



# Chevron RBU

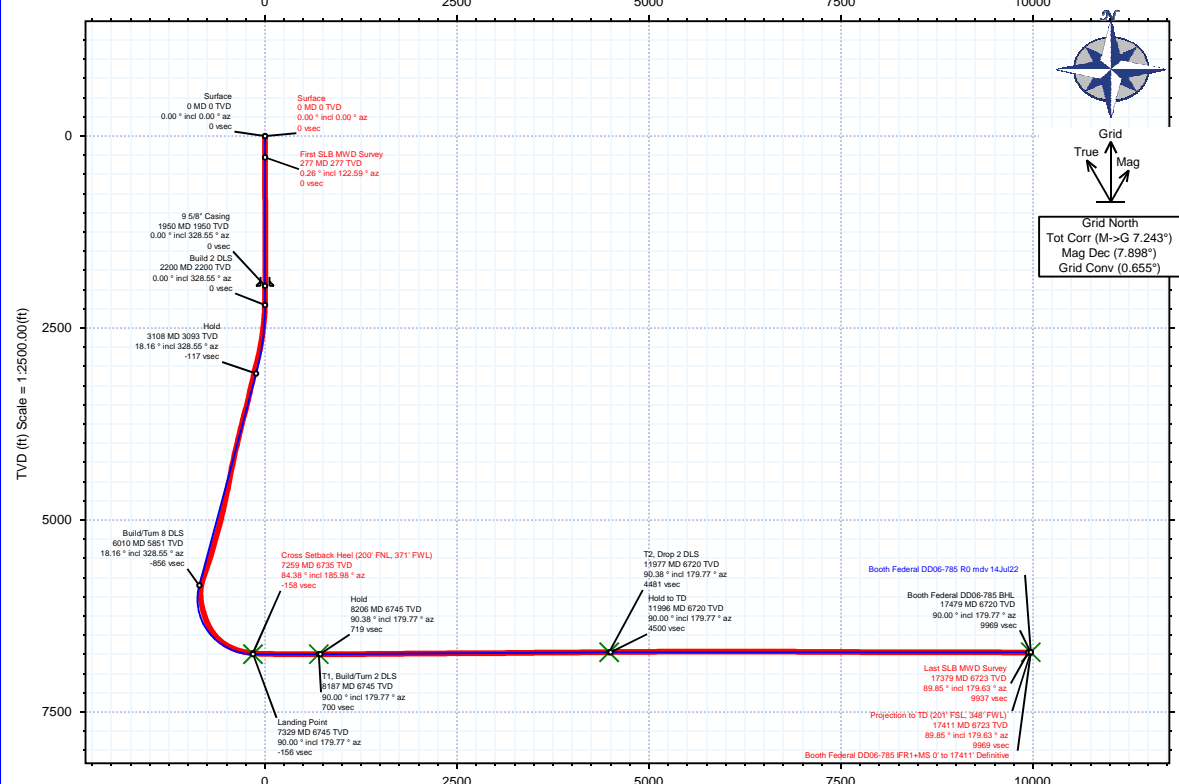


<b>Borehole:</b> Original Hole	<b>Well:</b> Booth Federal DD06-785	<b>Field:</b> CO, Weld County (NAD 83 NZ) - 2019	<b>Structure:</b> Chevron RBU 31-04N-63W (CC31-04-A Pad)
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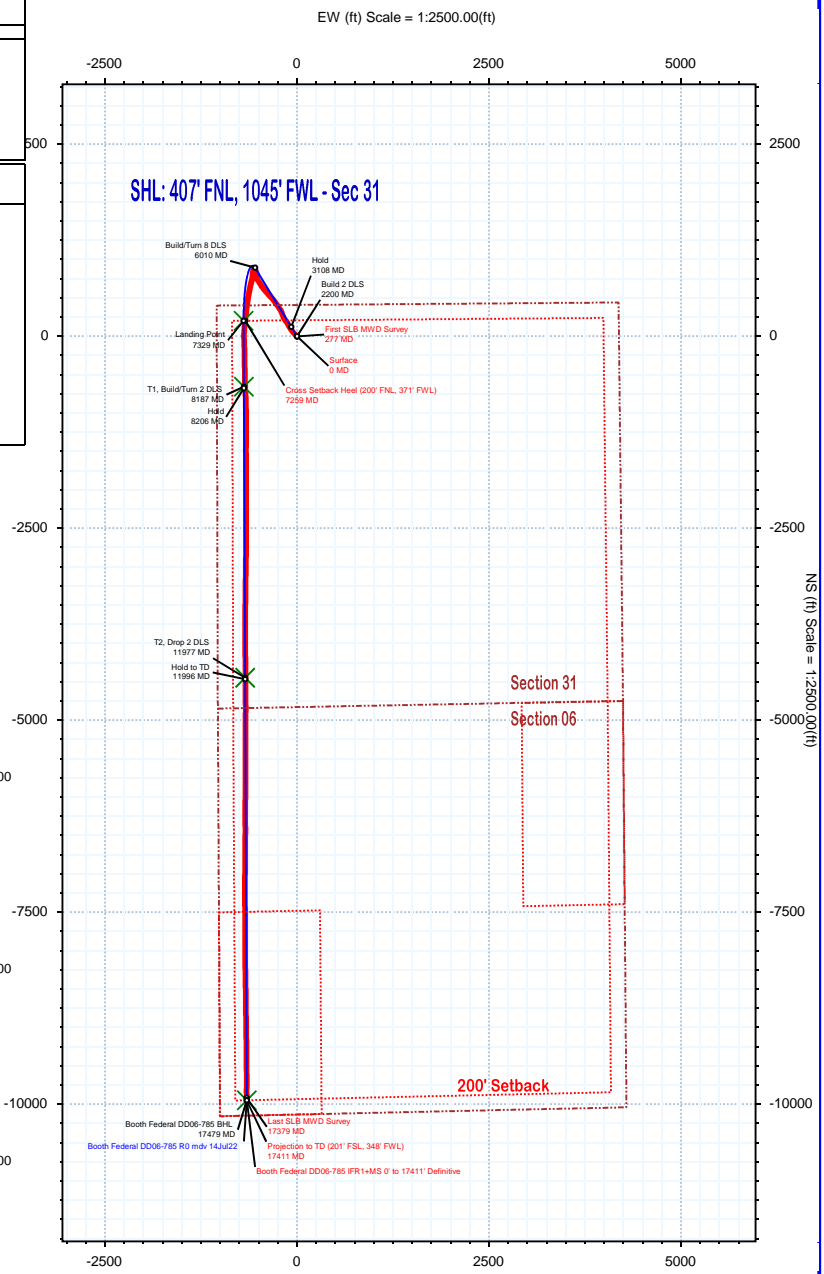
<b>Gravity &amp; Magnetic Parameters</b>				<b>Surface Location</b>				<b>NAD83 Colorado State Plane, Northern Zone, US Feet</b>				<b>Miscellaneous</b>			
Model:	IFR	Dip:	66.59°	Date:	07-Aug-2022	Lat:	N 40 16 29.93	Northing:	1344633.97ftUS	Grid Conv:	0.6551°	Slot:	Booth Federal DD06-785	TVD Ref:	KB = 29ft(4805ft above MSL)
MagDec:	7.898°	FS:	51790nT	Gravity FS:	999.029mgn (9.80665 Based)	Lon:	W 104 29 9.89	Easting:	3282901.81ftUS	Scale Fact:	0.99995694	Plan:	Booth Federal DD06-785 IFR+MS 0' to 17411' Definitive		

Target Description	Northing: 1344633.96663012		Easting: 3282901.80957252		Surface Location N 40 16 29.93		VSec Azimuth: 183.76		183.76	
	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	VSec	VSec	N(+)/S(-)	E(+)/W(-)
CC31-04-A Pad Fed Mins 2	N 40 16 29.93	W 104 29 9.02	1344634.73	3282968.77	4805.00	-5.16	0.77	0.77	66.96	66.96
CC31-04-A Pad Sec 31-06	N 40 16 29.93	W 104 29 9.02	1344634.73	3282968.77	4805.00	-5.16	0.77	0.77	66.96	66.96
CC31-04-A Pad Fed Mins 1	N 40 16 29.93	W 104 29 9.02	1344634.73	3282968.77	4805.00	-5.16	0.77	0.77	66.96	66.96
CC31-04-A Pad Sec 31-06 - 200' SB	N 40 16 29.93	W 104 29 9.02	1344634.73	3282968.77	4805.00	-5.16	0.77	0.77	66.96	66.96
Booth Federal DD06-785 T2	N 40 15 46.07	W 104 29 19.27	1340187.82	3282225.43	6720.00	-4.44	1.14	-4.44	67.41	-67.41
Booth Federal DD06-785 BHL	N 40 14 51.71	W 104 29 19.79	1334686.83	3282247.94	6720.00	-9.96	0.05	-9.94	58	-653.90
Booth Federal DD06-785 LP	N 40 16 32.01	W 104 29 18.83	1344836.34	3282206.40	6745.00	-156.33		202.38		-695.44
Booth Federal DD06-785 T1	N 40 16 23.52	W 104 29 18.91	1343977.99	3282209.91	6745.00	699.98		-656.01		-691.93

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
First SLB MWD Survey	277.00	0.26	122.59	277.00	0.30	-0.34	0.53	0.09
Cross Setback Heel (200' FNL, 371' FWL)	7259.00	84.38	185.98	6734.71	-157.86	202.56	-674.83	6.32
Last SLB MWD Survey	17379.00	89.85	179.63	6722.74	9937.08	-9915.40	-655.97	0.33
Projection to TD (201' FSL, 348' FWL)	17411.00	89.85	179.63	6722.83	9968.99	-9947.40	-655.76	0.00



Vertical Section (ft) Azim = 183.76° Scale = 1:2500.00(ft) Origin = 0N/-S, 0E/-W



NS (ft) Scale = 1:2500.00(ft)

# Booth Federal DD06-785 IFR1+MS 0' to 17411' Definitive Survey Geodetic Report (Def Survey)



**Report Date:** September 08, 2022 - 09:22 AM  
**Client:** Chevron RBU  
**Field:** CO, Weld County (NAD 83 NZ) - 2019  
**Structure / Slot:** Chevron RBU 31-04N-63W (CC31-04-A Pad) / Booth Federal DD06-785  
**Well:** Booth Federal DD06-785  
**Borehole:** Original Hole  
**UWI / API#:** Unknown / 05-123-49303  
**Survey Name:** Booth Federal DD06-785 IFR1+MS 0' to 17411' Definitive  
**Survey Date:** August 07, 2022  
**Tort / AHD / DDI / ERD Ratio:** 290.268 ° / 11908.914 ft / 6.950 / 1.765  
**Coordinate Reference System:** NAD83 Colorado State Plane, Northern Zone, US Feet  
**Location Lat / Long:** N 40° 16' 29.92800", W 104° 29' 9.88800"  
**Location Grid N/E Y/X:** N 1344633.967 ftUS, E 3282901.810 ftUS  
**CRS Grid Convergence Angle:** 0.6551 °  
**Grid Scale Factor:** 0.99995694  
**Version / Patch:** 2.10.832.2

**Survey / DLS Computation:** Minimum Curvature / Lubinski  
**Vertical Section Azimuth:** 183.761 ° (Grid North)  
**Vertical Section Origin:** 0.000 ft, 0.000 ft  
**TVD Reference Datum:** KB = 29ft  
**TVD Reference Elevation:** 4805.000 ft above MSL  
**Seabed / Ground Elevation:** 4776.000 ft above MSL  
**Magnetic Declination:** 7.898 °  
**Total Gravity Field Strength:** 999.0286mgn (9.80665 Based)  
**Gravity Model:** GARM  
**Total Magnetic Field Strength:** 51790.000 nT  
**Magnetic Dip Angle:** 66.590 °  
**Declination Date:** August 07, 2022  
**Magnetic Declination Model:** IFR  
**North Reference:** Grid North  
**Grid Convergence Used:** 0.6551 °  
**Total Corr Mag North->Grid North:** 7.2429 °  
**Local Coord Referenced To:** Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	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	1344633.97	3282901.81	40.274980	-104.486080
First SLB MWD Survey	277.00	0.26	122.59	277.00	0.30	-0.34	0.53	0.09	1344633.63	3282902.34	40.274979	-104.486078
	372.00	0.25	129.70	372.00	0.53	-0.59	0.87	0.03	1344633.38	3282902.68	40.274978	-104.486077
	467.00	0.22	133.41	467.00	0.77	-0.84	1.16	0.04	1344633.12	3282902.97	40.274978	-104.486076
	561.00	0.25	128.78	561.00	1.00	-1.10	1.45	0.04	1344632.87	3282903.26	40.274977	-104.486075
	656.00	0.24	118.04	656.00	1.20	-1.32	1.79	0.05	1344632.65	3282903.60	40.274976	-104.486074
	751.00	0.25	149.52	750.99	1.45	-1.59	2.07	0.14	1344632.37	3282903.88	40.274976	-104.486073
	846.00	0.24	171.05	845.99	1.82	-1.97	2.21	0.10	1344632.00	3282904.02	40.274975	-104.486072
	941.00	0.32	229.56	940.99	2.20	-2.34	2.04	0.30	1344631.63	3282903.85	40.274974	-104.486073
	1035.00	0.33	227.62	1034.99	2.58	-2.69	1.64	0.02	1344631.28	3282903.45	40.274973	-104.486074
	1130.00	0.31	251.53	1129.99	2.87	-2.96	1.19	0.14	1344631.01	3282903.00	40.274972	-104.486076
	1225.00	0.40	265.39	1224.99	3.02	-3.06	0.62	0.13	1344630.90	3282902.43	40.274972	-104.486078
	1320.00	0.40	267.20	1319.99	3.10	-3.11	-0.05	0.01	1344630.86	3282901.76	40.274971	-104.486080
	1415.00	0.48	266.84	1414.98	3.19	-3.14	-0.77	0.08	1344630.82	3282901.04	40.274971	-104.486083
	1509.00	0.54	269.13	1508.98	3.27	-3.17	-1.61	0.07	1344630.79	3282900.20	40.274971	-104.486086
	1604.00	0.60	284.48	1603.97	3.21	-3.05	-2.54	0.17	1344630.91	3282899.27	40.274972	-104.486089
	1699.00	0.51	280.41	1698.97	3.07	-2.85	-3.44	0.10	1344631.11	3282898.37	40.274972	-104.486092
	1794.00	0.46	306.78	1793.97	2.82	-2.55	-4.16	0.24	1344631.42	3282897.65	40.274973	-104.486095
	1889.00	0.59	332.27	1888.96	2.19	-1.89	-4.69	0.28	1344632.08	3282897.12	40.274975	-104.486097
	1939.00	0.62	338.88	1938.96	1.73	-1.41	-4.91	0.15	1344632.56	3282896.90	40.274976	-104.486098
	1980.00	0.76	321.28	1979.96	1.33	-0.99	-5.16	0.62	1344632.98	3282896.65	40.274977	-104.486099
	2075.00	0.77	350.44	2074.95	0.24	0.13	-5.66	0.41	1344634.10	3282896.15	40.274981	-104.486100
	2170.00	1.19	333.82	2169.94	-1.24	1.65	-6.20	0.53	1344635.61	3282895.61	40.274985	-104.486102
	2265.00	3.42	325.13	2264.85	-4.31	4.86	-8.25	2.37	1344638.82	3282893.56	40.274994	-104.486109
	2360.00	6.42	315.56	2359.49	-10.06	10.98	-13.59	3.26	1344644.94	3282888.22	40.275011	-104.486128
	2455.00	9.70	316.84	2453.54	-19.07	20.61	-22.79	3.46	1344654.57	3282879.02	40.275037	-104.486161
	2549.00	11.02	316.71	2546.01	-30.60	32.93	-34.37	1.40	1344666.89	3282867.44	40.275071	-104.486202
	2644.00	11.31	320.45	2639.21	-43.56	46.72	-46.53	0.82	1344680.68	3282855.29	40.275110	-104.486245
	2739.00	13.99	321.64	2731.90	-58.86	62.91	-59.59	2.83	1344696.87	3282842.23	40.275155	-104.486291
	2834.00	15.39	325.54	2823.79	-77.29	82.31	-73.85	1.80	1344716.27	3282827.97	40.275208	-104.486341
	2929.00	17.32	329.20	2914.95	-98.84	104.85	-88.22	2.30	1344738.81	3282813.59	40.275271	-104.486392
	3024.00	17.80	330.42	3005.52	-122.61	129.63	-102.63	0.64	1344763.59	3282799.18	40.275339	-104.486442
	3119.00	12.04	331.43	3097.28	-143.13	150.97	-114.55	6.07	1344784.93	3282787.27	40.275398	-104.486484
	3213.00	18.82	326.54	3187.84	-163.52	172.26	-127.61	7.34	1344806.22	3282774.20	40.275457	-104.486530
	3308.00	16.58	323.57	3278.34	-186.08	195.95	-144.11	2.54	1344829.91	3282757.70	40.275522	-104.486588
	3403.00	14.74	324.23	3369.81	-205.75	216.66	-159.23	1.95	1344850.62	3282742.59	40.275580	-104.486642
	3498.00	16.29	332.00	3461.35	-226.41	238.24	-172.55	2.73	1344872.19	3282729.27	40.275639	-104.486689
	3593.00	16.04	342.29	3552.62	-249.95	262.51	-182.80	3.02	1344896.46	3282719.02	40.275706	-104.486724
	3688.00	17.03	343.27	3643.69	-275.20	288.34	-190.80	1.08	1344922.29	3282711.02	40.275777	-104.486752
	3782.00	14.85	336.51	3734.08	-298.81	312.57	-199.56	3.04	1344946.52	3282702.26	40.275844	-104.486782
	3877.00	16.93	327.67	3825.45	-320.81	335.43	-211.81	3.35	1344969.38	3282690.01	40.275907	-104.486825
	3972.00	16.17	327.07	3916.52	-342.60	358.22	-226.40	0.82	1344992.17	3282675.42	40.275970	-104.486877
	4067.00	15.74	327.35	4007.86	-363.58	380.17	-240.55	0.46	1345014.12	3282661.27	40.276031	-104.486926
	4162.00	19.45	322.62	4098.40	-385.87	403.60	-257.11	4.18	1345037.55	3282644.71	40.276096	-104.486985
	4257.00	11.98	326.23	4189.79	-405.62	424.39	-272.21	7.93	1345058.34	3282629.61	40.276153	-104.487038
	4352.00	17.50	324.58	4281.63	-424.53	444.25	-285.98	5.83	1345078.19	3282615.84	40.276208	-104.487087
	4446.00	13.35	322.22	4372.22	-443.62	464.35	-300.83	4.46	1345098.30	3282601.00	40.276264	-104.487139
	4541.00	14.86	321.14	4464.36	-460.79	482.50	-315.19	1.61	1345116.45	3282586.63	40.276314	-104.487190
	4636.00	16.40	315.95	4555.84	-478.76	501.63	-332.16	2.19	1345135.58	3282569.67	40.276367	-104.487250
	4730.00	17.25	318.56	4645.82	-497.50	521.62	-350.61	1.21	1345155.56	3282551.21	40.276423	-104.487315
	4825.00	17.29	316.72	4736.54	-517.04	542.46	-369.61	0.58	1345176.40	3282532.21	40.276481	-104.487382
	4919.00	17.01	317.91	4826.36	-536.14	562.83	-388.40	0.48	1345196.77	3282513.42	40.276537	-104.487449
	5014.00	18.32	320.96	4916.88	-556.77	584.74	-407.12	1.69	1345218.68	3282494.70	40.276598	-104.487515
	5109.00	18.68	320.79	5006.97	-578.86	608.12	-426.15	0.38	1345242.06	3282475.68	40.276663	-104.487582
	5203.00	19.58	323.77	5095.78	-601.94	632.49	-444.97	1.41	1345266.43	3282456.86	40.276730	-104.487649
	5298.00	19.66	325.01	5185.27	-626.60	658.43	-463.54	0.45	1345292.36	3282438.29	40.276802	-104.487714
	5393.00	19.42	327.49	5274.80	-651.80	684.84	-481.20	0.91	1345318.77	3282420.64	40.276875	-104.487776
	5488.00	19.71	327.81	5364.31	-677.50	711.71	-498.22	0.33	1345345.65	3282403.61	40.276949	-104.487836
	5583.00	19.41	328.43	5453.83	-703.35	738.72	-515.02	0.38	1345372.65	3282386.82	40.277024	-104.487895
	5678.00	19.20	354.76	5543.66	-731.71	767.78	-524.73	9.09	1345401.71	3282377.11	40.277104	-104.487929
	5772.00	19.54	359.23	5632.34	-762.65	798.89	-526.35	1.62	1345432.82	3282375.48	40.277189	-104.487934
	5867.00	19.49	345.24	5721.93	-793.53	830.12	-530.60	4.91	1345464.05	3282371.23	40.277275	-104.487947
	5962.00	17.46	335.69	5812.05	-821.14	858.44	-540.51	3.83	1345492.37	3282361.32	40.277353	-104.487982
	6057.00	6.95	318.54	5904.80	-837.81	875.79	-550.21	11.58	1345509.72	3282351.62	40.277401	-104.488016
	6152.00	7.16	244.97	5999.25	-839.01	877.60	-559.40	8.88	1345511.52	3282342.44	40.277406	-104.488049
	6247.00	11.19	199.75	6093.13	-827.28	866.40	-567.89	8.37	1345500.33	3282333.94	40.277376	-104.488080
	6341.00	15.85	191.87	6184.51	-805.79	845.24	-573.62	5.32	1345479.17	3282328.22	40.277	

Comments	MD (ft)	Incl (°)	Azim (°)	Grid (ft)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
Cross Setback													
Heel (200' FNL, 371' FWL)	7259.00	84.38	185.98	6734.71		-157.86	202.56	-674.83	6.32	1344836.52	3282227.01	40.275557	-104.488490
	7289.00	86.27	185.88	6737.16		-127.98	172.82	-677.92	6.32	1344806.78	3282223.92	40.275476	-104.488502
	7384.00	89.11	185.44	6740.99		-33.12	78.37	-687.28	3.03	1344712.33	3282214.56	40.275217	-104.488540
	7478.00	88.88	177.62	6742.64		60.72	-15.51	-689.79	8.32	1344618.46	3282212.05	40.274959	-104.488553
	7573.00	88.67	178.31	6744.67		155.21	-110.43	-686.41	0.76	1344523.54	3282215.43	40.274698	-104.488544
	7667.00	89.91	178.76	6745.83		248.81	-204.39	-684.01	1.40	1344429.59	3282217.83	40.274440	-104.488540
	7762.00	89.81	179.45	6746.07		343.50	-299.38	-682.53	0.73	1344334.60	3282219.31	40.274180	-104.488538
	7857.00	89.93	179.15	6746.28		438.21	-394.37	-681.37	0.34	1344239.62	3282220.47	40.273919	-104.488538
	7951.00	89.75	178.79	6746.54		531.88	-488.35	-679.68	0.43	1344145.64	3282222.16	40.273661	-104.488536
	8046.00	89.85	179.26	6746.87		626.56	-583.34	-678.06	0.51	1344050.66	3282223.78	40.273400	-104.488534
	8141.00	89.83	177.27	6747.14		721.12	-678.29	-675.18	2.09	1343955.71	3282226.66	40.273139	-104.488527
	8235.00	90.50	176.06	6746.87		814.39	-772.13	-669.72	1.47	1343861.87	3282232.12	40.272882	-104.488512
	8330.00	90.28	179.46	6746.22		908.86	-867.04	-666.00	3.59	1343766.97	3282235.84	40.272621	-104.488502
	8425.00	90.35	178.36	6745.70		1003.51	-962.02	-664.20	1.16	1343671.99	3282237.64	40.272360	-104.488499
	8522.00	90.35	180.20	6745.11		1100.21	-1059.00	-662.98	1.90	1343575.01	3282238.86	40.272094	-104.488499
	8617.00	90.45	180.17	6744.44		1195.02	-1154.00	-663.28	0.11	1343480.02	3282238.56	40.271833	-104.488504
	8712.00	90.52	180.16	6743.64		1289.83	-1249.00	-663.56	0.07	1343385.03	3282238.28	40.271573	-104.488509
	8806.00	90.50	180.40	6742.80		1383.66	-1342.99	-664.02	0.26	1343291.03	3282237.82	40.271315	-104.488514
	8901.00	90.38	180.28	6742.07		1478.48	-1437.99	-664.58	0.18	1343196.04	3282237.26	40.271054	-104.488520
	8996.00	90.45	179.68	6741.39		1573.27	-1532.99	-664.55	0.64	1343101.05	3282237.29	40.270793	-104.488524
	9091.00	90.38	179.83	6740.70		1668.04	-1627.98	-664.14	0.17	1343006.06	3282237.70	40.270532	-104.488527
	9186.00	90.78	179.88	6739.74		1762.81	-1722.98	-663.90	0.42	1342911.07	3282237.94	40.270272	-104.488530
	9281.00	90.55	180.26	6738.63		1857.61	-1817.97	-664.02	0.47	1342816.08	3282237.82	40.270011	-104.488534
	9375.00	89.97	179.93	6738.21		1951.42	-1911.97	-664.17	0.71	1342722.08	3282237.67	40.269753	-104.488538
	9470.00	90.93	179.81	6737.46		2046.19	-2006.96	-663.96	1.02	1342627.09	3282237.88	40.269492	-104.488541
	9565.00	89.86	179.50	6736.81		2140.95	-2101.96	-663.39	1.17	1342532.10	3282238.45	40.269231	-104.488543
	9660.00	90.47	180.71	6736.53		2235.75	-2196.96	-663.56	1.43	1342437.11	3282238.28	40.268971	-104.488548
	9755.00	90.80	180.14	6735.48		2330.58	-2291.95	-664.26	0.69	1342342.12	3282237.58	40.268710	-104.488554
	9850.00	89.79	179.35	6734.99		2425.35	-2386.94	-663.84	1.35	1342247.13	3282238.00	40.268449	-104.488556
	9947.00	90.36	179.74	6734.86		2522.08	-2483.94	-663.07	0.71	1342150.14	3282238.77	40.268183	-104.488558
	10039.00	89.90	179.14	6734.65		2613.82	-2575.93	-662.17	0.82	1342055.15	3282239.67	40.267930	-104.488558
	10134.00	90.46	180.16	6734.36		2708.57	-2670.93	-661.59	1.22	1341963.16	3282240.25	40.267670	-104.488560
	10229.00	90.45	180.68	6733.60		2803.41	-2765.92	-662.29	0.55	1341868.17	3282239.55	40.267409	-104.488566
	10324.00	90.35	181.43	6732.94		2898.30	-2860.90	-664.04	0.80	1341773.19	3282237.80	40.267148	-104.488577
	10418.00	90.69	180.55	6732.09		2992.19	-2954.89	-665.66	1.00	1341679.21	3282236.18	40.266890	-104.488586
	10513.00	90.38	181.20	6731.20		3087.06	-3049.87	-667.11	0.76	1341584.23	3282234.73	40.266630	-104.488595
	10608.00	90.45	180.86	6730.51		3181.95	-3144.85	-668.82	0.37	1341489.26	3282233.02	40.266369	-104.488605
	10703.00	90.88	180.81	6729.41		3276.82	-3239.84	-670.20	0.46	1341394.28	3282231.64	40.266108	-104.488614
	10798.00	90.42	180.46	6728.33		3371.67	-3334.82	-671.26	0.61	1341299.29	3282230.58	40.265848	-104.488622
	10893.00	90.76	180.39	6727.35		3466.51	-3429.81	-671.96	0.37	1341204.31	3282229.88	40.265587	-104.488628
	10988.00	90.75	181.91	6726.10		3561.40	-3524.78	-673.87	1.60	1341109.34	3282227.97	40.265326	-104.488639
	11082.00	89.98	180.54	6725.50		3655.30	-3618.76	-675.88	1.67	1341015.37	3282225.96	40.265068	-104.488650
	11177.00	89.96	179.58	6725.55		3750.10	-3713.76	-675.98	1.01	1340920.38	3282225.86	40.264808	-104.488654
	11272.00	90.58	180.01	6725.10		3844.87	-3808.76	-675.64	0.79	1340825.38	3282226.20	40.264547	-104.488657
	11367.00	90.67	179.59	6724.07		3939.64	-3903.75	-675.30	0.45	1340730.39	3282226.54	40.264286	-104.488660
	11461.00	90.56	179.54	6723.06		4033.38	-3997.74	-674.59	0.13	1340636.41	3282227.25	40.264028	-104.488661
	11556.00	90.66	179.79	6722.05		4128.13	-4092.73	-674.04	0.28	1340541.42	3282227.80	40.263767	-104.488663
	11651.00	90.46	178.45	6721.12		4222.81	-4187.72	-672.58	1.43	1340446.44	3282229.26	40.263507	-104.488661
	11746.00	90.55	179.32	6720.28		4317.47	-4282.69	-670.73	0.92	1340351.47	3282231.11	40.263246	-104.488659
	11841.00	90.51	179.75	6719.40		4412.20	-4377.69	-669.96	0.45	1340256.48	3282231.88	40.262985	-104.488660
	11935.00	90.45	180.04	6718.61		4505.99	-4471.68	-669.79	0.32	1340162.49	3282232.05	40.262727	-104.488663
	12030.00	90.43	180.02	6717.88		4600.78	-4566.68	-669.83	0.03	1340067.49	3282232.01	40.262466	-104.488667
	12125.00	90.24	179.82	6717.33		4695.57	-4661.68	-669.70	0.29	1339972.50	3282232.14	40.262206	-104.488670
	12220.00	90.52	179.49	6716.70		4790.32	-4756.67	-669.13	0.46	1339877.51	3282232.71	40.261945	-104.488672
	12315.00	90.31	180.03	6716.01		4885.09	-4851.67	-668.73	0.61	1339782.52	3282233.11	40.261684	-104.488675
	12410.00	90.49	180.43	6715.35		4979.90	-4946.67	-669.11	0.46	1339687.52	3282232.73	40.261423	-104.488680
	12504.00	90.75	180.70	6714.33		5073.75	-5040.66	-670.04	0.40	1339593.54	3282231.80	40.261165	-104.488687
	12599.00	90.48	180.76	6713.31		5168.61	-5135.64	-671.25	0.29	1339498.56	3282230.59	40.260905	-104.488695
	12694.00	90.33	179.04	6712.64		5263.39	-5230.64	-671.08	1.82	1339403.57	3282230.75	40.260644	-104.488699
	12789.00	90.05	180.53	6712.32		5358.15	-5325.63	-670.73	1.60	1339308.57	3282231.11	40.260383	-104.488701
	12884.00	89.87	180.31	6712.39		5453.00	-5420.63	-671.42	0.30	1339213.58	3282230.42	40.260123	-104.488708
	12979.00	89.85	179.68	6712.62		5547.79	-5515.63	-671.42	0.66	1339118.59	3282230.42	40.259862	-104.488711
	13073.00	89.94	179.68	6712.80		5641.55	-5609.63	-670.89	0.10	1339024.59	3282230.95	40.259604	-104.488713
	13168.00	89.98	180.53	6712.86		5736.36	-5704.63	-671.07	0.90	1338929.60	3282230.77	40.259343	-104.488718
	13263.00	90.12	180.10	6712.78		5831.19	-5799.62	-671.59	0.48	1338834.60	3282230.25	40.259082	-104.488724
	13358.00	89.85	180.79	6712.80		5926.03	-5894.62	-672.33	0.78	1338739.61	3282229.51	40.258822	-104.488730
	13453.00	89.90	179.93	6713.01		6020.86	-5989.62	-672.92	0.91	1338644.62	3282228.92	40.258561	-104.488736
	13547.00	89.84	180.37	6713.22		6114.67	-6084.62	-673.17	0.47	1338550.62	3282228.67	40.258303	-104.488741
	13642.00	90.17											

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	17337.00	89.98	179.68	6722.68	9895.18	-9873.40	-656.22	0.72	1334761.01	3282245.62	40.247900	-104.488835
Last SLB MWD Survey Projection to TD (201' FSL, 348' FWL)	17379.00	89.85	179.63	6722.74	9937.08	-9915.40	-655.97	0.33	1334719.01	3282245.87	40.247785	-104.488836
	17411.00	89.85	179.63	6722.83	9968.99	-9947.40	-655.76	0.00	1334687.01	3282246.08	40.247697	-104.488836

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 (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	29.000	1/98.425	13.500	9.625	A005Mb_MWD+IFR1-Depth Only	Original Hole / Booth Federal DD06-785 IFR1+MS 0' to 17411' Definitive
	1	29.000	29.000	Act Stns	13.500	9.625	A005Mb_MWD+IFR1-Depth Only	Original Hole / Booth Federal DD06-785 IFR1+MS 0' to 17411' Definitive
	1	29.000	1939.000	Act Stns	13.500	9.625	A005Mb_MWD+IFR1	Original Hole / Booth Federal DD06-785 IFR1+MS 0' to 17411'
	1	1939.000	17411.000	Act Stns	8.500	5.500	A008Mb_MWD+IFR1+MS	Original Hole / Booth Federal DD06-785 IFR1+MS 0' to 17411'