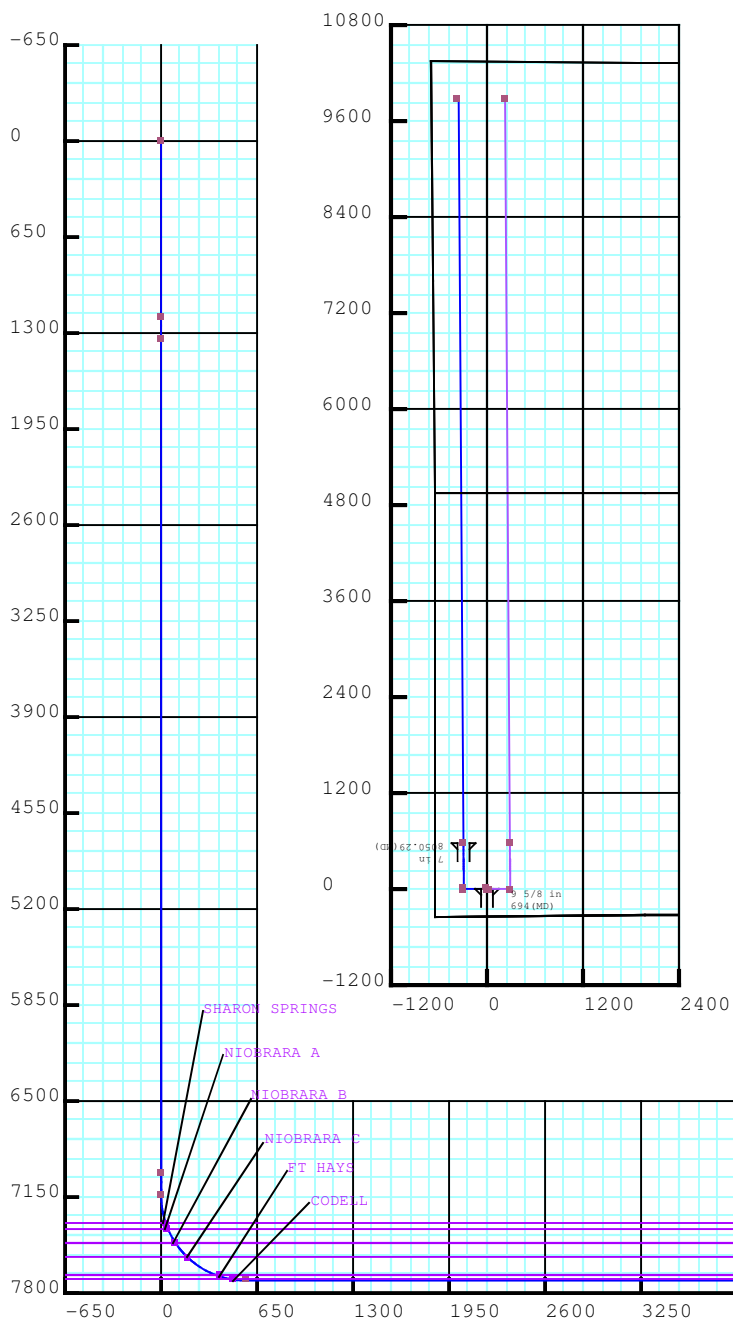


**5D Plan Report**

Anadarko Petroleum

Field Name: *WATTENBERG_ANADARKO_NAD 83*
Site Name: *NRC 13-9HZ PAD*
Well Name: *NRC 30C-4HZ*
Plan: *WP01 PERMIT*





TD-
~460' FNL, ~340' FWL

7 IN. CASING-
~923' FSL, ~337' FWL

Plan Data for NRC 30C-4HZ

Field: WATTENBERG_ANADARKO_NAD 83

Map Unit: USft

Vertical Reference Datum (VRD): Mean Sea Level

Projected Coordinate System: NAD83 / Colorado North (ftUS)

Slot: NRC 30C-4HZ

Position:

Offset is from Site centre

+N/-S: 0.00USft Northing: 1264984.56USft

Latitude: 40.059227°

+E/-W: 0.00USft Easting: 3167149.13USft

Longitude: -104.902843°

Elevation Above VRD: 5064.00USft

Plan Point Information:

DogLeg Severity Unit: °/100.00ft				Position offsets from Slot centre				
MD	Inc	Az	TVD	+N/-S	+E/-W	VSec	DLS	Toolface
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(DLSU)	(°)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0R
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	0.0R
1343.12	2.86	270.00	1343.06	0.00	-3.57	0.02	2.00	90.0L
7007.10	2.86	270.00	6999.98	-0.00	-286.43	1.85	0.00	0.0R
7150.23	0.00	0.00	7143.04	-0.00	-290.00	1.87	2.00	180.0R
8050.29	90.01	359.63	7716.00	573.01	-293.71	574.89	10.00	0.4L
17345.01	90.01	359.63	7715.00	9867.53	-353.95	9869.61	0.00	0.0R

Plan Data for NRC 30C-4HZ

Formation Point Information:

Name	TVD	Elevation	MD
	(USft)	(USft)	(USft)
FOX HILLS BASE	644.00	4437.00	644.00
SUSSEX	4730.00	351.00	4734.29
SHARON SPRINGS	7332.00	-2251.00	7342.79
NIOBRARA A	7367.00	-2286.00	7380.32
NIOBRARA B	7463.00	-2382.00	7489.70
NIOBRARA C	7560.00	-2479.00	7617.19
FT HAYS	7690.00	-2609.00	7876.97
CODELL	7711.00	-2630.00	7974.49

Plan Data for NRC 30C-4HZ

Casing Point Information:

Name	MD	TVD
	(USft)	(USft)
9 5/8 in	694.00	694.00
7 in	8050.29	7716.00

KOP- 7150.23' MD
LINER TOP- 7050.23' MD

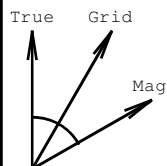
Plan Data for NRC 30C-4HZ

Target Set Information:

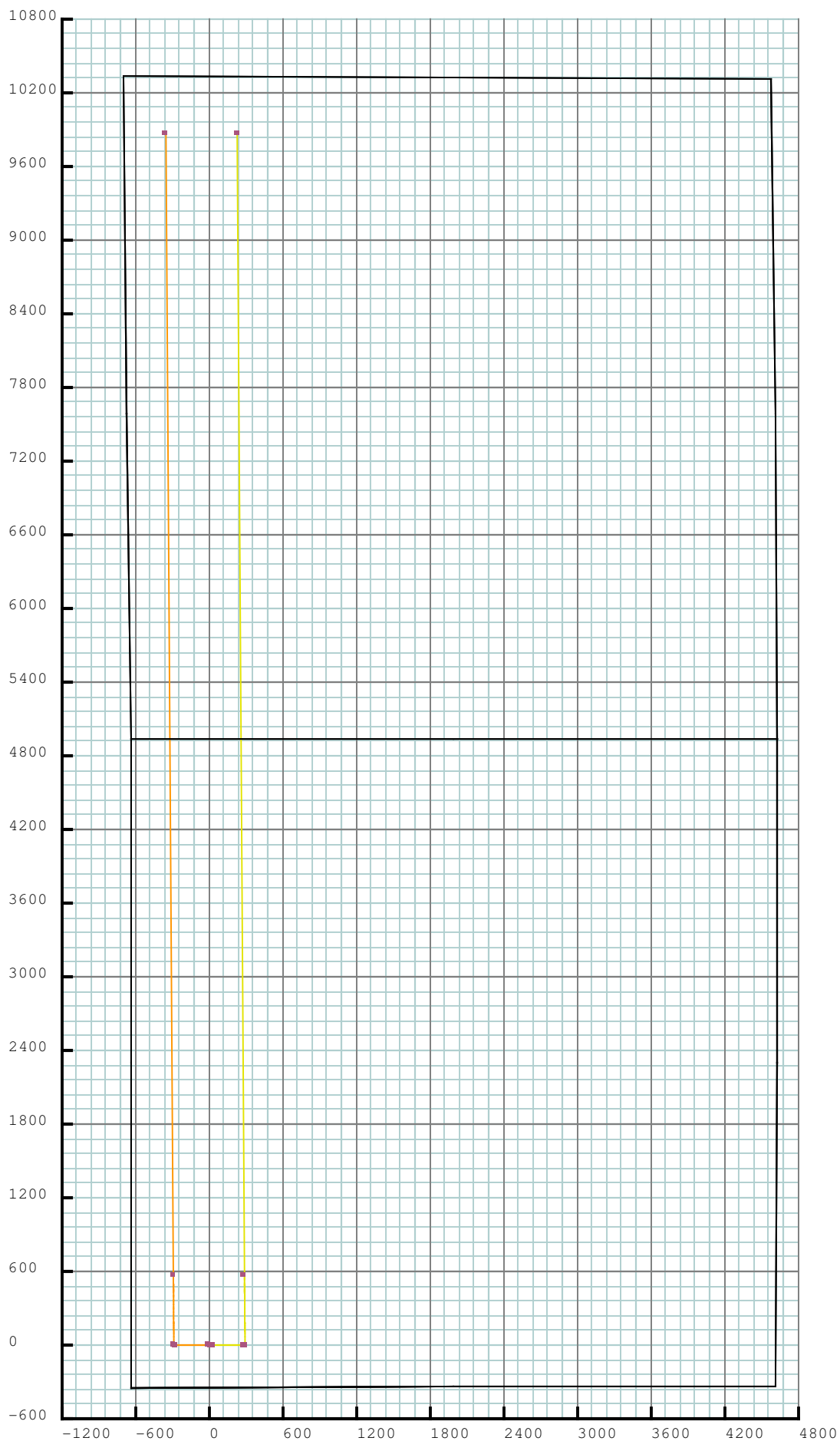
Name: 17

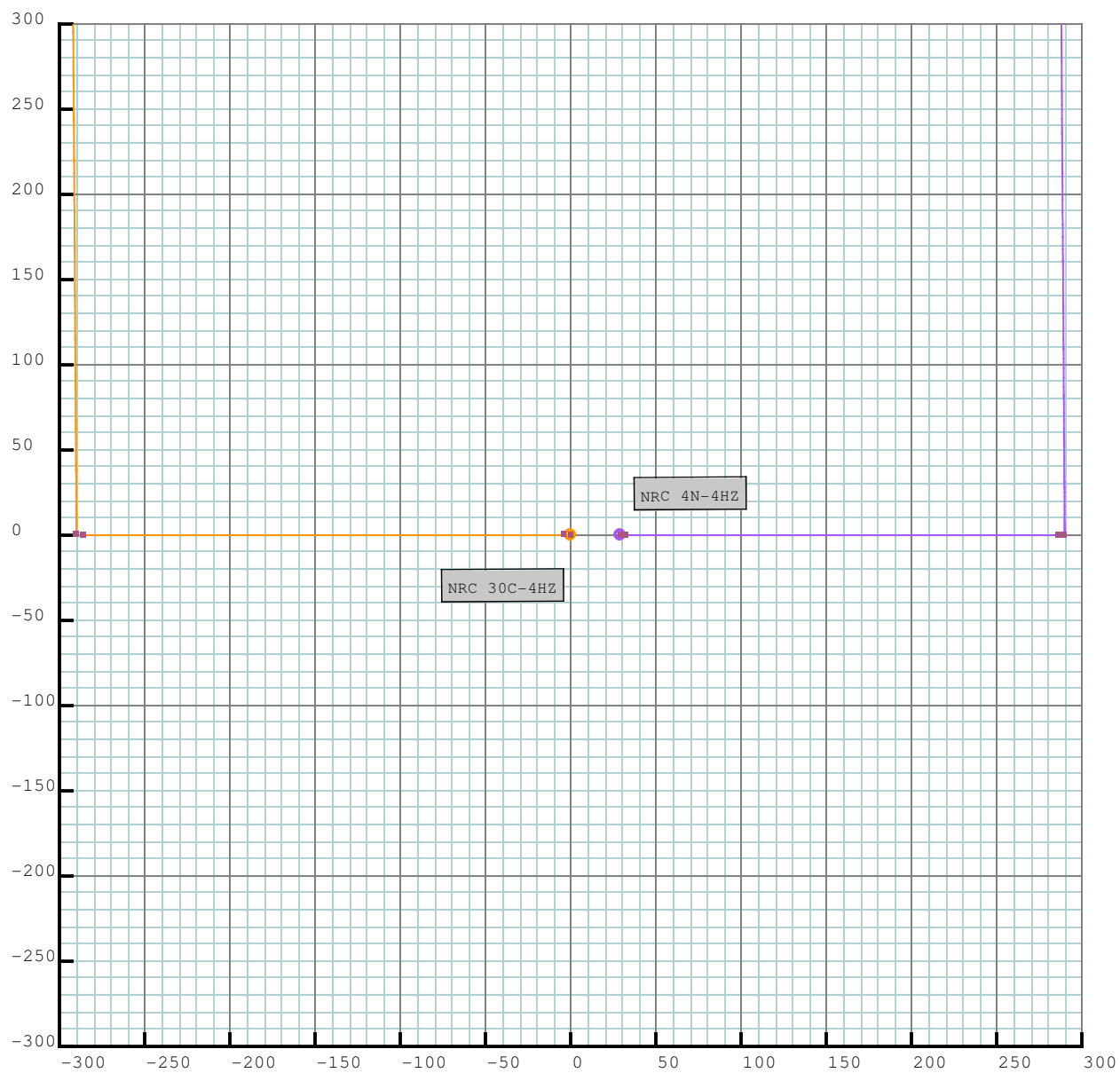
Name	TVD	Lat	Long	Shape
	(USft)	(°)	(°)	

PBHL 7715.00 40.086315 -104.904108 Cuboid



Grid Convergence: 0.39°
Mag Declination: 8.67°
Bearing:
True = Mag + 8.67°
Grid = True - 0.39°





Spider Plot - Top Site: NRC 13-9HZ PAD



Weatherford®



Plan Surveys for the NRC 30C-4HZ

Site Name NRC 13-9HZ PAD	Units : US ft	North Reference : True	Convergence Angle : 0.39		
	Position	Northing : 1264984.56 US ft	Latitude : 40.059227		
		Easting : 3167149.13 US ft	Longitude : -104.902843		
	Elevation above:5064.00 US ft				
Comment :					
Slot Name NRC 30C-4HZ	Position (Offsets relative to Site Centre)				
	+N / -S : 0.00 US ft	Northing :1264984.56 US ft	Latitude : 40.059227		
	+E / -W : 0.00 US ft	Easting :3167149.13 US ft	Longitude : -104.902843		
	Slot TVD Reference : Ground Elevation				
	Elevation above : 5064.00 US ft				
	Comment :				
Well Name NRC 30C-4HZ	Type : Main well		UWI :	Plan : WP01 PERMIT	
	Rig Height <i>Drill Floor</i> : 17.00 US ft		Comment :		
	Relative to : 5081.00 US ft				
	Closure Distance : 9873.88 US ft		Closure Azimuth : 357.946°		
	Vertical Section (Position of Origin Relative to Slot)				
	+N / -S : 0.00 US ft		+E / -W : 0.00 US ft	Az :359.63°	
	Magnetic Parameters				
Model : BGGM		Field Strength : 52684.0nT	Dec : 8.67°	Dip : 66.64°	Date : 22/May/2013

Target Set

Name : 17

Number of Targets : 1

Comment :

TargetName:	Position (Relative to centre)			
PBHL	+N / -S : 9867.53US ft		Northing : 1274849.48 US ft	
	+E / -W : -353.95 US ft		Easting : 3166728.74US ft	
Shape:	Longitude : -104°54'14.788800"			
Cuboid	TVD (Drill Floor) : 7715.00 US ft			
	Orientation	Azimuth : 0.00°	Inclination : 0.00°	
	Dimensions	Length : 1.00 US ft	Breadth : 1.00 US ft	Height : 1.00 US ft

Casing Points (Relative to centre, TVD relative to Drill Floor)								
Name	MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Latitude (°)	Longitude (°)
9 5/8 in	694.00	0.00	0.00	694.00	0.00	0.00	40.059227	-104.902843
7 in	8050.29	90.01	359.63	7716.00	573.01	-293.71	40.060800	-104.903892

Well path created using minimum curvature

Salient Points (Relative to centre, TVD relative to Drill Floor)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100 US ft)	T.Face (°)	VS (US ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	1264984.56	3167149.13	0.00	0.00	0.00	SURFACE
694.00	0.00	0.00	694.00	0.00	0.00	1264984.56	3167149.13	0.00	0.00	0.00	9 5/8 in
1200.00	0.00	0.00	1200.00	0.00	0.00	1264984.56	3167149.13	0.00	0.00	0.00	BEGIN NUDGE
1343.12	2.86	270.00	1343.06	0.00	-3.57	1264984.54	3167145.56	2.00	270.00	0.02	
7007.10	2.86	270.00	6999.98	-0.00	-286.43	1264982.63	3166862.71	0.00	0.00	1.85	
7150.23	0.00	0.00	7143.04	-0.00	-290.00	1264982.61	3166859.14	2.00	180.00	1.87	KOP
8050.29	90.01	359.63	7716.00	573.01	-293.71	1265555.58	3166851.56	10.00	359.63	574.89	7 in
17345.01	90.01	359.63	7715.00	9867.53	-353.95	1274849.48	3166728.74	0.00	0.00	9869.61	TD

Interpolated Points (Relative to centre, TVD relative to Drill Floor)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	DLS (°/100 US ft)	T.Face (°)	VS (US ft)	Comment		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SURFACE		
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00			
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00			
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00			

5D Plan Report

Interpolated Points (Relative to centre, TVD relative to Drill Floor)									
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	DLS (°/100 US ft)	T.Face (°)	VS (US ft)	Comment
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	0.00	BEGIN NUDGE
1300.00	2.00	270.00	1299.98	0.00	-1.75	2.00	270.00	0.01	
1343.12	2.86	270.00	1343.06	0.00	-3.57	2.00	0.00	0.02	
1400.00	2.86	270.00	1399.87	0.00	-6.41	0.00	0.00	0.04	
1500.00	2.86	270.00	1499.74	0.00	-11.41	0.00	0.00	0.07	
1600.00	2.86	270.00	1599.62	-0.00	-16.40	0.00	0.00	0.11	
1700.00	2.86	270.00	1699.50	0.00	-21.40	0.00	0.00	0.14	
1800.00	2.86	270.00	1799.37	-0.00	-26.39	0.00	0.00	0.17	
1900.00	2.86	270.00	1899.25	0.00	-31.38	0.00	0.00	0.20	
2000.00	2.86	270.00	1999.12	-0.00	-36.38	0.00	0.00	0.23	
2100.00	2.86	270.00	2099.00	0.00	-41.37	0.00	0.00	0.27	
2200.00	2.86	270.00	2198.87	-0.00	-46.37	0.00	0.00	0.30	
2300.00	2.86	270.00	2298.75	0.00	-51.36	0.00	0.00	0.33	
2400.00	2.86	270.00	2398.62	0.00	-56.35	0.00	0.00	0.36	
2500.00	2.86	270.00	2498.50	0.00	-61.35	0.00	0.00	0.40	
2600.00	2.86	270.00	2598.37	0.00	-66.34	0.00	0.00	0.43	
2700.00	2.86	270.00	2698.25	-0.00	-71.33	0.00	0.00	0.46	
2800.00	2.86	270.00	2798.12	0.00	-76.33	0.00	0.00	0.49	
2900.00	2.86	270.00	2898.00	-0.00	-81.32	0.00	0.00	0.53	
3000.00	2.86	270.00	2997.87	0.00	-86.32	0.00	0.00	0.56	
3100.00	2.86	270.00	3097.75	-0.00	-91.31	0.00	0.00	0.59	
3200.00	2.86	270.00	3197.62	0.00	-96.30	0.00	0.00	0.62	
3300.00	2.86	270.00	3297.50	-0.00	-101.30	0.00	0.00	0.65	
3400.00	2.86	270.00	3397.37	0.00	-106.29	0.00	0.00	0.69	
3500.00	2.86	270.00	3497.25	0.00	-111.29	0.00	0.00	0.72	
3600.00	2.86	270.00	3597.12	0.00	-116.28	0.00	0.00	0.75	
3700.00	2.86	270.00	3697.00	0.00	-121.27	0.00	0.00	0.78	
3800.00	2.86	270.00	3796.87	-0.00	-126.27	0.00	0.00	0.82	
3900.00	2.86	270.00	3896.75	0.00	-131.26	0.00	0.00	0.85	
4000.00	2.86	270.00	3996.63	-0.00	-136.26	0.00	0.00	0.88	
4100.00	2.86	270.00	4096.50	0.00	-141.25	0.00	0.00	0.91	
4200.00	2.86	270.00	4196.38	-0.00	-146.24	0.00	0.00	0.94	
4300.00	2.86	270.00	4296.25	0.00	-151.24	0.00	0.00	0.98	

5D Plan Report

Interpolated Points (Relative to centre, TVD relative to Drill Floor)									
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	DLS (°/100 US ft)	T.Face (°)	VS (US ft)	Comment
4400.00	2.86	270.00	4396.13	-0.00	-156.23	0.00	0.00	1.01	
4500.00	2.86	270.00	4496.00	0.00	-161.22	0.00	0.00	1.04	
4600.00	2.86	270.00	4595.88	0.00	-166.22	0.00	0.00	1.07	
4700.00	2.86	270.00	4695.75	0.00	-171.21	0.00	0.00	1.11	
4800.00	2.86	270.00	4795.63	0.00	-176.21	0.00	0.00	1.14	
4900.00	2.86	270.00	4895.50	-0.00	-181.20	0.00	0.00	1.17	
5000.00	2.86	270.00	4995.38	0.00	-186.19	0.00	0.00	1.20	
5100.00	2.86	270.00	5095.25	-0.00	-191.19	0.00	0.00	1.23	
5200.00	2.86	270.00	5195.13	0.00	-196.18	0.00	0.00	1.27	
5300.00	2.86	270.00	5295.00	-0.00	-201.18	0.00	0.00	1.30	
5400.00	2.86	270.00	5394.88	0.00	-206.17	0.00	0.00	1.33	
5500.00	2.86	270.00	5494.75	-0.00	-211.16	0.00	0.00	1.36	
5600.00	2.86	270.00	5594.63	0.00	-216.16	0.00	0.00	1.40	
5700.00	2.86	270.00	5694.50	-0.00	-221.15	0.00	0.00	1.43	
5800.00	2.86	270.00	5794.38	-0.00	-226.14	0.00	0.00	1.46	
5900.00	2.86	270.00	5894.25	0.00	-231.14	0.00	0.00	1.49	
6000.00	2.86	270.00	5994.13	-0.00	-236.13	0.00	0.00	1.52	
6100.00	2.86	270.00	6094.01	0.00	-241.13	0.00	0.00	1.56	
6200.00	2.86	270.00	6193.88	-0.00	-246.12	0.00	0.00	1.59	
6300.00	2.86	270.00	6293.76	0.00	-251.11	0.00	0.00	1.62	
6400.00	2.86	270.00	6393.63	-0.00	-256.11	0.00	0.00	1.65	
6500.00	2.86	270.00	6493.51	0.00	-261.10	0.00	0.00	1.69	
6600.00	2.86	270.00	6593.38	-0.00	-266.10	0.00	0.00	1.72	
6700.00	2.86	270.00	6693.26	0.00	-271.09	0.00	0.00	1.75	
6800.00	2.86	270.00	6793.13	-0.00	-276.08	0.00	0.00	1.78	
6900.00	2.86	270.00	6893.01	-0.00	-281.08	0.00	0.00	1.82	
7000.00	2.86	270.00	6992.88	0.00	-286.07	0.00	0.00	1.85	
7007.10	2.86	270.00	6999.98	-0.00	-286.43	0.00	0.00	1.85	
7100.00	1.00	270.00	7092.82	-0.00	-289.56	2.00	180.00	1.87	
7150.23	0.00	0.00	7143.04	-0.00	-290.00	2.00	180.00	1.87	KOP
7200.00	4.98	359.63	7192.75	2.16	-290.01	10.00	359.63	4.03	
7300.00	14.98	359.63	7291.11	19.46	-290.13	10.00	0.00	21.34	
7400.00	24.98	359.63	7384.98	53.59	-290.35	10.00	0.00	55.46	
7500.00	34.98	359.63	7471.49	103.49	-290.67	10.00	0.00	105.36	
7600.00	44.98	359.63	7548.02	167.65	-291.09	10.00	0.00	169.53	
7700.00	54.98	359.63	7612.25	244.13	-291.58	10.00	0.00	246.01	
7800.00	64.98	359.63	7662.22	330.60	-292.14	10.00	0.00	332.48	
7900.00	74.98	359.63	7696.42	424.44	-292.75	10.00	0.00	426.32	
8000.00	84.98	359.63	7713.80	522.79	-293.39	10.00	0.00	524.67	
8050.29	90.01	359.63	7716.00	573.01	-293.71	10.00	0.00	574.89	
8100.00	90.01	359.63	7715.99	622.72	-294.04	0.00	0.00	624.60	

5D Plan Report

Interpolated Points (Relative to centre, TVD relative to Drill Floor)									
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	DLS (°/100 US ft)	T.Face (°)	VS (US ft)	Comment
8200.00	90.01	359.63	7715.98	722.72	-294.68	0.00	0.00	724.60	
8300.00	90.01	359.63	7715.97	822.71	-295.33	0.00	0.00	824.60	
8400.00	90.01	359.63	7715.96	922.71	-295.98	0.00	0.00	924.60	
8500.00	90.01	359.63	7715.95	1022.71	-296.63	0.00	0.00	1024.60	
8600.00	90.01	359.63	7715.94	1122.71	-297.28	0.00	0.00	1124.60	
8700.00	90.01	359.63	7715.93	1222.71	-297.92	0.00	0.00	1224.60	
8800.00	90.01	359.63	7715.92	1322.70	-298.57	0.00	0.00	1324.60	
8900.00	90.01	359.63	7715.91	1422.70	-299.22	0.00	0.00	1424.60	
9000.00	90.01	359.63	7715.90	1522.70	-299.87	0.00	0.00	1524.60	
9100.00	90.01	359.63	7715.89	1622.70	-300.52	0.00	0.00	1624.60	
9200.00	90.01	359.63	7715.87	1722.70	-301.16	0.00	0.00	1724.60	
9300.00	90.01	359.63	7715.86	1822.69	-301.81	0.00	0.00	1824.60	
9400.00	90.01	359.63	7715.85	1922.69	-302.46	0.00	0.00	1924.60	
9500.00	90.01	359.63	7715.84	2022.69	-303.11	0.00	0.00	2024.60	
9600.00	90.01	359.63	7715.83	2122.69	-303.76	0.00	0.00	2124.60	
9700.00	90.01	359.63	7715.82	2222.69	-304.40	0.00	0.00	2224.60	
9800.00	90.01	359.63	7715.81	2322.68	-305.05	0.00	0.00	2324.60	
9900.00	90.01	359.63	7715.80	2422.68	-305.70	0.00	0.00	2424.60	
10000.00	90.01	359.63	7715.79	2522.68	-306.35	0.00	0.00	2524.60	
10100.00	90.01	359.63	7715.78	2622.68	-307.00	0.00	0.00	2624.60	
10200.00	90.01	359.63	7715.77	2722.67	-307.64	0.00	0.00	2724.60	
10300.00	90.01	359.63	7715.76	2822.67	-308.29	0.00	0.00	2824.60	
10400.00	90.01	359.63	7715.75	2922.67	-308.94	0.00	0.00	2924.60	
10500.00	90.01	359.63	7715.73	3022.67	-309.59	0.00	0.00	3024.60	
10600.00	90.01	359.63	7715.72	3122.67	-310.24	0.00	0.00	3124.60	
10700.00	90.01	359.63	7715.71	3222.66	-310.88	0.00	0.00	3224.60	
10800.00	90.01	359.63	7715.70	3322.66	-311.53	0.00	0.00	3324.60	
10900.00	90.01	359.63	7715.69	3422.66	-312.18	0.00	0.00	3424.60	
11000.00	90.01	359.63	7715.68	3522.66	-312.83	0.00	0.00	3524.60	
11100.00	90.01	359.63	7715.67	3622.66	-313.48	0.00	0.00	3624.60	
11200.00	90.01	359.63	7715.66	3722.65	-314.12	0.00	0.00	3724.60	
11300.00	90.01	359.63	7715.65	3822.65	-314.77	0.00	0.00	3824.60	
11400.00	90.01	359.63	7715.64	3922.65	-315.42	0.00	0.00	3924.60	
11500.00	90.01	359.63	7715.63	4022.65	-316.07	0.00	0.00	4024.60	
11600.00	90.01	359.63	7715.62	4122.65	-316.72	0.00	0.00	4124.60	
11700.00	90.01	359.63	7715.61	4222.64	-317.36	0.00	0.00	4224.60	
11800.00	90.01	359.63	7715.60	4322.64	-318.01	0.00	0.00	4324.60	
11900.00	90.01	359.63	7715.58	4422.64	-318.66	0.00	0.00	4424.60	
12000.00	90.01	359.63	7715.57	4522.64	-319.31	0.00	0.00	4524.60	
12100.00	90.01	359.63	7715.56	4622.63	-319.96	0.00	0.00	4624.60	
12200.00	90.01	359.63	7715.55	4722.63	-320.60	0.00	0.00	4724.60	

5D Plan Report

Interpolated Points (Relative to centre, TVD relative to Drill Floor)									
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	DLS (°/100 US ft)	T.Face (°)	VS (US ft)	Comment
12300.00	90.01	359.63	7715.54	4822.63	-321.25	0.00	0.00	4824.60	
12400.00	90.01	359.63	7715.53	4922.63	-321.90	0.00	0.00	4924.60	
12500.00	90.01	359.63	7715.52	5022.63	-322.55	0.00	0.00	5024.60	
12600.00	90.01	359.63	7715.51	5122.62	-323.20	0.00	0.00	5124.60	
12700.00	90.01	359.63	7715.50	5222.62	-323.84	0.00	0.00	5224.60	
12800.00	90.01	359.63	7715.49	5322.62	-324.49	0.00	0.00	5324.60	
12900.00	90.01	359.63	7715.48	5422.62	-325.14	0.00	0.00	5424.60	
13000.00	90.01	359.63	7715.47	5522.62	-325.79	0.00	0.00	5524.60	
13100.00	90.01	359.63	7715.46	5622.61	-326.44	0.00	0.00	5624.60	
13200.00	90.01	359.63	7715.44	5722.61	-327.08	0.00	0.00	5724.60	
13300.00	90.01	359.63	7715.43	5822.61	-327.73	0.00	0.00	5824.60	
13400.00	90.01	359.63	7715.42	5922.61	-328.38	0.00	0.00	5924.60	
13500.00	90.01	359.63	7715.41	6022.61	-329.03	0.00	0.00	6024.60	
13600.00	90.01	359.63	7715.40	6122.60	-329.68	0.00	0.00	6124.60	
13700.00	90.01	359.63	7715.39	6222.60	-330.33	0.00	0.00	6224.60	
13800.00	90.01	359.63	7715.38	6322.60	-330.97	0.00	0.00	6324.60	
13900.00	90.01	359.63	7715.37	6422.60	-331.62	0.00	0.00	6424.60	
14000.00	90.01	359.63	7715.36	6522.59	-332.27	0.00	0.00	6524.60	
14100.00	90.01	359.63	7715.35	6622.59	-332.92	0.00	0.00	6624.60	
14200.00	90.01	359.63	7715.34	6722.59	-333.57	0.00	0.00	6724.60	
14300.00	90.01	359.63	7715.33	6822.59	-334.21	0.00	0.00	6824.60	
14400.00	90.01	359.63	7715.32	6922.59	-334.86	0.00	0.00	6924.60	
14500.00	90.01	359.63	7715.31	7022.58	-335.51	0.00	0.00	7024.60	
14600.00	90.01	359.63	7715.29	7122.58	-336.16	0.00	0.00	7124.60	
14700.00	90.01	359.63	7715.28	7222.58	-336.81	0.00	0.00	7224.60	
14800.00	90.01	359.63	7715.27	7322.58	-337.45	0.00	0.00	7324.60	
14900.00	90.01	359.63	7715.26	7422.58	-338.10	0.00	0.00	7424.60	
15000.00	90.01	359.63	7715.25	7522.57	-338.75	0.00	0.00	7524.60	
15100.00	90.01	359.63	7715.24	7622.57	-339.40	0.00	0.00	7624.60	
15200.00	90.01	359.63	7715.23	7722.57	-340.05	0.00	0.00	7724.60	
15300.00	90.01	359.63	7715.22	7822.57	-340.69	0.00	0.00	7824.60	
15400.00	90.01	359.63	7715.21	7922.57	-341.34	0.00	0.00	7924.60	
15500.00	90.01	359.63	7715.20	8022.56	-341.99	0.00	0.00	8024.60	
15600.00	90.01	359.63	7715.19	8122.56	-342.64	0.00	0.00	8124.60	
15700.00	90.01	359.63	7715.18	8222.56	-343.29	0.00	0.00	8224.60	
15800.00	90.01	359.63	7715.17	8322.56	-343.93	0.00	0.00	8324.60	
15900.00	90.01	359.63	7715.16	8422.55	-344.58	0.00	0.00	8424.60	
16000.00	90.01	359.63	7715.14	8522.55	-345.23	0.00	0.00	8524.60	
16100.00	90.01	359.63	7715.13	8622.55	-345.88	0.00	0.00	8624.60	
16200.00	90.01	359.63	7715.12	8722.55	-346.53	0.00	0.00	8724.60	
16300.00	90.01	359.63	7715.11	8822.55	-347.17	0.00	0.00	8824.60	

5D Plan Report

Interpolated Points (Relative to centre, TVD relative to Drill Floor)									
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	DLS (°/100 US ft)	T.Face (°)	VS (US ft)	Comment
16400.00	90.01	359.63	7715.10	8922.54	-347.82	0.00	0.00	8924.60	
16500.00	90.01	359.63	7715.09	9022.54	-348.47	0.00	0.00	9024.60	
16600.00	90.01	359.63	7715.08	9122.54	-349.12	0.00	0.00	9124.60	
16700.00	90.01	359.63	7715.07	9222.54	-349.77	0.00	0.00	9224.60	
16800.00	90.01	359.63	7715.06	9322.54	-350.41	0.00	0.00	9324.60	
16900.00	90.01	359.63	7715.05	9422.53	-351.06	0.00	0.00	9424.60	
17000.00	90.01	359.63	7715.04	9522.53	-351.71	0.00	0.00	9524.60	
17100.00	90.01	359.63	7715.03	9622.53	-352.36	0.00	0.00	9624.60	
17200.00	90.01	359.63	7715.02	9722.53	-353.01	0.00	0.00	9724.60	
17300.00	90.01	359.63	7715.00	9822.53	-353.65	0.00	0.00	9824.60	
17345.01	90.01	359.63	7715.00	9867.53	-353.95	0.00	0.00	9869.61	TD

Formation Points (Relative to centre, TVD relative to Drill Floor)		
Name	MD (US ft)	TVD (US ft)
FOX HILLS BASE	644.00	644.00
SUSSEX	4734.29	4730.00
SHARON SPRINGS	7342.79	7332.00
NIOBRARA A	7380.32	7367.00
NIOBRARA B	7489.70	7463.00
NIOBRARA C	7617.19	7560.00
FT HAYS	7876.97	7690.00
CODELL	7974.49	7711.00