



# Verdad Resources LLC

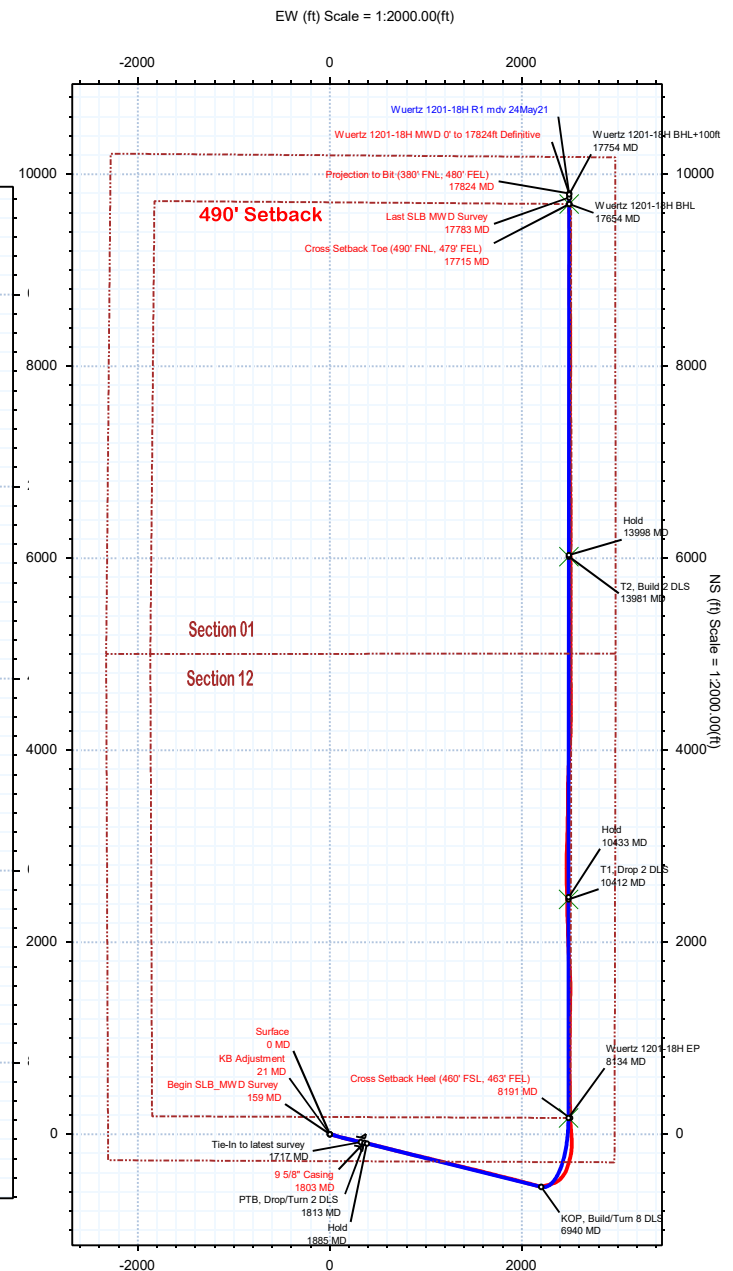
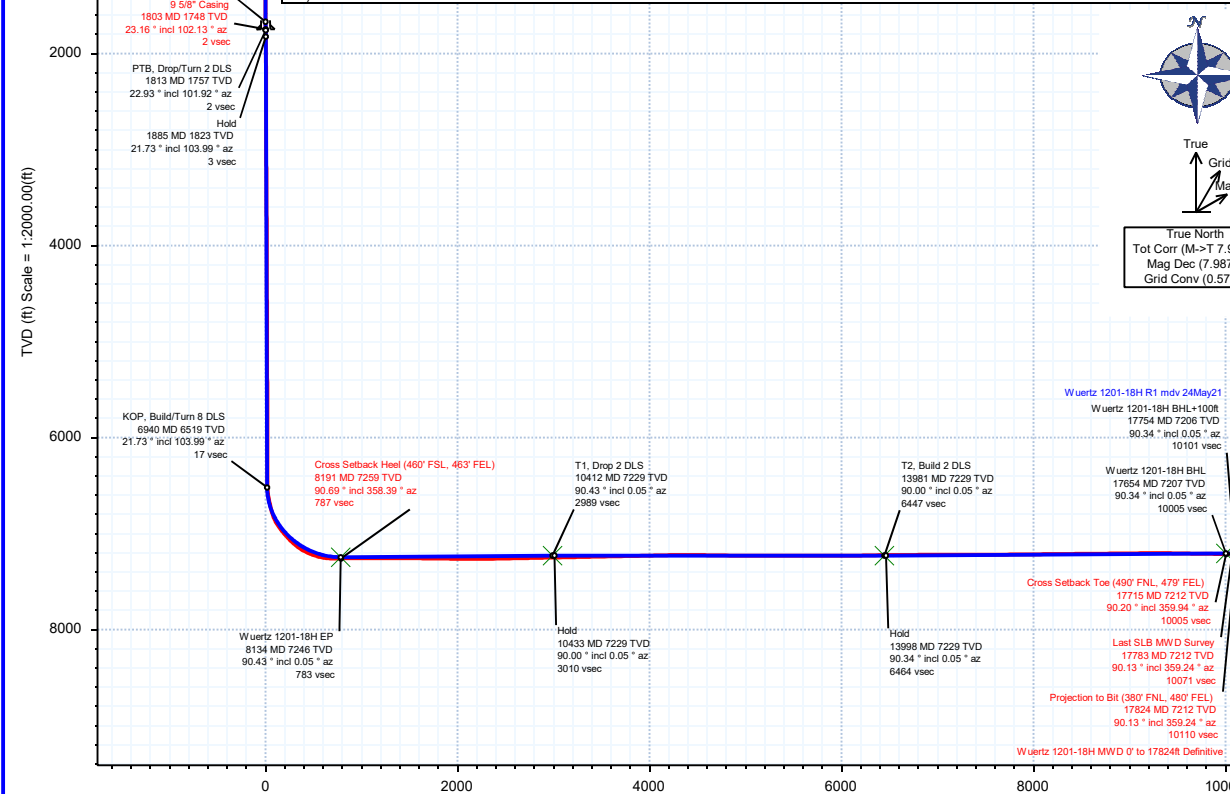


Borehole:	Well:	Field:	Structure:
Original Hole	Wuertz 1201-18H	CO, Weld County (NAD 83 NZ) - 2019	Verdad Resources 12-01N-65W (Wuertz 1201 Pad)

Gravity & Magnetic Parameters	Surface Location	NAD83 Colorado State Plane, Northern Zone, US Feet	Miscellaneous
Model: HDGM 2021 Dip: 66.334° Date: 10-jun.-2021	Lat: N 40 3 34.15 Northing: 1265756.62ftUS Grid Conv: 0.5729°	Slot: Wuertz 1201-18H TVD Ref: KB 21ft(5002ft above MSL)	
MagDec: 7.987° FS: 51757.015nT Gravity FS: 998.999mgn (9.80665 Based)	Lon: W 104 36 47.89 Easting: 3248190.82ftUS Scale Fact: 0.99996239	Plan: Wuertz 1201-18H MWD 0' to 17824ft Definitive	

North: 1265756.62132467 Easting: 3248190.81560159 Latitude: N 40 3 34.15 Longitude: W 104 36 47.89 VSec Azimuth: 14.43	Surface Location	NAD83 Colorado State Plane, Northern Zone, US Feet
Target Description	Grid Coord	Local Coord
Target Name	Latitude	Longitude
Wuertz 1201 Pad Sec 12-01 - SB	N 40 3 34.15	W 104 36 49.81
Wuertz 1201 Pad Sec 12-01	N 40 3 34.15	W 104 36 49.56
Wuertz 1201-18H BHL	N 40 5 9.89	W 104 36 15.80
Wuertz 1201-18H T2	N 40 4 33.60	W 104 36 15.85
Wuertz 1201-18H T1	N 40 3 58.32	W 104 36 15.89
Wuertz 1201-18H EP	N 40 3 35.81	W 104 36 15.92

Target Name	Latitude	Longitude	North	East	TVD	VSec	N(+)/S(-)	E(+)/W(-)	DLS
Wuertz 1201 Pad Sec 12-01 - SB	N 40 3 34.15	W 104 36 49.81	1265755.12	3248041.07	5002.00	-37.32	0.00	-149.76	
Wuertz 1201 Pad Sec 12-01	N 40 3 34.15	W 104 36 49.56	1265755.32	3248060.94	5002.00	-32.37	0.00	-129.88	
Wuertz 1201-18H BHL	N 40 5 9.89	W 104 36 15.80	1275469.50	3250587.39	7207.00	10004.58	9688.81	2493.68	
Wuertz 1201-18H T2	N 40 4 33.60	W 104 36 15.85	1271796.99	3250621.14	7229.00	6446.89	6016.00	2490.70	
Wuertz 1201-18H T1	N 40 3 58.32	W 104 36 15.89	1268227.88	3250653.93	7229.00	2989.37	2446.60	2487.80	
Wuertz 1201-18H EP	N 40 3 35.81	W 104 36 15.92	1265950.25	3250674.86	7246.00	782.96	168.79	2485.96	



## Wuertz 1201-18H MWD 0' to 17824' Definitive Survey Geodetic Report

(Def Survey)

**Report Date:** June 11, 2021 - 12:05 PM  
**Client:** Verdaz Resources LLC  
**Field:** CO, Weld County (NAD 83 NZ) - 2019  
**Structure / Slot:** Verdaz Resources 12-01N-65W (Wuertz 1201 Pad) / Wuertz 1201-18H  
**Well:** Wuertz 1201-18H  
**Borehole:** Original Hole  
**UWI / API#:** Unknown / 05-123-49733  
**Survey Name:** Wuertz 1201-18H MWD 0' to 17824' Definitive  
**Survey Date:** June 10, 2021  
**Tort / AHD / DDI / ERD Ratio:** 312.625° / 12781.762 ft / 6.991 / 1.759  
**Coordinate Reference System:** NAD83 Colorado State Plane, Northern Zone, US Feet  
**Location Lat / Long:** N 40° 3' 34.14600", W 104° 36' 47.88720"  
**Location Grid N/E Y/X:** N 1265756.621 ftUS, E 3248190.816 ftUS  
**CRS Grid Convergence Angle:** 0.5729°  
**Grid Scale Factor:** 0.99996239  
**Version / Patch:** 2.10.825.0

**Survey / DLS Computation:** Minimum Curvature / Lubinski  
**Vertical Section Azimuth:** 14.430° (True North)  
**Vertical Section Origin:** 0.000 ft, 0.000 ft  
**TVD Reference Datum:** KB 21ft  
**TVD Reference Elevation:** 5002.000 ft above MSL  
**Seabed / Ground Elevation:** 4981.000 ft above MSL  
**Magnetic Declination:** 7.987°  
**Total Gravity Field Strength:** 998.9992mgn (9.80665 Based)  
**Gravity Model:** GARM  
**Total Magnetic Field Strength:** 51757.015 nT  
**Magnetic Dip Angle:** 66.334°  
**Declination Date:** June 10, 2021  
**Magnetic Declination Model:** HDGM 2021  
**North Reference:** True North  
**Grid Convergence Used:** 0.0000°  
**Total Corr Mag North-True North:** 7.9865°  
**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	1265756.62	3248190.82	40.059485	-104.613302
KB Adjustment	21.00	0.00	0.00	21.00	0.00	0.00	0.00	0.00	1265756.62	3248190.82	40.059485	-104.613302
Begin												
SLB_MWD	159.00	0.13	228.71	159.00	-0.13	-0.10	-0.12	0.09	1265756.52	3248190.70	40.059485	-104.613302
Survey												
	243.00	0.88	113.01	243.00	-0.30	-0.42	0.40	1.12	1265756.21	3248191.22	40.059484	-104.613301
	337.00	2.57	104.76	336.95	-0.42	-1.24	3.11	1.81	1265755.42	3248193.93	40.059482	-104.613291
	427.00	4.55	101.79	426.77	-0.27	-2.48	8.55	2.21	1265754.23	3248199.39	40.059478	-104.613271
	517.00	6.64	100.64	516.34	0.24	-4.17	17.16	2.33	1265752.62	3248208.02	40.059474	-104.613241
	607.00	7.44	104.30	605.66	0.59	-6.57	27.92	1.02	1265750.33	3248218.80	40.059467	-104.613202
	697.00	8.32	108.00	694.81	0.20	-10.02	39.76	1.13	1265747.00	3248230.68	40.059457	-104.613160
	787.00	9.85	106.82	783.68	-0.52	-14.26	53.33	1.71	1265742.89	3248244.28	40.059446	-104.613111
	877.00	11.39	107.32	872.13	-1.29	-19.14	69.18	1.71	1265738.18	3248260.18	40.059432	-104.613055
	967.00	13.17	107.91	960.07	-2.36	-24.94	87.42	1.98	1265732.56	3248278.48	40.059417	-104.612990
	1057.00	14.93	104.26	1047.38	-2.95	-30.95	108.41	2.19	1265726.76	3248299.53	40.059400	-104.612915
	1147.00	15.70	103.59	1134.18	-2.74	-36.66	131.49	0.88	1265721.28	3248322.66	40.059384	-104.612832
	1237.00	16.50	103.66	1220.65	-2.39	-42.54	155.74	0.89	1265715.64	3248346.97	40.059368	-104.612746
	1327.00	18.20	103.11	1306.55	-1.89	-48.75	181.85	1.90	1265709.70	3248373.14	40.059351	-104.612652
	1417.00	20.92	104.12	1391.35	-1.48	-55.86	211.13	3.05	1265702.88	3248402.49	40.059332	-104.612548
	1507.00	22.85	104.74	1474.86	-1.49	-64.22	243.62	2.16	1265694.84	3248435.05	40.059309	-104.612432
	1597.00	22.44	103.87	1557.92	-1.42	-72.79	277.19	0.59	1265686.61	3248468.71	40.059285	-104.612312
	1687.00	23.06	101.59	1640.92	-0.38	-80.45	311.14	1.20	1265679.29	3248502.73	40.059264	-104.612190
	1717.00	22.93	101.92	1668.54	0.17	-82.83	322.61	0.61	1265677.02	3248514.22	40.059258	-104.612150
9 5/8" Casing	1803.00	23.16	102.13	1747.67	1.58	-89.85	355.54	0.28	1265670.34	3248547.22	40.059238	-104.612032
	1865.00	23.33	102.28	1804.64	2.54	-95.02	379.45	0.28	1265665.40	3248571.18	40.059224	-104.611946
	1954.00	23.47	102.56	1886.32	3.78	-102.62	413.97	0.21	1265658.15	3248605.78	40.059203	-104.611823
	2044.00	21.18	103.90	1969.57	4.51	-110.42	447.25	2.61	1265650.68	3248639.13	40.059182	-104.611704
	2133.00	21.45	104.08	2052.49	4.76	-118.24	478.64	0.32	1265643.18	3248670.59	40.059160	-104.611592
	2222.00	21.42	104.12	2135.33	4.95	-126.16	510.18	0.04	1265635.57	3248702.22	40.059139	-104.611479
	2311.00	21.41	103.15	2218.18	5.40	-133.83	541.77	0.40	1265628.22	3248733.87	40.059118	-104.611367
	2401.00	21.24	105.32	2302.02	5.52	-141.87	573.49	0.90	1265620.50	3248765.67	40.059096	-104.611253
	2490.00	21.10	104.01	2385.02	5.39	-150.00	604.58	0.55	1265612.68	3248796.84	40.059073	-104.611142
	2579.00	21.29	104.08	2468.00	5.60	-157.81	635.79	0.22	1265605.18	3248828.13	40.059052	-104.611031
	2669.00	21.47	104.72	2551.80	5.62	-165.97	667.57	0.33	1265597.34	3248859.99	40.059029	-104.610917
	2758.00	21.52	103.96	2634.61	5.68	-174.05	699.17	0.32	1265589.58	3248891.66	40.059007	-104.610804
	2848.00	21.44	103.34	2718.36	6.12	-181.82	731.20	0.27	1265582.13	3248923.77	40.058986	-104.610690
	2937.00	20.94	104.07	2801.34	6.53	-189.44	762.46	0.64	1265574.82	3248955.10	40.058965	-104.610578
	3026.00	21.19	103.79	2884.39	6.82	-197.14	793.51	0.31	1265567.43	3248986.22	40.058944	-104.610467
	3116.00	21.09	104.62	2968.33	6.94	-205.11	824.98	0.35	1265559.78	3249017.77	40.058922	-104.610355
	3205.00	21.35	103.59	3051.30	7.13	-212.96	856.22	0.51	1265552.24	3249049.09	40.058900	-104.610243
	3295.00	21.20	103.22	3135.17	7.71	-220.53	887.99	0.23	1265544.99	3249080.93	40.058880	-104.610130
	3384.00	21.13	101.91	3218.16	8.76	-227.52	919.35	0.54	1265538.32	3249112.36	40.058860	-104.610018
	3474.00	21.21	103.45	3302.09	9.75	-234.65	951.06	0.62	1265531.50	3249144.14	40.058841	-104.609904
	3563.00	20.77	103.80	3385.18	10.20	-242.16	982.05	0.51	1265524.30	3249175.19	40.058820	-104.609794
	3653.00	21.16	103.13	3469.22	10.74	-249.66	1013.36	0.50	1265517.12	3249206.58	40.058800	-104.609682
	3742.00	21.01	104.40	3552.27	11.12	-257.27	1044.46	0.54	1265509.81	3249237.75	40.058779	-104.609571
	3832.00	21.78	103.75	3636.06	11.33	-265.25	1076.30	0.90	1265502.15	3249269.67	40.058757	-104.609457
	3922.00	21.81	103.74	3719.63	11.73	-273.19	1108.76	0.03	1265494.54	3249302.21	40.058735	-104.609341
	4011.00	21.55	103.47	3802.34	12.20	-280.93	1140.71	0.31	1265487.13	3249334.23	40.058714	-104.609227
	4101.00	21.54	103.82	3886.05	12.65	-288.72	1172.83	0.14	1265479.65	3249366.43	40.058692	-104.609112
	4190.00	21.59	103.37	3968.82	13.13	-296.41	1204.63	0.20	1265472.28	3249398.30	40.058671	-104.608999
	4280.00	21.70	103.50	4052.47	13.71	-304.12	1236.91	0.12	1265464.89	3249430.66	40.058650	-104.608883
	4369.00	21.63	104.41	4135.19	13.98	-312.05	1268.80	0.39	1265457.29	3249462.62	40.058628	-104.608769
	4458.00	21.64	104.69	4217.92	13.91	-320.29	1300.56	0.11	1265449.36	3249494.46	40.058606	-104.608656
	4548.00	21.71	103.79	4301.55	14.02	-328.47	1332.78	0.38	1265441.51	3249526.76	40.058583	-104.608541
	4638.00	21.61	103.80	4385.20	14.39	-336.39	1365.04	0.11	1265433.91	3249559.10	40.058561	-104.608426
	4727.00	21.66	104.53	4467.93	14.54	-344.41	1396.85	0.31	1265426.20	3249590.99	40.058539	-104.608312
	4816.00	22.01	103.49	4550.55	14.79	-352.43	1428.97	0.59	1265418.51	3249623.18	40.058517	-104.608197
	4906.00	21.60	103.95	4634.10	15.20	-360.36	1461.44	0.49	1265410.91	3249655.73	40.058496	-104.608081
	4995.00	21.25	103.20	4716.95	15.69	-367.99	1493.05	0.51	1265403.60	3249687.41	40.058475	-104.607968
	5085.00	21.47	102.69	4800.77	16.54	-375.33	1524.99	0.32	1265396.58	3249719.43	40.058455	-104.607854
	5174.00	22.30	103.31	4883.36	17.36	-382.79	1557.32	0.96	1265389.43	3249751.82	40.058434	-104.607739
	5264.00	21.88	104.35	4966.75	17.72	-390.88	1590.17	0.64	1265381.67	3249784.76	40.058412	-104.607621
	5353.00	22.19	104.06	5049.25	17.85	-399.08	1622.54	0.38	1265373.80	3249817.20	40.058389	-104.607506
	5443.00	21.96	104.54	5132.65	17.93	-407.43	1655.32	0.33	1265365.78	3249850.06	40.058366	-104.607389
	5532.00	22.02	104.60	5215.18	17.85	-415.81	1687.58	0.07	1265357.72	3249882.40	40.058343	-104.607273
	5622.00	22.03	103.93	5298.61	17.95	-424.13	1720.29	0.28	1265349.74	3249915.01	40.058321	-104.607155
	5712.00	22.00	103.98	5382.05	18.23	-432.26	1753.03	0.04	1265341.93	3249948.01	40.058298	-104.607039
	5801.00	21.91	104.06	5464.59	18.47	-440.32	1785.32	0.11	1265334.19	3249980.37	40.058276	-104.606924
	5891.00	21.05	103.51	5548.34	18.83	-448.18	1817.32	0.98	1265326.66	3250012.45	40.058255	-104.606810
	5980.00	21.70	103.93	5631.22	19.23	-455.87	1848.83	0.75	1265319.28	3250044.04	40.058233	-104.606697
	6070.00	21.73	104.45	5714.83	19.37	-464.04	1881.12	0.22	1265311.44	3250076.41	40.058211	-104.606582
	6160.00	22.05	104.57	5798.34	19.32	-472.45	1913.61	0.36	1265303.35	3250108.98	40.058188	-104.606466
	6249.00	21.11	104.81	5881.10	19.18	-480.74	1945.27	1.07	1265295.37	3250140.72	40.058165	-104.606353
	6338.00	21.87	104.49	5963.91	19.05	-488.99	1976.81	0.87	1265287.44	3250172.34	40.058142	-104.606240
	6428.00	21.85	104.61	6047.44	18.98	-49						

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	6696.00	22.04	104.83	6295.89	18.54	-522.88	2106.46	0.20	1265254.85	3250302.32	40.058049	-104.605777
	6786.00	21.78	104.68	6379.39	18.35	-531.43	2138.94	0.29	1265246.63	3250334.87	40.058026	-104.605661
	6875.00	21.10	103.53	6462.23	18.53	-539.36	2170.48	0.90	1265239.01	3250366.50	40.058004	-104.605548
	6965.00	21.24	93.16	6546.18	21.97	-544.05	2202.52	4.16	1265234.64	3250398.58	40.057991	-104.605434
	7054.00	20.53	73.33	6629.44	33.20	-540.46	2233.61	7.95	1265238.54	3250429.63	40.058001	-104.605323
	7144.00	23.40	73.36	6712.90	50.58	-530.82	2265.86	3.19	1265248.51	3250461.78	40.058028	-104.605208
	7234.00	30.46	75.14	6793.09	70.99	-519.83	2305.08	7.89	1265259.88	3250500.89	40.058058	-104.605067
	7323.00	38.46	64.16	6866.48	99.99	-501.94	2351.92	11.35	1265278.25	3250547.54	40.058107	-104.604900
	7413.00	40.37	46.56	6936.23	142.90	-469.59	2398.42	12.56	1265311.05	3250593.72	40.058196	-104.604734
	7502.00	42.19	34.51	7003.22	195.47	-425.07	2436.35	9.15	1265355.95	3250631.19	40.058318	-104.604598
	7592.00	44.16	20.80	7069.00	255.15	-370.73	2464.67	10.64	1265410.56	3250658.97	40.058467	-104.604497
	7681.00	51.64	17.41	7128.63	320.91	-308.36	2486.15	8.86	1265473.15	3250679.83	40.058638	-104.604420
	7771.00	61.35	12.99	7178.27	395.83	-236.01	2505.64	11.54	1265545.68	3250698.59	40.058837	-104.604351
	7860.00	68.77	4.82	7215.82	475.99	-156.41	2517.94	11.77	1265625.41	3250710.09	40.059055	-104.604307
	7950.00	76.36	358.12	7242.80	559.53	-70.69	2520.03	11.02	1265711.14	3250711.33	40.059291	-104.604299
	8039.00	85.34	355.33	7256.94	643.13	16.94	2514.99	10.55	1265798.70	3250705.41	40.059531	-104.604317
	8129.00	91.07	354.83	7259.76	727.97	106.52	2507.28	6.39	1265888.21	3250696.80	40.059777	-104.604345
Cross Setback Heel (460' FSL, 463' FEL)	8191.43	90.69	358.39	7258.80	787.39	168.83	2503.59	5.73	1265950.47	3250692.49	40.059948	-104.604358
	8218.00	90.53	359.90	7258.51	813.02	195.39	2503.19	5.73	1265977.03	3250691.83	40.060021	-104.604359
	8308.00	90.81	358.51	7257.46	899.85	285.38	2501.94	1.58	1266066.99	3250689.68	40.060268	-104.604364
	8397.00	90.86	358.80	7256.17	985.49	374.34	2499.85	0.33	1266155.92	3250686.70	40.060512	-104.604371
	8487.00	89.87	0.78	7255.59	1072.56	464.33	2499.52	2.46	1266245.91	3250685.47	40.060759	-104.604372
	8576.00	89.84	358.42	7255.82	1158.59	553.32	2498.90	2.65	1266334.88	3250683.96	40.061004	-104.604375
	8666.00	90.33	358.58	7255.68	1245.13	643.29	2496.54	0.58	1266424.82	3250680.70	40.061251	-104.604383
	8755.00	89.56	0.91	7255.77	1331.21	732.29	2496.14	2.76	1266513.80	3250679.41	40.061495	-104.604384
	8845.00	89.49	1.10	7256.51	1418.75	822.27	2497.72	0.23	1266603.79	3250680.09	40.061742	-104.604379
	8935.00	89.40	359.02	7257.39	1505.93	912.26	2497.81	2.31	1266693.77	3250679.28	40.061989	-104.604378
	9024.00	89.26	1.34	7258.43	1592.18	1001.25	2498.10	2.61	1266782.76	3250678.68	40.062233	-104.604377
	9114.00	89.26	359.59	7259.59	1679.51	1091.23	2498.83	1.95	1266872.74	3250678.51	40.062480	-104.604375
	9203.00	89.36	359.99	7260.65	1765.61	1180.23	2498.50	0.46	1266961.72	3250677.29	40.062724	-104.604376
	9293.00	89.62	3.70	7261.45	1853.43	1270.16	2501.39	4.13	1267051.68	3250679.28	40.062971	-104.604365
	9383.00	89.28	359.13	7262.31	1941.09	1360.10	2503.61	5.09	1267141.64	3250680.60	40.063218	-104.604357
	9472.00	89.42	3.91	7263.32	2027.81	1449.04	2505.98	5.37	1267230.59	3250682.08	40.063462	-104.604349
	9561.00	89.08	358.33	7264.48	2114.38	1537.98	2507.72	6.28	1267319.54	3250682.93	40.063707	-104.604343
	9651.00	90.78	356.71	7264.59	2200.48	1627.89	2503.83	2.60	1267409.40	3250678.14	40.063953	-104.604357
	9741.00	90.75	356.58	7263.39	2286.17	1717.73	2498.57	0.15	1267499.18	3250671.98	40.064200	-104.604375
	9830.00	90.86	356.53	7262.14	2370.87	1806.56	2493.22	0.14	1267587.95	3250665.75	40.064444	-104.604394
	9919.00	90.96	356.48	7260.73	2455.54	1895.38	2487.80	0.12	1267676.71	3250659.44	40.064688	-104.604414
	10009.00	90.81	358.59	7259.34	2541.64	1985.28	2483.93	2.35	1267766.56	3250654.67	40.064934	-104.604428
	10098.00	91.12	358.65	7257.85	2627.26	2074.25	2481.79	0.35	1267855.50	3250651.64	40.065179	-104.604435
	10188.00	91.24	358.59	7256.00	2713.84	2164.20	2479.62	0.16	1267945.42	3250648.58	40.065426	-104.604443
	10278.00	91.22	356.38	7254.06	2799.91	2254.09	2475.67	2.45	1268035.26	3250643.73	40.065672	-104.604457
	10367.00	90.93	0.49	7252.38	2885.43	2343.02	2473.24	4.63	1268124.16	3250640.41	40.065916	-104.604466
	10457.00	91.07	358.90	7250.82	2972.45	2433.00	2472.77	1.78	1268214.13	3250639.03	40.066163	-104.604467
	10586.00	91.09	358.34	7248.39	3096.55	2561.94	2469.66	0.43	1268343.03	3250634.64	40.066517	-104.604478
	10675.00	91.19	358.46	7246.62	3182.07	2650.89	2467.18	0.17	1268431.94	3250631.27	40.066762	-104.604487
	10765.00	91.18	0.62	7244.76	3269.03	2740.86	2466.45	2.39	1268521.90	3250629.64	40.067008	-104.604490
	10854.00	91.33	359.92	7242.81	3355.30	2829.84	2466.87	0.80	1268610.87	3250629.17	40.067253	-104.604488
	10943.00	91.00	1.59	7240.99	3441.76	2918.81	2468.05	1.91	1268699.85	3250629.46	40.067497	-104.604484
	11033.00	91.08	1.84	7239.36	3529.54	3008.75	2470.74	0.28	1268789.81	3250631.25	40.067744	-104.604474
	11123.00	91.14	1.84	7237.62	3617.36	3098.69	2473.63	0.07	1268879.77	3250633.24	40.067991	-104.604464
	11212.00	91.06	1.11	7235.91	3704.08	3187.64	2475.93	0.83	1268968.73	3250634.65	40.068235	-104.604456
	11302.00	91.06	1.43	7234.25	3791.70	3277.61	2477.92	0.36	1269058.71	3250635.75	40.068482	-104.604449
	11391.00	91.36	359.89	7232.37	3878.12	3366.58	2478.95	1.77	1269147.68	3250635.88	40.068726	-104.604445
	11480.00	91.20	359.67	7230.38	3964.20	3455.55	2478.61	0.30	1269236.65	3250634.65	40.068970	-104.604446
	11570.00	91.13	1.23	7228.54	4051.52	3545.53	2479.32	1.74	1269326.62	3250634.66	40.069217	-104.604444
	11659.00	91.25	0.82	7226.69	4138.07	3634.50	2480.91	0.48	1269415.60	3250635.16	40.069462	-104.604438
	11749.00	90.94	3.27	7224.97	4225.66	3724.41	2484.12	2.74	1269505.54	3250637.47	40.069708	-104.604426
	11838.00	90.82	1.02	7223.61	4312.90	3813.34	2487.45	2.53	1269594.49	3250639.91	40.069952	-104.604414
	11928.00	89.19	5.44	7223.60	4401.16	3902.17	2492.51	5.23	1269684.36	3250644.08	40.070199	-104.604396
	12017.00	89.69	1.30	7224.47	4488.48	3991.99	2497.74	4.68	1269773.23	3250648.42	40.070443	-104.604378
	12107.00	89.32	3.95	7225.25	4576.57	4081.88	2501.86	2.97	1269863.16	3250651.64	40.070690	-104.604363
	12197.00	89.10	1.15	7226.49	4664.62	4171.78	2505.86	3.12	1269953.08	3250654.74	40.070936	-104.604348
	12286.00	89.23	1.33	7227.79	4751.27	4260.75	2507.79	0.26	1270042.06	3250655.77	40.071181	-104.604342
	12375.00	89.09	1.14	7229.09	4837.91	4349.72	2509.71	0.27	1270131.04	3250656.80	40.071425	-104.604335
	12465.00	89.15	0.59	7230.47	4925.39	4439.70	2511.06	0.62	1270221.03	3250657.26	40.071672	-104.604330
	12554.00	90.03	0.07	7231.11	5011.70	4528.69	2511.57	1.15	1270310.02	3250656.88	40.071916	-104.604328
	12644.00	90.28	358.04	7230.87	5098.47	4618.67	2510.09	2.27	1270399.98	3250654.50	40.072163	-104.604333
	12733.00	90.14	359.66	7230.54	5184.20	4707.65	2508.30	1.82	1270488.93	3250651.82	40.072407	-104.604340
	12822.00	89.99	359.77	7230.44	5270.28	4796.65	2507.86	0.21	1270577.92	3250650.49	40.072652	-104.604341
	12912.00	89.94	0.12	7230.49	5357.42	4886.65	2507.78	0.39	1270667.91	3250649.51	40.072899	-104.604341
	13001.00	90.06	358.82	7230.49	5443.40	4975.65	2506.96	1.47	1270756.89	3250647.80	40.073143	-104.604344
	13091.00	89.98	359.77	7230.46	5530.28	5065.64	2505.85	1.05	1270846.86	3250645.79	40.073390	-104.604348
	13180.00	90.19	1.43	7230.33	5616.70	5154.63	2506.78	1.89	1270935.85	3250646.83	40.073634	-104.604345
	13270.00	90.07	359.57	7230.12	5704.05	5244.62	2507.57	2.08	1271025.85	3250645.72	40.073881	-104.604342
	13359.00	89.92	359.76	7230.13	5790.11	5333.62	2507.05	0.28	1271114.83	3250644.31	40.074126	-104.604344
	13449.00	90.07	359.65	7230.14	5877.15	5423.62	2506.59	0.21	1271204.82	3250642.95	40.074373	-104.604345
	13539.00	90.11	359.51	7230.00	5964.15	5513.62	2505.93	0.16	12712			

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	16223.00	90.65	358.48	7210.46	8562.40	8197.33	2502.74	2.64	1273978.24	3250611.37	40.081987	-104.604358
	16313.00	90.30	0.65	7209.72	8649.38	8287.32	2502.06	2.44	1274068.21	3250609.78	40.082234	-104.604361
	16402.00	90.53	0.21	7209.08	8735.73	8376.31	2502.72	0.56	1274157.21	3250609.56	40.082478	-104.604358
	16492.00	90.66	359.69	7208.15	8822.87	8466.31	2502.64	0.59	1274247.19	3250608.58	40.082725	-104.604358
	16581.00	90.75	357.98	7207.05	8908.58	8555.28	2500.83	1.93	1274336.14	3250605.88	40.082969	-104.604365
	16671.00	90.26	358.75	7206.26	8995.06	8645.24	2498.26	1.02	1274426.06	3250602.40	40.083216	-104.604374
	16760.00	90.56	0.30	7205.62	9081.06	8734.23	2497.52	1.78	1274515.04	3250600.78	40.083461	-104.604377
	16850.00	90.16	359.79	7205.06	9168.24	8824.23	2497.60	0.72	1274605.03	3250599.95	40.083708	-104.604376
	16939.00	90.19	358.26	7204.79	9254.04	8913.21	2496.08	1.73	1274693.99	3250597.55	40.083952	-104.604382
	17029.00	90.03	2.61	7204.62	9341.35	9003.19	2496.76	4.85	1274783.97	3250597.33	40.084199	-104.604379
	17118.00	89.15	0.12	7205.26	9428.03	9092.15	2498.88	2.97	1274872.94	3250598.56	40.084443	-104.604372
	17208.00	88.92	1.79	7206.78	9515.54	9182.12	2500.38	1.87	1274962.92	3250599.16	40.084690	-104.604366
	17297.00	89.14	358.39	7208.28	9601.74	9271.10	2500.51	3.82	1275051.89	3250598.41	40.084934	-104.604366
	17386.00	89.17	359.91	7209.60	9687.58	9360.08	2499.19	1.70	1275140.85	3250596.19	40.085179	-104.604370
	17476.00	89.15	359.16	7210.92	9774.55	9450.06	2498.46	0.83	1275230.82	3250594.56	40.085426	-104.604373
	17565.00	89.48	358.17	7211.98	9860.19	9539.03	2496.38	1.17	1275319.76	3250591.60	40.085670	-104.604380
	17655.00	90.10	0.24	7212.31	9947.03	9629.02	2495.14	2.40	1275409.72	3250589.45	40.085917	-104.604385
Cross Setback Toe (490' FNL, 479' FEL)	17715.05	90.20	359.94	7212.15	10005.21	9689.07	2495.23	0.53	1275469.77	3250588.94	40.086082	-104.604384
	17744.00	90.25	359.79	7212.04	10033.23	9718.02	2495.16	0.53	1275498.71	3250588.58	40.086161	-104.604385
Last SLB MWD Survey Projection to Bit (380' FNL, 480' FEL)	17783.00	90.13	359.24	7211.91	10070.91	9757.01	2494.83	1.44	1275537.71	3250587.86	40.086268	-104.604386
	17824.00	90.13	359.24	7211.82	10110.48	9798.01	2494.28	0.00	1275578.69	3250586.91	40.086381	-104.604388

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 \*\*\* 3-D 95.000% Confidence 2.7955 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	21.000	1/98.425	13.500	9.625	NAL_MWD_PLUS_0.5_DEG- Depth Only	Original Hole / Wuerztz 1201-18H MWD 0' to 17824' Definitive
	1	21.000	21.000	Act Stns	13.500	9.625	NAL_MWD_PLUS_0.5_DEG- Depth Only	Original Hole / Wuerztz 1201-18H MWD 0' to 17824' Definitive
	1	21.000	17824.000	Act Stns	13.500	9.625	NAL_MWD_PLUS_0.5_DEG	Original Hole / Wuerztz 1201-18H MWD 0' to 17824' Definitive