

Plan Data for CANNON 35C-10HZ

Field: **WATTENBERG_ANADARKO_NAD 83**

Map Unit: USFT Vertical Reference Datum (VRD): Mean Sea Level
Projected Coordinate System: NAD83 / Colorado North (ftUS)

Slot: CANNON 35C-10HZ

Position:
Offset is from Site centre
+N/-S: -61.93USft Northing: 1301508.24USft Latitude: 40.158719°
+E/-W: 102.58USft Easting: 3204502.84USft Longitude: -104.768322°
Elevation Above VRD: 4949.00USft

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)	(°)
916.00	0.11	217.94	915.99	1.37	-1.07	-1.42	0.40	174.7R
1100.00	0.11	217.94	1099.99	1.09	-1.29	-1.15	0.00	0.0R
1604.30	10.00	0.25	1601.76	44.60	-1.39	-44.61	2.00	142.7R
3176.01	10.00	0.25	3149.59	317.49	-0.19	-317.11	0.00	0.0R
3675.95	0.00	0.00	3647.00	361.00	-0.00	-360.56	2.00	180.0R
6884.01	0.00	0.00	6855.06	361.00	-0.00	-360.56	0.00	0.0R
7783.18	89.92	179.75	7428.00	-211.13	2.49	211.00	10.00	179.7R
8700.00	89.92	179.75	7429.28	-1127.95	6.49	1126.88	0.00	0.0R
9383.60	90.24	169.50	7428.32	-1807.64	70.44	1808.90	1.50	88.2L
9747.43	90.24	169.50	7426.79	-2165.37	136.73	2169.49	0.00	0.0R
10431.03	89.92	179.75	7425.84	-2845.06	200.68	2851.51	1.50	91.8R
11981.03	89.92	179.75	7428.00	-4395.04	207.44	4399.92	0.00	0.0R

Plan Data for CANNON 35C-10HZ

Formation Point Information:

Name	TVD	Elevation	MD
(USft)	(USft)	(USft)	(USft)
PARKMAN	3988.00	977.00	4016.95
SUSSEX	4395.00	570.00	4423.95
SHARON SPRINGS	7144.00	-2179.00	7186.85
NIOBRARA A	7240.00	-2275.00	7306.11
NIOBRARA B	7307.00	-2342.00	7404.73
NIOBRARA C	7309.00	-2344.00	7408.00
CODELL	7398.00	-2433.00	7597.75

Survey Data for CANNON 35C-10HZ

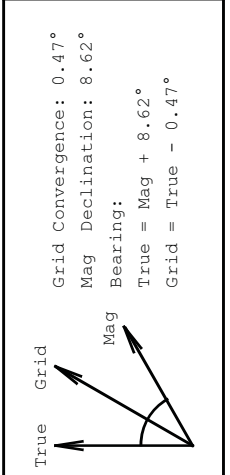
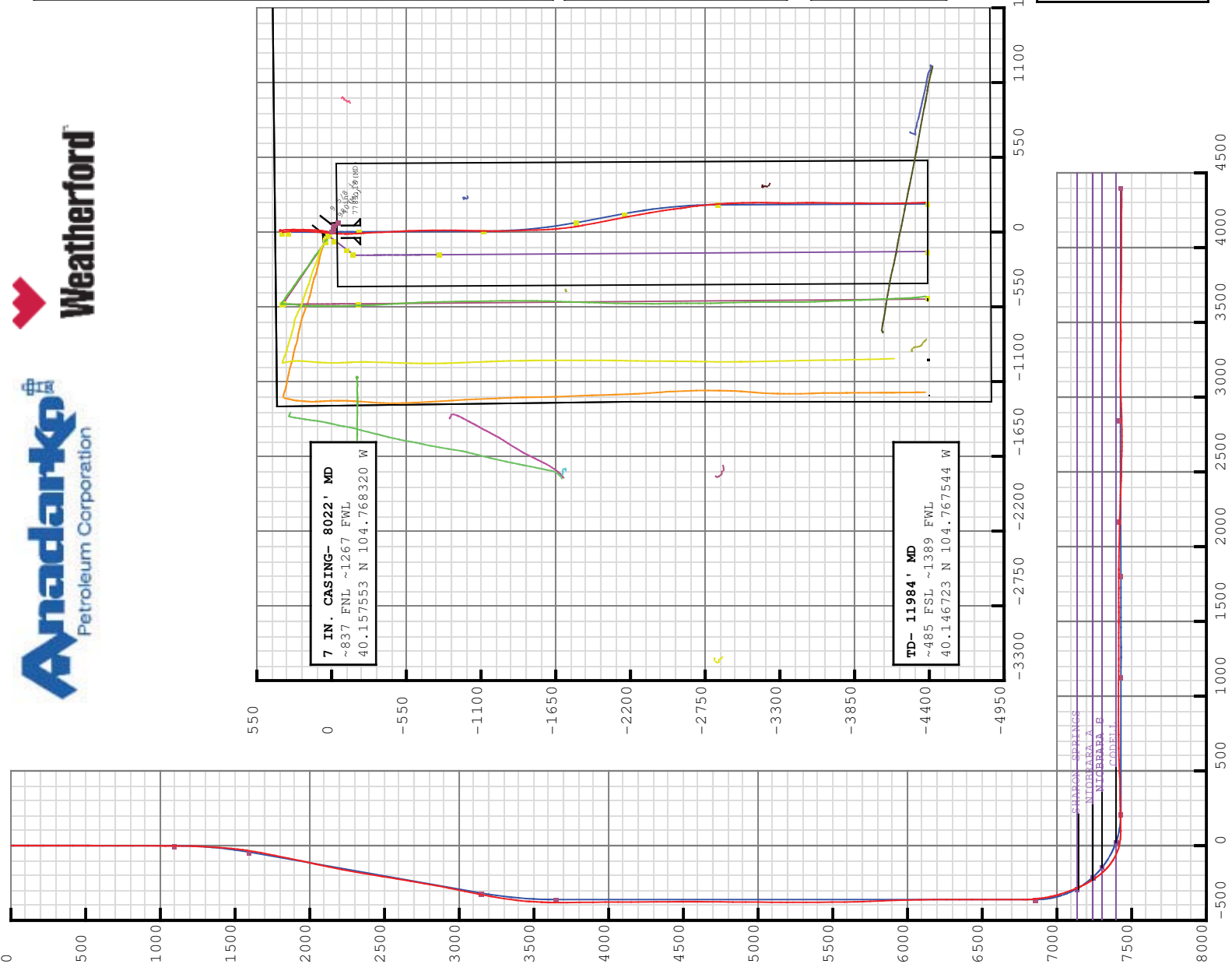
Casing Point Information:

Name	MD	TVD
(USft)	(USft)	(USft)
7 in	8022.00	7421.54

Plan Data for CANNON 35C-10HZ

Target Set Information:

Name	TVD	Lat	Long	Shape
(USft)	(°)	(°)	(°)	
PBHL	7428.00	40.146654	-104.767580	Cuboid





5D Survey Report

Anadarko Petroleum

Field Name: WATTENBERG_ANADARKO_NAD 83
Site Name: CANNON 29-10HZ
Well Name: CANNON 35C-10HZ
Survey: Definitive Survey



Weatherford®



Surveys for the CANNON 35C-10HZ

Site Name CANNON 29-10HZ	Units : US ft	North Reference : True	Convergence Angle : 0.47
	Position	Northing : 1301569.32 US ft Easting : 3204399.75 US ft	Latitude : 40.158889 Longitude : -104.768689
Elevation above: 4949.00 US ft			
Comment :			

Slot Name CANNON 35C-10HZ	Position (Offsets relative to Site Centre)		
	+N / -S : -61.93 US ft +E / -W : 102.58 US ft	Northing : 1301508.24 US ft Easting : 3204502.84 US ft	Latitude : 40.158719 Longitude : -104.768322
Slot TVD Reference : Ground Elevation			
Elevation above : 4949.00 US ft			
Comment :			

Well Name CANNON 35C-10HZ	Type : Main well	UWI :
	Rig Height Drill Floor : 16.00 US ft Relative to : 4965.00 US ft	Comment :
	Closure Distance : 4375.41 US ft	Closure Azimuth : 177.152°
	Vertical Section (Position of Origin Relative to Slot)	+E / -W : 0.00 US ft +N / -S : 0.00 US ft Az : 177.16°

Target Set

Name : 35C **Number of Targets :** 1

Comment :

TargetName: PBHL	Position (Relative to centre) Latitude : 40°8'47.954400" Longitude : -104°46'3.288000"
Shape: Cuboid	Northing : 1297115.06 US ft Easting : 3204746.52US ft
	TVD (Drill Floor) : 7428.00 US ft
Orientation Dimensions	Azimuth : 0.00° Length : 1.00 US ft
	Inclination : 0.00° Breadth : 1.00 US ft
	Height : 1.00 US ft

Survey Name : Definitive Survey

Date : 23/May/2013 **Survey Tool :** **Comment :** **Company :**

Magnetic Model

Model Name: Default **Date:** 04/Apr/2013 **Field Strength:** 50000.0 nT **Declination:** 0.00° **Dip:** 0.00°

Survey Tool Ranges

Name	Start MD (us ft)	End MD (us ft)	Source Survey
NSG Static GMS	0.00	916.00	GYROS
MWD	916.00	11984.00	WFT MWD

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)	Northing (US ft)	Easting (US ft)	Latitude (°)	Longitude (°)	VS (US ft)	Comment
7 in	8022.00	91.54	177.04	7421.54	-424.59	0.65	1301508.16	3204502.42	40.158719	-104.768320	-0.00	

Well path created using minimum curvature

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	Latitude (°)	Longitude (°)	VS (US ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	1301508.24	3204502.84	40.158719	-104.768322	-0.00	
16.00	0.00	0.00	16.00	0.00	0.00	1301508.24	3204502.84	40.158719	-104.768322	-0.00	
116.00	0.21	249.47	116.00	-0.06	-0.17	1301508.17	3204502.67	40.158719	-104.768323	0.06	
216.00	0.11	302.13	216.00	-0.08	-0.42	1301508.16	3204502.42	40.158719	-104.768324	0.06	
316.00	0.26	256.74	316.00	-0.08	-0.73	1301508.13	3204501.72	40.158719	-104.768325	0.04	
416.00	0.20	280.04	416.00	-0.10	-1.12	1301508.13	3204501.72	40.158719	-104.768326	0.04	
516.00	0.17	317.80	516.00	0.04	-1.39	1301508.27	3204501.45	40.158719	-104.768327	-0.11	
616.00	0.24	353.32	616.00	0.36	-1.51	1301508.59	3204501.32	40.158720	-104.768327	-0.43	

5D Survey Report

Survey 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)	Latitude (°)	Longitude (°)	VS (US ft)	Comment	
716.00	0.35	9.55	716.00	0.87	-1.49	1301509.10	3204501.34	40.158721	-104.768327	-0.94		
816.00	0.29	57.19	815.99	1.31	-1.23	1301509.54	3204501.60	40.158723	-104.768326	-1.36		
916.00	0.11	217.94	915.99	1.37	-1.07	1301509.60	3204501.76	40.158723	-104.768326	-1.42	TIE ON	
1033.00	0.38	325.18	1032.99	1.60	-1.36	1301509.83	3204501.46	40.158723	-104.768327	-1.66	FIRST MWD SURVEY	
1123.00	0.10	99.46	1122.99	1.83	-1.46	1301510.06	3204501.37	40.158724	-104.768327	-1.90		
1214.00	1.69	342.44	1213.98	3.10	-1.78	1301511.32	3204501.03	40.158727	-104.768328	-3.18		
1305.00	3.47	346.44	1304.88	7.05	-2.83	1301515.27	3204499.95	40.158738	-104.768332	-7.18		
1395.00	3.57	14.30	1394.72	12.42	-2.78	1301520.63	3204499.96	40.158753	-104.768332	-12.54		
1491.00	5.99	9.51	1490.38	20.25	-1.21	1301528.48	3204501.46	40.158775	-104.768326	-20.29		
1584.00	9.03	13.08	1582.57	32.15	1.24	1301540.40	3204503.82	40.158807	-104.768318	-32.05		
1677.00	10.78	12.19	1674.18	47.76	4.73	1301556.04	3204507.18	40.158850	-104.768305	-47.47		
1771.00	11.71	10.86	1766.38	65.72	8.38	1301574.03	3204510.68	40.158899	-104.768292	-65.23		
1863.00	11.80	7.24	1856.45	84.22	11.33	1301592.56	3204513.47	40.158950	-104.768281	-83.56		
1956.00	12.84	4.05	1947.31	103.97	13.26	1301612.31	3204515.24	40.159004	-104.768275	-103.18		
2049.00	12.24	2.70	2038.09	124.12	14.45	1301632.48	3204516.27	40.159060	-104.768270	-123.25		
2141.00	11.68	1.84	2128.09	143.17	15.21	1301651.53	3204516.87	40.159112	-104.768268	-142.24		
2233.00	10.92	1.90	2218.31	161.19	15.80	1301669.55	3204517.31	40.159161	-104.768265	-160.21		
2326.00	10.04	1.61	2309.75	178.10	16.32	1301686.46	3204517.69	40.159208	-104.768264	-177.07		
2418.00	9.71	2.76	2400.39	193.86	16.92	1301702.23	3204518.16	40.159251	-104.768261	-192.79		
2511.00	8.61	0.44	2492.20	208.66	17.35	1301717.03	3204518.47	40.159292	-104.768260	-207.54		
2603.00	9.44	357.65	2583.06	223.08	17.09	1301731.46	3204518.09	40.159331	-104.768261	-221.96		
2695.00	10.16	359.51	2673.72	238.73	16.71	1301747.10	3204517.58	40.159374	-104.768262	-237.61		
2789.00	9.43	2.53	2766.35	254.72	16.98	1301763.09	3204517.72	40.159418	-104.768261	-253.56		
2882.00	10.55	0.51	2857.94	270.84	17.39	1301779.22	3204518.00	40.159462	-104.768260	-269.65		
2974.00	11.78	359.51	2948.20	288.66	17.39	1301797.03	3204517.85	40.159511	-104.768260	-287.44		
3066.00	11.49	357.79	3038.31	307.20	16.95	1301815.57	3204517.26	40.159562	-104.768261	-305.99		
3159.00	11.13	359.20	3129.50	325.44	16.47	1301833.80	3204516.63	40.159612	-104.768263	-324.22		
3245.00	10.04	355.30	3214.04	341.21	15.74	1301849.57	3204515.77	40.159656	-104.768266	-340.01		
3330.00	8.67	350.27	3297.91	354.91	14.05	1301863.25	3204513.96	40.159693	-104.768272	-353.77		
3415.00	6.89	343.37	3382.12	366.11	11.51	1301874.43	3204511.33	40.159724	-104.768281	-365.09		
3501.00	4.67	331.63	3467.68	374.13	8.37	1301882.43	3204508.12	40.159746	-104.768292	-373.26		
3586.00	2.95	325.19	3552.49	378.97	5.48	1301887.25	3204505.19	40.159759	-104.768302	-378.24		
3671.00	1.38	308.48	3637.43	381.41	3.43	1301889.66	3204503.12	40.159766	-104.768310	-380.77		
3757.00	0.85	163.75	3723.42	381.44	2.79	1301889.69	3204502.49	40.159766	-104.768312	-380.83		
3842.00	0.80	140.32	3808.41	380.38	3.35	1301888.63	3204503.05	40.159763	-104.768310	-379.74		
3928.00	0.78	131.62	3894.41	379.53	4.17	1301887.79	3204503.88	40.159761	-104.768307	-378.85		
4013.00	0.79	128.41	3979.40	378.78	5.06	1301887.05	3204504.78	40.159759	-104.768304	-378.06		
4098.00	0.94	95.22	4064.39	378.35	6.21	1301886.63	3204505.93	40.159758	-104.768300	-377.58		
4184.00	0.85	116.50	4150.38	378.00	7.49	1301886.29	3204507.21	40.159757	-104.768295	-377.17		
4354.00	0.95	112.31	4320.36	376.90	9.92	1301885.21	3204509.65	40.159754	-104.768286	-375.95		

5D Survey Report

Survey 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)	Latitude (°)	Longitude (°)	VS (US ft)	Comment	
4440.00	0.91	103.99	4406.35	376.47	11.24	1301884.79	3204510.98	40.159752	-104.768282	-375.45		
4525.00	1.05	102.35	4491.33	376.14	12.66	1301884.47	3204512.40	40.159752	-104.768277	-375.05		
4610.00	0.50	41.93	4576.33	376.25	13.67	1301884.59	3204513.40	40.159752	-104.768273	-375.11		
4696.00	0.44	35.94	4662.32	376.79	14.11	1301885.14	3204513.84	40.159753	-104.768271	-375.63		
4781.00	0.47	27.02	4747.32	377.37	14.46	1301885.71	3204514.19	40.159755	-104.768270	-376.19		
4866.00	0.58	18.73	4832.32	378.09	14.76	1301886.43	3204514.48	40.159757	-104.768269	-376.89		
4951.00	0.85	298.78	4917.31	378.80	14.34	1301887.14	3204514.06	40.159759	-104.768271	-377.62		
5037.00	1.19	274.92	5003.30	379.18	12.89	1301887.51	3204512.61	40.159760	-104.768276	-378.08		
5122.00	1.41	291.15	5088.28	379.63	11.04	1301887.95	3204510.75	40.159761	-104.768282	-378.62		
5186.00	1.44	293.87	5152.26	380.24	9.57	1301888.55	3204509.27	40.159763	-104.768288	-379.30		
5271.00	0.69	95.63	5237.25	380.63	9.10	1301888.93	3204508.80	40.159764	-104.768289	-379.71		
5357.00	0.64	79.65	5323.24	380.66	10.09	1301888.97	3204509.79	40.159764	-104.768286	-379.69		
5442.00	0.94	147.93	5408.24	380.16	10.93	1301888.47	3204510.63	40.159763	-104.768283	-379.15		
5528.00	0.84	130.87	5494.23	379.14	11.78	1301887.47	3204511.49	40.159760	-104.768280	-378.10		
5613.00	0.93	114.51	5579.22	378.45	12.88	1301886.78	3204512.60	40.159758	-104.768276	-377.35		
5699.00	1.89	154.19	5665.19	376.88	14.13	1301885.23	3204513.86	40.159754	-104.768271	-375.72		
5784.00	2.79	200.11	5750.13	373.68	14.03	1301882.02	3204513.79	40.159745	-104.768272	-372.53		
5870.00	2.48	201.30	5836.04	369.98	12.63	1301878.31	3204512.42	40.159735	-104.768277	-368.90		
5955.00	1.79	208.80	5920.98	367.10	11.33	1301875.43	3204511.14	40.159727	-104.768281	-366.09		
6040.00	1.77	198.16	6005.94	364.69	10.28	1301873.01	3204510.11	40.159720	-104.768285	-363.74		
6126.00	1.39	242.56	6091.91	362.95	8.94	1301871.25	3204508.78	40.159715	-104.768290	-362.06		
6211.00	1.16	251.58	6176.89	362.20	7.21	1301870.49	3204507.06	40.159713	-104.768296	-361.40		
6297.00	1.11	242.80	6262.87	361.55	5.64	1301869.82	3204505.50	40.159711	-104.768302	-360.82		
6382.00	0.92	282.44	6347.86	361.32	4.24	1301869.58	3204504.10	40.159711	-104.768307	-360.66		
6467.00	1.05	280.42	6432.84	361.61	2.81	1301869.86	3204502.67	40.159712	-104.768312	-361.02		
6553.00	0.95	286.54	6518.83	361.95	1.35	1301870.19	3204501.21	40.159713	-104.768317	-361.44		
6638.00	0.71	236.09	6603.82	361.86	0.24	1301870.09	3204500.09	40.159712	-104.768321	-361.40		
6724.00	0.60	265.49	6689.82	361.53	-0.65	1301869.75	3204499.21	40.159711	-104.768324	-361.11		
6809.00	0.41	210.39	6774.82	361.23	-1.25	1301869.45	3204498.61	40.159711	-104.768326	-360.85		
6894.00	6.28	172.60	6859.64	356.35	-0.81	1301864.57	3204499.10	40.159697	-104.768325	-355.95		
6980.00	10.24	170.82	6944.73	344.14	1.02	1301852.37	3204501.02	40.159664	-104.768318	-343.66		
7065.00	18.03	174.86	7027.09	323.54	3.41	1301831.80	3204503.58	40.159607	-104.768310	-322.98		
7150.00	20.31	177.10	7107.37	295.71	5.33	1301803.98	3204505.73	40.159531	-104.768303	-295.08		
7193.00	24.44	178.53	7147.13	279.35	5.94	1301787.63	3204506.48	40.159486	-104.768301	-278.72		
7236.00	28.06	178.10	7185.69	260.35	6.50	1301768.63	3204507.20	40.159434	-104.768299	-259.70		
7278.00	30.73	179.17	7222.28	239.74	6.99	1301748.03	3204507.85	40.159377	-104.768297	-239.10		
7320.00	33.97	179.87	7257.75	217.27	7.17	1301725.56	3204508.22	40.159315	-104.768296	-216.65		
7363.00	40.07	182.08	7292.07	191.40	6.69	1301699.69	3204507.95	40.159244	-104.768298	-190.83		
7406.00	45.19	184.38	7323.07	162.34	5.02	1301670.62	3204506.53	40.159165	-104.768304	-161.89		
7449.00	51.56	185.55	7352.25	130.34	2.23	1301638.59	3204503.99	40.159077	-104.768314	-130.07		
7491.00	58.49	184.70	7376.31	96.08	-0.83	1301604.31	3204501.21	40.158983	-104.768325	-96.00		

5D Survey Report

Survey 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)	Latitude (°)	Longitude (°)	VS (US ft)	Comment	
7534.00	65.53	184.11	7396.48	58.24	-3.74	1301566.45	3204498.62	40.158879	-104.768335	-58.36		
7576.00	72.51	184.55	7411.51	19.17	-6.70	1301527.35	3204495.98	40.158772	-104.768346	-19.47		
7619.00	80.08	183.91	7421.69	-22.47	-9.78	1301485.69	3204493.25	40.158657	-104.768357	21.95		
7662.00	86.64	183.25	7426.66	-65.07	-12.44	1301443.07	3204490.93	40.158540	-104.768367	64.37		
7704.00	90.49	180.24	7427.71	-107.03	-13.72	1301401.10	3204490.00	40.158425	-104.768371	106.21		
7747.00	91.61	177.96	7426.92	-150.01	-13.05	1301358.13	3204491.03	40.158307	-104.768369	149.18		
7789.00	91.61	176.66	7425.74	-191.95	-11.08	1301316.21	3204493.35	40.158192	-104.768362	191.16		
7832.00	91.54	175.76	7424.56	-234.84	-8.23	1301273.35	3204496.54	40.158074	-104.768351	234.14		
7883.00	91.05	177.20	7423.40	-285.72	-5.10	1301222.48	3204500.09	40.157935	-104.768340	285.12		
7917.00	90.63	178.54	7422.91	-319.70	-3.84	1301188.52	3204501.64	40.157841	-104.768336	319.11		
7971.00	90.42	177.28	7422.41	-373.66	-1.87	1301134.58	3204504.05	40.157693	-104.768329	373.11		
8022.00	91.54	177.04	7421.54	-424.59	0.65	1301083.67	3204507.00	40.157553	-104.768320	424.10		
8084.00	92.90	176.75	7419.14	-486.45	4.01	1301021.84	3204510.86	40.157384	-104.768308	486.05		
8170.00	91.54	177.84	7415.81	-572.28	8.06	1300936.04	3204515.62	40.157148	-104.768293	571.98		
8255.00	91.05	178.89	7413.89	-657.23	10.49	1300851.12	3204518.75	40.156915	-104.768284	656.94		
8340.00	90.43	179.11	7412.79	-742.21	11.97	1300766.16	3204520.93	40.156682	-104.768279	741.89		
8425.00	90.74	179.93	7411.92	-827.20	12.68	1300681.18	3204522.35	40.156448	-104.768277	826.81		
8511.00	89.82	181.36	7411.50	-913.19	11.72	1300595.18	3204522.09	40.156212	-104.768280	912.65		
8596.00	89.75	181.11	7411.82	-998.17	9.88	1300510.19	3204520.96	40.155979	-104.768287	997.43		
8681.00	89.69	180.97	7412.23	-1083.15	8.34	1300425.19	3204520.11	40.155746	-104.768292	1082.23		
8767.00	88.83	180.91	7413.35	-1169.13	6.93	1300339.20	3204519.41	40.155510	-104.768297	1168.04		
8852.00	89.88	178.89	7414.30	-1254.12	7.08	1300254.22	3204520.26	40.155276	-104.768297	1252.93		
8937.00	90.74	178.36	7413.84	-1339.09	9.12	1300169.27	3204523.00	40.155043	-104.768289	1337.90		
9023.00	89.32	177.37	7413.80	-1425.03	12.32	1300083.36	3204526.91	40.154807	-104.768278	1423.89		
9108.00	89.75	178.57	7414.49	-1509.97	15.33	1299998.44	3204530.63	40.154574	-104.768267	1508.88		
9194.00	90.37	177.04	7414.40	-1595.91	18.63	1299912.54	3204534.63	40.154338	-104.768255	1594.87		
9279.00	89.75	174.36	7414.31	-1680.66	25.00	1299827.84	3204541.70	40.154105	-104.768233	1679.83		
9365.00	90.18	172.29	7414.36	-1766.07	35.00	1299742.52	3204552.40	40.153871	-104.768197	1765.64		
9450.00	89.45	169.10	7414.63	-1849.94	48.74	1299658.76	3204566.83	40.153641	-104.768148	1850.08		
9536.00	89.08	169.43	7415.74	-1934.43	64.76	1299574.41	3204583.55	40.153409	-104.768090	1935.26		
9621.00	88.52	168.80	7417.52	-2017.88	80.80	1299491.09	3204600.28	40.153180	-104.768033	2019.41		
9707.00	89.32	169.31	7419.14	-2102.30	97.13	1299406.81	3204617.30	40.152948	-104.767975	2104.53		
9792.00	88.46	169.07	7420.79	-2185.78	113.07	1299323.47	3204633.93	40.152719	-104.767918	2188.69		
9878.00	88.21	169.69	7423.28	-2270.27	128.91	1299239.11	3204650.47	40.152487	-104.767861	2273.87		
9963.00	87.35	170.51	7426.58	-2353.94	143.51	1299155.57	3204665.76	40.152257	-104.767809	2358.16		
10049.00	87.65	171.44	7430.33	-2438.79	156.99	1299070.83	3204679.94	40.152024	-104.767760	2443.57		
10134.00	90.43	172.97	7431.75	-2522.98	168.51	1298986.73	3204692.16	40.151793	-104.767719	2528.23		
10220.00	87.47	171.12	7433.33	-2608.13	180.41	1298901.69	3204704.76	40.151559	-104.767677	2613.86		
10306.00	89.63	173.37	7435.50	-2693.30	192.01	1298816.61	3204717.06	40.151326	-104.767635	2699.51		
10391.00	90.80	175.08	7435.19	-2777.87	200.56	1298732.12	3204726.31	40.151093	-104.767605	2784.39		
10477.00	91.73	176.16	7433.29	-2863.59	207.13	1298646.45	3204733.58	40.150858	-104.767581	2870.34		

5D Survey Report

Survey 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)	Latitude (°)	Longitude (°)	VS (US ft)	Comment	
10562.00	92.96	177.39	7429.81	-2948.38	211.91	1298561.70	3204739.06	40.150625	-104.767564	2955.26		
10648.00	91.30	179.04	7426.61	-3034.28	214.58	1298475.84	3204742.44	40.150389	-104.767554	3041.18		
10734.00	90.12	179.45	7425.55	-3120.26	215.72	1298389.86	3204744.28	40.150153	-104.767550	3127.12		
10818.00	89.57	181.19	7425.77	-3204.26	215.25	1298305.87	3204744.51	40.149923	-104.767552	3210.98		
10904.00	88.77	181.11	7427.02	-3290.23	213.52	1298219.88	3204743.49	40.149687	-104.767558	3296.77		
10989.00	90.12	179.64	7427.84	-3375.22	212.97	1298134.89	3204743.63	40.149454	-104.767560	3381.62		
11075.00	90.12	178.19	7427.66	-3461.20	214.59	1298048.93	3204745.97	40.149218	-104.767554	3467.58		
11160.00	89.88	180.48	7427.66	-3546.19	215.58	1297963.95	3204747.66	40.148984	-104.767551	3552.51		
11245.00	89.01	180.93	7428.49	-3631.18	214.53	1297878.96	3204747.31	40.148751	-104.767555	3637.35		
11331.00	88.83	180.94	7430.11	-3717.15	213.13	1297792.97	3204746.62	40.148515	-104.767560	3723.15		
11416.00	89.32	180.37	7431.48	-3802.13	212.16	1297707.99	3204746.35	40.148282	-104.767563	3807.98		
11501.00	89.57	180.13	7432.30	-3887.13	211.79	1297622.99	3204746.68	40.148048	-104.767564	3892.85		
11587.00	90.43	180.62	7432.30	-3973.13	211.23	1297536.99	3204746.83	40.147812	-104.767566	3978.71		
11672.00	90.31	179.83	7431.75	-4058.12	210.89	1297451.99	3204747.19	40.147579	-104.767568	4063.59		
11758.00	89.75	179.89	7431.71	-4144.12	211.10	1297366.00	3204748.11	40.147343	-104.767567	4149.49		
11843.00	89.01	178.68	7432.63	-4229.11	212.16	1297281.03	3204749.87	40.147110	-104.767563	4234.43		
11885.00	89.94	178.03	7433.01	-4271.09	213.37	1297239.06	3204751.43	40.146994	-104.767559	4276.41		
11930.00	89.69	177.54	7433.16	-4316.05	215.11	1297194.11	3204753.54	40.146871	-104.767553	4321.41	LAST MWD SURVEY	
11984.00	89.69	177.54	7433.45	-4370.00	217.43	1297140.18	3204756.30	40.146723	-104.767544	4375.41	PROJECTION TO TD	

Formation Points (Relative to centre, TVD relative to Drill Floor)		
Name	MD (US ft)	TVD (US ft)
PARKMAN	4021.60	3988.00
SUSSEX	4428.65	4395.00
SHARON SPRINGS	7189.57	7144.00
NIOBRARA A	7298.79	7240.00
NIOBRARA B	7382.86	7307.00
NIOBRARA C	7385.57	7309.00
CODELL	7537.72	7398.00