

Rush 4-65 29-30 3CH Plan #0 Anti-Collision Summary Report

Analysis Date-24hr Time: June 24, 2020 - 14:43
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 3CH
Well: Rush 4-65 29-30 3CH
Borehole: Original Hole
Scan MD Range: 0.00ft - 18028.44ft

Analysis Method: 3D Least Distance
Reference Trajectory: Rush 4-65 29-30 3CH Plan #0 (Def Plan)
Depth Interval: Every 10.00 Measured Depth (ft)
Rule Set: D&M AntiCollision Standard S002 v5.1/5.2
Min Pts: All local minima indicated.
Version / Patch: 2.10.810.1
Database \ Project: localhost\drilling-Colorado

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

Offset Trajectories Summary

Offset Selection Criteria

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

Offset Trajectory	Separation			Allow	Sep.	Controlling	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

25.15	20.30	24.16	4.85	N/A	MAS = 6.19 (m)	0.00	0.00	CtCt<=15m<15.00	Enter Alert				
25.14	20.30	24.15	4.83	N/A	MAS = 6.19 (m)	28.00	28.00		WRP				
25.14	20.30	22.99	4.83	20.71	MAS = 6.19 (m)	250.00	250.00		MinPts				
25.15	20.30	22.96	4.85	19.94	MAS = 6.19 (m)	260.00	260.00		MINPT-O-EOU				
34.60	20.30	31.45	14.30	15.53	MAS = 6.19 (m)	470.00	469.80		MinPt-O-SF				
38.75	20.30	35.34	18.45	15.53	MAS = 6.19 (m)	520.00	519.70		MinPt-O-SF				
48.64	20.30	44.65	28.33	15.88	MAS = 6.19 (m)	620.00	619.51	CtCt<=15m<15.00	Exit Alert				
1459.90	55.55	1422.54	1404.35	40.11	OSF1.50	7300.00	7286.33		MinPt-O-SF				
1470.17	56.02	1432.50	1414.15	40.04	OSF1.50	7360.00	7345.83		MinPt-O-SF				
1416.94	56.66	1378.83	1360.27	38.15	OSF1.50	7870.00	7780.44		MinPt-CtCt				
1416.95	56.73	1378.80	1360.22	38.10	OSF1.50	7880.00	7786.84		MinPts				
1480.08	60.80	1439.22	1419.28	37.09	OSF1.50	8480.00	7950.00		MinPt-O-SF				
1490.56	61.23	1449.41	1429.33	37.09	OSF1.50	8530.00	7950.00		MinPt-O-SF				
9840.18	73.04	9791.16	9767.15	204.83	OSF1.50	18028.44	7950.00		TD				

Rush 4-65 29-30 4AH 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	3016.62	MAS = 10.00 (m)	28.00	28.00		WRP				
49.91	32.81	47.73	17.10	41.05	MAS = 10.00 (m)	250.00	250.00		MinPts				
49.97	32.81	47.67	17.16	37.22	MAS = 10.00 (m)	270.00	270.00		MINPT-O-EOU				
70.91	32.81	66.10	38.10	18.25	MAS = 10.00 (m)	690.00	689.37		MinPt-O-SF				
174.89	32.81	164.05	142.08	17.65	MAS = 10.00 (m)	2000.00	1996.79		MinPt-O-SF				
595.35	52.85	559.79	542.50	17.19	OSF1.50	7265.35	7251.78		MinPt-O-SF				
654.71	67.11	609.64	587.60	14.83	OSF1.50	8380.00	7950.00		MinPt-CtCt				
654.81	197.54	522.78	457.26	4.99	OSF1.50	11310.00	7950.00	OSF<5.00	Enter Alert				
655.04	540.37	294.47	114.67	1.82	OSF1.50	18028.44	7950.00		MinPts				

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

Warning Alert

99.82	32.81	98.83	67.01	N/A	MAS = 10.00 (m)	0.00	0.00		Surface				
99.82	32.81	98.80	67.01	3646.37	MAS = 10.00 (m)	28.00	28.00		WRP				
99.82	32.81	97.75	67.01	91.33	MAS = 10.00 (m)	230.00	230.00		MinPts				
99.84	32.81	97.69	67.03	84.49	MAS = 10.00 (m)	250.00	250.00		MINPT-O-EOU				
355.92	32.81	343.80	323.11	31.86	MAS = 10.00 (m)	2000.00	1996.79		MinPt-O-SF				
1189.54	54.37	1152.97	1135.17	33.40	OSF1.50	7300.00	7286.33		MinPt-O-SF				
1299.66	391.01	1038.66	908.65	4.99	OSF1.50	15110.00	7950.00	OSF<5.00	Enter Alert				
1299.76	541.83	938.21	757.93	3.60	OSF1.50	18028.44	7950.00		MinPts				

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

Warning Alert

215.48	32.81	213.67	182.68	N/A	MAS = 10.00 (m)	0.00	0.00		Surface				
215.48	32.81	213.66	182.67	N/A	MAS = 10.00 (m)	20.00	20.00		MinPts				
215.48	32.81	213.66	182.67	192989.62	MAS = 10.00 (m)	28.00	28.00		WRP				
215.51	32.81	213.62	182.70	2943.39	MAS = 10.00 (m)	40.00	40.00		MINPT-O-EOU				
112.62	32.81	98.80	79.81	9.12	MAS = 10.00 (m)	3060.00	3054.71		MinPts				
112.67	32.81	98.84	79.86	9.12	MAS = 10.00 (m)	3070.00	3064.69		MinPt-O-SF				
506.90	40.93	479.07	465.96	19.27	OSF1.50	6660.00	6647.63		MinPt-O-SF				
565.11	44.20	535.11	520.91	19.84	OSF1.50	7140.00	7126.68		MinPt-O-SF				
674.88	93.99	611.69	580.89	10.93	OSF1.50	8800.00	7950.00		MinPt-CtCt				
676.74	99.90	609.61	576.84	10.30	OSF1.50	8900.00	7950.00		MINPT-O-EOU				
637.64	188.72	511.30	448.92	5.10	OSF1.50	10100.00	7950.00		MinPt-CtCt				
638.14	192.94	508.97	445.19	4.99	OSF1.50	10160.00	7950.00	OSF<5.00	Enter Alert				
646.64	209.62	506.35	437.01	4.65	OSF1.50	10390.00	7950.00		MINPT-O-EOU				
656.70	221.98	508.18	434.72	4.46	OSF1.50	10560.00	7950.00		MinPt-O-ADP				
696.75	354.05	460.18	342.70	2.96	OSF1.50	12230.00	7950.00		MinPt-CtCt				
711.72	416.64	433.43	295.08	2.57	OSF1.50	13050.00	7950.00		MINPT-O-EOU				
716.86	422.74	434.50	294.12	2.55	OSF1.50	13140.00	7950.00		MinPt-O-ADP				
730.92	438.12	438.30	292.80	2.51	OSF1.50	13340.00	7950.00		MinPt-O-ADP				
677.32	614.92	266.83	62.39	1.65	OSF1.50	15570.00	7950.00		MinPt-CtCt				
678.00	623.28	261.94	54.71	1.63	OSF1.50	15680.00	7950.00		MinPts				
678.24	623.51	262.03	54.73	1.63	OSF1.50	15690.00	7950.00		MinPt-O-SF				
1226.03	373.22	976.69	852.81	4.94	OSF1.50	16690.00	7950.00	OSF>5.00	Exit Alert				
2455.44	209.22	2315.43	2246.23	17.73	OSF1.50	18028.44	7950.00		TD				

Cottonwood Creek 4-65 27-28 3CH MWD 0' to 18345' - PR (Def Survey)

Warning Alert

7968.35	230.78	7813.90	7737.57	52.19	OSF1.50	0.00	0.00		Surface				
7940.41	230.90	7785.87	7709.51	51.98	OSF1.50	28.00	28.00		WRP				
810.70	244.44	647.21	566.27	5.00	OSF1.50	7170.00	7156.62	OSF<5.00	Enter Alert				
396.94	239.29	235.38	157.65	2.51	OSF1.50	7680.00	7640.15		MinPt-O-SF				
388.58	232.93	231.08	155.65	2.53	OSF1.50	7710.00	7664.47		MinPt-O-ADP				
386.54	230.49	230.61	156.05	2.55	OSF1.50	7720.00	7672.41		MINPT-O-EOU				
382.18	216.03	235.62	166.15	2.70	OSF1.50	7770.00	7710.79		MinPt-CtCt				
456.56	148.03	354.71	308.52	4.84	OSF1.50	7970.00	7838.47	OSF>5.00	Exit Alert				
10472.80	65.88	10428.35	10406.92	244.36	OSF1.50	18028.44	7950.00		TD				

...Rush 4-65 29-30 3CH\Original Hole\Rush 4-65 29-30 3CH 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 4AH MWD 0' to 18257' - PR (Def Survey)													
												Warning Alert	
	7957.05	225.51	7806.11	7731.54	53.34	OSF1.50	0.00	0.00				Surface	
	7929.06	225.62	7778.04	7703.43	53.13	OSF1.50	28.00	28.00				WRP	
	1235.86	373.85	986.09	862.01	4.97	OSF1.50	6850.00	6837.25	OSF<5.00			Enter Alert	
	674.56	628.95	253.42	45.60	1.61	OSF1.50	7760.00	7703.30				MinPts	
	1205.81	368.45	957.27	837.36	4.99	OSF1.50	8630.00	7950.00	OSF>5.00			Exit Alert	
	10469.44	73.83	10419.69	10395.61	217.39	OSF1.50	18028.44	7950.00				TD	
Cottonwood Creek 4-65 27-28 3DH MWD 0' to 17955' - PR (Def Survey)													
												Warning Alert	
	8039.84	218.97	7893.26	7820.87	55.52	OSF1.50	0.00	0.00				Surface	
	8011.87	219.08	7865.22	7792.80	55.30	OSF1.50	28.00	28.00				WRP	
	815.48	250.91	645.96	564.57	4.97	OSF1.50	7450.00	7433.48	OSF<5.00			Enter Alert	
	760.83	251.29	590.59	509.54	4.64	OSF1.50	7620.00	7589.43				MinPt-O-SF	
	759.11	250.43	589.40	508.68	4.65	OSF1.50	7640.00	7606.63				MinPt-O-ADP	
	758.64	249.92	589.25	508.73	4.66	OSF1.50	7650.00	7615.13				MINPT-O-EOU	
	758.44	249.36	589.39	509.09	4.67	OSF1.50	7660.00	7623.54				MinPt-CtCt	
	773.44	239.92	610.48	533.52	4.97	OSF1.50	7770.00	7710.79	OSF>5.00			Exit Alert	
	10857.34	63.14	10814.71	10794.19	264.61	OSF1.50	18028.44	7950.00				TD	
Cottonwood Creek 4-65 27-28 4BH MWD 0' to 18288' - PR (Def Survey)													
												Warning Alert	
	8054.43	226.39	7902.90	7828.04	53.78	OSF1.50	0.00	0.00				Surface	
	8026.48	226.52	7874.85	7799.95	53.57	OSF1.50	28.00	28.00				WRP	
	1497.24	453.30	1194.50	1043.94	4.97	OSF1.50	6820.00	6807.31	OSF<5.00			Enter Alert	
	991.46	666.27	545.86	325.19	2.24	OSF1.50	7790.00	7725.51				MinPt-CtCt	
	991.55	666.40	545.84	325.15	2.24	OSF1.50	7800.00	7732.73				MinPts	
	1492.61	455.10	1186.58	1037.50	4.98	OSF1.50	8750.00	7950.00	OSF>5.00			Exit Alert	
	10498.65	88.82	10438.90	10409.83	180.53	OSF1.50	18028.44	7950.00				TD	
Rush 4-65 29-30 2CH Plan #0 (Def Plan)													
												Warning Alert	
	1594.73	32.81	1593.75	1561.92	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1594.35	32.81	1593.32	1561.54	37846.18	MAS = 10.00 (m)	20.00	20.00				MinPt-O-SF	
	1594.26	32.81	1593.24	1561.45	44057.00	MAS = 10.00 (m)	28.00	28.00				WRP	
	1401.46	421.68	1119.94	979.78	5.00	OSF1.50	15640.00	7950.00	OSF<5.00			Enter Alert	
	1391.73	545.14	1027.91	846.59	3.83	OSF1.50	18028.44	7950.00				MinPts	
Little Rush 4-65 28 1V MWD 0' to 8693' - PR (Def Survey)													
												Pass	
	176.17	32.81	174.36	143.36	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	176.13	32.81	174.32	143.32	N/A	MAS = 10.00 (m)	20.00	20.00				MinPts	
	176.13	32.81	174.32	143.32	255515.68	MAS = 10.00 (m)	28.00	28.00				WRP	
	176.74	32.81	173.99	143.93	186.84	MAS = 10.00 (m)	210.00	210.00				MINPT-O-EOU	
	57.83	32.81	45.47	25.02	5.23	MAS = 10.00 (m)	2980.00	2974.87				MinPts	
	57.88	32.81	45.41	25.07	5.18	MAS = 10.00 (m)	3030.00	3024.77				MINPT-O-EOU	
	58.59	32.81	45.88	25.78	5.13	MAS = 10.00 (m)	3140.00	3134.55				MinPt-O-SF	
	10593.31	42.68	10564.32	10550.63	386.76	OSF1.50	18028.44	7950.00				TD	
Cottonwood Creek 4-65 28-27 3AH Plan #0 (Def Plan)													
												Pass	
	1571.56	32.81	1570.57	1538.75	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1571.18	32.81	1570.15	1538.37	38619.63	MAS = 10.00 (m)	20.00	20.00				MinPt-O-SF	
	1571.10	32.81	1570.08	1538.29	46442.57	MAS = 10.00 (m)	28.00	28.00				WRP	
	1102.88	56.20	1065.06	1046.69	29.99	OSF1.50	7240.00	7226.49				MinPt-O-SF	
	841.58	57.39	802.73	784.19	22.65	OSF1.50	8010.00	7859.85				MinPts	
	841.67	57.48	802.76	784.19	22.61	OSF1.50	8020.00	7864.64				MinPt-O-ADP	
	850.66	58.45	811.13	792.20	22.43	OSF1.50	8140.00	7912.32				MinPt-O-SF	
	9793.98	71.02	9746.31	9722.96	209.75	OSF1.50	18028.44	7950.00				TD	
Cottonwood Creek 4-65 28-27 2AH Plan #0 (Def Plan)													
												Pass	
	1617.99	32.81	1617.00	1585.18	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1617.59	32.81	1616.57	1584.79	37162.97	MAS = 10.00 (m)	20.00	20.00				MinPt-O-SF	
	1617.51	32.81	1616.48	1584.70	42041.14	MAS = 10.00 (m)	28.00	28.00				WRP	
	1581.52	32.81	1566.71	1548.71	114.36	MAS = 10.00 (m)	2960.00	2954.90				MinPts	
	1582.30	32.81	1566.13	1549.49	104.12	MAS = 10.00 (m)	3380.00	3374.08				MINPT-O-EOU	
	1660.62	56.29	1622.76	1604.33	45.01	OSF1.50	7300.00	7286.33				MinPt-O-SF	
	1563.46	57.64	1524.70	1505.82	41.37	OSF1.50	8030.00	7869.31				MinPt-CtCt	
	1563.52	57.82	1524.64	1505.70	41.24	OSF1.50	8050.00	7878.27				MinPts	
	1725.42	69.88	1678.51	1655.54	37.54	OSF1.50	8890.00	7950.00				MinPt-O-SF	
	1733.28	70.20	1686.16	1663.08	37.54	OSF1.50	8910.00	7950.00				MinPt-O-SF	
	9889.04	87.57	9830.33	9801.47	171.31	OSF1.50	18028.44	7950.00				TD	
Rush 4-65 29-30 2AH Plan #0 (Def Plan)													
												Pass	
	1641.26	32.81	1640.28	1608.46	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1640.87	32.81	1639.84	1608.06	36555.69	MAS = 10.00 (m)	20.00	20.00				MinPt-O-SF	
	1640.77	32.81	1639.75	1607.97	40316.90	MAS = 10.00 (m)	28.00	28.00				WRP	
	1624.73	32.81	1619.80	1591.92	411.59	MAS = 10.00 (m)	760.00	759.23				MinPts	
	1624.80	32.81	1619.71	1591.99	395.68	MAS = 10.00 (m)	790.00	789.17				MINPT-O-EOU	
	1991.34	544.89	1627.75	1446.45	5.49	OSF1.50	18028.44	7950.00				MinPts	
Cottonwood Creek 4-65 28-27 1CH Plan #0 (Def Plan)													
												Pass	
	1664.62	32.81	1663.64	1631.81	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1664.22	32.81	1663.19	1631.41	36017.18	MAS = 10.00 (m)	20.00	20.00				MinPt-O-SF	
	1664.12	32.81	1663.09	1631.31	38831.21	MAS = 10.00 (m)	28.00	28.00				WRP	
	1657.35	32.81	1653.29	1624.54	539.78	MAS = 10.00 (m)	630.00	629.49				MinPts	
	1657.43	32.81	1653.21	1624.62	512.53	MAS = 10.00 (m)	660.00	659.43				MINPT-O-EOU	
	1790.79	32.81	1776.60	1757.98	135.58	MAS = 10.00 (m)	2390.00	2386.03				MinPt-O-SF	
	2320.93	63.11	2278.53	2257.82	56.01	OSF1.50	8150.00	7915.45				MinPt-CtCt	
	2320.99	63.33	2278.44	2257.66	55.82	OSF1.50	8170.00	7921.32				MINPT-O-EOU	
	2321.16	63.55	2278.47	2257.62	55.63	OSF1.50	8190.00	7926.65				MinPt-O-ADP	
	2668.01	87.16	2609.57	2580.85	46.42	OSF1.50	9570.00	7950.00				MinPt-O-SF	
	10028.65	111.21	9954.18	9917.43	136.46	OSF1.50	18028.44	7950.00				TD	
Rush 4-65 29-30 1CH Plan #0 (Def Plan)													
												Pass	
	1687.99	32.81	1687.01	1655.19	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1687.58	32.81	1686.55	1654.77	35536.58	MAS = 10.00 (m)	20.00	20.00				MinPt-O-SF	
	1687.48	32.81	1686.46	1654.68	37538.55	MAS = 10.00 (m)	28.00	28.00				WRP	
	1671.65	32.81	1666.72	1638.84	424.07	MAS = 10.00 (m)	760.00	759.23				MinPts	

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		
	1671.71	32.81	1866.68	1638.90	413.00	MAS = 10.00 (m)	780.00	779.19				MINPT-O-EOU	
	1853.59	32.81	1839.52	1820.76	141.49	MAS = 10.00 (m)	2470.00	2465.87				MinPt-O-SF	
	2591.41	544.46	2228.11	2046.95	7.15	OSF1.50	18028.44	7950.00				MinPts	
Cottonwood Creek 4-65 28-27 1AH Plan #0 (Def Plan)													Pass
	1711.45	32.81	1710.46	1678.64	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1711.03	32.81	1710.00	1678.22	35109.69	MAS = 10.00 (m)	20.00	20.00				MinPt-O-SF	
	1710.93	32.81	1709.90	1678.12	36408.88	MAS = 10.00 (m)	28.00	28.00				WRP	
	1705.29	32.81	1701.45	1672.48	597.95	MAS = 10.00 (m)	590.00	589.57				MinPts	
	1705.34	32.81	1701.40	1672.53	576.46	MAS = 10.00 (m)	610.00	609.53				MINPT-O-EOU	
	1996.30	32.81	1981.51	1963.49	144.57	MAS = 10.00 (m)	2600.00	2595.61				MinPt-O-SF	
	3650.37	105.22	3579.90	3545.15	52.52	OSF1.50	10250.00	7950.00				MinPt-O-SF	
	10224.39	135.88	10133.47	10088.51	113.68	OSF1.50	18028.44	7950.00				TD	
Rush 4-65 29-30 1AH Plan #0 (Def Plan)													Pass
	1734.97	32.81	1733.98	1702.16	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1734.53	32.81	1733.50	1701.73	33476.12	MAS = 10.00 (m)	20.00	20.00				MinPt-O-SF	
	1734.43	32.81	1733.39	1701.62	33617.54	MAS = 10.00 (m)	28.00	28.00				WRP	
	1729.50	32.81	1725.83	1696.69	643.81	MAS = 10.00 (m)	560.00	559.63				MinPts	
	1729.55	32.81	1725.77	1696.74	619.50	MAS = 10.00 (m)	580.00	579.59				MINPT-O-EOU	
	2056.71	32.81	2041.98	2023.90	149.60	MAS = 10.00 (m)	2640.00	2635.53				MinPt-O-SF	
	3190.73	545.77	2826.55	2644.96	8.78	OSF1.50	18028.44	7950.00				MinPts	
Cottonwood Creek 4-65 27 1H Pilot 0' to 8261' - PR (Def Survey)													Pass
	5704.21	32.81	5702.40	5671.40	N/A	MAS = 10.00 (m)	0.00	0.00				MinPts	
	5704.22	32.81	5702.39	5671.41	342716.59	MAS = 10.00 (m)	28.00	28.00				WRP	
	5705.79	32.81	5699.90	5672.98	1399.07	MAS = 10.00 (m)	810.00	809.13				MINPT-O-EOU	
	5714.42	32.81	5703.93	5681.61	642.52	MAS = 10.00 (m)	2310.00	2306.18				MinPt-O-SF	
	5659.26	32.81	5642.61	5626.45	376.83	MAS = 10.00 (m)	4690.00	4681.50				MinPts	
	5643.74	32.81	5622.74	5610.93	291.64	MAS = 10.00 (m)	5840.00	5829.24				MinPts	
	5643.87	32.81	5622.58	5611.06	287.26	MAS = 10.00 (m)	5910.00	5899.10				MINPT-O-EOU	
	5644.13	37.96	5618.27	5606.16	233.02	OSF1.50	7020.00	7006.92				MinPt-CtCt	
	5644.36	38.98	5617.82	5605.38	226.67	OSF1.50	7170.00	7156.62				MINPT-O-EOU	
	5644.63	39.32	5617.87	5605.32	224.66	OSF1.50	7220.00	7206.52				MinPt-O-SF	
	5666.35	40.13	5639.06	5626.22	220.55	OSF1.50	7440.00	7423.87				MinPt-O-ADP	
	5896.33	42.09	5867.74	5854.25	218.42	OSF1.50	7900.00	7799.32				MinPt-O-SF	
	5966.96	42.57	5938.04	5924.39	218.42	OSF1.50	7990.00	7849.90				MinPt-O-SF	
	15857.69	64.31	15814.28	15793.38	379.30	OSF1.50	18028.44	7950.00				TD	
Cottonwood Creek 4-65 27 1H ST1 7234' to 12126' - PR (Def Survey)													Pass
	5704.21	32.81	5702.40	5671.40	N/A	MAS = 10.00 (m)	0.00	0.00				MinPts	
	5704.22	32.81	5702.39	5671.41	342716.59	MAS = 10.00 (m)	28.00	28.00				WRP	
	5705.79	32.81	5699.90	5672.98	1399.07	MAS = 10.00 (m)	810.00	809.13				MINPT-O-EOU	
	5714.42	32.81	5703.93	5681.61	642.52	MAS = 10.00 (m)	2310.00	2306.18				MinPt-O-SF	
	5659.26	32.81	5642.61	5626.45	376.83	MAS = 10.00 (m)	4690.00	4681.50				MinPts	
	5643.74	32.81	5622.74	5610.93	291.64	MAS = 10.00 (m)	5840.00	5829.24				MinPts	
	5643.87	32.81	5622.58	5611.06	287.26	MAS = 10.00 (m)	5910.00	5899.10				MINPT-O-EOU	
	5644.13	37.96	5618.27	5606.16	233.02	OSF1.50	7020.00	7006.92				MinPt-CtCt	
	5644.36	38.98	5617.82	5605.38	226.67	OSF1.50	7170.00	7156.62				MINPT-O-EOU	
	5644.63	39.32	5617.87	5605.32	224.66	OSF1.50	7220.00	7206.52				MinPt-O-ADP	
	5814.68	41.35	5786.57	5773.32	219.36	OSF1.50	7750.00	7695.71				MinPt-O-SF	
	5863.09	41.68	5834.76	5821.41	219.39	OSF1.50	7820.00	7746.86				MinPt-O-SF	
	6016.18	42.61	5987.24	5973.57	220.03	OSF1.50	8010.00	7859.85				MinPt-O-SF	
	15879.60	63.07	15837.02	15816.53	387.46	OSF1.50	18028.44	7950.00				TD	
Chico 4-65 26-25 2DH MWD 0' to 17975' - PR (Def Survey)													Pass
	10860.03	32.81	10858.10	10827.22	91043.88	MAS = 10.00 (m)	0.00	0.00				Surface	
	10859.99	32.81	10858.04	10827.19	76682.25	MAS = 10.00 (m)	28.00	28.00				WRP	
	10859.96	32.81	10857.98	10827.15	66789.24	MAS = 10.00 (m)	50.00	50.00				MinPt-O-SF	
	10859.85	32.81	10857.46	10827.04	18916.77	MAS = 10.00 (m)	190.00	190.00				MinPts	
	10860.03	32.81	10857.05	10827.23	9344.46	MAS = 10.00 (m)	310.00	310.00				MINPT-O-EOU	
	10462.11	41.39	10433.74	10420.72	401.75	OSF1.50	7120.00	7106.72				MinPt-CtCt	
	10462.18	41.62	10433.65	10420.56	399.46	OSF1.50	7160.00	7146.64				MINPT-O-EOU	
	10462.27	41.73	10433.67	10420.54	398.33	OSF1.50	7180.00	7166.60				MinPt-O-ADP	
	10830.12	44.08	10800.18	10786.04	382.86	OSF1.50	8000.00	7854.93				MinPt-O-SF	
	20807.32	54.22	20770.63	20753.10	593.11	OSF1.50	18028.44	7950.00				TD	
Chico 4-65 26-25 3AH MWD 0' to 17900' - PR (Def Survey)													Pass
	10853.53	32.81	10851.66	10820.72	187479.21	MAS = 10.00 (m)	0.00	0.00				MinPts	
	10853.66	32.81	10851.77	10820.86	128001.71	MAS = 10.00 (m)	28.00	28.00				WRP	
	10889.04	32.81	10878.37	10856.23	1201.57	MAS = 10.00 (m)	2180.00	2176.44				MinPt-O-SF	
	10891.27	32.81	10880.56	10858.46	1196.07	MAS = 10.00 (m)	2350.00	2346.10				MinPt-O-SF	
	10478.21	43.06	10448.74	10435.15	385.44	OSF1.50	7060.00	7046.84				MinPt-CtCt	
	10478.27	43.28	10448.65	10434.99	383.44	OSF1.50	7100.00	7086.76				MINPT-O-EOU	
	10478.35	43.39	10448.66	10434.97	382.45	OSF1.50	7120.00	7106.72				MinPt-O-ADP	
	10851.02	45.86	10819.91	10805.16	367.69	OSF1.50	8000.00	7854.93				MinPt-O-SF	
	20836.98	53.82	20800.57	20783.16	598.54	OSF1.50	18028.44	7950.00				TD	
Chico 4-65 26-25 2BH MWD 0' to 17932' - PR (Def Survey)													Pass
	10673.49	32.81	10671.64	10640.68	291600.91	MAS = 10.00 (m)	0.00	0.00				MinPts	
	10673.66	32.81	10671.79	10640.85	178436.35	MAS = 10.00 (m)	28.00	28.00				WRP	
	10890.48	32.81	10884.19	10857.67	2429.45	MAS = 10.00 (m)	890.00	888.98				MINPT-O-EOU	
	10906.96	32.81	10896.41	10874.15	1218.78	MAS = 10.00 (m)	2100.00	2096.60				MinPt-O-SF	
	10908.81	32.81	10898.29	10876.00	1224.48	MAS = 10.00 (m)	2260.00	2256.28				MinPt-O-SF	
	10518.90	41.58	10490.42	10477.32	401.45	OSF1.50	7110.00	7096.74				MinPt-CtCt	
	10518.99	41.81	10490.35	10477.18	399.17	OSF1.50	7150.00	7136.66				MINPT-O-EOU	
	10519.08	41.92	10490.38	10477.17	398.04	OSF1.50	7170.00	7156.62				MinPt-O-ADP	
	10976.25	44.72	10945.90	10931.53	381.85	OSF1.50	8100.00	7898.48				MinPt-O-SF	
	20831.43	59.67	20791.12	20771.76	538.06	OSF1.50	18028.44	7950.00				TD	
Chico 4-65 26-25 2CH MWD 0' to 17734' - PR (Def Survey)													Pass
	10866.47	32.81	10864.51	10833.65	77199.33	MAS = 10.00 (m)	0.00	0.00				MinPts	
	10866.50	32.81	10864.42	10833.69	41501.42	MAS = 10.00 (m)	28.00	28.00				WRP	
	10866.73	32.81	10863.65	10833.92	8657.47	MAS = 10.00 (m)	260.00	260.00				MINPT-O-EOU	

...Rush 4-65 29-30 3CH\Original Hole\Rush 4-65 29-30 3CH 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		
10890.07	32.81	10879.51	10857.27	1214.77	MAS = 10.00 (m)	2100.00	2096.60					MinPt-O-SF	
10891.90	32.81	10881.31	10859.09	1211.61	MAS = 10.00 (m)	2260.00	2256.28					MinPt-O-SF	
10600.79	38.99	10574.08	10561.79	431.19	OSF1.50	7040.00	7026.88					MinPt-CtCt	
10600.88	39.29	10573.98	10561.59	427.76	OSF1.50	7090.00	7076.78					MINPT-O-EOU	
10600.98	39.41	10574.00	10561.57	426.40	OSF1.50	7110.00	7096.74					MinPt-O-ADP	
11063.16	42.91	11034.02	11020.25	401.69	OSF1.50	8100.00	7898.48					MinPt-O-SF	
20933.30	55.66	20895.66	20877.64	580.84	OSF1.50	18028.44	7950.00					TD	