



# Crestone Peak Resources

Schlumberger

Plan 0

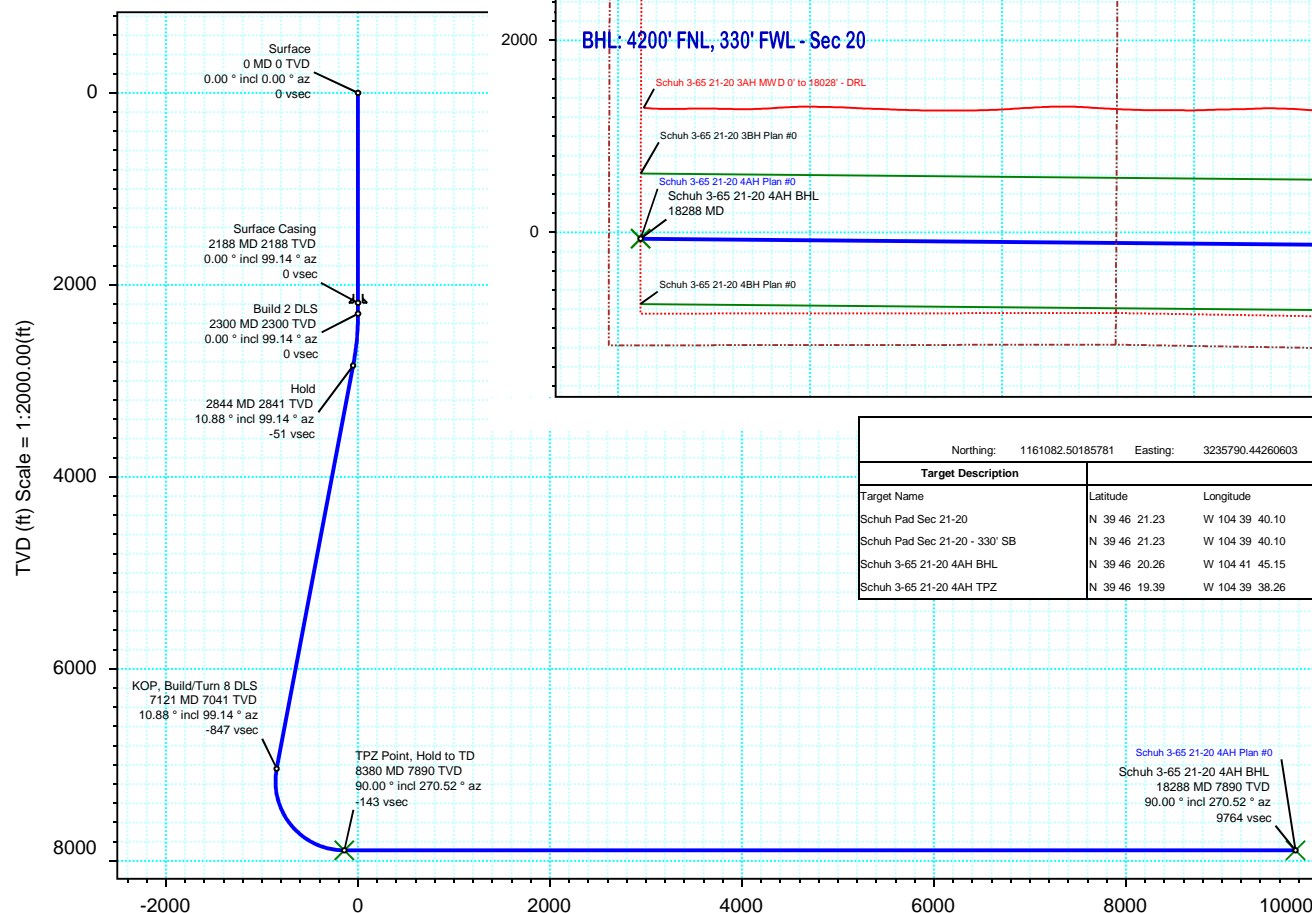
Borehole:	Well:	Field:	Structure:
Original Hole	Schuh 3-65 21-20 4AH	CO, Adams County (NAD 83 NZ)	Crestone Peak 21-03S-65W (Shuh Pad)

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 20.92	Northing:	1161082.5ftUS	Grid Conv:	0.542°	Slot:	Schuh 3-65 21-20 4AH	TVD Ref:	KB 28ft(5624.8ft above MSL)	
MagDec:	8.488°	FS:	51573.797nT	Gravity FS:	998.92mgn (9.80665 Based)	Lon:	W 104 39 40.10	Easting:	3235790.44ftUS	Scale Fact:	0.99999146	Plan:	Schuh 3-65 21-20 4AH Plan #0			

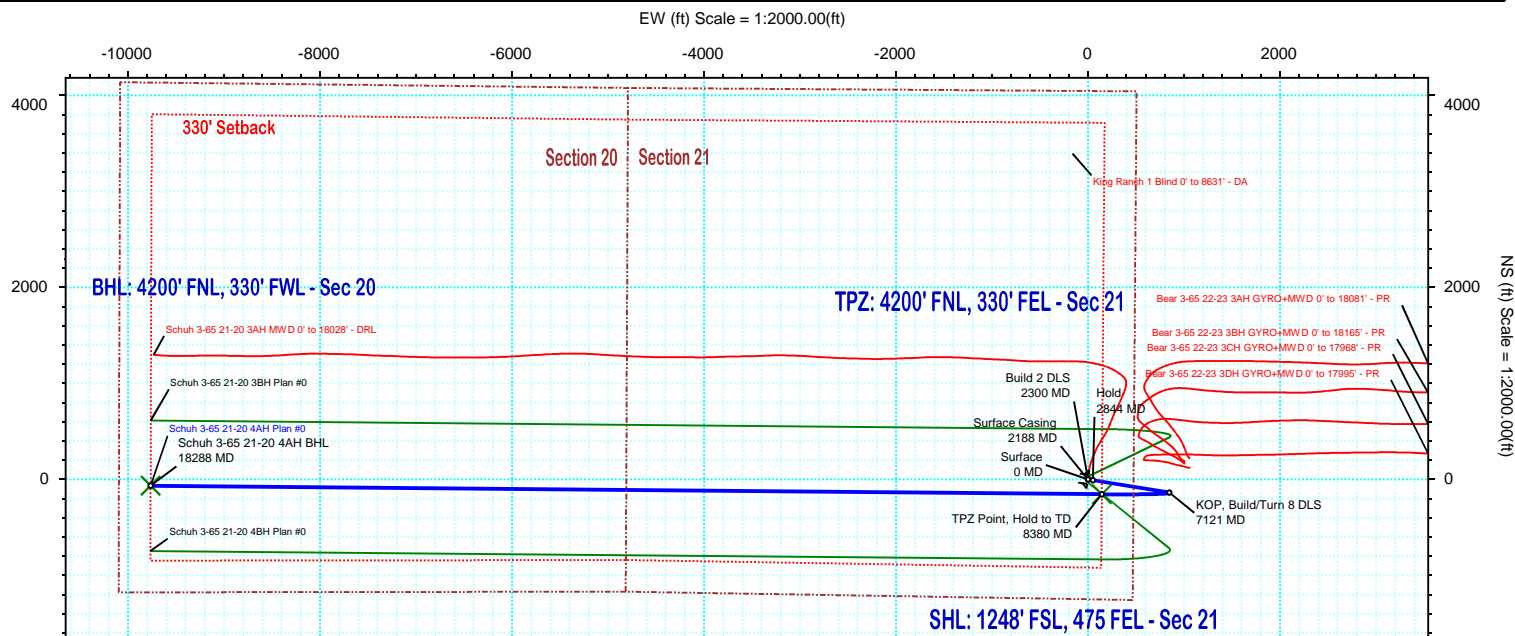
Proposal



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



Vertical Section (ft) Azim = 269.62° Scale = 1:2000.00(ft) Origin = 0N/-S, 0E/-W



Surface Location								
Northing: 1161082.50185781			Easting: 3235790.44260603			Latitude: N 39 46 20.92		
			Longitude: W 104 39 40.10			VSec Azimuth: 269.62		
Target Description		Grid Coord		Local Coord				
Target Name		Latitude	Longitude	Northings	Easting	TVD	VSec	
Schuh Pad Sec 21-20		N 39 46 21.23	W 104 39 40.10	1161113.83	3235790.43	5624.80	-0.49	31.33
Schuh Pad Sec 21-20 - 330' SB		N 39 46 21.23	W 104 39 40.10	1161113.83	3235790.43	5624.80	-0.49	31.33
Schuh 3-65 21-20 4AH BHL		N 39 46 20.26	W 104 41 45.15	1160925.39	3226027.59	7890.00	9764.22	-64.75
Schuh 3-65 21-20 4AH TPZ		N 39 46 19.39	W 104 39 38.26	1160929.42	3235935.82	7890.00	-142.89	-154.45

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	2188.00	0.00	99.14	2188.00	0.00	0.00	0.00	0.00
Build 2 DLS	2300.00	0.00	99.14	2300.00	0.00	0.00	0.00	0.00
Hold	2843.94	10.88	99.14	2840.67	-50.77	-8.18	50.83	2.00
KOP, Build/Turn 8 DLS	7120.63	10.88	99.14	7040.51	-846.81	-136.36	847.73	0.00
TPZ Point, Hold to TD	8380.06	90.00	270.52	7890.00	-142.89	-154.45	143.92	8.00
Schuh 3-65 21-20 4AH BHL	18288.40	90.00	270.52	7890.00	9764.22	-64.75	-9764.01	0.00

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

(Def Plan)

**Report Date:** March 03, 2020 - 11:57 AM  
**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 4AH  
**Well:** Schuh 3-65 21-20 4AH  
**Borehole:** Original Hole  
**UWI / API#:** Unknown / Unknown  
**Survey Name:** Schuh 3-65 21-20 4AH Plan #0  
**Survey Date:** March 03, 2020  
**Tort / AHD / DDI / ERD Ratio:** 111.633 ° / 11497.962 ft / 6.474 / 1.457  
**Coordinate Reference System:** NAD83 Colorado State Plane, Northern Zone, US Feet  
**Location Lat / Long:** N 39° 46' 20.92080", W 104° 39' 40.10040"  
**Location Grid N/E Y/X:** N 1161082.502 ftUS, E 3235790.443 ftUS  
**CRS Grid Convergence Angle:** 0.5420 °  
**Grid Scale Factor:** 0.99999146  
**Version / Patch:** 2.10.787.0

**Survey / DLS Computation:** Minimum Curvature / Lubinski  
**Vertical Section Azimuth:** 269.620 ° (True North)  
**Vertical Section Origin:** 0.000 ft, 0.000 ft  
**TVD Reference Datum:** KB 28ft  
**TVD Reference Elevation:** 5624.800 ft above MSL  
**Seabed / Ground Elevation:** 5596.800 ft above MSL  
**Magnetic Declination:** 8.488 °  
**Total Gravity Field Strength:** 998.9199mgn (9.80665 Based)  
**Gravity Model:** GARM  
**Total Magnetic Field Strength:** 51573.797 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:** 8.4877 °  
**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	1161082.50	3235790.44	39.772478	-104.661139	
	100.00	0.00	99.14	100.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	200.00	0.00	99.14	200.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	300.00	0.00	99.14	300.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	400.00	0.00	99.14	400.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	500.00	0.00	99.14	500.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	600.00	0.00	99.14	600.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	700.00	0.00	99.14	700.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	800.00	0.00	99.14	800.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	900.00	0.00	99.14	900.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	1000.00	0.00	99.14	1000.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	1100.00	0.00	99.14	1100.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	1200.00	0.00	99.14	1200.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	1300.00	0.00	99.14	1300.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	1400.00	0.00	99.14	1400.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	1500.00	0.00	99.14	1500.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	1600.00	0.00	99.14	1600.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	1700.00	0.00	99.14	1700.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	1800.00	0.00	99.14	1800.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	1900.00	0.00	99.14	1900.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
Surface Casing	2000.00	0.00	99.14	2000.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	2100.00	0.00	99.14	2100.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	2188.00	0.00	99.14	2188.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	2200.00	0.00	99.14	2200.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
Build 2 DLS	2300.00	0.00	99.14	2300.00	0.00	0.00	0.00	0.00	1161082.50	3235790.44	39.772478	-104.661139	
	2400.00	2.00	99.14	2399.98	-1.72	-0.28	1.72	2.00	1161082.24	3235792.17	39.772477	-104.661133	
	2500.00	4.00	99.14	2499.84	-6.88	-1.11	6.89	2.00	1161081.46	3235797.34	39.772475	-104.661114	
	2600.00	6.00	99.14	2599.45	-15.48	-2.49	15.49	2.00	1161080.16	3235805.96	39.772471	-104.661084	
Hold	2700.00	8.00	99.14	2698.70	-27.50	-4.43	27.53	2.00	1161078.33	3235818.01	39.772466	-104.661041	
	2800.00	10.00	99.14	2797.47	-42.92	-6.91	42.97	2.00	1161076.00	3235833.48	39.772459	-104.660986	
	2843.94	10.88	99.14	2840.67	-50.77	-8.18	50.83	2.00	1161074.81	3235841.35	39.772456	-104.660958	
	2900.00	10.88	99.14	2895.73	-61.21	-9.86	61.28	0.00	1161073.23	3235851.81	39.772451	-104.660921	
	3000.00	10.88	99.14	2993.93	-79.82	-12.85	79.91	0.00	1161070.41	3235870.47	39.772443	-104.660855	
	3100.00	10.88	99.14	3092.14	-98.44	-15.85	98.54	0.00	1161067.58	3235889.13	39.772434	-104.660788	
	3200.00	10.88	99.14	3190.34	-117.05	-18.85	117.18	0.00	1161064.76	3235907.79	39.772426	-104.660722	
	3300.00	10.88	99.14	3288.54	-135.66	-21.84	135.81	0.00	1161061.94	3235926.45	39.772418	-104.660656	
	3400.00	10.88	99.14	3386.74	-154.28	-24.84	154.44	0.00	1161059.12	3235945.11	39.772410	-104.660590	
	3500.00	10.88	99.14	3484.95	-172.89	-27.84	173.08	0.00	1161056.30	3235963.77	39.772402	-104.660523	
	3600.00	10.88	99.14	3583.15	-191.50	-30.84	191.71	0.00	1161053.48	3235982.44	39.772393	-104.660457	
	3700.00	10.88	99.14	3681.35	-210.12	-33.83	210.35	0.00	1161050.66	3236001.10	39.772385	-104.660391	
	3800.00	10.88	99.14	3779.56	-228.73	-36.83	228.98	0.00	1161047.84	3236019.76	39.772377	-104.660324	
	3900.00	10.88	99.14	3877.76	-247.34	-39.83	247.61	0.00	1161045.02	3236038.42	39.772369	-104.660258	
	4000.00	10.88	99.14	3975.96	-265.96	-42.83	266.25	0.00	1161042.20	3236057.08	39.772360	-104.660192	
	4100.00	10.88	99.14	4074.16	-284.57	-45.82	284.88	0.00	1161039.38	3236075.74	39.772352	-104.660126	
	4200.00	10.88	99.14	4172.37	-303.18	-48.82	303.51	0.00	1161036.56	3236094.40	39.772344	-104.660059	
	4300.00	10.88	99.14	4270.57	-321.80	-51.82	322.15	0.00	1161033.74	3236113.06	39.772336	-104.659993	
	4400.00	10.88	99.14	4368.77	-340.41	-54.81	340.78	0.00	1161030.91	3236131.72	39.772328	-104.659927	
	4500.00	10.88	99.14	4466.98	-359.02	-57.81	359.41	0.00	1161028.09	3236150.38	39.772319	-104.659860	
	4600.00	10.88	99.14	4565.18	-377.64	-60.81	378.05	0.00	1161025.27	3236169.04	39.772311	-104.659794	
	4700.00	10.88	99.14	4663.38	-396.25	-63.81	396.68	0.00	1161022.45	3236187.70	39.772303	-104.659728	
	4800.00	10.88	99.14	4761.59	-414.86	-66.80	415.31	0.00	1161019.63	3236206.37	39.772295	-104.659661	
	4900.00	10.88	99.14	4859.79	-433.48	-69.80	433.95	0.00	1161016.81	3236225.03	39.772286	-104.659595	
	5000.00	10.88	99.14	4957.99	-452.09	-72.80	452.58	0.00	1161013.99	3236243.69	39.772278	-104.659529	
	5100.00	10.88	99.14	5056.19	-470.70	-75.79	471.21	0.00	1161011.17	3236262.35	39.772270	-104.659463	
	5200.00	10.88	99.14	5154.40	-489.32	-78.79	489.85	0.00	1161008.35	3236281.01	39.772262	-104.659396	
	5300.00	10.88	99.14	5252.60	-507.93	-81.79	508.48	0.00	1161005.53	3236299.67	39.772253	-104.659330	
	5400.00	10.88	99.14	5350.80	-526.54	-84.79	527.12	0.00	1161002.71	3236318.33	39.772245	-104.659264	
	5500.00	10.88	99.14	5449.01	-545.15	-87.78	545.75	0.00	1160999.89	3236336.99	39.772237	-104.659197	
	5600.00	10.88	99.14	5547.21	-563.77	-90.78	564.38	0.00	1160997.07	3236355.65	39.772229	-104.659131	
	5700.00	10.88	99.14	5645.41	-582.38	-93.78	583.02	0.00	1160994.25	3236374.31	39.772221	-104.659065	
	5800.00	10.88	99.14	5743.61	-600.99	-96.77	601.65	0.00	1160991.42	3236392.97	39.772212	-104.658999	
	5900.00	10.88	99.14	5841.82	-619.61	-99.77	620.28	0.00	1160988.60	3236411.64	39.772204	-104.658933	
	6000.00	10.88	99.14	5940.02	-638.22	-102.77	638.92	0.00	1160985.78	3236430.30	39.772196	-104.658866	
	6100.00	10.88	99.14	6038.22	-656.83	-105.77	657.55	0.00	1160982.96	3236448.96	39.772188	-104.658800	
	6200.00	10.88	99.14	6136.43	-675.45	-108.76	676.18	0.00	1160980.14	3236467.62	39.772179	-104.658733	
	6300.00	10.88	99.14	6234.63	-694.06	-111.76	694.82	0.00	1160977.32	3236486.28	39.772171	-104.658667	
	6400.00	10.88	99.14	6332.83	-712.67	-114.76	713.45	0.00	1160974.50	3236504.94	39.772163	-104.658601	
	6500.00	10.88	99.14	6431.03	-731.29	-117.75	732.08	0.00	1160971.68	3236523.60	39.772155	-104.658535	
	6600.00	10.88	99.14	6529.24	-749.90	-120.75	750.72	0.00	1160968.86	3236542.26	39.772146	-104.658468	
	6700.00	10.88	99.14	6627.44	-768.51	-123.75	769.35	0.00	1160966.04	3236560.92	39.772138	-104.658402	
	6800.00	10.88	99.14	6725.64	-787.13	-126.75	787.99	0.00	1160963.22	3236579.58	39.772130	-104.658336	
	6900.00	10.88	99.14	6823.85	-805.74	-129.74	806.62	0.00	1160960.40	3236598.24	39.772122	-104.658269	
	7000.00	10.88	99.14	6922.05	-824.35	-132.74	825.25	0.00	1160957.58	3236616.90	39.772114	-104.658203	
	7100.00	10.88	99.14	7020.25	-842.97	-135.74	843.89	0.00	1160954.75	3236635.57	39.772105	-104.658137	
	KOP_Build/Turn 8 DLS	7120.63	10.88	99.14	7040.51	-846.81	-136.36	847.73	0.00	1160954.17	3236639.42	39.772104	-104.658123
		7200.00	4.70	111.01	7119.11	-857.23	-138.71	858.17	8.00	1160951.91	3236649.88	39.772097	-104.658086
		7300.00	3.96	245.90	7218.99	-857.90	-141.60	858.85	8.00	1160949.04	3236650.59	39.772089	

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
TPZ Point, Hold to TD	7400.00	11.71	262.53	7317.99	-844.65	-144.33	845.62	8.00	1160946.18	3236637.38	39.772082	-104.658131
	7500.00	19.66	265.90	7414.19	-817.74	-146.86	818.74	8.00	1160943.40	3236610.52	39.772075	-104.658226
	7600.00	27.64	267.37	7505.72	-777.71	-149.13	778.72	8.00	1160940.75	3236570.53	39.772069	-104.658369
	7700.00	35.63	268.22	7590.79	-725.33	-151.11	726.35	8.00	1160938.28	3236518.18	39.772063	-104.658555
	7800.00	43.62	268.79	7667.75	-661.62	-152.75	662.65	8.00	1160936.03	3236454.50	39.772059	-104.658782
	7900.00	51.61	269.21	7735.11	-587.82	-154.02	588.85	8.00	1160934.06	3236380.72	39.772055	-104.659044
	8000.00	59.61	269.55	7791.54	-505.37	-154.90	506.40	8.00	1160932.40	3236298.28	39.772053	-104.659337
	8100.00	67.60	269.84	7835.96	-415.86	-155.37	416.90	8.00	1160931.09	3236208.79	39.772051	-104.659656
	8200.00	75.60	270.10	7867.49	-321.05	-155.42	322.09	8.00	1160930.14	3236113.98	39.772051	-104.659993
	8300.00	83.60	270.33	7885.53	-222.78	-155.05	223.81	8.00	1160929.58	3236015.71	39.772052	-104.660343
	8380.06	90.00	270.52	7890.00	-142.89	-154.45	143.92	8.00	1160929.42	3235935.82	39.772054	-104.660627
	8400.00	90.00	270.52	7890.00	-122.96	-154.27	123.98	0.00	1160929.41	3235915.88	39.772054	-104.660698
	8500.00	90.00	270.52	7890.00	-22.97	-153.37	23.99	0.00	1160929.37	3235815.88	39.772057	-104.661054
	8600.00	90.00	270.52	7890.00	77.02	-152.46	-76.01	0.00	1160929.33	3235715.88	39.772059	-104.661409
	8700.00	90.00	270.52	7890.00	177.01	-151.55	-176.01	0.00	1160929.29	3235615.88	39.772062	-104.661765
	8800.00	90.00	270.52	7890.00	276.99	-150.65	-276.00	0.00	1160929.25	3235515.88	39.772064	-104.662121
	8900.00	90.00	270.52	7890.00	376.98	-149.74	-376.00	0.00	1160929.21	3235415.88	39.772067	-104.662477
	9000.00	90.00	270.52	7890.00	476.97	-148.84	-475.99	0.00	1160929.17	3235315.88	39.772069	-104.662832
	9100.00	90.00	270.52	7890.00	576.96	-147.93	-575.99	0.00	1160929.13	3235215.89	39.772072	-104.663188
	9200.00	90.00	270.52	7890.00	676.94	-147.03	-675.98	0.00	1160929.09	3235115.89	39.772074	-104.663544
	9300.00	90.00	270.52	7890.00	776.93	-146.12	-775.98	0.00	1160929.05	3235015.89	39.772077	-104.663900
	9400.00	90.00	270.52	7890.00	876.92	-145.22	-875.98	0.00	1160929.01	3234915.89	39.772079	-104.664255
	9500.00	90.00	270.52	7890.00	976.91	-144.31	-975.97	0.00	1160928.97	3234815.89	39.772082	-104.664611
	9600.00	90.00	270.52	7890.00	1076.90	-143.41	-1075.97	0.00	1160928.92	3234715.89	39.772084	-104.664967
	9700.00	90.00	270.52	7890.00	1176.88	-142.50	-1175.96	0.00	1160928.88	3234615.89	39.772087	-104.665323
	9800.00	90.00	270.52	7890.00	1276.87	-141.60	-1275.96	0.00	1160928.84	3234515.89	39.772089	-104.665678
	9900.00	90.00	270.52	7890.00	1376.86	-140.69	-1375.96	0.00	1160928.80	3234415.89	39.772092	-104.666034
	10000.00	90.00	270.52	7890.00	1476.85	-139.79	-1475.95	0.00	1160928.76	3234315.89	39.772094	-104.666390
	10100.00	90.00	270.52	7890.00	1576.83	-138.88	-1575.95	0.00	1160928.72	3234215.90	39.772097	-104.666746
	10200.00	90.00	270.52	7890.00	1676.82	-137.97	-1675.94	0.00	1160928.68	3234115.90	39.772099	-104.667101
	10300.00	90.00	270.52	7890.00	1776.81	-137.07	-1775.94	0.00	1160928.64	3234015.90	39.772102	-104.667457
	10400.00	90.00	270.52	7890.00	1876.80	-136.16	-1875.94	0.00	1160928.60	3233915.90	39.772104	-104.667813
	10500.00	90.00	270.52	7890.00	1976.78	-135.26	-1975.93	0.00	1160928.56	3233815.90	39.772106	-104.668168
	10600.00	90.00	270.52	7890.00	2076.77	-134.35	-2075.93	0.00	1160928.52	3233715.90	39.772109	-104.668524
	10700.00	90.00	270.52	7890.00	2176.76	-133.45	-2175.92	0.00	1160928.48	3233615.90	39.772111	-104.668880
	10800.00	90.00	270.52	7890.00	2276.75	-132.54	-2275.92	0.00	1160928.44	3233515.90	39.772114	-104.669236
	10900.00	90.00	270.52	7890.00	2376.74	-131.64	-2375.92	0.00	1160928.40	3233415.90	39.772116	-104.669591
	11000.00	90.00	270.52	7890.00	2476.72	-130.73	-2475.91	0.00	1160928.36	3233315.91	39.772119	-104.669947
	11100.00	90.00	270.52	7890.00	2576.71	-129.83	-2575.91	0.00	1160928.31	3233215.91	39.772121	-104.670303
	11200.00	90.00	270.52	7890.00	2676.70	-128.92	-2675.90	0.00	1160928.27	3233115.91	39.772124	-104.670659
	11300.00	90.00	270.52	7890.00	2776.69	-128.02	-2775.90	0.00	1160928.23	3233015.91	39.772126	-104.671014
	11400.00	90.00	270.52	7890.00	2876.67	-127.11	-2875.89	0.00	1160928.19	3232915.91	39.772129	-104.671370
	11500.00	90.00	270.52	7890.00	2976.66	-126.21	-2975.89	0.00	1160928.15	3232815.91	39.772131	-104.671726
	11600.00	90.00	270.52	7890.00	3076.65	-125.30	-3075.89	0.00	1160928.11	3232715.91	39.772134	-104.672082
	11700.00	90.00	270.52	7890.00	3176.64	-124.40	-3175.88	0.00	1160928.07	3232615.91	39.772136	-104.672437
	11800.00	90.00	270.52	7890.00	3276.62	-123.49	-3275.88	0.00	1160928.03	3232515.91	39.772138	-104.672793
	11900.00	90.00	270.52	7890.00	3376.61	-122.58	-3375.87	0.00	1160927.99	3232415.91	39.772141	-104.673149
	12000.00	90.00	270.52	7890.00	3476.60	-121.68	-3475.87	0.00	1160927.95	3232315.92	39.772143	-104.673505
	12100.00	90.00	270.52	7890.00	3576.59	-120.77	-3575.87	0.00	1160927.91	3232215.92	39.772146	-104.673860
	12200.00	90.00	270.52	7890.00	3676.58	-119.87	-3675.86	0.00	1160927.87	3232115.92	39.772148	-104.674216
12300.00	90.00	270.52	7890.00	3776.56	-118.96	-3775.86	0.00	1160927.83	3232015.92	39.772151	-104.674572	
12400.00	90.00	270.52	7890.00	3876.55	-118.06	-3875.85	0.00	1160927.79	3231915.92	39.772153	-104.674928	
12500.00	90.00	270.52	7890.00	3976.54	-117.15	-3975.85	0.00	1160927.75	3231815.92	39.772156	-104.675283	
12600.00	90.00	270.52	7890.00	4076.53	-116.25	-4075.85	0.00	1160927.70	3231715.92	39.772158	-104.675639	
12700.00	90.00	270.52	7890.00	4176.51	-115.34	-4175.84	0.00	1160927.66	3231615.92	39.772160	-104.675995	
12800.00	90.00	270.52	7890.00	4276.50	-114.44	-4275.84	0.00	1160927.62	3231515.92	39.772163	-104.676350	
12900.00	90.00	270.52	7890.00	4376.49	-113.53	-4375.83	0.00	1160927.58	3231415.93	39.772165	-104.676706	
13000.00	90.00	270.52	7890.00	4476.48	-112.63	-4475.83	0.00	1160927.54	3231315.93	39.772168	-104.677062	
13100.00	90.00	270.52	7890.00	4576.47	-111.72	-4575.82	0.00	1160927.50	3231215.93	39.772170	-104.677418	
13200.00	90.00	270.52	7890.00	4676.45	-110.82	-4675.82	0.00	1160927.46	3231115.93	39.772173	-104.677773	
13300.00	90.00	270.52	7890.00	4776.44	-109.91	-4775.82	0.00	1160927.42	3231015.93	39.772175	-104.678129	
13400.00	90.00	270.52	7890.00	4876.43	-109.00	-4875.81	0.00	1160927.38	3230915.93	39.772177	-104.678485	
13500.00	90.00	270.52	7890.00	4976.42	-108.10	-4975.81	0.00	1160927.34	3230815.93	39.772180	-104.678841	
13600.00	90.00	270.52	7890.00	5076.40	-107.19	-5075.80	0.00	1160927.30	3230715.93	39.772182	-104.679196	
13700.00	90.00	270.52	7890.00	5176.39	-106.29	-5175.80	0.00	1160927.26	3230615.93	39.772185	-104.679552	
13800.00	90.00	270.52	7890.00	5276.38	-105.38	-5275.80	0.00	1160927.22	323051051			

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	7890.00	9575.85	-66.46	-9575.62	0.00	1160925.47	3226215.98	39.772291	-104.695205
	18200.00	90.00	270.52	7890.00	9675.84	-65.55	-9675.62	0.00	1160925.43	3226115.98	39.772293	-104.695561
Schuh 3-65 21-20 4AH BHL	18288.40	90.00	270.52	7890.00	9764.22	-64.75	-9764.01	0.00	1160925.39	3226027.59	39.772295	-104.695875

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 4AH Plan #0
	1	28.000	2188.000	1/100.000	13.500	9.625		NAL_MWD-NON_SLB	Original Hole / Schuh 3-65 21-20 4AH Plan #0
	1	2188.000	18288.398	1/100.000	8.500	5.500		NAL_MWD_PLUS_0.5_DEG	Original Hole / Schuh 3-65 21-20 4AH Plan #0