

Anadarko Petroleum Corp.

Weld County, CO (NAD 83)

Sec. 3-T2N-R65W

Cannon 36N-E3HZ

Plan CRev 1

Design: Actual Field Surveys

Sperry Drilling Services

Standard Report

12 September, 2012

Well Coordinates: 1,307,380.39 N, 3,237,970.83 E (40° 10' 26.46" N, 104° 38' 54.18" W)

Ground Level: 4,839.00 ft

Local Coordinate Origin: Centered on Well Cannon 36N-E3HZ

Viewing Datum: RKB=16ft @ 4855.00ft (Xtreme 22)

TVDs to System: N

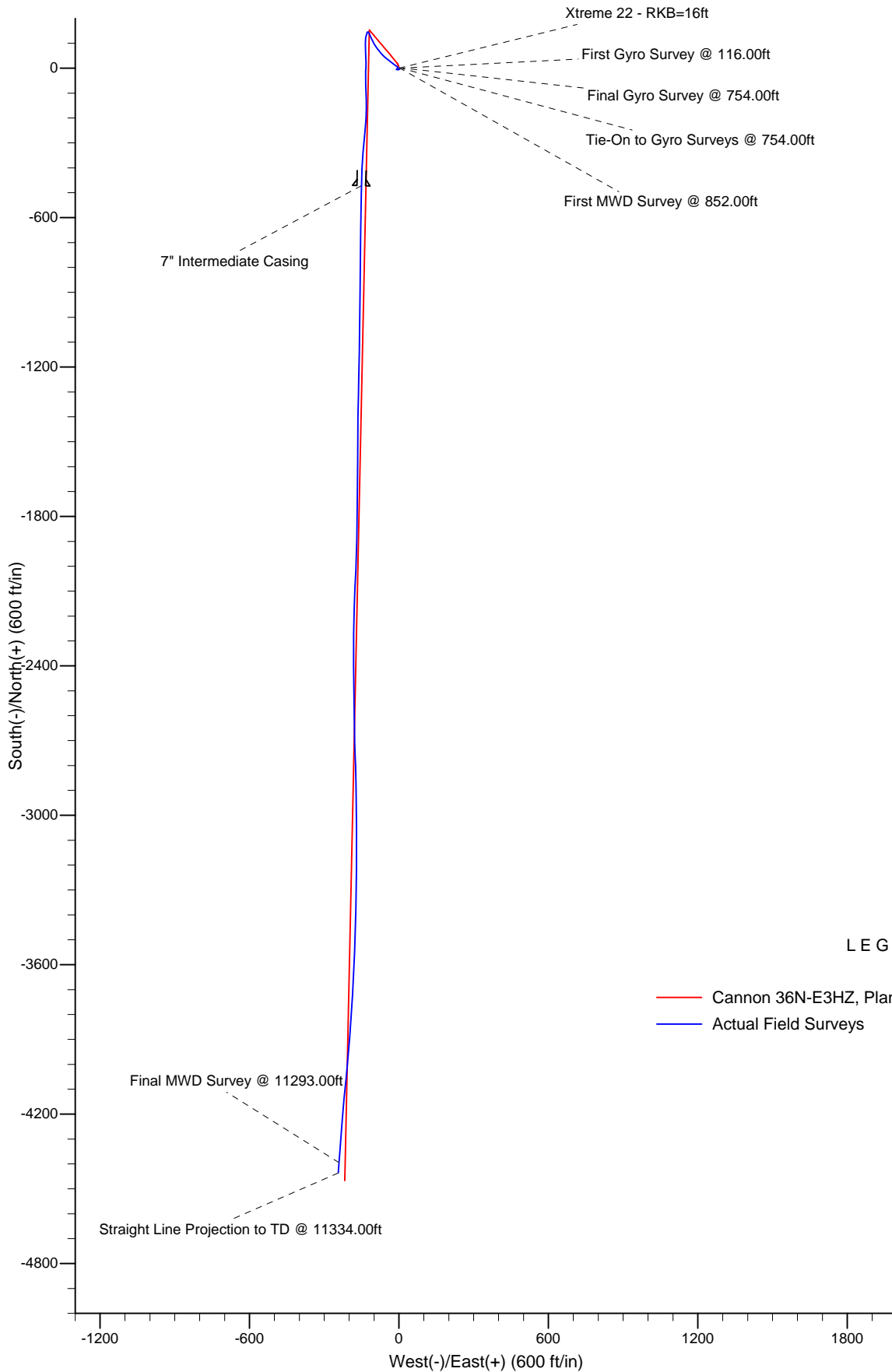
North Reference: True

Unit System: API - US Survey Feet - Custom

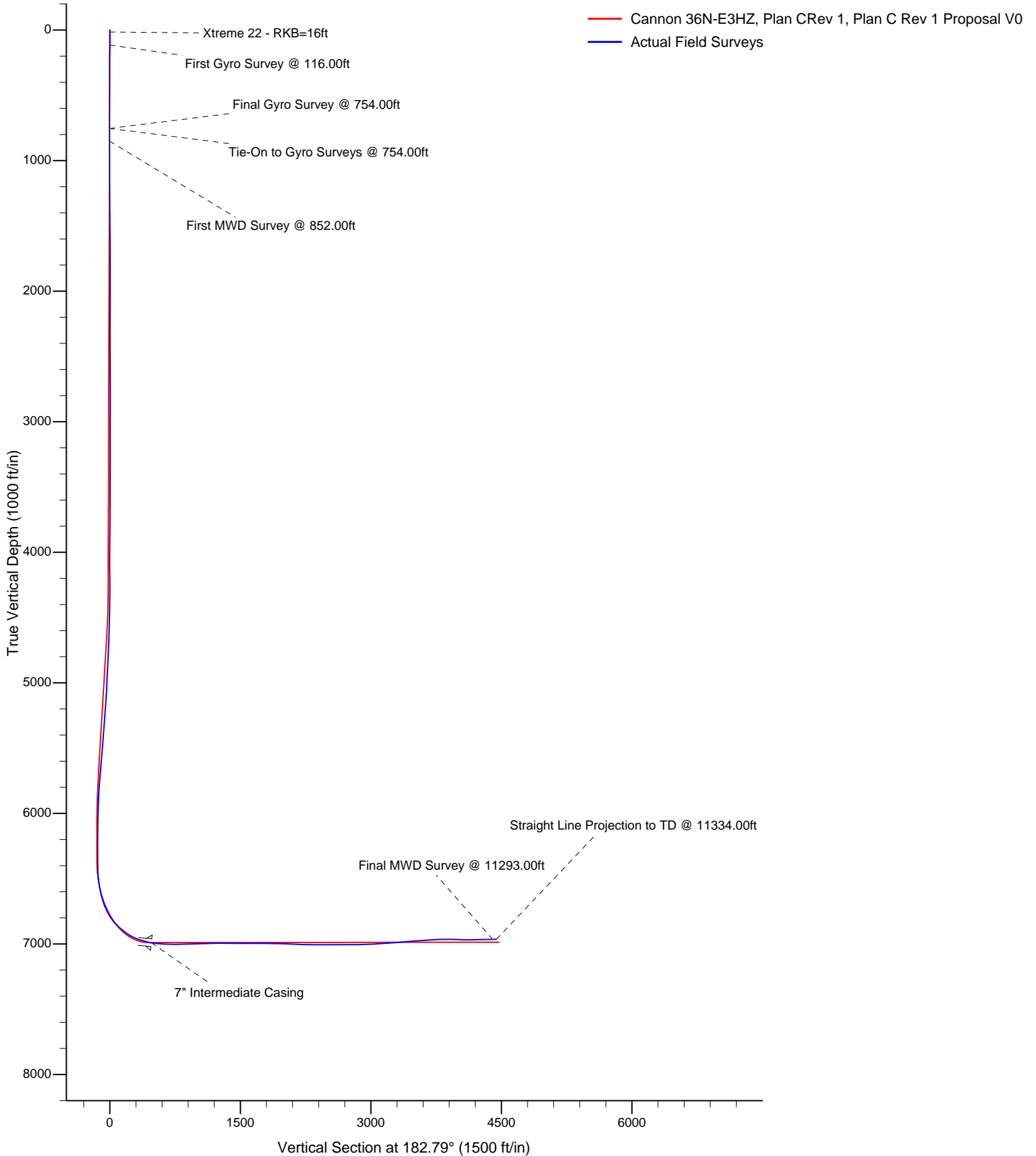
Geodetic Scale Factor Applied

Version: 2003.16 Build: 43I

HALLIBURTON



LEGEND



Design Report for Cannon 36N-E3HZ - Actual Field Surveys

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.00	0.00	0.00	16.00	0.00	0.00	0.00	0.00
Xtreme 22 - RKB=16ft							
116.00	0.47	312.04	116.00	0.27	-0.30	-0.26	0.47
First Gyro Survey @ 116.00ft							
216.00	0.16	325.05	216.00	0.66	-0.69	-0.63	0.32
316.00	0.34	47.26	316.00	0.98	-0.55	-0.95	0.36
416.00	0.23	4.66	416.00	1.38	-0.32	-1.36	0.23
516.00	0.26	45.51	515.99	1.74	-0.14	-1.73	0.17
616.00	0.30	12.01	615.99	2.16	0.08	-2.16	0.17
716.00	0.19	33.44	715.99	2.55	0.22	-2.56	0.14
754.00	0.28	339.50	753.99	2.69	0.23	-2.70	0.60
Final Gyro Survey @ 754.00ft - Tie-On to Gyro Surveys @ 754.00ft							
852.00	0.38	191.30	851.99	2.59	0.08	-2.60	0.65
First MWD Survey @ 852.00ft							
945.00	0.31	145.94	944.99	2.08	0.16	-2.09	0.29
1,032.00	0.31	144.59	1,031.99	1.70	0.43	-1.72	0.01
1,121.00	0.04	275.57	1,120.99	1.50	0.54	-1.53	0.38
1,242.00	0.57	154.28	1,241.99	0.97	0.75	-1.00	0.49
1,332.00	0.54	180.82	1,331.98	0.14	0.94	-0.18	0.28
1,423.00	0.67	181.01	1,422.98	-0.82	0.93	0.78	0.14
1,519.00	0.62	182.96	1,518.97	-1.90	0.89	1.86	0.06
1,612.00	0.48	170.88	1,611.97	-2.79	0.93	2.74	0.19
1,704.00	0.66	144.20	1,703.96	-3.60	1.30	3.53	0.34
1,796.00	0.42	147.72	1,795.96	-4.31	1.79	4.22	0.26
1,888.00	0.53	92.90	1,887.96	-4.62	2.39	4.50	0.49
1,973.00	0.57	38.79	1,972.95	-4.31	3.05	4.16	0.59
2,059.00	0.60	34.29	2,058.95	-3.61	3.57	3.43	0.06
2,144.00	0.10	35.29	2,143.95	-3.18	3.86	2.99	0.59
2,230.00	0.31	305.88	2,229.95	-2.98	3.72	2.80	0.38
2,316.00	0.53	289.31	2,315.94	-2.71	3.16	2.56	0.29
2,402.00	0.54	238.03	2,401.94	-2.80	2.44	2.67	0.54
2,487.00	0.83	259.34	2,486.93	-3.12	1.49	3.05	0.45
2,573.00	0.98	226.18	2,572.92	-3.75	0.35	3.72	0.62
2,659.00	1.60	242.65	2,658.90	-4.81	-1.25	4.86	0.83
2,745.00	1.18	231.80	2,744.88	-5.91	-3.01	6.05	0.57
2,831.00	0.47	300.44	2,830.87	-6.27	-4.01	6.46	1.28
2,916.00	0.59	328.40	2,915.86	-5.73	-4.54	5.94	0.33
3,002.00	0.48	311.12	3,001.86	-5.11	-5.04	5.35	0.23
3,088.00	0.57	309.75	3,087.86	-4.60	-5.64	4.87	0.11
3,174.00	0.92	278.66	3,173.85	-4.22	-6.66	4.54	0.61
3,259.00	0.73	258.25	3,258.84	-4.23	-7.86	4.61	0.41
3,345.00	1.13	231.13	3,344.83	-4.87	-9.06	5.31	0.68
3,431.00	0.85	280.26	3,430.82	-5.29	-10.34	5.79	1.00
3,517.00	1.50	48.36	3,516.81	-4.43	-10.13	4.92	2.48
3,602.00	1.63	53.14	3,601.78	-2.97	-8.33	3.37	0.22
3,688.00	0.98	58.55	3,687.76	-1.85	-6.73	2.17	0.77
3,774.00	1.04	62.01	3,773.74	-1.10	-5.41	1.36	0.10
3,860.00	0.88	53.34	3,859.73	-0.34	-4.19	0.54	0.25
3,946.00	0.68	65.41	3,945.72	0.27	-3.20	-0.11	0.30

Design Report for Cannon 36N-E3HZ - Actual Field Surveys

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
4,031.00	0.74	49.29	4,030.72	0.84	-2.32	-0.72	0.24
4,117.00	1.20	101.71	4,116.70	1.01	-1.02	-0.96	1.11
4,203.00	1.45	112.88	4,202.68	0.41	0.86	-0.45	0.42
4,289.00	0.47	207.45	4,288.67	-0.33	1.70	0.24	1.81
4,374.00	1.70	311.26	4,373.66	0.20	0.60	-0.22	2.20
4,460.00	2.68	312.20	4,459.60	2.39	-1.85	-2.29	1.14
4,546.00	4.47	302.35	4,545.42	5.53	-6.17	-5.22	2.19
4,632.00	5.62	303.22	4,631.09	9.63	-12.53	-9.01	1.34
4,720.00	6.87	305.00	4,718.57	15.01	-20.44	-14.00	1.44
4,806.00	5.97	312.23	4,804.03	20.97	-27.97	-19.58	1.40
4,893.00	6.81	312.04	4,890.49	27.46	-35.15	-25.72	0.97
4,978.00	6.21	302.29	4,974.94	33.29	-42.78	-31.17	1.48
5,064.00	8.42	311.14	5,060.24	39.92	-51.45	-37.37	2.88
5,143.00	9.52	313.77	5,138.27	48.25	-60.53	-45.25	1.49
5,229.00	8.04	312.54	5,223.26	57.23	-70.10	-53.76	1.73
5,317.00	8.61	329.36	5,310.35	67.06	-77.99	-63.19	2.83
5,403.00	8.95	319.08	5,395.34	77.66	-85.65	-73.40	1.86
5,488.00	7.80	325.73	5,479.44	87.42	-93.23	-82.78	1.77
5,574.00	8.87	331.45	5,564.53	98.07	-99.69	-93.10	1.57
5,660.00	9.00	332.56	5,649.49	109.86	-105.95	-104.58	0.25
5,746.00	7.58	334.84	5,734.59	120.97	-111.47	-115.40	1.69
5,831.00	5.96	339.00	5,818.99	130.16	-115.43	-124.39	1.99
5,917.00	3.36	330.64	5,904.70	136.53	-118.27	-130.61	3.12
6,003.00	2.28	332.40	5,990.59	140.24	-120.30	-134.22	1.26
6,089.00	1.59	336.11	6,076.55	142.85	-121.57	-136.77	0.82
6,174.00	1.59	323.47	6,161.51	144.87	-122.75	-138.73	0.41
6,260.00	0.94	271.83	6,247.49	145.85	-124.17	-139.64	1.45
6,346.00	0.95	258.32	6,333.48	145.73	-125.57	-139.45	0.26
6,419.00	2.07	218.48	6,406.46	144.58	-126.98	-138.23	2.02
6,466.00	3.48	205.93	6,453.40	142.63	-128.13	-136.23	3.25
6,505.00	8.05	188.79	6,492.20	138.86	-129.07	-132.42	12.39
6,547.00	11.95	198.66	6,533.55	131.83	-130.91	-125.31	10.11
6,590.00	15.76	188.08	6,575.30	121.83	-133.16	-115.21	10.61
6,636.00	20.64	181.19	6,618.99	107.53	-134.21	-100.88	11.58
6,676.00	23.54	180.69	6,656.05	92.49	-134.45	-85.84	7.27
6,722.00	29.12	177.66	6,697.26	72.10	-134.10	-65.50	12.47
6,762.00	34.10	177.27	6,731.32	51.17	-133.17	-44.63	12.46
6,808.00	39.59	179.68	6,768.12	23.61	-132.47	-17.14	12.34
6,848.00	44.59	182.10	6,797.80	-3.19	-132.92	9.65	13.14
6,893.00	50.60	180.11	6,828.13	-36.39	-133.53	42.84	13.75
6,933.00	55.91	178.48	6,852.05	-68.43	-133.12	74.82	13.67
6,973.00	59.43	177.30	6,873.44	-102.20	-131.87	108.49	9.15
7,019.00	62.00	179.34	6,895.94	-142.30	-130.70	148.48	6.79
7,061.00	64.10	182.50	6,914.98	-179.72	-131.31	185.89	8.36
7,104.00	67.28	184.34	6,932.68	-218.83	-133.66	225.07	8.36
7,150.00	72.78	185.04	6,948.39	-261.90	-137.19	268.26	12.04
7,190.00	76.27	185.18	6,959.06	-300.29	-140.63	306.78	8.73
7,235.00	77.71	184.90	6,969.19	-343.97	-144.48	350.59	3.26
7,276.00	78.81	183.12	6,977.53	-384.01	-147.29	390.72	5.03
7,320.00	79.98	181.70	6,985.63	-427.22	-149.10	433.96	4.14
7,365.00	84.08	181.65	6,991.87	-471.75	-150.41	478.51	9.11

Design Report for Cannon 36N-E3HZ - Actual Field Surveys

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
7" Intermediate Casing							
7,392.00	86.54	181.62	6,994.07	-498.65	-151.17	505.41	9.11
7,435.00	86.41	180.85	6,996.72	-541.56	-152.10	548.31	1.81
7,521.00	87.59	180.44	7,001.22	-627.43	-153.06	634.14	1.45
7,606.00	89.14	180.64	7,003.64	-712.39	-153.87	719.03	1.84
7,693.00	90.99	180.48	7,003.54	-799.39	-154.72	805.96	2.13
7,779.00	91.48	181.04	7,001.69	-885.36	-155.86	891.89	0.87
7,863.00	91.79	180.64	6,999.29	-969.31	-157.09	975.81	0.60
7,950.00	90.56	180.51	6,997.51	-1,056.29	-157.96	1,062.72	1.42
8,036.00	91.36	180.94	6,996.07	-1,142.27	-159.05	1,148.65	1.06
8,121.00	90.12	181.35	6,994.97	-1,227.24	-160.75	1,233.61	1.54
8,209.00	90.62	181.31	6,994.40	-1,315.22	-162.79	1,321.58	0.57
8,294.00	89.69	180.71	6,994.17	-1,400.20	-164.29	1,406.54	1.30
8,380.00	88.95	180.21	6,995.19	-1,486.19	-164.98	1,492.46	1.04
8,463.00	89.26	180.55	6,996.49	-1,569.18	-165.53	1,575.37	0.55
8,549.00	90.68	180.68	6,996.54	-1,655.17	-166.45	1,661.31	1.66
8,635.00	89.88	180.07	6,996.11	-1,741.17	-167.01	1,747.23	1.17
8,721.00	89.32	180.99	6,996.72	-1,827.16	-167.81	1,833.16	1.25
8,806.00	89.81	181.38	6,997.36	-1,912.14	-169.57	1,918.13	0.74
8,892.00	88.33	182.42	6,998.76	-1,998.08	-172.42	2,004.10	2.10
8,978.00	88.21	182.74	7,001.35	-2,083.95	-176.29	2,090.06	0.40
9,064.00	88.83	181.91	7,003.57	-2,169.85	-179.77	2,176.03	1.20
9,149.00	89.07	180.81	7,005.13	-2,254.81	-181.79	2,260.99	1.32
9,235.00	89.57	179.40	7,006.15	-2,340.80	-181.95	2,346.88	1.74
9,321.00	90.12	179.59	7,006.39	-2,426.80	-181.19	2,432.74	0.68
9,407.00	90.00	179.75	7,006.30	-2,512.80	-180.70	2,518.61	0.23
9,493.00	89.57	178.98	7,006.62	-2,598.79	-179.74	2,604.46	1.03
9,578.00	91.05	178.95	7,006.16	-2,683.78	-178.21	2,689.27	1.74
9,664.00	89.81	177.17	7,005.51	-2,769.72	-175.30	2,774.97	2.52
9,750.00	90.80	179.48	7,005.05	-2,855.67	-172.78	2,860.70	2.92
9,836.00	91.17	179.30	7,003.58	-2,941.66	-171.87	2,946.53	0.48
9,921.00	91.55	179.81	7,001.56	-3,026.63	-171.21	3,031.37	0.75
10,007.00	93.52	179.74	6,997.76	-3,112.54	-170.87	3,117.17	2.29
10,093.00	92.59	179.73	6,993.17	-3,198.42	-170.47	3,202.92	1.08
10,179.00	92.78	180.83	6,989.14	-3,284.32	-170.89	3,288.74	1.30
10,264.00	92.35	180.98	6,985.34	-3,369.22	-172.23	3,373.61	0.54
10,350.00	93.77	182.31	6,980.75	-3,455.06	-174.70	3,459.47	2.26
10,436.00	93.71	181.78	6,975.14	-3,540.82	-177.76	3,545.28	0.62
10,522.00	92.85	182.69	6,970.22	-3,626.61	-181.11	3,631.13	1.45
10,607.00	90.99	183.11	6,967.37	-3,711.45	-185.41	3,716.08	2.24
10,693.00	90.93	184.52	6,965.93	-3,797.25	-191.13	3,802.05	1.64
10,779.00	89.01	184.39	6,965.97	-3,882.99	-197.81	3,888.01	2.24
10,865.00	89.26	184.82	6,967.27	-3,968.70	-204.71	3,973.96	0.58
10,950.00	89.51	185.30	6,968.18	-4,053.36	-212.21	4,058.89	0.64
11,036.00	90.31	185.33	6,968.32	-4,138.99	-220.17	4,144.80	0.93
11,121.00	90.43	184.37	6,967.77	-4,223.68	-227.36	4,229.74	1.14
11,207.00	90.80	184.40	6,966.85	-4,309.43	-233.94	4,315.70	0.43
11,293.00	91.18	184.23	6,965.36	-4,395.17	-240.41	4,401.66	0.48
Final MWD Survey @ 11293.00ft							
11,334.00	91.18	184.23	6,964.52	-4,436.05	-243.43	4,442.64	0.00
Straight Line Projection to TD @ 11334.00ft							

Design Report for Cannon 36N-E3HZ - Actual Field Surveys**Design Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
16.00	16.00	0.00	0.00	Xtreme 22 - RKB=16ft
116.00	116.00	0.27	-0.30	First Gyro Survey @ 116.00ft
754.00	753.99	2.69	0.23	Final Gyro Survey @ 754.00ft
754.00	753.99	2.69	0.23	Tie-On to Gyro Surveys @ 754.00ft
852.00	851.99	2.59	0.08	First MWD Survey @ 852.00ft
11,293.00	6,965.36	-4,395.17	-240.41	Final MWD Survey @ 11293.00ft
11,334.00	6,964.52	-4,436.05	-243.43	Straight Line Projection to TD @ 11334.00ft

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (ft)
				+N/_S (ft)	+E/-W (ft)	
Target	Cannon 36N-E3HZ_BHL	182.79	Slot	0.00	0.00	0.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
16.00	754.00	Surface Gyros	NS-GYRO-MS
852.00	7,320.00	Sperry MWD Surveys - Vert/Build	MWD
7,392.00	11,334.00	Sperry MWD Surveys - Lateral	MWD

Casing Details

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,365.00	6,991.87	7" Intermediate Casing	7	8-3/4

Design Report for Cannon 36N-E3HZ - Actual Field Surveys**Targets**

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Cannon 36N-E3HZ_ - actual wellpath hits target center	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- Polygon									
Point 1				2,287.56	200.74	1,307,603.08	3,240,256.26		
Point 2				-359.52	217.75	1,307,594.67	3,237,609.25		
Point 3				-3,006.55	234.50	1,307,585.99	3,234,962.29		
Point 4				-3,031.02	-2,273.23	1,305,078.25	3,234,961.91		
Point 5				-3,056.95	-4,928.57	1,302,422.90	3,234,961.48		
Point 6				2,218.12	-4,925.46	1,302,476.66	3,240,236.05		
Point 7				2,244.98	-2,278.57	1,305,123.58	3,240,237.49		
Cannon 36N-E3HZ_ - actual wellpath hits target center	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- Polygon									
Point 1				1,819.62	-256.28	1,307,141.60	3,239,792.75		
Point 2				-362.43	-242.26	1,307,134.67	3,237,610.76		
Point 3				-2,551.03	-228.41	1,307,127.50	3,235,422.22		
Point 4				-2,570.99	-2,273.69	1,305,082.21	3,235,421.90		
Point 5				-2,592.42	-4,468.29	1,302,887.60	3,235,421.55		
Point 6				1,762.74	-4,465.72	1,302,931.99	3,239,776.30		
Point 7				1,784.94	-2,278.11	1,305,119.62	3,239,777.49		
Cannon 36N-E3HZ_ - actual wellpath misses target center by 46.24ft at 11334.00ft MD (6964.52 TVD, -4436.05 N, -243.43 E)	0.00	0.00	6,987.00	-4,467.00	-217.45	1,302,911.70	3,237,796.29	40.161756	-104.649162
- Point									
Cannon 36N-E3HZ_ - actual wellpath hits target center	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- Point									
Cannon 36N-E3HZ_ - actual wellpath hits target center	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- Polygon									
Point 1				-820.56	213.51	1,307,586.00	3,237,148.29		
Point 2				-845.03	-2,294.21	1,305,078.27	3,237,147.91		
Point 3				-870.96	-4,949.56	1,302,422.90	3,237,147.48		
Point 4				32.13	-4,904.46	1,302,476.67	3,238,050.06		
Point 5				58.98	-2,257.57	1,305,123.58	3,238,051.48		
Point 6				101.57	221.74	1,307,603.08	3,238,070.26		

North Reference Sheet for Sec. 3-T2N-R65W - Cannon 36N-E3HZ - Plan CRev 1

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.

Vertical Depths are relative to RKB=16ft @ 4855.00ft (Xtreme 22). Northing and Easting are relative to Cannon 36N-E3HZ

Coordinate System is US State Plane 1983, Colorado Northern Zone using datum North American Datum 1983, ellipsoid GRS 1980

Projection method is Lambert Conformal Conic (2 parallel)

Central Meridian is -105.500000°, Longitude Origin:0.000000°, Latitude Origin:40.783333°

False Easting: 3,000,000.00ft, False Northing: 1,000,000.00ft, Scale Reduction: 0.99995774

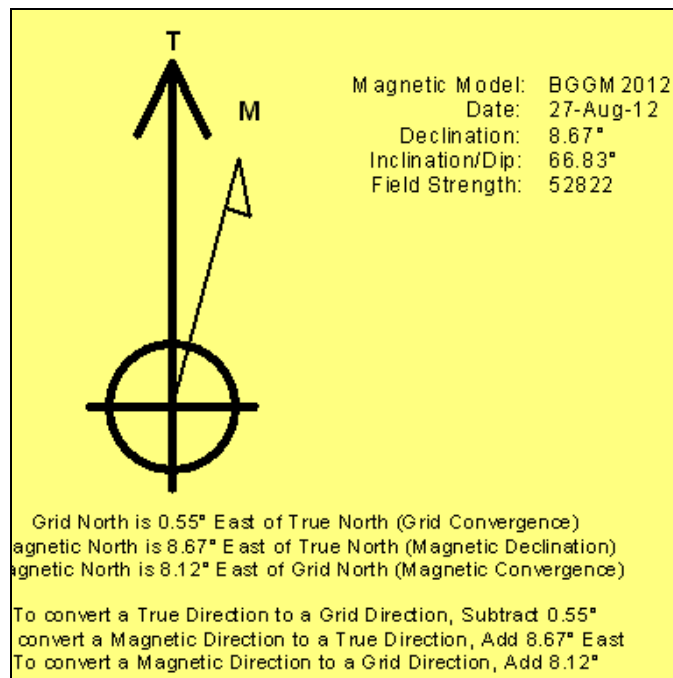
Grid Coordinates of Well: 1,307,380.39 ft N, 3,237,970.83 ft E

Geographical Coordinates of Well: 40° 10' 26.46" N, 104° 38' 54.18" W

Grid Convergence at Surface is: 0.55°

Based upon Minimum Curvature type calculations, at a Measured Depth of 11,334.00ft
the Bottom Hole Displacement is 4,442.72ft in the Direction of 183.14° (True).

Magnetic Convergence at surface is: -8.12° (27 August 2012, , BGGM2012)



Anadarko Petroleum Corp.

Weld County, CO (NAD 83)

Sec. 3-T2N-R65W

Cannon 36N-E3HZ

Plan CRev 1

Design: Actual Field Surveys

Survey Report - Geographic

12 September, 2012

Halliburton Company

Survey Report - Geographic

Company: Anadarko Petroleum Corp.	Local Co-ordinate Reference: Well Cannon 36N-E3HZ
Project: Weld County, CO (NAD 83)	TVD Reference: RKB=16ft @ 4855.00ft (Xtreme 22)
Site: Sec. 3-T2N-R65W	MD Reference: RKB=16ft @ 4855.00ft (Xtreme 22)
Well: Cannon 36N-E3HZ	North Reference: True
Wellbore: Plan CRev 1	Survey Calculation Method: Minimum Curvature
Design: Actual Field Surveys	Database: EDM 2003.16 Single User Db

Project Weld County, CO (NAD 83)	
Map System: US State Plane 1983	System Datum: Mean Sea Level
Geo Datum: North American Datum 1983	
Map Zone: Colorado Northern Zone	Using geodetic scale factor

Site Sec. 3-T2N-R65W		
Site Position:	Northing: 1,307,311.71 ft	Latitude: 40.173779
From: Lat/Long	Easting: 3,239,877.08 ft	Longitude: -104.641565
Position Uncertainty: 0.00 ft	Slot Radius: "	Grid Convergence: 0.55 °

Well Cannon 36N-E3HZ			
Well Position	+N/-S 0.00 ft	Northing: 1,307,380.39 ft	Latitude: 40.174018
	+E/-W 0.00 ft	Easting: 3,237,970.83 ft	Longitude: -104.648384
Position Uncertainty	0.00 ft	Wellhead Elevation: ft	Ground Level: 4,839.00 ft

Wellbore Plan CRev 1					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2012	8/27/2012	8.67	66.83	52,822

Design Actual Field Surveys				
Audit Notes:				
Version: 1.0	Phase: ACTUAL	Tie On Depth: 0.00		
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	182.79

Survey Program		Date 9/12/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
16.00	754.00	Surface Gyros (Plan CRev 1)	NS-GYRO-MS	North sensing gyrocompassing m/s
852.00	7,320.00	Sperry MWD Surveys - Vert/Build (Plan CF	MWD	Fixed:v2:standard declination
7,392.00	11,334.00	Sperry MWD Surveys - Lateral (Plan CRev	MWD	Fixed:v2:standard declination

Halliburton Company

Survey Report - Geographic

Company:	Anadarko Petroleum Corp.	Local Co-ordinate Reference:	Well Cannon 36N-E3HZ
Project:	Weld County, CO (NAD 83)	TVD Reference:	RKB=16ft @ 4855.00ft (Xtreme 22)
Site:	Sec. 3-T2N-R65W	MD Reference:	RKB=16ft @ 4855.00ft (Xtreme 22)
Well:	Cannon 36N-E3HZ	North Reference:	True
Wellbore:	Plan CRev 1	Survey Calculation Method:	Minimum Curvature
Design:	Actual Field Surveys	Database:	EDM 2003.16 Single User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384	
16.00	0.00	0.00	16.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384	
Xtreme 22 - RKB=16ft										
116.00	0.47	312.04	116.00	0.27	-0.30	1,307,380.66	3,237,970.52	40.174019	-104.648385	
First Gyro Survey @ 116.00ft										
216.00	0.16	325.05	216.00	0.66	-0.69	1,307,381.05	3,237,970.13	40.174020	-104.648386	
316.00	0.34	47.26	316.00	0.98	-0.55	1,307,381.36	3,237,970.27	40.174021	-104.648386	
416.00	0.23	4.66	416.00	1.38	-0.32	1,307,381.77	3,237,970.50	40.174022	-104.648385	
516.00	0.26	45.51	515.99	1.74	-0.14	1,307,382.13	3,237,970.67	40.174023	-104.648384	
616.00	0.30	12.01	615.99	2.16	0.08	1,307,382.54	3,237,970.89	40.174024	-104.648384	
716.00	0.19	33.44	715.99	2.55	0.22	1,307,382.94	3,237,971.03	40.174025	-104.648383	
754.00	0.28	339.50	753.99	2.69	0.23	1,307,383.08	3,237,971.03	40.174025	-104.648383	
Final Gyro Survey @ 754.00ft - Tie-On to Gyro Surveys @ 754.00ft										
852.00	0.38	191.30	851.99	2.59	0.08	1,307,382.98	3,237,970.88	40.174025	-104.648384	
First MWD Survey @ 852.00ft										
945.00	0.31	145.94	944.99	2.08	0.16	1,307,382.47	3,237,970.97	40.174024	-104.648383	
1,032.00	0.31	144.59	1,031.99	1.70	0.43	1,307,382.09	3,237,971.24	40.174023	-104.648382	
1,121.00	0.04	275.57	1,120.99	1.50	0.54	1,307,381.90	3,237,971.35	40.174022	-104.648382	
1,242.00	0.57	154.28	1,241.99	0.97	0.75	1,307,381.36	3,237,971.57	40.174021	-104.648381	
1,332.00	0.54	180.82	1,331.98	0.14	0.94	1,307,380.54	3,237,971.77	40.174018	-104.648381	
1,423.00	0.67	181.01	1,422.98	-0.82	0.93	1,307,379.57	3,237,971.76	40.174016	-104.648381	
1,519.00	0.62	182.96	1,518.97	-1.90	0.89	1,307,378.49	3,237,971.74	40.174013	-104.648381	
1,612.00	0.48	170.88	1,611.97	-2.79	0.93	1,307,377.61	3,237,971.78	40.174010	-104.648381	
1,704.00	0.66	144.20	1,703.96	-3.60	1.30	1,307,376.80	3,237,972.16	40.174008	-104.648379	
1,796.00	0.42	147.72	1,795.96	-4.31	1.79	1,307,376.09	3,237,972.66	40.174006	-104.648378	
1,888.00	0.53	92.90	1,887.96	-4.62	2.39	1,307,375.79	3,237,973.27	40.174005	-104.648375	
1,973.00	0.57	38.79	1,972.95	-4.31	3.05	1,307,376.11	3,237,973.92	40.174006	-104.648373	
2,059.00	0.60	34.29	2,058.95	-3.61	3.57	1,307,376.82	3,237,974.43	40.174008	-104.648371	
2,144.00	0.10	35.29	2,143.95	-3.18	3.86	1,307,377.25	3,237,974.72	40.174009	-104.648370	
2,230.00	0.31	305.88	2,229.95	-2.98	3.72	1,307,377.44	3,237,974.58	40.174010	-104.648371	
2,316.00	0.53	289.31	2,315.94	-2.71	3.16	1,307,377.71	3,237,974.01	40.174011	-104.648373	
2,402.00	0.54	238.03	2,401.94	-2.80	2.44	1,307,377.62	3,237,973.29	40.174010	-104.648375	
2,487.00	0.83	259.34	2,486.93	-3.12	1.49	1,307,377.28	3,237,972.35	40.174009	-104.648379	
2,573.00	0.98	226.18	2,572.92	-3.75	0.35	1,307,376.65	3,237,971.21	40.174008	-104.648383	
2,659.00	1.60	242.65	2,658.90	-4.81	-1.25	1,307,375.57	3,237,969.63	40.174005	-104.648388	
2,745.00	1.18	231.80	2,744.88	-5.91	-3.01	1,307,374.45	3,237,967.88	40.174002	-104.648395	
2,831.00	0.47	300.44	2,830.87	-6.27	-4.01	1,307,374.08	3,237,966.88	40.174001	-104.648398	
2,916.00	0.59	328.40	2,915.86	-5.73	-4.54	1,307,374.62	3,237,966.34	40.174002	-104.648400	
3,002.00	0.48	311.12	3,001.86	-5.11	-5.04	1,307,375.23	3,237,965.84	40.174004	-104.648402	
3,088.00	0.57	309.75	3,087.86	-4.60	-5.64	1,307,375.73	3,237,965.23	40.174005	-104.648404	
3,174.00	0.92	278.66	3,173.85	-4.22	-6.66	1,307,376.10	3,237,964.22	40.174006	-104.648408	
3,259.00	0.73	258.25	3,258.84	-4.23	-7.86	1,307,376.08	3,237,963.01	40.174006	-104.648412	
3,345.00	1.13	231.13	3,344.83	-4.87	-9.06	1,307,375.43	3,237,961.82	40.174005	-104.648416	
3,431.00	0.85	280.26	3,430.82	-5.29	-10.34	1,307,375.00	3,237,960.54	40.174003	-104.648421	
3,517.00	1.50	48.36	3,516.81	-4.43	-10.13	1,307,375.86	3,237,960.74	40.174006	-104.648420	
3,602.00	1.63	53.14	3,601.78	-2.97	-8.33	1,307,377.34	3,237,962.53	40.174010	-104.648414	
3,688.00	0.98	58.55	3,687.76	-1.85	-6.73	1,307,378.47	3,237,964.12	40.174013	-104.648408	
3,774.00	1.04	62.01	3,773.74	-1.10	-5.41	1,307,379.24	3,237,965.43	40.174015	-104.648403	
3,860.00	0.88	53.34	3,859.73	-0.34	-4.19	1,307,380.01	3,237,966.64	40.174017	-104.648399	
3,946.00	0.68	65.41	3,945.72	0.27	-3.20	1,307,380.62	3,237,967.63	40.174019	-104.648395	
4,031.00	0.74	49.29	4,030.72	0.84	-2.32	1,307,381.20	3,237,968.50	40.174020	-104.648392	
4,117.00	1.20	101.71	4,116.70	1.01	-1.02	1,307,381.39	3,237,969.80	40.174021	-104.648388	
4,203.00	1.45	112.88	4,202.68	0.41	0.86	1,307,380.81	3,237,971.69	40.174019	-104.648381	
4,289.00	0.47	207.45	4,288.67	-0.33	1.70	1,307,380.08	3,237,972.54	40.174017	-104.648378	
4,374.00	1.70	311.26	4,373.66	0.20	0.60	1,307,380.59	3,237,971.42	40.174019	-104.648382	

Halliburton Company

Survey Report - Geographic

Company:	Anadarko Petroleum Corp.	Local Co-ordinate Reference:	Well Cannon 36N-E3HZ
Project:	Weld County, CO (NAD 83)	TVD Reference:	RKB=16ft @ 4855.00ft (Xtreme 22)
Site:	Sec. 3-T2N-R65W	MD Reference:	RKB=16ft @ 4855.00ft (Xtreme 22)
Well:	Cannon 36N-E3HZ	North Reference:	True
Wellbore:	Plan CRev 1	Survey Calculation Method:	Minimum Curvature
Design:	Actual Field Surveys	Database:	EDM 2003.16 Single User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude	
4,460.00	2.68	312.20	4,459.60	2.39	-1.85	1,307,382.76	3,237,968.95	40.174025	-104.648391	
4,546.00	4.47	302.35	4,545.42	5.53	-6.17	1,307,385.86	3,237,964.60	40.174033	-104.648406	
4,632.00	5.62	303.22	4,631.09	9.63	-12.53	1,307,389.90	3,237,958.21	40.174044	-104.648429	
4,720.00	6.87	305.00	4,718.57	15.01	-20.44	1,307,395.20	3,237,950.24	40.174059	-104.648457	
4,806.00	5.97	312.23	4,804.03	20.97	-27.97	1,307,401.09	3,237,942.66	40.174076	-104.648484	
4,893.00	6.81	312.04	4,890.49	27.46	-35.15	1,307,407.51	3,237,935.42	40.174093	-104.648510	
4,978.00	6.21	302.29	4,974.94	33.29	-42.78	1,307,413.27	3,237,927.73	40.174109	-104.648537	
5,064.00	8.42	311.14	5,060.24	39.92	-51.45	1,307,419.81	3,237,919.00	40.174128	-104.648568	
5,143.00	9.52	313.77	5,138.27	48.25	-60.53	1,307,428.05	3,237,909.84	40.174150	-104.648601	
5,229.00	8.04	312.54	5,223.26	57.23	-70.10	1,307,436.94	3,237,900.19	40.174175	-104.648635	
5,317.00	8.61	329.36	5,310.35	67.06	-77.99	1,307,446.70	3,237,892.20	40.174202	-104.648663	
5,403.00	8.95	319.08	5,395.34	77.66	-85.65	1,307,457.22	3,237,884.44	40.174231	-104.648691	
5,488.00	7.80	325.73	5,479.44	87.42	-93.23	1,307,466.91	3,237,876.77	40.174258	-104.648718	
5,574.00	8.87	331.45	5,564.53	98.07	-99.69	1,307,477.49	3,237,870.21	40.174287	-104.648741	
5,660.00	9.00	332.56	5,649.49	109.86	-105.95	1,307,489.22	3,237,863.83	40.174320	-104.648763	
5,746.00	7.58	334.84	5,734.59	120.97	-111.47	1,307,500.27	3,237,858.21	40.174350	-104.648783	
5,831.00	5.96	339.00	5,818.99	130.16	-115.43	1,307,509.43	3,237,854.16	40.174375	-104.648797	
5,917.00	3.36	330.64	5,904.70	136.53	-118.27	1,307,515.77	3,237,851.26	40.174393	-104.648807	
6,003.00	2.28	332.40	5,990.59	140.24	-120.30	1,307,519.46	3,237,849.20	40.174403	-104.648814	
6,089.00	1.59	336.11	6,076.55	142.85	-121.57	1,307,522.05	3,237,847.90	40.174410	-104.648819	
6,174.00	1.59	323.47	6,161.51	144.87	-122.75	1,307,524.07	3,237,846.70	40.174416	-104.648823	
6,260.00	0.94	271.83	6,247.49	145.85	-124.17	1,307,525.04	3,237,845.27	40.174418	-104.648828	
6,346.00	0.95	258.32	6,333.48	145.73	-125.57	1,307,524.90	3,237,843.87	40.174418	-104.648833	
6,419.00	2.07	218.48	6,406.46	144.58	-126.98	1,307,523.73	3,237,842.47	40.174415	-104.648838	
6,466.00	3.48	205.93	6,453.40	142.63	-128.13	1,307,521.77	3,237,841.34	40.174409	-104.648843	
6,505.00	8.05	188.79	6,492.20	138.86	-129.07	1,307,518.00	3,237,840.44	40.174399	-104.648846	
6,547.00	11.95	198.66	6,533.55	131.83	-130.91	1,307,510.95	3,237,838.66	40.174380	-104.648852	
6,590.00	15.76	188.08	6,575.30	121.83	-133.16	1,307,500.93	3,237,836.51	40.174352	-104.648861	
6,636.00	20.64	181.19	6,618.99	107.53	-134.21	1,307,486.62	3,237,835.60	40.174313	-104.648864	
6,676.00	23.54	180.69	6,656.05	92.49	-134.45	1,307,471.58	3,237,835.51	40.174272	-104.648865	
6,722.00	29.12	177.66	6,697.26	72.10	-134.10	1,307,451.20	3,237,836.05	40.174216	-104.648864	
6,762.00	34.10	177.27	6,731.32	51.17	-133.17	1,307,430.27	3,237,837.18	40.174158	-104.648861	
6,808.00	39.59	179.68	6,768.12	23.61	-132.47	1,307,402.72	3,237,838.14	40.174083	-104.648858	
6,848.00	44.59	182.10	6,797.80	-3.19	-132.92	1,307,375.92	3,237,837.96	40.174009	-104.648860	
6,893.00	50.60	180.11	6,828.13	-36.39	-133.53	1,307,342.72	3,237,837.66	40.173918	-104.648862	
6,933.00	55.91	178.48	6,852.05	-68.43	-133.12	1,307,310.69	3,237,838.38	40.173830	-104.648860	
6,973.00	59.43	177.30	6,873.44	-102.20	-131.87	1,307,276.93	3,237,839.95	40.173737	-104.648856	
7,019.00	62.00	179.34	6,895.94	-142.30	-130.70	1,307,236.85	3,237,841.51	40.173627	-104.648852	
7,061.00	64.10	182.50	6,914.98	-179.72	-131.31	1,307,199.42	3,237,841.26	40.173525	-104.648854	
7,104.00	67.28	184.34	6,932.68	-218.83	-133.66	1,307,160.29	3,237,839.29	40.173417	-104.648862	
7,150.00	72.78	185.04	6,948.39	-261.90	-137.19	1,307,117.19	3,237,836.16	40.173299	-104.648875	
7,190.00	76.27	185.18	6,959.06	-300.29	-140.63	1,307,078.77	3,237,833.10	40.173194	-104.648887	
7,235.00	77.71	184.90	6,969.19	-343.97	-144.48	1,307,035.06	3,237,829.67	40.173074	-104.648901	
7,276.00	78.81	183.12	6,977.53	-384.01	-147.29	1,306,995.00	3,237,827.24	40.172964	-104.648911	
7,320.00	79.98	181.70	6,985.63	-427.22	-149.10	1,306,951.78	3,237,825.84	40.172845	-104.648918	
7,365.00	84.08	181.65	6,991.87	-471.75	-150.41	1,306,907.23	3,237,824.97	40.172723	-104.648922	
7" Intermediate Casing										
7,392.00	86.54	181.62	6,994.07	-498.65	-151.17	1,306,880.33	3,237,824.46	40.172649	-104.648925	
7,435.00	86.41	180.85	6,996.72	-541.56	-152.10	1,306,837.42	3,237,823.95	40.172531	-104.648928	
7,521.00	87.59	180.44	7,001.22	-627.43	-153.06	1,306,751.54	3,237,823.80	40.172296	-104.648932	
7,606.00	89.14	180.64	7,003.64	-712.39	-153.87	1,306,666.58	3,237,823.82	40.172062	-104.648935	
7,693.00	90.99	180.48	7,003.54	-799.39	-154.72	1,306,579.59	3,237,823.80	40.171824	-104.648938	
7,779.00	91.48	181.04	7,001.69	-885.36	-155.86	1,306,493.61	3,237,823.49	40.171588	-104.648942	
7,863.00	91.79	180.64	6,999.29	-969.31	-157.09	1,306,409.65	3,237,823.06	40.171357	-104.648946	
7,950.00	90.56	180.51	6,997.51	-1,056.29	-157.96	1,306,322.67	3,237,823.03	40.171118	-104.648949	

Halliburton Company

Survey Report - Geographic

Company:	Anadarko Petroleum Corp.	Local Co-ordinate Reference:	Well Cannon 36N-E3HZ
Project:	Weld County, CO (NAD 83)	TVD Reference:	RKB=16ft @ 4855.00ft (Xtreme 22)
Site:	Sec. 3-T2N-R65W	MD Reference:	RKB=16ft @ 4855.00ft (Xtreme 22)
Well:	Cannon 36N-E3HZ	North Reference:	True
Wellbore:	Plan CRev 1	Survey Calculation Method:	Minimum Curvature
Design:	Actual Field Surveys	Database:	EDM 2003.16 Single User Db

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
8,036.00	91.36	180.94	6,996.07	-1,142.27	-159.05	1,306,236.69	3,237,822.77	40.170882	-104.648953
8,121.00	90.12	181.35	6,994.97	-1,227.24	-160.75	1,306,151.71	3,237,821.88	40.170649	-104.648959
8,209.00	90.62	181.31	6,994.40	-1,315.22	-162.79	1,306,063.72	3,237,820.69	40.170408	-104.648967
8,294.00	89.69	180.71	6,994.17	-1,400.20	-164.29	1,305,978.73	3,237,820.00	40.170174	-104.648972
8,380.00	88.95	180.21	6,995.19	-1,486.19	-164.98	1,305,892.74	3,237,820.14	40.169938	-104.648974
8,463.00	89.26	180.55	6,996.49	-1,569.18	-165.53	1,305,809.76	3,237,820.39	40.169711	-104.648976
8,549.00	90.68	180.68	6,996.54	-1,655.17	-166.45	1,305,723.76	3,237,820.29	40.169474	-104.648980
8,635.00	89.88	180.07	6,996.11	-1,741.17	-167.01	1,305,637.77	3,237,820.55	40.169238	-104.648982
8,721.00	89.32	180.99	6,996.72	-1,827.16	-167.81	1,305,551.77	3,237,820.58	40.169002	-104.648984
8,806.00	89.81	181.38	6,997.36	-1,912.14	-169.57	1,305,466.79	3,237,819.64	40.168769	-104.648991
8,892.00	88.33	182.42	6,998.76	-1,998.08	-172.42	1,305,380.83	3,237,817.62	40.168533	-104.649001
8,978.00	88.21	182.74	7,001.35	-2,083.95	-176.29	1,305,294.93	3,237,814.57	40.168297	-104.649015
9,064.00	88.83	181.91	7,003.57	-2,169.85	-179.77	1,305,209.00	3,237,811.91	40.168062	-104.649027
9,149.00	89.07	180.81	7,005.13	-2,254.81	-181.79	1,305,124.03	3,237,810.71	40.167828	-104.649034
9,235.00	89.57	179.40	7,006.15	-2,340.80	-181.95	1,305,038.04	3,237,811.38	40.167592	-104.649035
9,321.00	90.12	179.59	7,006.39	-2,426.80	-181.19	1,304,952.06	3,237,812.96	40.167356	-104.649032
9,407.00	90.00	179.75	7,006.30	-2,512.80	-180.70	1,304,866.08	3,237,814.28	40.167120	-104.649031
9,493.00	89.57	178.98	7,006.62	-2,598.79	-179.74	1,304,780.10	3,237,816.06	40.166884	-104.649027
9,578.00	91.05	178.95	7,006.16	-2,683.78	-178.21	1,304,695.14	3,237,818.41	40.166651	-104.649022
9,664.00	89.81	177.17	7,005.51	-2,769.72	-175.30	1,304,609.23	3,237,822.15	40.166415	-104.649011
9,750.00	90.80	179.48	7,005.05	-2,855.67	-172.78	1,304,523.31	3,237,825.49	40.166179	-104.649002
9,836.00	91.17	179.30	7,003.58	-2,941.66	-171.87	1,304,437.34	3,237,827.23	40.165943	-104.648999
9,921.00	91.55	179.81	7,001.56	-3,026.63	-171.21	1,304,352.38	3,237,828.70	40.165710	-104.648997
10,007.00	93.52	179.74	6,997.76	-3,112.54	-170.87	1,304,266.48	3,237,829.87	40.165474	-104.648995
10,093.00	92.59	179.73	6,993.17	-3,198.42	-170.47	1,304,180.62	3,237,831.09	40.165238	-104.648994
10,179.00	92.78	180.83	6,989.14	-3,284.32	-170.89	1,304,094.72	3,237,831.49	40.165002	-104.648995
10,264.00	92.35	180.98	6,985.34	-3,369.22	-172.23	1,304,009.81	3,237,830.97	40.164769	-104.649000
10,350.00	93.77	182.31	6,980.75	-3,455.06	-174.70	1,303,923.96	3,237,829.33	40.164534	-104.649009
10,436.00	93.71	181.78	6,975.14	-3,540.82	-177.76	1,303,838.17	3,237,827.09	40.164298	-104.649020
10,522.00	92.85	182.69	6,970.22	-3,626.61	-181.11	1,303,752.35	3,237,824.56	40.164063	-104.649032
10,607.00	90.99	183.11	6,967.37	-3,711.45	-185.41	1,303,667.48	3,237,821.08	40.163830	-104.649047
10,693.00	90.93	184.52	6,965.93	-3,797.25	-191.13	1,303,581.64	3,237,816.18	40.163594	-104.649068
10,779.00	89.01	184.39	6,965.97	-3,882.99	-197.81	1,303,495.85	3,237,810.33	40.163359	-104.649092
10,865.00	89.26	184.82	6,967.27	-3,968.70	-204.71	1,303,410.08	3,237,804.25	40.163124	-104.649116
10,950.00	89.51	185.30	6,968.18	-4,053.36	-212.21	1,303,325.35	3,237,797.57	40.162891	-104.649143
11,036.00	90.31	185.33	6,968.32	-4,138.99	-220.17	1,303,239.65	3,237,790.42	40.162656	-104.649172
11,121.00	90.43	184.37	6,967.77	-4,223.68	-227.36	1,303,154.89	3,237,784.05	40.162424	-104.649197
11,207.00	90.80	184.40	6,966.85	-4,309.43	-233.94	1,303,069.10	3,237,778.30	40.162189	-104.649221
11,293.00	91.18	184.23	6,965.36	-4,395.17	-240.41	1,302,983.30	3,237,772.65	40.161953	-104.649244
Final MWD Survey @ 11293.00ft									
11,334.00	91.18	184.23	6,964.52	-4,436.05	-243.43	1,302,942.39	3,237,770.02	40.161841	-104.649255
Straight Line Projection to TD @ 11334.00ft									

Halliburton Company

Survey Report - Geographic

Company:	Anadarko Petroleum Corp.	Local Co-ordinate Reference:	Well Cannon 36N-E3HZ
Project:	Weld County, CO (NAD 83)	TVD Reference:	RKB=16ft @ 4855.00ft (Xtreme 22)
Site:	Sec. 3-T2N-R65W	MD Reference:	RKB=16ft @ 4855.00ft (Xtreme 22)
Well:	Cannon 36N-E3HZ	North Reference:	True
Wellbore:	Plan CRev 1	Survey Calculation Method:	Minimum Curvature
Design:	Actual Field Surveys	Database:	EDM 2003.16 Single User Db

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
Cannon 36N-E3HZ_S	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- actual wellpath hits target center									
- Polygon									
Point 1			0.00	200.74	2,287.56	1,307,603.08	3,240,256.26		
Point 2			0.00	217.75	-359.52	1,307,594.67	3,237,609.25		
Point 3			0.00	234.50	-3,006.55	1,307,585.99	3,234,962.29		
Point 4			0.00	-2,273.23	-3,031.02	1,305,078.25	3,234,961.91		
Point 5			0.00	-4,928.57	-3,056.95	1,302,422.90	3,234,961.48		
Point 6			0.00	-4,925.46	2,218.12	1,302,476.66	3,240,236.05		
Point 7			0.00	-2,278.57	2,244.98	1,305,123.58	3,240,237.49		
Cannon 36N-E3HZ_S	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- actual wellpath hits target center									
- Polygon									
Point 1			0.00	-256.28	1,819.62	1,307,141.60	3,239,792.75		
Point 2			0.00	-242.26	-362.43	1,307,134.67	3,237,610.76		
Point 3			0.00	-228.41	-2,551.03	1,307,127.50	3,235,422.22		
Point 4			0.00	-2,273.69	-2,570.99	1,305,082.21	3,235,421.90		
Point 5			0.00	-4,468.29	-2,592.42	1,302,887.60	3,235,421.55		
Point 6			0.00	-4,465.72	1,762.74	1,302,931.99	3,239,776.30		
Point 7			0.00	-2,278.11	1,784.94	1,305,119.62	3,239,777.49		
Cannon 36N-E3HZ_B	0.00	0.00	6,987.00	-4,467.00	-217.45	1,302,911.70	3,237,796.29	40.161756	-104.649162
- actual wellpath misses target center by 46.24ft at 11334.00ft MD (6964.52 TVD, -4436.05 N, -243.43 E)									
- Point									
Cannon 36N-E3HZ_S	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- actual wellpath hits target center									
- Point									
Cannon 36N-E3HZ_L	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- actual wellpath hits target center									
- Polygon									
Point 1			0.00	213.51	-820.56	1,307,586.00	3,237,148.29		
Point 2			0.00	-2,294.21	-845.03	1,305,078.27	3,237,147.91		
Point 3			0.00	-4,949.56	-870.96	1,302,422.90	3,237,147.48		
Point 4			0.00	-4,904.46	32.13	1,302,476.67	3,238,050.06		
Point 5			0.00	-2,257.57	58.98	1,305,123.58	3,238,051.48		
Point 6			0.00	221.74	101.57	1,307,603.08	3,238,070.26		

Casing Points					
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter	
(ft)	(ft)		(")	(")	
7,365.00	6,991.87	7" Intermediate Casing	7	8-3/4	

Halliburton Company

Survey Report - Geographic

Company:	Anadarko Petroleum Corp.	Local Co-ordinate Reference:	Well Cannon 36N-E3HZ
Project:	Weld County, CO (NAD 83)	TVD Reference:	RKB=16ft @ 4855.00ft (Xtreme 22)
Site:	Sec. 3-T2N-R65W	MD Reference:	RKB=16ft @ 4855.00ft (Xtreme 22)
Well:	Cannon 36N-E3HZ	North Reference:	True
Wellbore:	Plan CRev 1	Survey Calculation Method:	Minimum Curvature
Design:	Actual Field Surveys	Database:	EDM 2003.16 Single User Db

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
Cannon 36N-E3HZ_S	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- actual wellpath hits target center									
- Polygon									
Point 1			0.00	200.74	2,287.56	1,307,603.08	3,240,256.26		
Point 2			0.00	217.75	-359.52	1,307,594.67	3,237,609.25		
Point 3			0.00	234.50	-3,006.55	1,307,585.99	3,234,962.29		
Point 4			0.00	-2,273.23	-3,031.02	1,305,078.25	3,234,961.91		
Point 5			0.00	-4,928.57	-3,056.95	1,302,422.90	3,234,961.48		
Point 6			0.00	-4,925.46	2,218.12	1,302,476.66	3,240,236.05		
Point 7			0.00	-2,278.57	2,244.98	1,305,123.58	3,240,237.49		
Cannon 36N-E3HZ_S	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- actual wellpath hits target center									
- Polygon									
Point 1			0.00	-256.28	1,819.62	1,307,141.60	3,239,792.75		
Point 2			0.00	-242.26	-362.43	1,307,134.67	3,237,610.76		
Point 3			0.00	-228.41	-2,551.03	1,307,127.50	3,235,422.22		
Point 4			0.00	-2,273.69	-2,570.99	1,305,082.21	3,235,421.90		
Point 5			0.00	-4,468.29	-2,592.42	1,302,887.60	3,235,421.55		
Point 6			0.00	-4,465.72	1,762.74	1,302,931.99	3,239,776.30		
Point 7			0.00	-2,278.11	1,784.94	1,305,119.62	3,239,777.49		
Cannon 36N-E3HZ_B	0.00	0.00	6,987.00	-4,467.00	-217.45	1,302,911.70	3,237,796.29	40.161756	-104.649162
- actual wellpath misses target center by 46.24ft at 11334.00ft MD (6964.52 TVD, -4436.05 N, -243.43 E)									
- Point									
Cannon 36N-E3HZ_S	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- actual wellpath hits target center									
- Point									
Cannon 36N-E3HZ_L	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- actual wellpath hits target center									
- Polygon									
Point 1			0.00	213.51	-820.56	1,307,586.00	3,237,148.29		
Point 2			0.00	-2,294.21	-845.03	1,305,078.27	3,237,147.91		
Point 3			0.00	-4,949.56	-870.96	1,302,422.90	3,237,147.48		
Point 4			0.00	-4,904.46	32.13	1,302,476.67	3,238,050.06		
Point 5			0.00	-2,257.57	58.98	1,305,123.58	3,238,051.48		
Point 6			0.00	221.74	101.57	1,307,603.08	3,238,070.26		

Casing Points					
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter	
(ft)	(ft)		(")	(")	
7,365.00	6,991.87	7" Intermediate Casing	7	8-3/4	

Design Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(ft)	(ft)	+N/-S	+E/-W		
		(ft)	(ft)		
16.00	16.00	0.00	0.00	Xtreme 22 - RKB=16ft	
116.00	116.00	0.27	-0.30	First Gyro Survey @ 116.00ft	
754.00	753.99	2.69	0.23	Final Gyro Survey @ 754.00ft	
754.00	753.99	2.69	0.23	Tie-On to Gyro Surveys @ 754.00ft	
852.00	851.99	2.59	0.08	First MWD Survey @ 852.00ft	
11,293.00	6,965.36	-4,395.17	-240.41	Final MWD Survey @ 11293.00ft	
11,334.00	6,964.52	-4,436.05	-243.43	Straight Line Projection to TD @ 11334.00ft	

Halliburton Company

Survey Report - Geographic

Company: Anadarko Petroleum Corp.	Local Co-ordinate Reference: Well Cannon 36N-E3HZ
Project: Weld County, CO (NAD 83)	TVD Reference: RKB=16ft @ 4855.00ft (Xtreme 22)
Site: Sec. 3-T2N-R65W	MD Reference: RKB=16ft @ 4855.00ft (Xtreme 22)
Well: Cannon 36N-E3HZ	North Reference: True
Wellbore: Plan CRev 1	Survey Calculation Method: Minimum Curvature
Design: Actual Field Surveys	Database: EDM 2003.16 Single User Db

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/S	+E/W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
Cannon 36N-E3HZ_S	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- actual wellpath hits target center									
- Polygon									
Point 1			0.00	200.74	2,287.56	1,307,603.08	3,240,256.26		
Point 2			0.00	217.75	-359.52	1,307,594.67	3,237,609.25		
Point 3			0.00	234.50	-3,006.55	1,307,585.99	3,234,962.29		
Point 4			0.00	-2,273.23	-3,031.02	1,305,078.25	3,234,961.91		
Point 5			0.00	-4,928.57	-3,056.95	1,302,422.90	3,234,961.48		
Point 6			0.00	-4,925.46	2,218.12	1,302,476.66	3,240,236.05		
Point 7			0.00	-2,278.57	2,244.98	1,305,123.58	3,240,237.49		
Cannon 36N-E3HZ_S	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- actual wellpath hits target center									
- Polygon									
Point 1			0.00	-256.28	1,819.62	1,307,141.60	3,239,792.75		
Point 2			0.00	-242.26	-362.43	1,307,134.67	3,237,610.76		
Point 3			0.00	-228.41	-2,551.03	1,307,127.50	3,235,422.22		
Point 4			0.00	-2,273.69	-2,570.99	1,305,082.21	3,235,421.90		
Point 5			0.00	-4,468.29	-2,592.42	1,302,887.60	3,235,421.55		
Point 6			0.00	-4,465.72	1,762.74	1,302,931.99	3,239,776.30		
Point 7			0.00	-2,278.11	1,784.94	1,305,119.62	3,239,777.49		
Cannon 36N-E3HZ_B	0.00	0.00	6,987.00	-4,467.00	-217.45	1,302,911.70	3,237,796.29	40.161756	-104.649162
- actual wellpath misses target center by 46.24ft at 11334.00ft MD (6964.52 TVD, -4436.05 N, -243.43 E)									
- Point									
Cannon 36N-E3HZ_S	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- actual wellpath hits target center									
- Point									
Cannon 36N-E3HZ_L	0.00	0.00	0.00	0.00	0.00	1,307,380.39	3,237,970.83	40.174018	-104.648384
- actual wellpath hits target center									
- Polygon									
Point 1			0.00	213.51	-820.56	1,307,586.00	3,237,148.29		
Point 2			0.00	-2,294.21	-845.03	1,305,078.27	3,237,147.91		
Point 3			0.00	-4,949.56	-870.96	1,302,422.90	3,237,147.48		
Point 4			0.00	-4,904.46	32.13	1,302,476.67	3,238,050.06		
Point 5			0.00	-2,257.57	58.98	1,305,123.58	3,238,051.48		
Point 6			0.00	221.74	101.57	1,307,603.08	3,238,070.26		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
7,365.00	6,991.87	7" Intermediate Casing	7	8-3/4	

Checked By: _____ Approved By: _____ Date: _____