



SRC Energy

Rev 1

Schlumberger

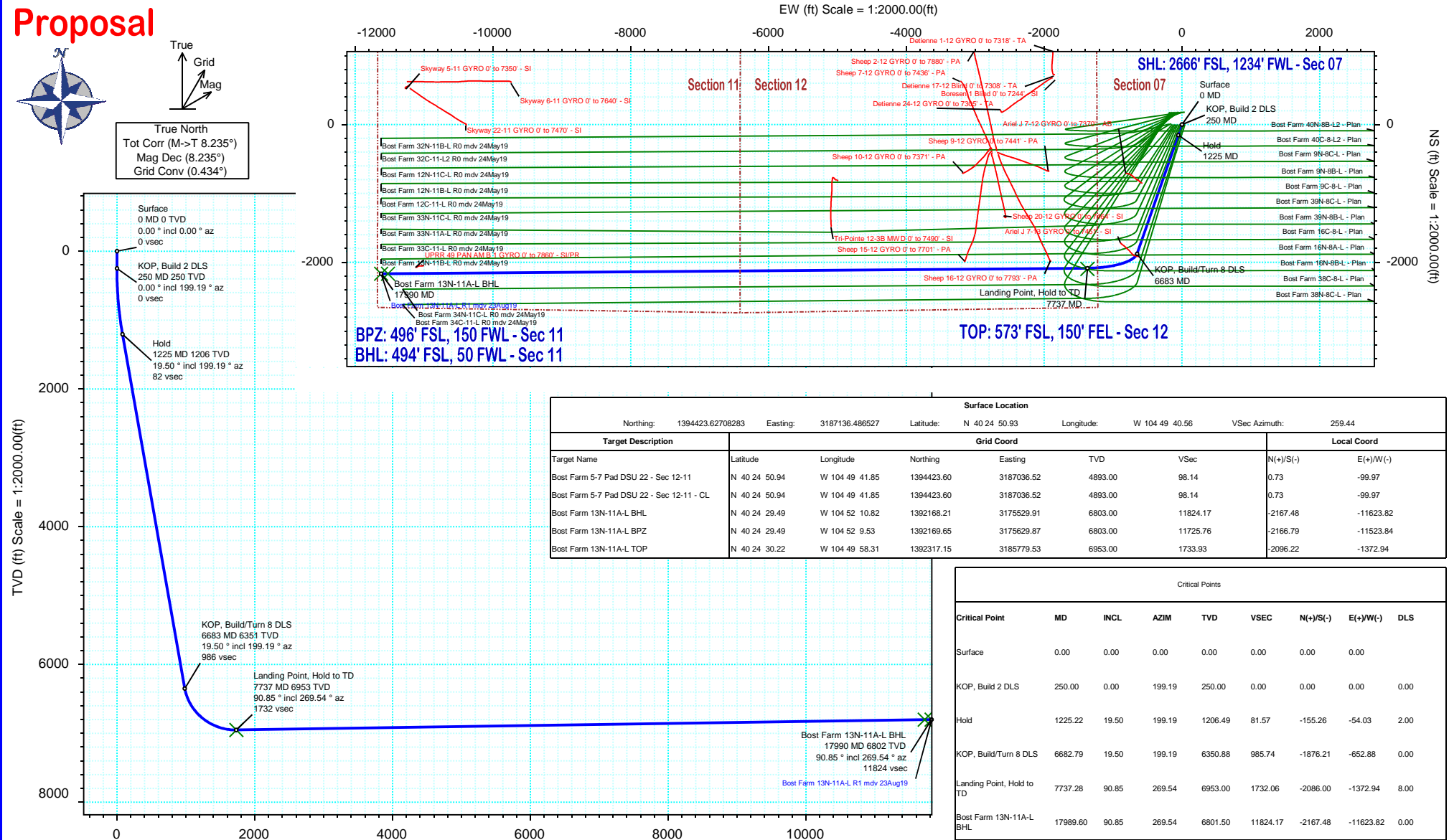
Borehole:	Well:	Field:	Structure:
Original Hole	Bost Farm 13N-11A-L	CO, Weld County (NAD 83 NZ) - SRC	SRC Energy 07-05N-66W (Bost Farm 5-7 Pad DSU 20)

Gravity & Magnetic Parameters					Surface Location				NAD83 Colorado State Plane, Northern Zone, US Feet				Miscellaneous		
Model:	HDGM 2019	Dip:	66.767°	Date:	23-Jul-2019	Lat:	N 40 24 50.93	Northings:	1394423.63ftUS	Grid Conv:	0.4342°	Slot:	Bost Farm 13N-11A-L	TVD Ref:	KB 20ft(4893ft above MSL)
MagDec:	8.235°	FS:	52199.824nT	Gravity FS:	999.024mgn (9.80665 Based)	Lon:	W 104 49 40.56	Easting:	3187136.49ftUS	Scale Fact:	0.9999609	Plan:	Bost Farm 13N-11A-L R1 mdy 23Aug19		

Proposal



True North
Tot Corr (M->T 8.235°)
Mag Dec (8.235°)
Grid Conv (0.434°)



Vertical Section (ft) Azim = 259.44° Scale = 1:2000.00(ft) Origin = 0N/-S, 0E/-W



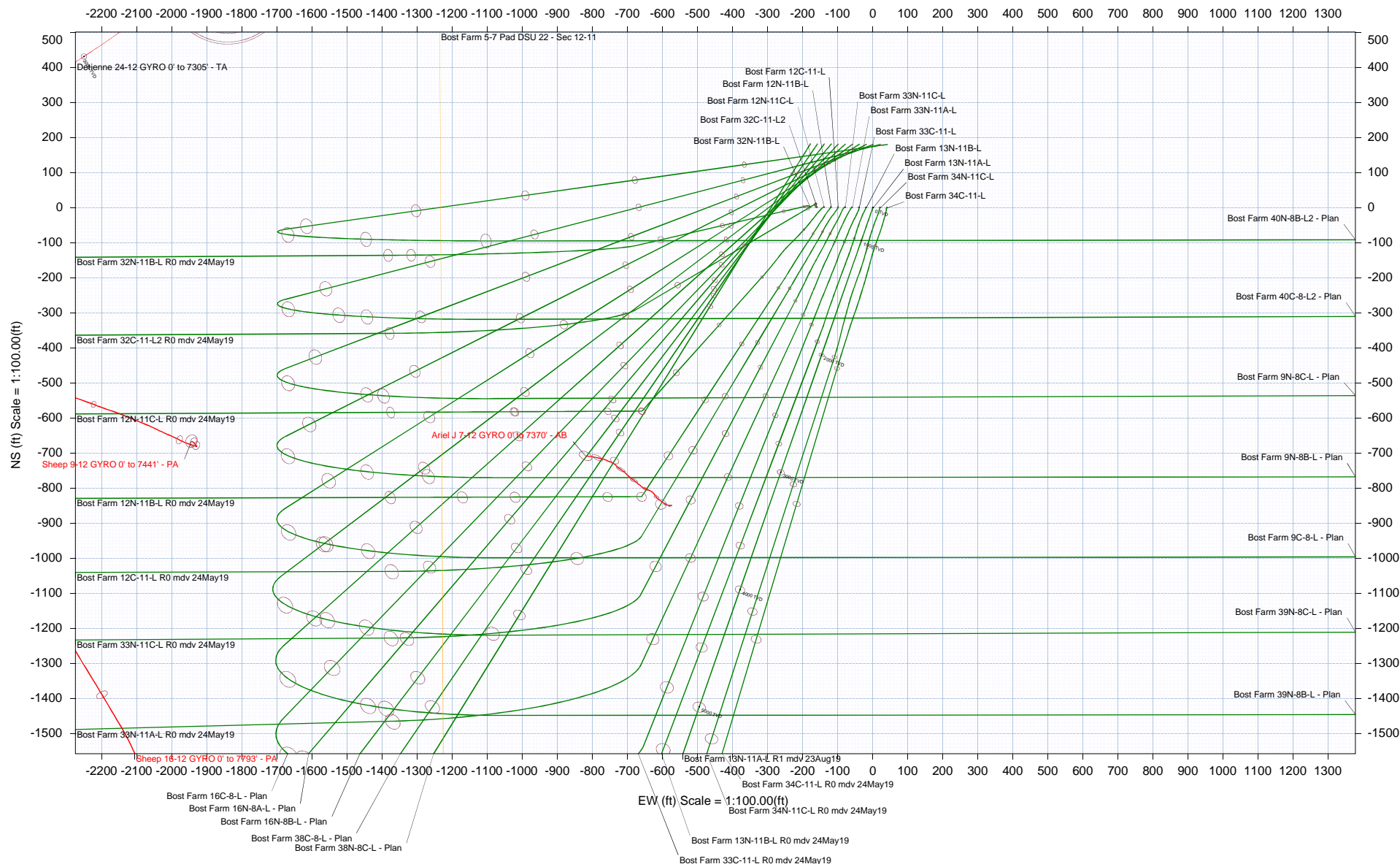
SRC Energy



True North
Tot Corr (M->T 8.235°)
Mag Dec (8.235°)
Grid Conv (0.434°)

Borehole:				Well:		Field:		Structure:	
Original Hole				Bost Farm 13N-11A-L		CO, Weld County (NAD 83 NZ) - SRC		SRC Energy 07-05N-66W (Bost Farm 5-7 Pad DSU 20)	
Gravity & Magnetic Parameters						Surface Location		NAD83 Colorado State Plane, Northern Zone, US Feet	
Model: HDGM 2019		Dip: 66.767°		Date: 23-Jul-2019		Lat: N 40 24 50.93		Northing: 1394423.63ftUS	
MagDec: 8.235°		FS: 52199.824nT		Gravity FS: 999.024mgN (9.80665 Based)		Lon: W 104 49 40.56		Easting: 3187136.49ftUS	
								Grid Conv: 0.4342°	
								Scale Fact: 0.9999609	
								Miscellaneous	
						Slot: Bost Farm 13N-11A-L		TVD Ref: KB 20ft(4893ft above MSL)	
						Plan: Bost Farm 13N-11A-L R1 mdv 23Aug19			

EOU Computation Based On 2-D 95% Confidence 2.44775 sigma





SRC Energy

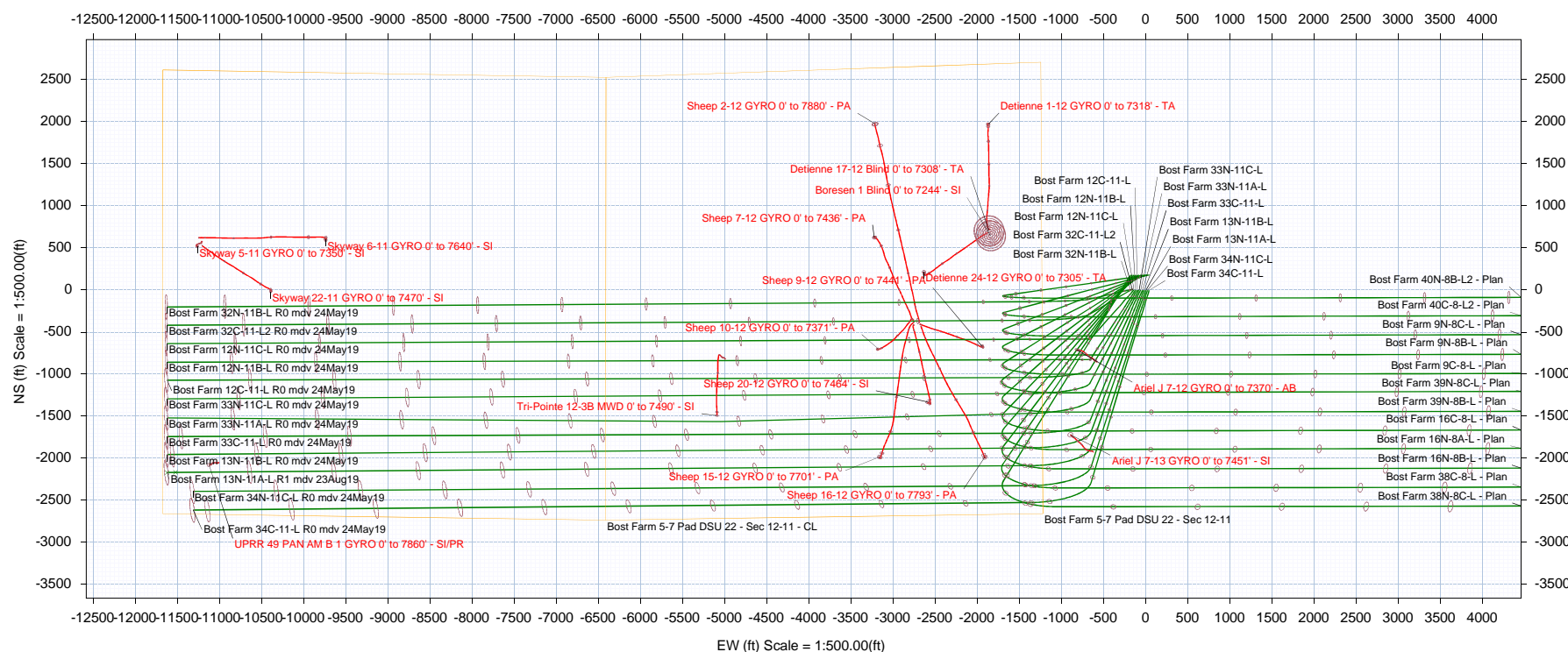
Schlumberger



True North
Tot Corr (M->T 8.235°)
Mag Dec (8.235°)
Grid Conv (0.434°)

Borehole:				Well:				Field:				Structure:																			
Original Hole				Bost Farm 13N-11A-L				CO, Weld County (NAD 83 NZ) - SRC				SRC Energy 07-05N-66W (Bost Farm 5-7 Pad DSU 20)																			
Gravity & Magnetic Parameters								Surface Location								Miscellaneous															
Model:		HDGM 2019		Dip:		66.767°		Date:		23-Jul-2019		Lat:		N 40 24 50.93		Northing:		1394423.63ftUS		Grid Conv:		0.4342°		Slot:		Bost Farm 13N-11A-L		TVD Ref:		KB 20ft(4893ft above MSL)	
MagDec:		8.235°		FS:		52199.824nT		Gravity FS:		999.024mgN (9.80665 Based)		Lon:		W 104 49 40.56		Easting:		3187136.49ftUS		Scale Fact:		0.9999609		Plan:		Bost Farm 13N-11A-L R1 mdv 23Aug19					

EOU Computation Based On 2-D 95% Confidence 2.44775 sigma



Bost Farm 13N-11A-L R1 mdv 23Aug19 Proposal Geodetic Report

(Def Plan)

Report Date: August 23, 2019 - 09:36 AM
Client: SRC Energy
Field: CO, Weld County (NAD 83 NZ) - SRC
Structure / Slot: SRC Energy 07-05N-66W (Bost Farm 5-7 Pad DSU 20) / Bost Farm 13N-11A-L
Well: Bost Farm 13N-11A-L
Borehole: Original Hole
UWI / API#: Unknown / 05-123-50259
Survey Name: Bost Farm 13N-11A-L R1 mdv 23Aug19
Survey Date: May 20, 2019
Tort / AHD / DDI / ERD Ratio: 103.864 ° / 13013.748 ft / 6.544 / 1.872
Coordinate Reference System: NAD83 Colorado State Plane, Northern Zone, US Feet
Location Lat / Long: N 40° 24' 50.93280", W 104° 49' 40.56240"
Location Grid N/E Y/X: N 1394423.627 ftUS, E 3187136.487 ftUS
CRS Grid Convergence Angle: 0.4342 °
Grid Scale Factor: 0.9999609
Version / Patch: 2.10.760.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 259.437 ° (True North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: KB 20ft
TVD Reference Elevation: 4893.000 ft above MSL
Seabed / Ground Elevation: 4873.000 ft above MSL
Magnetic Declination: 8.235 °
Total Gravity Field Strength: 999.0244mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 52199.824 nT
Magnetic Dip Angle: 66.767 °
Declination Date: July 23, 2019
Magnetic Declination Model: HDGM 2019
North Reference: True North
Grid Convergence Used: 0.0000 °
Total Corr Mag North→True North: 8.2349 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	1394423.63	3187136.49	40.414148	-104.827934
	100.00	0.00	199.19	100.00	0.00	0.00	0.00	0.00	1394423.63	3187136.49	40.414148	-104.827934
	200.00	0.00	199.19	200.00	0.00	0.00	0.00	0.00	1394423.63	3187136.49	40.414148	-104.827934
KOP, Build 2 DLS	250.00	0.00	199.19	250.00	0.00	0.00	0.00	0.00	1394423.63	3187136.49	40.414148	-104.827934
	300.00	1.00	199.19	300.00	0.22	-0.41	-0.14	2.00	1394423.21	3187136.35	40.414147	-104.827935
	400.00	3.00	199.19	399.93	1.95	-3.71	-1.29	2.00	1394419.91	3187135.22	40.414138	-104.827939
	500.00	5.00	199.19	499.68	5.41	-10.30	-3.58	2.00	1394413.30	3187132.98	40.414120	-104.827947
	600.00	7.00	199.19	599.13	10.60	-20.17	-7.02	2.00	1394403.41	3187129.62	40.414093	-104.827959
	700.00	9.00	199.19	698.15	17.50	-33.31	-11.59	2.00	1394390.23	3187125.15	40.414057	-104.827976
	800.00	11.00	199.19	796.63	26.12	-49.71	-17.30	2.00	1394373.79	3187119.57	40.414012	-104.827996
	900.00	13.00	199.19	894.44	36.43	-69.35	-24.13	2.00	1394354.10	3187112.88	40.413958	-104.828021
	1000.00	15.00	199.19	991.46	48.44	-92.19	-32.08	2.00	1394331.20	3187105.11	40.413895	-104.828049
	1100.00	17.00	199.19	1087.58	62.11	-118.22	-41.14	2.00	1394305.10	3187096.25	40.413823	-104.828082
	1200.00	19.00	199.19	1182.68	77.45	-147.41	-51.29	2.00	1394275.84	3187086.31	40.413743	-104.828118
Hold	1225.22	19.50	199.19	1206.49	81.57	-155.26	-54.03	2.00	1394267.97	3187083.64	40.413722	-104.828128
	1300.00	19.50	199.19	1276.98	93.96	-178.84	-62.23	0.00	1394244.33	3187075.61	40.413657	-104.828157
	1400.00	19.50	199.19	1371.24	110.53	-210.38	-73.21	0.00	1394212.71	3187064.88	40.413571	-104.828197
	1500.00	19.50	199.19	1465.51	127.10	-241.91	-84.18	0.00	1394181.10	3187054.15	40.413484	-104.828236
	1600.00	19.50	199.19	1559.77	143.66	-273.44	-95.15	0.00	1394149.48	3187043.41	40.413397	-104.828276
	1700.00	19.50	199.19	1654.03	160.23	-304.98	-106.12	0.00	1394117.87	3187032.68	40.413311	-104.828315
	1800.00	19.50	199.19	1748.29	176.80	-336.51	-117.10	0.00	1394086.25	3187021.95	40.413224	-104.828355
	1900.00	19.50	199.19	1842.55	193.37	-368.04	-128.07	0.00	1394054.64	3187011.21	40.413138	-104.828394
	2000.00	19.50	199.19	1936.81	209.93	-399.57	-139.04	0.00	1394023.03	3187000.48	40.413051	-104.828433
	2100.00	19.50	199.19	2031.08	226.50	-431.11	-150.02	0.00	1393991.41	3186989.75	40.412965	-104.828473
	2200.00	19.50	199.19	2125.34	243.07	-462.64	-160.99	0.00	1393959.80	3186979.01	40.412878	-104.828512
	2300.00	19.50	199.19	2219.60	259.64	-494.17	-171.96	0.00	1393928.18	3186968.28	40.412792	-104.828552
	2400.00	19.50	199.19	2313.86	276.20	-525.71	-182.94	0.00	1393896.57	3186957.55	40.412705	-104.828591
	2500.00	19.50	199.19	2408.12	292.77	-557.24	-193.91	0.00	1393864.96	3186946.81	40.412618	-104.828630
	2600.00	19.50	199.19	2502.38	309.34	-588.77	-204.88	0.00	1393833.34	3186936.08	40.412532	-104.828670
	2700.00	19.50	199.19	2596.64	325.90	-620.31	-215.85	0.00	1393801.73	3186925.35	40.412445	-104.828709
	2800.00	19.50	199.19	2690.91	342.47	-651.84	-226.83	0.00	1393770.11	3186914.62	40.412359	-104.828749
	2900.00	19.50	199.19	2785.17	359.04	-683.37	-237.80	0.00	1393738.50	3186903.88	40.412272	-104.828788
	3000.00	19.50	199.19	2879.43	375.61	-714.91	-248.77	0.00	1393706.88	3186893.15	40.412186	-104.828827
	3100.00	19.50	199.19	2973.69	392.17	-746.44	-259.75	0.00	1393675.27	3186882.42	40.412099	-104.828867
	3200.00	19.50	199.19	3067.95	408.74	-777.97	-270.72	0.00	1393643.66	3186871.68	40.412013	-104.828906
	3300.00	19.50	199.19	3162.21	425.31	-809.51	-281.69	0.00	1393612.04	3186860.95	40.411926	-104.828946
	3400.00	19.50	199.19	3256.48	441.88	-841.04	-292.66	0.00	1393580.43	3186850.22	40.411839	-104.828985
	3500.00	19.50	199.19	3350.74	458.44	-872.57	-303.64	0.00	1393548.81	3186839.48	40.411753	-104.829024
	3600.00	19.50	199.19	3445.00	475.01	-904.11	-314.61	0.00	1393517.20	3186828.75	40.411666	-104.829064
	3700.00	19.50	199.19	3539.26	491.58	-935.64	-325.58	0.00	1393485.58	3186818.02	40.411580	-104.829103
	3800.00	19.50	199.19	3633.52	508.14	-967.17	-336.56	0.00	1393453.97	3186807.28	40.411493	-104.829143
	3900.00	19.50	199.19	3727.78	524.71	-998.71	-347.53	0.00	1393422.36	3186796.55	40.411407	-104.829182
	4000.00	19.50	199.19	3822.05	541.28	-1030.24	-358.50	0.00	1393390.74	3186785.82	40.411320	-104.829221
	4100.00	19.50	199.19	3916.31	557.85	-1061.77	-369.47	0.00	1393359.13	3186775.08	40.411234	-104.829261
	4200.00	19.50	199.19	4010.57	574.41	-1093.31	-380.45	0.00	1393327.51	3186764.35	40.411147	-104.829300
	4300.00	19.50	199.19	4104.83	590.98	-1124.84	-391.42	0.00	1393295.90	3186753.62	40.411060	-104.829340
	4400.00	19.50	199.19	4199.09	607.55	-1156.37	-402.39	0.00	1393264.29	3186742.88	40.410974	-104.829379
	4500.00	19.50	199.19	4293.35	624.12	-1187.91	-413.37	0.00	1393232.67	3186732.15	40.410887	-104.829418
	4600.00	19.50	199.19	4387.62	640.68	-1219.44	-424.34	0.00	1393201.06	3186721.42	40.410801	-104.829458
	4700.00	19.50	199.19	4481.88	657.25	-1250.97	-435.31	0.00	1393169.44	3186710.69	40.410714	-104.829497
	4800.00	19.50	199.19	4576.14	673.82	-1282.51	-446.29	0.00	1393137.83	3186699.95	40.410628	-104.829537
	4900.00	19.50	199.19	4670.40	690.38	-1314.04	-457.26	0.00	1393106.21	3186689.22	40.410541	-104.829576
	5000.00	19.50	199.19	4764.66	706.95	-1345.57	-468.23	0.00	1393074.60	3186678.49	40.410455	-104.829615
	5100.00	19.50	199.19	4858.92	723.52	-1377.11	-479.20	0.00	1393042.99	3186667.75	40.410368	-104.829655
	5200.00	19.50	199.19	4953.18	740.09	-1408.64	-490.18	0.00	1393011.37	3186657.02	40.410281	-104.829694
	5300.00	19.50	199.19	5047.45	756.65	-1440.17	-501.15	0.00	1392979.76	3186646.29	40.410195	-104.829734
	5400.00	19.50	199.19	5141.71	773.22	-1471.71	-512.12	0.00	1392948.14	3186635.55	40.410108	-104.829773
	5500.00	19.50	199.19	5235.97	789.79	-1503.24	-523.10	0.00	1392916.53	3186624.82	40.410022	-104.829812
	5600.00	19.50	199.19	5330.23	806.36	-1534.77	-534.07	0.00	1392884.92	3186614.09	40.409935	-104.829852
	5700.00	19.50	199.19	5424.49	822.92	-1566.30	-545.04	0.00	1392853.30	3186603.35	40.409849	-104.829891
	5800.00	19.50	199.19	5518.75	839.49	-1597.84	-556.01	0.00	1392821.69	3186592.62	40.409762	-104.829931
	5900.00	19.50	199.19	5613.02	856.06	-1629.37	-566.99	0.00	1392790.07	3186581.89	40.409676	-104.829970
	6000.00	19.50	199.19	5707.28	872.63	-1660.90	-577.96	0.00	1392758.46	3186571.15	40.409589	-104.830009
	6100.00	19.50	199.19	5801.54	889.19	-1692.44	-588.93	0.00	1392726.84	3186560.42	40.409502	-104.830049
	6200.00	19.50	199.19	5895.80	905.76	-1723.97	-599.91	0.00	1392695.23	3186549.69	40.409416	-104.830088
	6300.00	19.50	199.19	5990.06	922.33	-1755.50	-610.88	0.00	1392663.62	3186538.95	40.409329	-104.830128
	6400.00	19.50	199.19	6084.32	938.89	-1787.04	-621.85	0.00	1392632.00	3186528.22	40.409243	-104.830167
	6500.00	19.50	199.19	6178.59	955.46	-1818.57	-632.82	0.00	1392600.39	3186517.49	40.409156	-104.830206
	6600.00	19.50	199.19	6272.85	972.03	-1850.10	-643.80	0.00	1392568.77	3186506.76	40.409070	-104.830246
KOP, Build/Turn 8 DLS	6682.79	19.50	199.19	6350.88	985.74	-1876.21	-652.88	0.00	1392542.60	3186497.87	40.408988	-104.830286
	6700.00	19.99	203.00	6367.09	988.80	-1881.63	-654.98	8.00	1392537.16	3186495.82	40.408993	-104.830286
	6800.00	24.16	221.32	6459.85	1014.39	-1912.78	-675.20	8.00	1392505.86	3186475.83	40.408988	-104.830359
	6900.00	29.85	233.79	6548.98	1052.98	-1942.90	-708.84	8.00	1392475.49	3186442.42	40.408815	-104.830479
	7000.00	36.35	242.36	6632.75	1103.82	-1971.40	-755.25	8.00	1392446.64	3186396.23	40.40873	

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
Landing Point, Hold to TD	7200.00	50.51	253.34	6777.83	1238.09	-2021.35	-882.52	8.00	1392395.73	3186269.35	40.408600	-104.831103
	7300.00	57.87	257.19	6836.31	1318.90	-2041.84	-960.90	8.00	1392374.65	3186191.13	40.408543	-104.831384
	7400.00	65.34	260.47	6883.84	1406.79	-2058.78	-1047.14	8.00	1392357.06	3186105.02	40.408497	-104.831694
	7500.00	72.87	263.37	6919.49	1500.04	-2071.84	-1139.57	8.00	1392343.30	3186012.70	40.408461	-104.832026
	7600.00	80.43	266.04	6942.57	1596.85	-2080.77	-1236.37	8.00	1392333.63	3185915.97	40.408436	-104.832374
	7700.00	88.02	268.60	6952.63	1695.31	-2085.40	-1335.68	8.00	1392328.25	3185816.71	40.408424	-104.832730
	7737.28	90.85	269.54	6953.00	1732.06	-2086.00	-1372.94	8.00	1392327.37	3185779.45	40.408422	-104.832864
	7800.00	90.85	269.54	6952.07	1793.80	-2086.50	-1435.66	0.00	1392326.39	3185716.74	40.408421	-104.833089
	7900.00	90.85	269.54	6950.60	1892.24	-2087.29	-1535.64	0.00	1392324.84	3185616.77	40.408418	-104.833448
	8000.00	90.85	269.54	6949.12	1990.68	-2088.09	-1635.63	0.00	1392323.29	3185516.80	40.408416	-104.833807
	8100.00	90.85	269.54	6947.64	2089.11	-2088.88	-1735.61	0.00	1392321.74	3185416.83	40.408414	-104.834166
	8200.00	90.85	269.54	6946.16	2187.55	-2089.68	-1835.60	0.00	1392320.18	3185316.85	40.408412	-104.834525
	8300.00	90.85	269.54	6944.68	2285.99	-2090.47	-1935.58	0.00	1392318.63	3185216.88	40.408410	-104.834884
	8400.00	90.85	269.54	6943.21	2384.43	-2091.27	-2035.57	0.00	1392317.08	3185116.91	40.408407	-104.835243
	8500.00	90.85	269.54	6941.73	2482.86	-2092.06	-2135.56	0.00	1392315.53	3185016.93	40.408405	-104.835602
	8600.00	90.85	269.54	6940.25	2581.30	-2092.86	-2235.54	0.00	1392313.97	3184916.96	40.408403	-104.835961
	8700.00	90.85	269.54	6938.77	2679.74	-2093.65	-2335.53	0.00	1392312.42	3184816.99	40.408401	-104.836320
	8800.00	90.85	269.54	6937.30	2778.18	-2094.45	-2435.51	0.00	1392310.87	3184717.02	40.408399	-104.836680
	8900.00	90.85	269.54	6935.82	2876.61	-2095.24	-2535.50	0.00	1392309.32	3184617.04	40.408396	-104.837039
	9000.00	90.85	269.54	6934.34	2975.05	-2096.03	-2635.49	0.00	1392307.77	3184517.07	40.408394	-104.837398
	9100.00	90.85	269.54	6932.86	3073.49	-2096.83	-2735.47	0.00	1392306.21	3184417.10	40.408392	-104.837757
	9200.00	90.85	269.54	6931.39	3171.93	-2097.62	-2835.46	0.00	1392304.66	3184317.12	40.408390	-104.838116
	9300.00	90.85	269.54	6929.91	3270.36	-2098.42	-2935.44	0.00	1392303.11	3184217.15	40.408388	-104.838475
	9400.00	90.85	269.54	6928.43	3368.80	-2099.21	-3035.43	0.00	1392301.56	3184117.18	40.408385	-104.838834
	9500.00	90.85	269.54	6926.95	3467.24	-2100.01	-3135.42	0.00	1392300.00	3184017.20	40.408383	-104.839193
	9600.00	90.85	269.54	6925.47	3565.68	-2100.80	-3235.40	0.00	1392298.45	3183917.23	40.408381	-104.839552
	9700.00	90.85	269.54	6924.00	3664.11	-2101.60	-3335.39	0.00	1392296.90	3183817.26	40.408379	-104.839911
	9800.00	90.85	269.54	6922.52	3762.55	-2102.39	-3435.37	0.00	1392295.35	3183717.29	40.408376	-104.840270
	9900.00	90.85	269.54	6921.04	3860.99	-2103.19	-3535.36	0.00	1392293.79	3183617.31	40.408374	-104.840629
	10000.00	90.85	269.54	6919.56	3959.42	-2103.98	-3635.35	0.00	1392292.24	3183517.34	40.408372	-104.840988
	10100.00	90.85	269.54	6918.09	4057.86	-2104.78	-3735.33	0.00	1392290.69	3183417.37	40.408370	-104.841347
	10200.00	90.85	269.54	6916.61	4156.30	-2105.57	-3835.32	0.00	1392289.14	3183317.39	40.408368	-104.841706
	10300.00	90.85	269.54	6915.13	4254.74	-2106.37	-3935.30	0.00	1392287.58	3183217.42	40.408365	-104.842065
	10400.00	90.85	269.54	6913.65	4353.17	-2107.16	-4035.29	0.00	1392286.03	3183117.45	40.408363	-104.842424
	10500.00	90.85	269.54	6912.17	4451.61	-2107.96	-4135.28	0.00	1392284.48	3183017.48	40.408361	-104.842783
	10600.00	90.85	269.54	6910.70	4550.05	-2108.75	-4235.26	0.00	1392282.93	3182917.51	40.408359	-104.843142
	10700.00	90.85	269.54	6909.22	4648.49	-2109.54	-4335.25	0.00	1392281.37	3182817.53	40.408356	-104.843501
	10800.00	90.85	269.54	6907.74	4746.92	-2110.34	-4435.23	0.00	1392279.82	3182717.56	40.408354	-104.843860
	10900.00	90.85	269.54	6906.26	4845.36	-2111.13	-4535.22	0.00	1392278.27	3182617.58	40.408352	-104.844219
	11000.00	90.85	269.54	6904.79	4943.80	-2111.93	-4635.20	0.00	1392276.72	3182517.61	40.408350	-104.844578
	11100.00	90.85	269.54	6903.31	5042.24	-2112.72	-4735.19	0.00	1392275.16	3182417.64	40.408348	-104.844937
	11200.00	90.85	269.54	6901.83	5140.67	-2113.52	-4835.18	0.00	1392273.61	3182317.66	40.408345	-104.845296
	11300.00	90.85	269.54	6900.35	5239.11	-2114.31	-4935.16	0.00	1392272.06	3182217.69	40.408343	-104.845655
	11400.00	90.85	269.54	6898.88	5337.55	-2115.11	-5035.15	0.00	1392270.51	3182117.72	40.408341	-104.846014
	11500.00	90.85	269.54	6897.40	5435.99	-2115.90	-5135.13	0.00	1392268.96	3182017.75	40.408339	-104.846373
	11600.00	90.85	269.54	6895.92	5534.42	-2116.70	-5235.12	0.00	1392267.40	3181917.77	40.408336	-104.846732
	11700.00	90.85	269.54	6894.44	5632.86	-2117.49	-5335.11	0.00	1392265.85	3181817.80	40.408334	-104.847091
	11800.00	90.85	269.54	6892.96	5731.30	-2118.29	-5435.09	0.00	1392264.30	3181717.83	40.408332	-104.847450
	11900.00	90.85	269.54	6891.49	5829.73	-2119.08	-5535.08	0.00	1392262.75	3181617.85	40.408330	-104.847809
	12000.00	90.85	269.54	6890.01	5928.17	-2119.88	-5635.06	0.00	1392261.19	3181517.88	40.408327	-104.848168
12100.00	90.85	269.54	6888.53	6026.61	-2120.67	-5735.05	0.00	1392259.64	3181417.91	40.408325	-104.848528	
12200.00	90.85	269.54	6887.05	6125.05	-2121.47	-5835.04	0.00	1392258.09	3181317.94	40.408323	-104.848887	
12300.00	90.85	269.54	6885.58	6223.48	-2122.26	-5935.02	0.00	1392256.54	3181217.96	40.408321	-104.849246	
12400.00	90.85	269.54	6884.10	6321.92	-2123.05	-6035.01	0.00	1392254.98	3181117.99	40.408318	-104.849605	
12500.00	90.85	269.54	6882.62	6420.36	-2123.85	-6134.99	0.00	1392253.43	3181018.02	40.408316	-104.849964	
12600.00	90.85	269.54	6881.14	6518.80	-2124.64	-6234.98	0.00	1392251.88	3180918.04	40.408314	-104.850323	
12700.00	90.85	269.54	6879.67	6617.23	-2125.44	-6334.97	0.00	1392250.33	3180818.07	40.408312	-104.850682	
12800.00	90.85	269.54	6878.19	6715.67	-2126.23	-6434.95	0.00	1392248.77	3180718.10	40.408309	-104.851041	
12900.00	90.85	269.54	6876.71	6814.11	-2127.03	-6534.94	0.00	1392247.22	3180618.13	40.408307	-104.851400	
13000.00	90.85	269.54	6875.23	6912.55	-2127.82	-6634.92	0.00	1392245.67	3180518.15	40.408305	-104.851759	
13100.00	90.85	269.54	6873.75	7010.98	-2128.62	-6734.91	0.00	1392244.12	3180418.18	40.408303	-104.852118	
13200.00	90.85	269.54	6872.28	7109.42	-2129.41	-6834.90	0.00	1392242.56	3180318.21	40.408300	-104.852477	
13300.00	90.85	269.54	6870.80	7207.86	-2130.21	-6934.88	0.00	1392241.01	3180218.23	40.408298	-104.852836	
13400.00	90.85	269.54	6869.32	7306.30	-2131.00	-7034.87	0.00	1392239.46	3180118.26	40.408296	-104.853195	
13500.00	90.85	269.54	6867.84	7404.73	-2131.80	-7134.85	0.00	1392237.91	3180018.29	40.408294	-104.853554	
13600.00	90.85	269.										

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
Bost Farm 13N-11A-L BHL	17900.00	90.85	269.54	6802.82	11735.98	-2166.76	-11534.23	0.00	1392169.60	3175619.48	40.408193	-104.869351
	17989.60	90.85	269.54	6801.50	11824.17	-2167.48	-11623.82	0.00	1392168.21	3175529.91	40.408191	-104.869673

Survey Type: Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	20.000	1/100.000	13.500	9.625		NAL_MWD_IFR1-Depth Only	Original Hole / Bost Farm 13N-11A-L R1 mdv 23Aug19
	1	20.000	1800.000	1/100.000	13.500	9.625		NAL_MWD_IFR1	Original Hole / Bost Farm 13N-11A-L R1 mdv 23Aug19
	1	1800.000	17989.596	1/100.000	8.500	5.500		NAL_MWD_IFR1+MS	Original Hole / Bost Farm 13N-11A-L R1 mdv 23Aug19

Bost Farm 13N-11A-L R1 mdv 23Aug19 Anti-Collision Summary Report

Analysis Date-24hr Time: August 23, 2019 - 09:37
Client: SRC Energy
Field: CO, Weld County (NAD 83 NZ) - SRC

Analysis Method: 3D Least Distance
Reference Trajectory: Bost Farm 13N-11A-L R1 mdv 23Aug19 (Def Plan)
Depth Interval: Every 10.00 Measured Depth (ft)

Structure: SRC Energy 07-05N-66W (Bost Farm 5-7 Pad DSU 20)
Slot: Bost Farm 13N-11A-L
Well: Bost Farm 13N-11A-L
Borehole: Original Hole
Scan MD Range: 0.00ft - 17989.60ft

Rule Set: D&M AntiCollision Standard S002 v5.1/5.2
Min Pts: All local minima indicated.
Version / Patch: 2.10.760.0
Database \ Project: us1164app01\drilling-CO, Weld County 2.10

Trajectory Error Model: ISCWSA0 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:
 Selection filters:
 Not performed!
 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

Bost Farm 13N-11B-L R0 mdv 24May19 (Def Plan)

Fail Major

20.05	16.23	19.07	3.82	N/A	MAS = 4.95 (m)	0.00	0.00	CtCt<=15m<15.00				Enter Alert	
20.05	16.23	19.06	3.82	28721.14	MAS = 4.95 (m)	20.00	20.00					WRP	
19.88	16.23	18.39	3.65	37.25	MAS = 4.95 (m)	160.00	160.00					MinPts	
19.99	16.23	18.25	3.76	25.13	MAS = 4.95 (m)	220.00	220.00					MINPT-O-EOU	
20.16	16.23	18.29	3.92	21.71	MAS = 4.95 (m)	250.00	250.00					MinPt-O-SF	
20.91	16.23	14.15	4.66	3.45	MAS = 4.95 (m)	1070.00	1058.85					MinPts	
21.22	16.23	13.77	4.99	3.13	MAS = 4.95 (m)	1140.00	1125.75					MINPT-O-EOU	
25.36	16.23	15.40	9.13	2.72	MAS = 4.95 (m)	1390.00	1361.82					MINPT-O-EOU	
26.36	16.23	15.63	10.13	2.60	MAS = 4.95 (m)	1490.00	1456.08					MinPt-O-SF	
30.41	18.23	17.93	12.18	2.56	OSF1.50	1750.00	1701.16					MinPt-O-ADP	
31.09	18.70	18.29	12.39	2.55	OSF1.50	1800.00	1748.29					MinPt-O-SF	
78.37	24.20	61.90	54.16	5.00	OSF1.50	3110.00	2983.12	OSF>5.00				Exit Alert	
220.54	66.45	175.92	154.10	5.03	OSF1.50	6682.79	6350.88					MinPt-O-SF	
262.39	79.63	208.98	182.76	4.99	OSF1.50	7750.00	6952.81	OSF<5.00				Enter Alert	
260.56	260.85	86.33	-0.29	1.50	OSF1.50	13450.00	6868.58		OSF<1.50			Enter Minor	
259.41	388.82	-0.13	-129.41	1.00	OSF1.50	17160.00	6813.76			OSF<1.00		Enter Major	
259.16	417.35	-19.40	-158.19	0.93	OSF1.50	17980.00	6801.64					MinPt-CtCt	
259.19	417.46	-19.45	-158.26	0.93	OSF1.50	17989.60	6801.50					MinPts	

Bost Farm 16N-8B-L - Plan (Def Plan)

Fail Major

228.50	32.81	227.51	195.69	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
228.10	32.81	227.08	195.29	5705.87	MAS = 10.00 (m)	10.00	10.00					MinPts	
228.07	32.81	227.08	195.26	51107.54	MAS = 10.00 (m)	20.00	20.00					WRP	
228.07	32.81	225.91	195.26	193.23	MAS = 10.00 (m)	250.00	250.00					MinPts	
228.08	32.81	225.88	195.27	188.05	MAS = 10.00 (m)	260.00	260.00					MINPT-O-EOU	
228.25	32.81	226.02	195.44	183.60	MAS = 10.00 (m)	300.00	300.00					MinPt-O-SF	
230.08	32.81	228.29	197.27	282.58	MAS = 10.00 (m)	440.00	439.86					MinPt-O-SF	
341.37	32.81	324.60	308.56	21.56	MAS = 10.00 (m)	1900.00	1842.55					MinPt-O-SF	
969.98	69.28	923.47	900.70	21.28	OSF1.50	6530.00	6206.86					MinPt-O-SF	
250.56	33.54	227.87	217.02	11.50	OSF1.50	7430.00	6895.82					MinPt-O-SF	
113.23	37.34	87.98	75.90	4.64	OSF1.50	7710.00	6952.91	OSF<5.00				Enter Alert	
53.81	58.07	14.68	-4.26	1.39	OSF1.50	7820.00	6951.78		OSF<1.50			Enter Minor	
43.57	66.10	-0.92	-22.53	0.98	OSF1.50	7840.00	6951.48			OSF<1.00		Enter Major	
30.09	83.78	-26.15	-53.69	0.53	OSF1.50	7890.00	6950.74					MinPts	
43.45	65.04	-0.23	-21.59	0.99	OSF1.50	7930.00	6950.15				OSF>1.00	Exit Major	
55.15	58.30	15.96	-3.14	1.42	OSF1.50	7950.00	6949.86					Exit Minor	
167.48	53.02	131.80	114.46	4.80	OSF1.50	8100.00	6947.64	OSF>5.00				Exit Alert	
9924.01	74.43	9874.06	9849.58	202.66	OSF1.50	17989.60	6801.50					TD	

UPRR 49 PAN AM B 1 GYRO 0' to 7860' - SI/PR (Def Survey)

Fail Major

11192.74	32.81	11190.76	11159.93	65246.62	MAS = 10.00 (m)	0.00	0.00					MinPts	
11192.85	32.81	11190.83	11160.04	55190.65	MAS = 10.00 (m)	20.00	20.00					WRP	
11193.08	32.81	11190.79	11160.27	23542.00	MAS = 10.00 (m)	110.00	110.00					MinPts	
11193.22	32.81	11190.71	11160.41	15917.24	MAS = 10.00 (m)	180.00	180.00					MINPT-O-EOU	
11193.85	32.81	11191.02	11161.04	11059.45	MAS = 10.00 (m)	300.00	300.00					MinPt-O-SF	
10286.75	61.10	10245.19	10225.64	263.13	OSF1.50	7120.00	6723.92					MinPt-O-SF	
349.25	114.63	269.23	234.63	4.89	OSF1.50	17140.00	6814.05	OSF<5.00				Enter Alert	
172.49	176.19	51.93	-3.70	1.47	OSF1.50	17330.00	6811.25		OSF<1.50			Enter Minor	
132.21	214.27	-13.24	-82.06	0.90	OSF1.50	17380.00	6810.51			OSF<1.00		Enter Major	
89.36	284.97	-101.15	-195.61	0.46	OSF1.50	17470.00	6809.18					MinPts	
89.05	284.22	-100.96	-195.16	0.45	OSF1.50	17480.00	6809.03					MinPts	
128.18	192.11	-0.43	-63.93	1.00	OSF1.50	17570.00	6807.70				OSF>1.00	Exit Major	
151.20	163.24	41.85	-12.03	1.39	OSF1.50	17600.00	6807.26					Exit Minor	
295.90	91.99	234.04	203.91	4.88	OSF1.50	17760.00	6804.89	OSF>5.00				Exit Alert	
519.43	68.75	473.06	450.68	11.57	OSF1.50	17989.60	6801.50					TD	

Bost Farm 34N-11C-L R0 mdv 24May19 (Def Plan)

Fail Minor

20.05	16.23	19.07	3.82	N/A	MAS = 4.95 (m)	0.00	0.00	CtCt<=15m<15.00				Enter Alert	
20.05	16.23	19.07	3.82	N/A	MAS = 4.95 (m)	10.00	10.00					MinPts	
20.05	16.23	19.06	3.82	24869.71	MAS = 4.95 (m)	20.00	20.00					WRP	
20.39	16.23	18.53	4.15	22.31	MAS = 4.95 (m)	300.00	300.00					MinPts	
20.25	16.23	18.51	4.01	25.79	MAS = 4.95 (m)	390.00	389.94					MinPts	
19.47	16.23	16.07	3.23	7.68	MAS = 4.95 (m)	680.00	678.39					MinPts	
19.56	16.23	15.94	3.33	7.04	MAS = 4.95 (m)	710.00	708.03					MINPT-O-EOU	
25.41	16.23	19.99	9.18	5.59	MAS = 4.95 (m)	940.00	933.35					MinPt-O-SF	
24.57	16.23	13.69	8.39	2.36	MAS = 4.95 (m)	1480.00	1446.65					MinPts	
24.75	16.44	13.46	8.31	2.31	OSF1.50	1520.00	1484.36					MINPT-O-EOU	
24.99	16.74	13.50	8.25	2.29	OSF1.50	1540.00	1503.21					MinPt-O-ADP	
28.11	19.07	15.07	9.04	2.25	OSF1.50	1690.00	1644.60					MinPt-O-SF	
37.15	21.76	22.32	15.40	2.61	OSF1.50	2110.00	2040.50					MinPt-O-SF	
126.98	68.39	81.06	58.59	2.80	OSF1.50	6682.79	6350.88					MinPt-O-SF	
226.12	68.88	179.87	157.24	4.97	OSF1.50	7180.00	6764.92	OSF>5.00				Exit Alert	
333.39	100.90	265.80	232.49	4.99	OSF1.50	10230.00	6916.16	OSF<5.00				Enter Alert	

...Bost Farm 13N-11A-L\Original Hole\Bost Farm 13N-11A-L R1 mdv 23Aug19

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		
	307.45	307.60	102.06	-0.15	1.50	OSF1.50	16220.00	6827.65		OSF<1.50		Enter Minor	
	301.36	359.69	61.18	-58.39	1.26	OSF1.50	17680.00	6806.07				MinPt-CtCt	
	302.05	361.88	60.47	-59.82	1.22	OSF1.50	17700.00	6805.78				MinPts	
	337.21	343.34	107.99	-6.13	1.47	OSF1.50	17830.00	6803.86		OSF>1.50		Exit Minor	
	433.04	287.60	240.98	145.44	2.26	OSF1.50	17989.60	6801.50				TD	

Bost Farm 38C-8-L - Plan (Def Plan)													Fail Minor
241.01	32.81	240.02	208.20	N/A		MAS = 10.00 (m)	0.00	0.00				Surface	
240.63	32.81	239.61	207.83	6351.50		MAS = 10.00 (m)	10.00	10.00				MinPts	
240.60	32.81	239.61	207.79	53928.46		MAS = 10.00 (m)	20.00	20.00				WRP	
240.60	32.81	238.44	207.79	203.89		MAS = 10.00 (m)	250.00	250.00				MinPts	
240.61	32.81	238.42	207.80	198.43		MAS = 10.00 (m)	260.00	260.00				MINPT-O-EOU	
240.76	32.81	238.54	207.95	194.03		MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
335.18	32.81	318.40	302.37	21.16		MAS = 10.00 (m)	1900.00	1842.55				MinPt-O-SF	
925.36	74.31	875.49	851.05	18.91		OSF1.50	6900.00	6548.98				MinPts	
565.63	32.81	545.92	532.82	30.15		MAS = 10.00 (m)	7430.00	6895.82				MinPt-O-SF	
230.05	71.78	181.87	158.27	4.85		OSF1.50	7840.00	6951.48	OSF<5.00			Enter Alert	
87.44	87.58	28.72	-0.15	1.50		OSF1.50	8040.00	6948.53		OSF<1.50		Enter Minor	
84.68	88.20	25.55	-3.52	1.44		OSF1.50	8060.00	6948.23				MinPts	
86.35	87.36	27.78	-1.01	1.48		OSF1.50	8080.00	6947.94		OSF>1.50		Exit Minor	
247.98	75.69	197.19	172.29	4.96		OSF1.50	8300.00	6944.68	OSF>5.00			Exit Alert	
9912.21	79.58	9858.83	9832.63	189.17		OSF1.50	17989.60	6801.50				TD	

Bost Farm 34C-11-L R0 mdv 24May19 (Def Plan)													Warning Alert
40.10	32.27	39.12	7.83	N/A		MAS = 9.84 (m)	0.00	0.00	CtCt<=15m<15.00			Enter Alert	
40.10	32.27	39.11	7.83	18439.69		MAS = 9.84 (m)	20.00	20.00				WRP	
38.47	32.27	36.36	6.20	33.16		MAS = 9.84 (m)	270.00	270.00				MinPts	
38.63	32.27	36.45	6.36	31.43		MAS = 9.84 (m)	300.00	300.00				MinPt-O-SF	
40.89	32.27	37.55	8.62	17.21		MAS = 9.84 (m)	590.00	589.20				MINPT-O-EOU	
41.97	32.27	35.35	9.70	7.32		MAS = 9.84 (m)	990.00	981.80				MinPts	
42.43	32.27	34.87	10.16	6.30		MAS = 9.84 (m)	1090.00	1078.02				MINPT-O-EOU	
49.23	32.27	37.10	16.96	4.33		MAS = 9.84 (m)	1480.00	1446.65				MINPT-O-EOU	
50.16	32.27	36.89	17.89	4.00		MAS = 9.84 (m)	1590.00	1550.34				MINPT-O-EOU	
54.02	32.27	38.91	21.75	3.75		MAS = 9.84 (m)	1900.00	1842.55				MinPt-O-SF	
75.00	32.27	59.18	42.72	4.99		MAS = 9.84 (m)	2570.00	2474.10	OSF>5.00			Exit Alert	
251.82	69.90	204.89	181.92	5.46		OSF1.50	6682.79	6350.88				MinPt-O-SF	
563.17	169.95	449.54	393.21	4.99		OSF1.50	12150.00	6887.79	OSF<5.00			Enter Alert	
551.80	366.29	307.28	185.51	2.26		OSF1.50	17680.00	6806.07				MinPt-CtCt	
552.21	367.87	306.64	184.34	2.25		OSF1.50	17700.00	6805.78				MINPT-O-EOU	
552.69	368.49	306.70	184.20	2.25		OSF1.50	17710.00	6805.63				MinPt-O-ADP	
553.35	368.99	307.03	184.36	2.25		OSF1.50	17720.00	6805.48				MinPt-O-SF	
633.40	345.82	402.53	287.58	2.75		OSF1.50	17989.60	6801.50				TD	

Bost Farm 33C-11-L R0 mdv 24May19 (Def Plan)													Warning Alert
40.10	32.27	39.12	7.83	N/A		MAS = 9.84 (m)	0.00	0.00	CtCt<=15m<15.00			Enter Alert	
40.10	32.27	39.11	7.83	19765.51		MAS = 9.84 (m)	20.00	20.00				WRP	
39.34	32.27	37.43	7.06	41.73		MAS = 9.84 (m)	220.00	220.00				MinPts	
39.41	32.27	37.34	7.13	35.39		MAS = 9.84 (m)	250.00	250.00				MINPT-O-EOU	
39.79	32.27	37.61	7.52	32.27		MAS = 9.84 (m)	300.00	300.00				MinPt-O-SF	
47.05	32.27	37.97	14.78	5.69		MAS = 9.84 (m)	1260.00	1239.28				MinPts	
47.26	32.27	37.75	14.99	5.45		MAS = 9.84 (m)	1300.00	1276.98				MINPT-O-EOU	
49.05	32.27	38.82	16.78	5.20		MAS = 9.84 (m)	1410.00	1380.67	CtCt<=15m<15.00			Exit Alert	
49.50	32.27	39.17	17.22	5.20		MAS = 9.84 (m)	1430.00	1399.52				MinPt-O-SF	
406.24	65.28	362.39	340.96	9.45		OSF1.50	6700.00	6367.09				MinPt-O-SF	
509.77	153.90	406.84	355.87	4.99		OSF1.50	10310.00	6914.98	OSF<5.00			Enter Alert	
542.11	413.57	266.07	128.54	1.97		OSF1.50	17989.60	6801.50				MinPts	

Bost Farm 33N-11A-L R0 mdv 24May19 (Def Plan)													Warning Alert
59.87	32.81	58.89	27.06	N/A		MAS = 10.00 (m)	0.00	0.00				Surface	
59.87	32.81	58.89	27.06	N/A		MAS = 10.00 (m)	10.00	10.00				MinPts	
59.87	32.81	58.89	27.06	43500.46		MAS = 10.00 (m)	20.00	20.00				WRP	
59.99	32.81	58.78	27.18	267.30		MAS = 10.00 (m)	90.00	90.00				MINPT-O-EOU	
60.20	32.81	58.76	27.39	127.90		MAS = 10.00 (m)	140.00	140.00				MINPT-O-EOU	
73.91	32.81	67.42	41.10	13.25		MAS = 10.00 (m)	1140.00	1125.75				MinPts	
74.13	32.81	67.11	41.32	12.12		MAS = 10.00 (m)	1190.00	1173.22				MINPT-O-EOU	
93.88	32.81	82.52	61.07	8.95		MAS = 10.00 (m)	1670.00	1625.75				MinPt-O-SF	
536.65	61.87	495.07	474.78	13.20		OSF1.50	6530.00	6206.86				MinPt-O-SF	
559.51	168.62	446.77	390.89	5.00		OSF1.50	11070.00	6903.75	OSF<5.00			Enter Alert	
553.07	181.79	431.54	371.27	4.58		OSF1.50	11460.00	6897.99				MinPt-CtCt	
649.73	420.40	369.13	229.33	2.32		OSF1.50	17989.60	6801.50				MinPts	

Bost Farm 33N-11C-L R0 mdv 24May19 (Def Plan)													Warning Alert
79.92	32.81	78.94	47.11	N/A		MAS = 10.00 (m)	0.00	0.00				Surface	
79.92	32.81	78.94	47.11	N/A		MAS = 10.00 (m)	10.00	10.00				MinPts	
79.92	32.81	78.94	47.11	49569.82		MAS = 10.00 (m)	20.00	20.00				WRP	
80.03	32.81	78.85	47.22	417.46		MAS = 10.00 (m)	80.00	80.00				MINPT-O-EOU	
80.14	32.81	78.86	47.33	264.21		MAS = 10.00 (m)	110.00	110.00				MINPT-O-EOU	
82.95	32.81	80.72	50.14	65.73		MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
85.64	32.81	81.70	52.83	28.59		MAS = 10.00 (m)	710.00	708.03				MINPT-O-EOU	
102.08	32.81	92.90	69.27	12.34		MAS = 10.00 (m)	1310.00	1286.41				MinPt-O-SF	
768.86	61.61	727.46	707.26	19.00		OSF1.50	6650.00	6319.98				MinPt-O-SF	
883.38	265.94	705.76	617.44	5.00		OSF1.50	13680.00	6865.18	OSF<5.00			Enter Alert	
899.39	422.62	617.32	476.77	3.20		OSF1.50	17980.00	6801.64				MINPT-O-EOU	
899.45	422.70	617.32	476.75	3.20		OSF1.50	17989.60	6801.50				MinPts	

Bost Farm 12C-11-L R0 mdv 24May19 (Def Plan)													Warning Alert
99.97	32.81	98.99	67.16	N/A		MAS = 10.00 (m)	0.00	0.00				Surface	
99.97	32.81	98.98	67.16	32442.67		MAS = 10.00 (m)	20.00	20.00				WRP	
98.95	32.81	97.20	66.14	127.22		MAS = 10.00 (m)	220.00	220.00				MinPts	
99.00	32.81	97.18	66.19	114.62		MAS = 10.00 (m)	240.00	240.00				MINPT-O-EOU	
99.44	32.81	97.55	66.63	108.15		MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
162.86	32.81	151.90	130.05	16.23		MAS = 10.00 (m)	1700.00	1654.03				MinPt-O-SF	
967.77	60.73	926.96	907.04	24.27		OSF1.50	6700.00	6367.09				MinPt-O-SF	
1132.78	340.84	905.22	791.93	5.00		OSF1.50	15740.00	6834.74	OSF<5.00			Enter Alert	
1146.76	422.06	865.05	724.70	4.08		OSF1.50	17989.60	6801.50				MinPts	

Sheep 16-12 GYRO 0' to 7793' - PA (Def Survey)													Warning Alert
2695.83	32.81	2694.02	2663.02	N/A		MAS = 10.00 (m)	0.00	0.00				MinPts	
2695.85	32.81	2694.01	2663.04	85034.68		MAS = 10.00 (m)	20.00	20.00				MINPT-O-EOU	
2699.48	32.81	2696.45	2666.67	2227.54		MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	

...Bost Farm 13N-11A-L\Original Hole\Bost Farm 13N-11A-L R1 mdv 23Aug19

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		
Sheep 15-12 GYRO 0' to 7701' - PA (Def Survey)	228.79	71.68	180.09	157.11	4.92	OSF1.50	8070.00	6948.08	OSF<5.00			Enter Alert	
	99.09	71.45	50.92	27.64	2.09	OSF1.50	8280.00	6944.98				MinPts	
	99.96	72.59	51.04	27.38	2.08	OSF1.50	8290.00	6944.83				MinPts	
	253.79	78.47	200.95	175.33	4.92	OSF1.50	8510.00	6941.58	OSF<5.00			Exit Alert	
	9712.88	76.96	9661.04	9635.92	193.32	OSF1.50	17989.60	6801.50				TD	
Warning Alert													
Bost Farm 12N-11B-L R0 mdv 24May19 (Def Plan)	2778.59	32.81	2776.78	2745.78	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	2778.59	32.81	2776.76	2745.78	192148.19	MAS = 10.00 (m)	10.00	10.00				MinPts	
	2778.59	32.81	2776.74	2745.78	79119.45	MAS = 10.00 (m)	20.00	20.00				WRP	
	2778.54	32.81	2775.75	2745.73	2855.81	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	2774.10	32.81	2771.04	2741.29	2223.16	MAS = 10.00 (m)	510.00	509.64				MinPt-O-SF	
	2564.24	55.62	2526.63	2508.63	71.19	OSF1.50	5130.00	4887.20				MinPt-CtCt	
	2563.64	57.85	2524.53	2505.78	68.34	OSF1.50	5300.00	5047.45				MinPt-CtCt	
	2563.83	58.36	2524.38	2505.46	67.72	OSF1.50	5350.00	5094.58				MINPT-O-EOU	
	2563.99	58.57	2524.41	2505.42	67.48	OSF1.50	5370.00	5113.43				MinPt-O-ADP	
	276.64	87.30	217.26	189.34	4.89	OSF1.50	9270.00	6930.35	OSF<5.00			Enter Alert	
	113.21	91.23	51.86	21.98	1.87	OSF1.50	9510.00	6926.80				MinPts	
	112.52	90.06	51.95	22.47	1.88	OSF1.50	9520.00	6926.66				MinPt-CtCt	
	235.78	72.51	186.91	163.27	4.95	OSF1.50	9730.00	6923.55	OSF<5.00			Exit Alert	
	8466.64	77.61	8414.36	8389.03	167.06	OSF1.50	17989.60	6801.50				TD	
Warning Alert													
Ariel J 7-13 GYRO 0' to 7451' - SI (Def Survey)	120.02	32.81	119.04	87.21	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	120.02	32.81	119.04	87.21	80119.62	MAS = 10.00 (m)	20.00	20.00				WRP	
	119.67	32.81	118.15	86.86	219.85	MAS = 10.00 (m)	160.00	160.00				MinPts	
	119.74	32.81	118.07	86.93	173.32	MAS = 10.00 (m)	190.00	190.00				MINPT-O-EOU	
	121.36	32.81	119.32	88.55	114.41	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	189.87	32.81	178.15	157.06	17.60	MAS = 10.00 (m)	1770.00	1720.01				MinPt-O-SF	
	193.34	32.81	181.42	160.53	17.60	MAS = 10.00 (m)	1800.00	1748.29				MinPt-O-SF	
	789.79	49.82	756.25	739.97	24.23	OSF1.50	5720.00	5443.35				MinPt-O-SF	
	1318.29	396.23	1053.80	922.05	5.00	OSF1.50	17330.00	6811.25	OSF<5.00			Enter Alert	
	1322.44	420.41	1041.84	902.04	4.73	OSF1.50	17989.60	6801.50				MinPts	
Warning Alert													
Bost Farm 16N-8A-L - Plan (Def Plan)	2020.24	32.81	2018.43	1987.44	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	2019.78	32.81	2017.88	1986.97	24265.38	MAS = 10.00 (m)	20.00	20.00				MinPt-O-SF	
	2019.44	32.81	2017.54	1986.63	22650.95	MAS = 10.00 (m)	60.00	60.00				MinPts	
	2019.45	32.81	2017.53	1986.64	17669.44	MAS = 10.00 (m)	70.00	70.00				MINPT-O-EOU	
	2021.32	32.81	2018.56	1988.51	2132.78	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	181.84	55.77	144.08	126.07	5.00	OSF1.50	6490.00	6169.16	OSF<5.00			Enter Alert	
	181.47	56.24	143.44	125.23	4.94	OSF1.50	6520.00	6197.44				MinPt-CtCt	
	181.51	56.43	143.36	125.09	4.92	OSF1.50	6530.00	6206.86				MINPT-O-EOU	
	181.63	56.61	143.36	125.03	4.91	OSF1.50	6540.00	6216.29				MinPt-O-ADP	
	182.92	57.25	144.21	125.66	4.89	OSF1.50	6580.00	6254.00				MinPt-O-SF	
	191.18	58.48	151.66	132.70	5.00	OSF1.50	6680.00	6348.26	OSF<5.00			Exit Alert	
	10760.23	88.79	10700.50	10671.43	185.09	OSF1.50	17989.60	6801.50				TD	
Warning Alert													
Bost Farm 12N-11C-L R0 mdv 24May19 (Def Plan)	216.91	32.81	215.93	184.11	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	216.50	32.81	215.47	183.69	5138.96	MAS = 10.00 (m)	10.00	10.00				MinPts	
	216.46	32.81	215.47	183.65	48495.75	MAS = 10.00 (m)	20.00	20.00				WRP	
	216.46	32.81	214.30	183.65	183.35	MAS = 10.00 (m)	250.00	250.00				MinPts	
	216.47	32.81	214.28	183.66	178.44	MAS = 10.00 (m)	260.00	260.00				MINPT-O-EOU	
	216.66	32.81	214.44	183.86	173.89	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	350.46	32.81	333.74	317.65	22.21	MAS = 10.00 (m)	1900.00	1842.55				MinPt-O-SF	
	1000.66	65.59	956.60	935.07	23.21	OSF1.50	6300.00	5990.06				MinPt-O-SF	
	235.08	71.77	186.91	163.31	4.96	OSF1.50	7220.00	6790.35	OSF<5.00			Enter Alert	
	187.23	79.98	133.57	107.25	3.54	OSF1.50	7470.00	6910.09				MinPt-O-SF	
	187.01	79.88	133.42	107.13	3.54	OSF1.50	7480.00	6913.35				MinPt-O-ADP	
	186.89	79.75	133.39	107.14	3.54	OSF1.50	7490.00	6916.49				MINPT-O-EOU	
	186.86	79.58	133.48	107.28	3.55	OSF1.50	7500.00	6919.49				MinPt-CtCt	
	219.01	66.68	174.23	152.33	4.98	OSF1.50	7770.00	6952.52	OSF<5.00			Exit Alert	
	9938.37	70.76	9890.87	9867.61	213.63	OSF1.50	17989.60	6801.50				TD	
Warning Alert													
Bost Farm 32C-11-L2 R0 mdv 24May19 (Def Plan)	160.12	32.81	159.14	127.31	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	160.12	32.81	159.14	127.31	N/A	MAS = 10.00 (m)	10.00	10.00				MinPts	
	160.12	32.81	159.13	127.31	44507.60	MAS = 10.00 (m)	20.00	20.00				WRP	
	160.16	32.81	159.11	127.35	2426.30	MAS = 10.00 (m)	40.00	40.00				MINPT-O-EOU	
	163.50	32.81	161.48	130.70	156.25	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	163.40	32.81	161.58	130.59	193.49	MAS = 10.00 (m)	480.00	479.75				MinPt-O-SF	
	160.48	32.81	157.97	127.68	104.00	MAS = 10.00 (m)	730.00	727.76				MinPts	
	160.65	32.81	157.84	127.84	87.40	MAS = 10.00 (m)	780.00	776.98				MINPT-O-EOU	
	227.21	32.81	220.50	194.40	39.54	MAS = 10.00 (m)	1370.00	1342.97				MinPt-O-SF	
	1008.74	32.81	991.36	975.93	61.48	MAS = 10.00 (m)	3850.00	3680.65				MinPt-O-SF	
	1782.15	420.69	1501.37	1361.47	6.37	OSF1.50	17980.00	6801.64				MINPT-O-EOU	
	1782.23	420.79	1501.38	1361.44	6.36	OSF1.50	17989.60	6801.50				MinPts	
Pass													
Bost Farm 32N-11B-L R0 mdv 24May19 (Def Plan)	179.89	32.81	178.91	147.09	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	179.89	32.81	178.91	147.08	92001.70	MAS = 10.00 (m)	20.00	20.00				WRP	
	179.40	32.81	177.83	146.60	304.42	MAS = 10.00 (m)	170.00	170.00				MinPts	
	179.46	32.81	177.75	146.66	244.46	MAS = 10.00 (m)	200.00	200.00				MINPT-O-EOU	
	180.59	32.81	178.61	147.78	180.65	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	183.40	32.81	180.16	150.59	80.79	MAS = 10.00 (m)	840.00	835.84				MinPts	
	183.47	32.81	180.04	150.66	74.72	MAS = 10.00 (m)	870.00	865.17				MINPT-O-EOU	
	260.30	32.81	252.81	227.49	39.88	MAS = 10.00 (m)	1470.00	1437.23				MinPt-O-SF	
	930.09	32.81	914.00	897.28	61.52	MAS = 10.00 (m)	3650.00	3492.13				MinPt-O-SF	
Pass													

...Bost Farm 13N-11A-L\Original Hole\Bost Farm 13N-11A-L R1 mdv 23Aug19

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		
	1773.44	52.48	1738.12	1720.96	51.63	OSF1.50	6700.00	6367.09				MinPt-O-SF	
	1975.65	420.59	1694.93	1555.07	7.06	OSF1.50	17989.60	6801.50				MinPts	
Bost Farm 9N-8C-L - Plan (Def Plan)													Pass
	180.69	32.81	179.70	147.88	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	180.08	32.81	179.02	147.27	2368.00	MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
	179.98	32.81	178.99	147.17	N/A	MAS = 10.00 (m)	20.00	20.00				WRP	
	179.98	32.81	177.82	147.17	153.11	MAS = 10.00 (m)	250.00	250.00				MinPts	
	179.99	32.81	177.81	147.18	149.00	MAS = 10.00 (m)	260.00	260.00				MINPT-O-EOU	
	180.31	32.81	178.07	147.51	141.83	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	449.75	32.81	434.78	416.94	32.08	MAS = 10.00 (m)	1830.00	1776.57				MinPt-O-SF	
	1507.39	70.02	1460.38	1437.37	32.73	OSF1.50	7010.00	6640.77				MinPts	
	1507.41	70.02	1460.41	1437.39	32.73	OSF1.50	7020.00	6648.72				MinPt-O-SF	
	1550.05	69.14	1503.63	1480.91	34.09	OSF1.50	7770.00	6952.52				MinPt-O-SF	
	1553.52	69.32	1506.98	1484.20	34.08	OSF1.50	7850.00	6951.33				MinPt-O-SF	
	10070.68	70.23	10023.54	10000.46	218.14	OSF1.50	17989.60	6801.50				TD	
Bost Farm 9N-8B-L - Plan (Def Plan)													Pass
	181.64	32.81	180.66	148.83	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	181.03	32.81	179.98	148.23	2393.34	MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
	180.94	32.81	179.95	148.13	N/A	MAS = 10.00 (m)	20.00	20.00				WRP	
	180.94	32.81	178.78	148.13	153.93	MAS = 10.00 (m)	250.00	250.00				MinPts	
	180.95	32.81	178.77	148.14	149.80	MAS = 10.00 (m)	260.00	260.00				MINPT-O-EOU	
	181.26	32.81	179.01	148.46	143.21	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	424.88	32.81	409.65	392.08	29.75	MAS = 10.00 (m)	1830.00	1776.57				MinPt-O-SF	
	1273.40	71.08	1225.68	1202.32	27.23	OSF1.50	7020.00	6648.72				MinPts	
	10040.07	68.39	9994.15	9971.68	223.42	OSF1.50	17989.60	6801.50				TD	
Bost Farm 40C-8L2 - Plan (Def Plan)													Pass
	182.04	32.81	181.05	149.23	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	181.38	32.81	180.31	148.57	2059.26	MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
	181.24	32.81	180.26	148.44	N/A	MAS = 10.00 (m)	20.00	20.00				WRP	
	181.24	32.81	179.08	148.44	154.60	MAS = 10.00 (m)	250.00	250.00				MinPts	
	181.26	32.81	179.08	148.45	150.45	MAS = 10.00 (m)	260.00	260.00				MINPT-O-EOU	
	181.60	32.81	179.35	148.79	142.30	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	479.83	32.81	465.05	447.02	34.73	MAS = 10.00 (m)	1840.00	1786.00				MinPt-O-SF	
	1755.05	69.26	1708.55	1685.79	38.54	OSF1.50	7040.00	6664.39				MinPt-CtCt	
	1755.05	69.28	1708.54	1685.78	38.53	OSF1.50	7050.00	6672.12				MinPts	
	1755.44	69.32	1708.90	1686.13	38.51	OSF1.50	7090.00	6702.22				MinPt-O-SF	
	1779.84	69.55	1733.14	1710.29	38.91	OSF1.50	7780.00	6952.37				MinPt-CtCt	
	1779.84	69.58	1733.13	1710.26	38.90	OSF1.50	7790.00	6952.22				MINPT-O-EOU	
	1779.87	69.61	1733.13	1710.26	38.88	OSF1.50	7800.00	6952.07				MinPt-O-ADP	
	1791.62	70.70	1744.16	1720.92	38.53	OSF1.50	8080.00	6947.94				MinPt-O-SF	
	1794.49	70.81	1746.96	1723.69	38.53	OSF1.50	8110.00	6947.49				MinPt-O-SF	
	10105.22	73.25	10056.06	10031.98	209.74	OSF1.50	17989.60	6801.50				TD	
Bost Farm 40N-8B-L2 - Plan (Def Plan)													Pass
	185.21	32.81	184.23	152.40	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	184.51	32.81	183.43	151.70	1864.79	MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
	184.34	32.81	183.35	151.53	N/A	MAS = 10.00 (m)	20.00	20.00				WRP	
	184.34	32.81	182.19	151.53	157.67	MAS = 10.00 (m)	250.00	250.00				MinPts	
	184.35	32.81	182.17	151.55	153.43	MAS = 10.00 (m)	260.00	260.00				MINPT-O-EOU	
	184.70	32.81	182.45	151.90	144.19	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	513.86	32.81	499.08	481.05	37.17	MAS = 10.00 (m)	1850.00	1795.42				MinPt-O-SF	
	1905.40	67.86	1859.83	1837.53	42.71	OSF1.50	6770.00	6432.32				MinPts	
	1905.44	67.91	1859.84	1837.53	42.69	OSF1.50	6780.00	6441.53				MinPt-O-ADP	
	1909.07	68.26	1863.24	1840.81	42.54	OSF1.50	6890.00	6540.28				MinPt-O-SF	
	2005.56	67.94	1959.93	1937.61	44.91	OSF1.50	7990.00	6949.27				MinPt-O-SF	
	2008.98	68.07	1963.27	1940.91	44.90	OSF1.50	8030.00	6948.67				MinPt-O-SF	
	10152.05	73.97	10102.41	10078.08	208.62	OSF1.50	17989.60	6801.50				TD	
Bost Farm 9C-8-L - Plan (Def Plan)													Pass
	185.05	32.81	184.07	152.24	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	184.51	32.81	183.46	151.70	2983.65	MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
	184.44	32.81	183.46	151.63	82578.46	MAS = 10.00 (m)	20.00	20.00				WRP	
	184.44	32.81	182.29	151.63	156.52	MAS = 10.00 (m)	250.00	250.00				MinPts	
	184.46	32.81	182.27	151.65	152.31	MAS = 10.00 (m)	260.00	260.00				MINPT-O-EOU	
	184.74	32.81	182.50	151.93	146.49	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	398.72	32.81	383.48	365.91	27.89	MAS = 10.00 (m)	1820.00	1767.14				MinPt-O-SF	
	1381.99	62.57	1339.95	1319.42	33.64	OSF1.50	6440.00	6122.03				MinPt-O-SF	
	1120.52	72.89	1071.60	1047.63	23.35	OSF1.50	7400.00	6883.84				MinPt-CtCt	
	1120.53	72.96	1071.60	1047.63	23.35	OSF1.50	7410.00	6887.96				MinPts	
	1120.55	72.91	1071.62	1047.64	23.35	OSF1.50	7420.00	6891.95				MinPt-O-SF	
	1120.54	73.07	1071.50	1047.47	23.30	OSF1.50	7726.12	6953.08				MinPt-CtCt	
	1120.56	73.13	1071.48	1047.43	23.28	OSF1.50	7750.00	6952.81				MinPts	
	1122.57	73.39	1073.31	1049.18	23.24	OSF1.50	7860.00	6951.19				MinPt-O-SF	
	10005.83	69.52	9959.15	9936.31	218.96	OSF1.50	17989.60	6801.50				TD	
Bost Farm 39N-8C-L - Plan (Def Plan)													Pass
	190.43	32.81	189.45	157.62	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	189.75	32.81	188.67	156.94	1972.45	MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
	189.58	32.81	188.59	156.77	N/A	MAS = 10.00 (m)	20.00	20.00				WRP	
	189.58	32.81	187.43	156.77	162.18	MAS = 10.00 (m)	250.00	250.00				MinPts	
	189.59	32.81	187.41	156.78	157.82	MAS = 10.00 (m)	260.00	260.00				MINPT-O-EOU	
	189.87	32.81	187.64	157.06	151.36	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	380.73	32.81	365.26	347.92	26.22	MAS = 10.00 (m)	1820.00	1767.14				MinPt-O-SF	
	1261.64	63.25	1219.15	1198.40	30.37	OSF1.50	6420.00	6103.18				MinPt-O-SF	
	907.58	74.62	857.51	832.96	18.47	OSF1.50	7430.00	6985.82				MinPt-O-SF	
	904.08	74.74	853.92	829.34	18.37	OSF1.50	7737.28	6953.00				MinPt-CtCt	
	904.08	74.75	853.92	829.33	18.36	OSF1.50	7740.00	6952.96				MINPT-O-EOU	
	904.10	74.77	853.93	829.33	18.36	OSF1.50	7750.00	6952.81				MinPt-O-ADP	
	904.44	74.83	854.23	829.61	18.35	OSF1.50	7790.00	6952.22				MinPt-O-SF	
	904.80	74.86	854.57	829.94	18.35	OSF1.50	7810.00	6951.93				MinPt-O-SF	
	9970.88	69.26	9924.38	9901.62	219.03	OSF1.50	17989.60	6801.50				TD	
Bost Farm 39N-8B-L - Plan (Def Plan)													Pass
	197.59	32.81	196.61	164.79	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	197.09	32.81	196.05	164.28	3405.47	MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
	197.02	32.81	196.04	164.22	88242.07	MAS = 10.00 (m)	20.00	20.00				WRP	
	197.02	32.81	194.87	164.22	167.25	MAS = 10.00 (m)	250.00	250.00				MinPts	

...Bost Farm 13N-11A-L\Original Hole\Bost Farm 13N-11A-L R1 mdv 23Aug19

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		
Bost Farm 16C-8-L - Plan (Def Plan)	197.04	32.81	194.85	164.23	162.76	MAS = 10.00 (m)	260.00	260.00				MINPT-O-EOU	
	197.28	32.81	195.05	164.47	157.54	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	376.46	32.81	360.17	343.65	24.53	MAS = 10.00 (m)	1900.00	1842.55				MinPt-O-SF	
	1137.37	63.30	1094.84	1074.06	27.35	OSF1.50	6320.00	6008.91				MinPt-O-SF	
	647.31	75.81	596.44	571.50	12.96	OSF1.50	7360.00	6866.21				MinPt-O-SF	
	646.94	75.70	596.14	571.24	12.97	OSF1.50	7400.00	6883.84				MinPts	
	9962.22	68.42	9916.28	9893.80	221.57	OSF1.50	17989.60	6801.50				TD	
													Pass
Bost Farm 38N-8C-L - Plan (Def Plan)	206.38	32.81	205.40	173.58	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	205.90	32.81	204.86	173.09	3717.57	MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
	205.84	32.81	204.85	173.03	92209.39	MAS = 10.00 (m)	20.00	20.00				WRP	
	205.84	32.81	203.68	173.03	174.77	MAS = 10.00 (m)	250.00	250.00				MinPts	
	205.85	32.81	203.66	173.04	170.08	MAS = 10.00 (m)	260.00	260.00				MINPT-O-EOU	
	206.07	32.81	203.84	173.26	165.05	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	360.29	32.81	343.92	327.48	23.35	MAS = 10.00 (m)	1900.00	1842.55				MinPt-O-SF	
	1063.20	66.79	1018.35	996.41	24.21	OSF1.50	6570.00	6244.57				MinPt-O-SF	
	488.31	79.96	434.68	408.35	9.26	OSF1.50	7900.00	6950.60				MinPts	
	488.39	79.98	434.74	408.41	9.26	OSF1.50	7910.00	6950.45				MinPt-O-SF	
	9942.76	71.69	9894.63	9871.06	210.91	OSF1.50	17989.60	6801.50				TD	
													Pass
	254.90	32.81	253.91	222.09	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	254.54	32.81	253.52	221.74	7108.59	MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
Ariel J 7-12 GYRO 0' to 7370' - AB (Def Survey)	254.51	32.81	253.52	221.70	57059.27	MAS = 10.00 (m)	20.00	20.00				WRP	
	254.51	32.81	252.36	221.70	215.73	MAS = 10.00 (m)	250.00	250.00				MinPts	
	254.52	32.81	252.33	221.71	209.95	MAS = 10.00 (m)	260.00	260.00				MINPT-O-EOU	
	254.65	32.81	252.43	221.84	205.59	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	332.07	32.81	315.16	299.26	20.80	MAS = 10.00 (m)	1900.00	1842.55				MinPt-O-SF	
	982.44	75.86	931.53	906.57	19.66	OSF1.50	6830.00	6487.05				MinPts	
	612.84	47.69	580.72	565.15	19.65	OSF1.50	7420.00	6891.95				MinPt-O-SF	
	332.69	89.99	272.37	242.70	5.59	OSF1.50	8050.00	6948.38				MinPts	
	9921.60	81.27	9867.10	9840.34	185.36	OSF1.50	17989.60	6801.50				TD	
													Pass
	1027.57	32.81	1025.76	994.76	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1026.85	32.81	1024.92	994.04	8587.23	MAS = 10.00 (m)	20.00	20.00				MinPt-O-SF	
	1026.03	32.81	1023.52	993.23	1469.21	MAS = 10.00 (m)	200.00	200.00				MinPts	
	1026.14	32.81	1023.42	993.34	1118.93	MAS = 10.00 (m)	250.00	250.00				MINPT-O-EOU	
Tri-Pointe 12-3B MWD 0' to 7490' - SI (Def Survey)	1025.97	32.81	1023.24	993.16	1111.30	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	325.88	32.81	306.00	293.07	17.74	MAS = 10.00 (m)	3570.00	3416.72				MinPts	
	325.91	32.81	305.97	293.10	17.68	MAS = 10.00 (m)	3580.00	3426.15				MINPT-O-EOU	
	334.39	32.81	313.43	301.58	17.19	MAS = 10.00 (m)	3770.00	3605.24				MinPt-O-SF	
	10920.49	72.45	10871.66	10848.04	231.17	OSF1.50	17989.60	6801.50				TD	
													Pass
	5058.80	32.81	5056.92	5025.99	78586.99	MAS = 10.00 (m)	0.00	0.00				MinPts	
	5058.80	32.81	5056.88	5025.99	47147.58	MAS = 10.00 (m)	20.00	20.00				WRP	
	4804.11	40.78	4576.34	4563.33	176.82	OSF1.50	5550.00	5283.10				MinPt-O-SF	
	4591.68	42.08	4563.04	4549.60	170.75	OSF1.50	5750.00	5471.62				MinPt-O-SF	
	648.26	134.56	558.02	513.70	7.30	OSF1.50	11450.00	6898.14				MinPts	
	648.31	134.58	558.06	513.73	7.30	OSF1.50	11460.00	6897.99				MinPt-O-SF	
	6569.38	57.43	6530.56	6511.95	176.47	OSF1.50	17989.60	6801.50				TD	
													Pass
Sheep 20-12 GYRO 0' to 7464' - SI (Def Survey)	2780.17	32.81	2778.36	2747.36	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	2780.17	32.81	2778.34	2747.36	165472.08	MAS = 10.00 (m)	10.00	10.00				MinPts	
	2780.18	32.81	2778.32	2747.37	67836.00	MAS = 10.00 (m)	20.00	20.00				WRP	
	2780.26	32.81	2778.29	2747.45	16989.18	MAS = 10.00 (m)	60.00	60.00				MINPT-O-EOU	
	2781.51	32.81	2778.47	2748.70	2256.72	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	758.91	76.52	707.36	682.39	15.16	OSF1.50	8940.00	6935.23				MinPt-CiCt	
	758.97	76.64	707.34	682.33	15.14	OSF1.50	8950.00	6935.08				MinPts	
	762.09	77.23	710.07	684.86	15.08	OSF1.50	9010.00	6934.19				MinPt-O-SF	
	9080.85	63.71	9037.84	9017.14	219.30	OSF1.50	17989.60	6801.50				TD	
													Pass
	2779.34	32.81	2777.52	2746.53	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	2779.33	32.81	2777.51	2746.53	190908.66	MAS = 10.00 (m)	10.00	10.00				MinPts	
	2779.34	32.81	2777.49	2746.53	78580.95	MAS = 10.00 (m)	20.00	20.00				WRP	
	2779.13	32.81	2776.43	2746.32	3116.58	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
Sheep 10-12 GYRO 0' to 7371' - PA (Def Survey)	2563.76	32.81	2545.99	2530.95	158.57	MAS = 10.00 (m)	3270.00	3133.94				MinPts	
	2563.79	32.81	2545.94	2530.98	157.77	MAS = 10.00 (m)	3290.00	3152.79				MINPT-O-EOU	
	2774.48	48.84	2741.38	2725.63	88.05	OSF1.50	5930.00	5641.29				MinPt-CiCt	
	2774.57	49.16	2741.27	2725.43	87.48	OSF1.50	5980.00	5688.43				MINPT-O-EOU	
	2774.68	49.27	2741.29	2725.40	87.26	OSF1.50	6000.00	5707.28				MinPt-O-ADP	
	1400.44	86.54	1342.21	1313.90	24.70	OSF1.50	9540.00	6926.36				MinPt-CiCt	
	1400.46	86.65	1342.16	1313.81	24.67	OSF1.50	9550.00	6926.21				MINPT-O-EOU	
	1400.55	86.75	1342.18	1313.80	24.65	OSF1.50	9560.00	6926.07				MinPt-O-ADP	
	1408.20	87.83	1349.11	1320.37	24.47	OSF1.50	9690.00	6924.14				MinPt-O-SF	
	8561.66	64.85	8517.89	8496.81	203.02	OSF1.50	17989.60	6801.50				TD	
													Pass
	2702.26	32.81	2700.44	2669.45	N/A	MAS = 10.00 (m)	0.00	0.00				MinPts	
	2702.26	32.81	2700.41	2669.46	69471.12	MAS = 10.00 (m)	20.00	20.00				WRP	
	2702.30	32.81	2700.40	2669.50	28266.68	MAS = 10.00 (m)	40.00	40.00				MINPT-O-EOU	
Boreen 1 Blind 0' to 7244' - SI (Def Survey)	2703.61	32.81	2700.66	2670.80	2380.44	MAS = 10.00 (m)	250.00	250.00				MINPT-O-EOU	
	1643.45	41.98	1614.88	1601.47	61.18	OSF1.50	5490.00	5226.54				MinPt-CiCt	
	1643.50	42.14	1614.83	1601.36	60.93	OSF1.50	5510.00	5245.40				MINPT-O-EOU	
	1643.56	42.22	1614.85	1601.34	60.80	OSF1.50	5520.00	5254.82				MinPt-O-ADP	
	1757.98	50.62	1723.70	1707.36	53.75	OSF1.50	6700.00	6367.09				MinPt-O-SF	
	1420.31	66.27	1375.60	1354.04	32.91	OSF1.50	8290.00	6944.83				MinPt-CiCt	
	1420.33	66.39	1375.53	1353.94	32.85	OSF1.50	8300.00	6944.68				MINPT-O-EOU	
	1420.42	66.52	1375.54	1353.90	32.78	OSF1.50	8310.00	6944.54				MinPt-O-ADP	
	1445.26	69.16	1398.62	1376.10	32.05	OSF1.50	8560.00	6940.84				MinPt-O-SF	
	9800.47	61.21	9759.13	9739.26	246.60	OSF1.50	17989.60	6801.50				TD	
													Pass
	1951.24	32.81	1949.42	1918.43	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1951.22	32.81	1949.18	1918.41	8570.55	MAS = 10.00 (m)	20.00	20.00				WRP	

...Bost Farm 13N-11A-L\Original Hole\Bost Farm 13N-11A-L R1 mdv 23Aug19

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		
Detienne 1-12 GYRO 0' to 7318' - TA (Def Survey)	1951.22	32.81	1941.60	1918.41	249.70	MAS = 10.00 (m)	250.00	250.00				MinPts	
	1964.37	81.14	1909.67	1883.23	37.11	OSF1.50	1400.00	1371.24				MINPT-O-EOU	
	1981.28	101.35	1913.11	1879.93	29.83	OSF1.50	1750.00	1701.16				MinPt-O-ADP	
	2734.91	418.52	2455.36	2316.39	9.83	OSF1.50	8180.00	6946.46				MinPt-CtCt	
	2734.91	418.53	2455.36	2316.38	9.83	OSF1.50	8190.00	6946.31				MinPts	
	2734.95	418.54	2455.39	2316.41	9.83	OSF1.50	8200.00	6946.16				MinPt-O-SF	
	10178.73	411.30	9904.00	9767.43	37.26	OSF1.50	17989.60	6801.50				TD	
	Pass												
	1983.86	32.81	1982.05	1951.05	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1983.85	32.81	1982.01	1951.05	56526.73	MAS = 10.00 (m)	20.00	20.00				WRP	
Detienne 17-12 Blind 0' to 7305' - TA (Def Survey)	1983.64	32.81	1981.27	1950.83	3597.47	MAS = 10.00 (m)	160.00	160.00				MinPts	
	1983.82	32.81	1981.04	1951.01	2045.43	MAS = 10.00 (m)	250.00	250.00				MINPT-O-EOU	
	1984.11	32.81	1981.27	1951.30	1927.34	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	2144.76	32.81	2131.70	2111.95	187.04	MAS = 10.00 (m)	1900.00	1842.55				MinPt-O-SF	
	4062.50	68.56	4016.25	3993.93	90.97	OSF1.50	8200.00	6946.16				MinPt-CtCt	
	4062.59	68.92	4016.11	3993.67	90.49	OSF1.50	8230.00	6945.72				MINPT-O-EOU	
	4062.78	69.16	4016.14	3993.62	90.17	OSF1.50	8250.00	6945.42				MinPt-O-ADP	
	4609.10	94.93	4545.28	4514.17	74.03	OSF1.50	10380.00	6913.95				MinPt-O-SF	
	10594.14	115.53	10516.58	10478.61	139.46	OSF1.50	17989.60	6801.50				TD	
	Pass												
Detienne 24-12 GYRO 0' to 7305' - TA (Def Survey)	1990.39	32.81	1988.58	1957.58	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1990.38	32.81	1988.26	1957.58	6376.01	MAS = 10.00 (m)	20.00	20.00				WRP	
	1990.38	32.81	1980.59	1957.58	249.03	MAS = 10.00 (m)	250.00	250.00				MinPts	
	2002.88	73.34	1953.38	1929.54	41.96	OSF1.50	1260.00	1239.28				MINPT-O-EOU	
	2020.20	94.11	1956.85	1926.09	32.80	OSF1.50	1620.00	1578.62				MinPt-O-ADP	
	2794.45	418.78	2514.73	2375.67	10.04	OSF1.50	8200.00	6946.16				MinPt-CtCt	
	2794.45	418.79	2514.73	2375.66	10.04	OSF1.50	8210.00	6946.01				MinPts	
	2794.49	418.80	2514.76	2375.69	10.04	OSF1.50	8220.00	6945.87				MinPt-O-SF	
	10176.07	411.80	9901.00	9764.27	37.21	OSF1.50	17989.60	6801.50				TD	
	Pass												
Skyway 22-11 GYRO 0' to 7470' - SI (Def Survey)	1997.74	32.81	1995.92	1964.93	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1997.73	32.81	1995.91	1964.92	184614.17	MAS = 10.00 (m)	10.00	10.00				MinPts	
	1997.73	32.81	1995.89	1964.92	61386.99	MAS = 10.00 (m)	20.00	20.00				WRP	
	1997.84	32.81	1995.82	1965.03	9494.96	MAS = 10.00 (m)	80.00	80.00				MINPT-O-EOU	
	1997.95	32.81	1995.81	1965.14	6275.71	MAS = 10.00 (m)	110.00	110.00				MINPT-O-EOU	
	1998.09	32.81	1995.50	1965.28	2569.89	MAS = 10.00 (m)	220.00	220.00				MinPts	
	1998.12	32.81	1995.40	1965.31	2194.76	MAS = 10.00 (m)	250.00	250.00				MINPT-O-EOU	
	1998.32	32.81	1995.57	1965.51	2140.69	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	2000.15	32.81	1997.05	1967.34	1557.79	MAS = 10.00 (m)	590.00	589.20				MINPT-O-EOU	
	2000.26	32.81	1997.04	1967.45	1423.50	MAS = 10.00 (m)	620.00	618.97				MINPT-O-EOU	
Sheep 2-12 GYRO 0' to 7880' - PA (Def Survey)	2301.62	78.20	2248.95	2223.42	45.04	OSF1.50	8980.00	6934.64				MinPt-CtCt	
	2301.71	78.46	2248.87	2223.25	44.89	OSF1.50	9000.00	6934.34				MINPT-O-EOU	
	2301.83	78.59	2248.90	2223.23	44.82	OSF1.50	9010.00	6934.19				MinPt-O-ADP	
	2378.67	84.95	2321.50	2293.72	42.78	OSF1.50	9580.00	6925.77				MinPt-O-SF	
	9299.01	81.39	9244.21	9217.62	174.80	OSF1.50	17989.60	6801.50				TD	
	Pass												
	11215.86	32.81	11213.98	11183.05	160525.92	MAS = 10.00 (m)	0.00	0.00				MinPts	
	11215.92	32.81	11214.01	11183.12	115480.31	MAS = 10.00 (m)	20.00	20.00				WRP	
	11218.31	32.81	11215.22	11185.50	8736.69	MAS = 10.00 (m)	390.00	389.94				MinPt-O-SF	
	2151.37	267.50	1972.51	1883.88	12.13	OSF1.50	16740.00	6819.97				MinPt-CtCt	
Sheep 7-12 GYRO 0' to 7436' - PA (Def Survey)	2151.49	267.84	1972.40	1883.65	12.11	OSF1.50	16760.00	6819.67				MINPT-O-EOU	
	2151.62	268.00	1972.42	1883.62	12.11	OSF1.50	16770.00	6819.52				MinPt-O-ADP	
	2156.78	269.52	1976.56	1887.25	12.07	OSF1.50	16890.00	6817.75				MinPt-O-SF	
	2489.25	252.26	2320.54	2236.99	14.89	OSF1.50	17989.60	6801.50				TD	
	Pass												
	2711.29	32.81	2709.48	2678.48	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	2711.29	32.81	2709.46	2678.48	151944.27	MAS = 10.00 (m)	10.00	10.00				MinPts	
	2711.29	32.81	2709.43	2678.48	62536.08	MAS = 10.00 (m)	20.00	20.00				WRP	
	2711.38	32.81	2708.68	2678.57	3056.33	MAS = 10.00 (m)	240.00	240.00				MinPts	
	2711.39	32.81	2708.65	2678.58	2922.91	MAS = 10.00 (m)	250.00	250.00				MINPT-O-EOU	
Skyway 5-11 GYRO 0' to 7350' - SI (Def Survey)	2711.28	32.81	2708.54	2678.47	2901.33	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	2593.50	32.81	2579.30	2560.69	205.82	MAS = 10.00 (m)	2130.00	2059.35				MinPts	
	2593.61	32.81	2579.16	2560.81	201.70	MAS = 10.00 (m)	2190.00	2115.91				MINPT-O-EOU	
	3296.11	41.36	3268.00	3254.75	124.31	OSF1.50	4920.00	4689.25				MinPt-O-SF	
	3555.79	44.68	3525.47	3511.12	123.77	OSF1.50	5430.00	5169.99				MinPt-O-SF	
	4297.72	53.06	4261.82	4244.66	125.24	OSF1.50	6660.00	6329.40				MinPt-O-SF	
	4473.50	53.51	4437.29	4419.99	129.24	OSF1.50	7050.00	6672.12				MinPt-O-SF	
	4074.87	73.73	4025.18	4001.14	84.71	OSF1.50	9470.00	6927.40				MinPt-CtCt	
	4075.07	74.45	4024.90	4000.62	83.88	OSF1.50	9510.00	6926.80				MINPT-O-EOU	
	4075.47	74.94	4024.98	4000.53	83.32	OSF1.50	9540.00	6926.36				MinPt-O-ADP	
Skyway 5-11 GYRO 0' to 7350' - SI (Def Survey)	4079.18	97.58	4013.59	3981.60	63.73	OSF1.50	9660.00	6924.59				MinPts	
	4521.90	128.15	4435.93	4393.75	53.58	OSF1.50	11500.00	6897.40				MinPt-O-SF	
	9376.67	146.51	9278.46	9230.16	97.04	OSF1.50	17989.60	6801.50				TD	
	Pass												
	2785.33	32.81	2783.51	2752.52	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	2785.33	32.81	2783.50	2752.52	168312.93	MAS = 10.00 (m)	10.00	10.00				MinPts	
	2785.33	32.81	2783.48	2752.53	68997.25	MAS = 10.00 (m)	20.00	20.00				WRP	
	2785.42	32.81	2783.44	2752.61	17202.24	MAS = 10.00 (m)	60.00	60.00				MINPT-O-EOU	
	2785.93	32.81	2783.04	2753.12	2581.94	MAS = 10.00 (m)	300.00	300.00				MinPt-O-SF	
	2675.72	32.81	2662.45	2642.91	229.20	MAS = 10.00 (m)	2160.00	2087.63				MinPts	
Skyway 5-11 GYRO 0' to 7350' - SI (Def Survey)	2675.75	32.81	2662.43	2642.94	228.25	MAS = 10.00 (m)	2180.00	2106.48				MINPT-O-EOU	
	2728.31	91.27	2666.94	2637.05	45.62	OSF1.50	9560.00	6926.07				MinPt-CtCt	
	2728.43	91.75	2666.73	2636.68	45.37	OSF1.50	9590.00	6925.62				MINPT-O-EOU	
	2728.69	92.07	2666.78	2636.62	45.22	OSF1.50	9610.00	6925.33				MinPt-O-ADP	
	2841.96	102.02	2773.41	2739.94	42.43	OSF1.50	10360.00	6914.24				MinPt-O-SF	
	8855.79	97.63	8790.16	8758.15	138.30	OSF1.50	17989.60	6801.50				TD	
	Pass												
	11224.50	32.81	11222.57	11191.69	100100.26	MAS = 10.00 (m)	0.00	0.00				Surface	
	11224.48	32.81	11222.51	11191.67	70198.56	MAS = 10.00 (m)	20.00	20.00				WRP	
	11224.40	32.81	11222.12	11191.59	24092.92	MAS =							

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		
	10851.58	52.82	10815.77	10798.76	318.93	OSF1.50	6910.00	6557.63				MinPt-O-SF	
	2690.98	289.28	2497.59	2401.70	14.02	OSF1.50	17620.00	6806.96				MinPt-CtCt	
	2691.17	289.85	2497.41	2401.32	14.00	OSF1.50	17650.00	6806.52				MinPt-O-EQU	
	2691.48	290.20	2497.48	2401.28	13.98	OSF1.50	17670.00	6806.22				MinPt-O-ADP	
	2702.74	292.94	2506.91	2409.80	13.91	OSF1.50	17870.00	6803.27				MinPt-O-SF	
	2716.48	293.83	2520.06	2422.66	13.94	OSF1.50	17989.60	6801.50				TD	
Skyway 6-11 GYRO 0' to 7640' - SI (Def Survey)													Pass
	11006.23	32.81	10984.54	10973.42	553.52	MAS = 10.00 (m)	0.00	0.00				Surface	
	10997.91	32.81	10976.12	10965.10	550.25	MAS = 10.00 (m)	20.00	20.00				WRP	
	2743.66	253.94	2573.83	2489.72	16.30	OSF1.50	16090.00	6829.57				MinPt-CtCt	
	2743.87	254.48	2573.67	2489.38	16.27	OSF1.50	16120.00	6829.13				MinPt-O-EQU	
	2744.01	254.67	2573.69	2489.34	16.26	OSF1.50	16130.00	6828.98				MinPt-O-ADP	
	2758.26	257.91	2585.79	2500.35	16.13	OSF1.50	16370.00	6825.43				MinPt-O-SF	
	3338.91	240.75	3177.87	3098.15	20.93	OSF1.50	17989.60	6801.50				TD	