

Reserve 3-65 35-34 3BH Plan #1 Anti-Collision Summary Report

Analysis Date-24hr Time: May 14, 2020 - 15:04
Client: Crestone Peak Resources
Field: CO, Adams County (NAD 83 NZ)
Structure: Crestone Peak 35-03S-65W (Reserve Pad)
Slot: Reserve 3-65 35-34 3BH
Well: Reserve 3-65 35-34 3BH
Borehole: Original Hole
Scan MD Range: 0.00ft - 18111.36ft

Analysis Method: 3D Least Distance
Reference Trajectory: Reserve 3-65 35-34 3BH Plan #1 (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: 2.10.787.0
Database \ Project: us1164app01\drilling-CO, Adams County 2.10

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 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 Trajectories Summary

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

Reserve 3-65 35-34 3CH Plan
#1 (Def Plan)

Warning Alert

24.77	20.01	23.79	4.76	N/A	MAS = 6.10 (m)	0.00	0.00	CtCt<=15m<15.00	Enter Alert				
24.77	20.01	23.79	4.76	107073.29	MAS = 6.10 (m)	28.00	28.00		WRP				
24.77	20.01	22.68	4.76	21.50	MAS = 6.10 (m)	240.00	240.00		MinPts				
24.78	20.01	22.61	4.77	20.19	MAS = 6.10 (m)	280.00	280.00		MINPT-O-EOU				
24.78	20.01	22.62	4.77	20.11	MAS = 6.10 (m)	300.00	300.00		MinPt-O-SF				
26.75	20.01	22.80	6.74	8.68	MAS = 6.10 (m)	860.00	855.40		MINPT-O-EOU				
33.87	20.01	26.31	13.86	5.00	MAS = 6.10 (m)	1240.00	1221.38		MinPt-O-SF				
48.62	20.01	39.14	28.61	5.60	MAS = 6.10 (m)	1450.00	1422.08	CtCt<=15m<15.00	Exit Alert				
507.62	74.00	457.96	433.62	10.41	OSF1.50	7241.67	6957.21		MinPt-O-SF				
585.43	176.58	467.38	408.85	4.99	OSF1.50	10950.00	7730.00	OSF<5.00	Enter Alert				
585.42	535.29	228.23	50.13	1.64	OSF1.50	18100.00	7730.00		MinPt-CtCt				
585.43	535.88	227.84	49.55	1.64	OSF1.50	18111.36	7730.00		MinPts				

Reserve 3-65 35-34 4AH Plan
#1 (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	48.92	17.10	220202.17	MAS = 10.00 (m)	28.00	28.00		WRP				
49.91	32.81	47.81	17.10	44.22	MAS = 10.00 (m)	240.00	240.00		MinPts				
49.91	32.81	47.75	17.10	41.65	MAS = 10.00 (m)	270.00	270.00		MINPT-O-EOU				
49.92	32.81	47.75	17.11	41.40	MAS = 10.00 (m)	300.00	300.00		MinPt-O-SF				
50.64	32.81	48.62	17.83	47.67	MAS = 10.00 (m)	590.00	589.20		MINPT-O-EOU				
51.08	32.81	48.56	18.27	32.56	MAS = 10.00 (m)	670.00	668.50		MINPT-O-EOU				
70.55	32.81	62.00	37.74	9.20	MAS = 10.00 (m)	1350.00	1326.51		MinPt-O-SF				
938.28	77.10	886.56	861.19	18.47	OSF1.50	7241.67	6957.21		MinPt-O-SF				
1159.84	348.91	926.90	810.93	5.00	OSF1.50	14480.00	7730.00	OSF<5.00	Enter Alert				
1159.83	534.60	803.11	625.23	3.26	OSF1.50	18100.00	7730.00		MinPt-CtCt				
1159.84	535.14	802.76	624.71	3.25	OSF1.50	18111.36	7730.00		MinPts				

Reserve 3-65 35-34 4BH Plan
#1 (Def Plan)

Warning Alert

74.68	32.81	73.69	41.87	N/A	MAS = 10.00 (m)	0.00	0.00		Surface				
74.68	32.81	73.69	41.87	165850.48	MAS = 10.00 (m)	28.00	28.00		WRP				
74.68	32.81	72.58	41.87	66.60	MAS = 10.00 (m)	240.00	240.00		MinPts				
74.68	32.81	72.52	41.87	62.76	MAS = 10.00 (m)	270.00	270.00		MINPT-O-EOU				
74.69	32.81	72.53	41.89	62.40	MAS = 10.00 (m)	300.00	300.00		MinPt-O-SF				
75.36	32.81	73.45	42.55	80.12	MAS = 10.00 (m)	570.00	569.33		MINPT-O-EOU				
75.80	32.81	73.43	42.99	53.97	MAS = 10.00 (m)	650.00	648.70		MINPT-O-EOU				
108.05	32.81	96.64	75.24	12.71	MAS = 10.00 (m)	1450.00	1422.08		MinPt-O-SF				
1385.12	80.19	1331.33	1304.93	26.21	OSF1.50	7241.67	6957.21		MinPt-O-SF				
1741.59	523.61	1392.19	1217.98	5.00	OSF1.50	17840.00	7730.00	OSF<5.00	Enter Alert				
1741.61	537.46	1382.98	1204.15	4.87	OSF1.50	18111.36	7730.00		MinPts				

Reserve 3-65 35-34 2AH
GYRO-MWD 0' to 17727' - PR
(Def Survey)

Warning Alert

149.39	32.81	147.58	116.58	N/A	MAS = 10.00 (m)	0.00	0.00		Surface				
148.99	32.81	147.17	116.18	13524.64	MAS = 10.00 (m)	10.00	10.00		MinPts				
148.99	32.81	147.17	116.18	N/A	MAS = 10.00 (m)	28.00	28.00		WRP				
147.39	32.81	144.32	114.58	115.33	MAS = 10.00 (m)	270.00	270.00		MinPts				
147.40	32.81	144.30	114.59	113.28	MAS = 10.00 (m)	280.00	280.00		MINPT-O-EOU				
338.00	32.81	329.46	305.19	49.99	MAS = 10.00 (m)	1380.00	1355.18		MinPt-O-SF				
511.16	32.81	499.05	478.35	48.51	MAS = 10.00 (m)	2000.00	1947.72		MinPt-O-SF				
1116.27	32.81	1098.77	1083.46	70.11	MAS = 10.00 (m)	4060.00	3916.47		MinPt-O-SF				
1328.33	54.53	1291.45	1273.80	37.60	OSF1.50	7170.00	6888.71		MinPt-CtCt				
1328.35	54.61	1291.41	1273.74	37.54	OSF1.50	7180.00	6898.27		MINPT-O-EOU				
1328.41	54.69	1291.41	1273.72	37.49	OSF1.50	7190.00	6907.83		MinPt-O-ADP				
1331.46	55.30	1294.06	1276.16	37.15	OSF1.50	7300.00	7013.17		MinPt-O-SF				
1202.04	159.39	1095.24	1042.65	11.41	OSF1.50	10070.00	7730.00		MinPt-CtCt				
1182.75	219.05	1036.18	963.70	8.15	OSF1.50	10860.00	7730.00		MinPt-CtCt				
1187.66	234.92	1030.52	952.75	7.63	OSF1.50	11110.00	7730.00		MINPT-O-EOU				
1190.86	238.70	1031.19	952.16	7.52	OSF1.50	11180.00	7730.00		MinPt-O-ADP				
1196.90	300.05	996.33	896.85	6.01	OSF1.50	11910.00	7730.00		MinPt-CtCt				
1192.57	338.86	966.13	853.72	5.30	OSF1.50	12410.00	7730.00		MinPt-CtCt				
1197.15	360.77	956.11	836.38	4.99	OSF1.50	12710.00	7730.00	OSF<5.00	Enter Alert				
1205.58	388.67	945.93	816.90	4.67	OSF1.50	13100.00	7730.00		MINPT-O-EOU				
1215.60	440.00	921.73	775.60	4.15	OSF1.50	13700.00	7730.00		MinPt-CtCt				
1219.99	452.50	917.79	767.49	4.05	OSF1.50	13910.00	7730.00		MINPT-O-EOU				
1170.54	540.75	809.50	629.79	3.25	OSF1.50	14990.00	7730.00		MinPt-CtCt				
1170.87	542.08	808.95	628.79	3.25	OSF1.50	15030.00	7730.00		MINPT-O-EOU				
1171.34	542.67	809.02	628.67	3.24	OSF1.50	15050.00	7730.00		MinPt-O-SF				
1172.86	543.69	809.86	629.17	3.24	OSF1.50	15090.00	7730.00		MinPt-O-SF				
1186.29	550.36	818.86	635.94	3.24	OSF1.50	15280.00	7730.00		MinPt-O-SF				
1198.85	566.89	820.39	631.96	3.18	OSF1.50	15410.00	7730.00		MINPT-O-EOU				
1199.50	567.57	820.58	631.93	3.17	OSF1.50	15420.00	7730.00		MinPt-O-ADP				
1200.17	567.90	821.04	632.27	3.17	OSF1.50	15430.00	7730.00		MinPt-O-SF				
1254.19	624.12	837.57	630.07	3.02	OSF1.50	16050.00	7730.00		MinPt-CtCt				
1199.25	693.07	736.67	506.19	2.60	OSF1.50	16940.00	7730.00		MinPt-CtCt				
1185.37	737.25	693.34	448.12	2.41	OSF1.50	17510.00	7730.00		MinPt-CtCt				

...Reserve 3-65 35-34 3BH\Original Hole\Reserve 3-65 35-34 3BH Plan #1

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	1187.00	742.05	691.78	444.94	2.40	OSF1.50	17610.00	7730.00				MINPT-O-EOU	
	1188.94	744.27	692.22	444.67	2.40	OSF1.50	17660.00	7730.00				MinPt-O-ADP	
	1192.82	747.28	694.10	445.54	2.40	OSF1.50	17730.00	7730.00				MinPt-O-SF	
	1199.40	758.32	693.31	441.07	2.37	OSF1.50	17830.00	7730.00				MINPT-O-EOU	
	1199.81	758.74	693.44	441.06	2.37	OSF1.50	17840.00	7730.00				MinPt-O-ADP	
	1202.91	761.11	694.97	441.81	2.37	OSF1.50	17900.00	7730.00				MinPt-O-SF	
	1189.81	788.64	663.51	401.17	2.25	OSF1.50	18111.36	7730.00				MinPts	

Reserve 3-65 35-34 1DH
GYRO+MWD 0' to 17679' - PR
(Def Survey)

Warning Alert

174.47	32.81	172.66	141.66	N/A	MAS = 10.00 (m)	0.00	0.00	Surface
174.12	32.81	172.30	141.32	18505.51	MAS = 10.00 (m)	10.00	10.00	MinPts
174.12	32.81	172.31	141.31	N/A	MAS = 10.00 (m)	28.00	28.00	WRP
172.27	32.81	169.30	139.46	147.10	MAS = 10.00 (m)	270.00	270.00	MinPts
172.27	32.81	169.27	139.46	143.76	MAS = 10.00 (m)	280.00	280.00	MINPT-O-EOU
478.31	32.81	467.05	445.50	50.43	MAS = 10.00 (m)	1790.00	1747.02	MinPt-O-SF
518.70	32.81	506.64	485.89	50.44	MAS = 10.00 (m)	1930.00	1880.82	MinPt-O-SF
538.78	32.81	526.54	505.97	50.50	MAS = 10.00 (m)	2000.00	1947.72	MinPt-O-SF
1127.86	32.81	1110.25	1095.05	70.35	MAS = 10.00 (m)	4010.00	3868.69	MinPt-O-SF
1551.39	52.75	1515.65	1498.60	45.45	OSF1.50	6940.00	6668.90	MinPt-CiCt
1551.39	52.90	1515.58	1498.48	45.32	OSF1.50	6960.00	6688.01	MINPT-O-EOU
1551.45	52.98	1515.60	1498.47	45.25	OSF1.50	6970.00	6697.57	MinPt-O-ADP
1564.92	55.26	1527.54	1509.65	43.70	OSF1.50	7300.00	7013.17	MinPt-O-SF
1571.04	94.88	1507.26	1476.17	25.24	OSF1.50	9100.00	7730.00	MinPt-CiCt
1578.81	121.18	1497.49	1457.63	19.78	OSF1.50	9520.00	7730.00	MINPT-O-EOU
1580.64	123.33	1497.89	1457.31	19.46	OSF1.50	9570.00	7730.00	MinPt-O-ADP
1605.03	145.87	1507.25	1459.16	16.67	OSF1.50	9900.00	7730.00	MINPT-O-EOU
1620.30	188.51	1494.09	1431.79	12.99	OSF1.50	10390.00	7730.00	MinPt-CiCt
1574.50	272.67	1392.19	1301.83	8.70	OSF1.50	11490.00	7730.00	MinPt-CiCt
1581.59	335.09	1357.66	1246.50	7.11	OSF1.50	12290.00	7730.00	MinPt-CiCt
1579.80	377.29	1327.74	1202.51	6.30	OSF1.50	12830.00	7730.00	MinPt-CiCt
1584.51	443.21	1288.51	1141.30	5.38	OSF1.50	13670.00	7730.00	MinPt-CiCt
1586.06	447.76	1287.02	1138.31	5.33	OSF1.50	13770.00	7730.00	MINPT-O-EOU
1587.51	449.46	1287.34	1138.05	5.31	OSF1.50	13810.00	7730.00	MinPt-O-ADP
1591.51	454.53	1287.95	1136.98	5.27	OSF1.50	13890.00	7730.00	MINPT-O-EOU
1598.26	480.86	1277.15	1117.40	5.00	OSF1.50	14150.00	7730.00	Enter Alert
1558.67	579.98	1171.48	978.69	4.04	OSF1.50	15410.00	7730.00	MinPt-CiCt
1559.73	583.27	1170.35	976.46	4.02	OSF1.50	15490.00	7730.00	MINPT-O-EOU
1560.33	584.02	1170.44	976.30	4.01	OSF1.50	15510.00	7730.00	MinPt-O-ADP
1565.45	587.05	1173.55	978.40	4.01	OSF1.50	15610.00	7730.00	MinPt-O-SF
1537.91	685.44	1073.75	842.47	3.32	OSF1.50	16880.00	7730.00	MinPt-CiCt
1541.40	704.32	1071.32	837.08	3.29	OSF1.50	17050.00	7730.00	MINPT-O-EOU
1550.17	714.38	1073.38	835.79	3.26	OSF1.50	17220.00	7730.00	MinPt-O-ADP
1566.57	756.71	1061.56	809.86	3.11	OSF1.50	17710.00	7730.00	MINPT-O-EOU
1570.09	760.97	1062.24	809.12	3.10	OSF1.50	17790.00	7730.00	MinPt-O-ADP
1592.08	784.68	1068.43	807.41	3.05	OSF1.50	18111.36	7730.00	MinPts

Reserve 3-65 35-34 1CH
GYRO+MWD 0' to 17779' - PR
(Def Survey)

Warning Alert

199.19	32.81	197.37	166.38	N/A	MAS = 10.00 (m)	0.00	0.00	Surface
198.89	32.81	197.07	166.09	30220.51	MAS = 10.00 (m)	10.00	10.00	MinPts
198.89	32.81	197.08	166.08	N/A	MAS = 10.00 (m)	28.00	28.00	WRP
195.37	32.81	192.37	162.56	163.03	MAS = 10.00 (m)	290.00	290.00	MinPts
195.37	32.81	192.35	162.57	160.44	MAS = 10.00 (m)	300.00	300.00	MinPts
329.73	32.81	322.19	296.93	57.21	MAS = 10.00 (m)	1180.00	1164.04	MinPt-O-SF
410.43	32.81	401.73	377.62	59.36	MAS = 10.00 (m)	1460.00	1431.64	MinPt-O-SF
519.94	32.81	509.17	487.13	57.88	MAS = 10.00 (m)	1840.00	1794.81	MinPt-O-SF
952.27	32.81	938.36	919.47	77.19	MAS = 10.00 (m)	3310.00	3199.69	MinPt-O-SF
1856.84	54.44	1820.01	1802.40	52.67	OSF1.50	7241.67	6957.21	MinPt-O-SF
1860.57	54.55	1823.67	1806.02	52.67	OSF1.50	7270.00	6984.34	MinPt-O-SF
1955.78	66.61	1910.84	1889.17	45.09	OSF1.50	8550.00	7730.00	MinPt-CiCt
1916.64	147.34	1817.88	1769.30	19.71	OSF1.50	9790.00	7730.00	MinPt-CiCt
1929.67	174.93	1812.51	1754.73	16.69	OSF1.50	10230.00	7730.00	MINPT-O-EOU
1936.80	183.63	1813.85	1753.18	15.95	OSF1.50	10370.00	7730.00	MinPt-O-ADP
1914.82	335.98	1690.30	1578.84	8.58	OSF1.50	12250.00	7730.00	MinPt-CiCt
1916.21	340.33	1688.79	1575.88	8.48	OSF1.50	12350.00	7730.00	MINPT-O-EOU
1917.93	342.36	1689.16	1575.57	8.44	OSF1.50	12400.00	7730.00	MinPt-O-ADP
1923.38	346.84	1691.62	1576.54	8.35	OSF1.50	12500.00	7730.00	MinPt-O-ADP
1949.03	419.06	1669.13	1529.97	7.00	OSF1.50	13310.00	7730.00	MinPt-CiCt
1950.87	424.64	1667.24	1526.23	6.91	OSF1.50	13430.00	7730.00	MINPT-O-EOU
1939.22	489.70	1612.22	1449.52	5.95	OSF1.50	14210.00	7730.00	MinPt-CiCt
1940.47	518.70	1594.13	1421.76	5.62	OSF1.50	14580.00	7730.00	MinPt-CiCt
1945.65	585.29	1554.92	1360.36	5.00	OSF1.50	15400.00	7730.00	Enter Alert
1941.31	612.25	1532.60	1329.05	4.76	OSF1.50	15770.00	7730.00	MinPt-CiCt
1943.26	618.37	1530.47	1324.88	4.72	OSF1.50	15900.00	7730.00	MINPT-O-EOU
1943.90	619.34	1530.47	1324.56	4.72	OSF1.50	15920.00	7730.00	MINPT-O-EOU
1947.23	623.38	1531.11	1323.85	4.69	OSF1.50	16000.00	7730.00	MinPt-O-ADP
1956.92	669.75	1509.89	1287.17	4.39	OSF1.50	16500.00	7730.00	MinPt-CiCt
1930.55	726.11	1445.94	1204.44	3.99	OSF1.50	17220.00	7730.00	MinPt-CiCt
1919.11	801.42	1384.29	1117.68	3.60	OSF1.50	18111.36	7730.00	MinPts

Reserve 3-65 35-34 2EH Plan
#1 (Def Plan)

Warning Alert

224.17	32.81	223.19	191.36	N/A	MAS = 10.00 (m)	0.00	0.00	Surface
224.03	32.81	223.04	191.22	N/A	MAS = 10.00 (m)	28.00	28.00	WRP
224.03	32.81	221.90	191.22	194.98	MAS = 10.00 (m)	250.00	250.00	MinPts
224.04	32.81	221.89	191.23	190.06	MAS = 10.00 (m)	260.00	260.00	MINPT-O-EOU
224.40	32.81	222.17	191.59	179.65	MAS = 10.00 (m)	300.00	300.00	MinPt-O-SF
308.64	32.81	294.56	275.83	23.49	MAS = 10.00 (m)	2100.00	2043.29	MinPt-O-SF
515.04	67.50	469.71	447.54	11.59	OSF1.50	7241.67	6957.21	MinPt-O-SF
584.27	176.04	466.59	408.24	5.00	OSF1.50	11200.00	7730.00	Enter Alert
584.01	527.45	232.04	56.56	1.66	OSF1.50	18111.36	7730.00	MinPts

Big Sandy 3-65 36-31 2CH
GYRO_MWD 0' to 18415' - PR
(Def Survey)

Pass

1637.62	32.81	1635.80	1604.81	N/A	MAS = 10.00 (m)	0.00	0.00	Surface
1637.62	32.81	1635.78	1604.81	56004.20	MAS = 10.00 (m)	28.00	28.00	WRP
286.82	42.98	257.63	243.84	10.34	OSF1.50	5560.00	5350.03	MinPts
287.69	43.28	258.30	244.41	10.30	OSF1.50	5590.00	5378.70	MinPt-O-SF
988.95	46.25	957.58	942.70	33.17	OSF1.50	6900.00	6630.67	MinPt-O-SF
1699.83	50.78	1665.44	1649.05	51.80	OSF1.50	8480.00	7730.00	MinPt-O-SF
1721.89	51.44	1687.06	1670.45	51.78	OSF1.50	8570.00	7730.00	MinPt-O-SF
1751.39	52.34	1715.97	1699.06	51.74	OSF1.50	8670.00	7730.00	MinPt-O-SF

...Reserve 3-65 35-34 3BH\Original Hole\Reserve 3-65 35-34 3BH Plan #1

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	1771.51	52.88	1735.73	1718.64	51.78	OSF1.50	8730.00	7730.00				MinPt-O-SF	
	10110.59	77.03	10058.70	10033.56	201.03	OSF1.50	18111.36	7730.00				TD	
Big Sandy 3-65 36-31 2AH GYRO+MWD 0' to 18177' - PR (Def Survey)													
	1676.99	32.81	1675.18	1644.18	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	1676.99	32.81	1675.18	1644.18	N/A	MAS = 10.00 (m)	10.00	10.00				MinPts	
	1677.00	32.81	1675.16	1644.19	74298.69	MAS = 10.00 (m)	28.00	28.00				WRP	
	1677.09	32.81	1675.16	1644.28	9928.30	MAS = 10.00 (m)	80.00	80.00				MINPT-O-EOU	
	1677.26	32.81	1674.36	1644.45	1533.59	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	412.94	44.03	383.05	368.91	14.54	OSF1.50	5770.00	5550.73				MinPt-CtCt	
	412.94	44.12	382.98	368.81	14.51	OSF1.50	5780.00	5560.28				MINPT-O-EOU	
	413.01	44.21	383.00	368.80	14.48	OSF1.50	5790.00	5569.84				MinPt-O-ADP	
	416.26	44.85	385.82	371.41	14.38	OSF1.50	5870.00	5646.30				MinPt-O-SF	
	9846.08	79.33	9792.66	9766.75	189.98	OSF1.50	17920.00	7730.00				MinPt-O-SF	
	9962.99	81.23	9908.30	9881.75	187.65	OSF1.50	18040.00	7730.00				MinPt-O-SF	
	10032.36	81.50	9977.49	9950.86	188.32	OSF1.50	18111.36	7730.00				TD	
Reserve 3-65 34-35 1H ST1 7045' to 16359' - PR (Def Survey)													
	423.41	32.81	421.60	390.61	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	423.25	32.81	421.43	390.44	61120.93	MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
	423.24	32.81	421.43	390.43	111439.74	MAS = 10.00 (m)	28.00	28.00				WRP	
	422.16	32.81	419.11	389.36	339.24	MAS = 10.00 (m)	270.00	270.00				MinPts	
	422.19	32.81	419.07	389.38	321.60	MAS = 10.00 (m)	290.00	290.00				MINPT-O-EOU	
	422.32	32.81	419.16	389.51	312.91	MAS = 10.00 (m)	310.00	310.00				MinPt-O-SF	
	423.84	32.81	420.65	391.03	307.64	MAS = 10.00 (m)	390.00	389.94				MinPt-O-SF	
	753.70	32.81	743.06	720.89	83.22	MAS = 10.00 (m)	2000.00	1947.72				MinPt-O-SF	
	2257.01	48.94	2223.85	2208.08	71.48	OSF1.50	7241.67	6957.21				MinPt-O-SF	
	2272.76	49.27	2239.38	2223.49	71.47	OSF1.50	7300.00	7013.17				MinPt-O-SF	
	2377.45	61.60	2335.85	2315.85	59.40	OSF1.50	8790.00	7730.00				MinPt-CtCt	
	2377.49	63.96	2334.31	2313.53	57.16	OSF1.50	8840.00	7730.00				MinPt-CtCt	
	2379.23	68.58	2332.97	2310.64	53.25	OSF1.50	8970.00	7730.00				MINPT-O-EOU	
	2380.37	70.21	2333.03	2310.16	52.01	OSF1.50	9010.00	7730.00				MINPT-O-EOU	
	2386.45	98.63	2320.16	2287.81	36.87	OSF1.50	9430.00	7730.00				MinPt-CtCt	
	2384.01	135.90	2292.88	2248.11	26.61	OSF1.50	9960.00	7730.00				MinPt-CtCt	
	2384.40	166.14	2273.11	2218.26	21.72	OSF1.50	10370.00	7730.00				MinPt-CtCt	
	2366.55	251.56	2198.32	2115.00	14.19	OSF1.50	11490.00	7730.00				MinPt-CtCt	
	2378.12	391.00	2116.92	1987.12	9.15	OSF1.50	13280.00	7730.00				MinPt-CtCt	
	2379.36	502.46	2043.85	1876.90	7.12	OSF1.50	14700.00	7730.00				MinPt-CtCt	
	2373.09	548.86	2006.65	1824.23	6.50	OSF1.50	15290.00	7730.00				MinPt-CtCt	
	2384.81	633.85	1961.71	1750.96	5.65	OSF1.50	16370.00	7730.00				MinPt-CtCt	
	2375.10	697.60	1909.50	1677.51	5.12	OSF1.50	17180.00	7730.00				MinPt-CtCt	
	2375.59	709.04	1902.36	1666.55	5.03	OSF1.50	17340.00	7730.00				MINPT-O-EOU	
	2375.69	709.17	1902.37	1666.52	5.03	OSF1.50	17350.00	7730.00				MinPt-O-ADP	
	2376.23	709.48	1902.71	1666.75	5.03	OSF1.50	17380.00	7730.00				MinPt-O-SF	
	2503.16	684.86	2046.05	1818.30	5.49	OSF1.50	18111.36	7730.00				TD	
Reserve 3-65 34-35 1H Pilot 0' to 8000' - PR (Def Survey)													
	423.41	32.81	421.60	390.61	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	423.25	32.81	421.43	390.44	61120.93	MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
	423.24	32.81	421.43	390.43	111439.74	MAS = 10.00 (m)	28.00	28.00				WRP	
	422.16	32.81	419.11	389.36	339.24	MAS = 10.00 (m)	270.00	270.00				MinPts	
	422.19	32.81	419.07	389.38	321.60	MAS = 10.00 (m)	290.00	290.00				MINPT-O-EOU	
	422.32	32.81	419.16	389.51	312.91	MAS = 10.00 (m)	310.00	310.00				MinPt-O-SF	
	423.84	32.81	420.65	391.03	307.64	MAS = 10.00 (m)	390.00	389.94				MinPt-O-SF	
	753.70	32.81	743.06	720.89	83.22	MAS = 10.00 (m)	2000.00	1947.72				MinPt-O-SF	
	2257.01	48.94	2223.85	2208.08	71.48	OSF1.50	7241.67	6957.21				MinPt-O-SF	
	2272.76	49.27	2239.38	2223.49	71.47	OSF1.50	7300.00	7013.17				MinPt-O-SF	
	2749.02	73.99	2699.16	2675.03	56.94	OSF1.50	9790.00	7730.00				MinPt-O-SF	
	2764.39	74.39	2714.26	2689.98	56.93	OSF1.50	9820.00	7730.00				MinPt-O-SF	
	10002.50	94.27	9939.11	9908.22	161.88	OSF1.50	18111.36	7730.00				TD	
Big Sandy 3-65 36-31 1DH GYRO+MWD 0' to 15399' - PR (Def Survey)													
	1756.69	32.81	1754.87	1723.88	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	1756.68	32.81	1754.82	1723.88	35504.51	MAS = 10.00 (m)	28.00	28.00				WRP	
	437.46	49.83	403.70	387.63	13.56	OSF1.50	6650.00	6391.75				MinPts	
	437.53	49.93	403.71	387.60	13.53	OSF1.50	6660.00	6401.30				MinPt-O-ADP	
	440.26	50.55	406.02	389.70	13.44	OSF1.50	6730.00	6468.20				MinPt-O-SF	
	4023.42	60.94	3982.26	3962.48	101.67	OSF1.50	12030.00	7730.00				MinPt-O-SF	
	9438.03	71.71	9389.70	9366.33	201.92	OSF1.50	17590.00	7730.00				MinPt-O-SF	
	9950.47	72.28	9901.74	9878.18	211.14	OSF1.50	18111.36	7730.00				TD	
Big Sandy 3-65 36-31 2BH GYRO+MWD 0' to 18220' - PR (Def Survey)													
	1717.40	32.81	1715.58	1684.59	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	1717.40	32.81	1715.54	1684.59	36878.54	MAS = 10.00 (m)	28.00	28.00				WRP	
	1716.29	32.81	1713.43	1683.48	1640.54	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	451.96	46.45	420.47	405.52	15.07	OSF1.50	6080.00	5846.99				MinPt-CtCt	
	451.98	46.56	420.41	405.43	15.03	OSF1.50	6090.00	5856.55				MINPT-O-EOU	
	452.07	46.65	420.43	405.41	15.00	OSF1.50	6100.00	5866.11				MinPt-O-ADP	
	455.90	47.47	423.72	408.43	14.86	OSF1.50	6190.00	5952.12				MinPt-O-SF	
	1061.82	47.20	1029.82	1014.62	34.88	OSF1.50	8140.00	7665.04				MinPt-O-SF	
	7393.81	69.81	7346.74	7324.00	162.58	OSF1.50	15480.00	7730.00				MinPt-O-SF	
	9171.14	76.25	9119.78	9094.90	184.26	OSF1.50	17300.00	7730.00				MinPt-O-SF	
	9963.20	77.60	9910.93	9885.60	196.62	OSF1.50	18111.36	7730.00				TD	
Flader Industries-B 1 Blind 0' to 8780' - DA (Def Survey)													
	9424.73	32.81	9422.56	9391.92	26024.58	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	9424.73	32.81	9422.00	9391.92	10252.11	MAS = 10.00 (m)	28.00	28.00				WRP	
	9424.73	32.81	9415.94	9391.92	1349.80	MAS = 10.00 (m)	250.00	250.00				MinPts	
	9429.64	32.81	9410.96	9396.83	559.05	MAS = 10.00 (m)	500.00	499.68				MINPT-O-EOU	
	9436.08	34.84	9412.25	9401.24	428.50	OSF1.50	630.00	628.89				MinPt-O-ADP	
	2393.19	591.32	1998.45	1801.87	6.08	OSF1.50	17950.00	7730.00				MinPt-CtCt	
	2393.37	591.90	1998.23	1801.46	6.08	OSF1.50	17980.00	7730.00				MINPT-O-EOU	
	2393.51	592.09	1998.25	1801.42	6.08	OSF1.50	17990.00	7730.00				MinPt-O-ADP	
	2397.22	593.73	2000.86	1803.49	6.07	OSF1.50	18090.00	7730.00				MinPt-O-SF	
	2398.55	594.03	2001.99	1804.52	6.07	OSF1.50	18111.36	7730.00				TD	

...Reserve 3-65 35-34 3BH\Original Hole\Reserve 3-65 35-34 3BH Plan #1

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
Blue 3-65 32-33 1H GYRO+MWD 0' to 17393' - PR (Def Survey)													Pass
	10457.51	32.81	10455.56	10424.70	75106.84	MAS = 10.00 (m)	0.00	0.00					Surface
	10457.48	32.81	10455.50	10424.68	62356.91	MAS = 10.00 (m)	28.00	28.00					WRP
	10457.48	32.81	10455.49	10424.67	57242.11	MAS = 10.00 (m)	40.00	40.00					MinPts
	10457.23	32.81	10454.49	10424.42	11218.67	MAS = 10.00 (m)	260.00	260.00					MinPts
	10457.34	32.81	10454.57	10424.53	10913.18	MAS = 10.00 (m)	300.00	300.00					MinPt-O-SF
	11457.16	53.64	11420.86	11403.52	330.19	OSF1.50	7300.00	7013.17					MinPt-O-SF
	2652.98	355.71	2414.84	2297.27	11.27	OSF1.50	18111.36	7730.00					MinPts