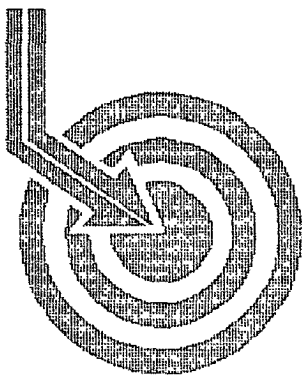




Scientific Drilling

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MAR 11 2010

HOBBSOCD

30-025-39564

K-5-205-37E

1650 FSL + 1650 FWL

APACHE CORPORATION

Field: Monument

Site: Lea County, NM

Well: Bertha Barber #22

Wellpath: DH - Job #32D1209547

Survey: 12/10/09-12/12/09

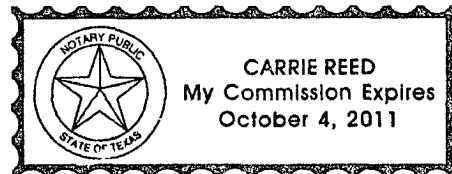
This survey is correct to the best of my knowledge
and is supported by actual field data.

.....*K. Wharton*..... Company Representative

Notorized this date 17th of December, 2009.

Carrie Reed

Notary Signature
County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: APACHE CORPORATION	Date: 12/17/2009	Time: 09:35:25	Page: 1
Field: Monument	Co-ordinate(NE) Reference:	Site: Lea County, NM, Grid North	
Site: Lea County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Bertha Barber #22	Section (VS) Reference:	Well (0.00N,0.00E,89.89Azi)	
Wellpath: DH - Job #32D1209547	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 12/10/09-12/12/09	Start Date: 12/10/2009
MWD 1183'-3155'	
Company: Scientific Drilling Internatio	Engineer: McCormick/Baldwin
Tool: MWD;MWD	Tied-to: From Surface

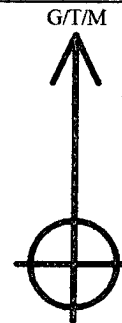
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1183.00	0.91	190.63	1182.95	-1.75	-9.23	-1.73	0.08	9.39	190.63
1275.00	0.77	198.47	1274.94	-2.08	-10.54	-2.06	0.20	10.74	191.08
1365.00	0.68	202.94	1364.93	-2.49	-11.60	-2.46	0.12	11.86	191.99
1455.00	0.48	226.24	1454.93	-2.97	-12.36	-2.94	0.34	12.70	193.40
1546.00	0.48	287.12	1545.93	-3.61	-12.51	-3.58	0.53	13.01	195.99
1637.00	0.62	324.31	1636.92	-4.26	-11.99	-4.23	0.41	12.72	199.45
1728.00	0.69	23.39	1727.92	-4.33	-11.09	-4.30	0.71	11.90	201.21
1818.00	1.77	35.05	1817.90	-3.31	-9.46	-3.29	1.23	10.01	199.19
1909.00	2.16	48.78	1908.84	-1.21	-7.18	-1.19	0.67	7.27	189.45
2000.00	2.31	52.54	1999.77	1.54	-4.93	1.55	0.23	5.17	162.53
2091.00	2.24	46.53	2090.70	4.29	-2.59	4.30	0.27	5.02	121.09
2182.00	2.65	48.38	2181.62	7.16	0.03	7.16	0.46	7.16	89.77
2273.00	2.33	48.30	2272.53	10.12	2.66	10.11	0.35	10.46	75.28
2337.00	1.51	23.53	2336.50	11.43	4.30	11.42	1.79	12.20	69.39
2437.00	1.79	341.73	2436.46	11.47	6.99	11.46	1.21	13.42	58.63
2453.00	1.62	328.52	2452.45	11.28	7.42	11.26	2.67	13.49	56.63
2500.00	0.84	117.95	2499.45	11.24	7.82	11.22	5.07	13.68	55.12
2545.00	2.98	126.65	2544.42	12.46	6.97	12.45	4.79	14.27	60.76
2591.00	3.32	135.08	2590.35	14.36	5.31	14.35	1.25	15.30	69.69
2682.00	3.02	138.38	2681.21	17.81	1.65	17.80	0.39	17.88	84.69
2727.00	3.01	138.65	2726.15	19.37	-0.12	19.37	0.04	19.37	90.35
2787.00	1.62	152.30	2786.10	20.80	-2.05	20.81	2.48	20.91	95.63
2864.00	1.17	315.53	2863.09	20.76	-2.46	20.76	3.59	20.91	96.74
2955.00	1.21	298.02	2954.07	19.26	-1.34	19.26	0.40	19.31	93.98
3046.00	1.37	281.69	3045.05	17.35	-0.67	17.35	0.44	17.36	92.21
3091.00	1.18	283.10	3090.04	16.37	-0.46	16.37	0.43	16.38	91.59
3136.00	0.92	304.65	3135.03	15.62	-0.14	15.62	1.04	15.62	90.53
3155.00	0.95	303.61	3154.03	15.37	0.03	15.37	0.18	15.37	89.89



Scientific
Drilling

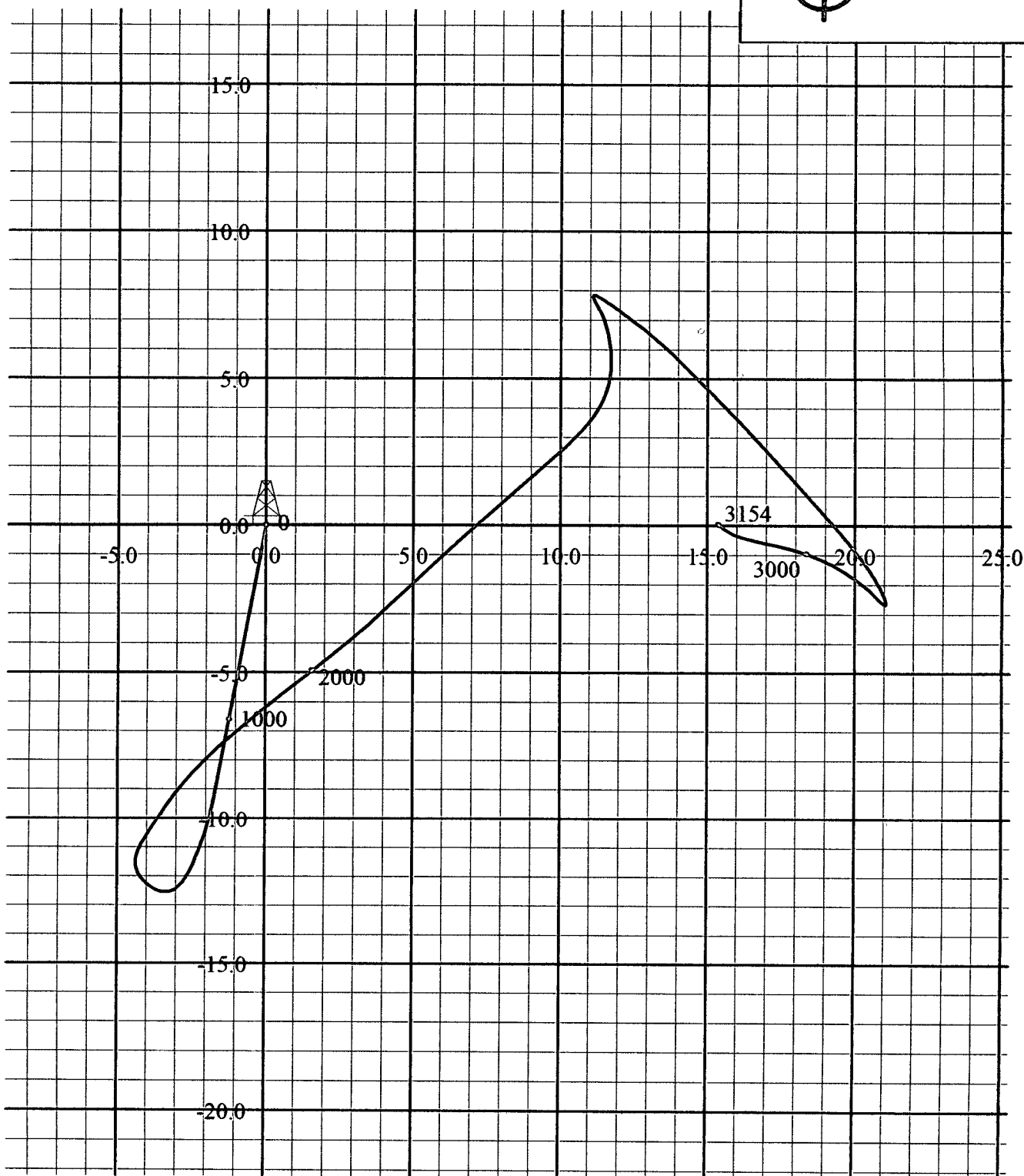
Field: Monument
Site: Lea County, NM
Well: Bertha Barber #22
Wellpath: DH - Job #32D1209547
Survey: 12/10/09-12/12/09



Azimuths to Grid North
True North: 0.00°
Magnetic North: 0.00°

Magnetic Field
Strength: 0nT
Dip Angle: 0.00°
Date: 12/17/2009
Model: igrf2000

South(-)/North(+) [5ft/in]



West(-)/East(+) [5ft/in]