



# Crestone Peak Resources

Schlumberger

Plan 0

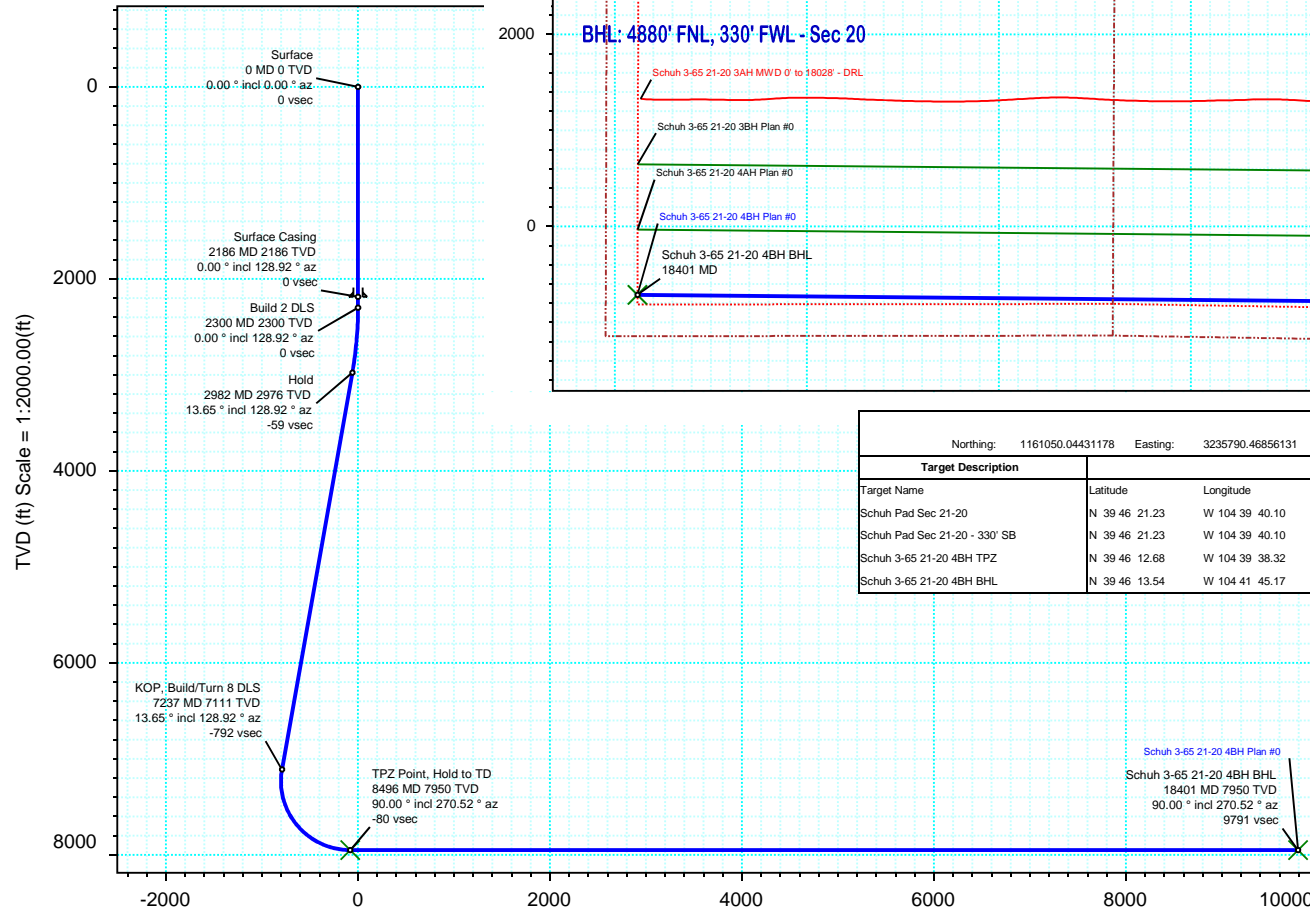
Borehole:	Well:	Field:	Structure:
Original Hole	Schuh 3-65 21-20 4BH	CO, Adams County (NAD 83 NZ)	Crestone Peak 21-03S-65W (Shuh Pad)

Gravity & Magnetic Parameters						Surface Location						NAD83 Colorado State Plane, Northern Zone, US Feet						Miscellaneous	
Model:	HDGM 2019	Dip:	66.278°	Date:	03-Mar-2020	Lat:	N 39 46 20.60	Northing:	1161050.04ftUS	Grid Conv:	0.542°	Slot:	Schuh 3-65 21-20 4BH	TVD Ref:	KB 28ft(5624.7ft above MSL)				
MagDec:	8.488°	FS:	51573.77nT	Gravity FS:	998.92mgn (9.80665 Based)	Lon:	W 104 39 40.10	Easting:	3235790.47ftUS	Scale Fact:	0.99999147	Plan:	Schuh 3-65 21-20 4BH Plan #0						

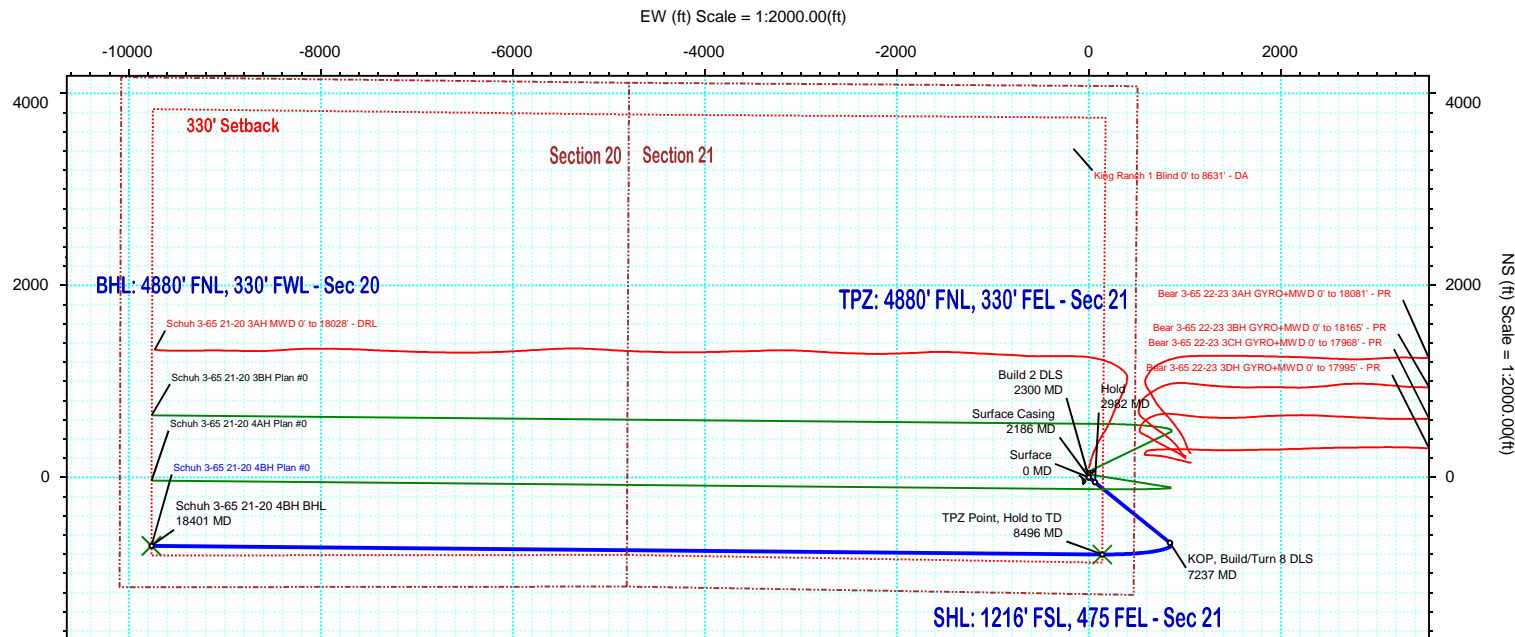
Proposal



True North  
Tot Corr (M->T 8.488°)  
Mag Dec (8.488°)  
Grid Conv (0.542°)



Vertical Section (ft) Azim = 265.83° Scale = 1:2000.00(ft) Origin = 0N/-S, 0E/-W



Surface Location								
Northing: 1161050.04431178			Easting: 3235790.46856131			Latitude: N 39 46 20.60		
Longitude: W 104 39 40.10			VSec Azimuth: 265.83					
Target Description		Grid Coord		Local Coord				
Target Name		Latitude	Longitude	Northing	Easting	TVD	VSec	
Schuh Pad Sec 21-20		N 39 46 21.23	W 104 39 40.10	1161113.83	3235790.43	5624.70	-5.20	63.78
Schuh Pad Sec 21-20 - 330' SB		N 39 46 21.23	W 104 39 40.10	1161113.83	3235790.43	5624.70	-5.20	63.78
Schuh 3-65 21-20 4BH TPZ		N 39 46 12.68	W 104 39 38.32	1160249.68	3235937.19	7950.00	-80.44	-801.73
Schuh 3-65 21-20 4BH BHL		N 39 46 13.54	W 104 41 45.17	1160245.32	3226032.35	7950.00	9791.35	-712.39

Critical Points								
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	
Surface Casing	2186.00	0.00	128.92	2186.00	0.00	0.00	0.00	0.00
Build 2 DLS	2300.00	0.00	128.92	2300.00	0.00	0.00	0.00	0.00
Hold	2982.40	13.65	128.92	2975.96	-59.07	-50.81	62.94	2.00
KOP, Build/Turn 8 DLS	7237.44	13.65	128.92	7110.86	-792.28	-681.52	844.10	0.00
TPZ Point, Hold to TD	8495.64	90.00	270.52	7950.00	-80.44	-801.73	139.14	8.00
Schuh 3-65 21-20 4BH BHL	18400.59	90.00	270.52	7950.00	9791.35	-712.39	-9765.40	0.00

## Schuh 3-65 21-20 4BH Plan #0 Proposal Geodetic Report

(Def Plan)

**Report Date:** March 03, 2020 - 12:11 PM  
**Client:** Crestone Peak Resources  
**Field:** CO, Adams County (NAD 83 NZ)  
**Structure / Slot:** Crestone Peak 21-03S-65W (Shuh Pad) / Schuh 3-65 21-20 4BH  
**Well:** Schuh 3-65 21-20 4BH  
**Borehole:** Original Hole  
**UWI / API#:** Unknown / Unknown  
**Survey Name:** Schuh 3-65 21-20 4BH Plan #0  
**Survey Date:** March 03, 2020  
**Tort / AHD / DDI / ERD Ratio:** 114.304 ° / 11752.494 ft / 6.493 / 1.478  
**Coordinate Reference System:** NAD83 Colorado State Plane, Northern Zone, US Feet  
**Location Lat / Long:** N 39° 46' 20.60004", W 104° 39' 40.10400"  
**Location Grid N/E Y/X:** N 1161050.044 ftUS, E 3235790.469 ftUS  
**CRS Grid Convergence Angle:** 0.5420 °  
**Grid Scale Factor:** 0.99999147  
**Version / Patch:** 2.10.787.0

**Survey / DLS Computation:** Minimum Curvature / Lubinski  
**Vertical Section Azimuth:** 265.828 ° (True North)  
**Vertical Section Origin:** 0.000 ft, 0.000 ft  
**TVD Reference Datum:** KB 28ft  
**TVD Reference Elevation:** 5624.700 ft above MSL  
**Seabed / Ground Elevation:** 5596.700 ft above MSL  
**Magnetic Declination:** 8.488 °  
**Total Gravity Field Strength:** 998.9199mgn (9.80665 Based)  
**Gravity Model:** GARM  
**Total Magnetic Field Strength:** 51573.770 nT  
**Magnetic Dip Angle:** 66.278 °  
**Declination Date:** March 03, 2020  
**Magnetic Declination Model:** HDGM 2019  
**North Reference:** True North  
**Grid Convergence Used:** 0.0000 °  
**Total Corr Mag North→True North:** 8.4879 °  
**Local Coord Referenced To:** Well Head

	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	1161050.04	3235790.47	39.772389	-104.661140
	100.00	0.00	128.92	100.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	200.00	0.00	128.92	200.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	300.00	0.00	128.92	300.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	400.00	0.00	128.92	400.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	500.00	0.00	128.92	500.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	600.00	0.00	128.92	600.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	700.00	0.00	128.92	700.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	800.00	0.00	128.92	800.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	900.00	0.00	128.92	900.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	1000.00	0.00	128.92	1000.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	1100.00	0.00	128.92	1100.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	1200.00	0.00	128.92	1200.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	1300.00	0.00	128.92	1300.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	1400.00	0.00	128.92	1400.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	1500.00	0.00	128.92	1500.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	1600.00	0.00	128.92	1600.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	1700.00	0.00	128.92	1700.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	1800.00	0.00	128.92	1800.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	1900.00	0.00	128.92	1900.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
Surface Casing	2000.00	0.00	128.92	2000.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	2100.00	0.00	128.92	2100.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	2186.00	0.00	128.92	2186.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	2200.00	0.00	128.92	2200.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
Build 2 DLS	2300.00	0.00	128.92	2300.00	0.00	0.00	0.00	0.00	1161050.04	3235790.47	39.772389	-104.661140
	2400.00	2.00	128.92	2399.98	-1.27	-1.10	1.36	2.00	1161048.96	3235791.84	39.772386	-104.661135
	2500.00	4.00	128.92	2499.84	-5.10	-4.38	5.43	2.00	1161045.71	3235795.94	39.772377	-104.661121
	2600.00	6.00	128.92	2599.45	-11.46	-9.86	12.21	2.00	1161040.30	3235802.77	39.772362	-104.661097
Hold	2700.00	8.00	128.92	2698.70	-20.36	-17.51	21.69	2.00	1161032.74	3235812.33	39.772341	-104.661063
	2800.00	10.00	128.92	2797.47	-31.78	-27.34	33.86	2.00	1161023.03	3235824.59	39.772314	-104.661020
	2900.00	12.00	128.92	2895.62	-45.72	-39.33	48.71	2.00	1161011.18	3235839.55	39.772281	-104.660967
	2982.40	13.65	128.92	2975.96	-59.07	-50.81	62.94	2.00	1160999.83	3235853.88	39.772249	-104.660916
	3000.00	13.65	128.92	2993.07	-62.11	-53.42	66.17	0.00	1160997.25	3235857.14	39.772242	-104.660905
	3100.00	13.65	128.92	3090.24	-79.34	-68.25	84.53	0.00	1160982.60	3235875.64	39.772202	-104.660839
	3200.00	13.65	128.92	3187.42	-96.57	-83.07	102.89	0.00	1160967.95	3235894.13	39.772161	-104.660774
	3300.00	13.65	128.92	3284.60	-113.80	-97.89	121.24	0.00	1160953.31	3235912.63	39.772120	-104.660709
	3400.00	13.65	128.92	3381.77	-131.03	-112.71	139.60	0.00	1160938.66	3235931.13	39.772079	-104.660643
	3500.00	13.65	128.92	3478.95	-148.26	-127.54	157.96	0.00	1160924.01	3235949.63	39.772039	-104.660578
	3600.00	13.65	128.92	3576.13	-165.50	-142.36	176.32	0.00	1160909.36	3235968.13	39.771998	-104.660513
	3700.00	13.65	128.92	3673.30	-182.73	-157.18	194.68	0.00	1160894.71	3235986.62	39.771957	-104.660447
	3800.00	13.65	128.92	3770.48	-199.96	-172.00	213.04	0.00	1160880.06	3236005.12	39.771917	-104.660382
	3900.00	13.65	128.92	3867.66	-217.19	-186.83	231.40	0.00	1160865.42	3236023.62	39.771876	-104.660317
	4000.00	13.65	128.92	3964.83	-234.42	-201.65	249.76	0.00	1160850.77	3236042.12	39.771835	-104.660251
	4100.00	13.65	128.92	4062.01	-251.65	-216.47	268.11	0.00	1160836.12	3236060.62	39.771795	-104.660186
	4200.00	13.65	128.92	4159.18	-268.88	-231.29	286.47	0.00	1160821.47	3236079.11	39.771754	-104.660121
	4300.00	13.65	128.92	4256.36	-286.12	-246.12	304.83	0.00	1160806.82	3236097.61	39.771713	-104.660056
	4400.00	13.65	128.92	4353.54	-303.35	-260.94	323.19	0.00	1160792.18	3236116.11	39.771673	-104.659990
	4500.00	13.65	128.92	4450.71	-320.58	-275.76	341.55	0.00	1160777.53	3236134.61	39.771632	-104.659925
	4600.00	13.65	128.92	4547.89	-337.81	-290.58	359.91	0.00	1160762.88	3236153.10	39.771591	-104.659860
	4700.00	13.65	128.92	4645.07	-355.04	-305.41	378.27	0.00	1160748.23	3236171.60	39.771550	-104.659794
	4800.00	13.65	128.92	4742.24	-372.27	-320.23	396.62	0.00	1160733.58	3236190.10	39.771510	-104.659729
	4900.00	13.65	128.92	4839.42	-389.51	-335.05	414.98	0.00	1160718.94	3236208.60	39.771469	-104.659664
	5000.00	13.65	128.92	4936.60	-406.74	-349.87	433.34	0.00	1160704.29	3236227.10	39.771428	-104.659598
	5100.00	13.65	128.92	5033.77	-423.97	-364.70	451.70	0.00	1160689.64	3236245.59	39.771388	-104.659533
	5200.00	13.65	128.92	5130.95	-441.20	-379.52	470.06	0.00	1160674.99	3236264.09	39.771347	-104.659468
	5300.00	13.65	128.92	5228.13	-458.43	-394.34	488.42	0.00	1160660.34	3236282.59	39.771306	-104.659402
	5400.00	13.65	128.92	5325.30	-475.66	-409.16	506.78	0.00	1160645.70	3236301.09	39.771266	-104.659337
	5500.00	13.65	128.92	5422.48	-492.89	-423.99	525.13	0.00	1160631.05	3236319.58	39.771225	-104.659272
	5600.00	13.65	128.92	5519.65	-510.13	-438.81	543.49	0.00	1160616.40	3236338.08	39.771184	-104.659207
	5700.00	13.65	128.92	5616.83	-527.36	-453.63	561.85	0.00	1160601.75	3236356.58	39.771144	-104.659141
	5800.00	13.65	128.92	5714.01	-544.59	-468.45	580.21	0.00	1160587.10	3236375.08	39.771103	-104.659076
	5900.00	13.65	128.92	5811.18	-561.82	-483.28	598.57	0.00	1160572.46	3236393.58	39.771062	-104.659011
	6000.00	13.65	128.92	5908.36	-579.05	-498.10	616.93	0.00	1160557.81	3236412.07	39.771021	-104.658945
	6100.00	13.65	128.92	6005.54	-596.28	-512.92	635.29	0.00	1160543.16	3236430.57	39.770981	-104.658880
	6200.00	13.65	128.92	6102.71	-613.52	-527.74	653.64	0.00	1160528.51	3236449.07	39.770940	-104.658815
	6300.00	13.65	128.92	6199.89	-630.75	-542.57	672.00	0.00	1160513.86	3236467.57	39.770899	-104.658749
	6400.00	13.65	128.92	6297.07	-647.98	-557.39	690.36	0.00	1160499.22	3236486.07	39.770859	-104.658684
	6500.00	13.65	128.92	6394.24	-665.21	-572.21	708.72	0.00	1160484.57	3236504.56	39.770818	-104.658619
6600.00	13.65	128.92	6491.42	-682.44	-587.04	727.08	0.00	1160469.92	3236523.06	39.770777	-104.658553	
6700.00	13.65	128.92	6588.60	-699.67	-601.86	745.44	0.00	1160455.27	3236541.56	39.770737	-104.658488	
6800.00	13.65	128.92	6685.77	-716.90	-616.68	763.80	0.00	1160440.62	3236560.06	39.770696	-104.658423	
6900.00	13.65	128.92	6782.95	-734.14	-631.50	782.15	0.00	1160425.98	3236578.55	39.770655	-104.658358	
7000.00	13.65	128.92	6880.12	-751.37	-646.33	800.51	0.00	1160411.33	3236597.05	39.770615	-104.658292	
7100.00	13.65	128.92	6977.30	-768.60	-661.15	818.87	0.00	1160396.68	3236615.55	39.770574	-104.658227	
7200.00	13.65	128.92	7074.48	-785.83	-675.97	837.23	0.00	1160382.03	3236634.05	39.770533	-104.658162	
KOP_Build/Turn 8 DLS	7237.44	13.65	128.92	7110.86	-792.28	-681.52	844.10	0.00	1160376.55	3236640.97	39.770518	-104.658137
	7300.00	10.26	146.96									

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	7400.00	8.89	195.89	7270.84	-802.02	-705.75	855.64	8.00	1160352.42	3236552.73	39.770451	-104.658096
	7500.00	13.41	231.28	7369.03	-789.80	-720.46	844.45	8.00	1160337.61	3236641.69	39.770411	-104.658136
	7600.00	20.19	246.31	7464.75	-763.94	-734.67	819.56	8.00	1160323.16	3236616.93	39.770372	-104.658224
	7700.00	27.61	253.76	7556.13	-724.94	-748.11	781.44	8.00	1160309.36	3236578.95	39.770335	-104.658360
	7800.00	35.28	258.21	7641.39	-673.58	-760.52	730.85	8.00	1160296.48	3236528.47	39.770301	-104.658540
	7900.00	43.05	261.22	7718.88	-610.83	-771.64	668.75	8.00	1160284.77	3236466.48	39.770271	-104.658761
	8000.00	50.88	263.47	7787.08	-537.94	-781.28	596.36	8.00	1160274.45	3236394.19	39.770244	-104.659018
	8100.00	58.74	265.26	7844.66	-456.31	-789.23	515.09	8.00	1160265.73	3236313.00	39.770222	-104.659308
	8200.00	66.63	266.78	7890.52	-367.53	-795.35	426.53	8.00	1160258.78	3236224.50	39.770206	-104.659623
	8300.00	74.53	268.12	7923.74	-273.34	-799.51	332.39	8.00	1160253.72	3236130.40	39.770194	-104.659958
	8400.00	82.43	269.37	7943.70	-175.56	-801.64	234.51	8.00	1160250.67	3236032.54	39.770188	-104.660306
TPZ Point, Hold to TD	8495.64	90.00	270.52	7950.00	-80.44	-801.73	139.14	8.00	1160249.68	3235937.19	39.770188	-104.660645
	8500.00	90.00	270.52	7950.00	-76.10	-801.69	134.78	0.00	1160249.68	3235932.83	39.770188	-104.660661
	8600.00	90.00	270.52	7950.00	23.57	-800.79	34.79	0.00	1160249.63	3235832.83	39.770191	-104.661016
	8700.00	90.00	270.52	7950.00	123.23	-799.88	-65.21	0.00	1160249.59	3235732.83	39.770193	-104.661372
	8800.00	90.00	270.52	7950.00	222.90	-798.98	-165.20	0.00	1160249.54	3235632.83	39.770196	-104.661728
	8900.00	90.00	270.52	7950.00	322.56	-798.08	-265.20	0.00	1160249.50	3235532.83	39.770198	-104.662083
	9000.00	90.00	270.52	7950.00	422.23	-797.18	-365.19	0.00	1160249.46	3235432.83	39.770200	-104.662439
	9100.00	90.00	270.52	7950.00	521.89	-796.28	-465.19	0.00	1160249.41	3235332.84	39.770203	-104.662795
	9200.00	90.00	270.52	7950.00	621.56	-795.37	-565.19	0.00	1160249.37	3235232.84	39.770205	-104.663151
	9300.00	90.00	270.52	7950.00	721.22	-794.47	-665.18	0.00	1160249.32	3235132.84	39.770208	-104.663506
	9400.00	90.00	270.52	7950.00	820.89	-793.57	-765.18	0.00	1160249.28	3235032.84	39.770210	-104.663862
	9500.00	90.00	270.52	7950.00	920.55	-792.67	-865.17	0.00	1160249.24	3234932.84	39.770213	-104.664218
	9600.00	90.00	270.52	7950.00	1020.22	-791.77	-965.17	0.00	1160249.19	3234832.84	39.770215	-104.664574
	9700.00	90.00	270.52	7950.00	1119.88	-790.86	-1065.17	0.00	1160249.15	3234732.84	39.770218	-104.664929
	9800.00	90.00	270.52	7950.00	1219.55	-789.96	-1165.16	0.00	1160249.10	3234632.84	39.770220	-104.665285
	9900.00	90.00	270.52	7950.00	1319.21	-789.06	-1265.16	0.00	1160249.06	3234532.84	39.770223	-104.665641
	10000.00	90.00	270.52	7950.00	1418.88	-788.16	-1365.15	0.00	1160249.02	3234432.85	39.770225	-104.665996
	10100.00	90.00	270.52	7950.00	1518.55	-787.26	-1465.15	0.00	1160248.97	3234332.85	39.770228	-104.666352
	10200.00	90.00	270.52	7950.00	1618.21	-786.35	-1565.15	0.00	1160248.93	3234232.85	39.770230	-104.666708
	10300.00	90.00	270.52	7950.00	1717.88	-785.45	-1665.14	0.00	1160248.88	3234132.85	39.770233	-104.667064
	10400.00	90.00	270.52	7950.00	1817.54	-784.55	-1765.14	0.00	1160248.84	3234032.85	39.770235	-104.667419
	10500.00	90.00	270.52	7950.00	1917.21	-783.65	-1865.13	0.00	1160248.80	3233932.85	39.770237	-104.667775
	10600.00	90.00	270.52	7950.00	2016.87	-782.75	-1965.13	0.00	1160248.75	3233832.85	39.770240	-104.668131
	10700.00	90.00	270.52	7950.00	2116.54	-781.84	-2065.13	0.00	1160248.71	3233732.85	39.770242	-104.668487
	10800.00	90.00	270.52	7950.00	2216.20	-780.94	-2165.12	0.00	1160248.66	3233632.85	39.770245	-104.668842
	10900.00	90.00	270.52	7950.00	2315.87	-780.04	-2265.12	0.00	1160248.62	3233532.86	39.770247	-104.669198
	11000.00	90.00	270.52	7950.00	2415.53	-779.14	-2365.11	0.00	1160248.58	3233432.86	39.770250	-104.669554
	11100.00	90.00	270.52	7950.00	2515.20	-778.24	-2465.11	0.00	1160248.53	3233332.86	39.770252	-104.669910
	11200.00	90.00	270.52	7950.00	2614.86	-777.33	-2565.11	0.00	1160248.49	3233232.86	39.770255	-104.670265
	11300.00	90.00	270.52	7950.00	2714.53	-776.43	-2665.10	0.00	1160248.44	3233132.86	39.770257	-104.670621
	11400.00	90.00	270.52	7950.00	2814.19	-775.53	-2765.10	0.00	1160248.40	3233032.86	39.770259	-104.670977
	11500.00	90.00	270.52	7950.00	2913.86	-774.63	-2865.09	0.00	1160248.36	3232932.86	39.770262	-104.671332
	11600.00	90.00	270.52	7950.00	3013.52	-773.73	-2965.09	0.00	1160248.31	3232832.86	39.770264	-104.671688
	11700.00	90.00	270.52	7950.00	3113.19	-772.83	-3065.09	0.00	1160248.27	3232732.86	39.770267	-104.672044
	11800.00	90.00	270.52	7950.00	3212.86	-771.92	-3165.08	0.00	1160248.22	3232632.86	39.770269	-104.672400
	11900.00	90.00	270.52	7950.00	3312.52	-771.02	-3265.08	0.00	1160248.18	3232532.87	39.770272	-104.672755
	12000.00	90.00	270.52	7950.00	3412.19	-770.12	-3365.07	0.00	1160248.13	3232432.87	39.770274	-104.673111
	12100.00	90.00	270.52	7950.00	3511.85	-769.22	-3465.07	0.00	1160248.09	3232332.87	39.770277	-104.673467
	12200.00	90.00	270.52	7950.00	3611.52	-768.32	-3565.06	0.00	1160248.05	3232232.87	39.770279	-104.673823
	12300.00	90.00	270.52	7950.00	3711.18	-767.41	-3665.06	0.00	1160248.00	3232132.87	39.770281	-104.674178
	12400.00	90.00	270.52	7950.00	3810.85	-766.51	-3765.06	0.00	1160247.96	3232032.87	39.770284	-104.674534
	12500.00	90.00	270.52	7950.00	3910.51	-765.61	-3865.05	0.00	1160247.91	3231932.87	39.770286	-104.674890
	12600.00	90.00	270.52	7950.00	4010.18	-764.71	-3965.05	0.00	1160247.87	3231832.87	39.770289	-104.675245
	12700.00	90.00	270.52	7950.00	4109.84	-763.81	-4065.04	0.00	1160247.83	3231732.87	39.770291	-104.675601
	12800.00	90.00	270.52	7950.00	4209.51	-762.90	-4165.04	0.00	1160247.78	3231632.88	39.770294	-104.675957
	12900.00	90.00	270.52	7950.00	4309.17	-762.00	-4265.04	0.00	1160247.74	3231532.88	39.770296	-104.676313
	13000.00	90.00	270.52	7950.00	4408.84	-761.10	-4365.03	0.00	1160247.69	3231432.88	39.770298	-104.676668
	13100.00	90.00	270.52	7950.00	4508.50	-760.20	-4465.03	0.00	1160247.65	3231332.88	39.770301	-104.677024
	13200.00	90.00	270.52	7950.00	4608.17	-759.30	-4565.02	0.00	1160247.61	3231232.88	39.770303	-104.677380
	13300.00	90.00	270.52	7950.00	4707.83	-758.39	-4665.02	0.00	1160247.56	3231132.88	39.770306	-104.677736
	13400.00	90.00	270.52	7950.00	4807.50	-757.49	-4765.02	0.00	1160247.52	3231032.88	39.770308	-104.678091
	13500.00	90.00	270.52	7950.00	4907.17	-756.59	-4865.01	0.00	1160247.47	3230932.88	39.770311	-104.678447
	13600.00	90.00	270.52	7950.00	5006.83	-755.69	-4965.01	0.00	1160247.43	3230832.88	39.770313	-104.678803
	13700.00	90.00	270.52	7950.00	5106.50	-754.79	-5065.00	0.00	1160247.39	3230732.88	39.770315	-104.679159
	13800.00	90.00	270.52	7950.00	5206.16	-753.88	-5165.00	0.00	1160247.34	3230632.89	39.770318	-104.679514
	13900.00	90.00	270.52	7950.00	5305.83	-752.98	-5265.00	0.00	1160247.30	3230532.89	39.770320	-104.679870
	14000.00	90.00	270.52	7950.00	5405.49	-752.08	-5364.99	0.00	1160247.25	3230432.89	39.770323	-104.680226
	14100.00	90.00	270.52	7950.00	5505.16	-751.18	-5464.99	0.00	1160247.21	3230332.89	39.770325	-104.680581
	14200.00	90.00	270.52	7950.00	5604.82	-750.28	-5564.98	0.00	1160247.17	3230232.89	39.770328	-104.680937
	14300.00	90.00	270.52	7950.00	5704.49	-749.37	-5664.98	0.00	1160247.12	3230132.89	39.770330	-104.681293
	14400.00	90.00	270.52	7950.00	5804.15	-748.47	-5764.98	0.00	1160247.08	3230032.89	39.770332	-104.681649
	14500.00	90.00	270.52	7950.00	5903.82	-747.57	-5864.97	0.00	1160247.03	3229932.89	39.770335	-104.682004
	14600.00	90.00	270.52	7950.00	6003.48	-746.67	-5964.97	0.00	1160246.99	3229832.89	39.770337	-104.682360
	14700.00	90.00	270.52	7950.00	6103.15	-745.77	-6064.96	0.00	1160246.95	3229732.89	39.770340	-104.682716
	14800.00	90.00	270.52	7950.00	6202.81	-744.86	-6164.96	0.00	1160246.90	3229632.90	39.770342	-104.683072
	14900.00	90.00	270.52	7950.00	6302.48	-743.96	-6264.95	0.00	1160246.86	3229532.90	39.770344	-104.683427
	15000.00	90.00	270.52	7950.00	6402.14	-743.06	-6364.95	0.00	1160246.81	3229432.		

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	18100.00	90.00	270.52	7950.00	9491.77	-715.10	-9464.82	0.00	1160245.45	3226332.93	39.770421	-104.694811
	18200.00	90.00	270.52	7950.00	9591.43	-714.20	-9564.82	0.00	1160245.41	3226232.93	39.770423	-104.695166
	18300.00	90.00	270.52	7950.00	9691.10	-713.30	-9664.82	0.00	1160245.36	3226132.93	39.770426	-104.695522
	18400.00	90.00	270.52	7950.00	9790.76	-712.39	-9764.81	0.00	1160245.32	3226032.93	39.770428	-104.695878
Schuh 3-65 21- 20 4BH BHL	18400.59	90.00	270.52	7950.00	9791.35	-712.39	-9765.40	0.00	1160245.32	3226032.35	39.770428	-104.695880

Survey Type: Def Plan

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)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	28.000	1/100.000	13.500	9.625		NAL_MWD-NON_SLB-Depth Only	Original Hole / Schuh 3-65 21-20 4BH Plan #0
	1	28.000	2186.000	1/100.000	13.500	9.625		NAL_MWD-NON_SLB	Original Hole / Schuh 3-65 21-20 4BH Plan #0
	1	2186.000	18400.588	1/100.000	8.500	5.500		NAL_MWD_PLUS_0.5_DEG	Original Hole / Schuh 3-65 21-20 4BH Plan #0