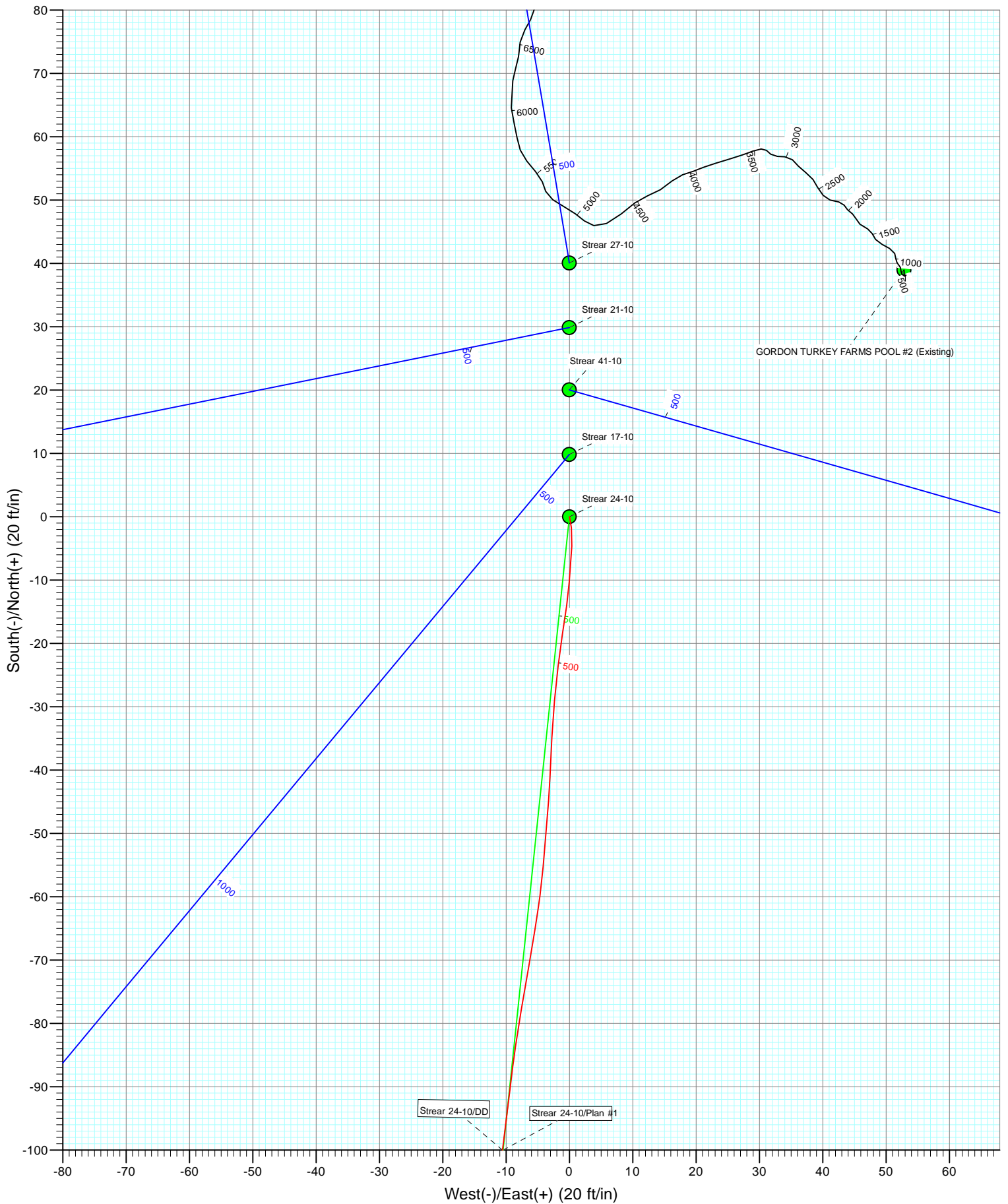


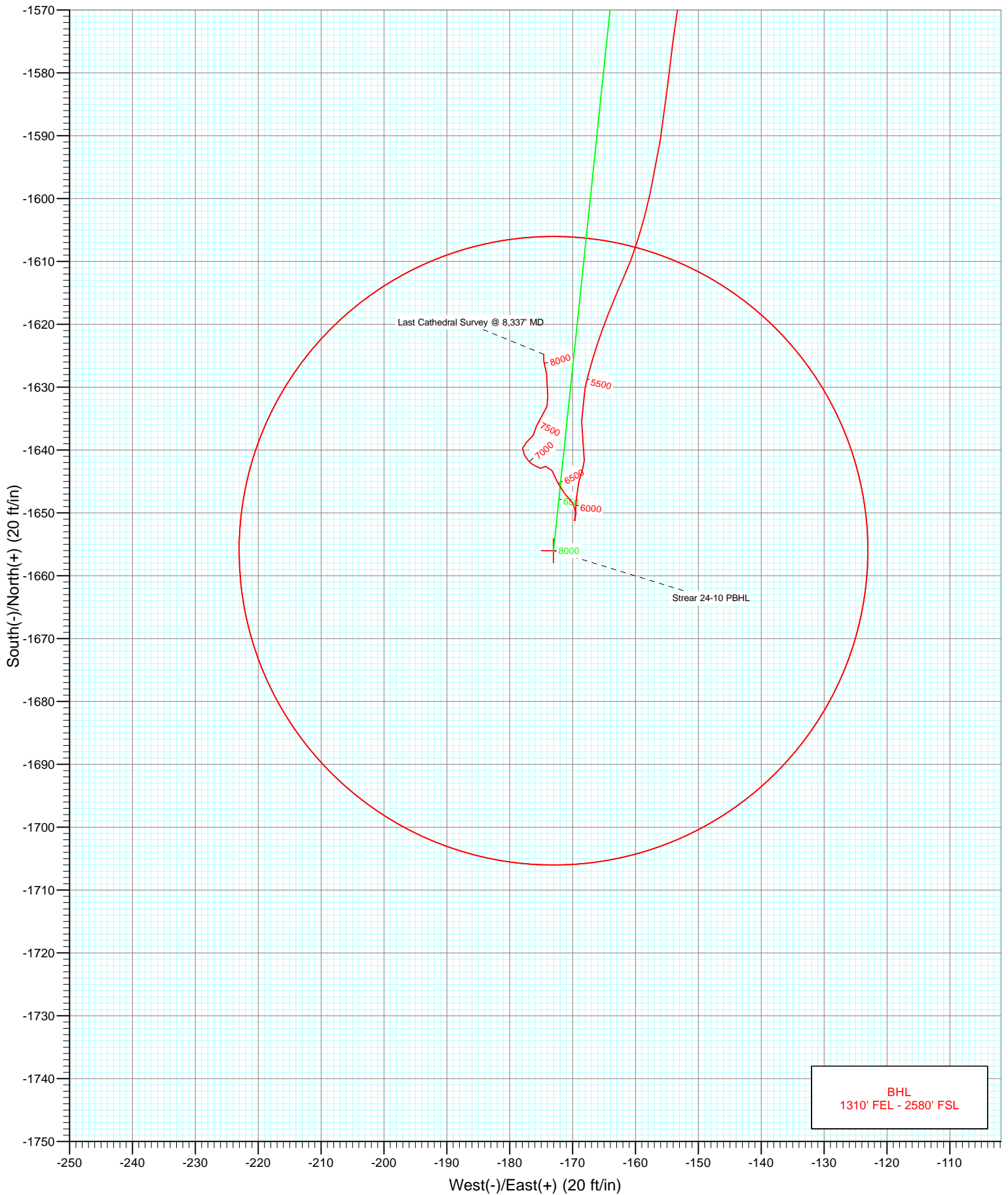
Azimuths to True North  
Magnetic North: 8.81°

Magnetic Field  
Strength: 52918.3nT  
Dip Angle: 66.81°  
Date: 2/23/2012  
Model: IGRF2010

Type	Target	Target	Azimuth	Origin Type	N/S	E/W	From TVD
Target	Strear 24-10 PBHL	Strear 24-10 PBHL	185.96	Slot	0.0	0.0	0.0
Name	Strear 24-10 PBHL	TVD	+N/-S	+E/-W	Latitude	Longitude	
		8064.0	-1656.0	-173.0	40.152476	-104.871861	

DD  
Strear 24-10  
125202 148155; LR  
KBE @ 4939.0ft (Xtreme 14)  
North American Datum 1983  
Well Strear 24-10, True North





# Cathedral Energy Services

## Survey Report

<b>Company:</b>	Anadarko Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Strear 24-10
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KBE @ 4939.0ft (Xtreme 14)
<b>Site:</b>	NENE Sec10-T2N-R67W (Strear 17-10-9F)	<b>MD Reference:</b>	KBE @ 4939.0ft (Xtreme 14)
<b>Well:</b>	Strear 24-10	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	USA EDM 5000 Multi Users DB

<b>Project</b>	DJ Wattenberg		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

Site		NENE Sec10-T2N-R67W (Strear 17-10-9F)			
Site Position:		Northing:	1,300,712.08 ft	Latitude:	40.157132
From:	Lat/Long	Easting:	3,175,747.83 ft	Longitude:	-104.871242
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.41 °

Well	Strear 24-10					
Well Position	+N/-S	0.0 ft	Northing:	1,300,672.00 ft	Latitude:	40.157022
	+E/-W	0.0 ft	Easting:	3,175,748.11 ft	Longitude:	-104.871242
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,924.0 ft

<b>Wellbore</b>	DD				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	2/23/2012	8.81	66.81	52,918

<b>Design</b>	DD				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	185.96	

<b>Survey Program</b>	<b>Date</b>	2/27/2012			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
183.0	369.0	Survey #1 (DD)	MWD	Geolink MWD	
461.0	8,337.0	Survey #2 (DD)	MWD	Geolink MWD	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Formations / Comments</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
183.0	1.10	169.90	183.0	-1.7	0.3	1.7	0.60	0.60		
276.0	2.50	182.10	275.9	-4.6	0.4	4.6	1.55	1.51		
369.0	4.40	185.10	368.8	-10.2	0.0	10.2	2.05	2.04		
461.0	6.20	189.10	460.4	-18.6	-1.1	18.7	2.00	1.96		
550.0	7.30	184.90	548.8	-29.0	-2.3	29.1	1.35	1.24		
639.0	8.40	182.20	636.9	-41.1	-3.1	41.2	1.30	1.24		
664.0	8.60	184.20	661.6	-44.8	-3.3	44.9	1.43	0.80		
734.0	8.40	185.10	730.9	-55.1	-4.1	55.3	0.34	-0.29		
825.0	10.60	190.60	820.6	-70.0	-6.3	70.3	2.61	2.42		
913.0	14.40	187.60	906.5	-88.8	-9.2	89.3	4.38	4.32		
1,001.0	15.60	185.40	991.5	-111.4	-11.8	112.1	1.51	1.36		

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	Anadarko Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Strear 24-10
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KBE @ 4939.0ft (Xtreme 14)
<b>Site:</b>	NENE Sec10-T2N-R67W (Strear 17-10-9F)	<b>MD Reference:</b>	KBE @ 4939.0ft (Xtreme 14)
<b>Well:</b>	Strear 24-10	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
1,089.0	17.80	186.90	1,075.8	-136.6	-14.5	137.3	2.55	2.50	
1,178.0	19.30	186.70	1,160.2	-164.7	-17.8	165.6	1.69	1.69	
1,268.0	20.50	187.70	1,244.8	-195.1	-21.7	196.3	1.39	1.33	
1,358.0	20.30	186.70	1,329.2	-226.2	-25.6	227.6	0.45	-0.22	
1,447.0	20.70	186.70	1,412.5	-257.2	-29.2	258.8	0.45	0.45	
1,537.0	19.50	186.20	1,497.0	-287.9	-32.7	289.7	1.35	-1.33	
1,625.0	20.10	181.50	1,579.8	-317.6	-34.7	319.5	1.93	0.68	
1,713.0	19.10	180.80	1,662.7	-347.1	-35.3	348.9	1.17	-1.14	
1,802.0	20.20	183.20	1,746.6	-377.0	-36.4	378.8	1.53	1.24	
1,891.0	18.40	181.50	1,830.6	-406.4	-37.6	408.1	2.12	-2.02	
1,978.0	19.20	186.30	1,912.9	-434.4	-39.5	436.1	2.00	0.92	
2,067.0	20.00	189.90	1,996.8	-463.9	-43.7	465.9	1.63	0.90	
2,156.0	20.90	187.30	2,080.2	-494.6	-48.4	497.0	1.44	1.01	
2,245.0	18.60	186.30	2,163.9	-524.5	-52.0	527.1	2.61	-2.58	
2,334.0	20.40	187.70	2,247.8	-554.0	-55.6	556.8	2.09	2.02	
2,424.0	20.00	184.20	2,332.3	-584.9	-58.8	587.8	1.41	-0.44	
2,513.0	19.70	186.80	2,416.0	-614.9	-61.7	618.0	1.05	-0.34	
2,602.0	19.50	188.10	2,499.8	-644.5	-65.6	647.9	0.54	-0.22	
2,690.0	19.70	188.60	2,582.7	-673.8	-69.9	677.4	0.30	0.23	
2,778.0	18.10	189.00	2,666.0	-701.9	-74.2	705.8	1.82	-1.82	
2,866.0	21.40	187.50	2,748.8	-731.3	-78.5	735.5	3.79	3.75	
2,956.0	20.70	187.70	2,832.8	-763.4	-82.7	767.9	0.78	-0.78	
3,043.0	21.20	185.20	2,914.0	-794.3	-86.2	799.0	1.18	0.57	
3,131.0	19.20	183.30	2,996.6	-824.6	-88.5	829.3	2.39	-2.27	
3,219.0	18.60	182.00	3,079.9	-853.1	-89.8	857.8	0.83	-0.68	
3,308.0	19.10	185.40	3,164.1	-881.7	-91.7	886.5	1.36	0.56	
3,397.0	19.40	186.50	3,248.1	-910.9	-94.7	915.8	0.53	0.34	
3,486.0	17.40	187.80	3,332.6	-938.8	-98.2	943.9	2.29	-2.25	
3,575.0	16.40	187.60	3,417.7	-964.4	-101.7	969.8	1.13	-1.12	
3,665.0	18.50	185.60	3,503.6	-991.2	-104.7	996.8	2.43	2.33	
3,754.0	19.50	181.10	3,587.7	-1,020.2	-106.4	1,025.7	1.99	1.12	
3,841.0	19.70	183.70	3,669.7	-1,049.3	-107.6	1,054.8	1.03	0.23	
3,929.0	20.70	186.90	3,752.3	-1,079.6	-110.5	1,085.2	1.69	1.14	
4,018.0	20.30	184.80	3,835.7	-1,110.6	-113.6	1,116.3	0.94	-0.45	
4,107.0	18.60	188.00	3,919.6	-1,140.0	-116.9	1,146.0	2.25	-1.91	
4,195.0	19.50	186.20	4,002.8	-1,168.5	-120.4	1,174.7	1.22	1.02	
4,283.0	22.10	180.70	4,085.0	-1,199.7	-122.2	1,205.9	3.69	2.95	
4,371.0	21.20	181.60	4,166.8	-1,232.1	-122.9	1,238.2	1.09	-1.02	
4,459.0	20.50	185.60	4,249.1	-1,263.4	-124.8	1,269.5	1.80	-0.80	
4,548.0	22.30	188.10	4,331.9	-1,295.6	-128.7	1,302.0	2.27	2.02	
4,638.0	19.00	186.40	4,416.1	-1,327.1	-132.8	1,333.7	3.73	-3.67	
4,727.0	21.60	187.60	4,499.6	-1,357.7	-136.6	1,364.5	2.96	2.92	
4,817.0	22.90	186.30	4,582.9	-1,391.5	-140.7	1,398.6	1.54	1.44	
4,906.0	21.20	185.80	4,665.4	-1,424.8	-144.2	1,432.0	1.92	-1.91	
4,996.0	20.30	182.10	4,749.5	-1,456.5	-146.4	1,463.9	1.77	-1.00	
5,085.0	18.40	180.00	4,833.5	-1,486.0	-147.0	1,493.3	2.27	-2.13	
5,175.0	17.10	184.40	4,919.2	-1,513.4	-148.0	1,520.6	2.07	-1.44	
5,262.0	15.80	182.70	5,002.7	-1,538.0	-149.5	1,545.2	1.59	-1.49	
5,352.0	14.50	189.50	5,089.5	-1,561.4	-152.0	1,568.7	2.44	-1.44	
5,441.0	12.20	186.30	5,176.1	-1,581.7	-154.8	1,589.2	2.71	-2.58	
5,530.0	10.70	192.40	5,263.4	-1,599.1	-157.6	1,606.8	2.16	-1.69	
5,618.0	8.30	204.20	5,350.2	-1,612.9	-162.0	1,621.0	3.50	-2.73	
5,705.0	6.20	198.00	5,436.5	-1,623.1	-166.0	1,631.6	2.57	-2.41	

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	Anadarko Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Strear 24-10
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KBE @ 4939.0ft (Xtreme 14)
<b>Site:</b>	NENE Sec10-T2N-R67W (Strear 17-10-9F)	<b>MD Reference:</b>	KBE @ 4939.0ft (Xtreme 14)
<b>Well:</b>	Strear 24-10	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
5,792.0	3.60	191.20	5,523.1	-1,630.2	-168.0	1,638.9	3.06	-2.99	
5,880.0	3.20	179.80	5,611.0	-1,635.4	-168.5	1,644.1	0.89	-0.45	
5,969.0	2.60	171.70	5,699.9	-1,639.9	-168.2	1,648.5	0.81	-0.67	
6,059.0	1.40	202.10	5,789.8	-1,642.9	-168.4	1,651.5	1.74	-1.33	
6,149.0	1.50	191.60	5,879.8	-1,645.1	-169.0	1,653.8	0.31	0.11	
6,238.0	2.00	185.00	5,968.7	-1,647.8	-169.4	1,656.5	0.60	0.56	
6,326.0	1.50	184.10	6,056.7	-1,650.5	-169.6	1,659.2	0.57	-0.57	
6,415.0	0.50	3.70	6,145.7	-1,651.2	-169.7	1,659.9	2.25	-1.12	
6,505.0	1.10	12.70	6,235.7	-1,650.0	-169.4	1,658.7	0.68	0.67	
6,593.0	1.40	316.30	6,323.7	-1,648.4	-170.0	1,657.1	1.38	0.34	
6,682.0	1.10	323.30	6,412.6	-1,646.9	-171.3	1,655.8	0.38	-0.34	
6,772.0	1.40	331.40	6,502.6	-1,645.3	-172.3	1,654.3	0.39	0.33	
6,860.0	1.50	337.30	6,590.6	-1,643.3	-173.3	1,652.4	0.20	0.11	
6,947.0	0.90	235.20	6,677.6	-1,642.6	-174.3	1,651.8	2.19	-0.69	
7,035.0	0.40	292.40	6,765.6	-1,642.9	-175.1	1,652.2	0.87	-0.57	
7,123.0	0.70	293.90	6,853.6	-1,642.6	-175.9	1,651.9	0.34	0.34	
7,211.0	0.30	314.00	6,941.6	-1,642.2	-176.5	1,651.6	0.49	-0.45	
7,299.0	0.80	317.70	7,029.6	-1,641.6	-177.1	1,651.1	0.57	0.57	
7,386.0	0.50	338.60	7,116.6	-1,640.8	-177.7	1,650.3	0.43	-0.34	
7,474.0	0.90	351.00	7,204.6	-1,639.7	-177.9	1,649.3	0.48	0.45	
7,561.0	1.00	69.20	7,291.5	-1,638.8	-177.3	1,648.3	1.38	0.11	
7,650.0	1.10	20.00	7,380.5	-1,637.7	-176.3	1,647.2	0.99	0.11	
7,738.0	1.20	21.90	7,468.5	-1,636.0	-175.7	1,645.4	0.12	0.11	
7,826.0	1.20	35.10	7,556.5	-1,634.4	-174.8	1,643.8	0.31	0.00	
7,916.0	0.80	17.30	7,646.5	-1,633.1	-174.1	1,642.3	0.56	-0.44	
8,004.0	1.30	357.20	7,734.5	-1,631.5	-173.9	1,640.7	0.70	0.57	
8,090.0	1.20	357.20	7,820.4	-1,629.6	-174.0	1,638.9	0.12	-0.12	
8,180.0	1.10	355.30	7,910.4	-1,627.8	-174.1	1,637.1	0.12	-0.11	
8,266.0	1.00	338.70	7,996.4	-1,626.3	-174.5	1,635.6	0.37	-0.12	
8,289.0	1.20	356.60	8,019.4	-1,625.9	-174.6	1,635.2	1.72	0.87	
8,332.9	1.38	0.86	8,063.3	-1,624.9	-174.6	1,634.2	0.47	0.42	Strear 24-10 PBHL
8,337.0	1.40	1.20	8,067.4	-1,624.8	-174.6	1,634.1	0.47	0.42	Last Cathedral Survey @ 8,337' MD

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Strear 24-10 PBHL	0.00	0.00	8,064.0	-1,656.0	-173.0	1,299,014.80	3,175,586.83	40.152476	-104.871861
- hit/miss target									
- Shape									
- actual wellpath misses target center by 31.2ft at 8332.9ft MD (8063.3 TVD, -1624.9 N, -174.6 E)									
- Circle (radius 50.0)									

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
8,337.0	8,067.4	-1,624.8	-174.6	Last Cathedral Survey @ 8,337' MD	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_