



Crestone Peak Resources

Schlumberger

Plan 0

Borehole:	Well:	Field:	Structure:
Original Hole	Warner 2E-10H-E165	CO, Weld County (NAD 83 NZ) - 2019	Crestone Peak 10-1N-65W (Warner Pad)

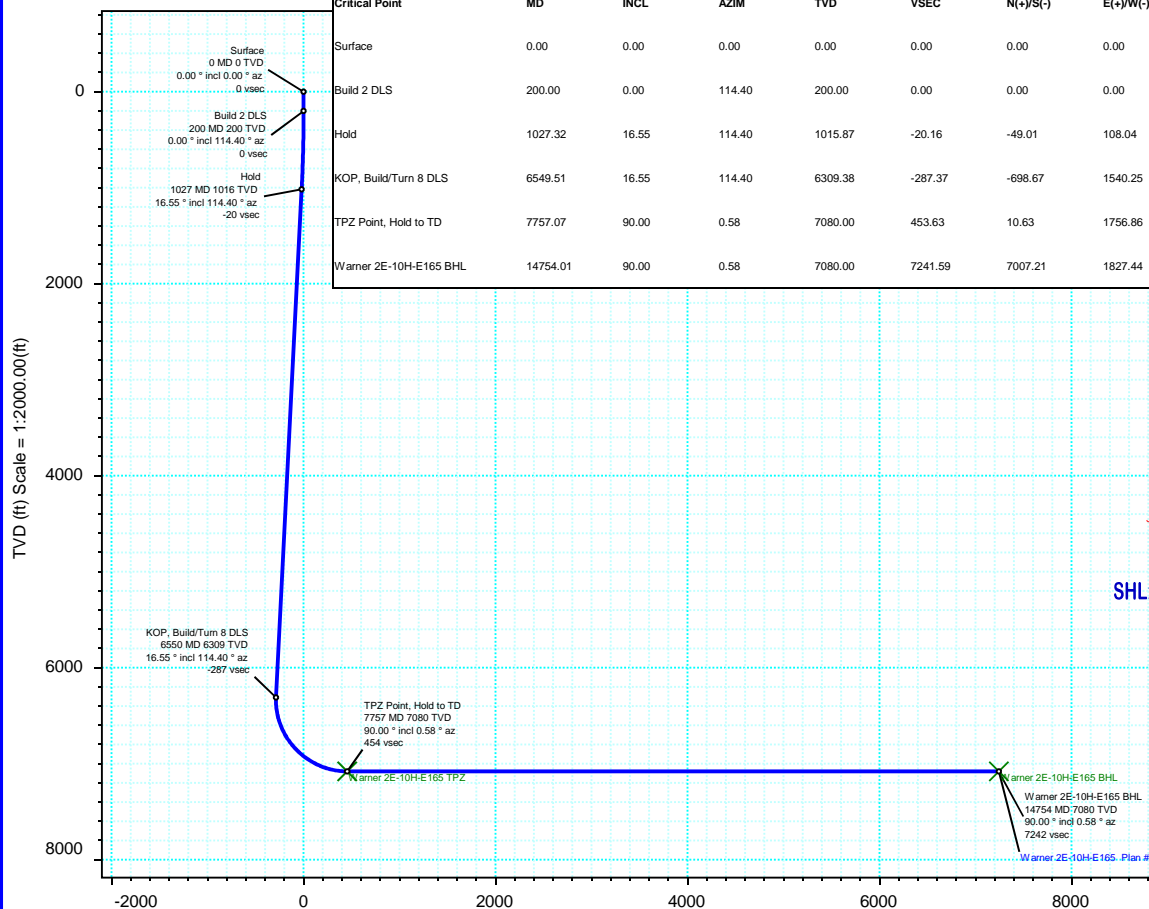
Gravity & Magnetic Parameters					Surface Location					NAD83 Colorado State Plane, Northern Zone, US Feet					Miscellaneous							
Model:	HDGM 2021		Dip:	66.328°	Date:	29-Jul-2021		Lat:	N 40 4 2.11		Northings:	1268463.12ftUS		Grid Conv:	0.5439°		Slot:	Warner 2E-10H-E165		TVD Ref:	KB 13ft(4984ft above MSL)	
MagDec:	7.931°		FS:	51748.543nT		Gravity FS:	998.998mgm (9.80665 Based)		Lon:	W 104 39 29.82		Easting:	3235573.68ftUS		Scale Fact:	0.99996195		Plan:	Warner 2E-10H-E165		Plan #0	

Proposal

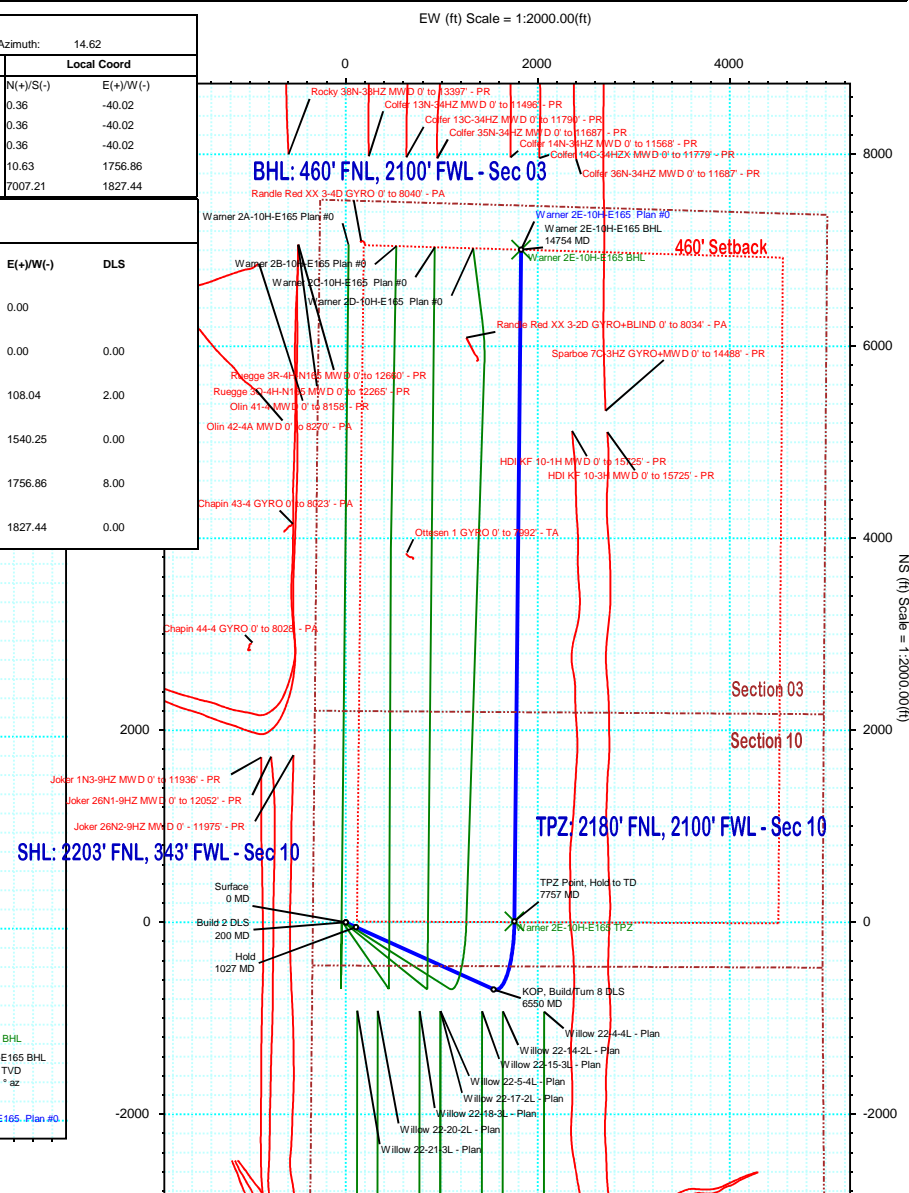


True North
Tot Corr (M->T 7.931°)
Mag Dec (7.931°)
Grid Conv (0.544°)

Surface Location								
Northing: 1268463.121984			Easting: 3235573.680732		Latitude: N 40 4 2.11		Longitude: W 104 39 29.82	
VSec Azimuth: 14.62								
Target Description		Grid Coord					Local Coord	
Target Name	Latitude	Longitude	Northing	Easting	TVD	VSec	N(+)/S(-)	E(+)/W(-)
Warner Pad Sec 10 - Mid	N 40 4 2.11	W 104 39 30.34	1268463.11	3235533.66	4984.00	-9.75	0.36	-40.02
Warner Pad Sec 10-03 - 460' SB	N 40 4 2.11	W 104 39 30.34	1268463.11	3235533.66	4984.00	-9.75	0.36	-40.02
Warner Pad Sec 10-03	N 40 4 2.11	W 104 39 30.34	1268463.11	3235533.66	4984.00	-9.75	0.36	-40.02
Warner 2E-10H-E165 TPZ	N 40 4 2.21	W 104 39 7.23	1268490.42	3237330.29	7080.00	453.63	10.63	1756.86
Warner 2E-10H-E165 BHL	N 40 5 11.35	W 104 39 6.31	1275487.09	3237334.45	7080.00	7241.59	7007.21	1827.44
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	200.00	0.00	114.40	200.00	0.00	0.00	0.00	0.00
Hold	1027.32	16.55	114.40	1015.87	-20.16	-49.01	108.04	2.00
KOP, Build/Turn 8 DLS	6549.51	16.55	114.40	6309.38	-287.37	-698.67	1540.25	0.00
TPZ Point, Hold to TD	7757.07	90.00	0.58	7080.00	453.63	10.63	1756.86	8.00
Warner 2E-10H-E165 BHL	14754.01	90.00	0.58	7080.00	7241.59	7007.21	1827.44	0.00



Vertical Section (ft) Azim = 14.62° Scale = 1:2000.00(ft) Origin = 0N/-S, 0E/-W



Warner 2E-10H-E165 Plan #0 Proposal Geodetic Report



(Def Plan)

Report Date: August 02, 2021 - 03:13 PM
Client: Crestone Peak Resources
Field: CO, Weld County (NAD 83 NZ) - 2019
Structure / Slot: Crestone Peak 10-1N-65W (Warner Pad) / Warner 2E-10H-E165
Well: Warner 2E-10H-E165
Borehole: Original Hole
UWI / API#: Unknown / Unknown
Survey Name: Warner 2E-10H-E165 Plan #0
Survey Date: July 29, 2021
Tort / AHD / DDI / ERD Ratio: 113.151 ° / 9482.615 ft / 6.349 / 1.339
Coordinate Reference System: NAD83 Colorado State Plane, Northern Zone, US Feet
Location Lat / Long: N 40° 4' 2.10720", W 104° 39' 29.82240"
Location Grid N/E Y/X: N 1268463.122 ftUS, E 3235573.681 ftUS
CRS Grid Convergence Angle: 0.5439 °
Grid Scale Factor: 0.99996195
Version / Patch: 2.10.826.8

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 14.617 ° (True North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: KB 13ft
TVD Reference Elevation: 4984.000 ft above MSL
Seabed / Ground Elevation: 4971.000 ft above MSL
Magnetic Declination: 7.931 °
Total Gravity Field Strength: 998.9975mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 51748.543 nT
Magnetic Dip Angle: 66.328 °
Declination Date: July 29, 2021
Magnetic Declination Model: HDGM 2021
North Reference: True North
Grid Convergence Used: 0.0000 °
Total Corr Mag North->True North: 7.9305 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
Surface	0.00	0.00	0.00	0.00	-4984.00	0.00	0.00	0.00	N/A	1268463.12	3235573.68	40.067252	-104.658284
Build 2 DLS	100.00	0.00	114.40	100.00	-4884.00	0.00	0.00	0.00	0.00	1268463.12	3235573.68	40.067252	-104.658284
	200.00	0.00	114.40	200.00	-4784.00	0.00	0.00	0.00	0.00	1268463.12	3235573.68	40.067252	-104.658284
	300.00	2.00	114.40	299.98	-4684.02	-0.30	-0.72	1.59	2.00	1268462.42	3235575.28	40.067250	-104.658278
	400.00	4.00	114.40	399.84	-4584.16	-1.19	-2.88	6.36	2.00	1268460.30	3235580.06	40.067244	-104.658261
	500.00	6.00	114.40	499.45	-4484.55	-2.67	-6.48	14.29	2.00	1268456.78	3235588.03	40.067234	-104.658233
	600.00	8.00	114.40	598.70	-4385.30	-4.74	-11.52	25.39	2.00	1268451.85	3235599.18	40.067220	-104.658193
	700.00	10.00	114.40	697.47	-4286.53	-7.39	-17.98	39.64	2.00	1268445.52	3235613.48	40.067203	-104.658142
	800.00	12.00	114.40	795.62	-4188.38	-10.64	-25.86	57.01	2.00	1268437.80	3235630.93	40.067181	-104.658080
	900.00	14.00	114.40	893.06	-4090.94	-14.46	-35.15	77.50	2.00	1268428.71	3235651.50	40.067156	-104.658007
	1000.00	16.00	114.40	989.64	-3994.36	-18.86	-45.84	101.07	2.00	1268418.24	3235675.17	40.067126	-104.657923
Hold	1027.32	16.55	114.40	1015.87	-3968.13	-20.16	-49.01	108.04	0.00	1268415.15	3235682.17	40.067117	-104.657898
	1100.00	16.55	114.40	1085.54	-3898.46	-23.67	-57.56	126.89	0.00	1268406.77	3235701.10	40.067094	-104.657831
	1200.00	16.55	114.40	1181.40	-3802.60	-28.51	-69.32	152.82	0.00	1268395.26	3235727.15	40.067062	-104.657738
	1300.00	16.55	114.40	1277.26	-3706.74	-33.35	-81.09	178.76	0.00	1268383.74	3235753.19	40.067029	-104.657645
	1400.00	16.55	114.40	1373.12	-3610.88	-38.19	-92.85	204.69	0.00	1268372.22	3235779.24	40.066997	-104.657553
	1500.00	16.55	114.40	1468.97	-3515.03	-43.03	-104.62	230.63	0.00	1268360.70	3235805.28	40.066965	-104.657460
	1600.00	16.55	114.40	1564.83	-3419.17	-47.87	-116.38	256.57	0.00	1268349.19	3235831.33	40.066933	-104.657367
	1700.00	16.55	114.40	1660.69	-3323.31	-52.71	-128.14	282.50	0.00	1268337.67	3235857.37	40.066900	-104.657275
	1800.00	16.55	114.40	1756.55	-3227.45	-57.55	-139.91	308.44	0.00	1268326.15	3235883.42	40.066868	-104.657182
	1900.00	16.55	114.40	1852.41	-3131.59	-62.38	-151.67	334.37	0.00	1268314.64	3235909.46	40.066836	-104.657089
	2000.00	16.55	114.40	1948.27	-3035.73	-67.22	-163.44	360.31	0.00	1268303.12	3235935.51	40.066803	-104.656997
	2100.00	16.55	114.40	2044.13	-2939.87	-72.06	-175.20	386.24	0.00	1268291.60	3235961.55	40.066771	-104.656904
	2200.00	16.55	114.40	2139.99	-2844.01	-76.90	-186.97	412.18	0.00	1268280.08	3235987.60	40.066739	-104.656811
	2300.00	16.55	114.40	2235.85	-2748.15	-81.74	-198.73	438.11	0.00	1268268.57	3236013.64	40.066706	-104.656719
	2400.00	16.55	114.40	2331.70	-2652.30	-86.58	-210.50	464.05	0.00	1268257.05	3236039.69	40.066674	-104.656626
	2500.00	16.55	114.40	2427.56	-2556.44	-91.42	-222.26	489.99	0.00	1268245.53	3236065.73	40.066642	-104.656533
	2600.00	16.55	114.40	2523.42	-2460.58	-96.26	-234.03	515.92	0.00	1268234.01	3236091.78	40.066610	-104.656441
	2700.00	16.55	114.40	2619.28	-2364.72	-101.10	-245.79	541.86	0.00	1268222.50	3236117.82	40.066577	-104.656348
	2800.00	16.55	114.40	2715.14	-2268.86	-105.93	-257.55	567.79	0.00	1268210.98	3236143.87	40.066545	-104.656255
	2900.00	16.55	114.40	2811.00	-2173.00	-110.77	-269.32	593.73	0.00	1268199.46	3236169.92	40.066513	-104.656163
	3000.00	16.55	114.40	2906.86	-2077.14	-115.61	-281.08	619.66	0.00	1268187.94	3236195.96	40.066480	-104.656070
	3100.00	16.55	114.40	3002.72	-1981.28	-120.45	-292.85	645.60	0.00	1268176.43	3236222.01	40.066448	-104.655977
	3200.00	16.55	114.40	3098.58	-1885.42	-125.29	-304.61	671.54	0.00	1268164.91	3236248.05	40.066416	-104.655885
	3300.00	16.55	114.40	3194.44	-1789.56	-130.13	-316.38	697.47	0.00	1268153.39	3236274.10	40.066383	-104.655792
	3400.00	16.55	114.40	3290.29	-1693.71	-134.97	-328.14	723.41	0.00	1268141.87	3236300.14	40.066351	-104.655699
	3500.00	16.55	114.40	3386.15	-1597.85	-139.81	-339.91	749.34	0.00	1268130.36	3236326.19	40.066319	-104.655607
	3600.00	16.55	114.40	3482.01	-1501.99	-144.65	-351.67	775.28	0.00	1268118.84	3236352.23	40.066287	-104.655514
	3700.00	16.55	114.40	3577.87	-1406.13	-149.48	-363.44	801.21	0.00	1268107.32	3236378.28	40.066254	-104.655421
	3800.00	16.55	114.40	3673.73	-1310.27	-154.32	-375.20	827.15	0.00	1268095.80	3236404.32	40.066222	-104.655329
	3900.00	16.55	114.40	3769.59	-1214.41	-159.16	-386.97	853.08	0.00	1268084.29	3236430.37	40.066190	-104.655236
	4000.00	16.55	114.40	3865.45	-1118.55	-164.00	-398.73	879.02	0.00	1268072.77	3236456.41	40.066157	-104.655143
	4100.00	16.55	114.40	3961.31	-1022.69	-168.84	-410.49	904.96	0.00	1268061.25	3236482.46	40.066125	-104.655051
	4200.00	16.55	114.40	4057.17	-926.83	-173.68	-422.26	930.89	0.00	1268049.73	3236508.50	40.066093	-104.654958
	4300.00	16.55	114.40	4153.02	-830.98	-178.52	-434.02	956.83	0.00	1268038.22	3236534.55	40.066061	-104.654865
	4400.00	16.55	114.40	4248.88	-735.12	-183.36	-445.79	982.76	0.00	1268026.70	3236560.59	40.066028	-104.654773
	4500.00	16.55	114.40	4344.74	-639.26	-188.20	-457.55	1008.70	0.00	1268015.18	3236586.64	40.065996	-104.654680
	4600.00	16.55	114.40	4440.60	-543.40	-193.03	-469.32	1034.63	0.00	1268003.67	3236612.68	40.065964	-104.654587
	4700.00	16.55	114.40	4536.46	-447.54	-197.87	-481.08	1060.57	0.00	1267992.15	3236638.73	40.065931	-104.654495
	4800.00	16.55	114.40	4632.32	-351.68	-202.71	-492.85	1086.51	0.00	1267980.63	3236664.77	40.065899	-104.654402
	4900.00	16.55	114.40	4728.18	-255.82	-207.55	-504.61	1112.44	0.00	1267969.11	3236690.82	40.065867	-104.654309
	5000.00	16.55	114.40	4824.04	-159.96	-212.39	-516.38	1138.38	0.00	1267957.60	3236716.86	40.065834	-104.654217
	5100.00	16.55	114.40	4919.90	-64.10	-217.23	-528.14	1164.31	0.00	1267946.08	3236742.91	40.065802	-104.654124
	5200.00	16.55	114.40	5015.76	31.76	-222.07	-539.90	1190.25	0.00	1267934.56	3236768.95	40.065770	-104.654032
	5300.00	16.55	114.40	5111.61	127.61	-226.91	-551.67	1216.18	0.00	1267923.04	3236795.00	40.065738	-104.653939
	5400.00	16.55	114.40	5207.47	223.47	-231.75	-563.43	1242.12	0.00	1267911.53	3236821.04	40.065705	-104.653846
	5500.00	16.55	114.40	5303.33	319.33	-236.58	-575.20	1268.05	0.00	1267900.01	3236847.09	40.065673	-104.653754
	5600.00	16.55	114.40	5399.19	415.19	-241.42	-586.96	1293.99	0.00	1267888.49	3236873.13	40.065641	-104.653661
	5700.00	16.55	114.40	5495.05	511.05	-246.26	-598.73	1319.93	0.00	1267876.97	3236899.18	40.065608	-104.653568
	5800.00	16.55	114.40	5590.91	606.91	-251.10	-610.49	1345.86	0.00	1267865.46	3236925.22	40.065576	-104.653476
	5900.00	16.55	114.40	5686.77	702.77	-255.94	-622.26	1371.80	0.00	1267853.94	3236951.27	40.065544	-104.653383
6000.00	16.55	114.40	5782.63	798.63	-260.78	-634.02	1397.73	0.00	1267842.42	3236977.31	40.065511	-104.653290	
6100.00	16.55	114.40	5878.49	894.49	-265.62	-645.79	1423.67	0.00	1267830.90	3237003.36	40.065479	-104.653198	
6200.00	16.55	114.40	5974.34	990.34	-270.46	-657.55	1449.60	0.00	1267819.39	3237029.40	40.065447	-104.653105	
6300.00	16.55	114.40	6070.20	1086.20	-275.30	-669.31	1475.54	0.00	1267807.87	3237055.45	40.065415	-104.653012	
6400.00	16.55	114.40	6166.06	1182.06	-280.13	-681.08	1501.48	0.00	1267796.35	3237081.49	40.065382	-104.652920	
6500.00	16.55	114.40	6261.92	1277.92	-284.97	-692.84	1527.41	0.00	1267784.83	3237107.54	40.065350	-104.652827	
KOP, Build/Turn 8 DLS	6549.51	16.55	114.40	6309.38	1325.38	-287.37	-698.67	1550.25	0.00	1267779.13	3237120.43	40.065334	-104.652781
6600.00	15.41	100.27	6357.94	1373.94	-288.08	-702.84	1553.41	8.00	1267775.09	3237133.63	40.065323	-104.652734	
6700.00	16.13	70.64	6454.33	1470.33	-279.30	-700.60	1579.63	8.00	1267777.57	3237159.83	40.065329	-104.652640	
6800.00	20.18	48.25	6549.45	1565.45	-257.14	-684.48	1605.64	8.00	1267793.94	3237185.69	40.065373	-104.652547	
6900.00	26.07	34.32	6641.44	1657.44	-222.03	-654.80	1630.95	8.00	1267823.86	3237210.70	40.065454	-104.652457	
7000.00	32.81												

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	8200.00	90.00	0.58	7080.00	2096.00	883.33	453.54	1761.33	0.00	1268933.34	3237330.55	40.068497	-104.651991
	8300.00	90.00	0.58	7080.00	2096.00	980.35	553.53	1762.34	0.00	1269033.33	3237330.61	40.068771	-104.651987
	8400.00	90.00	0.58	7080.00	2096.00	1077.36	653.53	1763.34	0.00	1269133.33	3237330.67	40.069046	-104.651984
	8500.00	90.00	0.58	7080.00	2096.00	1174.37	753.52	1764.35	0.00	1269233.32	3237330.73	40.069320	-104.651980
	8600.00	90.00	0.58	7080.00	2096.00	1271.39	853.52	1765.36	0.00	1269333.32	3237330.79	40.069595	-104.651976
	8700.00	90.00	0.58	7080.00	2096.00	1368.40	953.51	1766.37	0.00	1269433.32	3237330.85	40.069869	-104.651973
	8800.00	90.00	0.58	7080.00	2096.00	1465.41	1053.51	1767.38	0.00	1269533.31	3237330.91	40.070144	-104.651969
	8900.00	90.00	0.58	7080.00	2096.00	1562.43	1153.50	1768.39	0.00	1269633.31	3237330.97	40.070418	-104.651966
	9000.00	90.00	0.58	7080.00	2096.00	1659.44	1253.49	1769.40	0.00	1269733.30	3237331.03	40.070693	-104.651962
	9100.00	90.00	0.58	7080.00	2096.00	1756.45	1353.49	1770.41	0.00	1269833.30	3237331.09	40.070967	-104.651958
	9200.00	90.00	0.58	7080.00	2096.00	1853.46	1453.48	1771.41	0.00	1269933.30	3237331.15	40.071242	-104.651955
	9300.00	90.00	0.58	7080.00	2096.00	1950.48	1553.48	1772.42	0.00	1270033.29	3237331.21	40.071516	-104.651951
	9400.00	90.00	0.58	7080.00	2096.00	2047.49	1653.47	1773.43	0.00	1270133.29	3237331.27	40.071791	-104.651947
	9500.00	90.00	0.58	7080.00	2096.00	2144.50	1753.47	1774.44	0.00	1270233.28	3237331.33	40.072065	-104.651944
	9600.00	90.00	0.58	7080.00	2096.00	2241.52	1853.46	1775.45	0.00	1270333.28	3237331.39	40.072340	-104.651940
	9700.00	90.00	0.58	7080.00	2096.00	2338.53	1953.46	1776.46	0.00	1270433.28	3237331.45	40.072614	-104.651936
	9800.00	90.00	0.58	7080.00	2096.00	2435.54	2053.45	1777.47	0.00	1270533.27	3237331.50	40.072889	-104.651933
	9900.00	90.00	0.58	7080.00	2096.00	2532.56	2153.45	1778.47	0.00	1270633.27	3237331.56	40.073163	-104.651929
	10000.00	90.00	0.58	7080.00	2096.00	2629.57	2253.44	1779.48	0.00	1270733.26	3237331.62	40.073438	-104.651926
	10100.00	90.00	0.58	7080.00	2096.00	2726.58	2353.44	1780.49	0.00	1270833.26	3237331.68	40.073712	-104.651922
	10200.00	90.00	0.58	7080.00	2096.00	2823.60	2453.43	1781.50	0.00	1270933.26	3237331.74	40.073987	-104.651918
	10300.00	90.00	0.58	7080.00	2096.00	2920.61	2553.43	1782.51	0.00	1271033.25	3237331.80	40.074261	-104.651915
	10400.00	90.00	0.58	7080.00	2096.00	3017.62	2653.42	1783.52	0.00	1271133.25	3237331.86	40.074536	-104.651911
	10500.00	90.00	0.58	7080.00	2096.00	3114.64	2753.42	1784.53	0.00	1271233.24	3237331.92	40.074810	-104.651907
	10600.00	90.00	0.58	7080.00	2096.00	3211.65	2853.41	1785.54	0.00	1271333.24	3237331.98	40.075085	-104.651904
	10700.00	90.00	0.58	7080.00	2096.00	3308.66	2953.41	1786.54	0.00	1271433.24	3237332.04	40.075359	-104.651900
	10800.00	90.00	0.58	7080.00	2096.00	3405.67	3053.40	1787.55	0.00	1271533.23	3237332.10	40.075634	-104.651897
	10900.00	90.00	0.58	7080.00	2096.00	3502.69	3153.40	1788.56	0.00	1271633.23	3237332.16	40.075908	-104.651893
	11000.00	90.00	0.58	7080.00	2096.00	3599.70	3253.39	1789.57	0.00	1271733.22	3237332.22	40.076183	-104.651889
	11100.00	90.00	0.58	7080.00	2096.00	3696.71	3353.39	1790.58	0.00	1271833.22	3237332.28	40.076457	-104.651886
	11200.00	90.00	0.58	7080.00	2096.00	3793.73	3453.38	1791.59	0.00	1271933.22	3237332.34	40.076732	-104.651882
	11300.00	90.00	0.58	7080.00	2096.00	3890.74	3553.38	1792.60	0.00	1272033.21	3237332.40	40.077006	-104.651878
	11400.00	90.00	0.58	7080.00	2096.00	3987.75	3653.37	1793.60	0.00	1272133.21	3237332.46	40.077281	-104.651875
	11500.00	90.00	0.58	7080.00	2096.00	4084.77	3753.37	1794.61	0.00	1272233.20	3237332.52	40.077555	-104.651871
	11600.00	90.00	0.58	7080.00	2096.00	4181.78	3853.36	1795.62	0.00	1272333.20	3237332.58	40.077830	-104.651868
	11700.00	90.00	0.58	7080.00	2096.00	4278.79	3953.36	1796.63	0.00	1272433.20	3237332.63	40.078104	-104.651864
	11800.00	90.00	0.58	7080.00	2096.00	4375.81	4053.35	1797.64	0.00	1272533.19	3237332.69	40.078378	-104.651860
	11900.00	90.00	0.58	7080.00	2096.00	4472.82	4153.35	1798.65	0.00	1272633.19	3237332.75	40.078653	-104.651857
	12000.00	90.00	0.58	7080.00	2096.00	4569.83	4253.34	1799.66	0.00	1272733.18	3237332.81	40.078927	-104.651853
	12100.00	90.00	0.58	7080.00	2096.00	4666.85	4353.34	1800.67	0.00	1272833.18	3237332.87	40.079202	-104.651849
	12200.00	90.00	0.58	7080.00	2096.00	4763.86	4453.33	1801.67	0.00	1272933.18	3237332.93	40.079476	-104.651846
	12300.00	90.00	0.58	7080.00	2096.00	4860.87	4553.33	1802.68	0.00	1273033.17	3237332.99	40.079751	-104.651842
	12400.00	90.00	0.58	7080.00	2096.00	4957.89	4653.32	1803.69	0.00	1273133.17	3237333.05	40.080025	-104.651838
	12500.00	90.00	0.58	7080.00	2096.00	5054.90	4753.32	1804.70	0.00	1273233.16	3237333.11	40.080300	-104.651835
	12600.00	90.00	0.58	7080.00	2096.00	5151.91	4853.31	1805.71	0.00	1273333.16	3237333.17	40.080574	-104.651831
	12700.00	90.00	0.58	7080.00	2096.00	5248.92	4953.31	1806.72	0.00	1273433.16	3237333.23	40.080849	-104.651828
	12800.00	90.00	0.58	7080.00	2096.00	5345.94	5053.30	1807.73	0.00	1273533.15	3237333.29	40.081123	-104.651824
	12900.00	90.00	0.58	7080.00	2096.00	5442.95	5153.30	1808.73	0.00	1273633.15	3237333.35	40.081398	-104.651820
	13000.00	90.00	0.58	7080.00	2096.00	5539.96	5253.29	1809.74	0.00	1273733.14	3237333.41	40.081672	-104.651817
	13100.00	90.00	0.58	7080.00	2096.00	5636.98	5353.29	1810.75	0.00	1273833.14	3237333.47	40.081947	-104.651813
	13200.00	90.00	0.58	7080.00	2096.00	5733.99	5453.28	1811.76	0.00	1273933.14	3237333.53	40.082221	-104.651809
	13300.00	90.00	0.58	7080.00	2096.00	5831.00	5553.28	1812.77	0.00	1274033.13	3237333.59	40.082496	-104.651806
	13400.00	90.00	0.58	7080.00	2096.00	5928.02	5653.27	1813.78	0.00	1274133.13	3237333.65	40.082770	-104.651802
	13500.00	90.00	0.58	7080.00	2096.00	6025.03	5753.27	1814.79	0.00	1274233.12	3237333.71	40.083045	-104.651799
	13600.00	90.00	0.58	7080.00	2096.00	6122.04	5853.26	1815.80	0.00	1274333.12	3237333.77	40.083319	-104.651795
	13700.00	90.00	0.58	7080.00	2096.00	6219.06	5953.26	1816.80	0.00	1274433.12	3237333.82	40.083594	-104.651791
	13800.00	90.00	0.58	7080.00	2096.00	6316.07	6053.25	1817.81	0.00	1274533.11	3237333.88	40.083868	-104.651788
	13900.00	90.00	0.58	7080.00	2096.00	6413.08	6153.25	1818.82	0.00	1274633.11	3237333.94	40.084143	-104.651784
	14000.00	90.00	0.58	7080.00	2096.00	6510.10	6253.24	1819.83	0.00	1274733.10	3237334.00	40.084417	-104.651780
	14100.00	90.00	0.58	7080.00	2096.00	6607.11	6353.24	1820.84	0.00	1274833.10	3237334.06	40.084692	-104.651777
	14200.00	90.00	0.58	7080.00	2096.00	6704.12	6453.23	1821.85	0.00	1274933.10	3237334.12	40.084966	-104.651773
	14300.00	90.00	0.58	7080.00	2096.00	6801.13	6553.23	1822.86	0.00	1275033.09	3237334.18	40.085241	-104.651769
	14400.00	90.00	0.58	7080.00	2096.00	6898.15	6653.22	1823.87	0.00	1275133.09	3237334.24	40.085515	-104.651766
	14500.00	90.00	0.58	7080.00	2096.00	6995.16	6753.22	1824.87	0.00	1275233.08	3237334.30	40.085790	-104.651762
	14600.00	90.00	0.58	7080.00	2096.00	7092.17	6853.21	1825.88	0.00	1275333.08	3237334.36	40.086064	-104.651759
	14700.00	90.00	0.58	7080.00	2096.00	7189.19	6953.20	1826.89	0.00	1275433.08	3237334.42	40.086339	-104.651755
Warner 2E-10H-E165 BHL	14754.01	90.00	0.58	7080.00	2096.00	7241.59	7007.21	1827.44	0.00	1275487.09	3237334.45	40.086487	-104.651753

Survey Type: Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.00% 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	13.000	1/100.000	13.500	9.625		NAL_MWD_PLUS_0.5_DEG- Depth Only	Original Hole / Warner 2E-10H-E165 Plan #0
	1	13.000	1800.000	1/100.000	13.500	9.625		NAL_MWD_PLUS_0.5_DEG	Original Hole / Warner 2E-10H-E165 Plan #0
	1	1800.000	14754.012	1/100.000	8.500	5.500		NAL_MWD_PLUS_0.5_DEG	Original Hole / Warner 2E-10H-E165 Plan #0

Warner 2E-10H-E165 Plan #0 Anti-Collision Summary Report

Analysis Date-24hr Time: August 02, 2021 - 15:15
Client: Crestone Peak Resources
Field: CO, Weld County (NAD 83 NZ) - 2019
Structure: Crestone Peak 10-1N-65W (Warner Pad)
Slot: Warner 2E-10H-E165
Well: Warner 2E-10H-E165
Borehole: Original Hole
Scan MD Range: 0.00ft - 14754.01ft

Analysis Method: 3D Least Distance
Reference Trajectory: Warner 2E-10H-E165 Plan #0 (Def Plan)
Depth Interval: Every 10.00 Measured Depth (ft)
Rule Set: NAL Procedure: D&M AntiCollision Standard S002
Min Pts: All local minima indicated.
Version / Patch: 2.10.826.8
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 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

Warner 2D-10H-E165 Plan #0 (Def Plan)

Warning Alert

10.08	8.25	9.09	1.82	N/A	MAS = 2.52 (m)	0.00	0.00	CtCt<=15m<15.00	Enter Alert				
10.08	8.25	9.09	1.82	N/A	MAS = 2.52 (m)	13.00	13.00		WRP				
10.08	8.25	8.19	1.82	10.08	MAS = 2.52 (m)	200.00	200.00		MinPts				
10.17	8.25	8.09	1.91	8.41	MAS = 2.52 (m)	290.00	289.99		MINPT-O-EQU				
10.41	8.25	8.27	2.16	8.13	MAS = 2.52 (m)	370.00	369.90		MinPt-O-SF				
18.34	8.25	12.67	10.08	3.71	MAS = 2.52 (m)	880.00	873.63		MinPt-O-SF				
48.68	13.99	39.02	34.69	5.50	OSF1.50	1330.00	1306.01	CtCt<=15m>15.00	Exit Alert				
458.20	70.82	410.66	387.36	9.82	OSF1.50	6530.00	6290.68		MinPt-O-SF				
464.58	140.20	370.79	324.38	4.99	OSF1.50	9640.00	7080.00	OSF<5.00	Enter Alert				
378.69	364.32	135.48	14.36	1.56	OSF1.50	13620.00	7080.00		MinPt-CtCt				
379.10	365.69	134.98	13.42	1.56	OSF1.50	13670.00	7080.00		MINPT-O-EQU				
379.72	366.46	135.08	13.26	1.55	OSF1.50	13700.00	7080.00		MinPts				
500.44	415.01	223.44	85.43	1.81	OSF1.50	14754.01	7080.00		TD				

Warner 2C-10H-E165 Plan #0 (Def Plan)

Warning Alert

20.15	16.31	19.17	3.84	N/A	MAS = 4.97 (m)	0.00	0.00	CtCt<=15m<15.00	Enter Alert				
20.15	16.31	19.17	3.84	N/A	MAS = 4.97 (m)	13.00	13.00		WRP				
20.15	16.31	18.27	3.84	21.26	MAS = 4.97 (m)	200.00	200.00		MinPts				
20.19	16.31	18.22	3.87	19.59	MAS = 4.97 (m)	240.00	240.00		MINPT-O-EQU				
20.60	16.31	18.50	4.29	17.65	MAS = 4.97 (m)	340.00	339.94		MinPt-O-SF				
36.93	16.31	31.28	20.62	7.71	MAS = 4.97 (m)	890.00	883.35		MinPt-O-SF				
49.00	16.31	42.08	32.68	8.09	MAS = 4.97 (m)	1027.32	1015.87	CtCt<=15m>15.00	Exit Alert				
612.43	65.95	568.14	546.48	14.12	OSF1.50	6060.00	5840.14		MinPt-O-SF				
926.23	278.77	740.06	647.46	5.00	OSF1.50	12170.00	7080.00	OSF<5.00	Enter Alert				
926.31	428.74	640.15	497.57	3.24	OSF1.50	14754.01	7080.00		MinPts				

Warner 2B-10H-E165 Plan #0 (Def Plan)

Warning Alert

30.23	24.38	29.24	5.85	N/A	MAS = 7.43 (m)	0.00	0.00	CtCt<=15m<15.00	Enter Alert				
30.23	24.38	29.24	5.85	N/A	MAS = 7.43 (m)	13.00	13.00		WRP				
30.23	24.38	28.34	5.85	32.43	MAS = 7.43 (m)	200.00	200.00		MinPts				
30.23	24.38	28.33	5.86	31.89	MAS = 7.43 (m)	210.00	210.00		MINPT-O-EQU				
30.83	24.38	28.79	6.45	28.28	MAS = 7.43 (m)	300.00	299.98		MinPt-O-SF				
48.53	24.38	44.69	24.15	16.67	MAS = 7.43 (m)	700.00	697.47	CtCt<=15m>15.00	Exit Alert				
78.74	24.38	72.32	54.36	14.31	MAS = 7.43 (m)	970.00	960.76		MinPt-O-SF				
673.30	56.05	635.61	617.25	18.32	OSF1.50	4740.00	4574.80		MinPt-O-SF				
1305.23	392.42	1043.29	912.82	5.00	OSF1.50	14080.00	7080.00	OSF<5.00	Enter Alert				
1299.63	432.66	1010.87	866.98	4.51	OSF1.50	14754.01	7080.00		MinPts				

Warner 2A-10H-E165 Plan #0 (Def Plan)

Warning Alert

40.03	32.21	39.04	7.81	N/A	MAS = 9.82 (m)	0.00	0.00	CtCt<=15m<15.00	Enter Alert				
40.03	32.21	39.04	7.81	N/A	MAS = 9.82 (m)	13.00	13.00		WRP				
40.03	32.21	38.14	7.81	43.30	MAS = 9.82 (m)	200.00	200.00		MinPts				
41.64	32.21	39.63	9.43	39.71	MAS = 9.82 (m)	300.00	299.98		MinPt-O-SF				
48.82	32.21	46.78	16.60	45.43	MAS = 9.82 (m)	430.00	429.75	CtCt<=15m>15.00	Exit Alert				
158.45	32.21	151.73	126.24	27.44	MAS = 9.82 (m)	1027.32	1015.87		MinPt-O-SF				
244.81	32.21	234.98	212.60	27.56	MAS = 9.82 (m)	1350.00	1325.19		MinPt-O-SF				
279.66	32.21	268.57	247.45	27.57	MAS = 9.82 (m)	1480.00	1449.80		MinPt-O-SF				
365.52	32.21	351.30	333.31	27.54	MAS = 9.82 (m)	1800.00	1756.55		MinPt-O-SF				
983.29	46.01	952.29	937.28	32.73	OSF1.50	4100.00	3961.31		MinPt-O-SF				
1801.11	432.91	1512.17	1368.20	6.25	OSF1.50	14754.01	7080.00		MinPts				

Willow 22-14-2L - Plan (Def Plan)

Warning Alert

7406.95	313.30	7197.48	7093.65	35.66	OSF1.50	0.00	0.00		Surface				
7394.38	313.48	7184.79	7080.90	35.58	OSF1.50	13.00	13.00		WRP				
938.43	285.92	746.72	652.51	4.96	OSF1.50	6500.00	6261.92	OSF<5.00	Enter Alert				
550.55	246.99	383.25	303.55	3.40	OSF1.50	6970.00	6703.01		MinPt-O-SF				
522.06	229.72	365.79	292.34	3.49	OSF1.50	7050.00	6769.67		MinPt-O-ADP				
517.94	224.80	364.83	293.15	3.54	OSF1.50	7070.00	6785.63		MINPT-O-EQU				
513.30	211.78	368.57	301.52	3.75	OSF1.50	7120.00	6824.14		MinPt-CtCt				
547.54	173.76	427.51	373.78	4.98	OSF1.50	7270.00	6926.24	OSF>5.00	Exit Alert				
7937.03	98.13	7869.23	7838.89	130.68	OSF1.50	14754.01	7080.00		TD				

Randle Red XX 3-2D GYRO+BLIND 0' to 8034' - PA (Def Survey)

Warning Alert

6004.18	32.81	6002.37	5971.37	N/A	MAS = 10.00 (m)	0.00	0.00		Surface				
6004.14	32.81	6002.31	5971.33	567042.23	MAS = 10.00 (m)	13.00	13.00		WRP				
6004.12	32.81	6002.27	5971.31	158903.79	MAS = 10.00 (m)	30.00	30.00		MinPts				
6004.21	32.81	6002.21	5971.41	31634.62	MAS = 10.00 (m)	90.00	90.00		MINPT-O-EQU				
6004.37	32.81	6002.20	5971.56	16670.85	MAS = 10.00 (m)	130.00	130.00		MINPT-O-EQU				
797.63	245.02	632.90	552.61	4.94	OSF1.50	13180.00	7080.00	OSF<5.00	Enter Alert				
532.55	364.00	289.35	168.55	2.20	OSF1.50	13770.00	7080.00		MinPt-CtCt				
533.12	366.45	288.29	166.68	2.19	OSF1.50	13800.00	7080.00		MINPT-O-EQU				
533.69	367.06	288.45	166.63	2.18	OSF1.50	13810.00	7080.00		MinPts				
947.73	285.61	756.78	662.11	5.00	OSF1.50	14560.00	7080.00	OSF>5.00	Exit Alert				

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		
	7483.22	291.18	7288.49	7192.03	38.78	OSF1.50	0.00	0.00	OSF<5.00			Surface	
	7470.43	291.30	7275.63	7179.14	38.70	OSF1.50	13.00	13.00				WRP	
	1283.44	389.65	1023.12	893.79	4.96	OSF1.50	6450.00	6213.99				Enter Alert	
	955.30	551.26	586.04	404.04	2.61	OSF1.50	7130.00	6831.59				MinPt-CtCt	
	956.08	553.60	585.16	402.48	2.60	OSF1.50	7160.00	6853.43	OSF>5.00			MinPts	
	956.70	554.18	585.37	402.52	2.60	OSF1.50	7170.00	6860.53				MinPt-O-SF	
	1362.15	419.80	1078.80	942.35	4.95	OSF1.50	7910.00	7080.00				Exit Alert	
	7980.47	103.00	7909.37	7877.46	124.94	OSF1.50	14754.01	7080.00				TD	
Willow 22-18-3L - Plan (Def Plan)												Warning Alert	
	7320.24	285.53	7129.28	7034.71	38.69	OSF1.50	0.00	0.00	OSF<5.00			Surface	
	7307.41	285.63	7116.39	7021.78	38.61	OSF1.50	13.00	13.00				WRP	
	1408.96	427.11	1123.68	981.84	4.96	OSF1.50	6250.00	6022.27				Enter Alert	
	1059.29	623.53	642.30	435.75	2.55	OSF1.50	7040.00	6761.58				MinPt-CtCt	
	1060.73	627.41	641.07	433.32	2.54	OSF1.50	7080.00	6793.49	OSF>5.00			MINPT-O-EQU	
	1061.45	628.16	641.27	433.29	2.54	OSF1.50	7090.00	6801.27				MinPt-O-ADP	
	1062.33	628.83	641.67	433.50	2.54	OSF1.50	7100.00	6808.98				MinPt-O-SF	
	1551.78	472.58	1233.51	1079.19	5.00	OSF1.50	8010.00	7080.00				Exit Alert	
8001.54	121.64	7918.13	7879.90	104.55	OSF1.50	14754.01	7080.00			TD			
Willow 22-20-2L - Plan (Def Plan)												Warning Alert	
	7235.59	280.31	7048.11	6955.27	38.96	OSF1.50	0.00	0.00	OSF<5.00			Surface	
	7222.70	280.39	7035.17	6942.31	38.88	OSF1.50	13.00	13.00				WRP	
	1695.30	510.92	1354.15	1184.37	4.99	OSF1.50	6130.00	5907.24				Enter Alert	
	1426.04	670.87	978.13	755.17	3.19	OSF1.50	6940.00	6676.95				MinPt-CtCt	
	1427.40	675.74	976.18	751.66	3.17	OSF1.50	6980.00	6720.08	OSF>5.00			MINPT-O-EQU	
	1428.66	677.36	976.32	751.30	3.17	OSF1.50	7010.00	6736.88				MinPt-O-ADP	
	1432.37	680.01	978.21	752.36	3.17	OSF1.50	7050.00	6769.67				MinPt-O-SF	
	1676.41	568.79	1494.66	1307.61	5.00	OSF1.50	8040.00	7080.00				Exit Alert	
8068.62	170.50	7952.74	7898.13	73.80	OSF1.50	14754.01	7080.00			TD			
Willow 22-21-3L - Plan (Def Plan)												Warning Alert	
	7284.36	278.84	7097.86	7005.52	39.43	OSF1.50	0.00	0.00	OSF<5.00			Surface	
	7271.46	278.92	7084.92	6992.55	39.35	OSF1.50	13.00	13.00				WRP	
	1839.85	554.11	1469.91	1285.75	4.99	OSF1.50	6210.00	5983.93				Enter Alert	
	1641.31	676.77	1189.60	964.54	3.64	OSF1.50	6940.00	6676.95				MinPt-CtCt	
	1643.08	681.87	1187.95	961.21	3.62	OSF1.50	7000.00	6728.51	OSF>5.00			MINPT-O-EQU	
	1644.37	683.34	1188.24	961.03	3.61	OSF1.50	7020.00	6745.19				MinPt-O-ADP	
	1649.13	686.36	1190.90	962.77	3.61	OSF1.50	7070.00	6785.63				MinPt-O-SF	
	2010.25	610.26	1601.23	1399.99	4.98	OSF1.50	7980.00	7080.00				Exit Alert	
8110.76	196.53	7977.55	7914.23	64.00	OSF1.50	14754.01	7080.00			TD			
Coffer 14N-34HZ MWD 0' to 11568' - PR (Def Survey)												Pass	
	10786.49	74.08	10736.50	10712.41	223.86	OSF1.50	0.00	0.00			Surface		
	10777.98	74.16	10727.93	10703.82	223.42	OSF1.50	13.00	13.00			WRP		
	10650.15	73.33	10600.66	10576.82	223.33	OSF1.50	210.00	210.00			MinPt-O-SF		
	8698.64	78.88	8644.23	8619.76	177.64	OSF1.50	6300.00	6070.20			MinPt-CtCt		
	8698.93	79.70	8643.97	8619.23	175.71	OSF1.50	6370.00	6137.31			MINPT-O-EQU		
	8699.23	80.05	8644.03	8619.17	174.89	OSF1.50	6400.00	6166.06			MinPt-O-ADP		
968.32	135.08	873.96	833.24	11.73	OSF1.50	14754.01	7080.00			MinPts			
Coffer 14C-34HZX MWD 0' to 11779' - PR (Def Survey)												Pass	
	10964.21	80.16	10910.16	10884.05	209.88	OSF1.50	0.00	0.00			Surface		
	10955.60	80.25	10901.49	10875.35	209.47	OSF1.50	13.00	13.00			WRP		
	10629.66	78.49	10576.73	10551.17	207.90	OSF1.50	520.00	519.33			MinPt-O-SF		
	989.11	85.61	927.64	903.50	20.22	OSF1.50	14754.01	7080.00			MinPts		
Coffer 36N-34HZ MWD 0' to 11687' - PR (Def Survey)												Pass	
	10903.87	91.08	10842.55	10812.79	183.19	OSF1.50	0.00	0.00			Surface		
	10895.45	91.17	10834.07	10804.28	182.86	OSF1.50	13.00	13.00			WRP		
	10373.55	88.94	10313.65	10284.61	178.56	OSF1.50	870.00	863.91			MinPt-O-SF		
	8724.53	88.27	8663.83	8636.26	158.12	OSF1.50	6480.00	6242.75			MinPt-CtCt		
	8724.62	88.57	8663.72	8636.06	157.56	OSF1.50	6520.00	6281.09			MINPT-O-EQU		
	8724.81	88.79	8663.76	8636.02	157.15	OSF1.50	6549.51	6309.38			MinPt-O-ADP		
1103.85	185.99	975.72	917.85	9.43	OSF1.50	14754.01	7080.00			MinPts			
Ottesen 1 GYRO 0' to 7992' - TA (Def Survey)												Pass	
	3846.59	32.81	3844.77	3813.78	N/A	MAS = 10.00 (m)	0.00	0.00			Surface		
	3846.57	32.81	3844.76	3813.76	N/A	MAS = 10.00 (m)	10.00	10.00			MinPts		
	3846.57	32.81	3844.76	3813.76	N/A	MAS = 10.00 (m)	13.00	13.00			WRP		
	3846.53	32.81	3844.37	3813.72	11099.44	MAS = 10.00 (m)	120.00	120.00			MinPts		
	3846.69	32.81	3844.19	3813.88	5593.74	MAS = 10.00 (m)	200.00	200.00			MINPT-O-EQU		
	1164.33	175.16	1047.02	989.17	10.05	OSF1.50	11520.00	7080.00			MinPt-O-SF		
	1163.20	174.80	1046.13	988.39	10.06	OSF1.50	11560.00	7080.00			MinPts		
	1163.13	174.68	1046.14	988.44	10.07	OSF1.50	11570.00	7080.00			MinPt-CtCt		
3386.03	66.26	3341.32	3319.77	78.52	OSF1.50	14754.01	7080.00			TD			
Coffer 35N-34HZ MWD 0' to 11687' - PR (Def Survey)												Pass	
	10724.41	79.09	10671.08	10645.32	208.14	OSF1.50	0.00	0.00			Surface		
	10715.77	79.18	10662.38	10636.59	207.72	OSF1.50	13.00	13.00			WRP		
	10372.73	77.40	10320.53	10295.33	205.81	OSF1.50	550.00	549.13			MinPt-O-SF		
	8706.94	75.25	8655.10	8631.68	185.81	OSF1.50	6160.00	5936.00			MinPt-CtCt		
	8707.08	75.68	8654.95	8631.40	184.71	OSF1.50	6210.00	5983.93			MINPT-O-EQU		
	8707.30	75.94	8655.00	8631.36	184.06	OSF1.50	6240.00	6012.69			MinPt-O-ADP		
1292.75	298.68	1090.56	994.06	6.65	OSF1.50	14754.01	7080.00			MinPts			
Coffer 13C-34HZ MWD 0' to 11790' - PR (Def Survey)												Pass	
	10816.18	72.21	10767.44	10743.97	230.44	OSF1.50	0.00	0.00			Surface		
	10807.43	72.30	10758.62	10735.12	229.94	OSF1.50	13.00	13.00			WRP		
	10662.66	71.40	10614.45	10591.25	229.79	OSF1.50	230.00	230.00			MinPt-O-SF		
	8764.44	72.86	8714.24	8691.58	193.26	OSF1.50	6230.00	6003.10			MinPt-CtCt		
	8764.65	73.51	8714.02	8691.14	191.50	OSF1.50	6290.00	6060.62			MINPT-O-EQU		
	8764.91	73.83	8714.06	8691.08	190.62	OSF1.50	6320.00	6089.38			MinPt-O-ADP		
1548.32	335.10	1322.40	1213.22	7.06	OSF1.50	14754.01	7080.00			MinPts			
Randie Red XX 3-4D GYRO 0' to 8040' - PA (Def Survey)												Pass	
	7061.02	32.81	7059.21	7028.21	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		
	7060.98	32.81	7059.16	7028.18	844595.87	MAS = 10.00 (m)	13.00	13.00				WRP	
	7060.89	32.81	7058.43	7028.08	10897.29	MAS = 10.00 (m)	190.00	190.00				MinPts	
	7060.90	32.81	7058.39	7028.09	9920.77	MAS = 10.00 (m)	210.00	210.00				MINPT-O-EOU	
	1678.94	309.27	1472.23	1369.67	8.18	OSF1.50	14754.01	7080.00				MinPts	
Coffer 13N-34HZ MWD 0' to 11496' - PR (Def Survey)													
	10668.04	65.33	10623.88	10602.71	251.88	OSF1.50	0.00	0.00				Surface	Pass
	10659.43	65.43	10615.21	10594.00	251.31	OSF1.50	13.00	13.00				MinPt-O-SF	
	8788.58	75.10	8736.91	8713.48	187.47	OSF1.50	5920.00	5705.94				MinPt-CiCt	
	8788.83	75.93	8736.60	8712.90	185.32	OSF1.50	5990.00	5773.04				MINPT-O-EOU	
	8789.23	76.41	8736.67	8712.82	184.11	OSF1.50	6030.00	5811.38				MinPt-O-ADP	
	1862.63	360.24	1620.49	1502.39	7.86	OSF1.50	14754.01	7080.00				MinPts	
Joker 26N2-9HZ MWD 0' - 11975' - PR (Def Survey)													
	2725.90	32.81	2724.08	2693.09	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	2725.89	32.81	2724.07	2693.08	369723.85	MAS = 10.00 (m)	13.00	13.00				WRP	
	2725.42	32.81	2722.56	2692.62	2602.00	MAS = 10.00 (m)	250.00	250.00				MinPts	
	2725.50	32.81	2722.44	2692.69	2183.32	MAS = 10.00 (m)	310.00	309.97				MINPT-O-EOU	
	2231.34	109.78	2157.62	2121.56	30.92	OSF1.50	6730.00	6483.08				MinPt-CiCt	
	2231.39	109.87	2157.61	2121.53	30.89	OSF1.50	6740.00	6492.63				MinPts	
	2328.15	139.79	2234.42	2188.36	25.25	OSF1.50	7560.00	7054.00				MinPts	
	2330.52	185.18	2206.54	2145.35	19.03	OSF1.50	8430.00	7080.00				MinPt-CiCt	
	2318.61	246.27	2153.90	2072.34	14.21	OSF1.50	9450.00	7080.00				MinPts	
	2318.57	246.22	2153.89	2072.35	14.21	OSF1.50	9460.00	7080.00				MinPts	
	5775.12	105.59	5704.19	5669.53	83.28	OSF1.50	14754.01	7080.00				TD	
Ruegge 3Q-4H-N165 MWD 0' to 12265' - PR (Def Survey)													
	4512.76	32.81	4510.95	4479.96	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	4512.65	32.81	4510.81	4479.84	135877.78	MAS = 10.00 (m)	13.00	13.00				MinPt-O-SF	
	4512.53	32.81	4510.64	4479.72	54874.77	MAS = 10.00 (m)	50.00	50.00				MinPts	
	3653.42	111.75	3578.16	3541.67	50.03	OSF1.50	5760.00	5552.57				MinPt-CiCt	
	3653.53	112.06	3578.06	3541.47	49.89	OSF1.50	5790.00	5581.32				MINPT-O-EOU	
	3653.61	112.16	3578.07	3541.44	49.85	OSF1.50	5800.00	5590.91				MinPt-O-ADP	
	2310.44	144.97	2212.84	2165.47	24.36	OSF1.50	10550.00	7080.00				MinPt-CiCt	
	2310.70	145.77	2212.58	2164.93	24.22	OSF1.50	10590.00	7080.00				MINPT-O-EOU	
	2311.05	146.17	2212.67	2164.88	24.15	OSF1.50	10610.00	7080.00				MinPt-O-ADP	
	2346.21	160.40	2238.41	2185.81	22.28	OSF1.50	11030.00	7080.00				MinPts	
	2345.61	206.04	2207.31	2139.57	17.29	OSF1.50	11830.00	7080.00				MinPt-CiCt	
	2334.79	277.10	2149.12	2057.69	12.75	OSF1.50	13050.00	7080.00				MinPt-CiCt	
	2323.29	384.40	2066.08	1938.89	9.12	OSF1.50	14754.01	7080.00				MinPts	
Ruegge 3R-4H-N165 MWD 0' to 12660' - PR (Def Survey)													
	4437.96	32.81	4426.17	4405.15	444.51	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	4432.48	32.81	4420.48	4399.67	434.72	MAS = 10.00 (m)	13.00	13.00				WRP	
	3538.88	102.88	3469.51	3436.00	52.77	OSF1.50	5910.00	5696.35				MinPt-CiCt	
	3538.96	103.14	3469.40	3435.81	52.64	OSF1.50	5940.00	5725.11				MINPT-O-EOU	
	3539.03	103.23	3469.42	3435.80	52.60	OSF1.50	5950.00	5734.70				MinPt-O-ADP	
	3590.00	107.81	3517.30	3482.18	51.08	OSF1.50	6570.00	6329.05				MinPt-O-SF	
	2319.20	148.44	2219.30	2170.76	23.86	OSF1.50	10500.00	7080.00				MinPt-CiCt	
	2319.72	149.93	2218.83	2169.79	23.62	OSF1.50	10560.00	7080.00				MINPT-O-EOU	
	2320.34	150.66	2218.97	2169.67	23.51	OSF1.50	10590.00	7080.00				MinPt-O-ADP	
	2317.64	249.83	2150.13	2067.81	14.06	OSF1.50	12510.00	7080.00				MinPt-CiCt	
	2321.21	262.42	2145.34	2058.79	13.39	OSF1.50	12790.00	7080.00				MINPT-O-EOU	
	2324.19	267.29	2145.12	2056.96	13.17	OSF1.50	12890.00	7080.00				MINPT-O-EOU	
	2328.27	274.45	2144.35	2053.81	12.84	OSF1.50	13010.00	7080.00				MINPT-O-EOU	
	2329.97	326.18	2111.57	2003.79	10.80	OSF1.50	13750.00	7080.00				MinPt-CiCt	
	2328.35	392.29	2065.90	1936.10	8.95	OSF1.50	14754.01	7080.00				MinPts	
Chapin 43-4 GYRO 0' to 8023' - PA (Def Survey)													
	4114.78	32.81	4112.97	4081.97	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	4114.72	32.81	4112.89	4081.91	286760.47	MAS = 10.00 (m)	13.00	13.00				WRP	
	4114.44	32.81	4111.78	4081.64	4844.98	MAS = 10.00 (m)	220.00	220.00				MinPts	
	4114.46	32.81	4111.77	4081.65	4689.64	MAS = 10.00 (m)	230.00	230.00				MINPT-O-EOU	
	2363.16	186.66	2238.19	2176.50	19.14	OSF1.50	11860.00	7080.00				MinPt-CiCt	
	2363.29	187.11	2238.01	2176.18	19.10	OSF1.50	11890.00	7080.00				MINPT-O-EOU	
	2363.42	187.26	2238.05	2176.16	19.08	OSF1.50	11900.00	7080.00				MinPt-O-ADP	
	2374.82	189.49	2247.96	2185.33	18.95	OSF1.50	12100.00	7080.00				MinPt-O-SF	
	3731.97	151.33	3630.55	3580.64	37.37	OSF1.50	14754.01	7080.00				TD	
Joker 26N1-9HZ MWD 0' to 12052' - PR (Def Survey)													
	2736.94	32.81	2735.12	2704.13	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	2736.92	32.81	2735.10	2704.11	204683.12	MAS = 10.00 (m)	13.00	13.00				WRP	
	2736.58	32.81	2734.28	2703.78	5523.45	MAS = 10.00 (m)	140.00	140.00				MinPts	
	2736.72	32.81	2734.10	2703.91	3418.37	MAS = 10.00 (m)	200.00	200.00				MINPT-O-EOU	
	2438.53	113.18	2362.54	2325.35	32.76	OSF1.50	6760.00	6511.67				MinPt-CiCt	
	2438.65	113.44	2362.48	2325.20	32.69	OSF1.50	6780.00	6530.61				MINPT-O-EOU	
	2438.77	113.58	2362.51	2325.18	32.65	OSF1.50	6790.00	6540.04				MinPt-O-ADP	
	2506.12	187.21	2380.78	2318.91	20.24	OSF1.50	8500.00	7080.00				MinPt-CiCt	
	2510.72	210.63	2369.76	2300.09	18.01	OSF1.50	8950.00	7080.00				MINPT-O-EOU	
	2512.29	212.52	2370.07	2299.77	17.86	OSF1.50	9010.00	7080.00				MinPt-O-ADP	
	2570.48	243.61	2407.53	2326.86	15.92	OSF1.50	9750.00	7080.00				MinPt-O-SF	
	5889.69	122.35	5807.59	5767.34	73.15	OSF1.50	14754.01	7080.00				TD	
Joker 1N3-9HZ MWD 0' to 11936' - PR (Def Survey)													
	2750.78	32.81	2748.97	2717.97	N/A	MAS = 10.00 (m)	0.00	0.00				MinPts	Pass
	2750.79	32.81	2748.97	2717.98	750421.53	MAS = 10.00 (m)	13.00	13.00				WRP	
	2750.93	32.81	2748.88	2718.12	11855.44	MAS = 10.00 (m)	90.00	90.00				MINPT-O-EOU	
	2751.09	32.81	2748.84	2718.28	6391.39	MAS = 10.00 (m)	130.00	130.00				MINPT-O-EOU	
	2508.14	116.63	2429.85	2391.51	32.69	OSF1.50	6600.00	6357.94				MinPt-CiCt	
	2508.14	116.67	2429.82	2391.47	32.67	OSF1.50	6610.00	6367.58				MINPT-O-EOU	
	2508.18	116.72	2429.83	2391.46	32.66	OSF1.50	6620.00	6377.23				MinPt-O-ADP	
	2634.01	171.64	2519.04	2462.36	23.22	OSF1.50	8320.00	7080.00				MINPT-O-EOU	
	2655.28	243.01	2492.74	2412.27	16.49	OSF1.50	9490.00	7080.00				MINPT-O-EOU	
	2655.49	243.30	2492.76	2412.20	16.47	OSF1.50	9500.00	7080.00				MinPts	
	5939.89	128.50	5853.69	5811.39	70.20	OSF1.50	14754.01	7080.00				TD	
Rocky 38N-33HZ MWD 0' to 13397' - PR (Def Survey)													
													Pass

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		
	10753.65	76.75	10701.88	10676.91	215.22	OSF1.50	0.00	0.00				Surface	
	10745.00	76.78	10693.21	10668.22	214.97	OSF1.50	13.00	13.00				MinPt-O-SF	
	8965.89	79.32	8911.29	8886.57	181.27	OSF1.50	5790.00	5581.32				MinPt-CtCt	
	8966.26	80.43	8910.91	8885.83	178.64	OSF1.50	5870.00	5658.01				MINPT-O-EOU	
	8966.72	81.00	8910.98	8885.72	177.35	OSF1.50	5910.00	5696.35				MinPt-O-ADP	
	2620.04	385.70	2361.40	2234.34	10.29	OSF1.50	14754.01	7080.00				MinPts	

Olin 41-4 MWD 0' to 8158' - PR
(Def Survey)

Pass

6777.30	32.81	6775.49	6744.49	N/A	MAS = 10.00 (m)	0.00	0.00	Surface
6777.20	32.81	6775.36	6744.39	229882.26	MAS = 10.00 (m)	13.00	13.00	MinPt-O-SF
6777.06	32.81	6775.14	6744.25	64886.68	MAS = 10.00 (m)	60.00	60.00	MinPts
6777.17	32.81	6774.67	6744.36	9869.52	MAS = 10.00 (m)	200.00	200.00	MINPT-O-EOU
7034.84	32.81	7021.82	7002.04	616.00	MAS = 10.00 (m)	1900.00	1852.41	MinPt-O-SF
7752.55	58.25	7713.18	7694.29	205.24	OSF1.50	5570.00	5370.43	MinPts
7886.23	70.71	7838.56	7815.52	171.14	OSF1.50	6290.00	6060.62	MinPt-O-ADP
7948.76	83.98	7892.23	7864.78	144.71	OSF1.50	6650.00	6406.18	MINPT-O-EOU
2764.75	301.17	2563.44	2463.58	13.84	OSF1.50	14560.00	7080.00	MinPt-CtCt
2764.89	301.69	2563.23	2463.20	13.81	OSF1.50	14590.00	7080.00	MINPT-O-EOU
2765.17	302.02	2563.29	2463.15	13.80	OSF1.50	14610.00	7080.00	MinPt-O-ADP
2771.39	303.94	2568.22	2467.44	13.74	OSF1.50	14754.01	7080.00	MinPt-O-SF

Chapin 44-4 GYRO 0' to 8028' - PA
(Def Survey)

Pass

3010.14	32.81	3008.33	2977.33	N/A	MAS = 10.00 (m)	0.00	0.00	Surface
3010.06	32.81	3008.23	2977.25	166219.15	MAS = 10.00 (m)	13.00	13.00	MinPt-O-SF
3008.59	32.81	3005.92	2975.78	3496.64	MAS = 10.00 (m)	220.00	220.00	MinPts
3008.60	32.81	3005.90	2975.79	3399.37	MAS = 10.00 (m)	230.00	230.00	MINPT-O-EOU
2768.64	135.82	2677.55	2632.82	30.92	OSF1.50	10620.00	7080.00	MinPt-CtCt
2768.79	136.37	2677.34	2632.42	30.80	OSF1.50	10650.00	7080.00	MINPT-O-EOU
2769.07	136.72	2677.38	2632.35	30.72	OSF1.50	10670.00	7080.00	MinPt-O-ADP
2618.66	143.24	2722.64	2675.42	29.83	OSF1.50	11150.00	7080.00	MinPt-O-SF
4974.33	124.51	4890.79	4849.82	60.69	OSF1.50	14754.01	7080.00	TD

Olin 42-4A MWD 0' to 8270' - PA
(Def Survey)

Pass

6770.88	32.81	6769.06	6738.07	N/A	MAS = 10.00 (m)	0.00	0.00	Surface
6770.76	32.81	6768.92	6737.96	194146.35	MAS = 10.00 (m)	13.00	13.00	MinPt-O-SF
6770.57	32.81	6768.06	6737.76	9806.33	MAS = 10.00 (m)	200.00	200.00	MinPts
6770.58	32.81	6768.05	6737.77	9482.26	MAS = 10.00 (m)	210.00	210.00	MINPT-O-EOU
6759.70	64.17	6716.26	6695.52	162.94	OSF1.50	5640.00	5437.53	MinPt-CtCt
6759.86	64.65	6716.10	6695.21	161.74	OSF1.50	5690.00	5485.46	MINPT-O-EOU
6760.10	64.94	6716.15	6695.16	161.03	OSF1.50	5720.00	5514.22	MinPt-O-ADP
2786.97	252.73	2617.96	2534.25	16.64	OSF1.50	13290.00	7080.00	MinPt-CtCt
2787.18	253.36	2617.74	2533.83	16.60	OSF1.50	13320.00	7080.00	MINPT-O-EOU
2787.50	253.76	2617.79	2533.74	16.57	OSF1.50	13340.00	7080.00	MinPt-O-ADP
2806.92	258.11	2634.31	2548.81	16.41	OSF1.50	13620.00	7080.00	MinPt-O-SF
3149.30	253.45	2979.79	2895.85	18.75	OSF1.50	14754.01	7080.00	TD