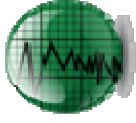




Weatherford[®]



END OF WELL REPORT

FINAL SURVEYS

SECTION 1

DAILY ACTIVITIES

SECTION 2

BHA REPORTS

SECTION 3

MOTOR REPORTS

SECTION 4

SLIDE SHEET REPORTS

SECTION 5



Weatherford®

Weatherford
2000 Oil Drive
Casper, WY 82604

Survey Certification

Operating Company:	Anadarko Petroleum Corp.
Well Name:	HOWARD 29C-28HZ
State:	CO
County:	WELD
API Number:	512337679
Datum:	NAD 83
Survey Calculation Method:	Minimum Curvature
North Reference:	True North

I, Matt Maydew, hereby certify the attached
directional survey run from the measure depth of 1,052.00 feet
to the measured depth of 12,748.00 feet as accurate and true
to the best of my knowledge.

Signature

23-Sep-13

Date

Matt Maydew
Directional Planning
Weatherford - Rockies District



FINAL SURVEYS



Plan Data for HOWARD 29C-28HZ

Field: WATTENBERG_ANADARKO_NAD 83

Map Unit: USFt

Vertical Reference Datum (VRD): Mean Sea Level

Projected Coordinate System: NAD83 / Colorado North (ftUS)

Slot: HOWARD 29C-28HZ

Position:

Offset is from Site centre

+N/-S: -0.36USft Northing: 1249106.53USft Latitude: 40.015624°

+E/-W: 59.94USft Easting: 3168012.60USft Longitude: -104.900142°

Elevation Above VRD: 5008.00USft



Survey 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	Annotations
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(DLSU)	(°)	(DLSU)	(DLSU)	
946.00	0.33	8.67	945.99	2.58	1.15	2.57	0.89	89.3	0.47	180.47	TIE ON
1052.00	0.35	348.91	1051.99	3.20	1.14	3.19	0.11	269.7	0.02	-18.64	FIRST WFT MWD SVY
12748.00	91.72	2.60	7717.34	4905.26	-391.81	4907.56	0.36	7.9	0.36	0.05	LAST WFT MWD SVY
12805.00	91.72	2.60	7715.63	4962.17	-389.23	4964.46	0.00	0.0	0.00	0.00	PROJECTION TO TD

Formation Point Information:

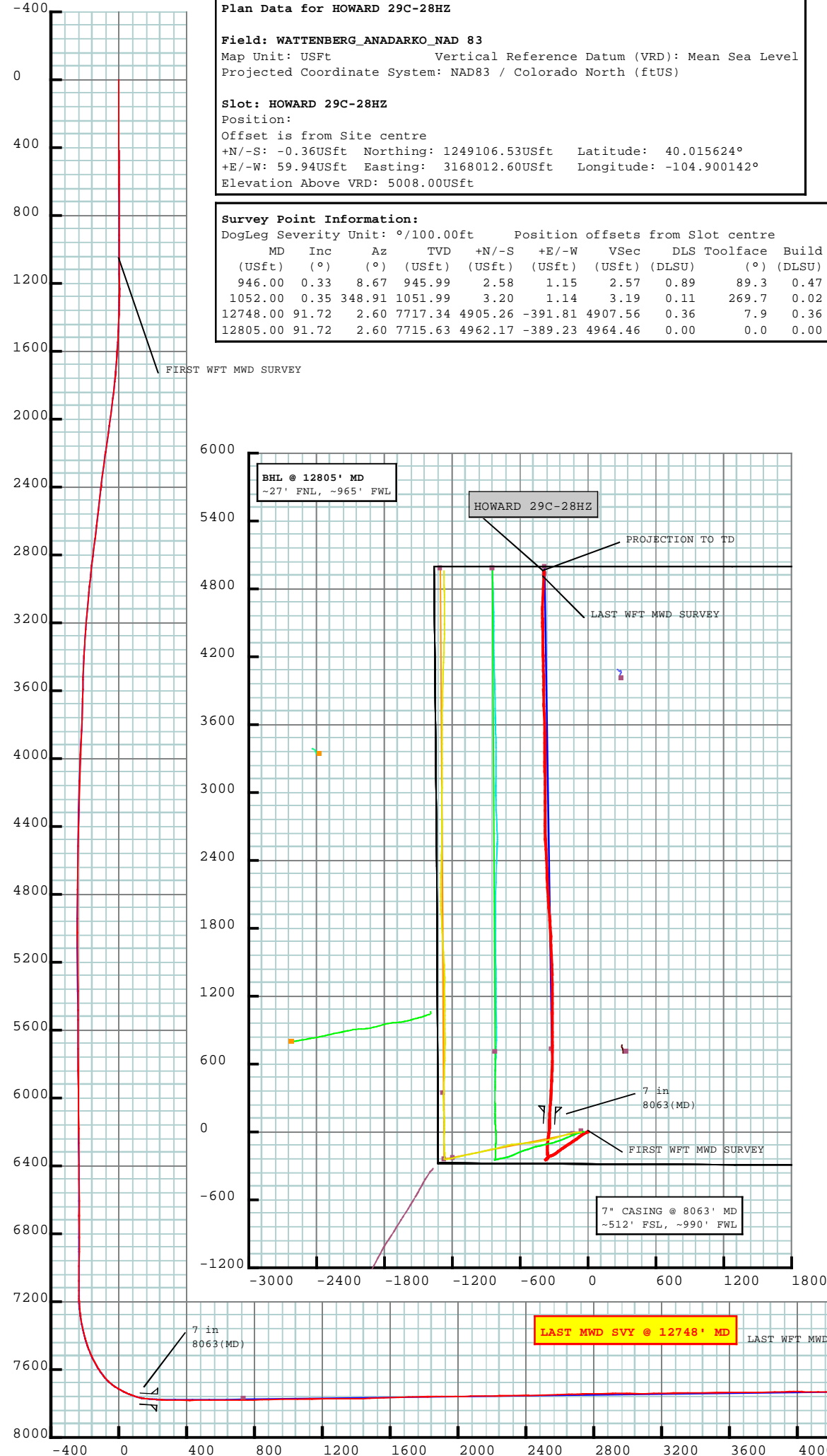
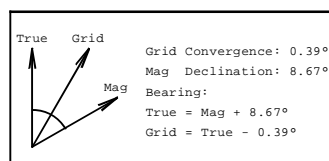
Name	TVD Elevation	MD
(USft)	(USft)	(USft)
FOX HILLS	1116.00	3908.00
SUSSEX	4804.00	220.00
SHARON SPRINGS	7304.00	-2280.00
NIOBRARA A	7341.00	-2317.00
NIOBRARA B	7535.00	-2511.00
NIOBRARA C	7617.00	-2593.00
FORT HAYS	7722.00	-2698.00
CODELL	7768.00	-2744.00

Target Set Information:

Name: 3			
Name	TVD	Lat	Long
(USft)	(°)	(°)	(°)
PBHL	7722.00	40.029316	-104.901514

Casing Point Information:

Name	MD	TVD
(USft)	(USft)	(USft)
7 in	8063.00	7776.46





5D Survey Report

Anadarko Petroleum

Field Name: WATTENBERG_ANADARKO_NAD 83
Site Name: HOWARD 14W-28HZ
Well Name: HOWARD 29C-28HZ
Survey: Definitive Survey



DEFINITIVE SURVEYS FOR THE HOWARD 29C-28HZ

Site Name HOWARD 14W-28HZ	Units : US ft		North Reference : True		Convergence Angle : 0.39	
	Position		Northing : 1249106.49 US ft		Latitude : 40.015625	
	Elevation above:5008.00 US ft		Easting : 3167952.66 US ft		Longitude : -104.900356	
Comment :						
Slot Name HOWARD 29C-28HZ	Position (Offsets relative to Site Centre)					
	+ N / -S : -0.36 US ft		Northing :1249106.53 US ft		Latitude : 40.015624	
	+ E / -W : 59.94 US ft		Easting :3168012.60 US ft		Longitude : -104.900142	
Slot TVD Reference : Ground Elevation						
Elevation above : 5008.00 US ft						
Comment :						
Well Name HOWARD 29C-28HZ	Type : Main well					
	Rig Height <i>Drill Floor</i> : 16.00 US ft					
	Relative to : 5024.00 US ft					
	Closure Distance : 4977.41 US ft					
	Vertical Section (Position of Origin Relative to Slot)					
	+ N / -S : 0.00 US ft		+ E / -W : 0.00 US ft		Az :359.65°	
	Target Set					
Name : 3 Number of Targets : 1						
Comment :						
TargetName: PBHL			Position (Relative to centre)			
Shape: Cuboid			Northing : 1254091.47 US ft		Latitude : 40°1'45.537600"	
			Easting : 3167594.66US ft		Longitude : -104°54'5.450400"	
TVD (Drill Floor) : 7722.00 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	

5D Survey Report

Survey Name :Definitive Survey				
Date : 22/May/2013		Survey Tool :		Company :
Magnetic Model				
Model Name: BGGM		Date: 22/May/2013	Field Strength: 52684.0 nT	Dip: 66.64°
Survey Tool Ranges				
Name		Start MD (us ft)	End MD (us ft)	Source Survey
NSG Static GMS		0.00	946.00	SURFACE GYRO SURVEYS
MWD		946.00	12805.00	WFT MWD SURVEYS

Well path created using minimum curvature

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)	Latitude (°)	-Longitude (°)	DLS (°/100 US ft)	T. Face (°)	CL (US ft)	VS (US ft)
0.00	0.00	0.00	0.00	0.00	0.00	40.015624	-104.900142	0.00	0.00	0.00	0.00
16.00	0.00	0.00	16.00	0.00	0.00	40.015624	-104.900142	0.00	0.00	16.00	0.00
116.00	0.33	68.26	116.00	0.11	0.27	40.015624	-104.900141	0.33	68.26	100.00	0.11
216.00	0.49	74.88	216.00	0.32	0.95	40.015625	-104.900139	0.17	19.82	100.00	0.32
316.00	0.27	42.87	315.99	0.61	1.52	40.015626	-104.900137	0.30	208.73	100.00	0.60
416.00	0.09	337.77	415.99	0.85	1.65	40.015626	-104.900136	0.25	199.38	100.00	0.84
516.00	0.33	20.94	515.99	1.20	1.72	40.015627	-104.900136	0.27	56.28	100.00	1.19
616.00	0.27	333.90	615.99	1.68	1.72	40.015629	-104.900136	0.25	233.54	100.00	1.67
716.00	0.20	1.03	715.99	2.06	1.62	40.015630	-104.900136	0.13	135.25	100.00	2.05
816.00	0.20	287.23	815.99	2.29	1.46	40.015630	-104.900137	0.24	233.10	100.00	2.28
916.00	0.19	314.53	915.99	2.46	1.17	40.015631	-104.900138	0.09	109.68	100.00	2.45
946.00	0.33	8.67	945.99	2.58	1.15	40.015631	-104.900138	0.89	89.29	30.00	2.57
1052.00	0.35	348.91	1051.99	3.20	1.14	40.015633	-104.900138	0.11	269.71	106.00	3.19
1144.00	0.99	324.25	1143.98	4.12	0.62	40.015635	-104.900140	0.75	323.08	92.00	4.11
1235.00	0.99	260.06	1234.97	4.62	-0.62	40.015637	-104.900144	1.16	237.91	91.00	4.62
1327.00	3.23	231.77	1326.90	2.88	-3.44	40.015632	-104.900154	2.61	320.47	92.00	2.90
1417.00	4.71	241.91	1416.69	-0.43	-8.69	40.015623	-104.900173	1.81	30.49	90.00	-0.38
1605.00	7.58	245.38	1603.59	-9.23	-26.77	40.015599	-104.900238	1.54	9.10	188.00	-9.07
1880.00	11.61	231.35	1874.72	-34.08	-64.89	40.015530	-104.900374	1.68	322.82	275.00	-33.69
1972.00	12.60	231.39	1964.67	-46.13	-79.96	40.015497	-104.900427	1.08	0.51	92.00	-45.64
2096.00	13.78	236.27	2085.40	-62.77	-102.82	40.015452	-104.900509	1.31	45.73	124.00	-62.14
2219.00	14.86	237.23	2204.58	-79.44	-128.26	40.015406	-104.900600	0.90	12.87	123.00	-78.66
2342.00	13.16	236.50	2323.92	-95.71	-153.20	40.015361	-104.900689	1.39	185.58	123.00	-94.77
2435.00	11.78	236.26	2414.72	-106.82	-169.93	40.015331	-104.900749	1.48	182.03	93.00	-105.78
2559.00	11.33	236.55	2536.21	-120.57	-190.61	40.015293	-104.900823	0.37	172.79	124.00	-119.40
2652.00	12.16	234.99	2627.26	-131.22	-206.26	40.015264	-104.900878	0.96	338.30	93.00	-129.96
2744.00	13.35	235.83	2716.99	-142.75	-222.98	40.015232	-104.900938	1.31	9.27	92.00	-141.38
2836.00	11.81	235.03	2806.78	-154.11	-239.49	40.015201	-104.900997	1.68	186.07	92.00	-152.65

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)	Latitude (°)	-Longitude (°)	DLS (°/100 US ft)	T.Face (°)	CL (US ft)	VS (US ft)	High to Plan (US ft)	Right to Plan (US ft)	Comment
2960.00	9.68	232.42	2928.60	-167.74	-258.15	40.015164	-104.901064	1.76	191.59	124.00	-166.16	0.00	0.00	
3053.00	8.15	230.35	3020.47	-176.72	-269.42	40.015139	-104.901104	1.68	190.82	93.00	-175.07	0.00	0.00	
3148.00	8.73	233.09	3114.44	-185.35	-280.37	40.015115	-104.901143	0.74	36.10	95.00	-183.63	0.00	0.00	
3273.00	9.47	241.28	3237.87	-195.98	-296.98	40.015086	-104.901202	1.19	64.35	125.00	-194.17	0.00	0.00	
3358.00	8.37	244.31	3321.84	-202.03	-308.68	40.015069	-104.901244	1.41	158.36	85.00	-200.14	0.00	0.00	
3443.00	7.25	246.34	3406.05	-206.86	-319.17	40.015056	-104.901282	1.36	167.17	85.00	-204.91	0.00	0.00	
3572.00	5.20	255.05	3534.29	-211.64	-332.28	40.015043	-104.901328	1.75	159.55	129.00	-209.60	0.00	0.00	
3700.00	3.08	245.30	3661.95	-214.57	-341.01	40.015035	-104.901359	1.74	193.55	128.00	-212.48	0.00	0.00	
3871.00	4.16	225.83	3832.61	-220.81	-349.63	40.015018	-104.901390	0.95	301.31	171.00	-218.67	0.00	0.00	
4169.00	2.11	221.77	4130.15	-232.44	-361.04	40.014986	-104.901431	0.69	184.16	298.00	-230.23	0.20	-1.07	
4340.00	1.82	214.16	4301.05	-237.03	-364.66	40.014973	-104.901444	0.23	218.22	171.00	-234.80	0.34	-1.04	
4554.00	1.62	232.62	4514.96	-241.68	-368.97	40.014961	-104.901459	0.27	118.91	214.00	-239.42	-0.01	-1.09	
4810.00	0.95	254.14	4770.89	-244.46	-373.89	40.014953	-104.901477	0.32	154.67	256.00	-242.17	-0.41	-1.01	
4981.00	0.81	225.98	4941.87	-245.68	-376.12	40.014950	-104.901485	0.26	238.32	171.00	-243.38	0.12	-1.08	
5151.00	1.24	62.26	5111.86	-245.66	-375.36	40.014950	-104.901482	1.19	189.86	170.00	-243.37	0.19	1.07	
5408.00	1.01	24.31	5368.82	-242.30	-371.96	40.014959	-104.901470	0.30	234.47	257.00	-240.03	-0.51	0.96	
5578.00	1.22	108.29	5538.79	-241.51	-369.63	40.014961	-104.901462	0.88	126.01	170.00	-239.24	0.91	0.61	
5749.00	0.56	56.47	5709.77	-241.62	-367.20	40.014961	-104.901453	0.57	206.74	171.00	-239.37	0.08	1.09	
5877.00	0.66	7.60	5837.77	-240.54	-366.58	40.014964	-104.901451	0.40	255.79	128.00	-238.30	-0.77	0.78	
6005.00	0.60	348.51	5965.76	-239.15	-366.62	40.014967	-104.901451	0.17	244.64	128.00	-236.91	-0.98	0.48	
6133.00	0.28	25.52	6093.76	-238.21	-366.62	40.014970	-104.901451	0.32	155.88	128.00	-235.97	-0.49	0.97	
6219.00	0.56	60.62	6179.75	-237.82	-366.16	40.014971	-104.901449	0.43	61.04	86.00	-235.58	0.16	1.08	
6304.00	0.56	35.39	6264.75	-237.28	-365.56	40.014973	-104.901447	0.29	257.39	85.00	-235.04	-0.32	1.04	
6432.00	0.31	14.61	6392.75	-236.43	-365.11	40.014975	-104.901446	0.23	202.15	128.00	-234.20	-0.67	0.86	
6518.00	0.60	5.20	6478.74	-235.76	-365.01	40.014977	-104.901445	0.35	340.81	86.00	-233.52	-0.80	0.74	
6646.00	0.35	273.31	6606.74	-235.07	-365.34	40.014979	-104.901446	0.55	209.77	128.00	-232.83	-0.72	-0.82	
6732.00	0.40	113.65	6692.74	-235.17	-365.33	40.014978	-104.901446	0.86	190.86	86.00	-232.94	0.96	0.52	
6860.00	0.70	56.03	6820.73	-234.91	-364.27	40.014979	-104.901443	0.46	267.57	128.00	-232.68	0.07	1.09	
6945.00	1.51	110.84	6905.72	-235.02	-362.79	40.014979	-104.901437	1.47	82.14	85.00	-232.80	0.93	0.57	
7030.00	1.55	105.68	6990.69	-235.73	-360.64	40.014977	-104.901430	0.17	283.60	85.00	-233.52	0.88	0.65	
7116.00	1.30	94.54	7076.66	-236.12	-358.55	40.014976	-104.901432	0.43	222.46	86.00	-233.93	0.73	0.81	
7174.00	1.35	75.54	7134.65	-236.00	-357.23	40.014976	-104.901417	0.76	266.94	58.00	-233.82	0.43	1.00	
7206.00	1.47	74.31	7166.64	-235.80	-356.47	40.014977	-104.901415	0.39	345.23	32.00	-233.62	0.41	1.01	
7291.00	6.03	3.95	7251.46	-231.05	-355.11	40.014990	-104.901410	6.71	275.65	85.00	-228.87	-0.81	0.73	
7376.00	11.01	352.03	7335.50	-218.55	-355.93	40.015024	-104.901413	6.19	334.50	85.00	-216.37	-0.93	0.54	
7462.00	16.05	358.60	7419.09	-198.51	-357.36	40.015079	-104.901418	6.12	20.18	86.00	-196.33	-0.84	0.65	
7547.00	22.41	357.94	7499.31	-170.55	-358.23	40.015156	-104.901421	7.49	357.73	85.00	-168.36	-0.82	0.64	
7594.00	26.73	358.37	7542.04	-151.02	-358.85	40.015209	-104.901423	9.20	2.57	47.00	-148.82	-0.78	0.64	
7633.00	30.27	0.31	7576.31	-132.42	-359.05	40.015260	-104.901424	9.38	15.51	39.00	-130.22	-0.74	0.67	
7718.00	39.57	7.00	7645.96	-84.00	-355.62	40.015393	-104.901412	11.82	25.18	85.00	-81.82	-0.59	0.77	
7803.00	57.71	7.74	7701.89	-21.00	-347.42	40.015566	-104.901382	21.35	2.01	85.00	-18.87	-0.40	0.78	

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)	Latitude (°)	-longitude (°)	DLS (°/100 US ft)	T.Face (°)	CL (US ft)	VS (US ft)	High to Plan (US ft)	Right to Plan (US ft)	Comment
7889.00	56.17	0.92	7742.34	54.56	-341.88	40.015774	-104.901363	12.07	322.91	86.00	56.64	-0.33	0.68	
7932.00	71.72	0.69	7757.79	94.67	-341.31	40.015884	-104.901361	12.92	357.74	43.00	96.75	-0.26	0.68	
7974.00	80.31	2.03	7767.93	135.37	-340.34	40.015996	-104.901357	20.68	8.78	42.00	137.45	-0.13	0.70	
8007.00	84.68	3.95	7772.24	168.03	-338.63	40.016085	-104.901351	14.44	23.67	33.00	170.10	-0.06	0.73	
8122.00	88.77	3.77	7778.81	282.56	-330.90	40.016400	-104.901323	3.56	357.48	115.00	284.58	2.85	0.77	
8207.00	89.26	3.30	7780.27	367.39	-325.66	40.016633	-104.901305	0.80	316.19	85.00	369.37	3.90	0.13	
8293.00	90.56	2.18	7780.40	453.29	-321.55	40.016868	-104.901290	2.00	319.25	86.00	455.24	3.92	-0.57	
8378.00	90.49	1.38	7779.62	538.24	-318.91	40.017102	-104.901281	0.94	265.00	85.00	540.18	3.34	-1.06	
8463.00	89.94	1.32	7779.30	623.22	-316.91	40.017335	-104.901273	0.65	186.23	85.00	625.14	3.53	-2.14	
8549.00	90.68	1.33	7778.84	709.19	-314.92	40.017571	-104.901266	0.86	0.77	86.00	711.10	3.88	-4.44	
8634.00	90.12	359.73	7778.24	794.18	-314.13	40.017804	-104.901264	1.99	250.72	85.00	796.09	4.33	-6.47	
8720.00	91.79	359.41	7776.81	880.16	-314.78	40.018040	-104.901266	1.98	349.16	86.00	882.07	3.96	-7.13	
8805.00	90.99	359.27	7774.75	965.13	-315.76	40.018273	-104.901269	0.96	189.93	85.00	967.04	2.95	-7.45	
8891.00	90.49	359.06	7773.64	1051.12	-317.01	40.018510	-104.901274	0.63	202.78	86.00	1053.03	2.90	-7.50	
8976.00	90.62	0.02	7772.82	1136.11	-317.69	40.018743	-104.901276	1.14	82.28	85.00	1138.03	3.13	-8.12	
9061.00	90.49	0.30	7771.99	1221.10	-317.46	40.018976	-104.901275	0.36	114.90	85.00	1223.02	3.36	-9.65	
9146.00	90.31	359.79	7771.40	1306.10	-317.39	40.019209	-104.901275	0.64	250.56	85.00	1308.02	3.82	-11.01	
9232.00	90.18	356.76	7771.03	1392.09	-318.48	40.019446	-104.901279	1.21	262.81	86.00	1394.01	4.52	-11.23	
9317.00	91.79	357.89	7769.57	1477.04	-320.96	40.019679	-104.901288	2.15	331.62	85.00	1478.97	4.10	-10.04	
9402.00	92.22	357.60	7766.60	1561.92	-324.30	40.019912	-104.901300	0.61	326.02	85.00	1563.87	2.18	-7.99	
9488.00	92.35	357.79	7763.17	1647.78	-327.76	40.020147	-104.901312	0.27	55.59	86.00	1649.76	-0.18	-5.84	
9573.00	90.93	357.88	7760.73	1732.69	-330.97	40.020381	-104.901324	1.67	176.37	85.00	1734.68	-1.56	-3.92	
9659.00	90.74	357.17	7759.48	1818.60	-334.68	40.020616	-104.901337	0.85	255.02	86.00	1820.61	-1.75	-1.52	
9744.00	90.00	355.70	7758.93	1903.43	-339.97	40.020849	-104.901356	1.94	243.28	85.00	1905.47	-1.24	2.47	
9829.00	91.05	355.40	7758.15	1988.17	-346.56	40.021082	-104.901379	1.28	344.06	85.00	1990.25	-0.96	7.76	
9914.00	91.23	356.83	7756.46	2072.95	-352.32	40.021315	-104.901400	1.70	82.81	85.00	2075.07	-1.60	12.23	
10000.00	90.62	356.40	7755.07	2158.79	-357.40	40.021550	-104.901418	0.87	215.18	86.00	2160.93	-1.93	16.00	
10085.00	90.80	357.89	7754.02	2243.68	-361.63	40.021783	-104.901433	1.77	83.10	85.00	2245.84	-1.93	18.95	
10171.00	90.86	357.74	7752.77	2329.60	-364.91	40.022019	-104.901445	0.19	291.80	86.00	2331.79	-2.11	20.92	
10256.00	90.86	357.23	7751.50	2414.51	-368.64	40.022252	-104.901458	0.60	270.00	85.00	2416.72	-2.33	23.35	
10341.00	91.91	357.14	7749.44	2499.38	-372.81	40.022485	-104.901473	1.24	355.10	85.00	2501.61	-3.31	26.23	
10427.00	91.59	357.19	7746.82	2585.24	-377.06	40.022721	-104.901488	0.38	171.12	86.00	2587.49	-4.88	29.17	
10512.00	91.30	356.46	7744.67	2670.15	-380.29	40.022954	-104.901500	1.53	102.85	85.00	2672.42	-5.99	31.11	
10598.00	91.23	1.25	7742.78	2756.12	-380.51	40.023190	-104.901501	3.24	91.41	86.00	2758.39	-6.85	30.00	
10683.00	90.86	0.40	7741.23	2841.09	-379.28	40.023423	-104.901496	1.09	246.48	85.00	2843.36	-7.34	27.50	
10768.00	90.12	359.43	7740.50	2926.09	-379.41	40.023657	-104.901497	1.44	232.66	85.00	2928.35	-7.00	26.34	
10854.00	89.53	0.56	7740.76	3012.09	-379.42	40.023893	-104.901497	1.48	117.57	86.00	3014.35	-5.67	25.03	
10939.00	90.12	359.30	7741.02	3097.09	-379.52	40.024126	-104.901497	1.64	295.09	85.00	3099.35	-4.36	23.85	
11025.00	91.54	356.69	7739.78	3183.06	-381.03	40.024362	-104.901503	1.80	336.76	86.00	3185.33	-4.54	24.04	
11110.00	90.80	0.26	7738.04	3268.04	-381.81	40.024595	-104.901505	2.04	115.22	85.00	3270.31	-5.23	23.52	
11195.00	90.68	0.49	7736.94	3353.03	-381.25	40.024829	-104.901503	0.31	117.55	85.00	3355.29	-5.27	21.67	

5D Survey Report

Survey Points (Relative to centre, TVD relative to Drill Floor)														
MD (US ft)	Inc (°)	Az (US ft)	TVD (°)	N. Offset (US ft)	E. Offset (US ft)	Latitude (°)	Longitude (°)	DLS (°/100 US ft)	T. Face (°)	CL (US ft)	VS (US ft)	High to Plan (US ft)	Right to Plan (US ft)	Comment
11281.00	90.43	359.82	7736.11	3439.02	-381.02	40.025065	-104.901502	0.83	249.54	86.00	3441.29	-5.04	20.14	
11366.00	90.43	358.91	7735.47	3524.01	-381.96	40.025298	-104.901506	1.07	270.00	85.00	3526.28	-4.62	19.79	
11452.00	90.31	358.04	7734.92	3609.98	-384.25	40.025534	-104.901514	1.02	262.15	86.00	3612.26	-4.11	20.76	
11537.00	90.18	357.62	7734.55	3694.92	-387.47	40.025767	-104.901526	0.52	252.80	85.00	3697.22	-3.42	22.68	
11622.00	90.99	358.42	7733.68	3779.86	-390.40	40.026000	-104.901536	1.34	44.64	85.00	3782.18	-3.23	24.33	
11708.00	91.54	358.74	7731.79	3865.81	-392.53	40.026236	-104.901544	0.74	30.18	86.00	3868.14	-4.07	25.15	
11794.00	91.06	0.72	7729.83	3951.79	-392.94	40.026472	-104.901545	2.37	103.61	86.00	3954.11	-4.97	24.24	
11879.00	88.39	358.46	7730.24	4036.77	-393.55	40.026706	-104.901547	4.12	220.25	85.00	4039.10	-3.50	23.56	
11965.00	90.49	358.50	7731.08	4122.73	-395.83	40.026942	-104.901555	2.44	1.09	86.00	4125.07	-1.59	24.54	
12050.00	91.98	359.79	7729.25	4207.70	-397.10	40.027175	-104.901560	2.32	40.87	85.00	4210.04	-2.38	24.51	
12135.00	91.85	358.78	7726.41	4292.64	-398.16	40.027408	-104.901564	1.20	262.68	85.00	4294.99	-4.15	24.28	
12221.00	92.04	358.80	7723.49	4378.57	-399.97	40.027644	-104.901570	0.22	6.01	86.00	4380.94	-6.01	24.78	
12306.00	90.86	359.70	7721.34	4463.54	-401.08	40.027877	-104.901574	1.75	142.66	85.00	4465.90	-7.11	24.60	
12391.00	88.77	358.91	7721.61	4548.52	-402.11	40.028111	-104.901578	2.63	200.71	85.00	4550.90	-5.78	24.34	
12477.00	90.12	1.21	7722.45	4634.51	-402.02	40.028347	-104.901578	3.10	59.60	86.00	4636.88	-3.89	22.92	
12562.00	90.88	1.95	7721.71	4719.48	-399.68	40.028580	-104.901569	1.25	44.23	85.00	4721.83	-3.59	19.28	
12648.00	91.36	2.55	7720.03	4805.39	-396.31	40.028816	-104.901557	0.89	51.33	86.00	4807.72	-4.21	14.59	
12748.00	91.72	2.60	7717.34	4905.26	-391.81	40.029090	-104.901541	0.36	7.90	100.00	4907.56	-5.66	8.59	LAST WFT MWD SURVEY
12805.00	91.72	2.60	7715.63	4962.17	-389.23	40.029246	-104.901532	0.00	0.00	57.00	4964.46	-6.67	5.21	PROJECTION TO TD

Formation Points (Relative to centre, TVD relative to Drill Floor)				Name	MC (US ft)	TVD (US ft)
				FOX HILLS	1116.01	1116.00
				SUSSEX	4843.11	4804.00
				SHARON SPRINGS	7344.01	7304.00
				NIOBRARA A	7381.61	7341.00
				NIOBRARA B	7586.14	7535.00
				NIOBRARA C	7681.47	7617.00
				FORT HAYS	7842.80	7722.00
				CODELL	7974.43	7768.00