



# Crestone Peak Resources



## Plan 0

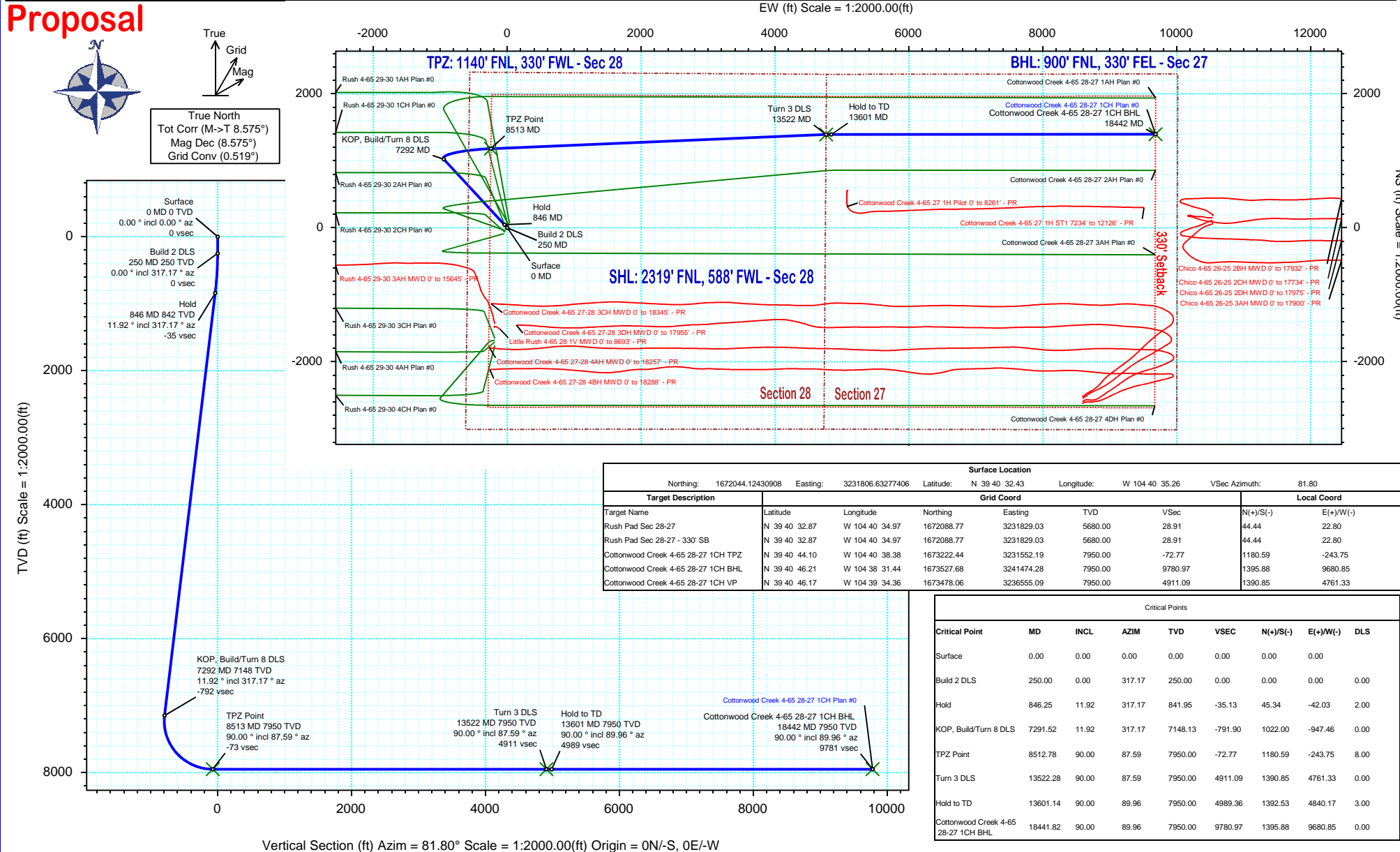
<b>Borehole:</b> Original Hole	<b>Well:</b> Cottonwood Creek 4-65 28-27 1CH	<b>Field:</b> CO, Arapahoe County (NAD 83 CZ)	<b>Structure:</b> Crestone Peak 28-04S-65W (Rush North Pad)
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<b>Gravity &amp; Magnetic Parameters</b>		<b>Surface Location</b> NAD83 Colorado State Plane, Central Zone, US Feet			<b>Miscellaneous</b>		
Model: HDGM 2020	Dip: 66.345°	Date: 22-Jun-2020	Lat: N 39 40 32.43	Northing: 1672044.12ftUS	Grid Conv: 0.5194°	Slot: Cottonwood Creek 4-65 28-27 1CH	TVD Ref: KB 28ft(5680ft above MSL)
MagDec: 8.575°	FS: 51550.456nT	Gravity FS: 998.915mgn (9.80665 Based)	Lon: W 104 40 35.26	Easting: 3231806.63ftUS	Scale Fact: 0.99998614	Plan: Cottonwood Creek 4-65 28-27 1CH Plan #0	

### Proposal



True North  
Tot Corr (M->T 8.575°)  
Mag Dec (8.575°)  
Grid Conv (0.519°)



Target Description		Surface Location			VSec Azimuth: 81.80			
Target Name	Latitude	Longitude	Northing	Easting	TVD	VSec	N(+)/S(-)	E(+)/W(-)
Rush Pad Sec 28-27	N 39 40 32.87	W 104 40 34.97	1672088.77	3231829.03	5680.00	28.91	44.44	22.80
Rush Pad Sec 28-27 - 330' SB	N 39 40 32.87	W 104 40 34.97	1672088.77	3231829.03	5680.00	28.91	44.44	22.80
Cottonwood Creek 4-65 28-27 1CH TPZ	N 39 40 44.10	W 104 40 38.38	1673222.44	3231552.19	7950.00	-72.77	1180.59	-243.75
Cottonwood Creek 4-65 28-27 1CH BHL	N 39 40 46.21	W 104 38 31.44	1673527.68	3241474.28	7950.00	9780.97	1395.88	9680.85
Cottonwood Creek 4-65 28-27 1CH VP	N 39 40 46.17	W 104 39 34.36	1673478.06	3236555.09	7950.00	4911.09	1390.85	4761.33

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	317.17	250.00	0.00	0.00	0.00	0.00
Hold	846.25	11.92	317.17	841.95	-35.13	45.34	-42.03	2.00
KOP, Build/Turn 8 DLS	7291.52	11.92	317.17	7148.13	-791.90	1022.00	-947.46	0.00
TPZ Point	8512.78	90.00	87.59	7950.00	-72.77	1180.59	-243.75	8.00
Turn 3 DLS	13522.28	90.00	87.59	7950.00	4911.09	1390.85	4761.33	0.00
Hold to TD	13601.14	90.00	89.96	7950.00	4989.36	1392.53	4840.17	3.00
Cottonwood Creek 4-65 28-27 1CH BHL	18441.82	90.00	89.96	7950.00	9780.97	1395.88	9680.85	0.00

Vertical Section (ft) Azim = 81.80° Scale = 1:2000.00(ft) Origin = 0N/-S, 0E/-W

# Cottonwood Creek 4-65 28-27 1CH Plan #0 Proposal Geodetic Report

(Def Plan)

**Report Date:** June 23, 2020 - 01:24 PM  
**Client:** Crestone Peak Resources  
**Field:** CO, Arapahoe County (NAD 83 CZ)  
**Structure / Slot:** Crestone Peak 28-04S-65W (Rush North Pad) / Cottonwood Creek 4-65 28-27 1CH  
**Well:** Cottonwood Creek 4-65 28-27 1CH  
**Borehole:** Original Hole  
**UWI / API#:** Unknown / Unknown  
**Survey Name:** Cottonwood Creek 4-65 28-27 1CH Plan #0  
**Survey Date:** June 22, 2020  
**Tort / AHD / DDI / ERD Ratio:** 111.991 ° / 12080.545 ft / 6.497 / 1.520  
**Coordinate Reference System:** NAD83 Colorado State Plane, Central Zone, US Feet  
**Location Lat / Long:** N 39° 40' 32.43000", W 104° 40' 35.25960"  
**Location Grid N/E Y/X:** N 1672044.124 ftUS, E 3231806.633 ftUS  
**CRS Grid Convergence Angle:** 0.5194 °  
**Grid Scale Factor:** 0.99998614  
**Version / Patch:** 2.10.810.1

**Survey / DLS Computation:** Minimum Curvature / Lubinski  
**Vertical Section Azimuth:** 81.795 ° (True North)  
**Vertical Section Origin:** 0.000 ft, 0.000 ft  
**TVD Reference Datum:** KB 28ft  
**TVD Reference Elevation:** 5680.000 ft above MSL  
**Seabed / Ground Elevation:** 5652.000 ft above MSL  
**Magnetic Declination:** 8.575 °  
**Total Gravity Field Strength:** 998.9147mgn (9.80665 Based)  
**Gravity Model:** GARM  
**Total Magnetic Field Strength:** 51550.456 nT  
**Magnetic Dip Angle:** 66.345 °  
**Declination Date:** June 22, 2020  
**Magnetic Declination Model:** HDGM 2020  
**North Reference:** True North  
**Grid Convergence Used:** 0.0000 °  
**Total Corr Mag North->True North:** 8.5748 °  
**Local Coord Referenced To:** Well Head

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	1672044.12	3231806.63	39.675675	-104.676461
	100.00	0.00	317.17	100.00	0.00	0.00	0.00	0.00	1672044.12	3231806.63	39.675675	-104.676461
	200.00	0.00	317.17	200.00	0.00	0.00	0.00	0.00	1672044.12	3231806.63	39.675675	-104.676461
Build 2 DLS	250.00	0.00	317.17	250.00	0.00	0.00	0.00	0.00	1672044.12	3231806.63	39.675675	-104.676461
	300.00	1.00	317.17	300.00	-0.25	0.32	-0.30	2.00	1672044.44	3231806.33	39.675676	-104.676462
	400.00	3.00	317.17	399.93	-2.23	2.88	-2.67	2.00	1672046.98	3231803.94	39.675683	-104.676470
	500.00	5.00	317.17	499.68	-6.19	7.99	-7.41	2.00	1672052.05	3231799.15	39.675697	-104.676487
	600.00	7.00	317.17	599.13	-12.13	15.66	-14.52	2.00	1672059.65	3231791.97	39.675718	-104.676513
	700.00	9.00	317.17	698.15	-20.04	25.87	-23.98	2.00	1672069.77	3231782.42	39.675746	-104.676546
	800.00	11.00	317.17	796.63	-29.91	38.60	-35.78	2.00	1672082.40	3231770.50	39.675781	-104.676588
Hold	846.25	11.92	317.17	841.95	-35.13	45.34	-42.03	2.00	1672089.08	3231764.19	39.675799	-104.676610
	900.00	11.92	317.17	894.54	-41.44	53.48	-49.58	0.00	1672097.16	3231756.57	39.675822	-104.676637
	1000.00	11.92	317.17	992.39	-53.18	68.64	-63.63	0.00	1672112.18	3231742.38	39.675863	-104.676667
	1100.00	11.92	317.17	1090.23	-64.93	83.79	-77.68	0.00	1672127.21	3231728.20	39.675905	-104.676737
	1200.00	11.92	317.17	1188.07	-76.67	98.94	-91.73	0.00	1672142.23	3231714.01	39.675947	-104.676787
	1300.00	11.92	317.17	1285.91	-88.41	114.10	-105.77	0.00	1672157.26	3231699.83	39.675988	-104.676837
	1400.00	11.92	317.17	1383.75	-100.15	129.25	-119.82	0.00	1672172.28	3231685.65	39.676030	-104.676887
	1500.00	11.92	317.17	1481.60	-111.89	144.40	-133.87	0.00	1672187.31	3231671.46	39.676071	-104.676937
	1600.00	11.92	317.17	1579.44	-123.63	159.56	-147.92	0.00	1672202.33	3231657.28	39.676113	-104.676986
	1700.00	11.92	317.17	1677.28	-135.37	174.71	-161.97	0.00	1672217.36	3231643.09	39.676155	-104.677036
	1800.00	11.92	317.17	1775.12	-147.12	189.86	-176.01	0.00	1672232.38	3231628.91	39.676196	-104.677086
	1900.00	11.92	317.17	1872.96	-158.86	205.02	-190.06	0.00	1672247.41	3231614.72	39.676238	-104.677136
	2000.00	11.92	317.17	1970.81	-170.60	220.17	-204.11	0.00	1672262.43	3231600.54	39.676279	-104.677186
	2100.00	11.92	317.17	2068.65	-182.34	235.32	-218.16	0.00	1672277.46	3231586.35	39.676321	-104.677236
	2200.00	11.92	317.17	2166.49	-194.08	250.48	-232.21	0.00	1672292.48	3231572.17	39.676363	-104.677286
	2300.00	11.92	317.17	2264.33	-205.82	265.63	-246.25	0.00	1672307.51	3231557.99	39.676404	-104.677336
	2400.00	11.92	317.17	2362.17	-217.57	280.78	-260.30	0.00	1672322.53	3231543.80	39.676446	-104.677386
	2500.00	11.92	317.17	2460.02	-229.31	295.93	-274.35	0.00	1672337.56	3231529.62	39.676487	-104.677436
	2600.00	11.92	317.17	2557.86	-241.05	311.09	-288.40	0.00	1672352.58	3231515.43	39.676529	-104.677486
	2700.00	11.92	317.17	2655.70	-252.79	326.24	-302.44	0.00	1672367.61	3231501.25	39.676571	-104.677535
	2800.00	11.92	317.17	2753.54	-264.53	341.39	-316.49	0.00	1672382.63	3231487.06	39.676612	-104.677585
	2900.00	11.92	317.17	2851.38	-276.27	356.55	-330.54	0.00	1672397.66	3231472.88	39.676654	-104.677635
	3000.00	11.92	317.17	2949.22	-288.01	371.70	-344.59	0.00	1672412.68	3231458.69	39.676695	-104.677685
	3100.00	11.92	317.17	3047.07	-299.76	386.85	-358.64	0.00	1672427.71	3231444.51	39.676737	-104.677735
	3200.00	11.92	317.17	3144.91	-311.50	402.01	-372.68	0.00	1672442.73	3231430.33	39.676779	-104.677785
	3300.00	11.92	317.17	3242.75	-323.24	417.16	-386.73	0.00	1672457.76	3231416.14	39.676820	-104.677835
	3400.00	11.92	317.17	3340.59	-334.98	432.31	-400.78	0.00	1672472.78	3231401.96	39.676862	-104.677885
	3500.00	11.92	317.17	3438.43	-346.72	447.47	-414.83	0.00	1672487.80	3231387.77	39.676903	-104.677935
	3600.00	11.92	317.17	3536.28	-358.46	462.62	-428.88	0.00	1672502.83	3231373.59	39.676945	-104.677985
	3700.00	11.92	317.17	3634.12	-370.21	477.77	-442.92	0.00	1672517.85	3231359.40	39.676987	-104.678035
	3800.00	11.92	317.17	3731.96	-381.95	492.93	-456.97	0.00	1672532.88	3231345.22	39.677028	-104.678084
	3900.00	11.92	317.17	3829.80	-393.69	508.08	-471.02	0.00	1672547.90	3231331.03	39.677070	-104.678134
	4000.00	11.92	317.17	3927.64	-405.43	523.23	-485.07	0.00	1672562.93	3231316.85	39.677111	-104.678184
	4100.00	11.92	317.17	4025.49	-417.17	538.39	-499.12	0.00	1672577.95	3231302.67	39.677153	-104.678234
	4200.00	11.92	317.17	4123.33	-428.91	553.54	-513.16	0.00	1672592.98	3231288.48	39.677195	-104.678284
	4300.00	11.92	317.17	4221.17	-440.65	568.69	-527.21	0.00	1672608.00	3231274.30	39.677236	-104.678334
	4400.00	11.92	317.17	4319.01	-452.40	583.85	-541.26	0.00	1672623.03	3231260.11	39.677278	-104.678384
	4500.00	11.92	317.17	4416.85	-464.14	599.00	-555.31	0.00	1672638.05	3231245.93	39.677319	-104.678434
	4600.00	11.92	317.17	4514.70	-475.88	614.15	-569.35	0.00	1672653.08	3231231.74	39.677361	-104.678484
	4700.00	11.92	317.17	4612.54	-487.62	629.30	-583.40	0.00	1672668.10	3231217.56	39.677403	-104.678534
	4800.00	11.92	317.17	4710.38	-499.36	644.46	-597.45	0.00	1672683.13	3231203.37	39.677444	-104.678584
	4900.00	11.92	317.17	4808.22	-511.10	659.61	-611.50	0.00	1672698.15	3231189.19	39.677486	-104.678633
	5000.00	11.92	317.17	4906.06	-522.84	674.76	-625.55	0.00	1672713.18	3231175.01	39.677527	-104.678683
	5100.00	11.92	317.17	5003.90	-534.59	689.92	-639.59	0.00	1672728.20	3231160.82	39.677569	-104.678733
	5200.00	11.92	317.17	5101.75	-546.33	705.07	-653.64	0.00	1672743.23	3231146.64	39.677611	-104.678783
	5300.00	11.92	317.17	5199.59	-558.07	720.22	-667.69	0.00	1672758.25	3231132.45	39.677652	-104.678833
	5400.00	11.92	317.17	5297.43	-569.81	735.38	-681.74	0.00	1672773.28	3231118.27	39.677694	-104.678883
	5500.00	11.92	317.17	5395.27	-581.55	750.53	-695.79	0.00	1672788.30	3231104.08	39.677735	-104.678933
	5600.00	11.92	317.17	5493.11	-593.29	765.68	-709.83	0.00	1672803.33	3231089.90	39.677777	-104.678983
	5700.00	11.92	317.17	5590.96	-605.04	780.84	-723.88	0.00	1672818.35	3231075.71	39.677819	-104.679033
	5800.00	11.92	317.17	5688.80	-616.78	795.99	-737.93	0.00	1672833.38	3231061.53	39.677860	-104.679083
	5900.00	11.92	317.17	5786.64	-628.52	811.14	-751.98	0.00	1672848.40	3231047.35	39.677902	-104.679133
	6000.00	11.92	317.17	5884.48	-640.26	826.30	-766.03	0.00	1672863.43	3231033.16	39.677943	-104.679183
	6100.00	11.92	317.17	5982.32	-652.00	841.45	-780.07	0.00	1672878.45	3231018.98	39.677985	-104.679233
	6200.00	11.92	317.17	6080.17	-663.74	856.60	-794.12	0.00	1672893.48	3231004.79	39.678027	-104.679283
	6300.00	11.92	317.17	6178.01	-675.48	871.76	-808.17	0.00	1672908.50	3230990.61	39.678068	-104.679333
	6400											

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	7300.00	11.50	319.78	7156.43	-792.85	1023.29	-948.60	8.00	1673058.76	3230848.81	39.678484	-104.679831
	7400.00	9.18	3.73	7254.95	-796.49	1038.89	-954.53	8.00	1673074.30	3230842.74	39.678527	-104.679852
	7500.00	12.78	42.46	7353.23	-786.27	1055.04	-946.53	8.00	1673090.53	3230850.60	39.678571	-104.679824
	7600.00	19.21	60.12	7449.36	-762.38	1071.43	-924.76	8.00	1673107.11	3230872.22	39.678616	-104.679746
	7700.00	26.49	68.78	7541.47	-725.30	1087.72	-889.64	8.00	1673123.72	3230907.18	39.678661	-104.679622
	7800.00	34.08	73.85	7627.78	-675.74	1103.62	-841.86	8.00	1673140.05	3230954.82	39.678705	-104.679452
	7900.00	41.81	77.24	7706.59	-614.66	1118.80	-782.34	8.00	1673155.77	3231014.20	39.678746	-104.679240
	8000.00	49.61	79.73	7776.37	-543.27	1132.97	-712.25	8.00	1673170.57	3231084.16	39.678785	-104.678991
	8100.00	57.45	81.70	7835.77	-462.93	1145.86	-632.94	8.00	1673184.18	3231163.34	39.678821	-104.678710
	8200.00	65.32	83.36	7883.63	-375.23	1157.21	-545.97	8.00	1673196.32	3231250.20	39.678852	-104.678401
	8300.00	73.20	84.81	7919.02	-281.87	1166.81	-453.02	8.00	1673206.76	3231343.06	39.678878	-104.678070
	8400.00	81.09	86.15	7941.25	-184.65	1174.47	-355.91	8.00	1673215.30	3231440.10	39.678899	-104.677725
	8500.00	88.99	87.43	7949.89	-85.49	1180.03	-256.52	8.00	1673221.77	3231539.43	39.678914	-104.677372
TPZ Point	8512.78	90.00	87.59	7950.00	-72.77	1180.59	-243.75	8.00	1673222.44	3231552.19	39.678916	-104.677327
	8600.00	90.00	87.59	7950.00	14.00	1184.25	-156.61	0.00	1673226.89	3231639.30	39.678926	-104.677017
	8700.00	90.00	87.59	7950.00	113.49	1188.45	-56.70	0.00	1673231.99	3231739.16	39.678938	-104.676662
	8800.00	90.00	87.59	7950.00	212.98	1192.64	43.21	0.00	1673237.09	3231839.03	39.678949	-104.676307
	8900.00	90.00	87.59	7950.00	312.47	1196.84	143.13	0.00	1673242.20	3231938.90	39.678961	-104.675953
	9000.00	90.00	87.59	7950.00	411.95	1201.04	243.04	0.00	1673247.30	3232038.77	39.678972	-104.675598
	9100.00	90.00	87.59	7950.00	511.44	1205.24	342.95	0.00	1673252.40	3232138.64	39.678984	-104.675243
	9200.00	90.00	87.59	7950.00	610.93	1209.43	442.86	0.00	1673257.50	3232238.51	39.678995	-104.674888
	9300.00	90.00	87.59	7950.00	710.42	1213.63	542.77	0.00	1673262.61	3232338.37	39.679007	-104.674533
	9400.00	90.00	87.59	7950.00	809.91	1217.83	642.68	0.00	1673267.71	3232438.24	39.679018	-104.674178
	9500.00	90.00	87.59	7950.00	909.40	1222.03	742.60	0.00	1673272.81	3232538.11	39.679030	-104.673823
	9600.00	90.00	87.59	7950.00	1008.88	1226.22	842.51	0.00	1673277.91	3232637.98	39.679041	-104.673468
	9700.00	90.00	87.59	7950.00	1108.37	1230.42	942.42	0.00	1673283.02	3232737.85	39.679053	-104.673113
	9800.00	90.00	87.59	7950.00	1207.86	1234.62	1042.33	0.00	1673288.12	3232837.71	39.679064	-104.672758
	9900.00	90.00	87.59	7950.00	1307.35	1238.81	1142.24	0.00	1673293.22	3232937.58	39.679076	-104.672403
	10000.00	90.00	87.59	7950.00	1406.84	1243.01	1242.16	0.00	1673298.32	3233037.45	39.679087	-104.672048
	10100.00	90.00	87.59	7950.00	1506.32	1247.21	1342.07	0.00	1673303.43	3233137.32	39.679099	-104.671693
	10200.00	90.00	87.59	7950.00	1605.81	1251.41	1441.98	0.00	1673308.53	3233237.19	39.679110	-104.671338
	10300.00	90.00	87.59	7950.00	1705.30	1255.60	1541.89	0.00	1673313.63	3233337.05	39.679122	-104.670983
	10400.00	90.00	87.59	7950.00	1804.79	1259.80	1641.80	0.00	1673318.74	3233436.92	39.679133	-104.670628
	10500.00	90.00	87.59	7950.00	1904.28	1264.00	1741.72	0.00	1673323.84	3233536.79	39.679145	-104.670273
	10600.00	90.00	87.59	7950.00	2003.77	1268.19	1841.63	0.00	1673328.94	3233636.66	39.679156	-104.669918
	10700.00	90.00	87.59	7950.00	2103.25	1272.39	1941.54	0.00	1673334.04	3233736.53	39.679168	-104.669563
	10800.00	90.00	87.59	7950.00	2202.74	1276.59	2041.45	0.00	1673339.15	3233836.40	39.679179	-104.669208
	10900.00	90.00	87.59	7950.00	2302.23	1280.79	2141.36	0.00	1673344.25	3233936.26	39.679191	-104.668853
	11000.00	90.00	87.59	7950.00	2401.72	1284.98	2241.28	0.00	1673349.35	3234036.13	39.679202	-104.668498
	11100.00	90.00	87.59	7950.00	2501.21	1289.18	2341.19	0.00	1673354.45	3234136.00	39.679214	-104.668143
	11200.00	90.00	87.59	7950.00	2600.69	1293.38	2441.10	0.00	1673359.56	3234235.87	39.679225	-104.667788
	11300.00	90.00	87.59	7950.00	2700.18	1297.58	2541.01	0.00	1673364.66	3234335.74	39.679237	-104.667433
	11400.00	90.00	87.59	7950.00	2799.67	1301.77	2640.92	0.00	1673369.76	3234435.60	39.679248	-104.667078
	11500.00	90.00	87.59	7950.00	2899.16	1305.97	2740.83	0.00	1673374.86	3234535.47	39.679260	-104.666723
	11600.00	90.00	87.59	7950.00	2998.65	1310.17	2840.75	0.00	1673379.97	3234635.34	39.679271	-104.666368
	11700.00	90.00	87.59	7950.00	3098.14	1314.36	2940.66	0.00	1673385.07	3234735.21	39.679283	-104.666014
	11800.00	90.00	87.59	7950.00	3197.62	1318.56	3040.57	0.00	1673390.17	3234835.08	39.679294	-104.665659
	11900.00	90.00	87.59	7950.00	3297.11	1322.76	3140.48	0.00	1673395.28	3234934.95	39.679306	-104.665304
	12000.00	90.00	87.59	7950.00	3396.60	1326.96	3240.39	0.00	1673400.38	3235034.81	39.679317	-104.664949
	12100.00	90.00	87.59	7950.00	3496.09	1331.15	3340.31	0.00	1673405.48	3235134.68	39.679329	-104.664594
	12200.00	90.00	87.59	7950.00	3595.58	1335.35	3440.22	0.00	1673410.58	3235234.55	39.679340	-104.664239
	12300.00	90.00	87.59	7950.00	3695.06	1339.55	3540.13	0.00	1673415.69	3235334.42	39.679352	-104.663884
	12400.00	90.00	87.59	7950.00	3794.55	1343.74	3640.04	0.00	1673420.79	3235434.29	39.679363	-104.663529
	12500.00	90.00	87.59	7950.00	3894.04	1347.94	3739.95	0.00	1673425.89	3235534.15	39.679375	-104.663174
	12600.00	90.00	87.59	7950.00	3993.53	1352.14	3839.87	0.00	1673430.99	3235634.02	39.679386	-104.662819
	12700.00	90.00	87.59	7950.00	4093.02	1356.34	3939.78	0.00	1673436.10	3235733.89	39.679398	-104.662464
	12800.00	90.00	87.59	7950.00	4192.51	1360.53	4039.69	0.00	1673441.20	3235833.76	39.679409	-104.662109
	12900.00	90.00	87.59	7950.00	4291.99	1364.73	4139.60	0.00	1673446.30	3235933.63	39.679421	-104.661754
	13000.00	90.00	87.59	7950.00	4391.48	1368.93	4239.51	0.00	1673451.41	3236033.49	39.679432	-104.661399
	13100.00	90.00	87.59	7950.00	4490.97	1373.13	4339.42	0.00	1673456.51	3236133.36	39.679444	-104.661044
	13200.00	90.00	87.59	7950.00	4590.46	1377.32	4439.34	0.00	1673461.61	3236233.23	39.679455	-104.660689
	13300.00	90.00	87.59	7950.00	4689.95	1381.52	4539.25	0.00	1673466.71	3236333.10	39.679466	-104.660334
	13400.00	90.00	87.59	7950.00	4789.43	1385.72	4639.16	0.00	1673471.82	3236432.97	39.679478	-104.659979
	13500.00	90.00	87.59	7950.00	4888.92	1389.91	4739.07	0.00	1673476.92	3236532.84	39.679489	-104.659624
Turn 3 DLS	13522.28	90.00	87.59	7950.00	4911.09	1390.85	4761.33	0.00	1673478.06	3236555.09	39.679492	-104.659269
	13600.00	90.00	89.93	7950.00	4988.23	1392.53	4839.03	3.00	1673480.44	3236632.76	39.679497	-104.659269
Hold to TD	13601.14	90.00	89.96	7950.00	4989.36	1392.53	4840.17	3.00	1673480.45	3236633.91	39.679497	-104.659265
	13700.00	90.00	89.96	7950.00	5087.22	1392.60	4939.03	0.00	1673481.42	3236732.76	39.679497	-104.658914
	13800.00	90.00	89.96	7950.00	5186.20	1392.67	5039.03	0.00	1673482.39	3236832.75	39.679497	-104.658558
	13900.00	90.00	89.96	7950.00	5285.19	1392.74	5139.03	0.00	1673483.37	3236932.74	39.679497	-104.658203
	14000.00	90.00	89.96	7950.00	5384.17	1392.81	5239.03	0.00	1673484.34	3237032.74	39.679497	-104.657848
	14100.00	90.00	89.96	7950.00	5483.16	1392.88	5339.03	0.00	1673485.32	3237132.73	39.679497	-104.657493
	14200.00	90.00	89.96	7950.00	5582.15	1392.95	5439.03	0.00	1673486.30	3237232.72	39.679497	-104.657137
	14300.00	90.00	89.96	7950.00	5681.13	1393.02	5539.03	0.00	1673487.27	3237332.72	39.679498	-104.656782
	14400.00	90.00	89.96	7950.00	5780.12	1393.08	5639.03	0.00	1673488.25	3237432.71	39.679498	-104.656427
	14500.00	90.00	89.96	7950.00	5879.11	1393.15	5739.03	0.00	1673489.22	3237532.71	39.679498	-104.656071
	14600.00	90.00	89.96	7950.00	5978.09	1393.22	5839.03	0.00	1673490.20	3237632.70	39.679498	-104.655716
	14700.00	90.00	89.96	7950.00	6077.08	1393.29	5939.03					

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	17900.00	90.00	89.96	7950.00	9244.64	1395.51	9139.03	0.00	1673522.40	3240932.49	39.679502	-104.643992
	18000.00	90.00	89.96	7950.00	9343.62	1395.58	9239.03	0.00	1673523.37	3241032.48	39.679502	-104.643637
	18100.00	90.00	89.96	7950.00	9442.61	1395.64	9339.03	0.00	1673524.35	3241132.48	39.679502	-104.643281
	18200.00	90.00	89.96	7950.00	9541.60	1395.71	9439.03	0.00	1673525.32	3241232.47	39.679502	-104.642926
	18300.00	90.00	89.96	7950.00	9640.58	1395.78	9539.03	0.00	1673526.30	3241332.46	39.679502	-104.642571
	18400.00	90.00	89.96	7950.00	9739.57	1395.85	9639.03	0.00	1673527.27	3241432.46	39.679502	-104.642216
Cottonwood Creek 4-65 28-27 1CH BHL	18441.82	90.00	89.96	7950.00	9780.97	1395.88	9680.85	0.00	1673527.68	3241474.28	39.679502	-104.642067

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_PLUS_0.5_DEG-Depth Only	Original Hole / Cottonwood Creek 4-65 28-27 1CH Plan #0
	1	28.000	2000.000	1/100.000	13.500	9.625		NAL_MWD_PLUS_0.5_DEG	Original Hole / Cottonwood Creek 4-65 28-27 1CH Plan #0
	1	2000.000	18441.823	1/100.000	8.500	5.500		NAL_MWD_PLUS_0.5_DEG	Original Hole / Cottonwood Creek 4-65 28-27 1CH Plan #0

## Cottonwood Creek 4-65 28-27 1CH Plan #0 Anti-Collision Summary Report

**Analysis Date-24hr Time:** June 23, 2020 - 13:24  
**Client:** Crestone Peak Resources  
**Field:** CO, Arapahoe County (NAD 83 CZ)  
**Structure:** Crestone Peak 28-04S-65W (Rush North Pad)  
**Slot:** Cottonwood Creek 4-65 28-27 1CH  
**Well:** Cottonwood Creek 4-65 28-27 1CH  
**Borehole:** Original Hole  
**Scan MD Range:** 0.00ft - 18441.82ft

**Analysis Method:** 3D Least Distance  
**Reference Trajectory:** Cottonwood Creek 4-65 28-27 1CH 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			Sep. Dev. (ft)	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

**Cottonwood Creek 4-65 28-27 1AH Plan #0 (Def Plan)** Fail Minor

49.99	32.81	49.00	17.18	N/A	MAS = 10.00 (m)	0.00	0.00					Surface
49.95	32.81	48.96	17.14	N/A	MAS = 10.00 (m)	28.00	28.00					WRP
49.95	32.81	47.80	17.14	42.12	MAS = 10.00 (m)	250.00	250.00					MinPts
50.14	32.81	47.54	17.34	30.41	MAS = 10.00 (m)	330.00	329.99					MINPT-O-EOU
78.83	32.81	71.26	46.02	11.82	MAS = 10.00 (m)	1100.00	1090.23					MinPt-O-SF
89.71	32.81	81.24	56.90	11.84	MAS = 10.00 (m)	1220.00	1207.64					MinPt-O-SF
721.09	67.38	675.84	653.71	16.27	OSF1.50	7291.52	7148.13					MinPt-O-SF
650.49	196.42	519.22	454.07	4.98	OSF1.50	11510.00	7950.00	OSF<5.00				Enter Alert
544.92	545.21	181.12	-0.29	1.50	OSF1.50	18390.00	7950.00		OSF<1.50			Enter Minor
544.76	547.88	179.18	-3.12	1.48	OSF1.50	18441.82	7950.00					MinPts

**Rush 4-65 29-30 1CH Plan #0 (Def Plan)** Warning Alert

24.93	20.12	23.95	4.81	N/A	MAS = 6.13 (m)	0.00	0.00	CtCt<=15m<15.00				Enter Alert
24.91	20.12	23.93	4.79	N/A	MAS = 6.13 (m)	28.00	28.00					WRP
23.39	20.12	20.00	3.27	9.33	MAS = 6.13 (m)	460.00	459.81					MinPts
23.44	20.12	19.93	3.32	8.91	MAS = 6.13 (m)	480.00	479.75					MINPT-O-EOU
26.86	20.12	22.63	6.74	7.97	MAS = 6.13 (m)	600.00	599.13					MinPt-O-SF
49.17	20.12	43.23	29.05	9.73	MAS = 6.13 (m)	870.00	865.19	CtCt<=15m<15.00				Exit Alert
683.77	59.44	643.82	624.34	17.52	OSF1.50	7291.52	7148.13					MinPt-O-SF
682.72	60.17	642.28	622.55	17.28	OSF1.50	7450.00	7304.24					MinPt-O-SF
249.50	66.84	204.62	182.67	5.66	OSF1.50	8150.00	7861.21					MinPts
10019.23	65.56	9975.20	9953.67	232.72	OSF1.50	18441.82	7950.00					TD

**Rush 4-65 29-30 2AH Plan #0 (Def Plan)** Warning Alert

25.04	20.22	24.05	4.82	N/A	MAS = 6.16 (m)	0.00	0.00	CtCt<=15m<15.00				Enter Alert
25.04	20.22	24.05	4.82	10827.30	MAS = 6.16 (m)	28.00	28.00					WRP
25.04	20.22	22.88	4.82	20.53	MAS = 6.16 (m)	250.00	250.00					MinPts
25.19	20.22	22.74	4.97	16.49	MAS = 6.16 (m)	300.00	300.00					MINPT-O-EOU
45.14	20.22	39.47	24.91	9.42	MAS = 6.16 (m)	820.00	816.25					MinPt-O-SF
48.71	20.22	42.70	28.48	9.50	MAS = 6.16 (m)	870.00	865.19	CtCt<=15m<15.00				Exit Alert
684.66	59.06	644.96	625.60	17.66	OSF1.50	7290.00	7146.64					MinPt-O-SF
317.52	64.02	274.51	253.50	7.53	OSF1.50	7950.00	7742.70					MinPt-O-SF
317.33	63.97	274.35	253.36	7.53	OSF1.50	7960.00	7749.63					MinPts
10052.36	62.87	10010.12	9989.49	243.62	OSF1.50	18441.82	7950.00					TD

**Cottonwood Creek 4-65 28-27 2AH Plan #0 (Def Plan)** Warning Alert

49.95	32.81	48.96	17.14	N/A	MAS = 10.00 (m)	0.00	0.00					Surface
49.95	32.81	48.96	17.14	11019.76	MAS = 10.00 (m)	28.00	28.00					WRP
49.95	32.81	47.85	17.14	44.02	MAS = 10.00 (m)	240.00	240.00					MinPts
50.03	32.81	47.72	17.22	37.10	MAS = 10.00 (m)	280.00	280.00					MINPT-O-EOU
191.52	32.81	177.88	158.71	15.05	MAS = 10.00 (m)	2000.00	1970.81					MinPt-O-SF
718.16	59.42	678.22	658.74	18.41	OSF1.50	7170.00	7029.23					MinPt-O-SF
634.05	191.22	506.24	442.83	4.99	OSF1.50	11590.00	7950.00	OSF<5.00				Enter Alert
539.44	292.63	344.03	246.81	2.77	OSF1.50	13690.00	7950.00					MinPt-CtCt
545.31	535.63	187.89	9.68	1.53	OSF1.50	18440.00	7950.00					MinPts
545.31	535.62	187.91	9.69	1.53	OSF1.50	18441.82	7950.00					TD

**Cottonwood Creek 4-65 28-27 3AH Plan #0 (Def Plan)** Warning Alert

99.90	32.81	98.91	67.09	N/A	MAS = 10.00 (m)	0.00	0.00					Surface
99.90	32.81	98.90	67.09	11130.52	MAS = 10.00 (m)	28.00	28.00					WRP
99.90	32.81	97.79	67.09	88.43	MAS = 10.00 (m)	240.00	240.00					MinPts
99.92	32.81	97.73	67.12	81.51	MAS = 10.00 (m)	260.00	260.00					MINPT-O-EOU
370.50	32.81	357.35	337.69	30.36	MAS = 10.00 (m)	2000.00	1970.81					MinPt-O-SF
1367.26	59.52	1327.25	1307.74	35.01	OSF1.50	7291.52	7148.13					MinPt-O-SF
1799.29	540.54	1438.61	1258.76	5.00	OSF1.50	18380.00	7950.00	OSF<5.00				Enter Alert
1799.49	543.71	1436.69	1255.78	4.97	OSF1.50	18441.82	7950.00					MinPts

**Cottonwood Creek 4-65 27 1H ST1 7234 to 12126 - PR (Def Survey)** Warning Alert

5108.73	32.81	5106.85	5075.92	84011.94	MAS = 10.00 (m)	0.00	0.00					Surface
5108.72	32.81	5106.78	5075.91	41160.52	MAS = 10.00 (m)	28.00	28.00					WRP
5108.71	32.81	5106.61	5075.90	18044.61	MAS = 10.00 (m)	70.00	70.00					MinPts
5108.76	32.81	5105.71	5075.95	4118.63	MAS = 10.00 (m)	250.00	250.00					MinPts
5108.85	32.81	5105.64	5076.04	3652.18	MAS = 10.00 (m)	280.00	280.00					MINPT-O-EOU
6068.98	44.39	6038.85	6024.59	212.73	OSF1.50	7300.00	7156.43					MinPt-O-SF
1122.90	288.73	929.87	834.16	5.86	OSF1.50	15370.00	7950.00					MinPt-CtCt
1110.23	334.50	886.70	775.73	5.00	OSF1.50	16100.00	7950.00	OSF<5.00				Enter Alert
1080.97	396.51	816.09	684.46	4.10	OSF1.50	17070.00	7950.00					MinPt-CtCt
1102.75	480.75	781.72	622.00	3.45	OSF1.50	18290.00	7950.00					MINPT-O-EOU
1102.99	481.08	781.73	621.91	3.45	OSF1.50	18300.00	7950.00					MinPts
1115.96	478.00	796.76	637.96	3.51	OSF1.50	18441.82	7950.00					TD

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		
Cottonwood Creek 4-65 27-28 3CH MWD 0' to 18345' - PR (Def Survey)													Warning Alert
7990.24	249.72	7823.15	7740.52	48.34		OSF1.50	0.00	0.00					Surface
7962.53	249.96	7795.29	7712.57	48.12		OSF1.50	28.00	28.00					WRP
2329.25	702.51	1859.41	1626.74	5.00		OSF1.50	7880.00	7691.50	OSF-5.00				Enter Alert
2313.04	720.50	1831.61	1592.54	4.83		OSF1.50	8290.00	7916.07					MinPt-CiCt
2313.24	721.51	1831.20	1591.73	4.82		OSF1.50	8340.00	7929.52					MINPT-O-EOU
2313.59	721.97	1831.29	1591.62	4.82		OSF1.50	8370.00	7935.99					MinPt-O-ADP
2315.09	722.63	1832.44	1592.46	4.82		OSF1.50	8440.00	7946.35					MinPt-O-SF
2345.92	705.53	1874.93	1640.39	5.00		OSF1.50	8860.00	7950.00	OSF-5.00				Exit Alert
2375.32	632.83	1952.40	1742.49	5.65		OSF1.50	9630.00	7950.00					MinPt-O-ADP
2372.81	629.95	1951.84	1742.86	5.67		OSF1.50	9700.00	7950.00					MINPT-O-EOU
2363.61	608.88	1956.78	1754.73	5.84		OSF1.50	10120.00	7950.00					MinPt-CiCt
2439.59	516.94	2093.96	1922.65	7.11		OSF1.50	11500.00	7950.00					MinPt-O-SF
2436.96	515.84	2092.15	1921.12	7.12		OSF1.50	11600.00	7950.00					MinPt-O-ADP
2436.74	515.58	2092.11	1921.16	7.12		OSF1.50	11620.00	7950.00					MINPT-O-EOU
2436.59	515.18	2092.25	1921.41	7.12		OSF1.50	11650.00	7950.00					MinPt-CiCt
2521.68	419.74	2241.02	2101.94	9.06		OSF1.50	13560.00	7950.00					MinPt-O-SF
2520.74	419.49	2240.29	2101.25	9.06		OSF1.50	13610.00	7950.00					MinPt-O-SF
2520.00	419.17	2239.81	2100.83	9.06		OSF1.50	13660.00	7950.00					MinPt-O-ADP
2519.93	419.10	2239.79	2100.83	9.06		OSF1.50	13670.00	7950.00					MINPT-O-EOU
2519.87	418.95	2239.84	2100.92	9.06		OSF1.50	13690.00	7950.00					MinPt-CiCt
2559.31	369.77	2312.06	2189.54	10.44		OSF1.50	15180.00	7950.00					MinPt-O-ADP
2559.15	369.58	2312.03	2189.57	10.44		OSF1.50	15200.00	7950.00					MINPT-O-EOU
2558.91	368.44	2312.57	2190.47	10.47		OSF1.50	15290.00	7950.00					MinPt-CiCt
2573.05	355.45	2335.31	2217.59	10.92		OSF1.50	16210.00	7950.00					MINPT-O-EOU
2566.98	352.18	2331.29	2214.80	11.01		OSF1.50	16310.00	7950.00					MinPt-O-SF
2532.45	359.86	2291.83	2172.59	10.61		OSF1.50	17080.00	7950.00					MinPt-CiCt
2532.65	360.58	2291.58	2172.07	10.59		OSF1.50	17120.00	7950.00					MINPT-O-EOU
2533.06	361.10	2291.66	2171.96	10.57		OSF1.50	17150.00	7950.00					MinPt-O-ADP
2545.74	365.27	2301.69	2180.46	10.49		OSF1.50	17420.00	7950.00					MinPt-O-SF
2555.15	367.85	2309.25	2187.30	10.47		OSF1.50	17610.00	7950.00					MinPt-O-SF
2535.29	376.99	2283.25	2158.30	10.14		OSF1.50	18020.00	7950.00					MinPt-CiCt
2535.68	378.20	2282.87	2157.47	10.10		OSF1.50	18070.00	7950.00					MINPT-O-EOU
2536.26	378.89	2283.02	2157.37	10.08		OSF1.50	18100.00	7950.00					MinPt-O-ADP
2559.63	386.39	2301.50	2173.24	9.97		OSF1.50	18441.82	7950.00					MinPt-O-SF
Rush 4-65 29-30 1AH Plan #0 (Def Plan)													Pass
75.09	32.81	74.11	42.28	N/A		MAS = 10.00 (m)	0.00	0.00					Surface
74.99	32.81	74.00	42.18	N/A		MAS = 10.00 (m)	28.00	28.00					WRP
74.99	32.81	72.79	42.18	60.91		MAS = 10.00 (m)	260.00	260.00					MinPts
75.12	32.81	72.69	42.32	51.17		MAS = 10.00 (m)	300.00	300.00					MINPT-O-EOU
127.17	32.81	120.06	94.36	20.59		MAS = 10.00 (m)	1040.00	1031.52					MinPt-O-SF
147.72	32.81	139.61	114.91	20.60		MAS = 10.00 (m)	1180.00	1168.50					MinPt-O-SF
165.36	32.81	156.39	132.55	20.57		MAS = 10.00 (m)	1300.00	1285.91					MinPt-O-SF
268.36	32.81	254.23	235.55	20.34		MAS = 10.00 (m)	2000.00	1970.81					MinPt-O-SF
1047.34	63.53	1004.66	983.82	25.09		OSF1.50	7291.52	7148.13					MinPt-O-SF
1053.94	65.35	1010.04	988.59	24.54		OSF1.50	7560.00	7411.29					MinPt-O-SF
865.02	70.85	817.45	794.16	18.55		OSF1.50	8220.00	7991.73					MinPts
865.08	70.93	817.46	794.15	18.53		OSF1.50	8230.00	7995.59					MinPt-O-ADP
869.19	71.50	821.20	797.70	18.47		OSF1.50	8320.00	7924.54					MinPt-O-SF
10017.96	77.05	9966.26	9940.91	197.52		OSF1.50	18441.82	7950.00					TD
Rush 4-65 29-30 2CH Plan #0 (Def Plan)													Pass
74.99	32.81	74.00	42.18	N/A		MAS = 10.00 (m)	0.00	0.00					Surface
74.99	32.81	74.00	42.18	11103.25		MAS = 10.00 (m)	28.00	28.00					WRP
74.99	32.81	72.82	42.18	62.81		MAS = 10.00 (m)	250.00	250.00					MinPts
75.14	32.81	72.68	42.33	50.31		MAS = 10.00 (m)	300.00	300.00					MINPT-O-EOU
165.22	32.81	156.06	132.42	20.08		MAS = 10.00 (m)	1370.00	1354.40					MinPt-O-SF
1035.87	58.62	996.46	977.25	26.93		OSF1.50	7291.52	7148.13					MinPt-O-SF
1041.58	59.51	1001.58	982.07	26.67		OSF1.50	7387.78	7242.88					MinPt-O-SF
914.63	62.80	872.43	851.83	22.17		OSF1.50	7910.00	7713.99					MinPt-O-SF
914.37	62.76	872.20	851.60	22.18		OSF1.50	7930.00	7728.53					MinPts
10104.87	67.19	10059.76	10037.69	228.94		OSF1.50	18441.82	7950.00					TD
Cottonwood Creek 4-65 27 1H Pilot 0' to 8261' - PR (Def Survey)													Pass
5108.73	32.81	5106.85	5075.92	84011.94		MAS = 10.00 (m)	0.00	0.00					Surface
5108.72	32.81	5106.78	5075.91	41160.52		MAS = 10.00 (m)	28.00	28.00					WRP
5108.71	32.81	5106.61	5075.90	18044.61		MAS = 10.00 (m)	70.00	70.00					MinPts
5108.70	32.81	5105.71	5075.95	4118.63		MAS = 10.00 (m)	250.00	250.00					MinPts
5108.85	32.81	5105.64	5076.04	3652.18		MAS = 10.00 (m)	280.00	280.00					MINPT-O-EOU
6068.98	44.39	6038.85	6024.59	212.79		OSF1.50	7300.00	7156.43					MinPt-O-SF
1081.76	218.32	935.68	863.44	7.48		OSF1.50	13830.00	7950.00					MinPt-CiCt
1081.89	218.72	935.55	863.18	7.46		OSF1.50	13850.00	7950.00					MinPts
1083.27	219.30	936.54	863.97	7.45		OSF1.50	13890.00	7950.00					MinPt-O-SF
4734.29	84.07	4677.71	4650.22	86.09		OSF1.50	18441.82	7950.00					TD
Chico 4-65 26-25 2BH MWD 0' to 17932' - PR (Def Survey)													Pass
10534.03	32.81	10532.16	10501.22	178896.91		MAS = 10.00 (m)	0.00	0.00					MinPts
10534.30	32.81	10532.40	10501.49	120867.00		MAS = 10.00 (m)	28.00	28.00					WRP
10759.47	32.81	10748.42	10726.66	1138.87		MAS = 10.00 (m)	2100.00	2068.65					MinPt-O-SF
10778.89	32.81	10767.86	10746.09	1143.09		MAS = 10.00 (m)	2240.00	2205.63					MinPt-O-SF
10892.21	35.74	10867.85	10856.47	478.57		OSF1.50	5640.00	5532.25					MinPt-CiCt
10892.32	36.04	10867.75	10856.27	474.35		OSF1.50	5680.00	5581.17					MINPT-O-EOU
10892.42	36.16	10867.78	10856.26	472.68		OSF1.50	5710.00	5600.74					MinPt-O-ADP
11012.13	46.04	10980.90	10966.08	371.64		OSF1.50	7300.00	7156.43					MinPt-O-SF
1139.89	339.27	911.92	800.62	5.10		OSF1.50	18441.82	7950.00					MinPts
Rush 4-65 29-30 3AH MWD 0' to 15645' - PR (Def Survey)													Pass
1449.68	32.81	1447.65	1416.87	6548.40		MAS = 10.00 (m)	0.00	0.00					Surface
1448.97	32.81	1446.67	1416.16	2990.57		MAS = 10.00 (m)	28.00	28.00					WRP
1440.84	32.81	1436.94	1408.03	690.71		MAS = 10.00 (m)	370.00	369.96					MinPts
1440.89	32.81	1436.89	1408.08	657.18		MAS = 10.00 (m)	390.00	389.94					MINPT-O-EOU
1673.35	32.81	1658.38	1640.55	125.07		MAS = 10.00 (m)	2370.00	2332.82					MinPt-O-SF
1776.05	32.81	1759.80	1743.24	121.17		MAS = 10.00 (m)	3130.00	3076.42					MinPt-O-SF
1762.01	32.81	1743.7											

Offset Trajectory	Separation			Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)			Allow Dev. (ft)	MD (ft)	TVD (ft)	Alert	Minor		
1757.19	32.81	1736.50	1724.38	91.97	MAS = 10.00 (m)	4450.00	4367.93				MINPT-O-EOU	
1757.16	32.81	1735.65	1724.35	88.22	MAS = 10.00 (m)	4630.00	4544.05				MinPts	
1757.23	32.81	1735.59	1724.42	87.63	MAS = 10.00 (m)	4660.00	4573.40				MINPT-O-EOU	
1760.02	33.82	1736.94	1726.20	81.87	OSF1.50	4970.00	4876.71				MinPt-CtCt	
1760.09	34.02	1736.88	1726.07	81.37	OSF1.50	5000.00	4906.06				MINPT-O-EOU	
1760.15	34.09	1736.89	1726.06	81.21	OSF1.50	5010.00	4915.85				MinPt-O-ADP	
1759.46	35.21	1735.45	1724.25	78.46	OSF1.50	5180.00	5082.18				MinPt-CtCt	
1753.85	37.91	1728.04	1715.94	72.39	OSF1.50	5550.00	5444.19				MinPt-CtCt	
1753.94	38.13	1727.98	1715.81	71.97	OSF1.50	5580.00	5473.55				MINPT-O-EOU	
1749.42	40.80	1721.69	1708.63	66.90	OSF1.50	5940.00	5825.78				MinPt-CtCt	
1742.83	43.51	1713.29	1699.32	62.32	OSF1.50	6290.00	6168.22				MinPt-CtCt	
1742.89	43.66	1713.25	1699.23	62.10	OSF1.50	6310.00	6187.79				MINPT-O-EOU	
1742.96	43.74	1713.27	1699.23	62.00	OSF1.50	6320.00	6197.58				MinPt-O-ADP	
1742.01	47.41	1709.87	1694.60	56.99	OSF1.50	6780.00	6647.65				MinPt-CtCt	
1742.08	47.56	1709.84	1694.52	56.81	OSF1.50	6800.00	6667.22				MINPT-O-EOU	
1742.15	47.64	1709.86	1694.52	56.72	OSF1.50	6810.00	6677.00				MinPt-O-ADP	
1742.04	50.08	1708.12	1691.96	53.86	OSF1.50	7110.00	6970.53				MinPt-CtCt	
1742.07	50.23	1708.05	1691.84	53.69	OSF1.50	7130.00	6990.10				MINPT-O-EOU	
1742.12	50.31	1708.05	1691.82	53.61	OSF1.50	7140.00	6999.88				MinPt-O-ADP	
1659.59	61.17	1618.28	1598.42	41.75	OSF1.50	7650.00	7496.03				MinPt-O-SF	
1658.07	60.96	1616.90	1597.11	41.86	OSF1.50	7710.00	7550.39				MinPts	
1658.07	60.92	1616.92	1597.15	41.89	OSF1.50	7720.00	7559.25				MinPt-CtCt	
10398.72	79.12	10345.44	10319.60	201.19	OSF1.50	18441.82	7950.00				TD	

Chico 4-65 26-25 2CH MWD 0' to 17734 - PR (Def Survey)												Pass
10532.78	32.81	10530.67	10499.97	35102.85	MAS = 10.00 (m)	0.00	0.00				MinPts	
10532.82	32.81	10530.60	10500.01	25743.31	MAS = 10.00 (m)	28.00	28.00				WRP	
10533.26	32.81	10530.28	10500.45	9012.09	MAS = 10.00 (m)	230.00	230.00				MINPT-O-EOU	
10770.93	32.81	10759.82	10738.12	1132.88	MAS = 10.00 (m)	2250.00	2215.41				MinPt-O-SF	
11001.56	32.81	10979.16	10968.75	529.00	MAS = 10.00 (m)	5490.00	5385.49				MinPt-CtCt	
11001.65	33.12	10979.04	10968.54	523.59	OSF1.50	5540.00	5434.41				MINPT-O-EOU	
11001.82	33.31	10979.08	10968.51	520.40	OSF1.50	5570.00	5463.76				MinPt-O-ADP	
11142.45	44.60	11112.18	11097.85	388.65	OSF1.50	7300.00	7156.43				MinPt-O-SF	
1444.37	341.90	1215.00	1102.47	6.40	OSF1.50	18441.82	7950.00				MinPts	

Little Rush 4-65 28 1V MWD 0' to 8693 - PR (Def Survey)												Pass
1488.94	32.81	1487.09	1456.13	39972.72	MAS = 10.00 (m)	0.00	0.00				Surface	
1488.91	32.81	1487.00	1456.10	14503.63	MAS = 10.00 (m)	28.00	28.00				WRP	
1488.01	32.81	1484.99	1455.21	1227.98	MAS = 10.00 (m)	270.00	270.00				MinPts	
1488.03	32.81	1484.98	1455.22	1197.01	MAS = 10.00 (m)	280.00	280.00				MINPT-O-EOU	
1713.92	32.81	1702.57	1681.11	175.71	MAS = 10.00 (m)	2100.00	2068.65				MinPt-O-SF	
2624.09	45.12	2593.47	2578.96	90.39	OSF1.50	7291.52	7148.13				MinPt-O-SF	
2691.45	48.81	2658.38	2642.65	85.48	OSF1.50	8530.00	7950.00				MinPt-CtCt	
2691.56	49.06	2658.30	2642.48	84.98	OSF1.50	8550.00	7950.00				MINPT-O-EOU	
2691.67	49.22	2658.32	2642.45	84.74	OSF1.50	8560.00	7950.00				MinPt-O-ADP	
3245.77	79.99	3191.91	3165.78	62.08	OSF1.50	10340.00	7950.00				MinPt-O-SF	
10219.20	103.01	10149.99	10116.18	151.13	OSF1.50	18441.82	7950.00				TD	

Chico 4-65 26-25 2DH MWD 0' to 17975 - PR (Def Survey)												Pass
10532.36	32.81	10530.39	10499.55	67087.50	MAS = 10.00 (m)	0.00	0.00				MinPt-O-SF	
10532.30	32.81	10530.36	10499.49	79236.16	MAS = 10.00 (m)	28.00	28.00				WRP	
10532.20	32.81	10529.88	10499.40	20895.19	MAS = 10.00 (m)	170.00	170.00				MinPts	
10532.28	32.81	10529.46	10499.47	10483.27	MAS = 10.00 (m)	270.00	270.00				MINPT-O-EOU	
10930.01	36.12	10905.39	10893.89	474.96	OSF1.50	5600.00	5493.11				MinPt-CtCt	
10930.08	36.36	10905.31	10893.72	471.67	OSF1.50	5640.00	5532.25				MINPT-O-EOU	
10930.23	36.54	10905.33	10893.68	469.23	OSF1.50	5670.00	5561.60				MinPt-O-ADP	
11057.48	46.59	11025.89	11010.90	368.67	OSF1.50	7300.00	7156.43				MinPt-O-SF	
1641.40	364.28	1397.61	1277.15	6.80	OSF1.50	18441.82	7950.00				MinPts	

Rush 4-65 29-30 3CH Plan #0 (Def Plan)												Pass
1664.05	32.81	1663.03	1631.24	47679.91	MAS = 10.00 (m)	0.00	0.00				Surface	
1664.05	32.81	1662.96	1631.24	17129.85	MAS = 10.00 (m)	28.00	28.00				WRP	
1657.34	32.81	1653.32	1624.54	544.25	MAS = 10.00 (m)	490.00	489.72				MinPts	
1657.43	32.81	1653.22	1624.62	513.28	MAS = 10.00 (m)	520.00	519.60				MINPT-O-EOU	
1782.66	32.81	1768.53	1749.85	135.52	MAS = 10.00 (m)	2100.00	2068.65				MinPt-O-SF	
2321.23	63.13	2278.82	2258.10	56.00	OSF1.50	7610.00	7458.78				MinPt-O-SF	
2320.94	63.11	2278.54	2257.83	56.01	OSF1.50	7640.00	7486.79				MinPts	
2320.93	63.10	2278.54	2257.83	56.03	OSF1.50	7650.00	7496.03				MinPt-CtCt	
2439.45	61.21	2398.31	2378.23	60.73	OSF1.50	8540.00	7950.00				MinPt-O-SF	
2789.12	71.92	2740.84	2717.20	58.96	OSF1.50	9580.00	7950.00				MinPt-O-SF	
2813.46	72.54	2764.77	2740.92	58.96	OSF1.50	9630.00	7950.00				MinPt-O-SF	
10394.73	101.04	10327.05	10293.70	155.83	OSF1.50	18441.82	7950.00				TD	

Cottonwood Creek 4-65 28-27 4DH Plan #0 (Def Plan)												Pass
1689.06	32.81	1688.04	1656.25	50995.51	MAS = 10.00 (m)	0.00	0.00				Surface	
1689.06	32.81	1687.98	1656.25	17711.73	MAS = 10.00 (m)	28.00	28.00				WRP	
1689.06	32.81	1687.06	1656.25	1690.59	MAS = 10.00 (m)	200.00	200.00				MinPts	
1689.14	32.81	1686.93	1656.33	1362.01	MAS = 10.00 (m)	250.00	250.00				MINPT-O-EOU	
2154.48	32.81	2141.89	2121.67	185.44	MAS = 10.00 (m)	2380.00	2342.60				MinPt-O-SF	
3545.64	57.82	3506.77	3487.82	93.55	OSF1.50	7300.00	7156.43				MinPt-O-SF	
4055.66	544.94	3692.04	3510.72	11.18	OSF1.50	18441.82	7950.00				MinPts	

Rush 4-65 29-30 4AH Plan #0 (Def Plan)												Pass
1713.71	32.81	1712.68	1680.90	33518.70	MAS = 10.00 (m)	0.00	0.00				Surface	
1713.71	32.81	1712.61	1680.90	15116.28	MAS = 10.00 (m)	28.00	28.00				WRP	
1713.71	32.81	1711.39	1680.90	1279.46	MAS = 10.00 (m)	250.00	250.00				MinPts	
1713.81	32.81	1711.31	1681.01	1129.64	MAS = 10.00 (m)	280.00	280.00				MINPT-O-EOU	
1972.78	32.81	1961.02	1939.97	183.06	MAS = 10.00 (m)	2120.00	2088.22				MinPt-O-SF	
2928.67	57.07	2890.30	2871.60	78.30	OSF1.50	7300.00	7156.43				MinPt-O-SF	
2948.91	60.78	2908.06	2888.13	73.95	OSF1.50	7620.00	7468.16				MinPt-O-SF	
3809.54	85.86	3751.97	3723.68	67.31	OSF1.50	10480.00	7950.00				MinPt-O-SF	
10575.18	117.48	10496.53	10457.70	136.15	OSF1.50	18441.82	7950.00				TD	

Rush 4-65 29-30 4CH Plan #0 (Def Plan)												Pass
1763.39	32.81	1762.35	1730.58	28433.40	MAS = 10.00 (m)	0.00	0.00				Surface	
1763.39	32.81	1762.28	1730.58	14191.27	MAS = 10.00 (m)	28.00	28.00				WRP	
1763.39	32.81	1761.42	1730.58	1792.53								

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		
1763.42	32.81	1761.38	1730.61	1675.76	MAS = 10.00 (m)	210.00	210.00					MINPT-O-EOU	
2198.13	32.81	2185.05	2165.32	181.73	MAS = 10.00 (m)	2290.00	2254.55					MinPt-O-SF	
3492.95	57.03	3454.61	3435.99	93.47	OSF1.50	7300.00	7156.43					MinPt-O-SF	
3600.70	58.67	3561.26	3542.03	93.61	OSF1.50	7820.00	7644.19					MinPt-O-SF	
4687.60	100.46	4620.30	4587.14	70.67	OSF1.50	11140.00	7950.00					MinPt-O-SF	
10774.55	135.11	10684.15	10639.45	120.49	OSF1.50	18441.82	7950.00					TD	

Chico 4-65 26-25 3AH MWD 0' to 17900' - PR (Def Survey)

Pass													
10532.22	32.81	10530.29	10499.41	89700.90	MAS = 10.00 (m)	0.00	0.00					MinPts	
10532.40	32.81	10530.40	10499.59	56875.98	MAS = 10.00 (m)	28.00	28.00					WRP	
10771.41	32.81	10760.24	10738.60	1124.99	MAS = 10.00 (m)	2170.00	2137.14					MinPt-O-SF	
10975.29	38.15	10949.32	10937.14	450.42	OSF1.50	5510.00	5405.06					MinPt-CtCt	
10975.39	38.44	10949.23	10936.95	446.89	OSF1.50	5560.00	5453.98					MINPT-O-EOU	
10975.50	38.55	10949.26	10936.94	445.50	OSF1.50	5580.00	5473.55					MinPt-O-ADP	
11115.78	48.60	11082.85	11067.18	354.75	OSF1.50	7300.00	7156.43					MinPt-O-SF	
1887.44	358.69	1647.71	1528.75	7.93	OSF1.50	18441.82	7950.00					MinPts	

Cottonwood Creek 4-65 27-28 3DH MWD 0' to 17955' - PR (Def Survey)

Pass													
8120.37	253.30	7950.90	7867.07	48.42	OSF1.50	0.00	0.00					Surface	
8092.83	253.59	7923.17	7839.24	48.20	OSF1.50	28.00	28.00					WRP	
2652.10	695.02	2187.96	1957.08	5.74	OSF1.50	8780.00	7950.00					MinPt-CtCt	
2652.11	695.11	2187.92	1957.00	5.74	OSF1.50	8790.00	7950.00					MINPT-O-EOU	
2652.15	695.18	2187.93	1956.97	5.74	OSF1.50	8800.00	7950.00					MinPt-O-ADP	
2652.72	695.38	2188.41	1957.33	5.74	OSF1.50	8840.00	7950.00					MinPt-O-SF	
2726.33	599.99	2325.58	2126.35	6.84	OSF1.50	10220.00	7950.00					MinPt-CtCt	
2763.95	534.83	2406.53	2229.12	7.78	OSF1.50	11140.00	7950.00					MINPT-O-EOU	
2756.49	527.54	2403.97	2228.95	7.87	OSF1.50	11320.00	7950.00					MinPt-O-SF	
2755.48	527.11	2403.29	2228.37	7.87	OSF1.50	11380.00	7950.00					MinPt-O-ADP	
2755.40	527.03	2403.27	2228.37	7.87	OSF1.50	11390.00	7950.00					MINPT-O-EOU	
2755.31	526.76	2403.39	2228.55	7.87	OSF1.50	11420.00	7950.00					MinPt-CtCt	
2748.94	501.22	2413.96	2247.72	8.26	OSF1.50	11780.00	7950.00					MinPt-O-ADP	
2747.88	499.97	2413.76	2247.91	8.28	OSF1.50	11830.00	7950.00					MINPT-O-EOU	
2739.26	474.96	2421.77	2264.30	8.69	OSF1.50	12240.00	7950.00					MINPT-O-EOU	
2729.94	461.63	2421.37	2268.31	8.91	OSF1.50	12540.00	7950.00					MinPt-O-SF	
2729.13	461.28	2420.83	2267.85	8.91	OSF1.50	12600.00	7950.00					MinPt-O-ADP	
2729.08	461.22	2420.83	2267.86	8.91	OSF1.50	12610.00	7950.00					MINPT-O-EOU	
2729.05	461.08	2420.90	2267.97	8.91	OSF1.50	12630.00	7950.00					MinPt-CtCt	
2876.72	410.11	2602.71	2466.61	10.56	OSF1.50	13860.00	7950.00					MinPt-O-ADP	
2876.63	410.06	2602.69	2466.63	10.56	OSF1.50	13870.00	7950.00					MINPT-O-EOU	
2876.41	408.49	2603.50	2467.91	10.60	OSF1.50	13940.00	7950.00					MinPt-CtCt	
2875.43	389.81	2614.97	2485.61	11.11	OSF1.50	14470.00	7950.00					MinPt-CtCt	
2872.87	374.41	2622.68	2498.45	11.56	OSF1.50	15020.00	7950.00					MinPts	
2873.13	374.41	2622.98	2498.72	11.55	OSF1.50	15070.00	7950.00					MinPt-O-SF	
2886.41	360.92	2645.27	2525.49	12.04	OSF1.50	15860.00	7950.00					MinPt-O-SF	
2879.64	356.81	2641.19	2522.83	12.16	OSF1.50	16600.00	7950.00					MinPt-CtCt	
2879.73	357.26	2641.04	2522.53	12.14	OSF1.50	16650.00	7950.00					MINPT-O-EOU	
2879.78	357.26	2641.04	2522.52	12.14	OSF1.50	16660.00	7950.00					MinPts	
2879.74	356.86	2641.23	2522.88	12.16	OSF1.50	16710.00	7950.00					MINPT-O-EOU	
2856.97	358.03	2617.55	2498.93	12.03	OSF1.50	17080.00	7950.00					MinPt-O-SF	
2839.56	367.34	2594.08	2472.22	11.64	OSF1.50	17560.00	7950.00					MinPt-CtCt	
2840.17	369.10	2593.56	2471.07	11.59	OSF1.50	17640.00	7950.00					MINPT-O-EOU	
2841.14	370.23	2593.78	2470.90	11.55	OSF1.50	17690.00	7950.00					MinPt-O-ADP	
2875.80	382.17	2620.48	2493.63	11.33	OSF1.50	18200.00	7950.00					MinPts	
2890.42	388.17	2631.11	2502.25	11.21	OSF1.50	18441.82	7950.00					MinPt-O-SF	

Cottonwood Creek 4-65 27-28 4AH MWD 0' to 18257' - PR (Def Survey)

Pass													
8116.58	273.19	7933.85	7843.39	44.85	OSF1.50	0.00	0.00					Surface	
8089.29	273.57	7906.30	7815.71	44.64	OSF1.50	28.00	28.00					WRP	
2964.25	723.02	2481.32	2241.23	6.17	OSF1.50	8070.00	7819.11					MinPt-CtCt	
2964.82	725.34	2480.43	2239.48	6.15	OSF1.50	8170.00	7870.55					MINPT-O-EOU	
2965.38	726.08	2480.53	2239.30	6.14	OSF1.50	8210.00	7887.75					MinPt-O-ADP	
2969.13	727.85	2483.25	2241.28	6.13	OSF1.50	8360.00	7933.97					MinPt-O-SF	
2997.37	658.18	2557.87	2339.20	6.85	OSF1.50	9290.00	7950.00					MinPt-O-ADP	
2995.81	656.36	2557.54	2339.45	6.86	OSF1.50	9350.00	7950.00					MINPT-O-EOU	
2994.39	653.24	2558.26	2341.15	6.89	OSF1.50	9470.00	7950.00					MinPt-CtCt	
3134.44	485.73	2810.04	2648.71	9.71	OSF1.50	12210.00	7950.00					MinPt-CtCt	
3196.32	369.53	2949.44	2826.79	13.02	OSF1.50	15270.00	7950.00					MinPt-O-ADP	
3195.73	368.94	2949.23	2826.79	13.04	OSF1.50	15320.00	7950.00					MinPt-O-ADP	
3195.24	368.36	2949.13	2826.89	13.06	OSF1.50	15380.00	7950.00					MINPT-O-EOU	
3190.90	361.55	2949.33	2829.35	13.29	OSF1.50	15770.00	7950.00					MinPts	
3187.69	358.45	2948.19	2829.24	13.39	OSF1.50	15920.00	7950.00					MinPt-O-ADP	
3179.04	358.52	2939.49	2820.52	13.35	OSF1.50	16300.00	7950.00					MinPt-CtCt	
3179.29	359.36	2939.18	2819.93	13.32	OSF1.50	16350.00	7950.00					MINPT-O-EOU	
3179.70	359.85	2939.27	2819.86	13.31	OSF1.50	16380.00	7950.00					MinPt-O-ADP	
3199.86	364.67	2956.21	2835.19	13.21	OSF1.50	16740.00	7950.00					MinPt-O-SF	
3201.78	369.94	2954.62	2831.85	13.03	OSF1.50	17690.00	7950.00					MinPt-CtCt	
3202.71	372.81	2953.63	2829.90	12.94	OSF1.50	17810.00	7950.00					MINPT-O-EOU	
3204.29	374.69	2953.97	2829.61	12.88	OSF1.50	17890.00	7950.00					MinPt-O-ADP	
3219.05	386.14	2961.09	2832.91	12.55	OSF1.50	18350.00	7950.00					MINPT-O-EOU	
3220.85	388.28	2961.46	2832.57	12.49	OSF1.50	18430.00	7950.00					MinPt-O-ADP	
3221.18	388.59	2961.58	2832.59	12.48	OSF1.50	18441.82	7950.00					MinPt-O-SF	

Cottonwood Creek 4-65 27-28 4BH MWD 0' to 18288' - PR (Def Survey)

Pass													
8269.10	279.83	8081.94	7989.27	44.60	OSF1.50	0.00	0.00					Surface	
8242.03	280.26	8054.58	7961.77	44.39	OSF1.50	28.00	28.00					WRP	
3289.95	723.13	2807.16	2566.82	6.84	OSF1.50	8100.00	7835.77					MinPt-CtCt	
3290.42	724.99	2806.46	2565.43	6.82	OSF1.50	8190.00	7879.39					MINPT-O-EOU	
3290.94	725.66	2806.57	2565.28	6.82	OSF1.50	8230.00	7895.59					MinPt-O-ADP	
3294.92	727.54	2809.36	2567.39	6.81	OSF1.50	8390.00	7939.63					MinPt-O-SF	
3296.24	716.27	2818.20	2579.97	6.92	OSF1.50	8520.00	7950.00						

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		
	3517.41	410.23	3243.39	3107.18	12.91	OSF1.50	13910.00	7950.00				MinPt-O-ADP	
	3517.23	410.05	3243.33	3107.19	12.91	OSF1.50	13920.00	7950.00				MINPT-O-EOU	
	3504.59	399.64	3237.63	3104.95	13.20	OSF1.50	14300.00	7950.00				MinPts	
	3504.70	399.67	3237.72	3105.03	13.20	OSF1.50	14330.00	7950.00				MinPt-O-SF	
	3509.76	365.31	3265.69	3144.45	14.47	OSF1.50	15380.00	7950.00				MinPt-O-SF	
	3500.40	363.36	3257.62	3137.03	14.51	OSF1.50	15750.00	7950.00				MinPts	
	3488.54	361.09	3247.28	3127.45	14.55	OSF1.50	16080.00	7950.00				MinPt-CtCt	
	3488.83	362.04	3246.94	3126.79	14.51	OSF1.50	16130.00	7950.00				MINPT-O-EOU	
	3489.27	362.59	3247.02	3126.69	14.49	OSF1.50	16160.00	7950.00				MinPt-O-ADP	
	3498.80	365.00	3254.93	3133.80	14.44	OSF1.50	16400.00	7950.00				MinPt-O-SF	
	3521.78	367.05	3276.55	3154.73	14.45	OSF1.50	16730.00	7950.00				MinPt-O-SF	
	3525.05	362.59	3282.79	3162.46	14.64	OSF1.50	17150.00	7950.00				MinPt-CtCt	
	3525.68	364.47	3282.17	3161.21	14.57	OSF1.50	17230.00	7950.00				MINPT-O-EOU	
	3526.26	365.16	3282.28	3161.10	14.54	OSF1.50	17260.00	7950.00				MinPt-O-ADP	
	3570.01	376.74	3318.31	3193.27	14.27	OSF1.50	17890.00	7950.00				MinPt-O-SF	
	3569.50	378.35	3316.73	3191.15	14.21	OSF1.50	18030.00	7950.00				MinPt-CtCt	
	3570.51	381.43	3315.69	3189.08	14.09	OSF1.50	18140.00	7950.00				MINPT-O-EOU	
	3571.64	382.80	3315.91	3188.84	14.05	OSF1.50	18190.00	7950.00				MinPt-O-ADP	
	3582.77	389.48	3322.58	3193.29	13.85	OSF1.50	18441.82	7950.00				MinPt-O-SF	