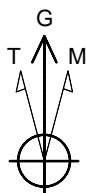


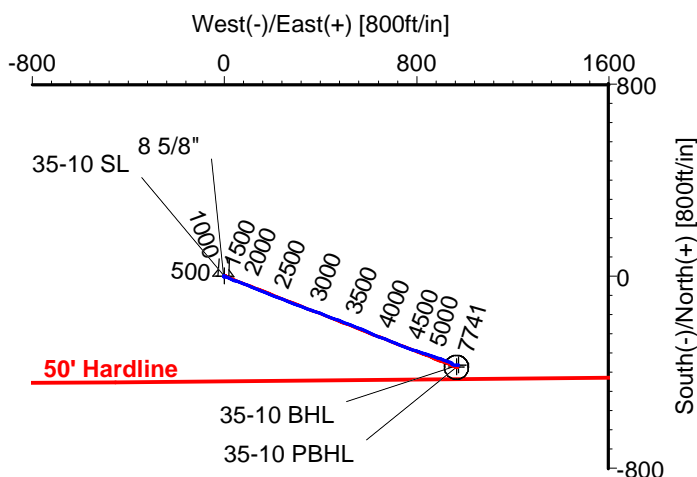
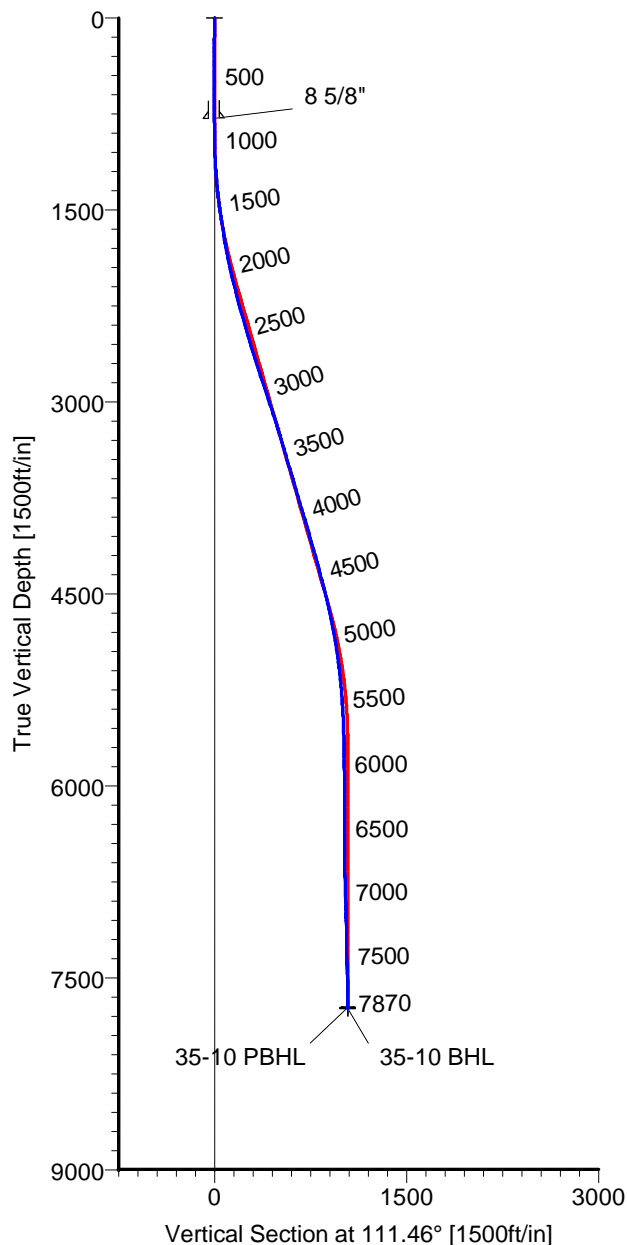
ANADARKO PETROLEUM

Field: Weld County, CO
Site: REI 13-10 Pad
Well: 35-10
Wellpath: Original Hole



Azimuths to Grid North
True North: -0.54°
Magnetic North: 8.26°

Magnetic Field
Strength: 53101nT
Dip Angle: 66.94°
Date: 05/25/2011
Model: IGRF2010



CASING DETAILS

No.	TVD	MD	Name	Size
1	784.96	785.00	8 5/8"	8.625

LEGEND

- 35-10, Original Hole, Plan #2
- Original Hole

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
35-10 SL	0.00	0.00	0.00	40°14'01.739N	104°39'27.940W	Point
35-10 PBHL	7731.00	-379.75	965.95	40°13'57.895N	104°39'15.532W	Circle (Radius: 50)
35-10 BHL	7741.37	-370.93	973.54	40°13'57.982N	104°39'15.433W	Circle (Radius: 50)

Wellpath: (35-10/Original Hole)

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

Archer

Created By: Ivonne Gonzalez

Date: 06/15/2011

ARCHER

Survey Report

Company: ANADARKO PETROLEUM Field: Weld County, CO Site: REI 13-10 Pad Well: 35-10 Wellpath: Original Hole	Date: 06/15/2011 Co-ordinate(NE) Reference: Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:	Time: 07:54:13 Well: 35-10, Grid North 4816'GL+15'KB 4831.0 Well (0.00N,0.00E,111.46Azi) Minimum Curvature	Page: 1 Db: Adapti
---	---	---	-------------------------------------

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
---	---

Site: REI 13-10 Pad Centered on 38-9 Site Position: From: Geographic Position Uncertainty: 0.00 ft Ground Level: 4816.00 ft	Northing: 1329141.36 ft Easting: 3235134.29 ft Latitude: 40 14 1.748 N Longitude: 104 39 28.145 W North Reference: Grid Grid Convergence: 0.54 deg
---	---

Well: 35-10 Well Position: +N/-S -0.77 ft +E/-W 15.92 ft Position Uncertainty: 0.00 ft	Slot Name: 35-10 Well Position: +N/-S -0.77 ft +E/-W 15.92 ft Position Uncertainty: 0.00 ft
--	---

Wellpath: Original Hole Current Datum: 4816'GL+15'KB Magnetic Data: 05/25/2011 Field Strength: 53101 nT Vertical Section: Depth From (TVD) ft	Drilled From: Surface Tie-on Depth: 0.00 ft Above System Datum: Mean Sea Level Declination: 8.80 deg Mag Dip Angle: 66.94 deg Direction: deg
--	---

Height 4831.00 ft +N/-S ft +E/-W ft	0.00 0.00 0.00
--	----------------------

Survey Program for Definitive Wellpath				
Date: 06/15/2011	Validated: No	Version: 0		
Actual From ft	To ft	Survey	Toolcode	Tool Name
49.00	7825.00	Survey #1 (49.00-7825.00)	MWD	Std MWD
7870.00	7870.00	Survey #2 (7870.00-7870.00)	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	1.40	269.00	49.00	-0.01	-0.60	-0.55	2.86	2.86	0.00	MWD
140.00	0.90	298.80	139.98	0.31	-2.34	-2.29	0.84	-0.55	32.75	MWD
229.00	0.40	4.90	228.97	0.96	-2.92	-3.07	0.93	-0.56	74.27	MWD
319.00	0.20	262.30	318.97	1.25	-3.05	-3.30	0.54	-0.22	-114.00	MWD
426.00	0.50	212.70	425.97	0.83	-3.49	-3.55	0.37	0.28	-46.36	MWD
517.00	0.50	177.60	516.97	0.10	-3.69	-3.47	0.33	0.00	-38.57	MWD
607.00	0.40	157.50	606.96	-0.58	-3.55	-3.09	0.21	-0.11	-22.33	MWD
698.00	0.40	176.10	697.96	-1.19	-3.41	-2.74	0.14	0.00	20.44	MWD
740.00	0.40	219.70	739.96	-1.45	-3.49	-2.72	0.71	0.00	103.81	MWD
785.00	0.49	182.34	784.96	-1.76	-3.60	-2.70	0.66	0.20	-83.03	8 5/8"
787.00	0.50	181.10	786.96	-1.78	-3.60	-2.70	0.66	0.39	-61.82	MWD
878.00	1.10	121.30	877.95	-2.63	-2.86	-1.70	1.05	0.66	-65.71	MWD
969.00	1.40	55.60	968.93	-2.46	-1.20	-0.22	1.52	0.33	-72.20	MWD
1060.00	1.90	91.40	1059.90	-1.86	1.23	1.83	1.23	0.55	39.34	MWD
1151.00	3.30	103.00	1150.80	-2.49	5.29	5.83	1.64	1.54	12.75	MWD
1241.00	4.40	111.80	1240.60	-4.36	11.02	11.85	1.38	1.22	9.78	MWD
1332.00	5.80	120.20	1331.24	-7.97	18.23	19.88	1.74	1.54	9.23	MWD
1423.00	7.20	116.70	1421.65	-12.84	27.30	30.11	1.60	1.54	-3.85	MWD
1514.00	8.40	111.50	1511.81	-17.84	38.58	42.43	1.53	1.32	-5.71	MWD
1604.00	8.60	107.60	1600.82	-22.28	51.11	55.72	0.68	0.22	-4.33	MWD
1695.00	8.80	107.60	1690.77	-26.45	64.23	69.46	0.22	0.22	0.00	MWD

ARCHER

Survey Report

Company: ANADARKO PETROLEUM Field: Weld County, CO Site: REI 13-10 Pad Well: 35-10 Wellpath: Original Hole	Date: 06/15/2011 Co-ordinate(NE) Reference: Well: 35-10, Grid North Vertical (TVD) Reference: 4816'GL+15'KB 4831.0 Section (VS) Reference: Well (0.00N,0.00E,111.46Azi) Survey Calculation Method: Minimum Curvature	Time: 07:54:13 Page: 2 Db: Adapti
---	---	--

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
1786.00	10.60	114.30	1780.47	-31.99	78.50	84.76	2.33	1.98	7.36	MWD
1877.00	11.40	109.30	1869.80	-38.41	94.62	102.11	1.37	0.88	-5.49	MWD
1967.00	12.30	111.50	1957.88	-44.87	111.93	120.58	1.12	1.00	2.44	MWD
2058.00	13.90	112.90	2046.51	-52.67	131.02	141.21	1.79	1.76	1.54	MWD
2149.00	13.90	111.80	2134.85	-60.98	151.24	163.06	0.29	0.00	-1.21	MWD
2240.00	15.10	111.80	2222.95	-69.45	172.39	185.85	1.32	1.32	0.00	MWD
2330.00	16.50	112.90	2309.54	-78.77	195.05	210.35	1.59	1.56	1.22	MWD
2421.00	15.80	110.40	2396.95	-88.12	218.57	235.65	1.08	-0.77	-2.75	MWD
2512.00	16.20	111.10	2484.43	-97.01	242.02	260.73	0.49	0.44	0.77	MWD
2603.00	17.10	111.50	2571.61	-106.48	266.31	286.81	1.00	0.99	0.44	MWD
2694.00	17.10	111.80	2658.59	-116.35	291.18	313.56	0.10	0.00	0.33	MWD
2784.00	18.10	110.40	2744.38	-126.14	316.57	340.77	1.21	1.11	-1.56	MWD
2875.00	18.70	109.70	2830.72	-135.99	343.56	369.49	0.70	0.66	-0.77	MWD
2966.00	18.30	108.60	2917.02	-145.46	370.83	398.34	0.58	-0.44	-1.21	MWD
3057.00	18.10	111.10	3003.47	-155.11	397.56	426.74	0.89	-0.22	2.75	MWD
3147.00	17.60	111.10	3089.14	-165.04	423.30	454.33	0.56	-0.56	0.00	MWD
3238.00	18.50	110.80	3175.66	-175.12	449.63	482.53	0.99	0.99	-0.33	MWD
3329.00	16.70	111.50	3262.39	-185.04	475.29	510.04	1.99	-1.98	0.77	MWD
3420.00	16.70	108.60	3349.56	-194.00	499.85	536.17	0.92	0.00	-3.19	MWD
3510.00	16.50	110.80	3435.81	-202.66	524.06	561.87	0.73	-0.22	2.44	MWD
3601.00	16.40	112.50	3523.08	-212.17	548.00	587.63	0.54	-0.11	1.87	MWD
3692.00	16.20	111.80	3610.43	-221.80	571.66	613.17	0.31	-0.22	-0.77	MWD
3783.00	16.00	114.60	3697.86	-231.73	594.85	638.39	0.88	-0.22	3.08	MWD
3874.00	16.50	113.20	3785.22	-242.04	618.13	663.83	0.70	0.55	-1.54	MWD
3964.00	17.20	111.80	3871.36	-252.02	642.23	689.91	0.90	0.78	-1.56	MWD
4055.00	16.90	112.00	3958.36	-261.97	666.99	716.59	0.34	-0.33	0.22	MWD
4146.00	15.80	111.40	4045.68	-271.45	690.79	742.21	1.22	-1.21	-0.66	MWD
4237.00	15.50	112.50	4133.30	-280.62	713.56	766.75	0.46	-0.33	1.21	MWD
4328.00	15.80	110.40	4220.93	-289.59	736.40	791.30	0.70	0.33	-2.31	MWD
4418.00	14.60	110.10	4307.78	-297.76	758.54	814.89	1.34	-1.33	-0.33	MWD
4509.00	14.80	109.00	4395.80	-305.49	780.30	837.97	0.38	0.22	-1.21	MWD
4600.00	13.70	109.70	4484.00	-312.91	801.44	860.35	1.22	-1.21	0.77	MWD
4691.00	13.20	107.90	4572.51	-319.73	821.47	881.49	0.72	-0.55	-1.98	MWD
4782.00	12.30	106.90	4661.26	-325.74	840.63	901.53	1.02	-0.99	-1.10	MWD
4872.00	11.10	107.60	4749.39	-331.15	858.06	919.73	1.34	-1.33	0.78	MWD
4963.00	9.90	109.30	4838.86	-336.38	873.79	936.28	1.36	-1.32	1.87	MWD
5054.00	8.80	107.60	4928.65	-341.07	887.81	951.05	1.25	-1.21	-1.87	MWD
5145.00	7.90	105.80	5018.69	-344.88	900.47	964.22	1.03	-0.99	-1.98	MWD
5236.00	6.30	110.40	5108.99	-348.33	911.16	975.43	1.86	-1.76	5.05	MWD
5326.00	5.30	111.10	5198.53	-351.54	919.67	984.53	1.11	-1.11	0.78	MWD
5417.00	4.20	112.90	5289.21	-354.35	926.66	992.06	1.22	-1.21	1.98	MWD
5507.00	3.70	110.40	5379.00	-356.65	932.42	998.26	0.59	-0.56	-2.78	MWD
5599.00	2.30	112.50	5470.87	-358.39	936.91	1003.07	1.53	-1.52	2.28	MWD
5780.00	1.20	116.40	5651.78	-360.62	941.96	1008.59	0.61	-0.61	2.15	MWD
5961.00	0.90	125.50	5832.75	-362.29	944.82	1011.86	0.19	-0.17	5.03	MWD
6143.00	0.50	152.20	6014.74	-363.82	946.35	1013.85	0.28	-0.22	14.67	MWD
6325.00	0.50	263.30	6196.74	-364.62	945.93	1013.75	0.45	0.00	61.04	MWD
6506.00	0.50	219.00	6377.73	-365.32	944.65	1012.81	0.21	0.00	-24.48	MWD
6687.00	1.20	111.10	6558.72	-366.62	945.92	1014.47	0.79	0.39	-59.61	MWD
6869.00	1.40	112.20	6740.67	-368.15	949.76	1018.60	0.11	0.11	0.60	MWD
7051.00	1.60	106.50	6922.61	-369.71	954.25	1023.36	0.14	0.11	-3.13	MWD
7232.00	1.40	101.30	7103.54	-370.86	958.84	1028.05	0.13	-0.11	-2.87	MWD
7413.00	1.40	96.30	7284.49	-371.53	963.21	1032.36	0.07	0.00	-2.76	MWD

ARCHER

Survey Report

Company: ANADARKO PETROLEUM	Date: 06/15/2011	Time: 07:54:13	Page: 3
Field: Weld County, CO	Co-ordinate(NE) Reference:	Well: 35-10, Grid North	
Site: REI 13-10 Pad	Vertical (TVD) Reference:	4816'GL+15'KB 4831.0	
Well: 35-10	Section (VS) Reference:	Well (0.00N,0.00E,111.46Azi)	
Wellpath: Original Hole	Survey Calculation Method:	Minimum Curvature	Db: Adapti

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
7595.00	1.40	86.80	7466.44	-371.65	967.64	1036.53	0.13	0.00	-5.22	MWD
7777.00	1.20	80.20	7648.39	-371.21	971.74	1040.18	0.14	-0.11	-3.63	MWD
7825.00	1.10	81.90	7696.38	-371.05	972.69	1041.01	0.22	-0.21	3.54	MWD
7859.63	1.10	81.90	7731.00	-370.96	973.35	1041.58	0.00	0.00	0.00	35-10 PBHL
7870.00	1.10	81.90	7741.37	-370.93	973.54	1041.76	0.00	0.00	0.00	35-10 BHL

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg Min Sec			<--- Longitude ---> Deg Min Sec		
35-10 SL			0.00	0.00	0.00	1329140.59	3235150.21	40	14	1.739 N	104	39	27.940 W
35-10 PBHL			7731.00	-379.75	965.95	1328760.84	3236116.15	40	13	57.895 N	104	39	15.532 W
-Circle (Radius: 50)													
35-10 BHL			7741.37	-370.93	973.54	1328769.66	3236123.75	40	13	57.982 N	104	39	15.433 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
785.00	784.96	8.625	9.875	8 5/8"