

**5D Plan Report****ANADARKO**

Field Name: *WATTENBURG_NAD83*
Site Name: *GEE 16N-25HZ PAD*
Well Name: *GEE 16N-25HZ*
Plan: *PLAN 1*





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Plan Data for GEE 16N-25HZ

Field: WATTENBURG_NAD83

Map Unit: USFt

Vertical Reference Datum (VRD): Mean Sea Level

Projected Coordinate System: NAD83 / Colorado North (ftUS)

Site: GEE 16N-25HZ PAD

Unit: USFeet

TVD Reference:

Company Name: ANADARKO

Position:

Northing: 1290305.10USft Latitude: 40.128353°

Easting: 3186621.41USft Longitude: -104.832598°

North Reference: True

Grid Convergence: 0.43°

Elevation Above VRD: 4858.00USft

Slot: GEE 16N-25HZ

Position:

Offset is from Site centre

+N/-S: 29.14USft Northing: 1290334.30USft Latitude: 40.128433°

+E/-W: 7.83USft Easting: 3186629.02USft Longitude: -104.832570°

Elevation Above VRD: 4858.00USft

Well: GEE 16N-25HZ

Type: Main-Well

File Number:

Vertical Section: Position offset of origin from Slot centre:

+N/-S: -29.14USft Azimuth: 180.08°

+E/-W: -7.83USft

Magnetic Parameters:

Model: Field Strength: Declination: Dip: Date:

BGGM 52735(nT) 8.63° 66.74° 2013-07-08

Plan Point Information:

DogLeg Severity Unit: °/100.00ft				Position offsets from Slot centre							
MD	Inc	Az	TVD	+N/-S	+E/-W	VSec	DLS	Toolface	Build	Turn	
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(DLSU)	(°)	(DLSU)	(DLSU)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	
3250.83	15.02	29.90	3242.26	84.81	48.77	-84.87	2.00	29.9	2.00	0.00	
5964.01	15.02	29.90	5862.79	694.20	399.23	-694.75	0.00	0.0	0.00	0.00	
6714.83	0.00	0.00	6605.05	779.00	448.00	-779.63	2.00	180.0	-2.00	0.00	
7611.31	89.65	180.08	7178.00	209.57	447.20	-210.20	10.00	180.1	10.00	0.00	
17516.35	89.65	180.08	7239.00	-9695.27	433.31	9694.65	0.00	0.0	0.00	0.00	

Target Set Information:

Name: GEE 16N

Name	TVD	Lat	Long
(USft)	(°)	(°)	(°)
PBHL 7239.00	40.101818	-104.831021	

Formation Point Information:

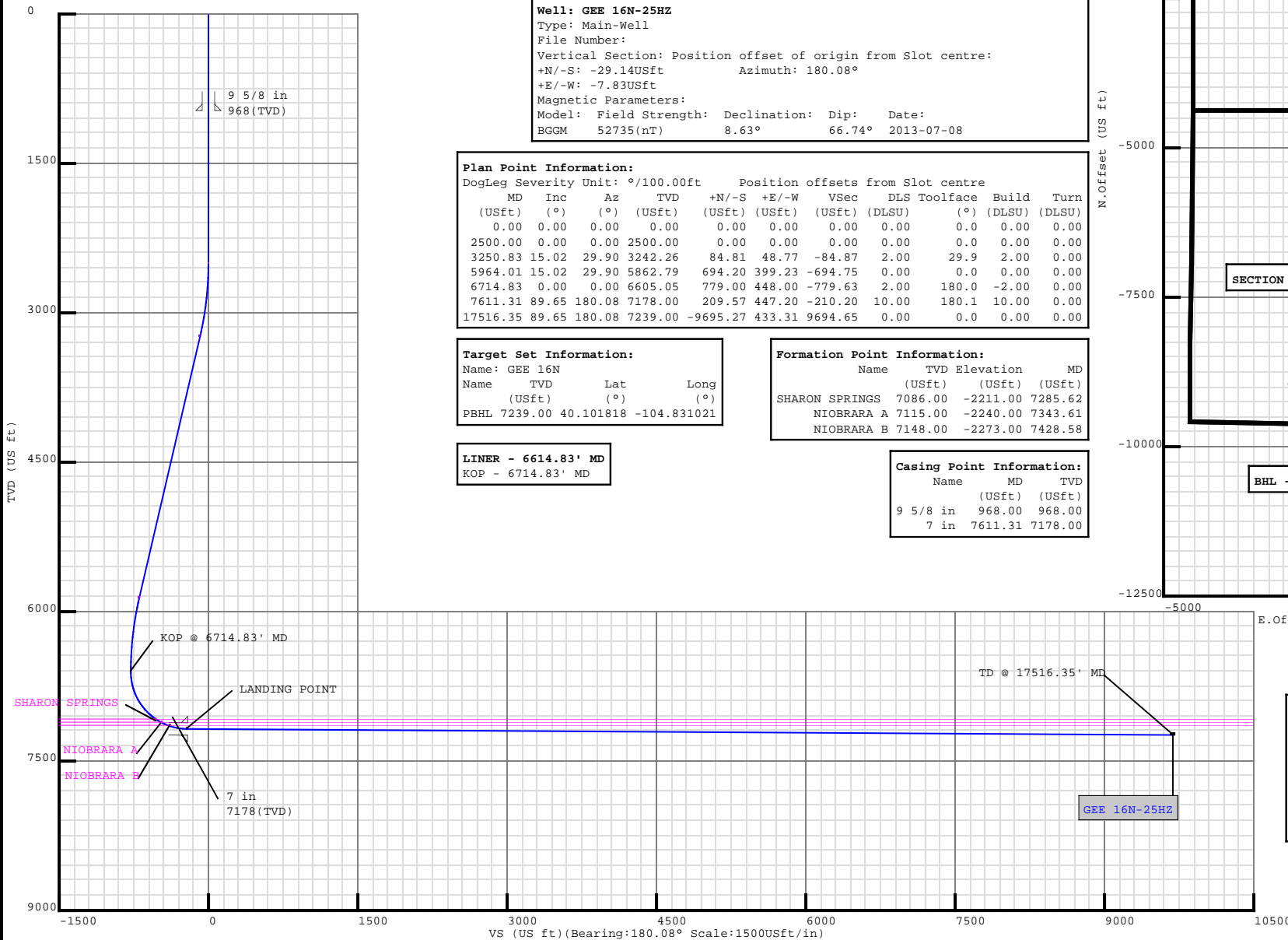
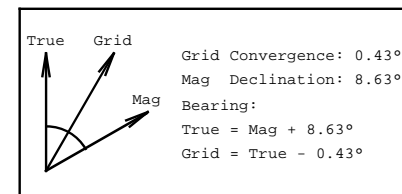
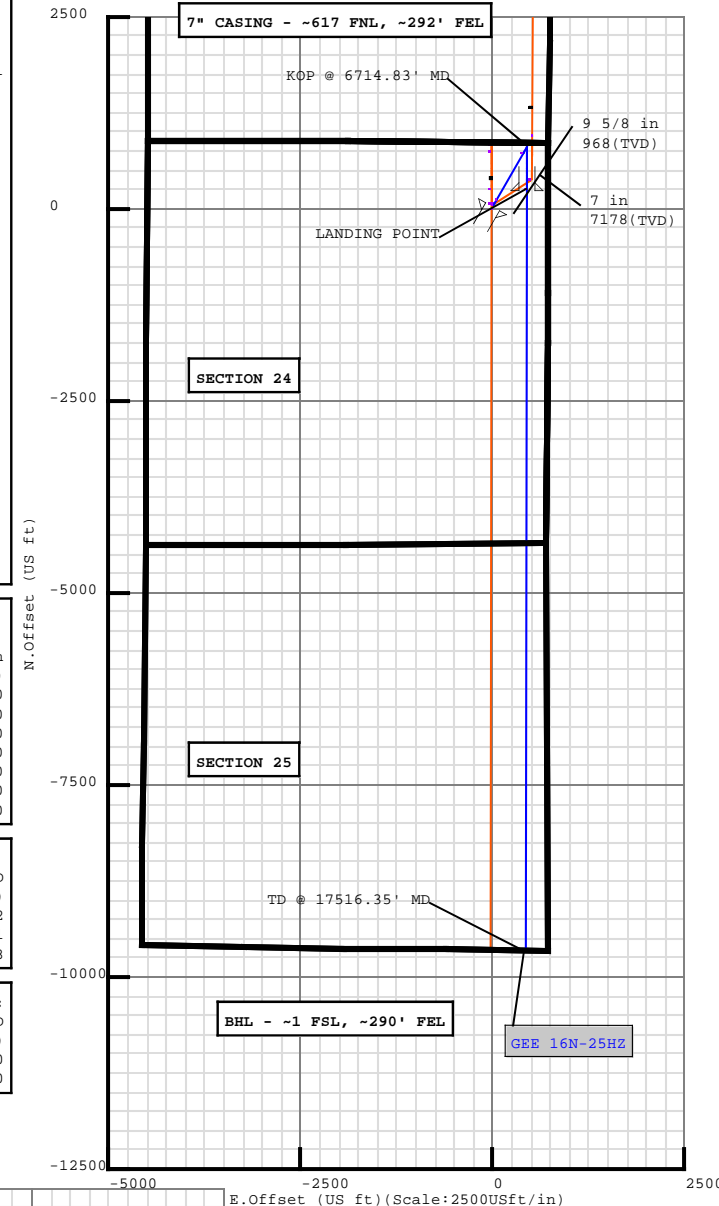
Name	TVD	Elevation	MD
(USft)	(USft)	(USft)	(USft)
SHARON SPRINGS	7086.00	-2211.00	7285.62
NIOBRARA A	7115.00	-2240.00	7343.61
NIOBRARA B	7148.00	-2273.00	7428.58

LINER - 6614.83' MD

KOP - 6714.83' MD

Casing Point Information:

Name	MD	TVD
(USft)	(USft)	(USft)
9 5/8 in	968.00	968.00
7 in	7611.31	7178.00



Plan Surveys for the GEE 16N-25HZ

Site Name GEE 16N-25HZ PAD	Units : US ft	North Reference : True	Convergence Angle : 0.43
	Position	Northing : 1290305.10 US ft	Latitude : 40.128353
		Easting : 3186621.41 US ft	Longitude : -104.832598
	Elevation above: 4858.00 US ft Comment :		
Slot Name GEE 16N-25HZ	Position (Offsets relative to Site Centre)		
	+N / -S : 29.14 US ft	Northing : 1290334.30 US ft	Latitude : 40.128433
	+E / -W : 7.83 US ft	Easting : 3186629.02 US ft	Longitude : -104.832570
	Slot TVD Reference : Ground Elevation Elevation above : 4858.00 US ft Comment :		
Well Name GEE 16N-25HZ	Type : Main well	UWI :	Plan : PLAN 1
	Rig Height <i>Drill Floor</i> : 17.00 US ft	Comment :	
	Relative to : 4875.00 US ft		
	Closure Distance : 9704.95 US ft	Closure Azimuth : 177.441°	
	Vertical Section (Position of Origin Relative to Slot)		
	+N / -S : -29.14 US ft	+E / -W : -7.83 US ft	Az : 180.08°
	Magnetic Parameters		
	Model : BGGM	Field Strength : 52735.5nT	Dec : 8.63°
			Dip : 66.74°
			Date : 08/Jul/2013

Target Set**Name :** GEE 16N**Number of Targets :** 1**Comment :**

TargetName:	Position (Relative to centre)			
PBHL	+N / -S : -9695.27US ft +E / -W : 433.31 US ft TVD (Drill Floor) : 7239.00 US ft			
Shape:	Northing : 1280642.57 US ft Easting : 3187135.29US ft Latitude : 40°6'6.544800" Longitude : -104°49'51.675600"			
Cuboid	Orientation Dimensions			
	Azimuth : 0.00°	Inclination : 0.00°		
	Length : 20.00 US ft	Breadth : 20.00 US ft	Height : 20.00 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	968.00	0.00	0.00	968.00	0.00	0.00	40.128433	-104.832570
7 in	7611.31	89.65	180.08	7178.00	209.57	447.20	40.129008	-104.830971

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)	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	-29.15	
968.00	0.00	0.00	968.00	0.00	0.00	0.00	0.00	-29.15	9 5/8 in
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	-29.15	
3250.83	15.02	29.90	3242.26	84.81	48.77	2.00	29.90	-114.02	
5964.01	15.02	29.90	5862.79	694.20	399.23	0.00	0.00	-723.90	
6714.83	0.00	0.00	6605.05	779.00	448.00	2.00	180.00	-808.78	KOP @ 6714.83' MD
7285.62	57.08	180.08	7086.00	517.44	447.63	10.00	180.08	-547.21	SHARON SPRINGS :
7343.61	62.88	180.08	7115.00	467.26	447.56	10.00	0.00	-497.03	NIOBRARA A :
7428.58	71.37	180.08	7148.00	389.04	447.45	10.00	0.00	-418.81	NIOBRARA B :
7611.31	89.65	180.08	7178.00	209.57	447.20	10.00	0.00	-239.35	LANDING POINT
7611.31	89.65	180.08	7178.00	209.57	447.20	0.00	0.00	-239.34	7 in
17516.35	89.65	180.08	7239.00	-9695.27	433.31	0.00	0.00	9665.50	TD @ 17516.35' MD

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-29.15	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	-29.15	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	-29.15	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	-29.15	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	-29.15	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	-29.15	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	-29.15	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	-29.15	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	-29.15	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	-29.15	
968.00	0.00	0.00	968.00	0.00	0.00	0.00	0.00	-29.15	9 5/8 in
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	-29.15	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	-29.15	
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	-29.15	
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	-29.15	
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	-29.15	
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	-29.15	
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	-29.15	
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	-29.15	
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	-29.15	
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	-29.15	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	-29.15	
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	-29.15	
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	-29.15	
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	-29.15	
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	-29.15	
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	-29.15	
2600.00	2.00	29.90	2599.98	1.51	0.87	2.00	29.90	-30.66	
2700.00	4.00	29.90	2699.84	6.05	3.48	2.00	0.00	-35.20	
2800.00	6.00	29.90	2799.45	13.60	7.82	2.00	0.00	-42.76	
2900.00	8.00	29.90	2898.70	24.17	13.90	2.00	0.00	-53.34	
3000.00	10.00	29.90	2997.47	37.73	21.70	2.00	0.00	-66.91	
3100.00	12.00	29.90	3095.62	54.27	31.21	2.00	0.00	-83.46	
3200.00	14.00	29.90	3193.06	73.77	42.42	2.00	0.00	-102.98	
3250.83	15.02	29.90	3242.26	84.81	48.77	2.00	0.00	-114.02	
3300.00	15.02	29.90	3289.75	95.85	55.12	0.00	0.00	-125.08	
3400.00	15.02	29.90	3386.34	118.31	68.04	0.00	0.00	-147.55	
3500.00	15.02	29.90	3482.92	140.77	80.96	0.00	0.00	-170.03	
3600.00	15.02	29.90	3579.51	163.23	93.87	0.00	0.00	-192.51	
3700.00	15.02	29.90	3676.10	185.69	106.79	0.00	0.00	-214.99	
3800.00	15.02	29.90	3772.68	208.15	119.71	0.00	0.00	-237.47	

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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
3900.00	15.02	29.90	3869.27	230.61	132.62	0.00	0.00	-259.95	
4000.00	15.02	29.90	3965.85	253.07	145.54	0.00	0.00	-282.42	
4100.00	15.02	29.90	4062.44	275.53	158.46	0.00	0.00	-304.90	
4200.00	15.02	29.90	4159.02	297.99	171.37	0.00	0.00	-327.38	
4300.00	15.02	29.90	4255.61	320.45	184.29	0.00	0.00	-349.86	
4400.00	15.02	29.90	4352.19	342.91	197.21	0.00	0.00	-372.34	
4500.00	15.02	29.90	4448.78	365.37	210.13	0.00	0.00	-394.82	
4600.00	15.02	29.90	4545.36	387.83	223.04	0.00	0.00	-417.30	
4700.00	15.02	29.90	4641.95	410.30	235.96	0.00	0.00	-439.77	
4800.00	15.02	29.90	4738.53	432.76	248.88	0.00	0.00	-462.25	
4900.00	15.02	29.90	4835.12	455.22	261.79	0.00	0.00	-484.73	
5000.00	15.02	29.90	4931.70	477.68	274.71	0.00	0.00	-507.21	
5100.00	15.02	29.90	5028.29	500.14	287.63	0.00	0.00	-529.69	
5200.00	15.02	29.90	5124.87	522.60	300.54	0.00	0.00	-552.17	
5300.00	15.02	29.90	5221.46	545.06	313.46	0.00	0.00	-574.64	
5400.00	15.02	29.90	5318.04	567.52	326.38	0.00	0.00	-597.12	
5500.00	15.02	29.90	5414.63	589.98	339.29	0.00	0.00	-619.60	
5600.00	15.02	29.90	5511.21	612.44	352.21	0.00	0.00	-642.08	
5700.00	15.02	29.90	5607.80	634.90	365.13	0.00	0.00	-664.56	
5800.00	15.02	29.90	5704.38	657.36	378.05	0.00	0.00	-687.04	
5900.00	15.02	29.90	5800.97	679.82	390.96	0.00	0.00	-709.51	
5964.01	15.02	29.90	5862.79	694.20	399.23	0.00	0.00	-723.90	
6000.00	14.30	29.90	5897.61	702.09	403.77	2.00	180.00	-731.80	
6100.00	12.30	29.90	5994.92	722.03	415.24	2.00	180.00	-751.76	
6200.00	10.30	29.90	6092.98	739.01	425.00	2.00	180.00	-768.75	
6300.00	8.30	29.90	6191.66	753.01	433.05	2.00	180.00	-782.76	
6400.00	6.30	29.90	6290.85	764.02	439.39	2.00	180.00	-793.78	
6500.00	4.30	29.90	6390.42	772.02	443.99	2.00	180.00	-801.79	
6600.00	2.30	29.90	6490.25	777.01	446.85	2.00	180.00	-806.78	
6700.00	0.30	29.90	6590.22	778.97	447.98	2.00	180.00	-808.74	
6714.83	0.00	0.00	6605.05	779.00	448.00	2.00	180.00	-808.78	KOP @ 6714.83' MD
6800.00	8.52	180.08	6689.90	772.68	447.99	10.00	180.08	-802.46	
6900.00	18.52	180.08	6787.01	749.34	447.96	10.00	0.00	-779.11	
7000.00	28.52	180.08	6878.59	709.49	447.90	10.00	0.00	-739.26	
7100.00	38.52	180.08	6961.85	654.34	447.83	10.00	0.00	-684.12	
7200.00	48.52	180.08	7034.28	585.57	447.73	10.00	0.00	-615.35	
7285.62	57.08	180.08	7086.00	517.44	447.63	10.00	0.00	-547.21	SHARON SPRINGS :
7300.00	58.52	180.08	7093.66	505.27	447.62	10.00	0.00	-535.05	
7343.61	62.88	180.08	7115.00	467.26	447.56	10.00	0.00	-497.03	NIOBRARA A :
7400.00	68.52	180.08	7138.20	415.88	447.49	10.00	0.00	-445.65	
7428.58	71.37	180.08	7148.00	389.04	447.45	10.00	0.00	-418.81	NIOBRARA B :

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
7500.00	78.52	180.08	7166.54	320.11	447.36	10.00	0.00	-349.89	LANDING POINT 7 in
7600.00	88.52	180.08	7177.82	220.88	447.22	10.00	0.00	-250.65	
7611.31	89.65	180.08	7178.00	209.57	447.20	10.00	0.00	-239.35	
7611.31	89.65	180.08	7178.00	209.57	447.20	0.00	0.00	-239.34	
7700.00	89.65	180.08	7178.54	120.88	447.08	0.00	0.00	-150.65	
7800.00	89.65	180.08	7179.16	20.88	446.94	0.00	0.00	-50.66	
7900.00	89.65	180.08	7179.78	-79.11	446.80	0.00	0.00	49.34	
8000.00	89.65	180.08	7180.39	-179.11	446.66	0.00	0.00	149.34	
8100.00	89.65	180.08	7181.01	-279.11	446.52	0.00	0.00	249.34	
8200.00	89.65	180.08	7181.62	-379.11	446.38	0.00	0.00	349.34	
8300.00	89.65	180.08	7182.24	-479.11	446.24	0.00	0.00	449.33	
8400.00	89.65	180.08	7182.85	-579.11	446.10	0.00	0.00	549.33	
8500.00	89.65	180.08	7183.47	-679.10	445.96	0.00	0.00	649.33	
8600.00	89.65	180.08	7184.09	-779.10	445.82	0.00	0.00	749.33	
8700.00	89.65	180.08	7184.70	-879.10	445.68	0.00	0.00	849.33	
8800.00	89.65	180.08	7185.32	-979.10	445.54	0.00	0.00	949.32	
8900.00	89.65	180.08	7185.93	-1079.10	445.40	0.00	0.00	1049.32	
9000.00	89.65	180.08	7186.55	-1179.09	445.25	0.00	0.00	1149.32	
9100.00	89.65	180.08	7187.17	-1279.09	445.11	0.00	0.00	1249.32	
9200.00	89.65	180.08	7187.78	-1379.09	444.97	0.00	0.00	1349.32	
9300.00	89.65	180.08	7188.40	-1479.09	444.83	0.00	0.00	1449.32	
9400.00	89.65	180.08	7189.01	-1579.09	444.69	0.00	0.00	1549.31	
9500.00	89.65	180.08	7189.63	-1679.08	444.55	0.00	0.00	1649.31	
9600.00	89.65	180.08	7190.25	-1779.08	444.41	0.00	0.00	1749.31	
9700.00	89.65	180.08	7190.86	-1879.08	444.27	0.00	0.00	1849.31	
9800.00	89.65	180.08	7191.48	-1979.08	444.13	0.00	0.00	1949.31	
9900.00	89.65	180.08	7192.09	-2079.08	443.99	0.00	0.00	2049.30	
10000.00	89.65	180.08	7192.71	-2179.07	443.85	0.00	0.00	2149.30	
10100.00	89.65	180.08	7193.33	-2279.07	443.71	0.00	0.00	2249.30	
10200.00	89.65	180.08	7193.94	-2379.07	443.57	0.00	0.00	2349.30	
10300.00	89.65	180.08	7194.56	-2479.07	443.43	0.00	0.00	2449.30	
10400.00	89.65	180.08	7195.17	-2579.07	443.29	0.00	0.00	2549.29	
10500.00	89.65	180.08	7195.79	-2679.06	443.15	0.00	0.00	2649.29	
10600.00	89.65	180.08	7196.40	-2779.06	443.01	0.00	0.00	2749.29	
10700.00	89.65	180.08	7197.02	-2879.06	442.87	0.00	0.00	2849.29	
10800.00	89.65	180.08	7197.64	-2979.06	442.73	0.00	0.00	2949.29	
10900.00	89.65	180.08	7198.25	-3079.06	442.59	0.00	0.00	3049.29	
11000.00	89.65	180.08	7198.87	-3179.05	442.45	0.00	0.00	3149.28	
11100.00	89.65	180.08	7199.48	-3279.05	442.31	0.00	0.00	3249.28	
11200.00	89.65	180.08	7200.10	-3379.05	442.17	0.00	0.00	3349.28	
11300.00	89.65	180.08	7200.72	-3479.05	442.03	0.00	0.00	3449.28	

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
11400.00	89.65	180.08	7201.33	-3579.05	441.89	0.00	0.00	3549.28	
11500.00	89.65	180.08	7201.95	-3679.04	441.75	0.00	0.00	3649.27	
11600.00	89.65	180.08	7202.56	-3779.04	441.61	0.00	0.00	3749.27	
11700.00	89.65	180.08	7203.18	-3879.04	441.47	0.00	0.00	3849.27	
11800.00	89.65	180.08	7203.80	-3979.04	441.33	0.00	0.00	3949.27	
11900.00	89.65	180.08	7204.41	-4079.04	441.19	0.00	0.00	4049.27	
12000.00	89.65	180.08	7205.03	-4179.03	441.05	0.00	0.00	4149.26	
12100.00	89.65	180.08	7205.64	-4279.03	440.91	0.00	0.00	4249.26	
12200.00	89.65	180.08	7206.26	-4379.03	440.77	0.00	0.00	4349.26	
12300.00	89.65	180.08	7206.88	-4479.03	440.63	0.00	0.00	4449.26	
12400.00	89.65	180.08	7207.49	-4579.03	440.49	0.00	0.00	4549.26	
12500.00	89.65	180.08	7208.11	-4679.02	440.35	0.00	0.00	4649.25	
12600.00	89.65	180.08	7208.72	-4779.02	440.21	0.00	0.00	4749.25	
12700.00	89.65	180.08	7209.34	-4879.02	440.07	0.00	0.00	4849.25	
12800.00	89.65	180.08	7209.95	-4979.02	439.93	0.00	0.00	4949.25	
12900.00	89.65	180.08	7210.57	-5079.02	439.78	0.00	0.00	5049.25	
13000.00	89.65	180.08	7211.19	-5179.01	439.64	0.00	0.00	5149.25	
13100.00	89.65	180.08	7211.80	-5279.01	439.50	0.00	0.00	5249.24	
13200.00	89.65	180.08	7212.42	-5379.01	439.36	0.00	0.00	5349.24	
13300.00	89.65	180.08	7213.03	-5479.01	439.22	0.00	0.00	5449.24	
13400.00	89.65	180.08	7213.65	-5579.01	439.08	0.00	0.00	5549.24	
13500.00	89.65	180.08	7214.27	-5679.00	438.94	0.00	0.00	5649.24	
13600.00	89.65	180.08	7214.88	-5779.00	438.80	0.00	0.00	5749.23	
13700.00	89.65	180.08	7215.50	-5879.00	438.66	0.00	0.00	5849.23	
13800.00	89.65	180.08	7216.11	-5979.00	438.52	0.00	0.00	5949.23	
13900.00	89.65	180.08	7216.73	-6079.00	438.38	0.00	0.00	6049.23	
14000.00	89.65	180.08	7217.35	-6178.99	438.24	0.00	0.00	6149.23	
14100.00	89.65	180.08	7217.96	-6278.99	438.10	0.00	0.00	6249.22	
14200.00	89.65	180.08	7218.58	-6378.99	437.96	0.00	0.00	6349.22	
14300.00	89.65	180.08	7219.19	-6478.99	437.82	0.00	0.00	6449.22	
14400.00	89.65	180.08	7219.81	-6578.99	437.68	0.00	0.00	6549.22	
14500.00	89.65	180.08	7220.43	-6678.98	437.54	0.00	0.00	6649.22	
14600.00	89.65	180.08	7221.04	-6778.98	437.40	0.00	0.00	6749.21	
14700.00	89.65	180.08	7221.66	-6878.98	437.26	0.00	0.00	6849.21	
14800.00	89.65	180.08	7222.27	-6978.98	437.12	0.00	0.00	6949.21	
14900.00	89.65	180.08	7222.89	-7078.98	436.98	0.00	0.00	7049.21	
15000.00	89.65	180.08	7223.50	-7178.97	436.84	0.00	0.00	7149.21	
15100.00	89.65	180.08	7224.12	-7278.97	436.70	0.00	0.00	7249.21	
15200.00	89.65	180.08	7224.74	-7378.97	436.56	0.00	0.00	7349.20	
15300.00	89.65	180.08	7225.35	-7478.97	436.42	0.00	0.00	7449.20	
15400.00	89.65	180.08	7225.97	-7578.97	436.28	0.00	0.00	7549.20	

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
15500.00	89.65	180.08	7226.58	-7678.96	436.14	0.00	0.00	7649.20	
15600.00	89.65	180.08	7227.20	-7778.96	436.00	0.00	0.00	7749.20	
15700.00	89.65	180.08	7227.82	-7878.96	435.86	0.00	0.00	7849.19	
15800.00	89.65	180.08	7228.43	-7978.96	435.72	0.00	0.00	7949.19	
15900.00	89.65	180.08	7229.05	-8078.96	435.58	0.00	0.00	8049.19	
16000.00	89.65	180.08	7229.66	-8178.95	435.44	0.00	0.00	8149.19	
16100.00	89.65	180.08	7230.28	-8278.95	435.30	0.00	0.00	8249.19	
16200.00	89.65	180.08	7230.90	-8378.95	435.16	0.00	0.00	8349.18	
16300.00	89.65	180.08	7231.51	-8478.95	435.02	0.00	0.00	8449.18	
16400.00	89.65	180.08	7232.13	-8578.95	434.88	0.00	0.00	8549.18	
16500.00	89.65	180.08	7232.74	-8678.94	434.74	0.00	0.00	8649.18	
16600.00	89.65	180.08	7233.36	-8778.94	434.60	0.00	0.00	8749.18	
16700.00	89.65	180.08	7233.98	-8878.94	434.46	0.00	0.00	8849.18	
16800.00	89.65	180.08	7234.59	-8978.94	434.32	0.00	0.00	8949.17	
16900.00	89.65	180.08	7235.21	-9078.94	434.17	0.00	0.00	9049.17	
17000.00	89.65	180.08	7235.82	-9178.93	434.03	0.00	0.00	9149.17	
17100.00	89.65	180.08	7236.44	-9278.93	433.89	0.00	0.00	9249.17	
17200.00	89.65	180.08	7237.06	-9378.93	433.75	0.00	0.00	9349.17	
17300.00	89.65	180.08	7237.67	-9478.93	433.61	0.00	0.00	9449.16	
17400.00	89.65	180.08	7238.29	-9578.93	433.47	0.00	0.00	9549.16	
17500.00	89.65	180.08	7238.90	-9678.92	433.33	0.00	0.00	9649.16	
17516.35	89.65	180.08	7239.00	-9695.27	433.31	0.00	0.00	9665.50	TD @ 17516.35' MD

Formation Points (Relative to centre, TVD relative to Drill Floor)			
Name	MD (US ft)	TVD (US ft)	
SHARON SPRINGS	7285.62	7086.00	
NIOBRARA A	7343.61	7115.00	
NIOBRARA B	7428.58	7148.00	