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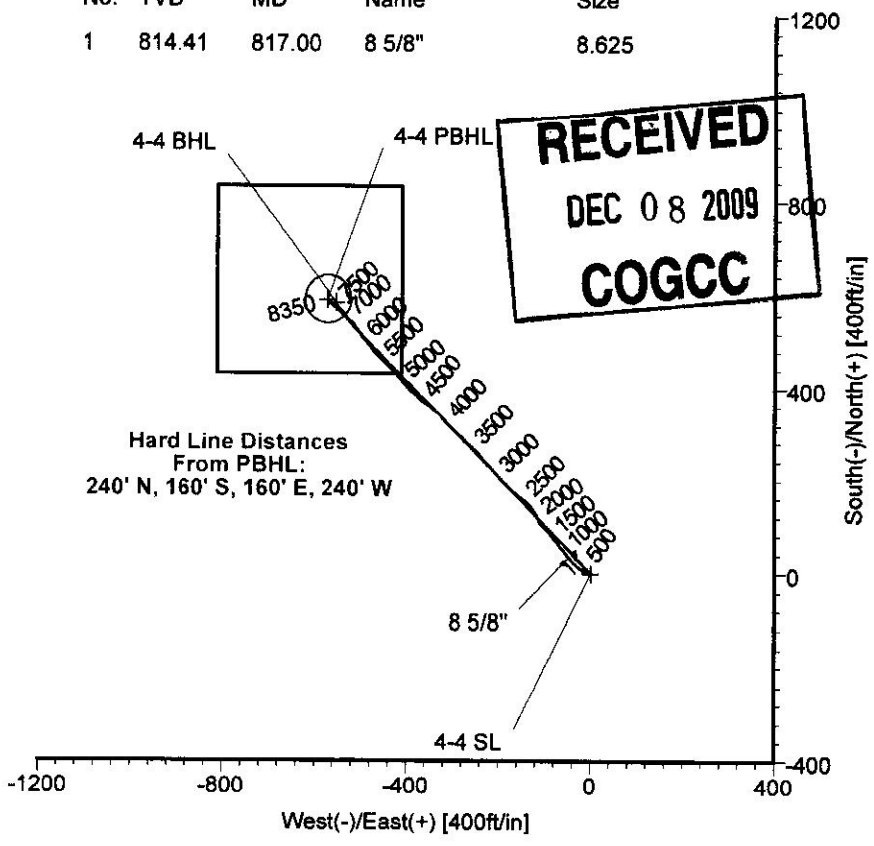
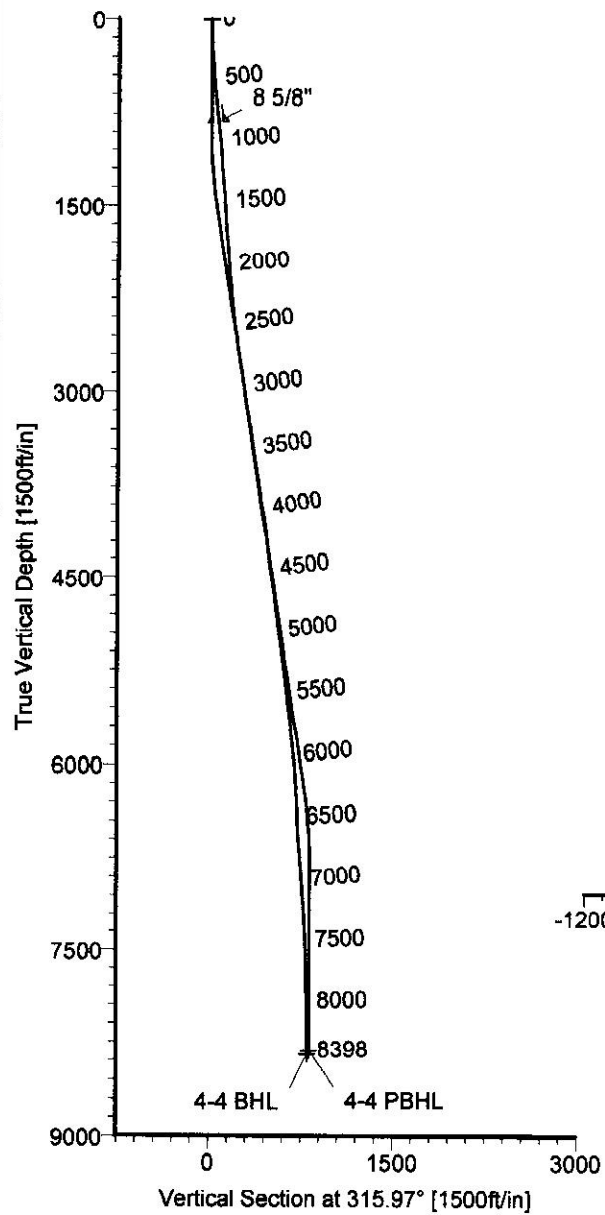
ANADARKO PETROLEUM

Field: Weld County, CO
Site: SEC Four 18-4 Pad
Well: 4-4
Wellpath: Original Hole



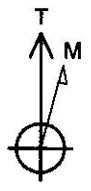
CASING DETAILS

No.	TVD	MD	Name	Size
1	814.41	817.00	8 5/8"	8.625



LEGEND

- 4-4, Original Hole, Plan #2
- Original Hole



Azimuths to True North
Magnetic North: 9.22°

Magnetic Field
Strength: 53222nT
Dip Angle: 66.83°
Date: 04/22/2009
Model: igr2005

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
4-4 SL	0.00	0.00	0.00	40°05'02.795N	105°00'47.402W	Point
4-4 PBHL	8321.00	591.58	-571.79	40°05'08.642N	105°00'54.759W	Circle (Radius: 50)
4-4 BHL	8350.15	585.44	-554.04	40°05'08.581N	105°00'54.530W	Point



STRATA DIRECTIONAL TECHNOLOGY, LLC.
911 Regional Park Drive Houston, Texas 77060
Phone: 713-934-9600 Fax: 713-934-9067

Wellpath: (4-4/Original Hole)
Created By: Mekka Williams Date: 06/22/2009
Checked: _____ Date: _____

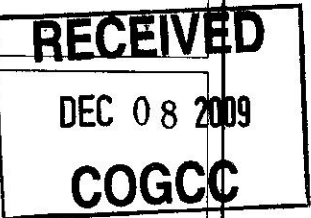
Strata Directional Technology, LLC

Survey Report

Company: ANADARKO PETROLEUM	Date: 06/22/2009	Time: 07:25:03	Page: 1
Field: Weld County, CO	Co-ordinate(NE) Reference: Well: 4-4, True North	Vertical (TVD) Reference: SITE 5041.0	
Site: SEC Four 18-4 Pad	Section (VS) Reference: Well (0.00N,0.00E,315.97Azi)	Survey Calculation Method: Minimum Curvature	
Well: 4-4	Db: Adapti		
Wellpath: Original Hole			

Field: Weld County, CO		
Map System: US State Plane Coordinate System 1983	Map Zone: Colorado, Northern Zone	
Geo Datum: GRS 1980	Coordinate System: Well Centre	
Sys Datum: Mean Sea Level	Geomagnetic Model: igrf2005	

Site: SEC Four 18-4 Pad Currently Centered on SEC Four 21-4		
Site Position:	Northing: 1273862.68 ft	Latitude: 40 5 2.796 N
From: Geographic	Easting: 3136255.33 ft	Longitude: 105 0 47.016 W
Position Uncertainty: 0.00 ft		North Reference: True
Ground Level: 5028.00 ft		Grid Convergence: 0.31 deg



Well: 4-4			Slot Name: 4-4		
Well Position:	+N/-S -0.07 ft	Northing: 1273862.45 ft	Latitude: 40 5 2.795 N	+E/-W -30.00 ft	Easting: 3136225.33 ft
Position Uncertainty: 0.00 ft			Longitude: 105 0 47.402 W		

Wellpath: Original Hole			Drilled From: Surface		
Current Datum: SITE	Height 5041.00 ft		Tie-on Depth: 0.00 ft		
Magnetic Data: 04/22/2009			Above System Datum: Mean Sea Level		
Field Strength: 53222 nT			Declination: 9.22 deg		
Vertical Section: Depth From (TVD)	+N/-S		Mag Dip Angle: 66.83 deg		
ft	ft		+E/-W	Direction	deg
0.00	0.00		0.00	315.97	

Survey Program for Definitive Wellpath					
Date: 06/22/2009	Validated: No	Version: 0			
Actual From	To	Survey	Toolcode	Tool Name	
ft	ft				
52.00	8298.00	Survey #1 (52.00-8298.00)	MWD	Std MWD	
8398.00	8398.00	Survey #2 (8398.00-8398.00)	Project	Projection	

Survey										
MD	Incl	Azim	TVD	+N/-S	+E/-W	VS	DLS	Build	Turn	Tool/Comment
ft	deg	deg	ft	ft	ft	ft	deg/100ft	deg/100ft	deg/100ft	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	TIE LINE
52.00	2.30	267.30	51.99	-0.05	-1.04	0.69	4.42	4.42	0.00	MWD
114.00	2.50	279.60	113.93	0.12	-3.62	2.60	0.89	0.32	19.84	MWD
177.00	3.00	286.30	176.86	0.81	-6.56	5.14	0.94	0.79	10.63	MWD
239.00	3.50	294.30	238.76	2.04	-9.84	8.31	1.09	0.81	12.90	MWD
300.00	3.70	296.80	299.64	3.70	-13.29	11.90	0.42	0.33	4.10	MWD
362.00	4.00	304.50	361.50	5.82	-16.86	15.91	0.96	0.48	12.42	MWD
424.00	4.90	307.70	423.31	8.67	-20.74	20.64	1.51	1.45	5.16	MWD
485.00	5.30	304.50	484.07	11.86	-25.12	25.98	0.80	0.66	-5.25	MWD
546.00	5.90	308.40	544.78	15.40	-29.90	31.85	1.16	0.98	6.39	MWD
608.00	5.80	315.80	606.46	19.63	-34.58	38.14	1.23	-0.16	11.94	MWD
669.00	5.50	318.20	667.16	24.01	-38.68	44.15	0.63	-0.49	3.93	MWD
785.00	6.00	318.60	782.58	32.71	-46.39	55.76	0.43	0.43	0.34	MWD
846.00	5.80	318.60	843.25	37.41	-50.54	62.02	0.33	-0.33	0.00	MWD
936.00	5.50	319.60	932.82	44.11	-56.34	70.87	0.35	-0.33	1.11	MWD
1026.00	5.10	321.40	1022.43	50.52	-61.63	79.16	0.48	-0.44	2.00	MWD
1116.00	4.80	321.80	1112.10	56.60	-66.46	86.89	0.34	-0.33	0.44	MWD
1207.00	4.80	322.50	1202.78	62.61	-71.13	94.46	0.06	0.00	0.77	MWD
1298.00	4.60	321.10	1293.47	68.48	-75.74	101.87	0.25	-0.22	-1.54	MWD
1388.00	4.00	317.20	1383.22	73.59	-80.14	108.61	0.74	-0.67	-4.33	MWD
1479.00	3.70	320.00	1474.01	78.17	-84.18	114.71	0.39	-0.33	3.08	MWD
1569.00	3.30	322.50	1563.84	82.44	-87.62	120.18	0.48	-0.44	2.78	MWD

Strata Directional Technology, LLC

Survey Report

Company: ANADARKO PETROLEUM
Field: Weld County, CO
Site: SEC Four 18-4 Pad
Well: 4-4
Wellpath: Original Hole

Date: 06/22/2009 **Time:** 07:25:03 **Page:** 2
Co-ordinate(NE) Reference: Well: 4-4, True North
Vertical (TVD) Reference: SITE 5041.0
Section (VS) Reference: Well (0.00N,0.00E,315.97Azi)
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
1660.00	4.20	323.90	1654.65	87.22	-91.18	126.08	0.99	0.99	1.54	MWD
1750.00	4.80	320.00	1744.37	92.76	-95.54	133.10	0.75	0.67	-4.33	MWD
1841.00	4.90	314.70	1835.05	98.41	-100.75	140.78	0.50	0.11	-5.82	MWD
1931.00	4.20	312.30	1924.76	103.33	-105.92	147.92	0.81	-0.78	-2.67	MWD
2021.00	4.40	328.40	2014.51	108.49	-110.17	154.58	1.35	0.22	17.89	MWD
2112.00	5.80	336.90	2105.15	115.70	-113.80	162.28	1.74	1.54	9.34	MWD
2203.00	5.30	339.30	2195.72	123.86	-117.09	170.44	0.61	-0.55	2.64	MWD
2293.00	5.10	326.00	2285.36	131.06	-120.80	178.19	1.35	-0.22	-14.78	MWD
2388.00	6.50	321.80	2379.87	138.79	-126.49	187.70	1.54	1.47	-4.42	MWD
2474.00	7.70	317.50	2465.21	146.86	-133.39	198.30	1.53	1.40	-5.00	MWD
2564.00	8.60	311.00	2554.30	155.72	-142.54	211.03	1.43	1.00	-7.22	MWD
2654.00	9.10	307.30	2643.23	164.45	-153.28	224.77	0.84	0.56	-4.11	MWD
2745.00	9.50	309.10	2733.03	173.55	-164.84	239.34	0.54	0.44	1.98	MWD
2835.00	9.50	309.50	2821.80	182.96	-176.33	254.10	0.07	0.00	0.44	MWD
2925.00	8.10	314.00	2910.74	192.09	-186.62	267.81	1.73	-1.56	5.00	MWD
3015.00	8.10	316.50	2999.84	201.09	-195.55	280.49	0.39	0.00	2.78	MWD
3106.00	8.30	318.90	3089.91	210.69	-204.28	293.46	0.44	0.22	2.64	MWD
3196.00	10.20	320.40	3178.74	221.73	-213.63	307.90	2.13	2.11	1.67	MWD
3287.00	10.40	317.20	3268.27	233.96	-224.35	324.14	0.67	0.22	-3.52	MWD
3378.00	8.40	319.90	3358.04	245.07	-234.21	338.99	2.25	-2.20	2.97	MWD
3467.00	8.80	317.50	3446.04	255.06	-243.00	352.28	0.60	0.45	-2.70	MWD
3558.00	8.80	312.50	3535.97	264.90	-252.83	366.18	0.84	0.00	-5.49	MWD
3648.00	9.30	314.00	3624.85	274.60	-263.14	380.32	0.61	0.56	1.67	MWD
3740.00	8.60	316.50	3715.73	284.76	-273.22	394.63	0.87	-0.76	2.72	MWD
3829.00	9.10	313.30	3803.67	294.41	-282.92	408.31	0.79	0.56	-3.60	MWD
3920.00	9.30	311.20	3893.50	304.19	-293.69	422.83	0.43	0.22	-2.31	MWD
4011.00	9.90	313.00	3983.23	314.37	-304.95	437.97	0.74	0.66	1.98	MWD
4101.00	7.90	315.80	4072.14	324.08	-314.92	451.88	2.27	-2.22	3.11	MWD
4190.00	6.00	320.40	4160.48	332.05	-322.15	462.64	2.22	-2.13	5.17	MWD
4281.00	6.20	317.20	4250.97	339.32	-328.52	472.29	0.43	0.22	-3.52	MWD
4371.00	7.20	312.60	4340.35	346.70	-335.97	482.78	1.26	1.11	-5.11	MWD
4461.00	8.30	305.60	4429.53	354.30	-345.41	494.80	1.61	1.22	-7.78	MWD
4552.00	9.10	307.70	4519.48	362.53	-356.44	508.39	0.95	0.88	2.31	MWD
4642.00	8.40	312.30	4608.44	371.30	-366.93	521.99	1.10	-0.78	5.11	MWD
4732.00	7.20	314.00	4697.60	379.64	-375.85	534.19	1.36	-1.33	1.89	MWD
4821.00	7.70	314.00	4785.85	387.66	-384.15	545.72	0.56	0.56	0.00	MWD
4912.00	7.20	313.30	4876.08	395.81	-392.69	557.51	0.56	-0.55	-0.77	MWD
5002.00	7.70	316.80	4965.32	404.07	-400.92	569.17	0.75	0.56	3.89	MWD
5092.00	8.10	321.40	5054.47	413.42	-409.01	581.51	0.83	0.44	5.11	MWD
5182.00	8.10	320.00	5143.57	423.23	-417.04	594.15	0.22	0.00	-1.56	MWD
5271.00	7.40	316.50	5231.76	432.19	-425.01	606.14	0.95	-0.79	-3.93	MWD
5361.00	6.70	317.90	5321.08	440.29	-432.52	617.18	0.80	-0.78	1.56	MWD
5451.00	6.70	313.00	5410.46	447.77	-439.88	627.67	0.64	0.00	-5.44	MWD
5542.00	5.30	316.10	5500.96	454.42	-446.68	637.17	1.58	-1.54	3.41	MWD
5632.00	7.20	310.20	5590.43	461.06	-453.87	646.94	2.23	2.11	-6.56	MWD
5723.00	7.00	316.00	5680.73	468.73	-462.08	658.16	0.82	-0.22	6.37	MWD
5813.00	6.90	320.00	5770.07	476.81	-469.36	669.04	0.55	-0.11	4.44	MWD
5903.00	6.50	327.00	5859.45	485.23	-475.61	679.43	1.01	-0.44	7.78	MWD
5994.00	5.80	317.20	5949.93	492.92	-481.54	689.09	1.38	-0.77	-10.77	MWD
6084.00	4.60	318.20	6039.58	498.95	-487.04	697.24	1.34	-1.33	1.11	MWD
6174.00	3.70	318.20	6129.32	503.80	-491.38	703.75	1.00	-1.00	0.00	MWD
6265.00	3.20	320.00	6220.16	507.94	-494.97	709.21	0.56	-0.55	1.98	MWD
6355.00	2.50	313.70	6310.05	511.22	-498.00	713.68	0.85	-0.78	-7.00	MWD

Strata Directional Technology, LLC

Survey Report

Company: ANADARKO PETROLEUM	Date: 06/22/2009	Time: 07:25:03	Page: 3
Field: Weld County, CO	Co-ordinate(NE) Reference:	Well: 4-4, True North	
Site: SEC Four 18-4 Pad	Vertical (TVD) Reference:	SITE 5041.0	
Well: 4-4	Section (VS) Reference:	Well (0.00N,0.00E,315.97Azi)	
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
6401.00	2.50	325.60	6356.00	512.74	-499.29	715.67	1.13	0.00	25.87	MWD
6446.00	1.90	339.30	6400.97	514.25	-500.11	717.33	1.76	-1.33	30.44	MWD
6491.00	3.20	329.80	6445.93	516.03	-501.01	719.23	3.03	2.89	-21.11	MWD
6537.00	3.90	337.20	6491.84	518.58	-502.26	721.94	1.82	1.52	16.09	MWD
6582.00	3.70	329.80	6536.74	521.25	-503.58	724.77	1.18	-0.44	-16.44	MWD
6627.00	5.60	324.60	6581.59	524.29	-505.59	728.35	4.32	4.22	-11.56	MWD
6672.00	5.30	323.20	6626.38	527.75	-508.10	732.59	0.73	-0.67	-3.11	MWD
6717.00	4.60	322.10	6671.22	530.83	-510.46	736.44	1.57	-1.56	-2.44	MWD
6763.00	4.80	320.70	6717.06	533.78	-512.81	740.19	0.50	0.43	-3.04	MWD
6808.00	4.60	324.90	6761.91	536.71	-515.04	743.85	0.88	-0.44	9.33	MWD
6853.00	4.00	317.50	6806.78	539.34	-517.14	747.20	1.81	-1.33	-16.44	MWD
6898.00	4.00	312.60	6851.67	541.56	-519.35	750.34	0.76	0.00	-10.89	MWD
6943.00	4.20	300.70	6896.56	543.47	-521.92	753.50	1.94	0.44	-26.44	MWD
6989.00	5.80	314.70	6942.39	545.96	-525.02	757.45	4.35	3.48	30.43	MWD
7033.00	3.90	321.40	6986.23	548.70	-527.54	761.16	4.50	-4.32	15.23	MWD
7079.00	3.50	322.10	7032.13	551.03	-529.38	764.11	0.88	-0.87	1.52	MWD
7122.00	4.80	324.20	7075.02	553.52	-531.24	767.20	3.04	3.02	4.88	MWD
7168.00	4.40	327.40	7120.87	556.57	-533.31	770.83	1.03	-0.87	6.96	MWD
7213.00	3.90	314.00	7165.75	559.09	-535.34	774.05	2.42	-1.11	-29.78	MWD
7258.00	3.50	322.80	7210.66	561.24	-537.27	776.95	1.54	-0.89	19.56	MWD
7304.00	3.00	319.60	7256.58	563.28	-538.90	779.54	1.16	-1.09	-6.96	MWD
7348.00	2.80	318.60	7300.53	564.96	-540.36	781.76	0.47	-0.45	-2.27	MWD
7394.00	2.80	316.50	7346.47	566.62	-541.88	784.01	0.22	0.00	-4.57	MWD
7484.00	2.30	318.60	7436.38	569.57	-544.58	788.01	0.57	-0.56	2.33	MWD
7620.00	1.90	315.40	7572.29	573.22	-547.97	792.99	0.31	-0.29	-2.35	MWD
7756.00	1.40	325.60	7708.24	576.20	-550.49	796.89	0.42	-0.37	7.50	MWD
7891.00	0.90	325.60	7843.21	578.43	-552.03	799.56	0.37	-0.37	0.00	MWD
8027.00	1.10	344.60	7979.19	580.57	-552.98	801.76	0.28	0.15	13.97	MWD
8163.00	0.70	355.20	8115.17	582.66	-553.39	803.54	0.32	-0.29	7.79	MWD
8298.00	0.70	343.60	8250.16	584.27	-553.69	804.91	0.10	0.00	-8.59	MWD
8398.00	0.70	343.60	8350.15	585.44	-554.04	806.00	0.00	0.00	0.00	PROJECTED to TD