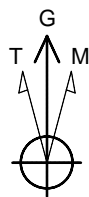


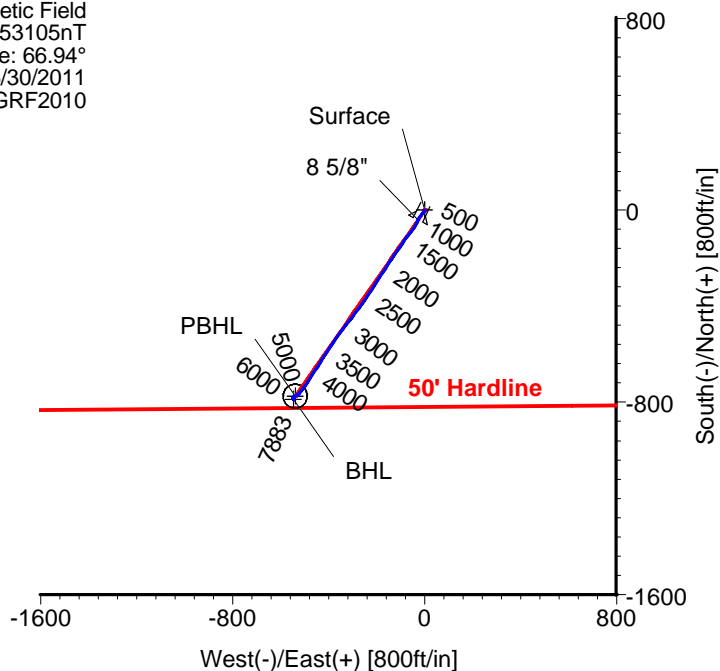
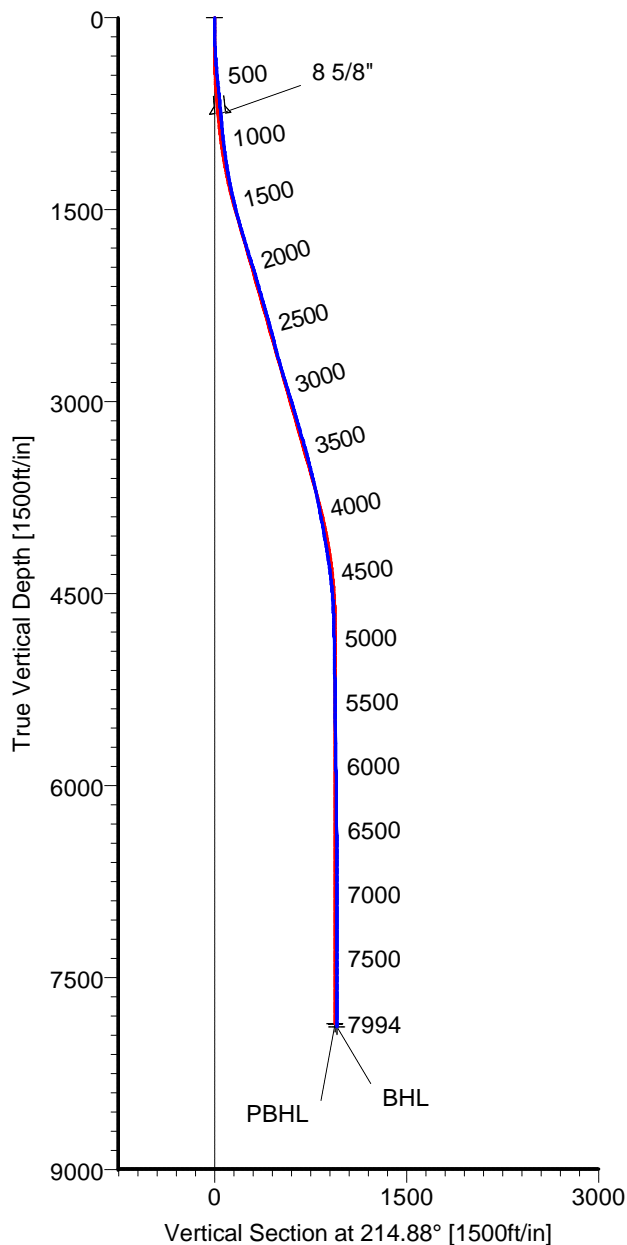
ANADARKO PETROLEUM

Field: Weld County, CO
Site: REI 35-5
Well: 35-5
Wellpath: Original Hole



Azimuths to Grid North
True North: -0.52°
Magnetic North: 8.30°

Magnetic Field
Strength: 53105nT
Dip Angle: 66.94°
Date: 05/30/2011
Model: IGRF2010



CASING DETAILS

No.	TVD	MD	Name	Size
1	747.99	750.00	8 5/8"	8.625

LEGEND

- 35-5,Original Hole,Plan #1
- Original Hole

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Surface	0.00	0.00	0.00	40°14'57.815N	104°41'21.732W	Point
PBHL	7862.00	-774.42	-539.84	40°14'50.211N	104°41'28.785W	Circle (Radius: 50)
BHL	7882.82	-787.80	-546.00	40°14'50.079N	104°41'28.866W	Point

Wellpath: (35-5/Original Hole)

Created By: Ivonne Gonzalez

Date: 05/25/2011

ARCHER DIRECTIONAL DRILLING SERVICES
911 Regional Park Drive Houston, Texas 77060
Phone: 713-934-9600 Fax: 713-934-9067

Archer

ARCHER

Survey Report

Company: ANADARKO PETROLEUM Field: Weld County, CO Site: REI 35-5 Well: 35-5 Wellpath: Original Hole	Date: 05/25/2011 Co-ordinate(NE) Reference: Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:	Time: 08:43:21 Well: 35-5, Grid North 4902'GL+15'KB 4917.0 Well (0.00N,0.00E,214.88Azi) Minimum Curvature	Page: 1 Db: Adapti
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Field: Weld County, CO Map System: US State Plane Coordinate System 1983 Geo Datum: GRS 1980 Sys Datum: Mean Sea Level	Map Zone: Colorado, Northern Zone Coordinate System: Well Centre Geomagnetic Model: IGRF2010
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Site: REI 35-5 Site Position: From: Geographic Position Uncertainty: 0.00 ft Ground Level: 4902.00 ft	Northing: 1334732.49 ft Easting: 3226273.70 ft Latitude: 40 14 57.815 N Longitude: 104 41 21.732 W North Reference: Grid Grid Convergence: 0.52 deg
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Well: 35-5 Well Position: +N/-S 0.00 ft +E/-W 0.00 ft Position Uncertainty: 0.00 ft	Slot Name: 35-5 Latitude: 40 14 57.815 N Longitude: 104 41 21.732 W Northing: 1334732.49 ft Easting : 3226273.70 ft
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Wellpath: Original Hole Current Datum: 4902'GL+15'KB Magnetic Data: 05/30/2011 Field Strength: 53105 nT Vertical Section: Depth From (TVD) ft	Drilled From: Surface Tie-on Depth: 0.00 ft Above System Datum: Mean Sea Level Declination: 8.82 deg Mag Dip Angle: 66.94 deg +N/-S ft +E/-W ft Direction deg
0.00	0.00

Survey Program for Definitive Wellpath				
Date: 05/25/2011	Validated: No	Version: 0		
Actual From ft	To ft	Survey	Toolcode	Tool Name
49.00	7949.00	Survey #1 (49.00-7949.00)	MWD	Std MWD
7994.00	7994.00	Survey #2 (7994.00-7994.00)	Project	Projection

Survey										
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	TIE LINE
49.00	0.90	185.30	49.00	-0.38	-0.04	0.33	1.84	1.84	0.00	MWD
140.00	1.60	211.70	139.98	-2.18	-0.77	2.22	0.98	0.77	29.01	MWD
229.00	2.50	212.00	228.92	-4.88	-2.45	5.40	1.01	1.01	0.34	MWD
319.00	3.70	220.50	318.79	-8.75	-5.38	10.25	1.42	1.33	9.44	MWD
426.00	5.50	220.80	425.44	-15.26	-10.97	18.79	1.68	1.68	0.28	MWD
516.00	5.50	219.10	515.02	-21.87	-16.51	27.38	0.18	0.00	-1.89	MWD
607.00	5.60	210.30	605.60	-29.09	-21.50	36.16	0.94	0.11	-9.67	MWD
715.00	5.10	204.60	713.13	-38.00	-26.16	46.13	0.68	-0.46	-5.28	MWD
750.00	5.10	205.65	747.99	-40.82	-27.48	49.20	0.27	0.00	3.01	8 5/8"
788.00	5.10	206.80	785.84	-43.85	-28.97	52.54	0.27	0.00	3.01	MWD
879.00	5.60	205.30	876.44	-51.47	-32.69	60.92	0.57	0.55	-1.65	MWD
970.00	6.70	208.90	966.92	-60.14	-37.15	70.58	1.28	1.21	3.96	MWD
1061.00	7.60	213.40	1057.21	-69.81	-43.03	81.88	1.16	0.99	4.95	MWD
1151.00	8.60	215.20	1146.31	-80.28	-50.19	94.55	1.15	1.11	2.00	MWD
1242.00	10.40	217.60	1236.06	-92.34	-59.12	109.56	2.02	1.98	2.64	MWD
1333.00	11.80	217.30	1325.35	-106.25	-69.77	127.07	1.54	1.54	-0.33	MWD
1424.00	13.20	216.20	1414.20	-122.04	-81.55	146.75	1.56	1.54	-1.21	MWD
1515.00	14.30	216.20	1502.59	-139.49	-94.32	168.37	1.21	1.21	0.00	MWD
1606.00	15.50	213.80	1590.53	-158.67	-107.72	191.77	1.48	1.32	-2.64	MWD
1696.00	16.20	214.80	1677.10	-178.97	-121.58	216.35	0.83	0.78	1.11	MWD
1787.00	17.10	212.70	1764.29	-200.65	-136.05	242.41	1.19	0.99	-2.31	MWD

ARCHER

Survey Report

Company: ANADARKO PETROLEUM Field: Weld County, CO Site: REI 35-5 Well: 35-5 Wellpath: Original Hole	Date: 05/25/2011 Co-ordinate(NE) Reference: Well: 35-5, Grid North Vertical (TVD) Reference: 4902'GL+15'KB 4917.0 Section (VS) Reference: Well (0.00N,0.00E,214.88Azi) Survey Calculation Method: Minimum Curvature	Time: 08:43:21 Page: 2 Db: Adapti
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Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1878.00	17.90	213.80	1851.08	-223.53	-151.06	269.76	0.95	0.88	1.21	MWD
1969.00	17.20	213.80	1937.84	-246.34	-166.32	297.20	0.77	-0.77	0.00	MWD
2059.00	16.50	214.10	2023.97	-267.98	-180.89	323.28	0.78	-0.78	0.33	MWD
2150.00	15.80	213.10	2111.38	-289.06	-194.90	348.59	0.83	-0.77	-1.10	MWD
2241.00	15.50	212.40	2199.01	-309.70	-208.18	373.12	0.39	-0.33	-0.77	MWD
2332.00	16.40	213.40	2286.51	-330.69	-221.77	398.11	1.03	0.99	1.10	MWD
2423.00	15.80	212.00	2373.94	-351.92	-235.41	423.32	0.79	-0.66	-1.54	MWD
2513.00	14.60	212.70	2460.79	-371.86	-248.03	446.90	1.35	-1.33	0.78	MWD
2604.00	14.40	214.50	2548.89	-390.84	-260.64	469.67	0.54	-0.22	1.98	MWD
2695.00	15.50	217.60	2636.81	-409.80	-274.46	493.13	1.49	1.21	3.41	MWD
2786.00	15.80	217.30	2724.43	-429.29	-289.39	517.66	0.34	0.33	-0.33	MWD
2877.00	17.10	217.60	2811.71	-449.74	-305.06	543.40	1.43	1.43	0.33	MWD
2967.00	17.40	218.40	2897.66	-470.77	-321.49	570.05	0.42	0.33	0.89	MWD
3058.00	17.60	217.60	2984.45	-492.34	-338.34	597.37	0.34	0.22	-0.88	MWD
3149.00	16.70	216.20	3071.40	-513.79	-354.46	624.19	1.09	-0.99	-1.54	MWD
3240.00	15.80	215.50	3158.76	-534.42	-369.37	649.65	1.01	-0.99	-0.77	MWD
3331.00	16.40	214.10	3246.20	-555.15	-383.77	674.88	0.79	0.66	-1.54	MWD
3421.00	16.00	214.50	3332.62	-575.89	-397.92	699.99	0.46	-0.44	0.44	MWD
3512.00	15.00	212.40	3420.31	-596.17	-411.33	724.29	1.26	-1.10	-2.31	MWD
3603.00	13.90	212.40	3508.43	-615.34	-423.50	746.98	1.21	-1.21	0.00	MWD
3694.00	13.40	211.30	3596.86	-633.58	-434.83	768.42	0.62	-0.55	-1.21	MWD
3785.00	12.30	212.70	3685.58	-650.75	-445.55	788.63	1.26	-1.21	1.54	MWD
3875.00	11.30	214.50	3773.68	-666.08	-455.72	807.03	1.18	-1.11	2.00	MWD
3966.00	10.60	213.10	3863.02	-680.44	-465.34	824.31	0.82	-0.77	-1.54	MWD
4056.00	10.40	210.60	3951.51	-694.37	-474.00	840.69	0.55	-0.22	-2.78	MWD
4147.00	10.40	214.50	4041.02	-708.21	-482.83	857.09	0.77	0.00	4.29	MWD
4238.00	9.70	214.50	4130.62	-721.30	-491.83	872.97	0.77	-0.77	0.00	MWD
4329.00	8.40	212.70	4220.49	-733.21	-499.76	887.28	1.46	-1.43	-1.98	MWD
4420.00	7.70	217.60	4310.59	-743.63	-507.07	900.01	1.08	-0.77	5.38	MWD
4511.00	6.60	221.90	4400.88	-752.35	-514.28	911.29	1.34	-1.21	4.73	MWD
4601.00	5.00	214.10	4490.42	-759.45	-519.94	920.35	1.98	-1.78	-8.67	MWD
4692.00	3.20	221.20	4581.19	-764.65	-523.83	926.84	2.05	-1.98	7.80	MWD
4783.00	1.80	234.90	4672.10	-767.38	-526.68	930.71	1.66	-1.54	15.05	MWD
4874.00	1.40	241.60	4763.06	-768.73	-528.82	933.04	0.48	-0.44	7.36	MWD
4965.00	1.60	239.40	4854.03	-769.91	-530.90	935.19	0.23	0.22	-2.42	MWD
5056.00	1.20	248.20	4945.00	-770.91	-532.87	937.14	0.50	-0.44	9.67	MWD
5237.00	0.90	269.00	5125.97	-771.64	-536.05	939.56	0.27	-0.17	11.49	MWD
5419.00	1.10	251.00	5307.95	-772.23	-539.14	941.81	0.20	0.11	-9.89	MWD
5601.00	0.90	247.50	5489.92	-773.35	-542.11	944.42	0.11	-0.11	-1.92	MWD
5782.00	0.90	211.00	5670.90	-775.11	-544.15	947.04	0.31	0.00	-20.17	MWD
5964.00	0.80	203.90	5852.88	-777.49	-545.40	949.71	0.08	-0.05	-3.90	MWD
6145.00	0.60	219.80	6033.86	-779.38	-546.52	951.90	0.15	-0.11	8.78	MWD
6326.00	0.60	211.30	6214.86	-780.92	-547.62	953.79	0.05	0.00	-4.70	MWD
6508.00	0.50	212.40	6396.85	-782.40	-548.54	955.53	0.06	-0.05	0.60	MWD
6690.00	0.30	164.20	6578.84	-783.53	-548.84	956.63	0.21	-0.11	-26.48	MWD
6871.00	0.40	203.90	6759.84	-784.56	-548.97	957.55	0.14	0.06	21.93	MWD
7053.00	0.40	173.70	6941.84	-785.78	-549.15	958.65	0.11	0.00	-16.59	MWD
7234.00	0.40	94.30	7122.83	-786.45	-548.45	958.80	0.28	0.00	-43.87	MWD
7416.00	0.40	121.30	7304.83	-786.83	-547.28	958.44	0.10	0.00	14.84	MWD
7598.00	0.20	118.50	7486.83	-787.31	-546.46	958.37	0.11	-0.11	-1.54	MWD
7779.00	0.40	125.00	7667.82	-787.82	-545.66	958.33	0.11	0.11	3.59	MWD
7949.00	0.40	293.90	7837.82	-787.92	-545.72	958.45	0.47	0.00	99.35	MWD
7973.18	0.40	293.90	7862.00	-787.85	-545.87	958.48	0.00	0.00	0.00	PBHL

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Survey Report

Company: ANADARKO PETROLEUM Field: Weld County, CO Site: REI 35-5 Well: 35-5 Wellpath: Original Hole	Date: 05/25/2011 Co-ordinate(NE) Reference: Well: 35-5, Grid North Vertical (TVD) Reference: 4902'GL+15'KB 4917.0 Section (VS) Reference: Well (0.00N,0.00E,214.88Azi) Survey Calculation Method: Minimum Curvature Db: Adapti
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Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
7994.00	0.40	293.90	7882.82	-787.80	-546.00	958.51	0.00	0.00	0.00	BHL

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<---- Latitude ---->			<--- Longitude --->		
Surface			0.00	0.00	0.00	1334732.49	3226273.70	40	14	57.815 N	104	41	21.732 W
PBHL			7862.00	-774.42	-539.84	1333958.07	3225733.86	40	14	50.211 N	104	41	28.785 W
-Circle (Radius: 50)													
BHL			7882.82	-787.80	-546.00	1333944.69	3225727.70	40	14	50.079 N	104	41	28.866 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
750.00	747.99	8.625	9.875	8 5/8"