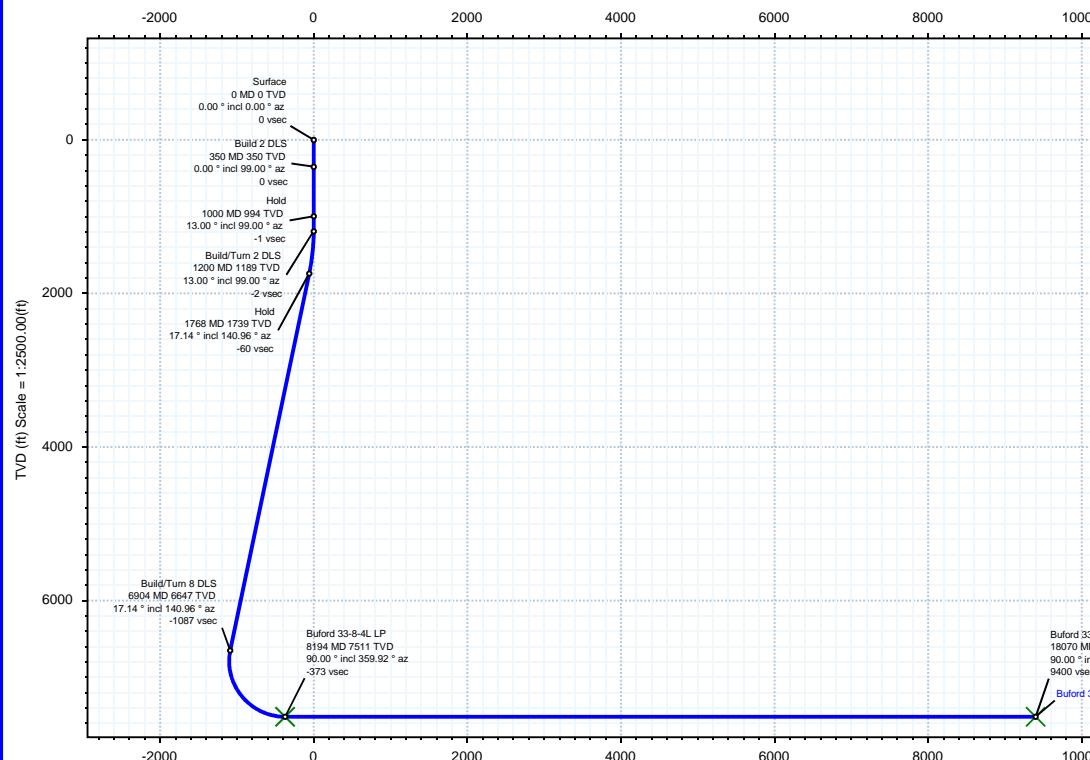


<b>Borehole:</b>	<b>Well:</b>	<b>Field:</b>	<b>Structure:</b>
Original Hole	Buford 33-8-4L	CO, Weld County (NAD 83 NZ) - 2019	Confluence 33-01N-65W (Freedom 33 Pad)

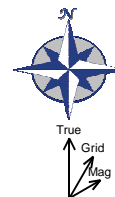
<b>Gravity &amp; Magnetic Parameters</b>	<b>Surface Location</b>	<b>Miscellaneous</b>
Model: HDGM 2022 Dip: 66.206° Date: 11-Jul-2022	NAD83 Colorado State Plane, Northern Zone, US Feet	Slot: Buford 33-8-4L TVD Ref: KB = 23ft(5101ft above MSL)
MagDec: 7.862° FS: 51573.515mT Gravity FS: 998.983mgn (9.80665 Based)	Lat: N 40 0 11.16 Northing: 1245046.47ftUS Grid Conv: 0.5319°	Plan: Buford 33-8-4L R0 mdy 27Jul22
	Lon: W 104 40 36.52 Easting: 3230605.84ftUS Scale Fact: 0.99996614	

Target Description	Latitude	Longitude	North	East	TVD	VSec	N(+)/S(-)	E(+)/W(-)
Target Name								
Freedom 33 Pad Sec 33-28 - CL NS	N 40 0 11.66	W 104 40 36.52	1245097.47	3230605.37	5101.00	50.48	51.00	0.00
Freedom 33 Pad Sec 33-28 - W2	N 40 0 11.66	W 104 40 36.52	1245097.47	3230605.37	5101.00	50.48	51.00	0.00
350'NSx200'EW SB	N 40 0 10.91	W 104 40 38.42	1245019.60	3230457.61	5101.00	-46.38	-25.50	-148.48
Freedom 33 Pad Sec 33-28 - CL	N 40 0 10.91	W 104 40 38.42	1245019.60	3230457.61	5101.00	-46.38	-25.50	-148.48
Buford 33-8-4L BHL	N 40 1 43.10	W 104 40 19.31	1254362.10	3231857.99	7511.00	9399.74	9303.94	1338.62
Buford 33-8-4L LP	N 40 0 5.51	W 104 40 19.13	1244487.18	3231964.20	7511.00	-373.36	-571.89	1353.16

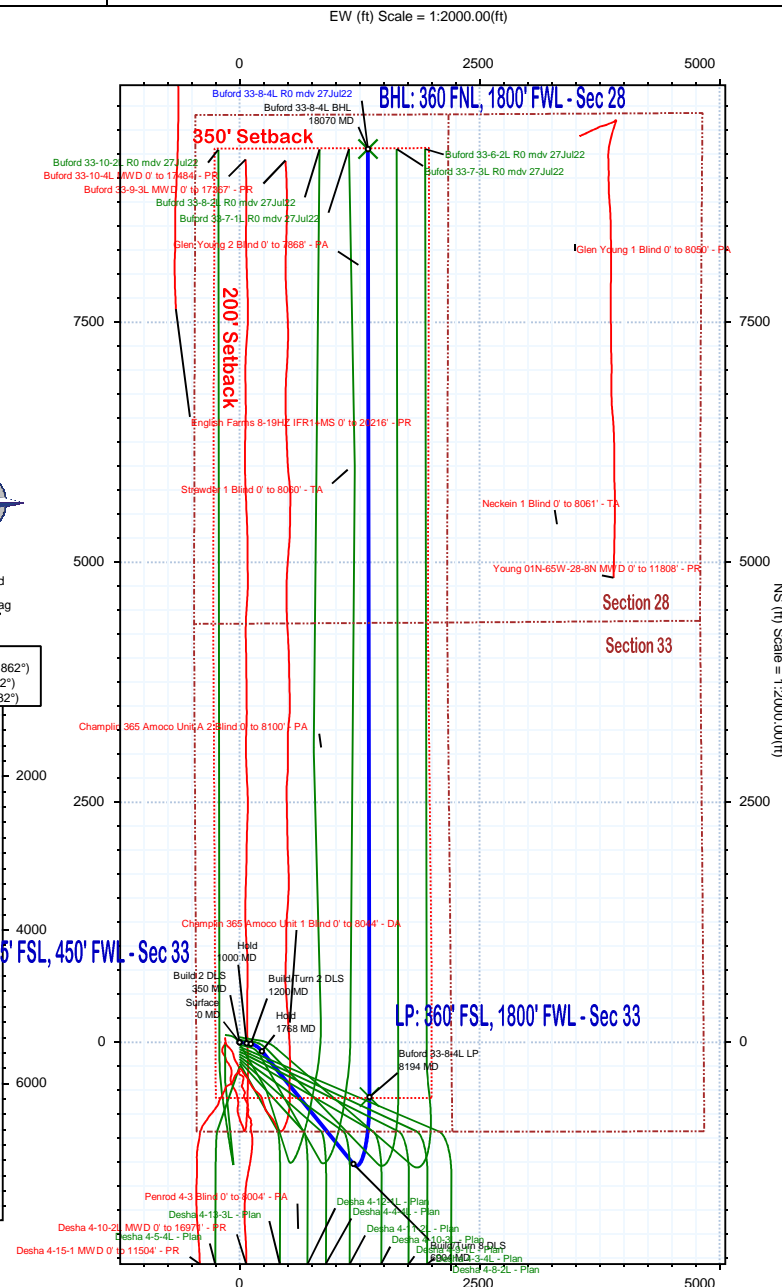
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Build 2 DLS	350.00	0.00	99.00	350.00	0.00	0.00	0.00	0.00
Hold	1000.00	13.00	99.00	994.44	-1.04	-11.49	72.52	2.00
Build/Turn 2 DLS	1200.00	13.00	99.00	1189.31	-1.68	-18.52	116.96	0.00
Hold	1768.20	17.14	140.96	1739.41	-59.63	-93.80	233.20	2.00
Build/Turn 8 DLS	6903.65	17.14	140.96	6646.77	-1087.36	-1269.28	1186.59	0.00
Buford 33-8-4L LP	8194.25	90.00	359.92	7511.00	-373.36	-571.89	1353.16	8.00
Buford 33-8-4L BHL	18070.10	90.00	359.92	7511.00	9399.74	9303.94	1338.62	0.00



Vertical Section (ft) Azim = 8.19° Scale = 1:2500.00(ft) Origin = 0N/-S, 0E/-W



True North  
Tot Corr (M->T 7.862°)  
Mag Dec (7.862°)  
Grid Conv (0.532°)



## Buford 33-8-4L R0 mdv 27Jul22 Proposal Geodetic Report

(Def Plan)

<b>Report Date:</b>	August 02, 2022 - 12:44 PM	<b>Survey / DLS Computation:</b>	Minimum Curvature / Lubinski
<b>Client:</b>	Confluence DJ	<b>Vertical Section Azimuth:</b>	8.187 ° (True North)
<b>Field:</b>	CO, Weld County (NAD 83 NZ) - 2019	<b>Vertical Section Origin:</b>	0.000 ft, 0.000 ft
<b>Structure / Slot:</b>	Confluence 33-01N-65W (Freedom 33 Pad) / Buford 33-8-4L	<b>TVD Reference Datum:</b>	KB = 23ft
<b>Well:</b>	Buford 33-8-4L	<b>TVD Reference Elevation:</b>	5101.000 ft above MSL
<b>Borehole:</b>	Original Hole	<b>Seabed / Ground Elevation:</b>	5078.000 ft above MSL
<b>UWI / API#:</b>	05-123-45536	<b>Magnetic Declination:</b>	7.862 °
<b>Survey Name:</b>	Buford 33-8-4L R0 mdv 27Jul22	<b>Total Gravity Field Strength:</b>	998.9830mgn (9.80665 Based)
<b>Survey Date:</b>	July 11, 2022	<b>Gravity Model:</b>	GARM
<b>Tort / AHD / DDI / ERD Ratio:</b>	127.612 ° / 12436.894 ft / 6.582 / 1.656	<b>Total Magnetic Field Strength:</b>	51573.515 nT
<b>Coordinate Reference System:</b>	NAD83 Colorado State Plane, Northern Zone, US Feet	<b>Magnetic Dip Angle:</b>	66.206 °
<b>Location Lat / Long:</b>	N 40° 0' 11.16000", W 104° 40' 36.51600"	<b>Declination Date:</b>	July 11, 2022
<b>Location Grid N/E Y/X:</b>	N 1245046.471 ftUS, E 3230605.839 ftUS	<b>Magnetic Declination Model:</b>	HDGM 2022
<b>CRS Grid Convergence Angle:</b>	0.5319 °	<b>North Reference:</b>	True North
<b>Grid Scale Factor:</b>	0.99996614	<b>Grid Convergence Used:</b>	0.0000 °
<b>Version / Patch:</b>	2.10.832.2	<b>Total Corr Mag North-&gt;True North:</b>	7.8624 °
		<b>Local Coord Referenced To:</b>	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	-5101.00	0.00	0.00	0.00	N/A	1245046.47	3230605.84	40.003100	-104.676810
Build 2 DLS	100.00	0.00	99.00	100.00	-5001.00	0.00	0.00	0.00	0.00	1245046.47	3230605.84	40.003100	-104.676810
	200.00	0.00	99.00	200.00	-4901.00	0.00	0.00	0.00	0.00	1245046.47	3230605.84	40.003100	-104.676810
	300.00	0.00	99.00	300.00	-4801.00	0.00	0.00	0.00	0.00	1245046.47	3230605.84	40.003100	-104.676810
	350.00	0.00	99.00	350.00	-4751.00	0.00	0.00	0.00	0.00	1245046.47	3230605.84	40.003100	-104.676810
	400.00	1.00	99.00	400.00	-4701.00	-0.01	-0.07	0.43	2.00	1245046.41	3230606.27	40.003100	-104.676808
	500.00	3.00	99.00	499.93	-4601.07	-0.06	-0.61	3.88	2.00	1245045.89	3230609.72	40.003098	-104.676796
	600.00	5.00	99.00	599.68	-4501.32	-0.15	-1.71	10.77	2.00	1245044.87	3230616.62	40.003095	-104.676772
	700.00	7.00	99.00	699.13	-4401.87	-0.30	-3.34	21.09	2.00	1245043.33	3230626.96	40.003091	-104.676735
	800.00	9.00	99.00	798.15	-4302.85	-0.50	-5.52	34.84	2.00	1245041.28	3230640.72	40.003085	-104.676686
Hold	900.00	11.00	99.00	896.63	-4204.37	-0.75	-8.23	51.99	2.00	1245038.72	3230657.90	40.003077	-104.676624
	1000.00	13.00	99.00	994.44	-4106.56	-1.04	-11.49	72.52	2.00	1245035.66	3230678.46	40.003068	-104.676551
	1100.00	13.00	99.00	1091.87	-4009.13	-1.36	-15.01	94.74	0.00	1245032.35	3230700.71	40.003059	-104.676472
Build/Turn 2 DLS	1200.00	13.00	99.00	1189.31	-3911.69	-1.68	-18.52	116.96	0.00	1245029.03	3230722.96	40.003049	-104.676393
Hold	1300.00	13.14	107.83	1286.73	-3814.27	-3.74	-23.76	138.89	2.00	1245024.00	3230744.93	40.003035	-104.676314
	1400.00	13.56	116.30	1384.04	-3716.96	-9.29	-32.44	160.22	2.00	1245015.52	3230766.34	40.003011	-104.676238
	1500.00	14.26	124.11	1481.11	-3619.89	-18.32	-44.54	180.93	2.00	1245003.61	3230787.16	40.002978	-104.676164
	1600.00	15.18	131.11	1577.84	-3523.16	-30.83	-60.06	200.99	2.00	1244988.28	3230807.37	40.002935	-104.676093
	1700.00	16.29	137.24	1674.10	-3426.90	-46.78	-78.97	220.38	2.00	1244969.56	3230826.93	40.002883	-104.676023
	1768.20	17.14	140.96	1739.41	-3361.59	-59.63	-93.80	233.20	2.00	1244954.85	3230839.89	40.002843	-104.675978
	1800.00	17.14	140.96	1769.80	-3331.20	-66.00	-101.08	239.11	0.00	1244947.62	3230845.86	40.002823	-104.675957
	1900.00	17.14	140.96	1865.36	-3235.64	-86.01	-123.97	257.67	0.00	1244924.91	3230864.64	40.002760	-104.675890
	2000.00	17.14	140.96	1960.92	-3140.08	-106.02	-146.86	276.24	0.00	1244902.19	3230883.42	40.002697	-104.675824
	2100.00	17.14	140.96	2056.48	-3044.52	-126.03	-169.75	294.80	0.00	1244879.48	3230902.19	40.002634	-104.675758
	2200.00	17.14	140.96	2152.04	-2948.96	-146.04	-192.63	313.37	0.00	1244856.76	3230920.97	40.002571	-104.675691
	2300.00	17.14	140.96	2247.60	-2853.40	-166.06	-215.52	331.93	0.00	1244834.05	3230939.74	40.002508	-104.675625
	2400.00	17.14	140.96	2343.15	-2757.85	-186.07	-238.41	350.50	0.00	1244811.33	3230958.52	40.002446	-104.675559
	2500.00	17.14	140.96	2438.71	-2662.29	-206.08	-261.30	369.06	0.00	1244788.61	3230977.30	40.002383	-104.675493
	2600.00	17.14	140.96	2534.27	-2566.73	-226.09	-284.19	387.62	0.00	1244765.90	3230996.07	40.002320	-104.675426
	2700.00	17.14	140.96	2629.83	-2471.17	-246.11	-307.08	406.19	0.00	1244743.18	3231014.85	40.002257	-104.675360
	2800.00	17.14	140.96	2725.39	-2375.61	-266.12	-329.97	424.75	0.00	1244720.47	3231033.62	40.002194	-104.675294
	2900.00	17.14	140.96	2820.95	-2280.05	-286.13	-352.86	443.32	0.00	1244697.75	3231052.40	40.002131	-104.675228
	3000.00	17.14	140.96	2916.50	-2184.50	-306.14	-375.75	461.88	0.00	1244675.04	3231071.17	40.002069	-104.675161
	3100.00	17.14	140.96	3012.06	-2088.94	-326.16	-398.64	480.45	0.00	1244652.32	3231089.95	40.002006	-104.675095
	3200.00	17.14	140.96	3107.62	-1993.38	-346.17	-421.53	499.01	0.00	1244629.61	3231108.73	40.001943	-104.675029
	3300.00	17.14	140.96	3203.18	-1897.82	-366.18	-444.42	517.58	0.00	1244606.89	3231127.50	40.001880	-104.674963
	3400.00	17.14	140.96	3298.74	-1802.26	-386.19	-467.31	536.14	0.00	1244584.18	3231146.28	40.001817	-104.674896
	3500.00	17.14	140.96	3394.30	-1706.70	-406.21	-490.20	554.71	0.00	1244561.46	3231165.05	40.001754	-104.674830
	3600.00	17.14	140.96	3489.86	-1611.14	-426.22	-513.09	573.27	0.00	1244538.75	3231183.83	40.001692	-104.674764
	3700.00	17.14	140.96	3585.41	-1515.59	-446.23	-535.98	591.84	0.00	1244516.03	3231202.61	40.001629	-104.674697
	3800.00	17.14	140.96	3680.97	-1420.03	-466.24	-558.87	610.40	0.00	1244493.32	3231221.38	40.001566	-104.674631
	3900.00	17.14	140.96	3776.53	-1324.47	-486.26	-581.76	628.97	0.00	1244470.60	3231240.16	40.001503	-104.674565
	4000.00	17.14	140.96	3872.09	-1228.91	-506.27	-604.65	647.53	0.00	1244447.88	3231258.93	40.001440	-104.674499
	4100.00	17.14	140.96	3967.65	-1133.35	-526.28	-627.54	666.10	0.00	1244425.17	3231277.71	40.001377	-104.674432
	4200.00	17.14	140.96	4063.21	-1037.79	-546.29	-650.42	684.66	0.00	1244402.45	3231296.49	40.001315	-104.674366
	4300.00	17.14	140.96	4158.76	-942.24	-566.30	-673.31	703.23	0.00	1244379.74	3231315.26	40.001252	-104.674300
	4400.00	17.14	140.96	4254.32	-846.68	-586.32	-696.20	721.79	0.00	1244357.02	3231334.04	40.001189	-104.674234
	4500.00	17.14	140.96	4349.88	-751.12	-606.33	-719.09	740.36	0.00	1244334.31	3231352.81	40.001126	-104.674167
	4600.00	17.14	140.96	4445.44	-655.56	-626.34	-741.98	758.92	0.00	1244311.59	3231371.59	40.001063	-104.674101
	4700.00	17.14	140.96	4541.00	-560.00	-646.35	-764.87	777.49	0.00	1244288.88	3231390.36	40.001000	-104.674035
	4800.00	17.14	140.96	4636.56	-464.44	-666.37	-787.76	796.05	0.00	1244266.16	3231409.14	40.000937	-104.673969
	4900.00	17.14	140.96	4732.12	-368.88	-686.38	-810.65	814.62	0.00	1244243.45	3231427.92	40.000875	-104.673902
	5000.00	17.14	140.96	4827.67	-273.33	-706.39	-833.54	833.18	0.00	1244220.73	3231446.69	40.000812	-104.673836
	5100.00	17.14	140.96	4923.23	-177.77	-726.40	-856.43	851.75	0.00	1244198.02	3231465.47	40.000749	-104.673770
	5200.00	17.14	140.96	5018.79	-82.21	-746.42	-879.32	870.31	0.00	1244175.30	3231484.24	40.000686	-104.673704
	5300.00	17.14	140.96	5114.35	13.35	-766.43	-902.21	888.88	0.00	1244152.58	3231503.02	40.000623	-104.673637
	5400.00	17.14	140.96	5209.91	108.91	-786.44	-925.10	907.44	0.00	1244129.87	3231521.80	40.000560	-104.673571
	5500.00	17.14	140.96	5305.47	204.47	-806.45	-947.99	926.01	0.00	1244107.15	3231540.57	40.000498	-104.673505
	5600.00	17.14	140.96	5401.02	300.02	-826.47	-970.88	944.57	0.00	1244084.44	3231559.35	40.000435	-104.673438
	5700.00	17.14	140.96	5496.58	395.58	-846.48	-993.77	963.14	0.00	1244061.72	3231578.12	40.000372	-104.673372
	5800.00	17.14	140.96	5592.14	491.14	-866.49	-1016.66	981.70	0.00	1244039.01	3231596.90	40.000309	-104.673306
	5900.00	17.14	140.96	5687.70	586.70	-886.50	-1039.55	1000.27	0.00	1244016.29	3231615.68	40.000246	-104.673240
6000.00	17.14	140.96	5783.26	682.26	-906.52	-1062.44	1018.83	0.00	1243993.58	3231634.45	40.000183	-104.673174	
6100.00	17.14	140.96	5878.82	777.82	-926.53	-1085.33	1037.40	0.00	1243970.86	3231653.23	40.000121	-104.673107	
6200.00	17.14	140.96	5974.38	873.38	-946.54	-1108.21	1055.96	0.00	1243948.15	3231672.00	40.000058	-104.673041	
6300.00	17.14	140.96	6069.93	968.93	-966.55	-1131.10	1074.52	0.00	1243925.43	3231690.78	39.999995	-104.672975	
6400.00	17.14	140.96	6165.49	1064.49	-986.56	-1153.99	1093.09	0.00	1243902.72	3231709.55	39.999932	-104.672908	
6500.00	17.14	140.96	6261.05	1160.05	-1006.58	-1176.88	1111.65	0.00	1243880.00	3231728.33	39.999869	-104.672842	
6600.00	17.14	140.96	6356.61	1255.61	-1026.59	-1199.77	1130.22	0.00	1243857.29	3231747.11	39.999806	-104.672776	
6700.00	17.14	140.96	6452.17	1351.17	-1046.60	-1222.66	1148.78	0.00	1243834.57	3231765.88	39.999744	-104.672710	
6800.00	17.14	140.96	6547.73	1446.73	-1066.6								

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
Buford 33-8-4L LP	8100.00	82.60	1.36	7504.92	2403.92	-466.53	-668.88	1352.12	8.00	12443993.20	3231964.03	40.001272	-104.671984
	8194.25	90.00	359.92	7511.00	2410.00	-373.36	-571.89	1353.16	8.00	12444487.18	3231964.20	40.001530	-104.671980
	8200.00	90.00	359.92	7511.00	2410.00	-367.67	-566.15	1353.15	0.00	12444492.93	3231964.14	40.001546	-104.671980
	8300.00	90.00	359.92	7511.00	2410.00	-268.71	-466.15	1353.00	0.00	12445592.92	3231963.06	40.001820	-104.671981
	8400.00	90.00	359.92	7511.00	2410.00	-169.75	-366.15	1352.86	0.00	12446692.91	3231961.99	40.002095	-104.671981
	8500.00	90.00	359.92	7511.00	2410.00	-70.79	-266.15	1352.71	0.00	12447792.90	3231960.91	40.002369	-104.671982
	8600.00	90.00	359.92	7511.00	2410.00	28.17	-166.15	1352.56	0.00	12448892.89	3231959.84	40.002644	-104.671982
	8700.00	90.00	359.92	7511.00	2410.00	127.12	-66.15	1352.42	0.00	12449992.88	3231958.76	40.002918	-104.671983
	8800.00	90.00	359.92	7511.00	2410.00	226.08	33.85	1352.27	0.00	12450992.87	3231957.69	40.003193	-104.671983
	8900.00	90.00	359.92	7511.00	2410.00	325.04	133.85	1352.12	0.00	12451992.87	3231956.61	40.003467	-104.671984
	9000.00	90.00	359.92	7511.00	2410.00	424.00	233.85	1351.97	0.00	12452992.86	3231955.53	40.003742	-104.671984
	9100.00	90.00	359.92	7511.00	2410.00	522.96	333.85	1351.83	0.00	12453992.85	3231954.46	40.004016	-104.671985
	9200.00	90.00	359.92	7511.00	2410.00	621.92	433.85	1351.68	0.00	12454992.84	3231953.38	40.004291	-104.671985
	9300.00	90.00	359.92	7511.00	2410.00	720.88	533.85	1351.53	0.00	12455992.83	3231952.31	40.004565	-104.671986
	9400.00	90.00	359.92	7511.00	2410.00	819.84	633.85	1351.38	0.00	12456992.82	3231951.23	40.004840	-104.671986
	9500.00	90.00	359.92	7511.00	2410.00	918.80	733.85	1351.24	0.00	12457992.81	3231950.16	40.005114	-104.671987
	9600.00	90.00	359.92	7511.00	2410.00	1017.76	833.85	1351.09	0.00	12458992.80	3231949.08	40.005389	-104.671987
	9700.00	90.00	359.92	7511.00	2410.00	1116.72	933.85	1350.94	0.00	12459992.79	3231948.01	40.005663	-104.671988
	9800.00	90.00	359.92	7511.00	2410.00	1215.68	1033.85	1350.80	0.00	12460992.78	3231946.93	40.005938	-104.671988
	9900.00	90.00	359.92	7511.00	2410.00	1314.64	1133.85	1350.65	0.00	12461992.77	3231945.86	40.006212	-104.671989
	10000.00	90.00	359.92	7511.00	2410.00	1413.60	1233.85	1350.50	0.00	12462992.76	3231944.78	40.006487	-104.671989
	10100.00	90.00	359.92	7511.00	2410.00	1512.56	1333.85	1350.35	0.00	12463992.75	3231943.70	40.006761	-104.671990
	10200.00	90.00	359.92	7511.00	2410.00	1611.52	1433.85	1350.21	0.00	12464992.74	3231942.63	40.007036	-104.671990
	10300.00	90.00	359.92	7511.00	2410.00	1710.48	1533.85	1350.06	0.00	12465992.73	3231941.55	40.007310	-104.671991
	10400.00	90.00	359.92	7511.00	2410.00	1809.44	1633.85	1349.91	0.00	12466992.72	3231940.48	40.007585	-104.671991
	10500.00	90.00	359.92	7511.00	2410.00	1908.40	1733.85	1349.77	0.00	12467992.72	3231939.40	40.007859	-104.671992
	10600.00	90.00	359.92	7511.00	2410.00	2007.36	1833.85	1349.62	0.00	12468992.71	3231938.33	40.008134	-104.671992
	10700.00	90.00	359.92	7511.00	2410.00	2106.32	1933.85	1349.47	0.00	12469992.70	3231937.25	40.008408	-104.671993
	10800.00	90.00	359.92	7511.00	2410.00	2205.28	2033.85	1349.32	0.00	12470992.69	3231936.18	40.008683	-104.671993
	10900.00	90.00	359.92	7511.00	2410.00	2304.24	2133.85	1349.18	0.00	12471992.68	3231935.10	40.008958	-104.671994
	11000.00	90.00	359.92	7511.00	2410.00	2403.20	2233.85	1349.03	0.00	12472992.67	3231934.03	40.009232	-104.671994
	11100.00	90.00	359.92	7511.00	2410.00	2502.16	2333.85	1348.88	0.00	12473992.66	3231932.95	40.009507	-104.671995
	11200.00	90.00	359.92	7511.00	2410.00	2601.12	2433.85	1348.73	0.00	12474992.65	3231931.87	40.009781	-104.671995
	11300.00	90.00	359.92	7511.00	2410.00	2700.08	2533.85	1348.59	0.00	12475992.64	3231930.80	40.010056	-104.671996
	11400.00	90.00	359.92	7511.00	2410.00	2799.04	2633.85	1348.44	0.00	12476992.63	3231929.72	40.010330	-104.671996
	11500.00	90.00	359.92	7511.00	2410.00	2898.00	2733.85	1348.29	0.00	12477992.62	3231928.65	40.010605	-104.671997
	11600.00	90.00	359.92	7511.00	2410.00	2996.96	2833.85	1348.15	0.00	12478992.61	3231927.57	40.010879	-104.671997
	11700.00	90.00	359.92	7511.00	2410.00	3095.92	2933.85	1348.00	0.00	12479992.60	3231926.50	40.011154	-104.671998
	11800.00	90.00	359.92	7511.00	2410.00	3194.88	3033.85	1347.85	0.00	12480992.59	3231925.42	40.011428	-104.671998
	11900.00	90.00	359.92	7511.00	2410.00	3293.84	3133.85	1347.70	0.00	12481992.58	3231924.35	40.011703	-104.671999
12000.00	90.00	359.92	7511.00	2410.00	3392.80	3233.85	1347.56	0.00	12482992.57	3231923.27	40.011977	-104.671999	
12100.00	90.00	359.92	7511.00	2410.00	3491.75	3333.85	1347.41	0.00	12483992.57	3231922.19	40.012252	-104.672000	
12200.00	90.00	359.92	7511.00	2410.00	3590.71	3433.85	1347.26	0.00	12484992.56	3231921.12	40.012526	-104.672000	
12300.00	90.00	359.92	7511.00	2410.00	3689.67	3533.85	1347.12	0.00	12485992.55	3231920.04	40.012801	-104.672001	
12400.00	90.00	359.92	7511.00	2410.00	3788.63	3633.85	1346.97	0.00	12486992.54	3231919.97	40.013075	-104.672001	
12500.00	90.00	359.92	7511.00	2410.00	3887.59	3733.85	1346.82	0.00	12487992.53	3231919.89	40.013350	-104.672002	
12600.00	90.00	359.92	7511.00	2410.00	3986.55	3833.85	1346.67	0.00	12488992.52	3231918.82	40.013624	-104.672002	
12700.00	90.00	359.92	7511.00	2410.00	4085.51	3933.85	1346.53	0.00	12489992.51	3231917.74	40.013899	-104.672003	
12800.00	90.00	359.92	7511.00	2410.00	4184.47	4033.85	1346.38	0.00	12490992.50	3231916.67	40.014173	-104.672003	
12900.00	90.00	359.92	7511.00	2410.00	4283.43	4133.85	1346.23	0.00	12491992.49	3231915.59	40.014448	-104.672004	
13000.00	90.00	359.92	7511.00	2410.00	4382.39	4233.85	1346.08	0.00	12492992.48	3231914.52	40.014722	-104.672004	
13100.00	90.00	359.92	7511.00	2410.00	4481.35	4333.85	1345.94	0.00	12493992.47	3231913.44	40.014997	-104.672005	
13200.00	90.00	359.92	7511.00	2410.00	4580.31	4433.85	1345.79	0.00	12494992.46	3231912.36	40.015271	-104.672005	
13300.00	90.00	359.92	7511.00	2410.00	4679.27	4533.85	1345.64	0.00	12495992.45	3231909.29	40.015546	-104.672006	
13400.00	90.00	359.92	7511.00	2410.00	4778.23	4633.85	1345.50	0.00	12496992.44	3231908.21	40.015820	-104.672006	
13500.00	90.00	359.92	7511.00	2410.00	4877.19	4733.85	1345.35	0.00	12497992.43	3231907.14	40.016095	-104.672007	
13600.00	90.00	359.92	7511.00	2410.00	4976.15	4833.85	1345.20	0.00	12498992.42	3231906.06	40.016369	-104.672007	
13700.00	90.00	359.92	7511.00	2410.00	5075.11	4933.85	1345.05	0.00	12499992.42	3231904.99	40.016644	-104.672008	
13800.00	90.00	359.92	7511.00	2410.00	5174.07	5033.85	1344.91	0.00	12500992.41	3231903.91	40.016918	-104.672008	
13900.00	90.00	359.92	7511.00	2410.00	5273.03	5133.85	1344.76	0.00	12501992.40	3231902.84	40.017193	-104.672009	
14000.00	90.00	359.92	7511.00	2410.00	5371.99	5233.85	1344.61	0.00	12502992.39	3231901.76	40.017467	-104.672009	
14100.00	90.00	359.92	7511.00	2410.00	5470.95	5333.8							

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
		1	0.000	23.000	1/100.000	13.500	9.625		B001Mb_MWD+HRGM-Depth Only		Original Hole / Buford 33-8-4L R0 mdv 27Jul22		
		1	23.000	1700.000	1/100.000	13.500	9.625		B001Mb_MWD+HRGM		Original Hole / Buford 33-8-4L R0 mdv 27Jul22		
		1	1700.000	18070.096	1/100.000	8.500	5.500		B001Mb_MWD+HRGM		Original Hole / Buford 33-8-4L R0 mdv 27Jul22		

## Buford 33-8-4L R0 mdv 27Jul22 Anti-Collision Summary Report

**Analysis Date-24hr Time:** August 02, 2022 - 12:45  
**Client:** Confluence DJ  
**Field:** CO, Weld County (NAD 83 NZ) - 2019  
**Structure:** Confluence 33-01N-65W (Freedom 33 Pad)  
**Slot:** Buford 33-8-4L  
**Well:** Buford 33-8-4L  
**Borehole:** Original Hole  
**Scan MD Range:** 0.00ft ~ 18070.10ft

**Analysis Method:** 3D Least Distance  
**Reference Trajectory:** Buford 33-8-4L R0 mdv 27Jul22 (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:** 2.10.832.2  
**Database \ Project:** us1455vsm3175\drilling-CO, Weld County 2.10\_RESTORE

**Trajectory Error Model:** ISCWSA3 3-D 95.000% Confidence 2.7955 sigma, for subject well. For offset wells, error model version is specified with each well respectively.

**Offset Selection Criteria**

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

**Offset Trajectories Summary**

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		

Results highlighted: Sep-Factor separation <= 1.50 ft

Buford 33-7-3L R0 mdv 27Jul22  
(Def Plan)

25.50	20.59	24.52	4.91	N/A	MAS = 6.28 (m)	0.00	0.00	CtCt<=15m<15.00				Enter Alert	Fail Major
25.50	20.59	24.52	4.91	N/A	MAS = 6.28 (m)	23.00	23.00					WRP	
25.19	20.59	19.35	4.59	4.99	MAS = 6.28 (m)	550.00	549.84					MinPts	
27.80	20.59	14.22	7.21	2.13	MAS = 6.28 (m)	1220.00	1208.80					MINPT-O-EQU	
28.61	20.65	14.52	7.96	2.11	OSF1.50	1260.00	1247.77					MinPt-O-SF	
295.25	125.39	211.32	169.85	3.55	OSF1.50	7100.00	6838.08					MinPt-O-SF	
340.21	340.24	113.06	-0.03	1.50	OSF1.50	13290.00	7511.00		OSF<1.50			Enter Minor	
340.18	509.78	0.00	-169.60	1.00	OSF1.50	16270.00	7511.00			OSF<1.00		Enter Major	
340.16	613.62	-69.24	-273.45	0.83	OSF1.50	18060.00	7511.00					MinPt-CtCt	
340.16	614.26	-69.67	-274.06	0.83	OSF1.50	18070.10	7511.00					MinPts	

Glen Young 2 Blind 0' to 7868' -  
PA (Def Survey)

8192.36	32.81	8190.55	8159.55	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	Fail Major
8192.20	32.81	8190.36	8159.39	307900.89	MAS = 10.00 (m)	23.00	23.00					WRP	
8192.05	32.81	8179.71	8159.25	777.51	MAS = 10.00 (m)	350.00	350.00					MinPts	
8195.75	74.91	8145.20	8120.84	168.15	OSF1.50	1300.00	1286.73					MINPT-O-EQU	
8198.78	78.49	8145.85	8120.29	160.35	OSF1.50	1360.00	1345.14					MinPt-O-ADP	
1507.48	455.77	1203.10	1051.71	4.97	OSF1.50	15360.00	7511.00		OSF<5.00			Enter Alert	
465.21	466.47	153.69	-1.26	1.50	OSF1.50	16410.00	7511.00			OSF<1.50		Enter Minor	
310.98	478.23	-8.37	-167.24	0.97	OSF1.50	16570.00	7511.00				OSF<1.00	Enter Major	
101.21	603.54	-301.68	-502.33	0.25	OSF1.50	16860.00	7511.00					MinPts	
303.28	466.69	-8.39	-163.42	0.97	OSF1.50	17150.00	7511.00				OSF>1.00	Exit Major	
457.24	458.20	151.24	-0.96	1.50	OSF1.50	17310.00	7511.00					Exit Minor	
1210.25	454.09	906.99	796.16	4.01	OSF1.50	18070.10	7511.00					TD	

Strawder 1 Blind 0' to 8060' -  
TA (Def Survey)

6068.86	32.81	6067.05	6036.05	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	Fail Major
6068.79	32.81	6066.96	6035.96	717424.07	MAS = 10.00 (m)	20.00	20.00					MinPt-O-SF	
6068.78	32.81	6066.96	6035.97	810999.60	MAS = 10.00 (m)	23.00	23.00					WRP	
6066.42	71.42	6018.20	5995.00	130.69	OSF1.50	1204.72	1193.91					MinPt-CtCt	
6068.73	78.31	6015.92	5990.42	118.96	OSF1.50	1320.00	1306.21					MINPT-O-EQU	
6071.21	81.30	6016.41	5989.91	114.54	OSF1.50	1370.00	1354.87					MinPt-O-ADP	
1515.59	458.53	1209.36	1057.06	4.97	OSF1.50	13230.00	7511.00		OSF<5.00			Enter Alert	
472.92	479.92	152.43	-7.01	1.48	OSF1.50	14310.00	7511.00			OSF<1.50		Enter Minor	
331.35	500.88	-3.10	-169.53	0.99	OSF1.50	14480.00	7511.00				OSF<1.00	Enter Major	
217.83	544.85	-145.95	-327.03	0.60	OSF1.50	14720.00	7511.00					MinPt-O-ADP	
217.64	544.59	-145.95	-326.99	0.60	OSF1.50	14730.00	7511.00					MinPts	
324.05	492.40	-4.76	-168.36	0.99	OSF1.50	14970.00	7511.00				OSF>1.00	Exit Major	
464.27	471.94	149.11	-7.67	1.48	OSF1.50	15140.00	7511.00					Exit Minor	
1515.82	456.19	1211.16	1059.63	5.00	OSF1.50	16230.00	7511.00		OSF>5.00			Exit Alert	
3347.29	456.23	3042.61	2891.07	11.04	OSF1.50	18070.10	7511.00					TD	

Buford 33-7-1L R0 mdv 27Jul22  
(Def Plan)

25.50	20.59	24.52	4.91	N/A	MAS = 6.28 (m)	0.00	0.00	CtCt<=15m<15.00				Enter Alert	Fail Minor
25.50	20.59	24.52	4.91	N/A	MAS = 6.28 (m)	23.00	23.00					WRP	
25.19	20.59	19.83	4.59	5.54	MAS = 6.28 (m)	500.00	499.93					MinPts	
25.46	20.59	19.50	4.86	4.93	MAS = 6.28 (m)	560.00	559.81					MINPT-O-EQU	
27.77	20.59	20.91	7.19	4.56	MAS = 6.28 (m)	650.00	649.45					MinPt-O-SF	
48.94	20.59	39.29	28.35	5.53	MAS = 6.28 (m)	930.00	926.05	CtCt<=15m>15.00				Exit Alert	
88.00	25.51	70.66	62.48	5.32	OSF1.50	1680.00	1654.89					MinPt-O-SF	
156.70	47.78	124.52	108.92	4.99	OSF1.50	3550.00	3442.08		OSF<5.00			Enter Alert	
276.76	119.05	197.07	157.71	3.50	OSF1.50	6700.00	6452.17					MinPt-O-SF	
273.28	116.95	194.95	156.33	3.52	OSF1.50	6780.00	6528.61					MinPt-O-ADP	
272.37	115.83	194.82	156.54	3.54	OSF1.50	6810.00	6557.28					MINPT-O-EQU	
271.92	114.12	195.51	157.80	3.59	OSF1.50	6850.00	6595.51					MinPt-CtCt	
314.13	96.03	249.78	218.10	4.94	OSF1.50	7190.00	6925.88			OSF>5.00		Exit Alert	
440.71	69.21	394.25	371.51	9.67	OSF1.50	8160.00	7510.20					MinPt-O-SF	
404.12	122.16	322.35	281.96	4.99	OSF1.50	10390.00	7511.00		OSF<5.00			Enter Alert	
386.92	276.84	202.04	110.09	2.10	OSF1.50	14730.00	7511.00					MinPt-CtCt	
406.44	406.65	135.01	-0.21	1.50	OSF1.50	17480.00	7511.00			OSF<1.50		Enter Minor	
411.24	437.01	119.58	-25.78	1.41	OSF1.50	18070.10	7511.00					MinPts	

Buford 33-8-2L R0 mdv 27Jul22  
(Def Plan)

169.52	32.81	168.54	136.72	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	Fail Minor
169.52	32.81	168.54	136.72	N/A	MAS = 10.00 (m)	23.00	23.00					WRP	
169.52	32.81	165.65	136.72	58.30	MAS = 10.00 (m)	350.00	350.00					MinPts	
169.67	32.81	165.50	136.86	52.82	MAS = 10.00 (m)	380.00	380.00					MINPT-O-EQU	
215.29	32.81	196.95	182.48	12.35	MAS = 10.00 (m)	1768.20	1739.41					MinPt-O-SF	
629.59	117.16	551.15	512.43	8.12	OSF1.50	6690.00	6442.61					MinPt-O-SF	
553.19	112.13	478.11	441.06	7.45	OSF1.50	8930.00	7511.00					MinPt-CtCt	
553.81	113.94	477.52	439.87	7.34	OSF1.50	9000.00	7511.00					MINPT-O-EQU	
589.36	177.80	470.50	411.56	4.99	OSF1.50	10570.00	7511.00		OSF<5.00			Enter Alert	

...Confluence 33-01N-65W (Freedom 33 Pad)\Buford 33-8-4L\Original Hole\Buford 33-8-4L R0 mdv 27Jul22

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		
	561.13	561.65	186.36	-0.53	1.50	OSF1.50	17270.00	7511.00	OSF<1.50			Enter Minor	
	552.89	607.67	147.45	-54.78	1.36	OSF1.50	18060.00	7511.00				MinPts	
	552.85	607.58	147.46	-54.74	1.36	OSF1.50	18070.00	7511.00				MinPt-CtCt	
	552.85	607.58	147.47	-54.73	1.36	OSF1.50	18070.10	7511.00				TD	

Desha 4-8-2L - Plan (Def Plan)													Warning Alert
	47.42	32.81	46.44	14.61	N/A	MAS = 10.00 (m)	0.00	0.00	CtCt<=15m<15.00			Enter Alert	
	47.36	32.81	46.37	14.55	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	47.36	32.81	44.49	14.55	24.63	MAS = 10.00 (m)	250.00	250.00				MinPts	
	47.67	32.81	44.12	14.86	18.15	MAS = 10.00 (m)	320.00	320.00	CtCt<=15m>15.00			MINPT-O-EOU	
	49.05	32.81	44.62	16.24	13.94	MAS = 10.00 (m)	410.00	410.00				Exit Alert	
	85.50	32.81	73.23	52.69	7.49	MAS = 10.00 (m)	1130.00	1121.11				MinPt-O-SF	
	127.02	32.81	108.52	94.21	7.20	MAS = 10.00 (m)	1720.00	1693.28				MinPt-O-SF	
	879.31	137.23	787.49	742.08	9.67	OSF1.50	7000.00	6740.02				MinPt-O-SF	
	886.37	138.43	793.76	747.94	9.66	OSF1.50	7100.00	6838.08				MinPt-O-SF	
	887.78	138.70	794.99	749.08	9.66	OSF1.50	7200.00	6935.55				MinPt-O-SF	
	876.90	136.28	785.72	740.63	9.71	OSF1.50	7420.00	7138.63				MinPt-O-SF	
	862.02	129.81	775.15	732.21	10.03	OSF1.50	7580.00	7267.88				MinPt-O-ADP	
	861.15	128.77	774.98	732.38	10.10	OSF1.50	7600.00	7282.54				MINPT-O-EOU	
	860.50	126.63	775.75	733.87	10.26	OSF1.50	7640.00	7310.76				MinPt-CtCt	
	10226.35	152.45	10124.38	10073.90	101.26	OSF1.50	18070.10	7511.00				TD	

Buford 33-6-2L R0 mdv 27Jul22 (Def Plan)													Warning Alert
	51.00	32.81	50.02	18.19	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	51.00	32.81	50.02	18.19	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	50.37	32.81	44.73	17.56	10.60	MAS = 10.00 (m)	530.00	529.88	OSF<5.00			MinPts	
	53.55	32.81	42.00	20.74	4.97	MAS = 10.00 (m)	1050.00	1043.16				Enter Alert	
	54.04	32.81	41.98	21.23	4.79	MAS = 10.00 (m)	1090.00	1082.13				MINPT-O-EOU	
	60.21	32.81	45.05	27.40	4.18	MAS = 10.00 (m)	1330.00	1315.94				MinPt-O-SF	
	97.85	32.81	77.45	65.04	4.99	MAS = 10.00 (m)	1700.00	1674.10	OSF>5.00			Exit Alert	
	645.27	194.64	515.18	450.63	4.99	OSF1.50	10370.00	7511.00	OSF<5.00			Enter Alert	
	644.85	634.01	221.85	10.84	1.53	OSF1.50	18070.00	7511.00				MinPt-CtCt	
	644.85	634.02	221.84	10.83	1.53	OSF1.50	18070.10	7511.00				MinPts	

Desha 4-10-3L - Plan (Def Plan)													Warning Alert
	123.88	32.81	122.90	91.07	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	123.86	32.81	122.87	91.05	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	123.86	32.81	120.96	91.05	65.26	MAS = 10.00 (m)	250.00	250.00	OSF<5.00			MinPts	
	124.14	32.81	120.68	91.33	49.89	MAS = 10.00 (m)	310.00	310.00				MINPT-O-EOU	
	108.09	33.41	85.49	74.68	4.95	OSF1.50	2400.00	2343.15				Enter Alert	
	51.16	40.60	23.77	10.56	1.90	OSF1.50	3270.00	3174.51				MinPt-CtCt	
	53.54	47.04	21.85	6.50	1.71	OSF1.50	3410.00	3308.29				MINPT-O-EOU	
	56.29	50.33	22.41	5.96	1.68	OSF1.50	3480.00	3375.19				MinPt-O-ADP	
	57.24	51.23	22.76	6.01	1.68	OSF1.50	3500.00	3394.30				MinPt-O-SF	
	153.66	123.76	70.82	29.90	1.87	OSF1.50	7570.00	7280.41				MinPts	
	152.44	122.28	70.62	30.20	1.87	OSF1.50	7580.00	7267.88				MINPT-O-EOU	
	151.86	120.48	71.21	31.38	1.89	OSF1.50	7590.00	7275.26				MinPt-CtCt	
	308.69	95.27	244.85	213.42	4.90	OSF1.50	7870.00	7440.16	OSF>5.00			Exit Alert	
	10222.90	132.81	10134.04	10090.09	116.31	OSF1.50	18070.10	7511.00				TD	

Desha 4-11-2L - Plan (Def Plan)													Warning Alert
	149.38	32.81	148.39	116.57	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	149.36	32.81	148.37	116.55	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	149.36	32.81	146.49	116.55	78.81	MAS = 10.00 (m)	250.00	250.00	OSF<5.00			MinPts	
	149.58	32.81	146.23	116.77	62.72	MAS = 10.00 (m)	300.00	300.00				MINPT-O-EOU	
	124.48	38.41	98.54	86.06	4.95	OSF1.50	2550.00	2486.49				Enter Alert	
	66.87	49.78	33.35	17.08	2.03	OSF1.50	3460.00	3356.07				MinPt-O-SF	
	66.82	49.73	33.33	17.09	2.03	OSF1.50	3470.00	3365.63				MinPts	
	66.77	49.62	33.36	17.15	2.03	OSF1.50	3490.00	3384.74				MinPt-CtCt	
	246.58	74.79	196.39	171.79	4.99	OSF1.50	5620.00	5420.14	OSF>5.00			Exit Alert	
	384.43	100.66	316.99	283.77	5.77	OSF1.50	7070.00	6808.64				MinPt-O-SF	
	273.42	83.45	217.47	189.98	4.96	OSF1.50	7240.00	6973.94	OSF<5.00			Enter Alert	
	150.32	117.89	71.39	32.42	1.92	OSF1.50	7470.00	7181.11				MinPt-CtCt	
	150.54	119.24	70.72	31.30	1.90	OSF1.50	7480.00	7189.39				MINPT-O-EOU	
	151.41	120.29	70.89	31.12	1.89	OSF1.50	7490.00	7197.60				MinPts	
	350.22	106.96	278.58	243.25	4.94	OSF1.50	7800.00	7407.13	OSF>5.00			Exit Alert	
	10241.85	126.45	10157.22	10115.40	122.43	OSF1.50	18070.10	7511.00				TD	

Buford 33-10-4L MWD 0' to 17484' - PR (Def Survey)										Warning Alert	
	148.48	32.81	146.67	115.67	N/A	MAS = 10.00 (m)	0.00	0.00		Surface	
	148.48	32.81	146.67	115.67	N/A	MAS = 10.00 (m)	23.00	23.00		WRP	
	147.24	32.81	142.83	114.44	55.85	MAS = 10.00 (m)	360.00	360.00		MinPts	
	147.34	32.81	142.73	114.53	52.05	MAS = 10.00 (m)	380.00	380.00		MINPT-O-EOU	
	264.94	32.81	251.98	232.13	23.60	MAS = 10.00 (m)	1220.00	1208.80		MinPt-O-SF	
	374.37	32.81	356.77	341.56	23.61	MAS = 10.00 (m)	1690.00	1664.50		MinPt-O-SF	
	708.78	53.33	672.69	655.45	20.51	OSF1.50	3710.00	3594.97		MinPt-O-SF	
	947.71	83.02	891.83	864.69	17.43	OSF1.50	5320.00	5133.46		MinPt-O-SF	
	975.59	85.46	918.08	890.12	17.42	OSF1.50	5460.00	5267.24		MinPt-O-SF	
	1202.76	112.62	1127.15	1090.15	16.23	OSF1.50	6903.65	6646.77		MinPt-O-SF	
	1217.74	114.09	1141.14	1103.65	16.22	OSF1.50	7000.00	6740.02		MinPt-O-SF	
	1248.29	117.34	1169.53	1130.95	16.16	OSF1.50	7300.00	7030.53		MinPt-O-SF	
	1253.20	117.79	1174.13	1135.40	16.16	OSF1.50	7400.00	7121.18		MinPt-O-SF	
	1263.67	123.51	1180.79	1140.16	15.53	OSF1.50	8500.00	7511.00		MinPt-CtCt	
	1263.79	123.86	1180.68	1139.93	15.49	OSF1.50	8530.00	7511.00		MINPT-O-EOU	
	1263.88	123.98	1180.70	1139.91	15.47	OSF1.50	8540.00	7511.00		MinPt-O-ADP	
	1268.19	147.85	1169.09	1120.34	12.99	OSF1.50	9460.00	7511.00		MinPt-CtCt	
	1269.89	155.33	1165.80	1114.56	12.38	OSF1.50	9660.00	7511.00		MINPT-O-EOU	
	1271.35	157.06	1166.10	1114.28	12.25	OSF1.50	9710.00	7511.00		MinPt-O-ADP	
	1261.45	241.10	1100.19	1020.36	7.89	OSF1.50	11250.00	7511.00		MinPt-CtCt	
	1263.98	247.48	1098.46	1016.51	7.70	OSF1.50	11390.00	7511.00		MINPT-O-EOU	
	1271.77	300.77	1070.72	971.00	6.37	OSF1.50	12210.00	7511.00		MinPt-CtCt	
	1262.74	380.01	1008.86	882.72	5.00	OSF1.50	13390.00	7511.00	OSF<5.00	Enter Alert	
	1259.18	387.30	1000.44	871.88	4.89	OSF1.50	13540.00	7511.00		MinPt-CtCt	
	1259.50	409.14	986.20	850.35	4.63	OSF1.50	13870.00	7511.00		MinPt-CtCt	
	1275.12	442.67	979.48	832.45	4.33	OSF1.50	14420.00	7511.00		MINPT-O-EOU	
	1276.91	509.26	936.87	767.65	3.77	OSF1.50	15360.00	7511.00		MinPt-CtCt	
	1252.49	579.01	865.94	673.47	3.25	OSF1.50	16390.00	7511.00		MinPt-CtCt	
	1254.85	586.58	863.26	668.27	3.21	OSF1.50	16540.00	7511.00		MINPT-O-EOU	
	1257.83	591.27	863.11	666.56	3.20	OSF1.50	16620.00	7511.00		MINPT-O-EOU	

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Cl-Cl (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
Buford 33-10-2L R0 mdv 27Jul22 (Def Plan)	1268.16	656.19	830.19	611.89	2.90	OSF1.50	17520.00	7511.00				MinPt-CiCl	
	1274.36	686.76	815.96	587.59	2.79	OSF1.50	17990.00	7511.00				MinPts	
	1278.56	685.51	821.02	593.05	2.80	OSF1.50	18070.10	7511.00				TD	
Warning Alert													
Buford 33-9-3L MWD 0' to 17367' - PR (Def Survey)	150.65	32.81	149.67	117.85	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	150.65	32.81	149.67	117.85	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	150.65	32.81	147.78	117.85	79.23	MAS = 10.00 (m)	250.00	250.00				MinPts	
	151.04	32.81	147.10	118.23	50.75	MAS = 10.00 (m)	360.00	360.00				MINPT-O-EOU	
	422.11	32.81	402.52	389.30	22.63	MAS = 10.00 (m)	1768.20	1739.41				MinPt-O-SF	
	1212.08	112.61	1136.68	1099.47	16.27	OSF1.50	6690.00	6442.61				MinPt-O-SF	
	1577.81	474.58	1261.09	1103.23	4.99	OSF1.50	15270.00	7511.00	OSF<5.00			Enter Alert	
	1577.47	650.69	1143.35	926.78	3.64	OSF1.50	18060.00	7511.00				MinPt-CiCl	
	1577.48	651.11	1143.07	926.39	3.64	OSF1.50	18070.10	7511.00				MinPts	
	159.65	32.81	157.84	126.84	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	159.65	32.81	157.83	126.84	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	158.19	32.81	153.52	125.33	54.79	MAS = 10.00 (m)	370.00	370.00				MinPts	
	158.31	32.81	153.45	125.50	51.32	MAS = 10.00 (m)	390.00	390.00				MINPT-O-EOU	
Champlin 365 Amoco Unit 1 Blind 0' to 8044' - DA (Def Survey)	301.08	32.81	287.06	268.27	24.63	MAS = 10.00 (m)	1320.00	1306.21				MinPt-O-SF	
	390.24	32.81	372.61	357.44	24.24	MAS = 10.00 (m)	1700.00	1674.10				MinPt-O-SF	
	422.06	32.81	403.30	389.25	24.51	MAS = 10.00 (m)	1850.00	1817.58				MinPt-O-SF	
	812.17	108.51	739.30	703.67	11.37	OSF1.50	6750.00	6499.95				MinPt-O-SF	
	841.78	119.27	761.73	722.51	10.71	OSF1.50	8520.00	7511.00				MinPt-CiCl	
	841.91	119.65	761.61	722.26	10.68	OSF1.50	8550.00	7511.00				MINPT-O-EOU	
	842.18	119.94	761.69	722.24	10.65	OSF1.50	8580.00	7511.00				MinPt-O-ADP	
	842.51	120.25	761.80	722.25	10.63	OSF1.50	8610.00	7511.00				MinPt-O-ADP	
	843.01	120.74	761.99	722.27	10.59	OSF1.50	8650.00	7511.00				MinPt-O-ADP	
	878.12	155.42	773.96	722.71	8.55	OSF1.50	9780.00	7511.00				MinPt-CiCl	
	851.24	187.91	725.44	663.34	6.84	OSF1.50	10450.00	7511.00				MinPt-CiCl	
	851.98	190.13	724.65	661.85	6.77	OSF1.50	10510.00	7511.00				MINPT-O-EOU	
	852.93	191.21	724.92	661.72	6.73	OSF1.50	10540.00	7511.00				MinPt-O-ADP	
	856.82	196.76	725.11	660.06	6.57	OSF1.50	10640.00	7511.00				MINPT-O-EOU	
	859.31	258.47	686.46	600.84	5.01	OSF1.50	11670.00	7511.00				MinPt-CiCl	
	859.34	259.46	685.83	599.88	4.99	OSF1.50	11690.00	7511.00	OSF<5.00			Enter Alert	
	839.44	295.18	642.12	544.26	4.28	OSF1.50	12270.00	7511.00				MinPt-CiCl	
	851.76	332.55	629.53	519.21	3.85	OSF1.50	12890.00	7511.00				MINPT-O-EOU	
	831.34	433.91	541.54	397.43	2.88	OSF1.50	14420.00	7511.00				MinPt-CiCl	
	832.22	436.75	540.52	395.47	2.86	OSF1.50	14490.00	7511.00				MINPT-O-EOU	
	832.85	437.47	540.66	395.37	2.86	OSF1.50	14510.00	7511.00				MinPt-O-ADP	
	835.75	439.49	542.22	396.26	2.88	OSF1.50	14570.00	7511.00				MinPt-O-SF	
	839.32	441.24	544.62	398.08	2.89	OSF1.50	14620.00	7511.00				MinPt-O-SF	
	865.88	470.56	551.63	395.33	2.76	OSF1.50	15000.00	7511.00				MINPT-O-EOU	
	867.10	472.33	551.63	394.77	2.76	OSF1.50	15030.00	7511.00				MINPT-O-EOU	
	852.76	548.36	486.65	304.39	2.34	OSF1.50	16140.00	7511.00				MinPt-CiCl	
	854.29	553.00	485.02	301.29	2.32	OSF1.50	16240.00	7511.00				MINPT-O-EOU	
	857.38	557.48	485.19	299.90	2.31	OSF1.50	16320.00	7511.00				MINPT-O-EOU	
	861.67	638.55	435.44	223.12	2.03	OSF1.50	17480.00	7511.00				MinPt-CiCl	
	868.22	657.21	429.55	211.01	1.98	OSF1.50	17790.00	7511.00				MINPT-O-EOU	
	871.06	660.59	430.13	210.46	1.98	OSF1.50	17860.00	7511.00				MinPt-O-ADP	
	878.70	670.17	431.39	208.54	1.97	OSF1.50	17990.00	7511.00				MinPts	
	885.62	664.90	441.82	220.72	2.00	OSF1.50	18070.10	7511.00				TD	
Warning Alert													
Champlin 365 Amoco Unit 1 Blind 0' to 8100' - PA (Def Survey)	561.21	32.81	559.40	528.41	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	560.97	32.81	559.12	528.16	17656.28	MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
	560.89	32.81	559.00	528.08	6706.20	MAS = 10.00 (m)	23.00	23.00				WRP	
	413.93	100.36	346.49	313.57	6.26	OSF1.50	1700.00	1674.10				MinPt-CiCl	
	415.98	105.71	344.97	310.27	5.97	OSF1.50	1790.00	1760.25				MINPT-O-EOU	
	420.93	111.58	346.00	309.34	5.72	OSF1.50	1890.00	1855.81				MinPt-O-ADP	
	504.78	152.58	402.52	352.19	5.00	OSF1.50	2590.00	2524.72	OSF<5.00			Enter Alert	
	542.85	164.76	432.47	378.09	4.98	OSF1.50	2800.00	2725.39				MinPt-O-SF	
	593.42	179.19	473.43	414.23	5.00	OSF1.50	3050.00	2964.28	OSF>5.00			Exit Alert	
	1468.95	443.18	1172.96	1025.77	4.98	OSF1.50	7700.00	7350.12	OSF<5.00			Enter Alert	
	829.54	454.88	525.76	374.66	2.74	OSF1.50	8970.00	7511.00				MinPts	
	829.58	454.93	525.76	374.65	2.74	OSF1.50	8980.00	7511.00				MinPts	
	1515.77	456.87	1210.65	1058.90	4.99	OSF1.50	10240.00	7511.00	OSF>5.00			Exit Alert	
	9136.46	457.20	8831.13	8679.26	30.08	OSF1.50	18070.10	7511.00				TD	
Warning Alert													
Penrod 4-3 Blind 0' to 8004' - PA (Def Survey)	2039.10	32.81	2037.28	2006.29	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	2038.99	32.81	2037.16	2006.18	123785.42	MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
	2038.92	32.81	2037.10	2006.11	228718.91	MAS = 10.00 (m)	23.00	23.00				WRP	
	1057.43	318.42	844.62	739.01	5.00	OSF1.50	5430.00	5238.58	OSF<5.00			Enter Alert	
	886.73	408.88	613.63	477.87	3.26	OSF1.50	6950.00	6691.37				MinPt-CiCl	
	887.63	411.27	612.91	476.36	3.24	OSF1.50	6990.00	6730.26				MINPT-O-EOU	
	888.12	411.87	613.01	476.26	3.24	OSF1.50	7000.00	6740.02				MinPt-O-ADP	
	894.54	415.97	616.69	478.57	3.23	OSF1.50	7069.25	6807.90				MinPt-O-SF	
	1513.58	456.46	1208.74	1057.13	4.99	OSF1.50	8140.00	7508.98	OSF>5.00			Exit Alert	
	11272.75	456.58	10967.83	10816.17	37.16	OSF1.50	18070.10	7511.00				TD	
Warning Alert													
Robin 9-5HZ IFR1+MS 0' to 18381' - PR (Def Survey)	12630.17	175.07	12513.13	12455.10	108.82	OSF1.50	0.00	0.00				MinPt-O-SF	
	12616.55	174.85	12499.66	12441.70	108.84	OSF1.50	23.00	23.00				MinPt-O-SF	
	11283.15	117.93	11204.20	11165.22	144.71	OSF1.50	4990.00	4818.12				MinPt-O-ADP	

...Confluence 33-01N-65W (Freedom 33 Pad)\Buford 33-8-4L\Original Hole\Buford 33-8-4L R0 mdv 27Jul22

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		
Robin 9-4HZ IFR1+MS 0' to 18437' - PR (Def Survey)	11283.07	117.84	11204.18	11165.23	144.82	OSF1.50	5010.00	4837.23				MINPT-O-EOU	
	11283.01	117.71	11204.21	11165.30	144.98	OSF1.50	5040.00	4865.90				MinPt-CtCt	
	959.54	293.10	763.81	666.44	4.92	OSF1.50	18040.00	7511.00	OSF<5.00			Enter Alert	
	932.71	299.54	732.69	633.17	4.68	OSF1.50	18070.10	7511.00				MinPts	
	Warning Alert												
Robin 9-9HZ IFR1+MS 0' to 18068' - PR (Def Survey)	12499.06	171.86	12384.16	12327.20	109.71	OSF1.50	0.00	0.00				MinPt-O-SF	
	12485.69	171.63	12370.94	12314.06	109.74	OSF1.50	23.00	23.00				WRP	
	11249.85	117.61	11171.11	11132.24	144.68	OSF1.50	4730.00	4569.67				MinPt-O-ADP	
	11249.78	117.52	11171.10	11132.26	144.79	OSF1.50	4750.00	4588.78				MINPT-O-EOU	
	11249.73	117.38	11171.15	11132.35	144.96	OSF1.50	4780.00	4617.45				MinPt-CtCt	
	1213.12	366.15	968.69	846.97	4.98	OSF1.50	17970.00	7511.00	OSF<5.00			Enter Alert	
	1136.90	387.60	878.17	749.30	4.41	OSF1.50	18070.10	7511.00				MinPts	
Robin 9-9HZ IFR1+MS 0' to 18068' - PR (Def Survey)	12721.85	170.03	12608.17	12551.82	112.88	OSF1.50	0.00	0.00				MinPt-O-SF	
	12708.59	169.83	12595.04	12538.76	112.89	OSF1.50	23.00	23.00				MinPt-O-SF	
	11359.79	114.99	11282.80	11244.80	149.45	OSF1.50	5080.00	4904.12				MinPt-O-ADP	
	11359.73	114.92	11282.79	11244.81	149.55	OSF1.50	5100.00	4923.23				MINPT-O-EOU	
	11359.70	114.84	11282.82	11244.86	149.64	OSF1.50	5120.00	4942.34				MinPt-CtCt	
	1183.52	357.84	944.64	825.68	4.97	OSF1.50	18070.00	7511.00	OSF<5.00			Enter Alert	
	1183.45	357.86	944.55	825.59	4.97	OSF1.50	18070.10	7511.00				MinPts	
Robin 9-3HZ IFR1+MS 0' to 18437' - PR (Def Survey)	12533.56	179.34	12413.68	12354.23	105.40	OSF1.50	0.00	0.00				MinPt-O-SF	
	12520.05	179.11	12400.31	12340.94	105.42	OSF1.50	23.00	23.00				MinPt-O-SF	
	11265.73	124.58	11182.35	11141.15	136.71	OSF1.50	4770.00	4607.89				MinPt-O-ADP	
	11265.64	124.48	11182.33	11141.16	136.82	OSF1.50	4790.00	4627.00				MINPT-O-EOU	
	11265.58	124.29	11182.39	11141.28	137.03	OSF1.50	4830.00	4665.22				MinPt-CtCt	
	1392.38	421.45	1111.08	970.92	4.96	OSF1.50	17940.00	7511.00	OSF<5.00			Enter Alert	
	1306.19	447.16	1007.76	859.03	4.39	OSF1.50	18070.10	7511.00				MinPts	
Robin 9-2HZ IFR1+MS 0' to 18623' - PR (Def Survey)	12627.36	181.27	12506.19	12446.10	105.05	OSF1.50	0.00	0.00				MinPt-O-SF	
	12613.73	181.05	12492.70	12432.68	105.07	OSF1.50	23.00	23.00				MinPt-O-SF	
	11337.46	128.58	11251.41	11208.88	133.27	OSF1.50	4850.00	4684.34				MinPt-O-ADP	
	11337.39	128.49	11251.40	11208.90	133.36	OSF1.50	4870.00	4703.45				MINPT-O-EOU	
	11337.36	128.37	11251.45	11208.99	133.49	OSF1.50	4900.00	4732.12				MinPt-CtCt	
	1534.76	463.77	1225.25	1070.99	4.97	OSF1.50	18020.00	7511.00	OSF<5.00			Enter Alert	
	1505.61	472.38	1190.36	1033.23	4.79	OSF1.50	18070.10	7511.00				MinPts	
Warning Alert													
Desha 4-3-4L - Plan (Def Plan)													
Desha 4-3-4L - Plan (Def Plan)	72.90	32.81	71.92	40.09	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	72.86	32.81	71.87	40.05	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	72.86	32.81	69.99	40.05	38.17	MAS = 10.00 (m)	250.00	250.00				MinPts	
	73.19	32.81	69.64	40.38	28.10	MAS = 10.00 (m)	320.00	320.00				MINPT-O-EOU	
	123.98	32.81	104.86	91.17	6.78	MAS = 10.00 (m)	2080.00	2037.37				MinPt-O-SF	
	123.90	32.81	104.80	91.09	6.78	MAS = 10.00 (m)	2110.00	2066.03				MinPts	
	123.96	32.81	104.84	91.15	6.78	MAS = 10.00 (m)	2140.00	2094.70				MinPt-O-SF	
	200.28	47.52	168.27	152.76	6.42	OSF1.50	3280.00	3184.07				MinPt-O-SF	
	599.48	134.34	509.59	465.14	6.73	OSF1.50	7550.00	7245.20				MinPt-O-SF	
	578.97	125.74	494.82	453.24	6.95	OSF1.50	7690.00	7343.81				MinPt-O-ADP	
	578.37	125.02	494.70	453.35	6.98	OSF1.50	7700.00	7350.12				MINPT-O-EOU	
	577.47	122.86	495.23	454.61	7.10	OSF1.50	7730.00	7368.38				MinPt-CtCt	
	10200.98	143.97	10104.67	10057.01	107.00	OSF1.50	18070.10	7511.00				TD	
Pass													
Desha 4-9-1L - Plan (Def Plan)													
Desha 4-9-1L - Plan (Def Plan)	98.39	32.81	97.40	65.58	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	98.36	32.81	97.37	65.55	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	98.36	32.81	95.49	65.55	51.72	MAS = 10.00 (m)	250.00	250.00				MinPts	
	98.71	32.81	95.16	65.90	38.05	MAS = 10.00 (m)	320.00	320.00				MINPT-O-EOU	
	132.02	32.81	111.78	99.21	6.81	MAS = 10.00 (m)	2450.00	2390.93				MinPts	
	132.06	32.81	111.72	99.25	6.77	MAS = 10.00 (m)	2480.00	2419.60				MINPT-O-EOU	
	215.76	58.95	176.14	156.81	5.56	OSF1.50	3830.00	3709.64				MinPt-O-SF	
	569.14	138.40	476.54	430.73	6.20	OSF1.50	7090.00	6828.27				MinPt-O-SF	
	481.34	126.99	396.36	354.35	5.72	OSF1.50	7370.00	7094.55				MinPt-O-SF	
	476.62	124.84	393.06	351.78	5.76	OSF1.50	7420.00	7138.63				MinPts	
	476.15	123.75	393.32	352.40	5.81	OSF1.50	7440.00	7155.83				MinPt-CtCt	
	10247.07	141.40	10152.48	10105.67	109.46	OSF1.50	18070.10	7511.00				TD	
Pass													
Desha 4-4-4L - Plan (Def Plan)													
Desha 4-4-4L - Plan (Def Plan)	174.88	32.81	173.89	142.07	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	174.86	32.81	173.87	142.05	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	174.86	32.81	171.99	142.05	92.35	MAS = 10.00 (m)	250.00	250.00				MinPts	
	175.11	32.81	171.76	142.30	73.58	MAS = 10.00 (m)	300.00	300.00				MINPT-O-EOU	
	167.48	43.34	138.25	124.14	5.90	OSF1.50	3000.00	2916.50				MinPt-CtCt	
	167.74	44.09	138.02	123.65	5.80	OSF1.50	3070.00	2983.40				MINPT-O-EOU	
	167.91	44.30	138.05	123.61	5.78	OSF1.50	3090.00	3002.51				MinPt-O-ADP	
	172.50	46.34	141.28	126.16	5.67	OSF1.50	3310.00	3212.74				MinPt-O-SF	
	431.72	115.02	354.76	316.75	5.67	OSF1.50	7620.00	7296.84				MinPt-CtCt	
	431.89	115.54	354.53	316.35	5.64	OSF1.50	7630.00	7303.85				MINPT-O-EOU	
	432.23	116.03	354.55	316.20	5.62	OSF1.50	7640.00	7310.76				MinPt-O-ADP	
	435.81	117.72	357.01	318.10	5.59	OSF1.50	7680.00	7337.41				MinPt-O-SF	
	10231.29	121.97	10149.65	10109.32	126.84	OSF1.50	18070.10	7511.00				TD	
Pass													
Desha 4-12-1L - Plan (Def Plan)													
Desha 4-12-1L - Plan (Def Plan)	200.39	32.81	199.41	167.59	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	200.38	32.81	199.39	167.57	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	200.38	32.81	197.51	167.57	105.91	MAS = 10.00 (m)	250.00	250.00				MinPts	
	200.55	32.81	197.30	167.74	88.00	MAS = 10.00 (m)	290.00	290.00				MINPT-O-EOU	
	225.24	40.82	197.69	184.42	8.44	OSF1.50	2820.00	2744.50				MinPt-CtCt	
	225.65	42.14	197.23	183.51	8.19	OSF1.50	2920.00	2840.06				MINPT-O-EOU	
	226.19	42.79	197.34	183.41	8.08	OSF1.50	2970.00	2887.84				MinPt-O-ADP	
	244.91	49.11	211.84	195.80	7.60	OSF1.50	3500.00	3394.30				MinPt-O-SF	
	555.02	115.72	477.54	439.29	7.24	OSF1.50	7270.00	7002.41				MinPt-CtCt	
	555.17	116.04	477.45	439.13	7.22	OSF1.50	7280.00	7011.82				MinPts	
557.56	116.99	479.24	440.57	7.20	OSF1.50	7320.00	7049.06				MinPt-O-SF		



Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Cl-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	10280.68	120.59	10199.96	10160.09	128.92	OSF1.50	18070.10	7511.00				TD	
Desha 4-13-3L - Plan (Def Plan)													Pass
	222.25	32.81	221.26	189.44	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	222.23	32.81	221.25	189.42	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	222.23	32.81	219.37	189.42	117.51	MAS = 10.00 (m)	250.00	250.00				MinPts	
	222.43	32.81	219.19	189.63	97.77	MAS = 10.00 (m)	290.00	290.00				MINPT-O-EOU	
	298.55	32.81	276.65	265.74	14.23	MAS = 10.00 (m)	2220.00	2171.15				MinPts	
	298.79	33.06	276.43	265.74	13.93	OSF1.50	2290.00	2238.04				MINPT-O-EOU	
	299.06	33.37	276.48	265.69	13.81	OSF1.50	2320.00	2266.71				MinPt-O-ADP	
	360.23	45.84	329.34	314.39	12.01	OSF1.50	3360.00	3260.52				MinPt-O-SF	
	873.86	113.27	798.02	760.59	11.66	OSF1.50	7410.00	7129.94				MinPt-CtCt	
	873.99	113.70	797.87	760.29	11.62	OSF1.50	7430.00	7147.26				MinPts	
	877.73	114.82	800.86	762.92	11.55	OSF1.50	7500.00	7205.73				MinPt-O-SF	
	10281.85	118.73	10202.37	10163.12	130.97	OSF1.50	18070.10	7511.00				TD	
Desha 4-5-4L - Plan (Def Plan)													Pass
	247.74	32.81	246.76	214.94	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	247.73	32.81	246.75	214.92	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	247.73	32.81	244.86	214.92	131.06	MAS = 10.00 (m)	250.00	250.00				MinPts	
	247.85	32.81	244.69	215.04	113.86	MAS = 10.00 (m)	280.00	280.00				MINPT-O-EOU	
	406.12	32.81	386.70	373.31	21.97	MAS = 10.00 (m)	1870.00	1836.69				MinPt-O-SF	
	418.71	32.81	398.75	385.90	22.01	MAS = 10.00 (m)	2020.00	1980.03				MinPt-O-SF	
	430.98	32.81	410.46	398.17	22.02	MAS = 10.00 (m)	2140.00	2094.70				MinPt-O-SF	
	436.63	32.81	415.86	403.82	22.02	MAS = 10.00 (m)	2190.00	2142.48				MinPt-O-SF	
	445.03	32.81	423.87	412.22	22.01	MAS = 10.00 (m)	2260.00	2209.37				MinPt-O-SF	
	459.33	32.81	437.51	426.52	22.00	MAS = 10.00 (m)	2370.00	2314.49				MinPt-O-SF	
	473.41	33.22	450.94	440.19	21.99	OSF1.50	2470.00	2410.05				MinPt-O-SF	
	488.43	34.26	465.26	454.16	21.97	OSF1.50	2570.00	2505.60				MinPt-O-SF	
	504.29	35.36	480.39	468.93	21.96	OSF1.50	2670.00	2601.16				MinPt-O-SF	
	520.93	36.52	496.26	484.41	21.95	OSF1.50	2770.00	2696.72				MinPt-O-SF	
	536.50	37.59	511.11	498.91	21.94	OSF1.50	2860.00	2782.72				MinPt-O-SF	
	552.60	38.69	526.47	513.90	21.94	OSF1.50	2950.00	2868.73				MinPt-O-SF	
	569.17	39.82	542.29	529.34	21.94	OSF1.50	3040.00	2954.73				MinPt-O-SF	
	586.17	40.98	558.52	545.19	21.95	OSF1.50	3130.00	3040.73				MinPt-O-SF	
	603.57	42.16	575.14	561.42	21.95	OSF1.50	3220.00	3126.73				MinPt-O-SF	
	1478.54	100.18	1411.43	1378.36	22.34	OSF1.50	7000.00	6740.02				MinPt-O-SF	
	1556.30	110.94	1482.02	1445.36	21.22	OSF1.50	7630.00	7303.85				MinPt-O-SF	
	10340.42	123.10	10258.03	10217.33	127.01	OSF1.50	18070.10	7511.00				TD	
Desha 4-10-2L MWD 0' to 16971' - PR (Def Survey)													Pass
	273.41	32.81	271.60	240.60	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	273.23	32.81	271.42	240.42	N/A	MAS = 10.00 (m)	23.00	23.00				MinPts	
	272.73	32.81	267.75	239.98	84.02	MAS = 10.00 (m)	400.00	400.00				MinPts	
	265.16	32.81	255.62	232.35	34.06	MAS = 10.00 (m)	850.00	847.47				MinPts	
	265.71	32.81	255.43	232.90	31.17	MAS = 10.00 (m)	920.00	916.25				MINPT-O-EOU	
	304.51	32.81	285.20	271.71	17.10	MAS = 10.00 (m)	1810.00	1779.36				MinPt-O-SF	
	344.29	35.21	320.28	309.08	15.29	OSF1.50	2370.00	2314.49				MinPt-CtCt	
	344.43	35.59	320.17	308.84	15.13	OSF1.50	2400.00	2343.15				MINPT-O-EOU	
	344.54	35.72	320.19	308.82	15.08	OSF1.50	2410.00	2352.71				MinPt-O-ADP	
	355.18	37.91	329.37	317.27	14.61	OSF1.50	2590.00	2524.72				MinPt-O-SF	
	431.87	43.86	402.09	388.00	15.27	OSF1.50	3010.00	2926.06				MinPt-O-SF	
	544.30	55.24	506.94	489.06	15.18	OSF1.50	3720.00	3604.53				MinPt-O-SF	
	733.87	72.04	685.31	661.83	15.59	OSF1.50	4790.00	4627.00				MinPt-O-SF	
	837.07	81.08	782.48	755.99	15.77	OSF1.50	5340.00	5152.57				MinPt-O-SF	
	989.23	94.44	925.74	894.79	15.96	OSF1.50	6140.00	5917.04				MinPt-O-SF	
	1072.07	101.81	1003.67	970.26	16.02	OSF1.50	6590.00	6347.05				MinPt-O-SF	
	1151.28	118.67	1071.63	1032.60	14.73	OSF1.50	7280.00	7011.82				MinPt-CtCt	
	1151.41	119.05	1071.51	1032.36	14.68	OSF1.50	7300.00	7030.53				MINPT-O-EOU	
	1151.56	119.22	1071.55	1032.34	14.67	OSF1.50	7310.00	7039.82				MinPt-O-ADP	
	1157.07	120.66	1076.09	1036.41	14.56	OSF1.50	7420.00	7138.63				MinPt-O-SF	
	9446.37	126.61	9361.43	9319.76	113.33	OSF1.50	17230.00	7511.00				MinPt-O-SF	
	10272.09	128.00	10186.22	10144.09	121.89	OSF1.50	18070.10	7511.00				TD	
Desha 4-15-1 MWD 0' to 11504' - PR (Def Survey)													Pass
	298.81	32.81	297.00	266.00	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	298.73	32.81	296.92	265.92	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	291.39	32.81	282.55	258.58	41.20	MAS = 10.00 (m)	780.00	778.39				MinPts	
	291.74	32.81	282.18	258.93	37.44	MAS = 10.00 (m)	850.00	847.47				MINPT-O-EOU	
	319.95	32.81	301.63	287.14	19.31	MAS = 10.00 (m)	1640.00	1616.40				MINPT-O-EOU	
	326.20	32.81	307.14	293.39	18.60	MAS = 10.00 (m)	1768.20	1739.41				MinPt-O-SF	
	418.06	33.85	394.96	384.21	19.37	OSF1.50	2320.00	2266.71				MinPt-O-SF	
	703.67	51.28	668.95	652.40	21.20	OSF1.50	3490.00	3384.74				MinPt-O-SF	
	784.05	56.16	746.08	727.90	21.51	OSF1.50	3810.00	3690.53				MinPt-O-SF	
	975.10	69.48	928.25	905.63	21.51	OSF1.50	4560.00	4407.22				MinPt-O-SF	
	1336.77	91.28	1275.38	1245.49	22.33	OSF1.50	5850.00	5639.92				MinPt-O-SF	
	1495.55	101.10	1427.62	1394.45	22.52	OSF1.50	6410.00	6175.05				MinPt-O-SF	
	1581.21	107.60	1508.94	1473.61	22.35	OSF1.50	6720.00	6471.28				MinPt-O-SF	
	1651.93	112.04	1576.70	1539.89	22.41	OSF1.50	7000.00	6740.02				MinPt-O-SF	
	1656.29	114.51	1579.42	1541.78	21.98	OSF1.50	7020.00	6759.59				MinPt-O-ADP	
	1682.27	117.23	1603.58	1565.03	21.80	OSF1.50	7190.00	6925.88				MinPt-O-SF	
	1714.05	118.78	1634.33	1595.27	21.92	OSF1.50	7370.00	7094.55				MinPt-O-SF	
	10387.33	134.37	10297.22	10252.96	117.34	OSF1.50	18070.10	7511.00				TD	
Robin 9-6HZ IFR1+MS 0' to 18139' - PR (Def Survey)													Pass
	12570.37	171.28	12455.85	12399.09	110.71	OSF1.50	0.00	0.00				MinPt-O-SF	
	12557.02	171.06	12442.66	12385.96	110.74	OSF1.50	23.00	23.00				WRP	
	11275.50	114.16	11199.00	11161.34	149.43	OSF1.50	4860.00	4693.89				MinPt-O-ADP	
	11275.42	114.06	11199.05	11161.36	149.56	OSF1.50	4880.00	4713.00				MINPT-O-EOU	
	11275.36	113.86	11199.12	11161.50	149.82	OSF1.50	4920.00	4751.23				MinPt-CtCt	
	892.01	173.24	776.18	718.76	7.76	OSF1.50	18070.10	7511.00				MinPts	
Robin 9-7HZ IFR1+MS 0' to 18107' - PR (Def Survey)													Pass
	12582.13	169.41	12468.86	12412.72	112.05	OSF1.50	0.00	0.00				MinPt-O-SF	
	12568.88	169.19	12455.76	12399.69	112.07	OSF1.50	23.00	23.00				WRP	
	11283.68	111.98	11208.70	11171.70	152.47	OSF1.50	4880.00	4713.00				MinPt-O-ADP	
	11283.60	111.88	11208.63	11171.72	152.61	OSF1.50	4900.00	4732.12				MINPT-O-EOU	
	11283.53	111.74	11208.73	11171.81	152.80	OSF1.50	4930.00	4760.78				MinPt-CtCt	

...Confluence 33-01N-65W (Freedom 33 Pad)\Buford 33-8-4L\Original Hole\Buford 33-8-4L R0 mdv 27Jul22

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Cl-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	917.20	169.13	804.12	748.07	8.17	OSF1.50	18070.10	7511.00				MinPts	
Robin 9-8HZ IFR1+MS 0' to 18257' - PR (Def Survey)													Pass
	12748.13	170.88	12633.88	12577.25	112.54	OSF1.50	0.00	0.00				MinPt-O-SF	
	12734.63	170.68	12620.51	12563.95	112.96	OSF1.50	23.00	23.00				MinPt-O-SF	
	11351.58	114.28	11275.07	11237.30	150.28	OSF1.50	5160.00	4980.57				MinPt-O-ADP	
	11351.55	114.24	11275.06	11237.31	150.33	OSF1.50	5170.00	4990.12				MINPT-O-EOU	
	11351.51	114.14	11275.10	11237.38	150.47	OSF1.50	5200.00	5018.79				MinPt-CtCt	
	959.23	241.62	797.82	717.61	5.97	OSF1.50	18070.10	7511.00				MinPts	
Robin 9-10HZ IFR1+MS 0' to 17999' - PR (Def Survey)													Pass
	12715.29	171.33	12600.74	12543.96	111.95	OSF1.50	0.00	0.00				MinPt-O-SF	
	12702.19	171.14	12587.77	12531.05	111.97	OSF1.50	23.00	23.00				MinPt-O-SF	
	11367.91	117.60	11289.19	11250.31	146.21	OSF1.50	5050.00	4875.45				MinPt-O-ADP	
	11367.85	117.52	11289.17	11250.33	146.31	OSF1.50	5070.00	4894.56				MINPT-O-EOU	
	11367.81	117.41	11289.21	11250.40	146.45	OSF1.50	5100.00	4923.23				MinPt-CtCt	
	1414.15	418.49	1134.63	995.66	5.08	OSF1.50	18070.10	7511.00				MinPts	
Robin 9-1HZ IFR1+MS 0' to 18459' - PR (Def Survey)													Pass
	12508.56	182.19	12386.78	12326.38	103.54	OSF1.50	0.00	0.00				MinPt-O-SF	
	12495.14	181.97	12373.50	12313.17	103.55	OSF1.50	23.00	23.00				MinPt-O-SF	
	11307.21	134.02	11217.54	11173.20	127.48	OSF1.50	4600.00	4445.44				MinPt-O-ADP	
	11307.14	133.93	11217.53	11173.21	127.56	OSF1.50	4620.00	4464.55				MINPT-O-EOU	
	11307.10	133.81	11217.56	11173.29	127.68	OSF1.50	4650.00	4493.22				MinPt-CtCt	
	1823.41	500.55	1489.38	1322.85	5.47	OSF1.50	18070.10	7511.00				MinPts	
Neckline 1 Blind 0' to 8061' - TA (Def Survey)													Pass
	6328.79	32.81	6326.98	6295.98	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	6328.66	32.81	6326.83	6295.85	367481.82	MAS = 10.00 (m)	23.00	23.00				WRP	
	6274.05	84.76	6216.94	6189.29	113.42	OSF1.50	1450.00	1432.61				MinPt-CtCt	
	6276.23	91.32	6214.75	6184.91	105.15	OSF1.50	1560.00	1539.20				MINPT-O-EOU	
	6279.15	94.89	6215.29	6184.26	101.17	OSF1.50	1620.00	1597.13				MinPt-O-ADP	
	1963.49	529.76	1609.78	1433.73	5.57	OSF1.50	14160.00	7511.00				MinPt-CtCt	
	1963.92	530.97	1609.41	1432.95	5.56	OSF1.50	14200.00	7511.00				MINPT-O-EOU	
	1964.45	531.56	1609.54	1432.88	5.56	OSF1.50	14220.00	7511.00				MinPt-O-ADP	
	1971.85	534.81	1614.78	1437.05	5.54	OSF1.50	14340.00	7511.00				MinPt-O-SF	
	4376.67	509.99	4036.14	3866.68	12.91	OSF1.50	18070.10	7511.00				TD	
English Farms 8-19HZ IFR1+MS 0' to 20216' - PR (Def Survey)													Pass
	10594.09	223.28	10444.90	10370.81	71.48	OSF1.50	0.00	0.00				Surface	
	10578.22	223.02	10429.21	10355.20	71.46	OSF1.50	23.00	23.00				WRP	
	10369.05	218.79	10222.86	10150.26	71.40	OSF1.50	330.00	330.00				MinPt-O-SF	
	8952.32	138.72	8859.52	8813.61	97.48	OSF1.50	5060.00	4885.01				MinPt-O-ADP	
	8952.05	138.38	8859.46	8813.66	97.72	OSF1.50	5090.00	4913.68				MINPT-O-EOU	
	8951.70	137.63	8859.71	8814.16	98.26	OSF1.50	5160.00	4980.57				MinPt-CtCt	
	2013.20	504.74	1676.38	1508.46	5.99	OSF1.50	16410.00	7511.00				MinPt-CtCt	
	2013.34	505.20	1676.21	1508.14	5.99	OSF1.50	16430.00	7511.00				MINPT-O-EOU	
	2013.68	505.61	1676.28	1508.07	5.98	OSF1.50	16450.00	7511.00				MinPt-O-ADP	
	2023.93	513.96	1680.95	1509.97	5.92	OSF1.50	16850.00	7511.00				MinPts	
	2016.57	520.23	1669.42	1496.34	5.82	OSF1.50	17140.00	7511.00				MinPt-CtCt	
	1988.97	542.56	1626.93	1446.40	5.51	OSF1.50	18070.10	7511.00				MinPts	
Glen Young 1 Blind 0' to 8050' - PA (Def Survey)													Pass
	9017.34	32.81	9015.52	8984.53	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	9017.27	32.81	9015.45	8984.46	980593.31	MAS = 10.00 (m)	20.00	20.00				MinPt-O-SF	
	9017.26	32.81	9015.44	8984.45	994803.37	MAS = 10.00 (m)	23.00	23.00				WRP	
	8986.01	79.40	8932.48	8906.62	173.70	OSF1.50	1350.00	1335.41				MinPt-CtCt	
	8988.24	85.96	8930.33	8902.28	160.19	OSF1.50	1460.00	1442.32				MINPT-O-EOU	
	8991.23	89.54	8930.93	8901.69	153.71	OSF1.50	1520.00	1500.49				MinPt-O-ADP	
	2153.64	611.10	1745.70	1542.54	5.30	OSF1.50	17080.00	7511.00				MinPt-CtCt	
	2154.31	613.01	1745.10	1541.30	5.28	OSF1.50	17130.00	7511.00				MINPT-O-EOU	
	2154.91	613.74	1745.21	1541.17	5.28	OSF1.50	17150.00	7511.00				MinPt-O-ADP	
	2164.25	618.17	1751.60	1546.08	5.26	OSF1.50	17290.00	7511.00				MinPt-O-SF	
	2372.03	622.24	1956.67	1749.80	5.73	OSF1.50	18070.10	7511.00				TD	
Young 01N-65W-28-8N MWD 0' to 11808' - PR (Def Survey)													Pass
	9531.16	144.54	9434.20	9386.63	100.15	OSF1.50	0.00	0.00				Surface	
	9513.73	144.73	9416.64	9369.00	99.83	OSF1.50	23.00	23.00				WRP	
	9697.69	162.48	6588.83	6535.20	62.43	OSF1.50	6570.00	6327.94				MinPt-CtCt	
	6697.70	162.54	6588.82	6535.18	62.42	OSF1.50	6580.00	6337.50				MINPT-O-EOU	
	6697.73	162.56	6588.82	6535.17	62.40	OSF1.50	6590.00	6347.05				MinPt-O-ADP	
	2566.75	368.87	2320.30	2197.88	10.48	OSF1.50	13800.00	7511.00				MinPt-CtCt	
	2567.07	370.25	2319.70	2196.82	10.44	OSF1.50	13840.00	7511.00				MINPT-O-EOU	
	2567.24	370.50	2319.70	2196.74	10.43	OSF1.50	13850.00	7511.00				MinPts	
	2570.84	371.27	2322.79	2199.56	10.43	OSF1.50	13810.00	7511.00				MinPt-O-SF	
	2580.10	371.77	2331.72	2208.33	10.45	OSF1.50	14260.00	7511.00				MinPt-O-SF	
	2579.43	370.67	2331.79	2208.77	10.48	OSF1.50	14390.00	7511.00				MinPt-CtCt	
	2579.44	370.84	2331.68	2208.60	10.47	OSF1.50	14400.00	7511.00				MinPts	
	2572.30	373.21	2322.96	2199.09	10.38	OSF1.50	14680.00	7511.00				MinPt-CtCt	
	2573.29	376.10	2322.02	2197.19	10.30	OSF1.50	14880.00	7511.00				MinPts	
	2573.35	376.14	2322.05	2197.20	10.30	OSF1.50	14890.00	7511.00				MinPt-O-SF	
	2573.34	376.01	2322.13	2197.33	10.30	OSF1.50	14940.00	7511.00				MinPts	
	2570.69	374.03	2320.80	2196.60	10.35	OSF1.50	15020.00	7511.00				MinPts	
	2543.94	387.97	2284.75	2155.96	9.87	OSF1.50	15590.00	7511.00				MinPt-CtCt	
	2545.37	392.35	2283.26	2153.02	9.77	OSF1.50	15720.00	7511.00				MINPT-O-EOU	
	2546.97	394.29	2283.57	2152.67	9.72	OSF1.50	15780.00	7511.00				MinPts	
	2539.20	412.82	2263.45	2126.38	9.26	OSF1.50	16520.00	7511.00				MinPt-CtCt	
	2541.22	419.96	2260.71	2121.26	9.11	OSF1.50	16710.00	7511.00				MINPT-O-EOU	
	2541.58	428.59	2255.33	2113.00	8.92	OSF1.50	16990.00	7511.00				MinPt-CtCt	
	2540.36	436.93	2248.54	2103.43	8.75	OSF1.50	17240.00	7511.00				MinPts	
	2518.21	457.42	2212.73	2060.79	8.28	OSF1.50	17740.00	7511.00				MinPt-CtCt	
	2519.12	461.92	2210.64	2057.20	8.20	OSF1.50	17840.00	7511.00				MinPts	
	2518.79	465.17	2208.15	2053.63	8.15	OSF1.50	17930.00	7511.00				MinPt-CtCt	
	2520.72	471.82	2205.64	2048.90	8.04	OSF1.50	18070.00	7511.00				MINPT-O-EOU	
	2520.72	471.83	2205.64	2048.89	8.04	OSF1.50	18070.10	7511.00				MinPts	

...Confluence 33-01N-65W (Freedom 33 Pad)\Buford 33-8-4L\Original Hole\Buford 33-8-4L R0 mdv 27Jul22