



Crestone Peak Resources

Schlumberger

Plan 1

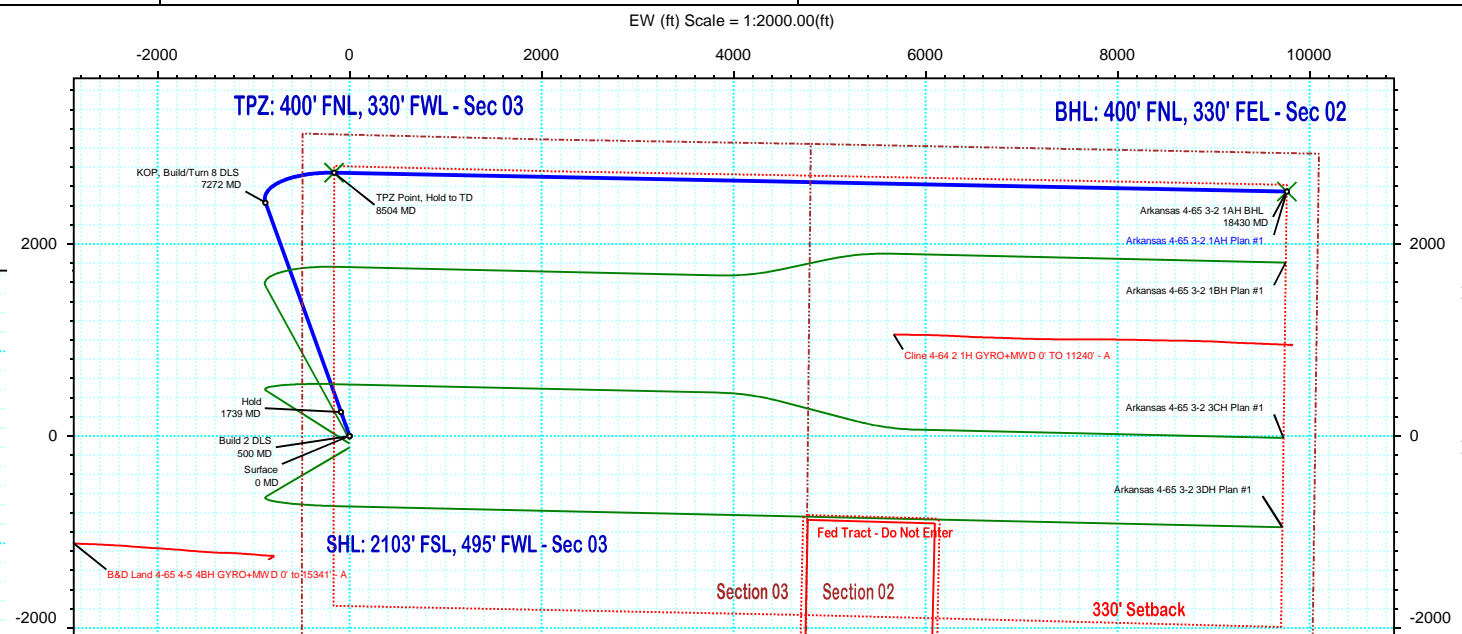
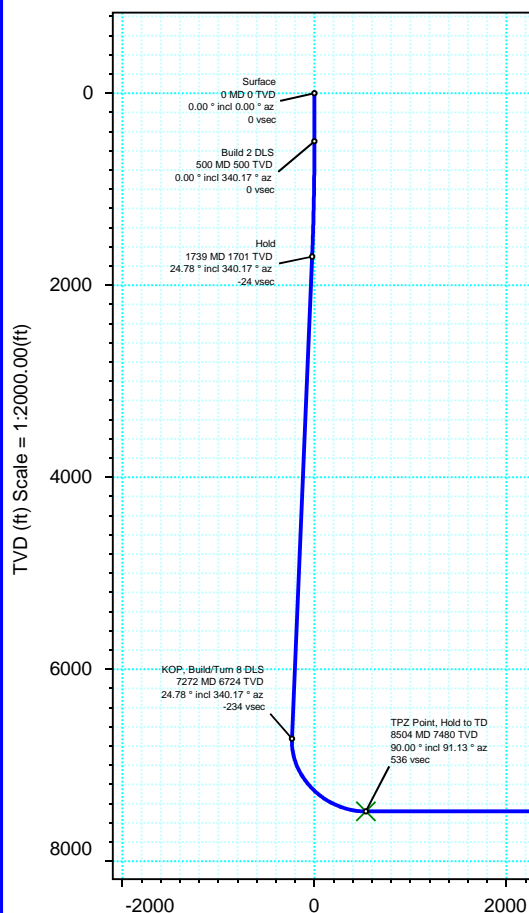
Borehole:	Well:	Field:	Structure:
Original Hole	Arkansas 4-65 3-2 1AH	CO, Arapahoe County (NAD 83 CZ)	Crestone Peak 03-04S-64W (Arkansas 4-65 3-2 Pad)

Gravity & Magnetic Parameters				Surface Location				Miscellaneous			
Model:	HDGM 2021	Dip:	66.356°	Date:	21-Jul-2021	Lat:	N 39 43 48.72	Northing:	1692269.86ftUS	Grid Conv:	0.6029°
MagDec:	8.335°	FS:	51513.47nT	Gravity FS:	998.935mgm (9.80665 Based)	Lon:	W 104 32 38.66	Easting:	3268860.99ftUS	Scale Fact:	0.99999614
								Slot:			
								Arkansas 4-65 3-2 1AH			
								TVD Ref:			
								KB 13ft(5624.2ft above MSL)			
								Plan:			
								Arkansas 4-65 3-2 1AH Plan #1			

Proposal



True North
Tot Corr (M->T 8.335°)
Mag Dec (8.335°)
Grid Conv (0.603°)



Target Description		Surface Location		Grid Coord		Local Coord	
Target Name	Latitude	Longitude	Northing	Easting	TVD	VSec	N(+)/S(-)
Arkansas 4-65 3-2 Pad Sec 2-3	N 39 43 48.72	W 104 32 38.66	1692269.86	3268860.99	5624.20	0.00	0.00
Arkansas 4-65 3-2 Pad - Fed Tract 2 - 50'	N 39 43 48.72	W 104 32 38.66	1692269.86	3268860.99	5624.20	0.00	0.00
Arkansas 4-65 3-2 Pad Sec 2-3 - 330' SB	N 39 43 48.72	W 104 32 38.66	1692269.86	3268860.99	5624.20	0.00	0.00
Arkansas 4-65 3-2 Pad - Fed Tract 2	N 39 43 48.72	W 104 32 38.66	1692269.86	3268860.99	5624.20	0.00	0.00
Arkansas 4-65 3-2 1AH BHL	N 39 44 13.87	W 104 30 33.70	1694918.71	3276595.27	7480.00	10088.30	2546.29
Arkansas 4-65 3-2 1AH TPZ	N 39 44 15.82	W 104 32 40.73	1695009.85	3268670.45	7480.00	535.57	2741.86

Critical Points							
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Build 2 DLS	500.00	0.00	340.17	500.00	0.00	0.00	0.00
Hold	1739.15	24.78	340.17	1700.87	-23.95	248.20	-89.49
KOP, Build/Turn 8 DLS	7271.53	24.78	340.17	6723.73	-234.45	2429.80	-876.10
TPZ Point, Hold to TD	8504.31	90.00	91.13	7480.00	535.57	2741.86	-161.71
Arkansas 4-65 3-2 1AH BHL	18429.62	90.00	91.13	7480.00	10088.30	2546.29	9761.67

Arkansas 4-65 3-2 1AH Plan #1 Proposal Geodetic Report



(Def Plan)

Report Date: July 21, 2021 - 09:50 AM
Client: Crestone Peak Resources
Field: CO, Arapahoe County (NAD 83 CZ)
Structure / Slot: Crestone Peak 03-04S-64W (Arkansas 4-65 3-2 Pad) / Arkansas 4-65 3-2 1AH
Well: Arkansas 4-65 3-2 1AH
Borehole: Original Hole
UWI / API#: Unknown / Unknown
Survey Name: Arkansas 4-65 3-2 1AH Plan #1
Survey Date: July 21, 2021
Tort / AHD / DDI / ERD Ratio: 123.406 ° / 13374.171 ft / 6.609 / 1.788
Coordinate Reference System: NAD83 Colorado State Plane, Central Zone, US Feet
Location Lat / Long: N 39° 43' 48.72360", W 104° 32' 38.65560"
Location Grid N/E Y/X: N 1692269.855 fTUS, E 3268860.995 fTUS
CRS Grid Convergence Angle: 0.6029 °
Grid Scale Factor: 0.99999614
Version / Patch: 2.10.825.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 75.380 ° (True North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: KB 13ft
TVD Reference Elevation: 5624.200 ft above MSL
Seabed / Ground Elevation: 5611.200 ft above MSL
Magnetic Declination: 8.335 °
Total Gravity Field Strength: 998.9352mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 51513.470 nT
Magnetic Dip Angle: 66.356 °
Declination Date: July 21, 2021
Magnetic Declination Model: HDGM 2021
North Reference: True North
Grid Convergence Used: 0.0000 °
Total Corr Mag North->True North: 8.3352 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
Surface	0.00	0.00	0.00	0.00	-5624.20	0.00	0.00	0.00	N/A	16922269.86	3268860.99	39.730201	-104.544071
Build 2 DLS	100.00	0.00	340.17	100.00	-5524.20	0.00	0.00	0.00	0.00	16922269.86	3268860.99	39.730201	-104.544071
	200.00	0.00	340.17	200.00	-5424.20	0.00	0.00	0.00	0.00	16922269.86	3268860.99	39.730201	-104.544071
	300.00	0.00	340.17	300.00	-5324.20	0.00	0.00	0.00	0.00	16922269.86	3268860.99	39.730201	-104.544071
	400.00	0.00	340.17	400.00	-5224.20	0.00	0.00	0.00	0.00	16922269.86	3268860.99	39.730201	-104.544071
	500.00	0.00	340.17	500.00	-5124.20	0.00	0.00	0.00	0.00	16922269.86	3268860.99	39.730201	-104.544071
	600.00	2.00	340.17	599.98	-5024.22	-0.16	1.64	-0.59	2.00	16922271.49	3268860.39	39.730206	-104.544073
	700.00	4.00	340.17	699.84	-4924.36	-0.63	6.56	-2.37	2.00	16922276.39	3268858.56	39.730219	-104.544079
	800.00	6.00	340.17	799.45	-4824.75	-1.42	14.76	-5.32	2.00	16922284.56	3268855.52	39.730242	-104.544090
	900.00	8.00	340.17	898.70	-4725.50	-2.53	26.23	-9.46	2.00	16922295.98	3268851.26	39.730273	-104.544105
	1000.00	10.00	340.17	997.47	-4626.73	-3.95	40.94	-14.76	2.00	1692310.64	3268845.80	39.730313	-104.544123
	1100.00	12.00	340.17	1095.62	-4528.58	-5.68	58.89	-21.23	2.00	1692328.52	3268839.14	39.730363	-104.544146
	1200.00	14.00	340.17	1193.06	-4431.14	-7.72	80.05	-28.86	2.00	1692349.60	3268831.29	39.730421	-104.544174
	1300.00	16.00	340.17	1289.64	-4334.56	-10.07	104.40	-37.64	2.00	1692373.85	3268822.26	39.730488	-104.544205
	1400.00	18.00	340.17	1385.27	-4238.93	-12.73	131.90	-47.56	2.00	1692401.25	3268812.05	39.730563	-104.544240
	1500.00	20.00	340.17	1479.82	-4144.38	-15.68	162.53	-58.60	2.00	1692431.75	3268800.69	39.730647	-104.544279
Hold	1600.00	22.00	340.17	1573.17	-4051.03	-18.93	196.24	-70.76	2.00	1692465.34	3268788.18	39.730740	-104.544323
	1700.00	24.00	340.17	1665.21	-3958.99	-22.48	232.99	-84.01	2.00	1692501.95	3268774.54	39.730841	-104.544370
	1739.15	24.78	340.17	1700.87	-3923.33	-23.95	248.20	-89.49	2.00	1692517.10	3268768.90	39.730882	-104.544389
	1800.00	24.78	340.17	1756.12	-3868.08	-26.26	272.20	-98.14	0.00	1692541.00	3268759.99	39.730948	-104.544420
	1900.00	24.78	340.17	1846.91	-3777.29	-30.07	311.63	-112.36	0.00	1692580.28	3268745.36	39.731056	-104.544470
	2000.00	24.78	340.17	1937.70	-3686.50	-33.87	351.06	-126.58	0.00	1692619.56	3268730.73	39.731165	-104.544521
	2100.00	24.78	340.17	2028.49	-3595.71	-37.68	390.50	-140.80	0.00	1692658.85	3268716.10	39.731273	-104.544572
	2200.00	24.78	340.17	2119.28	-3504.92	-41.48	429.93	-155.02	0.00	1692698.13	3268701.46	39.731381	-104.544622
	2300.00	24.78	340.17	2210.07	-3414.13	-45.29	469.36	-169.24	0.00	1692737.41	3268686.83	39.731490	-104.544673
	2400.00	24.78	340.17	2300.86	-3323.34	-49.09	508.80	-183.45	0.00	1692776.69	3268672.20	39.731598	-104.544723
	2500.00	24.78	340.17	2391.65	-3232.55	-52.90	548.23	-197.67	0.00	1692815.97	3268657.57	39.731706	-104.544774
	2600.00	24.78	340.17	2482.44	-3141.76	-56.70	587.66	-211.89	0.00	1692855.25	3268642.93	39.731814	-104.544824
	2700.00	24.78	340.17	2573.23	-3050.97	-60.51	627.10	-226.11	0.00	1692894.53	3268628.30	39.731923	-104.544875
	2800.00	24.78	340.17	2664.02	-2960.18	-64.31	666.53	-240.33	0.00	1692933.81	3268613.67	39.732031	-104.544925
	2900.00	24.78	340.17	2754.81	-2869.39	-68.12	705.96	-254.54	0.00	1692973.10	3268599.04	39.732139	-104.544976
	3000.00	24.78	340.17	2845.60	-2778.60	-71.92	745.40	-268.76	0.00	1693012.38	3268584.41	39.732247	-104.545027
	3100.00	24.78	340.17	2936.39	-2687.81	-75.73	784.83	-282.98	0.00	1693051.66	3268569.77	39.732356	-104.545077
	3200.00	24.78	340.17	3027.18	-2597.02	-79.53	824.26	-297.20	0.00	1693090.94	3268555.14	39.732464	-104.545128
	3300.00	24.78	340.17	3117.97	-2506.23	-83.34	863.70	-311.42	0.00	1693130.22	3268540.51	39.732572	-104.545178
	3400.00	24.78	340.17	3208.76	-2415.44	-87.14	903.13	-325.64	0.00	1693169.50	3268525.88	39.732680	-104.545229
	3500.00	24.78	340.17	3299.55	-2324.65	-90.95	942.56	-339.85	0.00	1693208.78	3268511.24	39.732789	-104.545279
	3600.00	24.78	340.17	3390.34	-2233.86	-94.75	982.00	-354.07	0.00	1693248.07	3268496.61	39.732897	-104.545330
	3700.00	24.78	340.17	3481.13	-2143.07	-98.56	1021.43	-368.29	0.00	1693287.35	3268481.98	39.733005	-104.545380
	3800.00	24.78	340.17	3571.92	-2052.28	-102.36	1060.86	-382.51	0.00	1693326.63	3268467.35	39.733113	-104.545431
	3900.00	24.78	340.17	3662.71	-1961.49	-106.17	1100.30	-396.73	0.00	1693365.91	3268452.71	39.733222	-104.545482
	4000.00	24.78	340.17	3753.50	-1870.70	-109.97	1139.73	-410.95	0.00	1693405.19	3268438.08	39.733330	-104.545532
	4100.00	24.78	340.17	3844.29	-1779.91	-113.78	1179.16	-425.16	0.00	1693444.47	3268423.45	39.733438	-104.545583
	4200.00	24.78	340.17	3935.08	-1689.12	-117.58	1218.60	-439.38	0.00	1693483.75	3268408.82	39.733546	-104.545633
	4300.00	24.78	340.17	4025.87	-1598.33	-121.39	1258.03	-453.60	0.00	1693523.03	3268394.19	39.733655	-104.545684
	4400.00	24.78	340.17	4116.66	-1507.54	-125.19	1297.46	-467.82	0.00	1693562.32	3268379.55	39.733763	-104.545734
	4500.00	24.78	340.17	4207.45	-1416.75	-129.00	1336.90	-482.04	0.00	1693601.60	3268364.92	39.733871	-104.545785
	4600.00	24.78	340.17	4298.24	-1325.96	-132.80	1376.33	-496.25	0.00	1693640.88	3268350.29	39.733979	-104.545835
	4700.00	24.78	340.17	4389.03	-1235.17	-136.61	1415.76	-510.47	0.00	1693680.16	3268335.66	39.734088	-104.545886
	4800.00	24.78	340.17	4479.82	-1144.38	-140.41	1455.20	-524.69	0.00	1693719.44	3268321.02	39.734196	-104.545937
	4900.00	24.78	340.17	4570.61	-1053.59	-144.22	1494.63	-538.91	0.00	1693758.72	3268306.39	39.734304	-104.545987
	5000.00	24.78	340.17	4661.40	-962.80	-148.02	1534.06	-553.13	0.00	1693798.00	3268291.76	39.734412	-104.546038
	5100.00	24.78	340.17	4752.19	-872.01	-151.83	1573.50	-567.35	0.00	1693837.28	3268277.13	39.734521	-104.546088
	5200.00	24.78	340.17	4842.98	-781.22	-155.63	1612.93	-581.56	0.00	1693876.57	3268262.50	39.734629	-104.546139
	5300.00	24.78	340.17	4933.77	-690.43	-159.44	1652.36	-595.78	0.00	1693915.85	3268247.86	39.734737	-104.546189
	5400.00	24.78	340.17	5024.56	-599.64	-163.24	1691.80	-610.00	0.00	1693955.13	3268233.23	39.734845	-104.546240
	5500.00	24.78	340.17	5115.35	-508.85	-167.04	1731.23	-624.22	0.00	1693994.41	3268218.60	39.734954	-104.546290
	5600.00	24.78	340.17	5206.14	-418.06	-170.85	1770.66	-638.44	0.00	1694033.69	3268203.97	39.735062	-104.546341
	5700.00	24.78	340.17	5296.93	-327.27	-174.65	1810.10	-652.65	0.00	1694072.97	3268189.33	39.735170	-104.546392
	5800.00	24.78	340.17	5387.72	-236.48	-178.46	1849.53	-666.87	0.00	1694112.25	3268174.70	39.735278	-104.546442
	5900.00	24.78	340.17	5478.51	-145.69	-182.26	1888.96	-681.09	0.00	1694151.53	3268160.07	39.735387	-104.546493
6000.00	24.78	340.17	5569.30	-54.90	-186.07	1928.40	-695.31	0.00	1694190.82	3268145.44	39.735495	-104.546544	
6100.00	24.78	340.17	5660.09	35.89	-189.87	1967.83	-709.53	0.00	1694230.10	3268130.80	39.735603	-104.546594	
6200.00	24.78	340.17	5750.88	126.68	-193.68	2007.26	-723.75	0.00	1694269.38	3268116.17	39.735711	-104.546644	
6300.00	24.78	340.17	5841.67	217.47	-197.48	2046.70	-737.96	0.00	1694308.66	3268101.54	39.735820	-104.546695	
6400.00	24.78	340.17	5932.46	308.26	-201.29	2086.13	-752.18	0.00	1694347.94	3268086.91	39.735928	-104.546746	
6500.00	24.78	340.17	6023.25	399.05	-205.09	2125.56	-766.40	0.00	1694387.22	3268072.28	39.736036	-104.546796	
6600.00	24.78	340.17	6114.04	489.84	-208.90	2164.99	-780.62	0.00	1694426.50	3268057.64	39.736144	-104.546847	
6700.00	24.78	340.17	6204.83	580.63	-212.70	2204.43	-794.84	0.00	1694465.79	32			

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
TPZ Point, Hold to TD	8300.00	75.02	84.51	7453.42	1829.22	338.48	2734.38	-363.45	8.00	1695000.24	3268468.80	39.737707	-104.545363
	8400.00	82.34	87.81	7473.04	1848.84	434.72	2740.91	-265.69	8.00	1695007.80	3268566.48	39.737725	-104.545016
	8500.00	89.68	90.99	7479.99	1855.79	531.42	2741.94	-166.02	8.00	1695009.88	3268666.13	39.737728	-104.544661
	8504.31	90.00	91.13	7480.00	1855.80	535.57	2741.86	-161.71	8.00	1695009.85	3268670.45	39.737728	-104.544646
	8600.00	90.00	91.13	7480.00	1855.80	627.67	2739.98	-66.04	0.00	1695008.97	3268766.13	39.737723	-104.544306
	8700.00	90.00	91.13	7480.00	1855.80	723.92	2738.01	33.94	0.00	1695008.05	3268866.12	39.737717	-104.543950
	8800.00	90.00	91.13	7480.00	1855.80	820.16	2736.04	133.92	0.00	1695007.13	3268966.12	39.737712	-104.543595
	8900.00	90.00	91.13	7480.00	1855.80	916.41	2734.07	233.90	0.00	1695006.22	3269066.11	39.737707	-104.543239
	9000.00	90.00	91.13	7480.00	1855.80	1012.65	2732.10	333.88	0.00	1695005.30	3269166.11	39.737701	-104.542884
	9100.00	90.00	91.13	7480.00	1855.80	1108.90	2730.13	433.86	0.00	1695004.38	3269266.10	39.737696	-104.542528
	9200.00	90.00	91.13	7480.00	1855.80	1205.15	2728.16	533.84	0.00	1695003.46	3269366.10	39.737690	-104.542173
	9300.00	90.00	91.13	7480.00	1855.80	1301.39	2726.19	633.82	0.00	1695002.54	3269466.09	39.737685	-104.541817
	9400.00	90.00	91.13	7480.00	1855.80	1397.64	2724.21	733.80	0.00	1695001.62	3269566.09	39.737680	-104.541462
	9500.00	90.00	91.13	7480.00	1855.80	1493.88	2722.24	833.78	0.00	1695000.71	3269666.08	39.737674	-104.541106
	9600.00	90.00	91.13	7480.00	1855.80	1590.13	2720.27	933.76	0.00	1694999.79	3269766.08	39.737669	-104.540751
	9700.00	90.00	91.13	7480.00	1855.80	1686.38	2718.30	1033.75	0.00	1694998.87	3269866.07	39.737663	-104.540395
	9800.00	90.00	91.13	7480.00	1855.80	1782.62	2716.33	1133.73	0.00	1694997.95	3269966.07	39.737658	-104.540040
	9900.00	90.00	91.13	7480.00	1855.80	1878.87	2714.36	1233.71	0.00	1694997.03	3270066.06	39.737652	-104.539684
	10000.00	90.00	91.13	7480.00	1855.80	1975.12	2712.39	1333.69	0.00	1694996.11	3270166.06	39.737647	-104.539329
10100.00	90.00	91.13	7480.00	1855.80	2071.36	2710.42	1433.67	0.00	1694995.20	3270266.06	39.737642	-104.538973	
10200.00	90.00	91.13	7480.00	1855.80	2167.61	2708.45	1533.65	0.00	1694994.28	3270366.05	39.737636	-104.538618	
10300.00	90.00	91.13	7480.00	1855.80	2263.85	2706.48	1633.63	0.00	1694993.36	3270466.05	39.737631	-104.538262	
10400.00	90.00	91.13	7480.00	1855.80	2360.10	2704.51	1733.61	0.00	1694992.44	3270566.04	39.737625	-104.537907	
10500.00	90.00	91.13	7480.00	1855.80	2456.35	2702.54	1833.59	0.00	1694991.52	3270666.04	39.737620	-104.537551	
10600.00	90.00	91.13	7480.00	1855.80	2552.59	2700.57	1933.57	0.00	1694990.61	3270766.03	39.737614	-104.537196	
10700.00	90.00	91.13	7480.00	1855.80	2648.84	2698.60	2033.55	0.00	1694989.69	3270866.03	39.737609	-104.536840	
10800.00	90.00	91.13	7480.00	1855.80	2745.08	2696.63	2133.53	0.00	1694988.77	3270966.02	39.737604	-104.536485	
10900.00	90.00	91.13	7480.00	1855.80	2841.33	2694.66	2233.51	0.00	1694987.85	3271066.02	39.737598	-104.536129	
11000.00	90.00	91.13	7480.00	1855.80	2937.58	2692.69	2333.49	0.00	1694986.93	3271166.01	39.737593	-104.535774	
11100.00	90.00	91.13	7480.00	1855.80	3033.82	2690.72	2433.47	0.00	1694986.01	3271266.01	39.737587	-104.535418	
11200.00	90.00	91.13	7480.00	1855.80	3130.07	2688.75	2533.45	0.00	1694985.10	3271366.00	39.737582	-104.535063	
11300.00	90.00	91.13	7480.00	1855.80	3226.32	2686.78	2633.43	0.00	1694984.18	3271466.00	39.737576	-104.534707	
11400.00	90.00	91.13	7480.00	1855.80	3322.56	2684.81	2733.42	0.00	1694983.26	3271565.99	39.737571	-104.534352	
11500.00	90.00	91.13	7480.00	1855.80	3418.81	2682.84	2833.40	0.00	1694982.34	3271665.99	39.737566	-104.533996	
11600.00	90.00	91.13	7480.00	1855.80	3515.05	2680.87	2933.38	0.00	1694981.42	3271765.98	39.737560	-104.533641	
11700.00	90.00	91.13	7480.00	1855.80	3611.30	2678.89	3033.36	0.00	1694980.50	3271865.98	39.737555	-104.533285	
11800.00	90.00	91.13	7480.00	1855.80	3707.55	2676.92	3133.34	0.00	1694979.59	3271965.97	39.737549	-104.532930	
11900.00	90.00	91.13	7480.00	1855.80	3803.79	2674.95	3233.32	0.00	1694978.67	3272065.97	39.737544	-104.532574	
12000.00	90.00	91.13	7480.00	1855.80	3900.04	2672.98	3333.30	0.00	1694977.75	3272165.96	39.737538	-104.532219	
12100.00	90.00	91.13	7480.00	1855.80	3996.28	2671.01	3433.28	0.00	1694976.83	3272265.96	39.737533	-104.531863	
12200.00	90.00	91.13	7480.00	1855.80	4092.53	2669.04	3533.26	0.00	1694975.91	3272365.95	39.737527	-104.531508	
12300.00	90.00	91.13	7480.00	1855.80	4188.78	2667.07	3633.24	0.00	1694974.99	3272465.95	39.737522	-104.531152	
12400.00	90.00	91.13	7480.00	1855.80	4285.02	2665.10	3733.22	0.00	1694974.08	3272565.94	39.737517	-104.530797	
12500.00	90.00	91.13	7480.00	1855.80	4381.27	2663.13	3833.20	0.00	1694973.16	3272665.94	39.737511	-104.530441	
12600.00	90.00	91.13	7480.00	1855.80	4477.52	2661.16	3933.18	0.00	1694972.24	3272765.94	39.737506	-104.530086	
12700.00	90.00	91.13	7480.00	1855.80	4573.76	2659.19	4033.16	0.00	1694971.32	3272865.93	39.737500	-104.529730	
12800.00	90.00	91.13	7480.00	1855.80	4670.01	2657.22	4133.14	0.00	1694970.40	3272965.93	39.737495	-104.529375	
12900.00	90.00	91.13	7480.00	1855.80	4766.25	2655.25	4233.12	0.00	1694969.48	3273065.92	39.737489	-104.529019	
13000.00	90.00	91.13	7480.00	1855.80	4862.50	2653.28	4333.10	0.00	1694968.57	3273165.92	39.737484	-104.528664	
13100.00	90.00	91.13	7480.00	1855.80	4958.75	2651.31	4433.09	0.00	1694967.65	3273265.91	39.737478	-104.528308	
13200.00	90.00	91.13	7480.00	1855.80	5054.99	2649.34	4533.07	0.00	1694966.73	3273365.91	39.737473	-104.527953	
13300.00	90.00	91.13	7480.00	1855.80	5151.24	2647.37	4633.05	0.00	1694965.81	3273465.90	39.737467	-104.527597	
13400.00	90.00	91.13	7480.00	1855.80	5247.48	2645.40	4733.03	0.00	1694964.89	3273565.90	39.737462	-104.527242	
13500.00	90.00	91.13	7480.00	1855.80	5343.73	2643.43	4833.01	0.00	1694963.97	3273665.89	39.737457	-104.526886	
13600.00	90.00	91.13	7480.00	1855.80	5439.98	2641.46	4932.99	0.00	1694963.06	3273765.89	39.737451	-104.526530	
13700.00	90.00	91.13	7480.00	1855.80	5536.22	2639.49	5032.97	0.00	1694962.14	3273865.88	39.737446	-104.526175	
13800.00	90.00	91.13	7480.00	1855.80	5632.47	2637.52	5132.95	0.00	1694961.22	3273965.88	39.737440	-104.525819	
13900.00	90.00	91.13	7480.00	1855.80	5728.72	2635.55	5232.93	0.00	1694960.30	3274065.87	39.737435	-104.525464	
14000.00	90.00	91.13	7480.00	1855.80	5824.96	2633.58	5332.91	0.00	1694959.38	3274165.87	39.737429	-104.525108	
14100.00	90.00	91.13	7480.00	1855.80	5921.21	2631.60	5432.89	0.00	1694958.47	3274265.86	39.737424	-104.524753	
14200.00	90.00	91.13	7480.00	1855.80	6017.45	2629.63	5532.87	0.00	1694957.55	3274365.86	39.737418	-104.524397	
14300.00	90.00	91.13	7480.00	1855.80	6113.70	2627.66	5632.85	0.00	1694956.63	3274465.85	39.737413	-104.524042	
14400.00	90.00	91											

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
		1	0.000	13.000	1/100.000	13.500	9.625		NAL_MWD-NON_SLB-Depth Only		Original Hole / Arkansas 4-65 3-2 1AH Plan #1		
		1	13.000	2200.000	1/100.000	13.500	9.625		NAL_MWD-NON_SLB		Original Hole / Arkansas 4-65 3-2 1AH Plan #1		
		1	2200.000	18429.619	1/100.000	8.500	5.500		NAL_MWD_PLUS_0.5_DEG		Original Hole / Arkansas 4-65 3-2 1AH Plan #1		

Arkansas 4-65 3-2 1AH Plan #1 Anti-Collision Summary Report

Analysis Date-24hr Time: July 21, 2021 - 09:51
Client: Crestone Peak Resources
Field: CO, Arapahoe County (NAD 83 CZ)

Analysis Method: 3D Least Distance
Reference Trajectory: Arkansas 4-65 3-2 1AH Plan #1 (Def Plan)
Depth Interval: Every 10.00 Measured Depth (ft)

Structure: Crestone Peak 03-04S-64W (Arkansas 4-65 3-2 Pad)
Slot: Arkansas 4-65 3-2 1AH
Well: Arkansas 4-65 3-2 1AH
Borehole: Original Hole
Scan MD Range: 0.00ft - 18429.62ft

Rule Set: NAL Procedure: D&M AntiCollision Standard S002
Min Pts: All local minima indicated.
Version / Patch: 2.10.825.0
Database \ Project: localhost\drilling-Colorado

Trajectory Error Model: ISCWSA0 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		

Results highlighted: Sep-Factor separation <= 1.50 ft

Arkansas 4-65 3-2 1BH Plan #1
(Def Plan)

Fail Minor

39.71	31.96	38.72	7.75	N/A	MAS = 9.74 (m)	0.00	0.00	ClCt<=15m<15.00				Enter Alert	
39.71	31.96	38.72	7.75	174291.18	MAS = 9.74 (m)	13.00	13.00					WRP	
39.71	31.96	35.95	7.75	13.89	MAS = 9.74 (m)	500.00	500.00					MinPts	
40.65	31.96	34.99	8.69	8.47	MAS = 9.74 (m)	810.00	809.40					MINPT-O-EOU	
48.93	31.96	38.87	16.97	5.28	MAS = 9.74 (m)	1320.00	1308.85	ClCt<=15m>15.00				Exit Alert	
51.56	31.96	40.46	19.60	5.00	MAS = 9.74 (m)	1400.00	1385.27	OSF<5.00				Enter Alert	
56.33	31.96	44.02	24.37	4.89	MAS = 9.74 (m)	1490.00	1470.41					MinPt-O-SF	
64.00	31.96	50.39	32.05	4.99	MAS = 9.74 (m)	1590.00	1563.89	OSF>5.00				Exit Alert	
818.00	89.30	758.13	728.70	13.88	OSF1.50	7070.00	6540.76					MinPt-O-SF	
982.56	83.84	926.34	898.73	17.77	OSF1.50	8510.00	7480.00					MinPt-ClCt	
992.29	298.74	792.80	693.55	4.99	OSF1.50	12220.00	7480.00	OSF<5.00				Enter Alert	
732.36	448.66	432.93	283.71	2.45	OSF1.50	14310.00	7480.00					MinPt-ClCt	
742.93	743.33	247.04	-0.41	1.50	OSF1.50	18340.00	7480.00	OSF<1.50				Enter Minor	
743.16	749.92	242.89	-6.76	1.49	OSF1.50	18429.62	7480.00					MinPts	

Cline 4-64 2 1H GYRO+MWD
0' TO 11240' - A (Def Survey)

Warning Alert

9412.95	85.23	9355.52	9327.72	169.22	OSF1.50	0.00	0.00					Surface	
9402.68	85.40	9345.14	9317.28	168.71	OSF1.50	13.00	13.00					WRP	
8430.14	82.15	8374.77	8347.99	157.37	OSF1.50	1320.00	1308.85					MinPt-O-SF	
6674.08	107.89	6600.68	6566.19	96.68	OSF1.50	6450.00	5977.86					MinPt-ClCt	
6674.68	109.70	6600.06	6564.97	95.05	OSF1.50	6540.00	6059.57					MINPT-O-EOU	
6675.53	110.72	6600.24	6564.82	94.16	OSF1.50	6590.00	6104.97					MinPt-O-ADP	
1572.41	467.29	1260.35	1105.13	5.08	OSF1.50	14350.00	7480.00					MinPt-O-SF	
1572.35	467.22	1260.33	1105.12	5.06	OSF1.50	14360.00	7480.00					MinPts	
1571.05	459.41	1264.25	1111.65	5.14	OSF1.50	14720.00	7480.00					MinPt-ClCt	
1589.92	452.33	1287.83	1137.59	5.29	OSF1.50	15920.00	7480.00					MinPt-ClCt	
1580.40	466.77	1268.68	1113.62	5.09	OSF1.50	16820.00	7480.00					MinPt-ClCt	
1581.08	475.65	1263.44	1105.43	5.00	OSF1.50	17130.00	7480.00	OSF<5.00				Enter Alert	
1579.48	484.18	1256.16	1095.30	4.90	OSF1.50	17390.00	7480.00					MinPt-ClCt	
1581.47	494.19	1251.47	1087.28	4.81	OSF1.50	17680.00	7480.00					MINPT-O-EOU	
1582.62	495.77	1251.57	1086.85	4.80	OSF1.50	17730.00	7480.00					MINPT-O-EOU	
1587.82	502.19	1252.50	1085.64	4.75	OSF1.50	17900.00	7480.00					MinPt-O-ADP	
1590.37	507.06	1251.80	1083.31	4.71	OSF1.50	17980.00	7480.00					MINPT-O-EOU	
1590.81	507.57	1251.90	1083.25	4.71	OSF1.50	18000.00	7480.00					MinPt-O-ADP	
1592.60	509.59	1252.34	1083.01	4.70	OSF1.50	18060.00	7480.00					MINPT-O-EOU	
1593.78	511.15	1252.48	1082.64	4.69	OSF1.50	18100.00	7480.00					MinPt-O-ADP	
1596.28	512.65	1253.98	1083.64	4.68	OSF1.50	18170.00	7480.00					MinPt-O-SF	
1617.08	513.31	1274.34	1103.78	4.74	OSF1.50	18429.62	7480.00					TD	

Arkansas 4-65 3-2 3CH Plan #1
(Def Plan)

Pass

79.78	32.81	78.79	46.97	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
79.78	32.81	78.79	46.97	N/A	MAS = 10.00 (m)	13.00	13.00					WRP	
79.78	32.81	76.00	46.97	28.27	MAS = 10.00 (m)	500.00	500.00					MinPts	
79.84	32.81	75.95	47.03	27.09	MAS = 10.00 (m)	520.00	520.00					MINPT-O-EOU	
103.78	32.81	97.61	70.97	19.83	MAS = 10.00 (m)	880.00	878.89					MinPt-O-SF	
1854.46	82.09	1799.41	1772.38	34.26	OSF1.50	6990.00	6468.13					MinPt-O-SF	
2201.25	75.03	2150.91	2126.23	44.57	OSF1.50	8530.00	7480.00					MinPt-ClCt	
2213.81	323.40	1997.88	1890.41	10.29	OSF1.50	12680.00	7480.00					MINPT-O-EOU	
2216.26	326.31	1998.38	1889.95	10.21	OSF1.50	12750.00	7480.00					MinPt-O-ADP	
2313.80	355.33	2076.58	1958.47	9.79	OSF1.50	13560.00	7480.00					MinPt-O-SF	
2567.13	748.64	2067.71	1818.49	5.15	OSF1.50	18429.62	7480.00					MinPts	

Arkansas 4-65 3-2 3DH Plan #1
(Def Plan)

Pass

119.85	32.81	118.86	87.04	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
119.85	32.81	118.86	87.04	N/A	MAS = 10.00 (m)	13.00	13.00					WRP	
119.85	32.81	116.07	87.04	42.66	MAS = 10.00 (m)	500.00	500.00					MinPts	
119.91	32.81	116.02	87.10	40.86	MAS = 10.00 (m)	520.00	520.00					MINPT-O-EOU	
161.44	32.81	154.49	128.63	26.90	MAS = 10.00 (m)	1000.00	997.47					MinPt-O-SF	
3049.99	78.16	2997.55	2971.83	59.26	OSF1.50	7271.53	6723.73					MinPt-O-SF	
3497.85	748.44	2998.56	2749.41	7.02	OSF1.50	18429.62	7480.00					MinPts	

B&D Land 4-65 4-5 4BH
GYRO+MWD 0' to 15341' - A
(Def Survey)

Pass

1532.10	32.81	1530.29	1499.29	N/A	MAS = 10.00 (m)	0.00	0.00					MinPts	
1532.10	32.81	1530.28	1499.29	125962.72	MAS = 10.00 (m)	13.00	13.00					WRP	
1532.19	32.81	1530.22	1499.38	10071.38	MAS = 10.00 (m)	60.00	60.00					MINPT-O-EOU	
1532.66	32.81	1530.23	1499.85	2510.83	MAS = 10.00 (m)	150.00	150.00					MINPT-O-EOU	
1534.73	32.81	1530.64	1501.92	674.80	MAS = 10.00 (m)	510.00	510.00					MINPT-O-EOU	
3680.76	65.51	3636.56	3615.26	86.38	OSF1.50	7271.53	6723.73					MinPt-O-SF	
3714.95	66.28	3670.23	3648.67	86.12	OSF1.50	7360.00	6804.60					MinPt-O-SF	
3804.52	69.82	3757.44	3734.70	83.62	OSF1.50	7600.00	7021.79					MinPt-O-SF	
3834.31	70.34	3786.89	3763.97	83.64	OSF1.50	7690.00	7098.76					MinPt-O-SF	
4112.54	67.42	4067.06	4045.12	93.69	OSF1.50	8770.00	7480.00					MinPt-O-SF	

...Arkansas 4-65 3-2 1AH\Original Hole\Arkansas 4-65 3-2 1AH Plan #1

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		
	5349.51	105.62	5278.57	5243.89	77.12	OSF1.50	11460.00	7480.00					MinPt-O-SF
	5382.43	106.25	5311.07	5276.19	77.13	OSF1.50	11510.00	7480.00					MinPt-O-SF
	11225.52	143.44	11129.35	11082.07	118.70	OSF1.50	18429.62	7480.00					TD