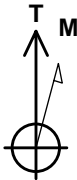


CASING DETAILS									
No casing data is available									
FORMATION TOP DETAILS									
No formation data is available									
<div style="display: flex; align-items: center; justify-content: space-between;">  <div style="margin-left: 20px;"> <p>Azimuths to True North Magnetic North: 8.74°</p> <p>Magnetic Field Strength: 52845.1snT Dip Angle: 66.75° Date: 7/3/2012 Model: IGRF2010</p> </div> </div>									
<div style="text-align: center;">DD</div> <div style="text-align: center;">Lambrecht 17-2</div> <div style="text-align: center;">125438/177655; LR</div> <div style="text-align: center;">WELL @ 4954.0ft (Xtreme 11)</div> <div style="text-align: center;">GL @ 4939.0</div> <div style="text-align: center;">North American Datum 1983</div> <div style="text-align: center;">Well Lambrecht 17-2, True North</div>									
Type Target	Target	Azimuth	Origin Type Slot	N/S	E/W	From TVD			
Lambrecht 17-2 LB	Lambrecht 17-2 PBHL	TVD -7689.0	+N/-S -735.1	+E/-W -881.5	Latitude 40.083765	Longitude -104.853529			

Cathedral Energy Services

Survey Report

Company:	Anadarko Petroleum Corporation	Local Co-ordinate Reference:	Well Lambrecht 17-2
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4954.0ft (Xtreme 11)
Site:	S2-T1N-R67W (Lambrecht)	MD Reference:	WELL @ 4954.0ft (Xtreme 11)
Well:	Lambrecht 17-2	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 Multi Users DB

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

Site	S2-T1N-R67W (Lambrecht)				
Site Position:		Northing:	1,274,774.66 ft	Latitude:	40.085813
From:	Lat/Long	Easting:	3,181,757.64 ft	Longitude:	-104.850421
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.42 °

Well	Lambrecht 17-2					
Well Position	+N/-S	0.0 ft	Northing:	1,274,763.81 ft	Latitude:	40.085783
	+E/-W	0.0 ft	Easting:	3,181,769.47 ft	Longitude:	-104.850379
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,939.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/3/2012	8.74	66.75	52,845

Design	DD				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	233.77	

Survey Program	Date	7/8/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
77.0	7,763.0	Survey #1 (DD)	MWD	Geolink MWD	

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	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
77.0	1.40	336.70	77.0	0.9	-0.4	-0.2	1.82	1.82		
164.0	0.50	289.40	164.0	2.0	-1.2	-0.2	1.29	-1.03		
253.0	2.00	240.20	253.0	1.3	-2.9	1.5	1.93	1.69		
340.0	3.70	239.80	339.8	-0.8	-6.6	5.8	1.95	1.95		
417.0	5.50	231.30	416.6	-4.4	-11.6	12.0	2.49	2.34		
508.0	7.00	232.40	507.1	-10.5	-19.4	21.9	1.65	1.65		
598.0	9.00	226.60	596.2	-18.7	-28.9	34.4	2.39	2.22		
689.0	9.90	223.90	685.9	-29.2	-39.5	49.1	1.10	0.99		
780.0	10.00	226.20	775.6	-40.3	-50.6	64.7	0.45	0.11		
871.0	9.20	229.30	865.3	-50.5	-61.8	79.8	1.05	-0.88		
907.0	9.30	230.90	900.8	-54.3	-66.3	85.5	0.77	0.28		
988.0	8.70	235.40	980.8	-61.9	-76.4	98.2	1.14	-0.74		

Cathedral Energy Services

Survey Report

Company:	Anadarko Petroleum Corporation	Local Co-ordinate Reference:	Well Lambrecht 17-2
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4954.0ft (Xtreme 11)
Site:	S2-T1N-R67W (Lambrecht)	MD Reference:	WELL @ 4954.0ft (Xtreme 11)
Well:	Lambrecht 17-2	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	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
1,078.0	8.20	235.60	1,069.9	-69.3	-87.3	111.4	0.56	-0.56	
1,169.0	9.30	232.70	1,159.8	-77.5	-98.5	125.2	1.30	1.21	
1,260.0	7.80	228.90	1,249.8	-86.0	-109.0	138.7	1.76	-1.65	
1,350.0	8.60	232.50	1,338.9	-94.1	-118.9	151.6	1.06	0.89	
1,441.0	9.80	229.80	1,428.7	-103.2	-130.3	166.1	1.40	1.32	
1,532.0	9.60	225.00	1,518.4	-113.6	-141.5	181.3	0.92	-0.22	
1,622.0	9.60	222.30	1,607.1	-124.5	-151.9	196.1	0.50	0.00	
1,713.0	8.20	232.10	1,697.0	-134.1	-162.1	210.0	2.26	-1.54	
1,804.0	9.10	235.70	1,787.0	-142.1	-173.2	223.7	1.15	0.99	
1,895.0	7.70	235.70	1,877.0	-149.6	-184.2	237.0	1.54	-1.54	
1,985.0	8.60	240.70	1,966.1	-156.3	-195.0	249.7	1.27	1.00	
2,076.0	9.10	238.00	2,056.0	-163.4	-207.1	263.6	0.71	0.55	
2,167.0	7.40	238.50	2,146.1	-170.3	-218.2	276.6	1.87	-1.87	
2,257.0	9.20	229.30	2,235.1	-178.0	-228.6	289.6	2.48	2.00	
2,348.0	8.00	229.30	2,325.1	-186.9	-238.9	303.1	1.32	-1.32	
2,439.0	8.90	236.40	2,415.1	-194.9	-249.5	316.5	1.51	0.99	
2,530.0	7.40	233.20	2,505.2	-202.3	-260.1	329.4	1.72	-1.65	
2,620.0	8.30	241.50	2,594.4	-208.9	-270.4	341.6	1.61	1.00	
2,711.0	8.90	236.60	2,684.3	-215.9	-282.1	355.2	1.04	0.66	
2,802.0	6.80	233.30	2,774.5	-223.0	-292.3	367.6	2.36	-2.31	
2,893.0	7.30	237.00	2,864.8	-229.4	-301.5	378.7	0.74	0.55	
2,983.0	7.90	236.20	2,954.0	-235.9	-311.4	390.6	0.68	0.67	
3,074.0	9.10	234.40	3,044.0	-243.6	-322.4	404.1	1.35	1.32	
3,165.0	7.50	232.30	3,134.1	-251.4	-333.0	417.2	1.79	-1.76	
3,255.0	7.60	247.30	3,223.3	-257.3	-343.1	428.9	2.19	0.11	
3,346.0	8.10	239.10	3,313.4	-262.9	-354.2	441.1	1.35	0.55	
3,437.0	9.10	231.20	3,403.4	-270.7	-365.3	454.7	1.70	1.10	
3,527.0	7.40	230.90	3,492.5	-278.8	-375.3	467.6	1.89	-1.89	
3,618.0	8.10	236.00	3,582.6	-286.1	-385.2	479.8	1.08	0.77	
3,709.0	8.90	239.80	3,672.6	-293.2	-396.6	493.2	1.07	0.88	
3,800.0	8.30	230.90	3,762.6	-300.9	-407.8	506.8	1.60	-0.66	
3,891.0	7.20	229.60	3,852.8	-308.8	-417.2	519.0	1.22	-1.21	
3,981.0	8.00	238.70	3,942.0	-315.7	-426.9	530.9	1.60	0.89	
4,072.0	9.40	232.50	4,032.0	-323.5	-438.2	544.7	1.85	1.54	
4,163.0	9.10	232.80	4,121.8	-332.4	-449.8	559.3	0.33	-0.33	
4,253.0	9.10	229.30	4,210.6	-341.3	-460.9	573.5	0.61	0.00	
4,344.0	8.30	233.70	4,300.6	-349.9	-471.6	587.2	1.14	-0.88	
4,435.0	5.90	240.90	4,390.9	-356.1	-481.0	598.4	2.81	-2.64	
4,525.0	6.20	248.40	4,480.4	-360.1	-489.6	607.7	0.94	0.33	
4,630.0	5.10	243.60	4,584.9	-364.3	-499.0	617.8	1.14	-1.05	
4,721.0	6.40	237.60	4,675.4	-368.8	-506.9	626.9	1.57	1.43	
4,812.0	6.80	229.60	4,765.8	-375.0	-515.3	637.3	1.10	0.44	
4,902.0	8.40	232.50	4,855.0	-382.4	-524.6	649.2	1.83	1.78	
4,993.0	7.80	231.90	4,945.1	-390.3	-534.7	662.0	0.67	-0.66	
5,084.0	8.00	227.90	5,035.3	-398.4	-544.3	674.5	0.64	0.22	
5,175.0	8.20	234.10	5,125.4	-406.4	-554.2	687.3	0.98	0.22	
5,266.0	8.70	233.50	5,215.4	-414.3	-565.0	700.6	0.56	0.55	
5,356.0	7.50	232.40	5,304.5	-421.9	-575.1	713.3	1.34	-1.33	
5,446.0	6.10	231.60	5,393.8	-428.5	-583.5	724.0	1.56	-1.56	
5,537.0	4.70	230.20	5,484.4	-433.9	-590.2	732.5	1.55	-1.54	
5,628.0	4.00	225.00	5,575.2	-438.5	-595.3	739.4	0.88	-0.77	
5,719.0	2.50	233.90	5,666.0	-441.9	-599.2	744.5	1.73	-1.65	
5,809.0	1.30	299.60	5,756.0	-442.6	-601.6	746.9	2.55	-1.33	

Cathedral Energy Services

Survey Report

Company:	Anadarko Petroleum Corporation	Local Co-ordinate Reference:	Well Lambrecht 17-2
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4954.0ft (Xtreme 11)
Site:	S2-T1N-R67W (Lambrecht)	MD Reference:	WELL @ 4954.0ft (Xtreme 11)
Well:	Lambrecht 17-2	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	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
5,900.0	1.00	128.10	5,847.0	-442.6	-601.9	747.1	2.52	-0.33	
5,991.0	0.70	130.60	5,938.0	-443.4	-600.9	746.7	0.33	-0.33	
6,081.0	0.50	135.00	6,027.9	-444.0	-600.2	746.6	0.23	-0.22	
6,172.0	0.60	148.90	6,118.9	-444.7	-599.6	746.5	0.18	0.11	
6,263.0	0.20	133.40	6,209.9	-445.3	-599.3	746.6	0.45	-0.44	
6,353.0	0.00	278.70	6,299.9	-445.4	-599.2	746.5	0.22	-0.22	
6,444.0	0.30	346.40	6,390.9	-445.1	-599.2	746.4	0.33	0.33	
6,534.0	0.70	325.90	6,480.9	-444.4	-599.6	746.3	0.48	0.44	
6,626.0	0.70	321.40	6,572.9	-443.5	-600.2	746.3	0.06	0.00	
6,716.0	0.70	321.20	6,662.9	-442.7	-600.9	746.4	0.00	0.00	
6,807.0	0.60	331.30	6,753.9	-441.8	-601.5	746.3	0.17	-0.11	
6,898.0	0.60	325.10	6,844.9	-441.0	-602.0	746.3	0.07	0.00	
6,988.0	0.50	317.70	6,934.9	-440.3	-602.5	746.3	0.14	-0.11	
7,079.0	0.30	335.80	7,025.9	-439.8	-602.9	746.3	0.26	-0.22	
7,170.0	0.30	322.20	7,116.9	-439.4	-603.1	746.2	0.08	0.00	
7,260.0	0.20	327.90	7,206.9	-439.1	-603.4	746.2	0.11	-0.11	
7,351.0	0.10	6.30	7,297.9	-438.9	-603.5	746.2	0.15	-0.11	
7,442.0	0.10	38.20	7,388.9	-438.8	-603.4	746.0	0.06	0.00	
7,533.0	0.40	59.30	7,479.9	-438.5	-603.1	745.7	0.34	0.33	
7,624.0	0.40	51.50	7,570.9	-438.2	-602.5	745.0	0.06	0.00	
7,708.0	0.40	48.60	7,654.9	-437.8	-602.1	744.4	0.02	0.00	
7,763.0	0.40	48.60	7,709.9	-437.5	-601.8	744.0	0.00	0.00	

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
Lambrecht 17-2 LB - survey misses target center by 7774.2ft at 0.0ft MD (0.0 TVD, 0.0 N, 0.0 E) - Rectangle (sides W800.0 H800.0 D0.0)	0.00	0.00	-7,689.0	-735.1	-881.5	1,274,022.28	3,180,893.38	40.083765	-104.853529
Lambrecht 17-2 PBHL - survey misses target center by 12.9ft at 7742.2ft MD (7689.1 TVD, -437.6 N, -601.9 E) - Circle (radius 50.0)	0.00	0.00	7,689.0	-432.4	-590.1	1,274,327.12	3,181,182.54	40.084596	-104.852488

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
7,708.0	7,654.9	-437.8	-602.1	Last Cathedral Survey @ 7708' MD
7,763.0	7,709.9	-437.5	-601.8	Projection to Bit @ 7763' MD

Checked By: _____ Approved By: _____ Date: _____