



Crestone Peak Resources

Schlumberger

Plan 0

Borehole:	Well:	Field:	Structure:
Original Hole	Sunset 4-65 21-22 2BH	CO, Arapahoe County (NAD 83 CZ)	Crestone Peak 21-04S-65W (Grande North Pad)

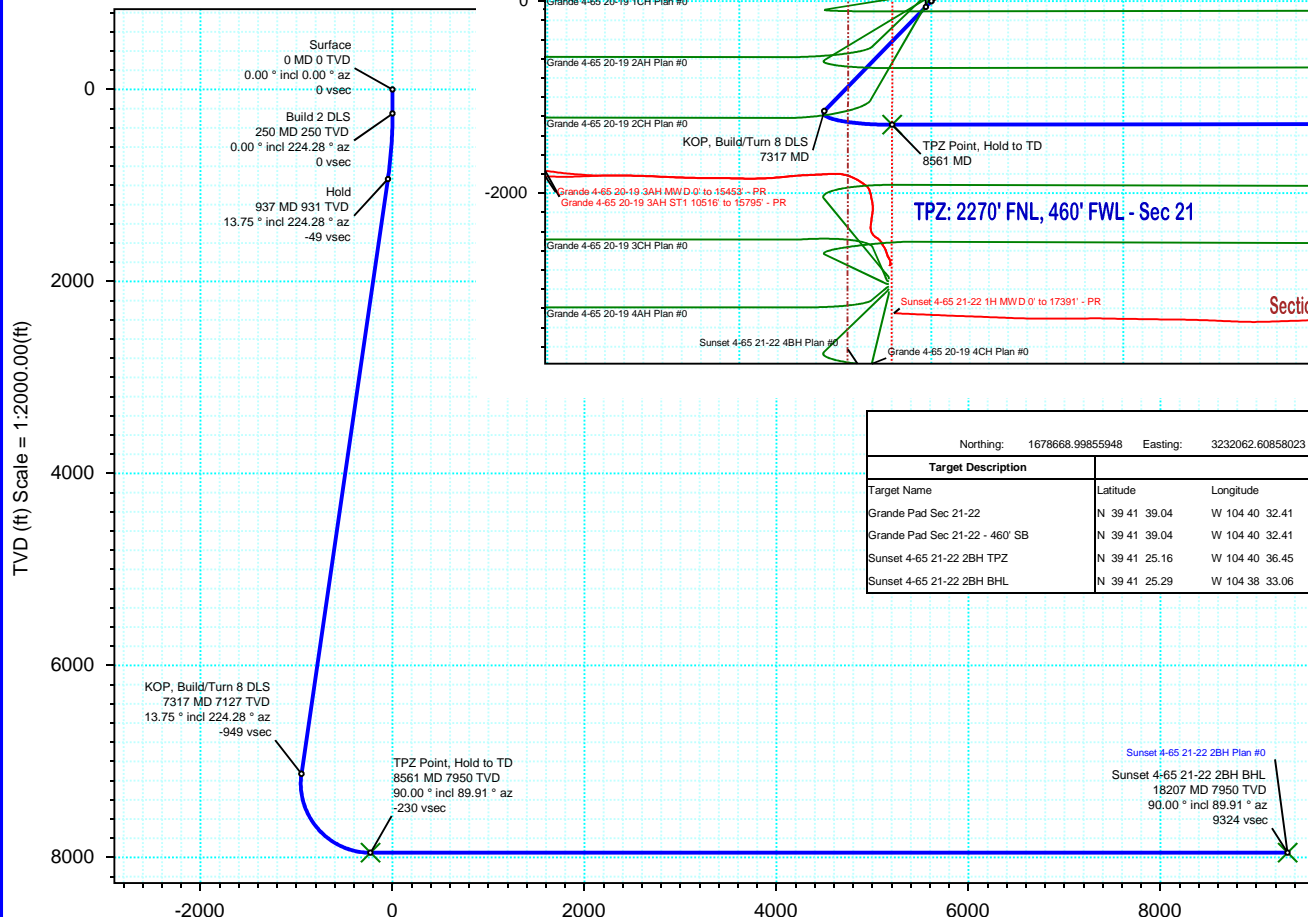
Gravity & Magnetic Parameters				Surface Location				Miscellaneous			
Model:	HDGM 2020	Dip:	66.336°	Date:	18-May-2020	Lat:	N 39 41 37.88	Northing:	1678669ftUS	Grid Conv:	0.5201°
MagDec:	8.573°	FS:	51550.114nT	Gravity FS:	998.911mgn (9.80665 Based)	Lon:	W 104 40 31.22	Easting:	3232062.61ftUS	Scale Fact:	0.99998938
								Slot: Sunset 4-65 21-22 2BH			
								TVD Ref: KB 28ft(5692.9ft above MSL)			
								Plan: Sunset 4-65 21-22 2BH Plan #0			

Proposal

EW (ft) Scale = 1:2000.00(ft)



True North
Tot Corr (M->T 8.573°)
Mag Dec (8.573°)
Grid Conv (0.520°)



Surface Location								
Northing: 1678668.99855948			Easting: 3232062.60858023			Latitude: N 39 41 37.88		
						Longitude: W 104 40 31.22		
						VSec Azimuth: 97.84		
Target Description		Grid Coord		Local Coord				
Target Name		Latitude	Longitude	Northing	Easting	TVD	VSec	
Grande Pad Sec 21-22		N 39 41 39.04	W 104 40 32.41	1678785.81	3231968.40	5692.90	-108.33	117.66
Grande Pad Sec 21-22 - 460' SB		N 39 41 39.04	W 104 40 32.41	1678785.81	3231968.40	5692.90	-108.33	117.66
Sunset 4-65 21-22 2BH TPZ		N 39 41 25.16	W 104 40 36.45	1677378.40	3231665.12	7950.00	-229.76	-1286.95
Sunset 4-65 21-22 2BH BHL		N 39 41 25.29	W 104 38 33.06	1677480.73	3241310.02	7950.00	9323.56	-1272.17

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	
Build 2 DLS	250.00	0.00	224.28	250.00	0.00	0.00	0.00	0.00
Hold	937.38	13.75	224.28	930.80	-48.74	-58.76	-57.30	2.00
KOP, Build/Turn 8 DLS	7316.61	13.75	224.28	7127.28	-949.10	-1144.17	-1115.66	0.00
TPZ Point, Hold to TD	8561.18	90.00	89.91	7950.00	-229.76	-1286.95	-409.19	8.00
Sunset 4-65 21-22 2BH BHL	18206.74	90.00	89.91	7950.00	9323.56	-1272.17	9236.36	0.00

Vertical Section (ft) Azim = 97.84° Scale = 1:2000.00(ft) Origin = 0N/-S, 0E/-W

Sunset 4-65 21-22 2BH Plan #0 Anti-Collision Summary Report

Analysis Date-24hr Time: May 21, 2020 - 16:18
Client: Crestone Peak Resources
Field: CO, Arapahoe County (NAD 83 CZ)
Structure: Crestone Peak 21-04S-65W (Grande North Pad)
Slot: Sunset 4-65 21-22 2BH
Well: Sunset 4-65 21-22 2BH
Borehole: Original Hole
Scan MD Range: 0.00ft - 18206.74ft

Analysis Method: 3D Least Distance
Reference Trajectory: Sunset 4-65 21-22 2BH Plan #0 (Def Plan)
Depth Interval: Every 10.00 Measured Depth (ft)
Rule Set: D&M AntiCollision Standard S002 v5.1/5.2
Min Pts: All local minima indicated.
Version / Patch: 2.10.810.1
Database \ Project: localhost\drilling-Colorado

Trajectory Error Model: ICSWSA0 3-D 95.000% Confidence 2.7955 sigma, for subject well. For offset wells, error model version is specified with each well respectively.

Offset Trajectories Summary

Offset Selection Criteria

Wellhead distance scan: Not performed!
 Selection filters: Definitive Surveys - Definitive Plans - Definitive surveys exclude definitive plans
 - All Non-Def Surveys when no Def-Survey is set in a borehole - All Non-Def Plans when no Def-Plan is set in a borehole

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
Grande 4-65 20-19 2CH Plan #0 (Def Plan)													
25.08	20.22	24.10	4.86	N/A	MAS = 6.16 (m)	0.00	0.00	CtCt<=15m<15.00				Enter Alert	Warning Alert
25.03	20.22	24.05	4.81	N/A	MAS = 6.16 (m)	28.00	28.00						
25.03	20.22	22.88	4.81	20.66	MAS = 6.16 (m)	250.00	250.00						
25.05	20.22	22.86	4.83	20.01	MAS = 6.16 (m)	280.00	280.00	CtCt<=15m>15.00				MINPT-O-EQU	
25.09	20.22	22.88	4.87	19.67	MAS = 6.16 (m)	300.00	300.00						
40.25	20.22	36.87	20.03	16.38	MAS = 6.16 (m)	730.00	727.76						
48.51	20.22	44.69	28.29	16.76	MAS = 6.16 (m)	800.00	796.63						
505.38	33.07	483.01	472.31	23.58	OSF1.50	4790.00	4673.05						
508.90	43.19	479.78	465.71	18.05	OSF1.50	5710.00	5566.70						
513.71	48.94	480.76	464.77	16.04	OSF1.50	6210.00	6052.37						
177.19	56.38	139.21	120.81	4.78	OSF1.50	7910.00	7677.94						
114.82	64.53	71.40	50.29	2.69	OSF1.50	8040.00	7771.31						
114.83	64.61	71.37	50.23	2.69	OSF1.50	8050.00	7777.81						
189.71	58.10	150.65	131.61	4.96	OSF1.50	8200.00	7862.18	OSF>5.00			Exit Alert	TD	
9867.94	70.89	9820.35	9797.05	211.73	OSF1.50	18206.74	7950.00						
Sunset 4-65 21-22 2AH Plan #0 (Def Plan)													
50.12	32.81	49.14	17.31	N/A	MAS = 10.00 (m)	0.00	0.00	OSF<5.00				Surface	Warning Alert
50.06	32.81	49.07	17.25	N/A	MAS = 10.00 (m)	28.00	28.00						
50.06	32.81	47.91	17.25	42.27	MAS = 10.00 (m)	250.00	250.00						
50.07	32.81	47.90	17.27	41.13	MAS = 10.00 (m)	270.00	270.00						
50.16	32.81	47.95	17.36	39.87	MAS = 10.00 (m)	300.00	300.00						
153.12	32.81	136.26	120.31	9.58	MAS = 10.00 (m)	2200.00	2157.25						
509.63	61.70	468.16	447.92	12.57	OSF1.50	7190.00	7004.30						
594.18	179.21	474.38	414.97	4.99	OSF1.50	11400.00	7950.00						
594.18	234.55	437.49	359.63	3.81	OSF1.50	12510.00	7950.00						
594.19	526.28	243.01	67.91	1.69	OSF1.50	18206.74	7950.00						
Sunset 4-65 21-22 1BH Plan #0 (Def Plan)													
100.09	32.81	99.11	67.28	N/A	MAS = 10.00 (m)	0.00	0.00	OSF<5.00				Surface	Warning Alert
100.01	32.81	99.02	67.20	N/A	MAS = 10.00 (m)	28.00	28.00						
100.01	32.81	97.87	67.20	85.66	MAS = 10.00 (m)	250.00	250.00						
100.01	32.81	97.85	67.20	83.77	MAS = 10.00 (m)	260.00	260.00						
100.24	32.81	98.00	67.43	78.81	MAS = 10.00 (m)	300.00	300.00						
315.91	32.81	299.47	283.10	20.38	MAS = 10.00 (m)	2200.00	2157.25						
1052.28	61.08	1011.23	991.20	26.24	OSF1.50	7290.00	7101.43						
1179.55	354.84	942.66	824.70	5.00	OSF1.50	14820.00	7950.00						
1179.50	521.04	831.81	658.46	3.40	OSF1.50	18040.00	7950.00						
1179.50	529.67	826.06	649.83	3.34	OSF1.50	18206.74	7950.00						
Sunset 4-65 21-22 3AH Plan #0 (Def Plan)													
2930.25	32.81	2929.27	2897.45	N/A	MAS = 10.00 (m)	0.00	0.00	OSF<5.00				Surface	Warning Alert
2930.00	32.81	2928.99	2897.19	98753.18	MAS = 10.00 (m)	20.00	20.00						
2929.94	32.81	2928.93	2897.13	100549.87	MAS = 10.00 (m)	28.00	28.00						
627.16	67.92	580.64	559.24	14.57	OSF1.50	8550.00	7949.91						
639.40	194.53	508.47	444.87	5.00	OSF1.50	11570.00	7950.00						
666.11	533.76	309.04	132.35	1.87	OSF1.50	18206.74	7950.00						
Sunset 4-65 21-22 3BH Plan #0 (Def Plan)													
2979.59	32.81	2978.61	2946.78	N/A	MAS = 10.00 (m)	0.00	0.00	OSF<5.00				Surface	Warning Alert
2979.34	32.81	2978.33	2946.53	102107.66	MAS = 10.00 (m)	20.00	20.00						
2979.28	32.81	2978.27	2946.47	103965.54	MAS = 10.00 (m)	28.00	28.00						
1220.71	67.47	1174.71	1153.25	28.37	OSF1.50	8750.00	7950.00						
1251.73	377.77	998.86	873.95	5.00	OSF1.50	15220.00	7950.00						
1265.96	532.16	910.17	733.79	3.58	OSF1.50	18206.74	7950.00						
Sunset 4-65 21-22 1H MWD 0' to 17391' - PR (Def Survey)													
8565.93	312.09	8357.26	8253.84	41.40	OSF1.50	0.00	0.00	OSF<5.00				Surface	Warning Alert
8540.05	312.71	8330.97	8227.34	41.19	OSF1.50	28.00	28.00						
2130.15	644.83	1698.36	1485.32	4.99	OSF1.50	7860.00	7638.06						
1967.62	677.01	1515.23	1290.61	4.37	OSF1.50	8570.00	7950.00	OSF>5.00				MinPts	
1967.61	676.99	1515.25	1290.63	4.37	OSF1.50	8580.00	7950.00						
2012.68	606.08	1607.76	1406.60	5.00	OSF1.50	9700.00	7950.00						
2024.25	538.89	1663.97	1485.36	5.66	OSF1.50	10670.00	7950.00						
2054.13	423.60	1770.60	1630.53	7.32	OSF1.50	12640.00	7950.00						
2052.92	422.32	1770.27	1630.60	7.34	OSF1.50	12680.00	7950.00						
2027.85	397.43	1761.81	1630.42	7.70	OSF1.50	13250.00	7950.00						
2027.33	396.80	1761.73	1630.53	7.71	OSF1.50	13280.00	7950.00						
2025.73	386.64	1766.96	1639.10	7.91	OSF1.50	13570.00	7950.00						
2042.48	351.67	1807.02	1690.81	8.77	OSF1.50	14660.00	7950.00						
2053.68	335.21	1829.19	1718.47	9.26	OSF1.50	15960.00	7950.00					MinPts	
2052.07	334.51	1828.00	1717.55	9.28	OSF1.50	16120.00	7950.00						
2031.69	354.03	1794.65	1677.65	8.67	OSF1.50	17430.00	7950.00						
2036.85	368.58	1790.19	1668.27	8.34	OSF1.50	17930.00	7950.00						
2038.12	370.12	1790.47	1668.01	8.31	OSF1.50	17980.00	7950.00						
												MinPt-O-ADP	

...Sunset 4-65 21-22 2BH\Original Hole\Sunset 4-65 21-22 2BH Plan #0

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	2049.68	376.51	1797.92	1673.17	8.21	OSF1.50	18206.74	7950.00				MinPt-O-SF	
Grande 4-65 20-19 2AH Plan #0 (Def Plan)													Pass
	75.05	32.81	74.07	42.25	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	74.98	32.81	73.99	42.17	N/A	MAS = 10.00 (m)	28.00	28.00				WRP	
	74.98	32.81	72.84	42.17	63.89	MAS = 10.00 (m)	250.00	250.00				MinPts	
	75.00	32.81	72.81	42.19	61.73	MAS = 10.00 (m)	270.00	270.00				MINPT-O-EOU	
	75.10	32.81	72.87	42.29	59.28	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	101.60	32.81	97.07	68.79	28.40	MAS = 10.00 (m)	860.00	855.40				MinPt-O-SF	
	692.89	59.61	652.82	633.28	17.70	OSF1.50	7890.00	7662.23				MinPt-O-SF	
	692.82	59.60	652.76	633.22	17.70	OSF1.50	7900.00	7670.13				MinPts	
	9896.62	71.47	9848.65	9825.16	210.59	OSF1.50	18206.74	7950.00				TD	
Grande 4-65 20-19 1CH Plan #0 (Def Plan)													Pass
	125.12	32.81	124.14	92.32	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	125.04	32.81	124.05	92.23	N/A	MAS = 10.00 (m)	28.00	28.00				WRP	
	125.04	32.81	122.90	92.23	107.49	MAS = 10.00 (m)	250.00	250.00				MinPts	
	125.06	32.81	122.87	92.25	103.18	MAS = 10.00 (m)	270.00	270.00				MINPT-O-EOU	
	125.19	32.81	122.94	92.38	98.25	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	156.93	32.81	152.09	124.12	40.39	MAS = 10.00 (m)	910.00	904.18				MinPt-O-SF	
	406.90	32.81	394.63	374.09	35.96	MAS = 10.00 (m)	2200.00	2157.25				MinPt-O-SF	
	936.51	32.81	916.36	903.70	48.81	MAS = 10.00 (m)	4490.00	4381.65				MinPt-O-SF	
	1324.87	53.35	1288.97	1271.52	37.92	OSF1.50	7400.00	7208.89				MinPt-O-SF	
	1300.84	56.32	1262.97	1244.52	35.24	OSF1.50	7880.00	7654.25				MinPts	
	9888.52	84.90	9831.60	9803.63	176.74	OSF1.50	18206.74	7950.00				TD	
Sunset 4-65 21-22 1AH Plan #0 (Def Plan)													Pass
	150.15	32.81	149.17	117.34	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	150.07	32.81	149.08	117.26	N/A	MAS = 10.00 (m)	28.00	28.00				WRP	
	150.07	32.81	147.93	117.26	129.28	MAS = 10.00 (m)	250.00	250.00				MinPts	
	150.07	32.81	147.90	117.26	125.90	MAS = 10.00 (m)	260.00	260.00				MINPT-O-EOU	
	479.77	32.81	463.49	446.96	31.30	MAS = 10.00 (m)	2200.00	2157.25				MinPt-O-SF	
	1586.63	60.69	1545.84	1525.94	39.84	OSF1.50	7316.61	7127.28				MinPt-O-SF	
	1770.63	519.33	1424.08	1251.30	5.12	OSF1.50	18010.00	7950.00				MinPt-CtCt	
	1770.63	529.52	1417.29	1241.11	5.02	OSF1.50	18206.74	7950.00				MinPts	
Grande 4-65 20-19 1AH Plan #0 (Def Plan)													Pass
	174.90	32.81	173.91	142.09	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	174.81	32.81	173.83	142.00	N/A	MAS = 10.00 (m)	28.00	28.00				WRP	
	174.81	32.81	172.67	142.00	150.94	MAS = 10.00 (m)	250.00	250.00				MinPts	
	174.83	32.81	172.62	142.02	142.04	MAS = 10.00 (m)	270.00	270.00				MINPT-O-EOU	
	217.05	32.81	211.63	184.24	48.75	MAS = 10.00 (m)	910.00	904.18				MinPt-O-SF	
	458.68	32.81	445.32	425.88	36.96	MAS = 10.00 (m)	2200.00	2157.25				MinPt-O-SF	
	1798.79	56.08	1761.08	1742.71	48.95	OSF1.50	7316.61	7127.28				MinPt-O-SF	
	1892.08	58.92	1852.47	1833.16	48.96	OSF1.50	7840.00	7621.55				MinPt-O-SF	
	2158.96	65.48	2114.97	2093.48	50.19	OSF1.50	9180.00	7950.00				MinPt-O-SF	
	2183.37	66.22	2138.90	2117.15	50.18	OSF1.50	9240.00	7950.00				MinPt-O-SF	
	10004.27	93.06	9941.91	9911.21	162.96	OSF1.50	18206.74	7950.00				TD	
Grande 4-65 20-19 3AH MWD 0' to 15453' - PR (Def Survey)													Pass
	2781.56	32.81	2779.75	2748.75	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	2781.18	32.81	2779.33	2748.37	71243.41	MAS = 10.00 (m)	28.00	28.00				MinPt-O-SF	
	2780.60	32.81	2777.70	2747.80	2547.10	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	2347.11	32.81	2333.38	2314.30	196.56	MAS = 10.00 (m)	3000.00	2934.33				MinPt-O-SF	
	2166.86	32.81	2149.67	2134.05	141.96	MAS = 10.00 (m)	4100.00	4002.82				MinPt-O-SF	
	2004.69	32.81	1985.40	1971.88	116.15	MAS = 10.00 (m)	4660.00	4546.78				MinPt-O-SF	
	1004.02	50.04	969.64	953.98	31.96	OSF1.50	7270.00	7082.01				MinPt-O-SF	
	548.90	56.37	509.82	492.53	15.74	OSF1.50	8100.00	7808.72				MinPt-CtCt	
	548.92	56.44	509.80	492.47	15.72	OSF1.50	8110.00	7814.58				MinPts	
	550.21	56.63	510.98	493.58	15.69	OSF1.50	8140.00	7831.49				MinPt-O-SF	
	9919.65	67.12	9874.37	9852.53	227.09	OSF1.50	18206.74	7950.00				TD	
Grande 4-65 20-19 3AH ST1 10516' to 15795' - PR (Def Survey)													Pass
	2781.56	32.81	2779.75	2748.75	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	2781.18	32.81	2779.33	2748.37	71243.41	MAS = 10.00 (m)	28.00	28.00				MinPt-O-SF	
	2780.60	32.81	2777.70	2747.80	2547.10	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	2347.11	32.81	2333.38	2314.30	196.56	MAS = 10.00 (m)	3000.00	2934.33				MinPt-O-SF	
	2166.86	32.81	2149.67	2134.05	141.96	MAS = 10.00 (m)	4100.00	4002.82				MinPt-O-SF	
	2004.69	32.81	1985.40	1971.88	116.15	MAS = 10.00 (m)	4660.00	4546.78				MinPt-O-SF	
	1004.02	50.04	969.64	953.98	31.96	OSF1.50	7270.00	7082.01				MinPt-O-SF	
	548.90	56.37	509.82	492.53	15.74	OSF1.50	8100.00	7808.72				MinPt-CtCt	
	548.92	56.44	509.80	492.47	15.72	OSF1.50	8110.00	7814.58				MinPts	
	550.21	56.63	510.98	493.58	15.69	OSF1.50	8140.00	7831.49				MinPt-O-SF	
	9919.65	67.12	9874.37	9852.53	227.09	OSF1.50	18206.74	7950.00				TD	
Grande 4-65 20-19 3CH Plan #0 (Def Plan)													Pass
	2955.10	32.81	2954.12	2922.29	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	2954.85	32.81	2953.84	2922.04	99691.65	MAS = 10.00 (m)	20.00	20.00				MinPt-O-SF	
	2954.79	32.81	2953.78	2921.98	101186.51	MAS = 10.00 (m)	28.00	28.00				WRP	
	1218.35	60.56	1176.95	1157.80	31.73	OSF1.50	8180.00	7852.42				MinPts	
	1218.38	60.55	1176.98	1157.83	31.73	OSF1.50	8190.00	7857.36				MinPt-O-SF	
	1219.49	60.61	1178.05	1158.88	31.72	OSF1.50	8230.00	7875.91				MinPt-O-SF	
	9950.95	83.62	9894.88	9867.33	180.62	OSF1.50	18206.74	7950.00				TD	
Grande 4-65 20-19 4AH Plan #0 (Def Plan)													Pass
	3004.43	32.81	3003.45	2971.62	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	3004.19	32.81	3003.18	2971.38	107842.21	MAS = 10.00 (m)	20.00	20.00				MinPt-O-SF	
	3004.13	32.81	3003.12	2971.33	111646.13	MAS = 10.00 (m)	28.00	28.00				WRP	
	3003.73	32.81	3001.55	2970.92	2507.15	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	2006.62	52.73	1970.91	1953.90	58.92	OSF1.50	7400.00	7208.89				MinPt-O-SF	
	1896.63	52.28	1861.10	1844.34	56.52	OSF1.50	8240.00	7880.24				MinPts	
	1896.67	52.33	1861.11	1844.34	56.48	OSF1.50	8250.00	7884.45				MinPt-O-ADP	
	2267.79	70.87	2220.21	2196.92	48.65	OSF1.50	9530.00	7950.00				MinPt-O-SF	
	10004.02	100.96	9936.38	9903.06	150.08	OSF1.50	18206.74	7950.00				TD	
Grimm Motocross 4-65 23-24 1H ST1 7232' to 17548' - PR (Def Survey)													Pass

...Sunset 4-65 21-22 2BH\Original Hole\Sunset 4-65 21-22 2BH Plan #0

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	9935.08	32.81	9933.13	9902.27	69668.85	MAS = 10.00 (m)	0.00	0.00				MinPts	
	9935.08	32.81	9933.07	9902.28	48668.84	MAS = 10.00 (m)	28.00	28.00				WRP	
	9935.17	32.81	9931.99	9902.37	7225.38	MAS = 10.00 (m)	270.00	270.00				MINPT-O-EOU	
	10819.17	47.82	10786.76	10771.35	351.08	OSF1.50	6670.00	6499.19				MinPt-O-SF	
	10925.71	52.44	10890.21	10873.27	322.34	OSF1.50	7400.00	7208.89				MinPt-O-SF	
	2331.67	332.60	2107.87	1999.07	10.69	OSF1.50	17750.00	7950.00				MinPt-O-SF	
	2185.32	366.56	1939.19	1818.76	9.05	OSF1.50	18206.74	7950.00				MinPts	

Grimm Motocross 4-65 23-24
1H MWD 0' to 7959' - PR (Def
Survey)

Pass

9935.08	32.81	9933.13	9902.27	69668.85	MAS = 10.00 (m)	0.00	0.00					MinPts	
9935.08	32.81	9933.07	9902.28	48668.84	MAS = 10.00 (m)	28.00	28.00					WRP	
9935.17	32.81	9931.99	9902.37	7225.38	MAS = 10.00 (m)	270.00	270.00					MINPT-O-EOU	
10819.17	47.82	10786.76	10771.35	351.08	OSF1.50	6670.00	6499.19					MinPt-O-SF	
10925.67	52.45	10890.17	10873.22	322.28	OSF1.50	7400.00	7208.89					MinPt-O-SF	
2202.22	369.48	1954.31	1832.77	9.04	OSF1.50	18206.74	7950.00					MinPts	

Sunset 4-65 21-22 4BH Plan #0
(Def Plan)

Pass

3029.29	32.81	3028.30	2996.48	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
3029.05	32.81	3028.04	2996.24	110061.36	MAS = 10.00 (m)	20.00	20.00					MinPt-O-SF	
3029.00	32.81	3027.98	2996.19	114143.25	MAS = 10.00 (m)	28.00	28.00					WRP	
3028.59	32.81	3026.41	2995.78	2531.50	MAS = 10.00 (m)	300.00	300.00					MinPt-O-SF	
2465.92	58.36	2426.57	2407.57	64.84	OSF1.50	7760.00	7552.74					MinPt-O-SF	
2465.71	58.31	2426.39	2407.40	64.89	OSF1.50	7800.00	7587.68					MinPts	
2465.70	58.30	2426.39	2407.40	64.90	OSF1.50	7810.00	7596.25					MinPt-CICt	
2555.37	530.40	2201.34	2024.96	7.24	OSF1.50	18206.74	7950.00					MinPts	

Grande 4-65 20-19 4CH Plan
#0 (Def Plan)

Pass

3053.83	32.81	3052.85	3021.02	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
3053.60	32.81	3052.59	3020.79	111852.63	MAS = 10.00 (m)	20.00	20.00					MinPt-O-SF	
3053.54	32.81	3052.53	3020.73	116001.09	MAS = 10.00 (m)	28.00	28.00					WRP	
3053.14	32.81	3050.96	3020.33	2554.40	MAS = 10.00 (m)	300.00	300.00					MinPt-O-SF	
2531.68	32.81	2514.82	2498.87	161.62	MAS = 10.00 (m)	4050.00	3954.25					MinPts	
2531.72	32.81	2514.79	2498.91	160.94	MAS = 10.00 (m)	4070.00	3973.68					MINPT-O-EOU	
2560.82	55.42	2523.48	2505.40	70.76	OSF1.50	8320.00	7910.38					MinPt-CICt	
2560.84	55.49	2523.46	2505.35	70.67	OSF1.50	8330.00	7913.57					MINPT-O-EOU	
2560.91	55.56	2523.48	2505.35	70.58	OSF1.50	8340.00	7916.63					MinPt-O-ADP	
3136.63	86.41	3078.70	3050.23	55.06	OSF1.50	10150.00	7950.00					MinPt-O-SF	
10185.39	115.40	10108.12	10069.98	133.51	OSF1.50	18206.74	7950.00					TD	

Sunset 4-65 21-22 2BH Plan #0 Proposal Geodetic Report

(Def Plan)

Report Date: May 21, 2020 - 04:17 PM
Client: Crestone Peak Resources
Field: CO, Arapahoe County (NAD 83 CZ)
Structure / Slot: Crestone Peak 21-04S-65W (Grande North Pad) / Sunset 4-65 21-22 2BH
Well: Sunset 4-65 21-22 2BH
Borehole: Original Hole
UWI / API#: Unknown / Unknown
Survey Name: Sunset 4-65 21-22 2BH Plan #0
Survey Date: March 19, 2020
Tort / AHD / DDI / ERD Ratio: 113.318 ° / 12011.572 ft / 6.494 / 1.511
Coordinate Reference System: NAD83 Colorado State Plane, Central Zone, US Feet
Location Lat / Long: N 39° 41' 37.87800", W 104° 40' 31.21680"
Location Grid N/E Y/X: N 1678668.999 ftUS, E 3232062.609 ftUS
CRS Grid Convergence Angle: 0.5201 °
Grid Scale Factor: 0.99998938
Version / Patch: 2.10.810.1

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 97.842 ° (True North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: KB 28ft
TVD Reference Elevation: 5692.900 ft above MSL
Seabed / Ground Elevation: 5664.900 ft above MSL
Magnetic Declination: 8.573 °
Total Gravity Field Strength: 998.9111mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 51550.114 nT
Magnetic Dip Angle: 66.336 °
Declination Date: May 18, 2020
Magnetic Declination Model: HDGM 2020
North Reference: True North
Grid Convergence Used: 0.0000 °
Total Corr Mag North→True North: 8.5733 °
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	0.00	N/A	1678669.00	3232062.61	39.693855	-104.675338
Build 2 DLS	100.00	0.00	224.28	100.00	0.00	0.00	0.00	0.00	1678669.00	3232062.61	39.693855	-104.675338	
	200.00	0.00	224.28	200.00	0.00	0.00	0.00	0.00	1678669.00	3232062.61	39.693855	-104.675338	
	250.00	0.00	224.28	250.00	0.00	0.00	0.00	0.00	1678669.00	3232062.61	39.693855	-104.675338	
	300.00	1.00	224.28	300.00	-0.26	-0.31	-0.30	2.00	1678668.68	3232062.31	39.693854	-104.675339	
	400.00	3.00	224.28	399.93	-2.33	-2.81	-2.74	2.00	1678666.16	3232059.89	39.693847	-104.675348	
	500.00	5.00	224.28	499.68	-6.47	-7.81	-7.61	2.00	1678661.12	3232055.07	39.693834	-104.675365	
	600.00	7.00	224.28	599.13	-12.68	-15.29	-14.91	2.00	1678653.58	3232047.84	39.693813	-104.675391	
Hold	700.00	9.00	224.28	698.15	-20.95	-25.25	-24.62	2.00	1678643.52	3232038.22	39.693786	-104.675425	
	800.00	11.00	224.28	796.63	-31.26	-37.68	-36.75	2.00	1678630.98	3232026.21	39.693752	-104.675469	
	900.00	13.00	224.28	894.44	-43.61	-52.57	-51.26	2.00	1678615.97	3232011.83	39.693711	-104.675520	
	937.38	13.75	224.28	930.80	-48.74	-58.76	-57.30	2.00	1678609.72	3232005.85	39.693694	-104.675542	
	1000.00	13.75	224.28	991.63	-57.58	-69.41	-67.68	0.00	1678598.97	3231995.56	39.693664	-104.675579	
	1100.00	13.75	224.28	1088.76	-71.69	-86.43	-84.28	0.00	1678581.81	3231979.12	39.693618	-104.675637	
	1200.00	13.75	224.28	1185.90	-85.81	-103.44	-100.87	0.00	1678564.64	3231962.69	39.693571	-104.675696	
	1300.00	13.75	224.28	1283.03	-99.92	-120.46	-117.46	0.00	1678547.48	3231946.25	39.693524	-104.675755	
	1400.00	13.75	224.28	1380.17	-114.04	-137.47	-134.05	0.00	1678530.32	3231929.82	39.693478	-104.675814	
	1500.00	13.75	224.28	1477.31	-128.15	-154.49	-150.64	0.00	1678513.15	3231913.38	39.693431	-104.675873	
	1600.00	13.75	224.28	1574.44	-142.26	-171.50	-167.23	0.00	1678495.99	3231896.95	39.693384	-104.675932	
	1700.00	13.75	224.28	1671.58	-156.38	-188.52	-183.82	0.00	1678478.82	3231880.51	39.693337	-104.675991	
	1800.00	13.75	224.28	1768.71	-170.49	-205.53	-200.41	0.00	1678461.66	3231864.07	39.693291	-104.676050	
	1900.00	13.75	224.28	1865.85	-184.61	-222.55	-217.00	0.00	1678444.49	3231847.64	39.693244	-104.676109	
	2000.00	13.75	224.28	1962.98	-198.72	-239.56	-233.59	0.00	1678427.33	3231831.20	39.693197	-104.676168	
	2100.00	13.75	224.28	2060.12	-212.83	-256.58	-250.18	0.00	1678410.16	3231814.77	39.693151	-104.676227	
	2200.00	13.75	224.28	2157.25	-226.95	-273.59	-266.77	0.00	1678393.00	3231798.33	39.693104	-104.676286	
	2300.00	13.75	224.28	2254.39	-241.06	-290.61	-283.36	0.00	1678375.84	3231781.90	39.693057	-104.676345	
	2400.00	13.75	224.28	2351.52	-255.18	-307.62	-299.96	0.00	1678358.67	3231765.46	39.693011	-104.676404	
	2500.00	13.75	224.28	2448.66	-269.29	-324.64	-316.55	0.00	1678341.51	3231749.03	39.692964	-104.676463	
	2600.00	13.75	224.28	2545.79	-283.40	-341.65	-333.14	0.00	1678324.34	3231732.59	39.692917	-104.676522	
	2700.00	13.75	224.28	2642.93	-297.52	-358.67	-349.73	0.00	1678307.18	3231716.16	39.692870	-104.676581	
	2800.00	13.75	224.28	2740.06	-311.63	-375.68	-366.32	0.00	1678290.01	3231699.72	39.692824	-104.676640	
	2900.00	13.75	224.28	2837.20	-325.75	-392.70	-382.91	0.00	1678272.85	3231683.28	39.692777	-104.676699	
	3000.00	13.75	224.28	2934.33	-339.86	-409.71	-399.50	0.00	1678255.68	3231666.85	39.692730	-104.676758	
	3100.00	13.75	224.28	3031.47	-353.97	-426.72	-416.09	0.00	1678238.52	3231650.41	39.692684	-104.676817	
	3200.00	13.75	224.28	3128.60	-368.09	-443.74	-432.68	0.00	1678221.36	3231633.98	39.692637	-104.676876	
	3300.00	13.75	224.28	3225.74	-382.20	-460.75	-449.27	0.00	1678204.19	3231617.54	39.692590	-104.676934	
	3400.00	13.75	224.28	3322.87	-396.32	-477.77	-465.86	0.00	1678187.03	3231601.11	39.692543	-104.676993	
	3500.00	13.75	224.28	3420.01	-410.43	-494.78	-482.45	0.00	1678169.86	3231584.67	39.692497	-104.677052	
	3600.00	13.75	224.28	3517.14	-424.54	-511.80	-499.04	0.00	1678152.70	3231568.24	39.692450	-104.677111	
	3700.00	13.75	224.28	3614.28	-438.66	-528.81	-515.63	0.00	1678135.53	3231551.80	39.692403	-104.677170	
	3800.00	13.75	224.28	3711.41	-452.77	-545.83	-532.23	0.00	1678118.37	3231535.37	39.692357	-104.677229	
	3900.00	13.75	224.28	3808.55	-466.88	-562.84	-548.82	0.00	1678101.20	3231518.93	39.692310	-104.677288	
4000.00	13.75	224.28	3905.69	-481.00	-579.86	-565.41	0.00	1678084.04	3231502.50	39.692263	-104.677347		
4100.00	13.75	224.28	4002.82	-495.11	-596.87	-582.00	0.00	1678066.88	3231486.06	39.692216	-104.677406		
4200.00	13.75	224.28	4099.96	-509.23	-613.89	-598.59	0.00	1678049.71	3231469.62	39.692170	-104.677465		
4300.00	13.75	224.28	4197.09	-523.34	-630.90	-615.18	0.00	1678032.55	3231453.19	39.692123	-104.677524		
4400.00	13.75	224.28	4294.23	-537.45	-647.92	-631.77	0.00	1678015.38	3231436.75	39.692076	-104.677583		
4500.00	13.75	224.28	4391.36	-551.57	-664.93	-648.36	0.00	1677998.22	3231420.32	39.692030	-104.677642		
4600.00	13.75	224.28	4488.50	-565.68	-681.95	-664.95	0.00	1677981.05	3231403.88	39.691983	-104.677701		
4700.00	13.75	224.28	4585.63	-579.80	-698.96	-681.54	0.00	1677963.89	3231387.45	39.691936	-104.677760		
4800.00	13.75	224.28	4682.77	-593.91	-715.98	-698.13	0.00	1677946.72	3231371.01	39.691889	-104.677819		
4900.00	13.75	224.28	4779.90	-608.02	-732.99	-714.72	0.00	1677929.56	3231354.58	39.691843	-104.677878		
5000.00	13.75	224.28	4877.04	-622.14	-750.01	-731.31	0.00	1677912.40	3231338.14	39.691796	-104.677937		
5100.00	13.75	224.28	4974.17	-636.25	-767.02	-747.91	0.00	1677895.23	3231321.71	39.691749	-104.677996		
5200.00	13.75	224.28	5071.31	-650.37	-784.04	-764.50	0.00	1677878.07	3231305.27	39.691703	-104.678055		
5300.00	13.75	224.28	5168.44	-664.48	-801.05	-781.09	0.00	1677860.90	3231288.84	39.691656	-104.678114		
5400.00	13.75	224.28	5265.58	-678.59	-818.06	-797.68	0.00	1677843.74	3231272.40	39.691609	-104.678172		
5500.00	13.75	224.28	5362.71	-692.71	-835.08	-814.27	0.00	1677826.57	3231255.96	39.691562	-104.678231		
5600.00	13.75	224.28	5459.85	-706.82	-852.09	-830.86	0.00	1677809.41	3231239.53	39.691516	-104.678290		
5700.00	13.75	224.28	5556.98	-720.94	-869.11	-847.45	0.00	1677792.24	3231223.09	39.691469	-104.678349		
5800.00	13.75	224.28	5654.12	-735.05	-886.12	-864.04	0.00	1677775.08	3231206.66	39.691422	-104.678408		
5900.00	13.75	224.28	5751.25	-749.16	-903.14	-880.63	0.00	1677757.91	3231190.22	39.691376	-104.678467		
6000.00	13.75	224.28	5848.39	-763.28	-920.15	-897.22	0.00	1677740.75	3231173.79	39.691329	-104.678526		
6100.00	13.75	224.28	5945.52	-777.39	-937.17	-913.81	0.00	1677723.59	3231157.35	39.691282	-104.678585		
6200.00	13.75	224.28	6042.66	-791.51	-954.18	-930.40	0.00	1677706.42	3231140.92	39.691235	-104.678644		
6300.00	13.75	224.28	6139.79	-805.62	-971.20	-946.99	0.00	1677689.26	3231124.48	39.691189	-104.678703		
6400.00	13.75	224.28	6236.93	-819.73	-988.21	-963.58	0.00	1677672.09	3231108.05	39.691142	-104.678762		
6500.00	13.75	224.28	6334.06	-833.85	-1005.23	-980.18	0.00	1677654.93	3231091.61	39.691095	-104.678821		
6600.00	13.75	224.28	6431.20	-847.96	-1022.24	-996.77	0.00	1677637.76	3231075.18	39.691049	-104.678880		
6700.00	13.75	224.28	6528.34	-862.08	-1039.26	-1013.36	0.00	1677620.60	3231058.74	39.691002	-104.678939		
6800.00	13.75	224.28	6625.47	-876.19	-1056.27	-1029.95	0.00	1677603.43	3231042.30	39.690955	-104.678998		
6900.00	13.75	224.28	6722.61	-890.30	-1073.29	-1046.54	0.00	1677586.27	3231025.87	39.690909	-104.679057		
7000.00	13.75	224.28	6819.74	-904.42	-1090.30	-1063.13	0.00	1677569.11	3231009.43	39.690862	-104.679116		
7100.00	13.75	224.28	6916.88	-918.53	-1107.32	-1079.72	0.00	1677551.94	3230993.00	39.690815	-104.679175		
7200.00	13.75	224.28	7014.01	-932.65	-1124.33	-1096.31	0.00	1677534.78	3230976.56	39.690768	-104.679234		
7300.00	13.75	224.28	7111.15	-946.76	-1141.35	-1112.90	0.00	1677517.61	3230960.13	39.690722	-104.679293		

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
KOP, Build/Turn 8 DLS	7316.61	13.75	224.28	7127.28	-949.10	-1144.17	-1115.66	0.00	1677514.76	3230957.40	39.690714	-104.679302
7400.00	10.33	196.26	7208.89	-956.09	-1158.46	-1124.68	8.00	1677500.39	3230948.51	39.690675	-104.679334	
7500.00	11.15	152.50	7307.30	-951.81	-1175.67	-1122.72	8.00	1677483.20	3230950.62	39.690627	-104.679327	
7600.00	16.38	126.41	7404.48	-933.80	-1192.64	-1106.88	8.00	1677466.38	3230966.61	39.690581	-104.679271	
7700.00	23.22	113.96	7498.55	-902.42	-1209.05	-1077.47	8.00	1677450.24	3230996.17	39.690536	-104.679167	
7800.00	30.61	107.10	7587.68	-858.28	-1224.57	-1035.05	8.00	1677435.10	3231038.73	39.690493	-104.679016	
7900.00	38.22	102.74	7670.13	-802.24	-1238.90	-980.45	8.00	1677421.26	3231093.46	39.690454	-104.678822	
8000.00	45.95	99.65	7744.29	-735.38	-1251.77	-914.74	8.00	1677408.99	3231159.28	39.690419	-104.678588	
8100.00	53.75	97.28	7808.72	-659.02	-1262.92	-839.19	8.00	1677398.53	3231234.93	39.690388	-104.678320	
8200.00	61.58	95.34	7862.18	-574.63	-1272.14	-755.28	8.00	1677390.07	3231318.92	39.690363	-104.678022	
8300.00	69.43	93.67	7903.61	-483.86	-1279.24	-664.63	8.00	1677383.79	3231409.63	39.690343	-104.677700	
8400.00	77.30	92.17	7932.21	-388.48	-1284.09	-569.01	8.00	1677379.81	3231505.28	39.690330	-104.677360	
8500.00	85.18	90.76	7947.43	-290.34	-1286.60	-470.29	8.00	1677378.20	3231604.02	39.690323	-104.677009	
TPZ Point, Hold to TD	8561.18	90.00	89.91	7950.00	-229.76	-1286.95	-409.19	8.00	1677378.40	3231665.12	39.690322	-104.676792
8600.00	90.00	89.91	7950.00	-191.31	-1286.89	-370.37	0.00	1677378.81	3231703.94	39.690322	-104.676654	
8700.00	90.00	89.91	7950.00	-92.27	-1286.74	-270.37	0.00	1677379.88	3231803.94	39.690323	-104.676299	
8800.00	90.00	89.91	7950.00	6.78	-1286.58	-170.37	0.00	1677380.94	3231903.93	39.690323	-104.675943	
8900.00	90.00	89.91	7950.00	105.82	-1286.42	-70.37	0.00	1677382.01	3232003.92	39.690323	-104.675588	
9000.00	90.00	89.91	7950.00	204.86	-1286.26	29.63	0.00	1677383.07	3232103.92	39.690324	-104.675233	
9100.00	90.00	89.91	7950.00	303.91	-1286.11	129.63	0.00	1677384.14	3232203.91	39.690324	-104.674877	
9200.00	90.00	89.91	7950.00	402.95	-1285.95	229.63	0.00	1677385.20	3232303.90	39.690325	-104.674522	
9300.00	90.00	89.91	7950.00	501.99	-1285.79	329.63	0.00	1677386.27	3232403.89	39.690325	-104.674167	
9400.00	90.00	89.91	7950.00	601.04	-1285.64	429.63	0.00	1677387.33	3232503.89	39.690326	-104.673811	
9500.00	90.00	89.91	7950.00	700.08	-1285.48	529.63	0.00	1677388.39	3232603.88	39.690326	-104.673456	
9600.00	90.00	89.91	7950.00	799.12	-1285.33	629.63	0.00	1677389.46	3232703.87	39.690326	-104.673101	
9700.00	90.00	89.91	7950.00	898.17	-1285.17	729.63	0.00	1677390.52	3232803.87	39.690327	-104.672745	
9800.00	90.00	89.91	7950.00	997.21	-1285.01	829.63	0.00	1677391.59	3232903.86	39.690327	-104.672390	
9900.00	90.00	89.91	7950.00	1096.25	-1284.86	929.63	0.00	1677392.65	3233003.85	39.690328	-104.672035	
10000.00	90.00	89.91	7950.00	1195.30	-1284.70	1029.63	0.00	1677393.71	3233103.85	39.690328	-104.671679	
10100.00	90.00	89.91	7950.00	1294.34	-1284.55	1129.63	0.00	1677394.78	3233203.84	39.690329	-104.671324	
10200.00	90.00	89.91	7950.00	1393.38	-1284.39	1229.63	0.00	1677395.84	3233303.83	39.690329	-104.670969	
10300.00	90.00	89.91	7950.00	1492.43	-1284.23	1329.63	0.00	1677396.90	3233403.83	39.690329	-104.670613	
10400.00	90.00	89.91	7950.00	1591.47	-1284.08	1429.63	0.00	1677397.97	3233503.82	39.690330	-104.670258	
10500.00	90.00	89.91	7950.00	1690.51	-1283.92	1529.63	0.00	1677399.03	3233603.81	39.690330	-104.669903	
10600.00	90.00	89.91	7950.00	1789.56	-1283.77	1629.63	0.00	1677400.09	3233703.80	39.690331	-104.669547	
10700.00	90.00	89.91	7950.00	1888.60	-1283.61	1729.63	0.00	1677401.16	3233803.80	39.690331	-104.669192	
10800.00	90.00	89.91	7950.00	1987.64	-1283.46	1829.63	0.00	1677402.22	3233903.79	39.690331	-104.668837	
10900.00	90.00	89.91	7950.00	2086.69	-1283.30	1929.63	0.00	1677403.28	3234003.78	39.690332	-104.668481	
11000.00	90.00	89.91	7950.00	2185.73	-1283.15	2029.63	0.00	1677404.35	3234103.78	39.690332	-104.668126	
11100.00	90.00	89.91	7950.00	2284.77	-1282.99	2129.63	0.00	1677405.41	3234203.77	39.690333	-104.667771	
11200.00	90.00	89.91	7950.00	2383.82	-1282.84	2229.63	0.00	1677406.47	3234303.76	39.690333	-104.667415	
11300.00	90.00	89.91	7950.00	2482.86	-1282.68	2329.63	0.00	1677407.53	3234403.75	39.690333	-104.667060	
11400.00	90.00	89.91	7950.00	2581.90	-1282.53	2429.63	0.00	1677408.60	3234503.75	39.690334	-104.666705	
11500.00	90.00	89.91	7950.00	2680.95	-1282.37	2529.63	0.00	1677409.66	3234603.74	39.690334	-104.666349	
11600.00	90.00	89.91	7950.00	2779.99	-1282.22	2629.63	0.00	1677410.72	3234703.74	39.690335	-104.665994	
11700.00	90.00	89.91	7950.00	2879.03	-1282.06	2729.63	0.00	1677411.78	3234803.73	39.690335	-104.665639	
11800.00	90.00	89.91	7950.00	2978.08	-1281.91	2829.63	0.00	1677412.85	3234903.72	39.690335	-104.665283	
11900.00	90.00	89.91	7950.00	3077.12	-1281.75	2929.63	0.00	1677413.91	3235003.71	39.690336	-104.664928	
12000.00	90.00	89.91	7950.00	3176.16	-1281.60	3029.63	0.00	1677414.97	3235103.71	39.690336	-104.664573	
12100.00	90.00	89.91	7950.00	3275.21	-1281.44	3129.63	0.00	1677416.03	3235203.70	39.690337	-104.664217	
12200.00	90.00	89.91	7950.00	3374.25	-1281.29	3229.63	0.00	1677417.09	3235303.69	39.690337	-104.663862	
12300.00	90.00	89.91	7950.00	3473.30	-1281.14	3329.63	0.00	1677418.16	3235403.69	39.690337	-104.663507	
12400.00	90.00	89.91	7950.00	3572.34	-1280.98	3429.63	0.00	1677419.22	3235503.68	39.690338	-104.663151	
12500.00	90.00	89.91	7950.00	3671.38	-1280.83	3529.63	0.00	1677420.28	3235603.67	39.690338	-104.662796	
12600.00	90.00	89.91	7950.00	3770.43	-1280.67	3629.63	0.00	1677421.34	3235703.67	39.690339	-104.662441	
12700.00	90.00	89.91	7950.00	3869.47	-1280.52	3729.63	0.00	1677422.40	3235803.66	39.690339	-104.662085	
12800.00	90.00	89.91	7950.00	3968.51	-1280.37	3829.63	0.00	1677423.46	3235903.65	39.690339	-104.661730	
12900.00	90.00	89.91	7950.00	4067.56	-1280.21	3929.63	0.00	1677424.52	3236003.65	39.690340	-104.661375	
13000.00	90.00	89.91	7950.00	4166.60	-1280.06	4029.63	0.00	1677425.59	3236103.64	39.690340	-104.661019	
13100.00	90.00	89.91	7950.00	4265.64	-1279.91	4129.63	0.00	1677426.65	3236203.63	39.690340	-104.660664	
13200.00	90.00	89.91	7950.00	4364.69	-1279.75	4229.63	0.00	1677427.71	3236303.63	39.690341	-104.660309	
13300.00	90.00	89.91	7950.00	4463.73	-1279.60	4329.63	0.00	1677428.77	3236403.62	39.690341	-104.659953	
13400.00	90.00	89.91	7950.00	4562.78	-1279.45	4429.63	0.00	1677429.83	3236503.61	39.690342	-104.659598	
13500.00	90.00	89.91	7950.00	4661.82	-1279.29	4529.63	0.00	1677430.89	3236603.60	39.690342	-104.659243	
13600.00	90.00	89.91	7950.00	4760.86	-1279.14	4629.63	0.00	1677431.95	3236703.60	39.690342	-104.658887	
13700.00	90.00	89.91	7950.00	4859.91	-1278.99	4729.63	0.00	1677433.01	3236803.59	39.690343	-104.658532	
13800.00	90.00	89.91	7950.00	4958.95	-1278.83	4829.63	0.00	1677434.07	3236903.58	39.690343	-104.658177	
13900.00	90.00	89.91	7950.00	5057.99	-1278.68	4929.63	0.00	1677435.13	3237003.58	39.690343	-104.657821	
14000.00	90.00	89.91	7950.00	5157.04	-1278.53	5029.63	0.00	1677436.19	3237103.57	39.690344	-104.657466	
14100.00	90.00	89.91	7950.00	5256.08	-1278.38	5129.63	0.00	1677437.25	3237203.56	39.690344	-104.657111	
14200.00	90.00	89.91	7950.00	5355.13	-1278.22	5229.63	0.00	1677438.32	3237303.56	39.690345	-104.656755	
14300.00	90.00	89.91	7950.00	5454.17	-1278.07	5329.63	0.00	1677439.38	3237403.55	39.690345	-104.656400	
14400.00	90.00	89.91	7950.00	5553.21	-1277.92	5429.63	0.00	1677440.44	3237503.54	39.690345	-104.656045	
14500.00	90.00	89.91	7950.00	5652.26	-1277.77	5529.63	0.00	1677441.50	3237603.54	39.690346	-104.655689	
14600.00	90.00	89.91	7950.00	5751.30	-1277.61	5629.63	0.00	1677442.56	3237703.53	39.690346	-104.655334	
14700.00	90.00	89.91	7950.00	5850.34	-1277.46	5729.63	0.00	1677443.62	3237803.52	39.690346	-104.654979	
14800.00	90.00	89.91	7950.00	5949.39	-1277.31	5829.63	0.00	1677444.68	3237903.51	39.690347	-104.654623	
14900.00	90.00	89.91	7950.00	6048.43	-1277.16	5929.63	0.00	1677445.74	3238003.51	39.690347	-104.654268	
15000.00	90.00	89.91	7950.00	6147.48	-1277.01	6029.63	0.00	1677446.79	3238103.50	39.690347	-104.653913	
15100.00	90.00	89.91	7950.00	6246.52	-1276.85	6129.63	0.00					

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	17800.00	90.00	89.91	7950.00	8920.71	-1272.78	8829.62	0.00	1677476.43	3240903.31	39.690357	-104.643963
	17900.00	90.00	89.91	7950.00	9019.75	-1272.63	8929.62	0.00	1677477.49	3241003.30	39.690357	-104.643608
	18000.00	90.00	89.91	7950.00	9118.80	-1272.48	9029.62	0.00	1677478.55	3241103.30	39.690357	-104.643253
	18100.00	90.00	89.91	7950.00	9217.84	-1272.33	9129.62	0.00	1677479.61	3241203.29	39.690358	-104.642897
	18200.00	90.00	89.91	7950.00	9316.89	-1272.18	9229.62	0.00	1677480.66	3241303.28	39.690358	-104.642542
Sunset 4-65 21-22 2BH BHL	18206.74	90.00	89.91	7950.00	9323.56	-1272.17	9236.36	0.00	1677480.73	3241310.02	39.690358	-104.642518

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 (in)	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 / Sunset 4-65 21-22 2BH Plan #0
	1	28.000	2200.000	1/100.000	13.500	9.625		NAL_MWD-NON_SLB	Original Hole / Sunset 4-65 21-22 2BH Plan #0
	1	2200.000	18206.738	1/100.000	8.500	5.500		NAL_MWD_PLUS_0.5_DEG	Original Hole / Sunset 4-65 21-22 2BH Plan #0