

Rush 4-65 29-30 4AH Plan #0 Anti-Collision Summary Report

Analysis Date-24hr Time: June 24, 2020 - 15:09
Client: Crestone Peak Resources
Field: CO, Arapahoe County (NAD 83 CZ)
Structure: Crestone Peak 28-04S-65W (Rush South Pad)
Slot: Rush 4-65 29-30 4AH
Well: Rush 4-65 29-30 4AH
Borehole: Original Hole
Scan MD Range: 0.00ft - 17935.46ft

Analysis Method: 3D Least Distance
Reference Trajectory: Rush 4-65 29-30 4AH 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: ISCSA0 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

Cottonwood Creek 4-65 28-27 4DH Plan #0 (Def Plan)

Warning Alert

26.06	20.01	25.08	6.05	N/A	MAS = 6.10 (m)	0.00	0.00	CtCt<=15m<15.00				Enter Alert	
24.77	20.01	23.79	4.76	N/A	MAS = 6.10 (m)	28.00	28.00					WRP	
24.34	20.01	21.47	4.33	12.34	MAS = 6.10 (m)	420.00	420.00					MinPts	
24.42	20.01	21.38	4.41	11.44	MAS = 6.10 (m)	450.00	450.00					MINPT-O-EOU	
27.83	20.01	24.06	7.82	9.71	MAS = 6.10 (m)	580.00	580.00					MinPt-O-SF	
49.16	20.01	44.74	29.15	14.04	MAS = 6.10 (m)	790.00	789.96	CtCt<=15m>15.00				Exit Alert	
196.89	20.01	187.97	176.88	24.71	MAS = 6.10 (m)	2000.00	1999.27					MinPt-O-SF	
959.01	54.89	922.09	904.12	26.66	OSF1.50	7270.00	7265.90					MinPt-O-SF	
774.08	56.84	735.86	717.24	20.76	OSF1.50	7920.00	7782.71					MinPt-CtCt	
774.11	56.98	735.80	717.14	20.71	OSF1.50	7930.00	7787.56					MinPts	
783.16	58.41	743.89	724.75	20.43	OSF1.50	8060.00	7839.13					MinPt-O-SF	
9764.22	66.26	9719.72	9697.96	224.35	OSF1.50	17935.46	7875.00					TD	

Rush 4-65 29-30 4CH Plan #0 (Def Plan)

Warning Alert

49.91	32.81	48.92	17.10	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
49.91	32.81	48.91	17.10	4494.15	MAS = 10.00 (m)	28.00	28.00					WRP	
49.91	32.81	47.80	17.10	43.63	MAS = 10.00 (m)	240.00	240.00					MinPts	
49.91	32.81	47.76	17.10	41.85	MAS = 10.00 (m)	250.00	250.00					MINPT-O-EOU	
75.60	32.81	71.83	42.79	26.80	MAS = 10.00 (m)	650.00	650.00					MinPt-O-SF	
182.45	32.81	172.89	149.64	21.16	MAS = 10.00 (m)	2010.00	2009.26					MinPt-O-SF	
596.13	53.51	560.12	542.61	17.00	OSF1.50	7320.00	7315.03					MinPt-O-SF	
653.64	197.05	521.94	456.58	4.99	OSF1.50	11240.00	7875.00	OSF<5.00				Enter Alert	
653.62	539.91	293.35	113.71	1.82	OSF1.50	17930.00	7875.00					MinPt-CtCt	
653.62	540.17	293.18	113.45	1.82	OSF1.50	17935.46	7875.00					MinPts	

Rush 4-65 29-30 3CH Plan #0 (Def Plan)

Warning Alert

50.44	32.81	49.45	17.63	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
49.91	32.81	48.92	17.10	N/A	MAS = 10.00 (m)	28.00	28.00					WRP	
49.91	32.81	47.76	17.10	42.69	MAS = 10.00 (m)	250.00	250.00					MinPts	
49.99	32.81	47.67	17.18	36.78	MAS = 10.00 (m)	280.00	280.00					MINPT-O-EOU	
71.02	32.81	66.21	38.21	18.29	MAS = 10.00 (m)	700.00	700.00					MinPt-O-SF	
175.04	32.81	164.20	142.23	17.65	MAS = 10.00 (m)	2010.00	2009.26					MinPt-O-SF	
597.57	53.04	561.88	544.53	17.19	OSF1.50	7300.00	7295.45					MinPt-O-SF	
654.71	67.06	609.67	587.64	14.84	OSF1.50	8287.64	7875.00					MinPt-CtCt	
654.81	197.59	522.75	457.22	4.99	OSF1.50	11220.00	7875.00	OSF<5.00				Enter Alert	
655.04	540.33	294.49	114.71	1.82	OSF1.50	17935.46	7875.00					MinPts	

Rush 4-65 29-30 3AH MWD 0' to 15645' - PR (Def Survey)

Warning Alert

265.54	32.81	263.72	232.73	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
265.38	32.81	263.57	232.58	N/A	MAS = 10.00 (m)	28.00	28.00					WRP	
265.38	32.81	263.57	232.58	59319.27	MAS = 10.00 (m)	30.00	30.00					MinPts	
265.43	32.81	263.52	232.62	2790.79	MAS = 10.00 (m)	50.00	50.00					MINPT-O-EOU	
345.51	32.81	333.79	312.70	34.00	MAS = 10.00 (m)	2380.00	2379.05					MinPt-O-SF	
361.36	32.81	348.87	328.55	33.07	MAS = 10.00 (m)	3040.00	3038.68					MinPt-O-SF	
680.63	32.81	662.51	647.83	41.10	MAS = 10.00 (m)	4820.00	4817.66					MinPt-O-SF	
746.75	32.81	726.87	713.94	40.79	MAS = 10.00 (m)	5200.00	5197.45					MinPt-O-SF	
781.08	32.81	760.41	748.27	40.89	MAS = 10.00 (m)	5390.00	5387.34					MinPt-O-SF	
818.75	32.81	797.30	785.94	41.17	MAS = 10.00 (m)	5590.00	5587.23					MinPt-O-SF	
897.33	33.98	874.14	863.35	41.49	OSF1.50	5980.00	5977.00					MinPt-O-SF	
976.75	36.53	951.87	940.23	41.89	OSF1.50	6370.00	6366.78					MinPt-O-SF	
1072.81	39.84	1045.72	1032.97	42.02	OSF1.50	6840.00	6836.52					MinPt-O-SF	
1150.87	42.51	1122.00	1108.36	42.14	OSF1.50	7230.00	7226.21					MinPt-O-SF	
1164.29	42.97	1135.11	1121.32	42.16	OSF1.50	7310.00	7305.26					MinPt-O-SF	
1323.82	59.14	1283.86	1264.68	34.47	OSF1.50	8240.00	7873.42					MinPts	
1327.09	93.64	1264.13	1233.45	21.60	OSF1.50	8710.00	7875.00					MinPt-CtCt	
1328.93	99.12	1262.32	1229.81	20.42	OSF1.50	8820.00	7875.00					MINPT-O-EOU	
1290.17	188.67	1163.86	1101.51	10.33	OSF1.50	10010.00	7875.00					MinPt-CtCt	
1298.94	208.34	1159.51	1090.60	9.41	OSF1.50	10310.00	7875.00					MINPT-O-EOU	
1308.47	220.07	1161.22	1088.40	8.97	OSF1.50	10480.00	7875.00					MinPt-O-ADP	
1349.58	353.18	1113.59	996.40	5.75	OSF1.50	12130.00	7875.00					MinPt-CtCt	
1361.68	410.05	1087.78	951.63	4.99	OSF1.50	12900.00	7875.00	OSF<5.00				Enter Alert	
1365.21	416.11	1087.27	949.10	4.93	OSF1.50	12980.00	7875.00					MINPT-O-EOU	
1368.86	420.36	1088.09	948.50	4.90	OSF1.50	13050.00	7875.00					MinPt-O-ADP	
1386.20	438.57	1093.28	947.63	4.75	OSF1.50	13300.00	7875.00					MinPt-O-ADP	
1331.38	615.33	920.63	716.06	3.25	OSF1.50	15490.00	7875.00					MinPt-CtCt	
1332.03	622.88	916.24	709.15	3.21	OSF1.50	15600.00	7875.00					MinPts	
1332.52	623.20	916.52	709.32	3.21	OSF1.50	15620.00	7875.00					MinPt-O-SF	
1697.49	512.44	1355.32	1185.04	4.98	OSF1.50	16630.00	7875.00	OSF>5.00				Exit Alert	
2708.05	342.47	2479.20	2365.58	11.91	OSF1.50	17935.46	7875.00					TD	

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

Warning Alert

7963.54	225.07	7812.89	7738.47	53.49	OSF1.50	0.00	0.00					Surface	
7935.54	225.18	7784.82	7710.36	53.28	OSF1.50	28.00	28.00					WRP	

...Rush 4-65 29-30 4AH\Original Hole\Rush 4-65 29-30 4AH 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		
Cottonwood Creek 4-65 27-28 4BH MWD 0' to 18288' - PR (Def Survey)	754.27	227.44	602.11	526.83	5.00	OSF1.50	7220.00	7216.25	OSF<5.00			Enter Alert	
	445.16	209.64	303.53	235.51	3.23	OSF1.50	7620.00	7585.77				MinPt-O-SF	
	432.88	201.66	296.35	231.22	3.27	OSF1.50	7660.00	7617.20				MinPt-O-ADP	
	428.82	196.97	295.31	231.84	3.33	OSF1.50	7680.00	7632.38				MINPT-O-EOU	
	425.07	183.49	300.28	241.58	3.56	OSF1.50	7730.00	7668.70				MinPt-CtCt	
	457.58	143.61	358.90	313.97	4.99	OSF1.50	7860.00	7751.10	OSF>5.00			Exit Alert	
	10451.55	56.34	10413.45	10395.21	286.38	OSF1.50	17935.46	7875.00				TD	
	Warning Alert												
	8059.04	225.66	7908.00	7833.38	53.99	OSF1.50	0.00	0.00				Surface	
	8031.08	225.79	7879.95	7805.29	53.77	OSF1.50	28.00	28.00	OSF<5.00			WRP	
987.46	299.11	787.52	688.35	4.97	OSF1.50	7110.00	7106.36				Enter Alert		
555.52	386.02	295.99	169.50	2.17	OSF1.50	7730.00	7668.70				MinPt-O-SF		
554.70	385.41	295.53	169.29	2.17	OSF1.50	7740.00	7675.67				MinPt-O-ADP		
554.18	384.63	295.49	169.55	2.17	OSF1.50	7750.00	7682.54				MINPT-O-EOU		
553.96	383.68	295.87	170.29	2.18	OSF1.50	7760.00	7689.31				MinPt-CtCt		
814.35	251.45	643.58	562.90	4.99	OSF1.50	8230.00	7872.68	OSF>5.00			Exit Alert		
10461.36	58.95	10421.52	10402.41	273.58	OSF1.50	17935.46	7875.00				TD		
Cottonwood Creek 4-65 27-28 3CH MWD 0' to 18345' - PR (Def Survey)													
Warning Alert													
7979.00	231.37	7824.15	7747.63	52.13	OSF1.50	0.00	0.00				Surface		
7951.07	231.50	7796.13	7719.57	51.91	OSF1.50	28.00	28.00				WRP		
1360.62	412.14	1085.33	948.48	4.97	OSF1.50	6800.00	6796.54	OSF<5.00			Enter Alert		
838.02	620.30	423.56	217.72	2.03	OSF1.50	7710.00	7654.46				MinPts		
1314.85	402.93	1043.96	911.92	4.95	OSF1.50	8560.00	7875.00	OSF>5.00			Exit Alert		
10495.70	83.06	10439.79	10412.64	193.26	OSF1.50	17935.46	7875.00				TD		
Cottonwood Creek 4-65 27-28 3DH MWD 0' to 17955' - PR (Def Survey)													
Warning Alert													
8048.53	219.15	7901.82	7829.38	55.54	OSF1.50	0.00	0.00				Surface		
8020.56	219.26	7873.79	7801.31	55.32	OSF1.50	28.00	28.00				WRP		
1018.67	309.54	810.94	709.13	4.98	OSF1.50	7240.00	7236.16	OSF<5.00			Enter Alert		
871.42	335.10	645.90	536.33	3.95	OSF1.50	7590.00	7561.32				MinPt-O-SF		
871.04	334.83	645.67	536.21	3.95	OSF1.50	7600.00	7569.55				MinPts		
870.90	334.50	645.73	536.40	3.95	OSF1.50	7610.00	7577.70				MinPt-CtCt		
970.22	296.64	769.85	673.58	5.00	OSF1.50	7910.00	7777.74	OSF>5.00			Exit Alert		
10860.85	65.48	10816.66	10795.37	255.00	OSF1.50	17935.46	7875.00				TD		
Little Rush 4-65 28 1V MWD 0' to 8693' - PR (Def Survey)													
Pass													
226.30	32.81	224.49	193.50	N/A	MAS = 10.00 (m)	0.00	0.00				Surface		
226.04	32.81	224.22	193.23	31260.56	MAS = 10.00 (m)	10.00	10.00				MinPts		
226.04	32.81	224.22	193.23	N/A	MAS = 10.00 (m)	28.00	28.00				WRP		
226.04	32.81	224.22	193.23	50463.79	MAS = 10.00 (m)	30.00	30.00				MinPts		
226.66	32.81	223.87	193.85	230.66	MAS = 10.00 (m)	220.00	220.00				MINPT-O-EOU		
228.26	32.81	223.25	195.45	70.81	MAS = 10.00 (m)	650.00	650.00				MINPT-O-EOU		
228.66	32.81	223.53	195.85	68.34	MAS = 10.00 (m)	700.00	700.00				MinPt-O-SF		
232.44	32.81	227.29	199.63	69.23	MAS = 10.00 (m)	870.00	869.91				MinPt-O-SF		
234.59	32.81	229.41	201.78	69.24	MAS = 10.00 (m)	960.00	959.86				MinPt-O-SF		
236.65	32.81	231.45	203.84	69.41	MAS = 10.00 (m)	1050.00	1049.81				MinPt-O-SF		
259.29	32.81	252.43	226.49	49.01	MAS = 10.00 (m)	2170.00	2169.17				MinPt-O-SF		
413.37	37.30	387.97	376.07	17.30	OSF1.50	7230.00	7226.21				MinPt-O-SF		
10588.82	42.72	10559.81	10546.11	386.29	OSF1.50	17935.46	7875.00				TD		
Cottonwood Creek 4-65 28-27 3AH Plan #0 (Def Plan)													
Pass													
1621.50	32.81	1620.51	1588.69	N/A	MAS = 10.00 (m)	0.00	0.00				Surface		
1621.04	32.81	1620.00	1588.23	29995.56	MAS = 10.00 (m)	20.00	20.00				MinPt-O-SF		
1620.93	32.81	1619.89	1588.12	30442.36	MAS = 10.00 (m)	28.00	28.00				WRP		
1573.00	32.81	1557.27	1540.19	106.64	MAS = 10.00 (m)	3720.00	3718.29				MinPts		
1574.99	32.81	1555.52	1542.19	85.12	MAS = 10.00 (m)	4420.00	4417.89				MINPT-O-EOU		
1621.31	54.55	1584.62	1566.76	45.37	OSF1.50	7220.00	7216.25				MinPt-O-SF		
1485.16	55.78	1447.59	1429.37	40.72	OSF1.50	7930.00	7787.56				MinPt-CtCt		
1485.16	55.87	1447.55	1429.30	40.66	OSF1.50	7940.00	7792.29				MINPT-O-EOU		
1485.23	55.95	1447.56	1429.28	40.60	OSF1.50	7950.00	7796.89				MinPt-O-ADP		
1603.30	63.86	1560.40	1539.45	38.23	OSF1.50	8640.00	7875.00				MinPt-O-SF		
9865.01	78.14	9812.58	9786.86	191.76	OSF1.50	17935.46	7875.00				TD		
Rush 4-65 29-30 2CH Plan #0 (Def Plan)													
Pass													
1644.65	32.81	1643.67	1611.84	N/A	MAS = 10.00 (m)	0.00	0.00				Surface		
1644.07	32.81	1643.03	1611.27	29752.26	MAS = 10.00 (m)	28.00	28.00				MinPt-O-SF		
1643.95	32.81	1640.44	1611.14	649.25	MAS = 10.00 (m)	490.00	490.00				MinPts		
1644.03	32.81	1640.30	1611.22	598.19	MAS = 10.00 (m)	530.00	530.00				MINPT-O-EOU		
1647.42	32.81	1642.97	1614.61	474.45	MAS = 10.00 (m)	700.00	700.00				MinPt-O-SF		
2044.69	545.63	1680.61	1499.06	5.63	OSF1.50	17935.46	7875.00				MinPts		
Cottonwood Creek 4-65 28-27 2AH Plan #0 (Def Plan)													
Pass													
1667.88	32.81	1666.90	1635.08	N/A	MAS = 10.00 (m)	0.00	0.00				Surface		
1667.30	32.81	1666.26	1634.49	29141.88	MAS = 10.00 (m)	28.00	28.00				MinPt-O-SF		
1667.16	32.81	1664.90	1634.36	1306.30	MAS = 10.00 (m)	290.00	290.00				MinPts		
1667.35	32.81	1664.67	1634.54	982.60	MAS = 10.00 (m)	370.00	370.00				MINPT-O-EOU		
2222.08	54.82	2185.21	2167.27	61.89	OSF1.50	7340.00	7334.48				MinPt-O-SF		
2194.05	56.25	2156.23	2137.80	59.52	OSF1.50	7930.00	7787.56				MinPt-CtCt		
2194.09	56.41	2156.15	2137.68	59.35	OSF1.50	7950.00	7796.89				MINPT-O-EOU		
2194.15	56.49	2156.16	2137.66	59.27	OSF1.50	7960.00	7801.37				MinPt-O-ADP		
2497.65	75.87	2446.74	2421.78	50.01	OSF1.50	9320.00	7875.00				MinPt-O-SF		
10000.83	95.86	9936.60	9904.97	158.09	OSF1.50	17935.46	7875.00				TD		
Rush 4-65 29-30 2AH Plan #0 (Def Plan)													
Pass													
1691.14	32.81	1690.16	1658.33	N/A	MAS = 10.00 (m)	0.00	0.00				Surface		
1690.54	32.81	1689.50	1657.73	28598.58	MAS = 10.00 (m)	28.00	28.00				MinPt-O-SF		
1690.40	32.81	1686.83	1657.59	652.94	MAS = 10.00 (m)	500.00	500.00				MinPts		
1690.49	32.81	1686.76	1657.68	615.76	MAS = 10.00 (m)	530.00	530.00				MINPT-O-EOU		
1694.76	32.81	1690.29	1661.96	484.73	MAS = 10.00 (m)	700.00	700.00				MinPt-O-SF		
2641.41	545.43	2277.46	2095.98	7.27	OSF1.50	17935.46	7875.00				MinPts		
Cottonwood Creek 4-65 28-27 1CH Plan #0 (Def Plan)													
Pass													
1714.47	32.81	1713.49	1681.66	N/A	MAS = 10.00 (m)	0.00	0.00				Surface		

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		
Rush 4-65 29-30 1CH Plan #0 (Def Plan)	1713.87	32.81	1712.82	1691.06	28115.43	MAS = 10.00 (m)	28.00	28.00				MinPt-O-SF	
	1713.71	32.81	1711.40	1680.90	1285.45	MAS = 10.00 (m)	300.00	300.00				MinPts	
	1713.78	32.81	1711.31	1680.97	1148.90	MAS = 10.00 (m)	330.00	330.00				MINPT-O-EOU	
	1727.14	32.81	1722.85	1694.33	521.04	MAS = 10.00 (m)	700.00	700.00				MinPt-O-SF	
	3479.92	93.35	3417.35	3386.57	56.50	OSF1.50	10030.00	7875.00				MinPt-O-SF	
	10187.02	119.77	10106.85	10067.26	128.63	OSF1.50	17935.46	7875.00				TD	
Cottonwood Creek 4-65 28-27 1AH Plan #0 (Def Plan)	1737.82	32.81	1736.84	1705.01	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	1737.21	32.81	1736.16	1704.40	27683.05	MAS = 10.00 (m)	28.00	28.00				MinPt-O-SF	
	1737.04	32.81	1733.48	1704.23	672.50	MAS = 10.00 (m)	500.00	500.00				MinPts	
	1737.12	32.81	1733.40	1704.32	633.73	MAS = 10.00 (m)	530.00	530.00				MINPT-O-EOU	
	1741.44	32.81	1736.96	1708.63	498.68	MAS = 10.00 (m)	700.00	700.00				MinPt-O-SF	
	3243.37	545.18	2879.58	2698.18	6.94	OSF1.50	17935.46	7875.00				MinPts	
Rush 4-65 29-30 1AH Plan #0 (Def Plan)	1761.25	32.81	1760.26	1728.44	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	1760.63	32.81	1759.58	1727.82	27297.25	MAS = 10.00 (m)	28.00	28.00				MinPt-O-SF	
	1760.45	32.81	1758.14	1727.64	1325.96	MAS = 10.00 (m)	300.00	300.00				MinPts	
	1760.52	32.81	1758.05	1727.71	1183.02	MAS = 10.00 (m)	330.00	330.00				MINPT-O-EOU	
	1775.59	32.81	1771.30	1742.78	537.17	MAS = 10.00 (m)	700.00	700.00				MinPt-O-SF	
	2229.83	32.81	2217.05	2197.02	188.94	MAS = 10.00 (m)	2670.00	2668.89				MinPt-O-SF	
	4480.19	111.34	4405.63	4368.85	60.88	OSF1.50	10730.00	7875.00				MinPt-O-SF	
	10424.96	143.67	10328.85	10281.29	109.59	OSF1.50	17935.46	7875.00				TD	
Cottonwood Creek 4-65 27 1H ST1 7234' to 12126' - PR (Def Survey)	1784.75	32.81	1783.76	1751.94	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	1784.10	32.81	1783.05	1751.29	25953.98	MAS = 10.00 (m)	28.00	28.00				MinPt-O-SF	
	1783.90	32.81	1781.59	1751.09	1349.15	MAS = 10.00 (m)	300.00	300.00				MinPts	
	1783.96	32.81	1781.50	1751.16	1201.88	MAS = 10.00 (m)	330.00	330.00				MINPT-O-EOU	
	1800.49	32.81	1796.21	1767.68	546.50	MAS = 10.00 (m)	700.00	700.00				MinPt-O-SF	
	2292.39	32.81	2279.68	2259.59	195.28	MAS = 10.00 (m)	2710.00	2708.86				MinPt-O-SF	
	3840.86	546.33	3476.31	3294.53	10.56	OSF1.50	17935.46	7875.00				MinPts	
Cottonwood Creek 4-65 27 1H ST1 7234' to 12126' - PR (Def Survey)	5724.13	32.81	5722.31	5691.32	N/A	MAS = 10.00 (m)	0.00	0.00				MinPts	Pass
	5724.13	32.81	5722.32	5691.33	N/A	MAS = 10.00 (m)	28.00	28.00				WRP	
	5725.58	32.81	5720.47	5692.77	1735.10	MAS = 10.00 (m)	650.00	650.00				MINPT-O-EOU	
	5727.93	32.81	5722.66	5695.12	1657.10	MAS = 10.00 (m)	760.00	759.97				MinPt-O-SF	
	5743.08	32.81	5737.74	5710.27	1626.52	MAS = 10.00 (m)	1150.00	1149.75				MinPt-O-SF	
	5781.09	32.81	5772.39	5748.28	813.89	MAS = 10.00 (m)	3000.00	2998.70				MinPts	
	5781.20	32.81	5772.29	5748.39	791.49	MAS = 10.00 (m)	3070.00	3068.66				MINPT-O-EOU	
	5785.39	32.81	5775.00	5752.59	658.31	MAS = 10.00 (m)	3590.00	3588.36				MINPT-O-EOU	
	5786.76	32.81	5775.37	5753.95	591.24	MAS = 10.00 (m)	3870.00	3868.20				MINPT-O-EOU	
	5806.78	32.81	5788.83	5773.97	355.11	MAS = 10.00 (m)	5460.00	5457.30				MinPts	
	5806.90	32.81	5788.73	5774.09	350.43	MAS = 10.00 (m)	5510.00	5507.27				MINPT-O-EOU	
	6094.50	40.91	6066.70	6053.59	232.54	OSF1.50	7780.00	7702.54				MinPt-O-SF	
	6198.41	41.58	6170.15	6156.82	232.50	OSF1.50	7910.00	7777.74				MinPt-O-SF	
	15950.47	64.66	15906.82	15885.80	379.38	OSF1.50	17935.46	7875.00				TD	
Chico 4-65 26-25 2DH MWD 0' to 17975' - PR (Def Survey)	5724.13	32.81	5722.31	5691.32	N/A	MAS = 10.00 (m)	0.00	0.00				MinPts	Pass
	5724.13	32.81	5722.32	5691.33	N/A	MAS = 10.00 (m)	28.00	28.00				WRP	
	5725.58	32.81	5720.47	5692.77	1735.10	MAS = 10.00 (m)	650.00	650.00				MINPT-O-EOU	
	5727.93	32.81	5722.66	5695.12	1657.10	MAS = 10.00 (m)	760.00	759.97				MinPt-O-SF	
	5743.08	32.81	5737.74	5710.27	1626.52	MAS = 10.00 (m)	1150.00	1149.75				MinPt-O-SF	
	5781.09	32.81	5772.39	5748.28	813.89	MAS = 10.00 (m)	3000.00	2998.70				MinPts	
	5781.20	32.81	5772.29	5748.39	791.49	MAS = 10.00 (m)	3070.00	3068.66				MINPT-O-EOU	
	5785.39	32.81	5775.00	5752.59	658.31	MAS = 10.00 (m)	3590.00	3588.36				MINPT-O-EOU	
	5786.76	32.81	5775.37	5753.95	591.24	MAS = 10.00 (m)	3870.00	3868.20				MINPT-O-EOU	
	5806.78	32.81	5788.83	5773.97	355.11	MAS = 10.00 (m)	5460.00	5457.30				MinPts	
	5806.90	32.81	5788.73	5774.09	350.43	MAS = 10.00 (m)	5510.00	5507.27				MINPT-O-EOU	
	5902.15	39.18	5875.50	5862.97	235.54	OSF1.50	7460.00	7447.79				MinPt-O-SF	
	6166.27	41.66	6137.96	6124.61	230.86	OSF1.50	7900.00	7772.65				MinPt-O-SF	
	15932.24	66.77	15887.19	15865.47	366.67	OSF1.50	17935.46	7875.00				TD	
Chico 4-65 26-25 3AH MWD 0' to 17900' - PR (Def Survey)	10868.79	32.81	10866.87	10835.98	95744.15	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	10868.76	32.81	10866.81	10835.95	80037.01	MAS = 10.00 (m)	28.00	28.00				WRP	
	10868.60	32.81	10866.22	10835.80	19035.51	MAS = 10.00 (m)	190.00	190.00				MinPts	
	10868.72	32.81	10864.26	10835.91	4101.89	MAS = 10.00 (m)	660.00	660.00				MinPts	
	10868.99	32.81	10864.50	10836.18	4066.28	MAS = 10.00 (m)	700.00	700.00				MinPt-O-SF	
	10551.62	39.20	10524.74	10512.42	428.38	OSF1.50	6980.00	6976.44				MinPt-CtCt	
	10551.72	39.50	10524.63	10512.22	425.00	OSF1.50	7030.00	7026.41				MINPT-O-EOU	
	10551.82	39.62	10524.65	10512.20	423.67	OSF1.50	7050.00	7046.40				MinPt-O-ADP	
	10987.15	43.64	10957.53	10943.51	392.03	OSF1.50	7990.00	7814.05				MinPt-O-SF	
	20849.14	53.52	20812.92	20795.62	602.32	OSF1.50	17935.46	7875.00				TD	
Chico 4-65 26-25 2BH MWD 0' to 17932' - PR (Def Survey)	10862.08	32.81	10860.21	10829.27	210259.25	MAS = 10.00 (m)	0.00	0.00				MinPts	Pass
	10862.20	32.81	10860.31	10829.39	138598.32	MAS = 10.00 (m)	28.00	28.00				WRP	
	10869.05	32.81	10864.50	10836.24	3978.35	MAS = 10.00 (m)	700.00	700.00				MinPt-O-SF	
	10915.11	32.81	10908.06	10882.31	2002.18	MAS = 10.00 (m)	2190.00	2189.16				MinPt-O-SF	
	10919.85	32.81	10912.72	10887.05	1974.53	MAS = 10.00 (m)	2360.00	2359.06				MinPt-O-SF	
	10556.12	41.07	10527.99	10515.05	407.73	OSF1.50	6950.00	6946.45				MinPt-CtCt	
	10556.20	41.36	10527.92	10514.90	405.41	OSF1.50	6990.00	6986.43				MINPT-O-EOU	
	10556.30	41.41	10527.94	10514.88	404.26	OSF1.50	7010.00	7006.42				MinPt-O-SF	
	10914.87	45.12	10884.25	10869.75	376.18	OSF1.50	7900.00	7772.65				MinPt-O-ADP	
	20872.28	53.09	20836.36	20819.20	608.10	OSF1.50	17935.46	7875.00				TD	
Chico 4-65 26-25 2BH MWD 0' to 17932' - PR (Def Survey)	10882.57	32.81	10880.72	10849.76	325221.43	MAS = 10.00 (m)	0.00	0.00				MinPts	Pass
	10882.72	32.81	10880.85	10849.91	192519.27	MAS = 10.00 (m)	28.00	28.00				WRP	
	10891.18	32.81	10886.36	10858.37	3626.45	MAS = 10.00 (m)	700.00	700.00				MinPt-O-SF	
	10898.20	32.81	10892.91	10865.39	3138.56	MAS = 10.00 (m)	900.00	899.89				MINPT-O-EOU	

...Rush 4-65 29-30 4AH\Original Hole\Rush 4-65 29-30 4AH 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		
10900.41	32.81	10894.91	10867.60	2359.29	MAS = 10.00 (m)		980.00	979.85				MinPt-O-SF	
10902.92	32.81	10897.43	10870.11	2963.76	MAS = 10.00 (m)		1070.00	1069.80				MinPt-O-SF	
10919.13	32.81	10913.07	10886.32	2568.64	MAS = 10.00 (m)		1590.00	1589.50				MinPt-O-SF	
10933.68	32.81	10926.81	10900.87	2076.14	MAS = 10.00 (m)		2100.00	2099.21				MinPt-O-SF	
10938.02	32.81	10931.22	10905.21	2105.51	MAS = 10.00 (m)		2260.00	2259.12				MinPt-O-SF	
10633.32	39.24	10606.44	10594.07	429.86	OSF1.50		6920.00	6916.47				MinPt-CtCt	
10633.40	39.48	10606.36	10593.92	427.16	OSF1.50		6960.00	6956.45				MINPT-O-EOU	
10633.49	39.60	10606.38	10593.89	425.82	OSF1.50		6980.00	6976.44				MinPt-O-ADP	
11042.83	43.97	11012.99	10998.86	390.92	OSF1.50		7960.00	7801.37				MinPt-O-SF	
20888.24	58.88	20848.45	20829.36	546.97	OSF1.50		17935.46	7875.00				TD	

Chico 4-65 26-25 2CH MWD 0' to 17734' - PR (Def Survey)													Pass
10875.39	32.81	10873.47	10842.58	99318.09	MAS = 10.00 (m)		0.00	0.00				MinPts	
10875.42	32.81	10873.38	10842.61	47083.07	MAS = 10.00 (m)		28.00	28.00				WRP	
10875.67	32.81	10872.55	10842.86	8338.13	MAS = 10.00 (m)		280.00	280.00				MINPT-O-EOU	
10876.11	32.81	10871.61	10843.30	4050.73	MAS = 10.00 (m)		650.00	650.00				MINPT-O-EOU	
10876.49	32.81	10871.98	10843.68	4028.62	MAS = 10.00 (m)		700.00	700.00				MinPt-O-SF	
10920.63	32.81	10913.69	10887.82	2046.84	MAS = 10.00 (m)		2270.00	2269.12				MinPt-O-SF	
10702.03	36.55	10677.00	10665.49	464.74	OSF1.50		6870.00	6866.50				MinPt-CtCt	
10702.12	36.86	10676.87	10665.26	460.57	OSF1.50		6920.00	6916.47				MINPT-O-EOU	
10702.28	37.05	10676.90	10665.22	458.11	OSF1.50		6950.00	6946.45				MinPt-O-ADP	
11151.97	42.21	11123.30	11109.76	411.86	OSF1.50		8000.00	7818.02				MinPt-O-SF	
20982.73	54.79	20945.66	20927.94	591.71	OSF1.50		17935.46	7875.00				TD	