.03	3223520.90	40.013263	-104.701983
	12073.00	89.55	1.31	7353.38	4391.33	4390.81	428.01	0.05	1248774.02	3223522.16	40.013510	-104.701975
	12162.00	89.79	1.36	7353.90	4480.30	4479.78	430.08	0.28	1248863.00	3223523.43	40.013754	-104.701968
	12251.00	89.63	1.24	7354.35	4569.28	4568.76	432.10	0.22	1248951.99	3223524.65	40.013999	-104.701961
	12341.00	89.65	1.66	7354.92	4659.25	4658.73	434.38	0.47	1249041.97	3223526.12	40.014246	-104.701953
	12430.00	89.68	1.91	7355.43	4748.21	4747.68	437.16	0.28	1249130.95	3223528.10	40.014490	-104.701943
	12520.00	89.65	1.44	7355.96	4838.17	4837.64	439.79	0.53	1249220.92	3223529.92	40.014737	-104.701933
	12609.00	89.66	2.15	7356.49	4927.13	4926.59	442.58	0.81	1249309.90	3223531.91	40.014981	-104.701923
	12699.00	89.68	2.28	7357.02	5017.07	5016.53	446.06	0.14	1249399.85	3223534.58	40.015228	-104.701911
	12788.00	89.76	1.91	7357.46	5106.01	5105.47	449.31	0.43	1249488.81	3223537.03	40.015472	-104.701899
	12878.00	89.50	0.47	7358.04	5195.99	5195.44	451.17	1.63	1249578.80	3223538.09	40.015719	-104.701893
	12968.00	89.87	0.75	7358.54	5285.98	5285.44	452.13	0.52	1249668.79	3223538.24	40.015966	-104.701889
	13057.00	89.47	359.83	7359.05	5374.98	5374.43	452.58	1.13	1249757.79	3223537.89	40.016210	-104.701888
	13147.00	89.54	359.54	7359.83	5464.97	5464.43	452.09	0.33	1249847.77	3223536.59	40.016457	-104.701889
	13236.00	89.55	359.79	7360.53	5553.97	5553.42	451.56	0.28	1249936.76	3223535.26	40.016702	-104.701891
	13326.00	89.56	0.02	7361.23	5643.97	5643.42	451.41	0.26	1250026.74	3223534.30	40.016949	-104.701892
	13416.00	89.66	359.95	7361.84	5733.96	5733.42	451.39	0.13	1250116.74	3223533.47	40.017196	-104.701892
	13505.00	89.54	0.26	7362.46	5822.96	5822.41	451.55	0.37	1250205.73	3223532.83	40.017440	-104.701891
	13595.00	89.49	0.06	7363.21	5912.96	5912.41	451.80	0.23	1250295.72	3223532.28	40.017687	-104.701890
	13684.00	89.56	359.12	7363.95	6001.95	6001.40	451.16	1.06	1250384.70	3223530.84	40.017931	-104.701893
	13774.00	89.59	358.94	7364.61	6091.93	6091.39	449.64	0.20	1250474.67	3223528.50	40.018178	-104.701898
	13863.00	89.53	359.01	7365.30	6180.92	6180.37	448.04	0.10	1250563.63	3223526.11	40.018423	-104.701904
	13952.00	89.67	358.47	7365.92	6269.89	6269.35	446.08	0.63	1250652.58	3223523.35	40.018667	-104.701911
	14042.00	91.06	358.42	7365.34	6359.85	6359.31	443.64	1.55	1250742.51	3223520.10	40.018914	-104.701919
	14132.00	91.03	358.42	7363.69	6449.80	6449.26	441.16	0.04	1250832.43	3223516.81	40.019161	-104.701928
	14221.00	91.00	359.12	7362.12	6538.76	6538.23	439.25	0.79	1250921.38	3223514.10	40.019405	-104.701935
	14310.00	91.11	359.50	7360.48	6627.74	6627.21	438.18	0.45	1251010.34	3223512.24	40.019649	-104.701939
	14399.00	91.12	359.02	7358.74	6716.71	6716.18	437.04	0.55	1251099.30	3223510.29	40.019893	-104.701943
	14489.00	91.13	359.37	7356.97	6806.68	6806.15	435.77	0.39	1251189.25	3223508.22	40.020140	-104.701948
	14579.00	91.04	358.34	7355.27	6896.64	6896.12	433.97	1.15	1251279.19	3223506.62	40.020387	-104.701954
	14757.00	91.03	357.71	7352.05	7074.50	7073.98	427.84	0.35	1251456.99	3223497.89	40.020876	-104.701976
	14847.00	91.00	358.15	7350.46	7164.42	7163.91	424.59	0.48	1251546.88	3223493.83	40.021123	-104.701987
	14936.00	90.95	358.52	7348.95	7253.37	7252.86	422.01	0.43	1251635.80	3223490.45	40.021367	-104.701997
	15025.00	91.05	359.09	7347.39	7342.33	7341.83	420.15	0.64	1251724.74	3223487.79	40.021611	-104.702003
	15115.00	90.96	359.50	7345.82	7432.31	7431.81	419.05	0.47	1251814.70	3223485.88	40.021858	-104.702007
	15204.00	91.00	359.85	7344.29	7521.30	7520.79	418.54	0.39	1251903.68	3223484.58	40.022102	-104.702009
	15293.00	91.07	0.33	7342.68	7610.28	7609.78	418.68	0.55	1251992.66	3223483.91	40.022346	-104.702008
	15383.00	90.98	1.29	7341.07	7700.26	7699.75	419.96	1.07	1252082.64	3223484.38	40.022593	-104.702004
	15472.00	91.01	2.33	7339.52	7789.20	7788.69	422.77	1.17	1252171.60	3223486.39	40.022838	-104.701994
	15562.00	91.10	2.84	7337.86	7879.10	7878.59	426.82	0.58	1252261.52	3223489.64	40.023084	-104.701979
	15651.00	91.32	2.98	7335.98	7967.97	7967.45	431.34	0.29	1252350.42	3223493.36	40.023328	-104.701963
	15740.00	90.70	1.87	7334.42	8056.88	8056.36	435.11	1.43	1252439.35	3223496.33	40.023572	-104.701950
	15830.00	91.14	1.81	7332.98	8146.83	8146.30	438.00	0.50	1252529.31	3223498.41	40.023819	-104.701939
	15919.00	91.03	1.64	7331.29	8235.77	8235.24	440.68	0.22	1252618.27	3223500.29	40.024063	-104.701930
	16009.00	90.68	1.86	7329.94	8325.72	8325.19	443.43	0.46	1252708.24	3223502.23	40.024310	-104.701920
	16098.00	90.96	2.77	7328.67	8414.65	8414.11	447.02	1.08	1252797.18	3223505.02	40.024554	-104.701907
	16188.00	90.98	3.01	7327.14	8504.52	8503.98	451.55	0.27	1252887.09	3223508.75	40.024801	-104.701891
	16277.00	91.26	1.04	7325.40	8593.45	8592.90	454.70	2.24	1252976.03	3223511.10	40.025045	-104.701880
	16367.00	90.99	359.49	7323.64	8683.43	8682.88	455.11	1.75	1253066.01	3223510.71	40.025292	-104.701878
	16456.00	91.15	358.56	7321.98	8772.40	8771.85	453.60	1.06	1253154.96	3223508.39	40.025536	-104.701884
	16545.00	91.22	358.95	7320.14	8861.36	8860.81	451.66	0.44	1253243.89	3223505.66	40.025781	-104.701891
	16635.00	90.96	358.75	7318.42	8951.32	8950.78	449.85	0.36	1253333.84	3223503.04	40.026028	-104.701897
	16813.00	90.89	358.54	7315.55	9129.24	9128.70	445.64	0.13	1253511.71	3223497.23	40.026516	-104.701912
	16902.00	90.92	358.52	7314.15	9218.20	9217.66	443.36	0.05	1253600.64	3223494.15	40.026760	-104.701920
	16992.00	91.16	358.84	7312.51	9308.16	9307.62	441.28	0.45	1253690.58	3223491.26	40.027007	-104.701928
	17081.00	91.01	358.71	7310.83	9397.12	9396.59	439.37	0.22	1253779.52	3223488.56	40.027251	-104.701934
	17171.00	91.04	358.78	7309.22	9487.08	9486.55	437.41	0.09	1253869.46	3223485.78	40.027498	-104.701942
	17260.00	91.05	359.04	7307.59	9576.05	9575.52	435.71	0.29	1253958.41	3223483.29	40.027743	-104.701948
	17349.00	90.99	358.72	7306.01	9665.01	9664.49	433.97	0.37	1254047.35	3223480.75	40.027987	-104.701954
	17439.00	91.09	358.89	7304.37	9754.97	9754.45	432.10	0.22	1254137.29	3223478.07	40.028234	-104.701960
Cross Setback Toe (460' FNL, 1319' FEL)	17485.26	91.01	358.80	7303.52	9801.22	9800.70	431.17	0.27	1254183.53	3223476.72	40.028361	-104.701964
Last SLB_MWD Survey	17528.00	90.93	358.71	7302.80	9843.94	9843.42	430.24	0.27	1254226.24	3223475.41	40.028478	-104.701967
Projection to TD (359' FNL, 1323' FEL)	17586.00	90.93	358.71	7301.86	9901.92	9901.40	428.93	0.00	1254284.20	3223473.58	40.028637	-104.701972

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 3 \*\*\* 3-D 97.071% Confidence 3.0000 sigma  
Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	17.000	1/98.425	13.500	9.625	B001Mb_MWD+HRGM-Depth Only	Original Hole / County Line 3130-04H MWD 0' to 17586' Definitive
	1	17.000	21.000	Act Stns	13.500	9.625	B001Mb_MWD+HRGM-Depth Only	Original Hole / County Line 3130-04H MWD 0' to 17586' Definitive
	1	21.000	2364.000	Act Stns	13.500	9.625	B001Mb_MWD+HRGM	Original Hole / County Line 3130-04H MWD 0' to 17586' Definitive
	1	2364.000	17586.000	Act Stns	8.500	5.500	B001Mb_MWD+HRGM	Original Hole / County Line 3130-04H MWD 0' to 17586' Definitive