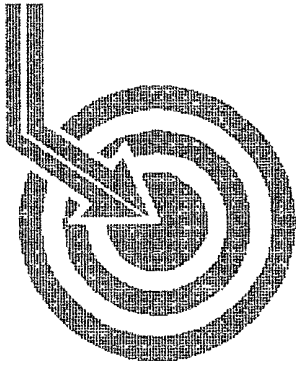


30-025-30632
B-8-25s-34E
660 FNL & 2310 FEL



Scientific Drilling

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MAY 17 2010
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SUR: B-8-25s-34e, 660/N & 2310/E
BHL: O-8-25s-34e, 4888/N & 2003/E
API # 30-025-30632

EOG

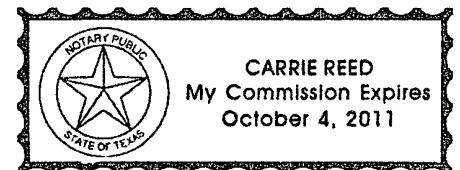
Field: Pitchfork Ranch Morrow
Site: Lea County, NM
Well: Diamond 8 Federal #1
Wellpath: VH - Job #32K1209578
Survey: 12/20/09

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

Clayton.....Company Representative

Notorized this date 3/60 of December, 2009.

Carrie Reed
Notary Signature
County of Midland
State of Texas





Scientific
Drilling

Scientific Drilling International

Survey Report

Company: EOG Date: 12/29/2009 Time: 12:24:36 Page: 1
Field: Pitchfork Ranch Morrow Co-ordinate(NE) Reference: Site: Lea County, NM; Grid North
Site: Lea County, NM Vertical (TVD) Reference: SITE 0.0
Well: Diamond 8 Federal #1 Section (VS) Reference: Well (0.00N;0.00E;15.01Azi)
Wellpath: VH - Job #32K1209578 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 12/20/09 Start Date: 12/20/2009
Company: Scientific Drilling Internatio Engineer: Guebara w/Express
Tool: Keeper; Keeper Surface Readout Gyro 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	359.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50.00	0.84	338.04	50.00	0.29	0.34	-0.14	1.68	0.37	338.04
100.00	0.91	340.02	99.99	0.91	1.05	-0.41	0.15	1.13	338.74
150.00	0.95	335.90	149.99	1.56	1.80	-0.71	0.16	1.94	338.39
200.00	0.95	339.05	199.98	2.21	2.57	-1.03	0.10	2.77	338.12
250.00	1.03	336.93	249.97	2.90	3.37	-1.36	0.18	3.63	338.08
300.00	1.03	341.59	299.96	3.63	4.21	-1.67	0.17	4.53	338.31
350.00	1.07	338.73	349.95	4.38	5.07	-1.99	0.13	5.45	338.62
400.00	1.01	340.84	399.95	5.13	5.92	-2.30	0.14	6.35	338.78
450.00	1.12	339.08	449.94	5.89	6.80	-2.62	0.23	7.28	338.93
500.00	1.40	328.51	499.93	6.70	7.77	-3.11	0.73	8.37	338.18
550.00	1.46	325.67	549.91	7.54	8.82	-3.79	0.19	9.60	336.74
600.00	1.45	326.18	599.89	8.37	9.87	-4.50	0.03	10.85	335.48
650.00	1.48	326.97	649.88	9.22	10.94	-5.21	0.07	12.11	334.55
700.00	1.52	324.86	699.86	10.07	12.02	-5.94	0.14	13.41	333.71
750.00	1.41	327.60	749.84	10.91	13.08	-6.65	0.26	14.68	333.05
800.00	1.37	328.04	799.83	11.74	14.11	-7.30	0.08	15.89	332.65
850.00	1.19	328.54	849.82	12.50	15.06	-7.88	0.36	17.00	332.37
900.00	1.10	332.07	899.81	13.21	15.93	-8.38	0.23	18.00	332.25
950.00	0.97	335.14	949.80	13.89	16.74	-8.78	0.28	18.90	332.31
1000.00	0.80	338.30	999.79	14.49	17.44	-9.09	0.35	19.67	332.48
1050.00	0.76	340.64	1049.79	15.05	18.08	-9.33	0.10	20.35	332.71
1100.00	0.71	342.74	1099.78	15.58	18.69	-9.53	0.11	20.98	332.98
1150.00	0.65	344.99	1149.78	16.09	19.26	-9.70	0.13	21.56	333.28
1200.00	0.60	357.09	1199.78	16.59	19.79	-9.78	0.28	22.08	333.70
1250.00	0.61	352.89	1249.78	17.08	20.32	-9.83	0.09	22.57	334.19
1300.00	0.54	15.95	1299.77	17.56	20.81	-9.80	0.48	23.00	334.79
1350.00	0.53	12.74	1349.77	18.03	21.26	-9.68	0.06	23.36	335.52
1400.00	0.50	29.20	1399.77	18.47	21.68	-9.52	0.30	23.68	336.28
1450.00	0.52	27.93	1449.77	18.91	22.07	-9.31	0.05	23.95	337.12
1500.00	0.43	16.64	1499.76	19.31	22.45	-9.15	0.26	24.24	337.82
1550.00	0.47	23.59	1549.76	19.70	22.82	-9.02	0.14	24.53	338.44
1600.00	0.45	28.21	1599.76	20.10	23.18	-8.84	0.08	24.81	339.12
1650.00	0.48	28.63	1649.76	20.49	23.54	-8.65	0.06	25.07	339.83
1700.00	0.42	5.54	1699.76	20.88	23.90	-8.53	0.38	25.38	340.36
1750.00	0.38	14.94	1749.76	21.22	24.24	-8.47	0.15	25.68	340.74
1800.00	0.37	19.48	1799.76	21.55	24.56	-8.37	0.06	25.94	341.17
1850.00	0.31	5.93	1849.76	21.85	24.84	-8.30	0.20	26.19	341.52
1900.00	0.34	325.05	1899.75	22.07	25.10	-8.38	0.46	26.46	341.55
1950.00	0.35	315.54	1949.75	22.25	25.33	-8.57	0.12	26.74	341.31
2000.00	0.39	311.94	1999.75	22.40	25.55	-8.80	0.09	27.03	340.99
2050.00	0.42	308.83	2049.75	22.55	25.78	-9.07	0.07	27.33	340.62
2100.00	0.53	300.24	2099.75	22.69	26.01	-9.41	0.26	27.66	340.11
2150.00	0.44	301.16	2149.75	22.80	26.23	-9.78	0.18	27.99	339.56
2200.00	0.47	300.24	2199.75	22.91	26.43	-10.12	0.06	28.30	339.05
2250.00	0.49	298.11	2249.74	23.01	26.64	-10.48	0.05	28.62	338.51
2300.00	0.57	296.28	2299.74	23.11	26.85	-10.90	0.16	28.97	337.91
2350.00	0.62	299.03	2349.74	23.22	27.09	-11.36	0.12	29.37	337.26
2400.00	0.80	299.04	2399.74	23.37	27.39	-11.90	0.36	29.86	336.52



Scientific
Drilling

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Survey Report

Company: EOG	Date: 12/29/2009	Time: 12:24:36	Page: 2
Field: Pitchfork Ranch Morrow	Co-ordinate(NE) Reference: Site: Lea County, NM, Grid North		
Site: Lea County, NM	Vertical (TVD) Reference: SITE 0.0		
Well: Diamond 8 Federal #1	Section (VS) Reference: Well (0.00N,0.00E,15.01Azi)		
Wellpath: VH - Job #32K1209578	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
2450.00	0.78	303.15	2449.73	23.56	27.74	-12.49	0.12	30.42	335.77
2500.00	0.81	303.09	2499.73	23.78	28.12	-13.07	0.06	31.01	335.08
2550.00	0.85	307.27	2549.72	24.03	28.54	-13.66	0.15	31.64	334.42
2600.00	1.00	319.81	2599.71	24.42	29.10	-14.24	0.50	32.39	333.93
2650.00	1.22	324.20	2649.71	25.00	29.86	-14.83	0.47	33.34	333.59
2700.00	1.33	332.10	2699.69	25.77	30.81	-15.41	0.41	34.45	333.42
2750.00	1.44	334.07	2749.68	26.67	31.89	-15.96	0.24	35.66	333.41
2800.00	1.53	337.10	2799.66	27.67	33.07	-16.49	0.24	36.95	333.49
2850.00	1.69	338.64	2849.64	28.79	34.37	-17.02	0.33	38.35	333.65
2900.00	1.87	343.81	2899.62	30.08	35.84	-17.52	0.48	39.89	333.95
2950.00	2.10	344.13	2949.59	31.56	37.50	-18.00	0.46	41.60	334.37
3000.00	2.34	348.63	2999.55	33.26	39.38	-18.45	0.59	43.49	334.90
3050.00	2.43	349.06	3049.51	35.13	41.43	-18.85	0.18	45.51	335.53
3100.00	2.56	349.20	3099.46	37.09	43.56	-19.26	0.26	47.63	336.15
3150.00	2.56	350.62	3149.41	39.11	45.76	-19.65	0.13	49.80	336.76
3200.00	2.61	350.08	3199.36	41.16	47.98	-20.03	0.11	52.00	337.34
3250.00	2.62	350.60	3249.31	43.23	50.23	-20.41	0.05	54.22	337.89
3300.00	2.56	351.83	3299.26	45.30	52.47	-20.76	0.16	56.42	338.41
3350.00	2.42	355.70	3349.21	47.32	54.62	-20.99	0.44	58.52	338.98
3400.00	2.17	359.93	3399.17	49.23	56.62	-21.08	0.60	60.42	339.58
3450.00	2.07	3.89	3449.13	51.03	58.47	-21.02	0.35	62.13	340.23
3500.00	1.90	8.62	3499.10	52.74	60.19	-20.83	0.47	63.69	340.91
3550.00	1.87	7.85	3549.08	54.38	61.82	-20.59	0.08	65.16	341.58
3600.00	1.79	13.23	3599.05	55.97	63.39	-20.30	0.38	66.56	342.24
3650.00	1.60	19.26	3649.03	57.44	64.81	-19.89	0.52	67.79	342.93
3700.00	1.55	20.56	3699.01	58.81	66.10	-19.43	0.12	68.89	343.62
3750.00	1.40	24.47	3748.99	60.09	67.29	-18.94	0.36	69.90	344.28
3800.00	1.33	28.57	3798.98	61.25	68.35	-18.41	0.24	70.79	344.93
3850.00	1.21	27.70	3848.97	62.33	69.33	-17.88	0.24	71.60	345.54
3900.00	1.11	26.77	3898.96	63.32	70.23	-17.42	0.20	72.36	346.07
3950.00	1.05	31.43	3948.95	64.24	71.05	-16.96	0.21	73.05	346.57
4000.00	1.10	36.59	3998.94	65.12	71.83	-16.44	0.22	73.69	347.11
4050.00	1.03	39.18	4048.93	65.98	72.56	-15.87	0.17	74.28	347.67
4100.00	0.99	42.84	4098.92	66.77	73.23	-15.29	0.15	74.81	348.21
4150.00	1.09	51.18	4148.92	67.54	73.84	-14.63	0.36	75.28	348.80
4200.00	1.09	55.99	4198.91	68.28	74.41	-13.86	0.18	75.69	349.45
4250.00	1.03	55.18	4248.90	68.98	74.93	-13.10	0.12	76.07	350.08
4300.00	1.05	55.68	4298.89	69.67	75.45	-12.35	0.04	76.45	350.70
4350.00	1.20	63.33	4348.88	70.37	75.94	-11.50	0.42	76.80	351.39
4400.00	1.30	68.25	4398.87	71.06	76.38	-10.51	0.29	77.10	352.17
4450.00	1.43	72.98	4448.85	71.73	76.78	-9.39	0.34	77.35	353.03
4500.00	1.45	73.14	4498.84	72.39	77.14	-8.18	0.04	77.58	353.94
4550.00	1.62	77.58	4548.82	73.05	77.48	-6.89	0.41	77.78	354.92
4600.00	1.44	74.12	4598.80	73.70	77.80	-5.59	0.40	78.00	355.89
4650.00	1.63	83.09	4648.78	74.29	78.06	-4.28	0.61	78.18	356.86
4700.00	1.43	87.71	4698.77	74.74	78.17	-2.95	0.47	78.23	357.84
4750.00	1.55	89.24	4748.75	75.11	78.20	-1.65	0.25	78.22	358.79
4800.00	1.54	92.68	4798.73	75.43	78.18	-0.31	0.19	78.18	359.77
4850.00	1.60	95.11	4848.71	75.70	78.09	1.06	0.18	78.09	0.78
4900.00	1.68	94.97	4898.69	75.95	77.96	2.48	0.16	78.00	1.83
4950.00	1.80	95.41	4948.67	76.20	77.82	4.00	0.24	77.93	2.94
5000.00	1.70	96.16	4998.65	76.45	77.67	5.52	0.21	77.87	4.06



Scientific
Drilling

Scientific Drilling International Survey Report

Company: EOG
Field: Pitchfork Ranch Morrow
Site: Lea County, NM
Well: Diamond 8 Federal #1
Wellpath: VH - Job #32K1209578

Date: 12/29/2009 Time: 12:24:36 Page: 3
Co-ordinate(NE) Reference: Site: Lea County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,15.01Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
5050.00	1.45	99.92	5048.63	76.62	77.48	6.88	0.54	77.79	5.07
5100.00	1.15	104.92	5098.61	76.68	77.24	7.98	0.64	77.66	5.90
5150.00	1.00	108.22	5148.60	76.65	76.98	8.88	0.32	77.49	6.58
5200.00	0.80	107.24	5198.60	76.61	76.74	9.63	0.40	77.34	7.15
5250.00	0.72	110.88	5248.59	76.57	76.52	10.26	0.19	77.21	7.63
5300.00	0.65	113.32	5298.59	76.50	76.30	10.81	0.15	77.06	8.07
5350.00	0.67	126.76	5348.59	76.35	76.01	11.31	0.31	76.85	8.46
5400.00	0.65	129.69	5398.58	76.12	75.66	11.76	0.08	76.56	8.83
5450.00	0.64	121.64	5448.58	75.92	75.33	12.21	0.18	76.31	9.21
5500.00	0.61	117.89	5498.58	75.78	75.06	12.69	0.10	76.12	9.59
5550.00	0.60	113.70	5548.58	75.68	74.83	13.16	0.09	75.98	9.98
5600.00	0.56	119.99	5598.57	75.58	74.60	13.61	0.15	75.83	10.34
5650.00	0.54	127.12	5648.57	75.43	74.34	14.01	0.14	75.64	10.68
5700.00	0.47	121.49	5698.57	75.28	74.09	14.38	0.17	75.47	10.98
5750.00	0.40	124.22	5748.57	75.17	73.88	14.70	0.15	75.33	11.25
5800.00	0.41	118.61	5798.57	75.07	73.70	15.00	0.08	75.21	11.50
5850.00	0.37	118.18	5848.56	74.99	73.54	15.30	0.08	75.11	11.75
5900.00	0.35	118.16	5898.56	74.92	73.39	15.57	0.04	75.02	11.98
5950.00	0.38	109.13	5948.56	74.87	73.26	15.86	0.13	74.96	12.22
6000.00	0.39	118.89	5998.56	74.82	73.12	16.17	0.13	74.89	12.47
6050.00	0.37	128.22	6048.56	74.71	72.94	16.45	0.13	74.77	12.71
6100.00	0.33	142.36	6098.56	74.56	72.73	16.66	0.19	74.61	12.90
6150.00	0.22	143.73	6148.56	74.41	72.54	16.81	0.22	74.46	13.04
6200.00	0.26	167.71	6198.56	74.25	72.35	16.89	0.21	74.29	13.14
6250.00	0.21	150.31	6248.56	74.09	72.16	16.96	0.17	74.12	13.22
6300.00	0.18	144.82	6298.56	73.97	72.01	17.05	0.07	74.00	13.32
6350.00	0.23	142.29	6348.56	73.86	71.87	17.15	0.10	73.89	13.42
6400.00	0.25	149.42	6398.56	73.72	71.70	17.27	0.07	73.75	13.54
6450.00	0.24	143.84	6448.56	73.58	71.52	17.39	0.05	73.60	13.66
6500.00	0.25	161.74	6498.56	73.42	71.33	17.48	0.15	73.44	13.77
6550.00	0.19	151.60	6548.56	73.27	71.15	17.56	0.14	73.29	13.86
6600.00	0.22	160.87	6598.56	73.13	70.99	17.63	0.09	73.15	13.95
6650.00	0.20	145.72	6648.56	73.00	70.83	17.71	0.12	73.01	14.04
6700.00	0.20	137.73	6698.55	72.89	70.69	17.82	0.06	72.90	14.15
6750.00	0.25	154.49	6748.55	72.76	70.53	17.92	0.16	72.77	14.26
6800.00	0.16	125.41	6798.55	72.66	70.39	18.03	0.27	72.66	14.36
6850.00	0.18	138.14	6848.55	72.59	70.29	18.14	0.09	72.59	14.47
6900.00	0.16	118.67	6898.55	72.53	70.20	18.25	0.12	72.53	14.57
6950.00	0.18	115.32	6948.55	72.50	70.13	18.38	0.04	72.50	14.69
7000.00	0.17	126.94	6998.55	72.46	70.05	18.51	0.07	72.46	14.80
7050.00	0.18	119.55	7048.55	72.41	69.97	18.64	0.05	72.41	14.92
7100.00	0.16	121.64	7098.55	72.37	69.89	18.77	0.04	72.37	15.03
7150.00	0.15	117.06	7148.55	72.34	69.83	18.88	0.03	72.34	15.13
7200.00	0.17	103.99	7198.55	72.32	69.78	19.01	0.08	72.32	15.24
7250.00	0.19	125.47	7248.55	72.30	69.71	19.15	0.14	72.30	15.36
7300.00	0.16	118.01	7298.55	72.25	69.63	19.28	0.08	72.25	15.48
7350.00	0.17	120.25	7348.55	72.22	69.56	19.41	0.02	72.22	15.59
7400.00	0.15	91.67	7398.55	72.21	69.52	19.54	0.16	72.22	15.70
7450.00	0.18	103.16	7448.55	72.23	69.50	19.68	0.09	72.24	15.81
7500.00	0.19	94.91	7498.55	72.25	69.48	19.84	0.06	72.26	15.94
7550.00	0.20	105.92	7548.55	72.26	69.45	20.01	0.08	72.27	16.07
7600.00	0.17	125.14	7598.55	72.23	69.38	20.15	0.14	72.25	16.19
7650.00	0.18	111.63	7648.55	72.20	69.31	20.28	0.08	72.22	16.31



Scientific
Drilling

Scientific Drilling International

Survey Report

Company: EOG	Date: 12/29/2009	Time: 12:24:36	Page: 4
Field: Pitchfork Ranch Morrow	Co-ordinate(NE) Reference:	Site: Lea County, NM, Grid North	
Site: Lea County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Diamond 8 Federal #1	Section (VS) Reference:	Well (0.00N,0.00E,15.01Azi)	
Wellpath: VH - Job #32K1209578	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
7700.00	0.27	106.08	7698.55	72.19	69.25	20.47	0.18	72.21	16.47
7750.00	0.39	118.17	7748.55	72.15	69.14	20.73	0.28	72.18	16.69
7800.00	0.60	131.37	7798.55	71.99	68.88	21.08	0.48	72.04	17.02
7850.00	0.80	138.16	7848.54	71.68	68.45	21.51	0.43	71.75	17.44
7900.00	0.80	136.06	7898.54	71.31	67.94	21.98	0.06	71.41	17.93
7950.00	0.83	135.47	7948.53	70.95	67.43	22.48	0.06	71.08	18.44
8000.00	0.93	134.34	7998.53	70.57	66.89	23.02	0.20	70.74	19.00
8050.00	0.99	134.08	8048.52	70.16	66.30	23.63	0.12	70.39	19.61
8100.00	1.00	136.65	8098.51	69.72	65.68	24.24	0.09	70.01	20.25
8150.00	0.98	137.04	8148.51	69.26	65.05	24.83	0.04	69.63	20.89
8200.00	1.01	137.44	8198.50	68.80	64.42	25.42	0.06	69.25	21.53
8250.00	1.02	139.34	8248.49	68.31	63.75	26.00	0.07	68.85	22.19
8300.00	1.08	142.30	8298.48	67.78	63.04	26.58	0.16	68.42	22.86
8350.00	1.12	144.36	8348.47	67.18	62.27	27.15	0.11	67.94	23.56
8400.00	1.13	145.38	8398.46	66.55	61.47	27.72	0.04	67.43	24.27
8450.00	1.07	143.80	8448.45	65.94	60.69	28.28	0.13	66.95	24.98
8500.00	1.16	144.45	8498.44	65.33	59.90	28.85	0.18	66.48	25.71
8550.00	1.23	145.06	8548.43	64.66	59.05	29.45	0.14	65.98	26.50
8600.00	1.24	144.97	8598.42	63.97	58.17	30.06	0.02	65.48	27.33
8650.00	1.24	145.73	8648.41	63.27	57.28	30.68	0.03	64.97	28.18
8700.00	1.27	142.32	8698.40	62.58	56.39	31.32	0.16	64.51	29.05
8750.00	1.31	143.78	8748.39	61.88	55.49	32.00	0.10	64.06	29.97
8800.00	1.33	144.55	8798.37	61.16	54.56	32.67	0.05	63.59	30.92
8850.00	1.28	143.49	8848.36	60.44	53.63	33.34	0.11	63.15	31.87
8900.00	1.31	140.85	8898.35	59.76	52.74	34.04	0.13	62.77	32.83
8950.00	1.34	141.43	8948.33	59.08	51.84	34.76	0.07	62.42	33.84
9000.00	1.37	145.36	8998.32	58.34	50.89	35.47	0.20	62.03	34.87
9050.00	1.34	143.33	9048.30	57.59	49.93	36.15	0.11	61.65	35.91
9100.00	1.43	142.54	9098.29	56.85	48.97	36.88	0.18	61.30	36.99
9150.00	1.40	144.61	9148.28	56.08	47.98	37.62	0.12	60.96	38.10
9200.00	1.35	139.95	9198.26	55.35	47.03	38.35	0.24	60.68	39.20
9250.00	1.28	135.02	9248.25	54.74	46.18	39.12	0.27	60.52	40.27
9300.00	1.14	121.04	9298.24	54.32	45.53	39.94	0.65	60.57	41.26
9350.00	1.09	113.36	9348.23	54.11	45.08	40.81	0.31	60.81	42.15
9400.00	1.04	95.64	9398.22	54.12	44.85	41.69	0.66	61.24	42.91
9450.00	0.93	88.79	9448.21	54.31	44.82	42.55	0.32	61.80	43.52
9500.00	0.91	65.84	9498.20	54.67	44.99	43.32	0.73	62.45	43.92
9550.00	0.87	56.45	9548.20	55.21	45.36	44.00	0.30	63.19	44.13
9600.00	0.83	38.11	9598.19	55.82	45.85	44.54	0.55	63.92	44.17
9650.00	0.86	10.85	9648.19	56.53	46.51	44.83	0.80	64.60	43.95
9700.00	1.31	337.86	9698.18	57.36	47.40	44.69	1.50	65.15	43.31
9750.00	1.39	335.94	9748.17	58.29	48.49	44.22	0.18	65.63	42.37
9800.00	1.63	321.45	9798.15	59.18	49.60	43.53	0.90	65.99	41.28
9850.00	1.63	303.57	9848.13	59.83	50.55	42.50	1.01	66.04	40.06
9900.00	1.70	292.23	9898.11	60.15	51.22	41.22	0.67	65.75	38.83
9950.00	1.73	288.41	9948.09	60.29	51.74	39.82	0.24	65.29	37.58
10000.00	1.80	281.40	9998.06	60.28	52.13	38.33	0.45	64.71	36.33
10050.00	1.98	273.69	10048.03	60.06	52.34	36.70	0.62	63.93	35.03
10100.00	2.40	264.02	10098.00	59.52	52.29	34.80	1.12	62.81	33.64
10150.00	2.69	261.97	10147.95	58.68	52.02	32.59	0.61	61.39	32.07
10200.00	3.00	262.88	10197.89	57.73	51.69	30.13	0.63	59.83	30.24
10250.00	3.04	263.33	10247.82	56.75	51.38	27.52	0.09	58.28	28.17



Scientific
Drilling

Scientific Drilling International

Survey Report

Company: EOG	Date: 12/29/2009	Time: 12:24:36	Page: 5
Field: Pitchfork Ranch Morrow	Co-ordinate(NE) Reference:	Site: Lea County, NM, Grid North	
Site: Lea County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Diamond 8 Federal #1	Section (VS) Reference:	Well (0.00N,0.00E,15.01Azi)	
Wellpath: VH - Job #32K1209578	Survey Calculation Method:	Minimum Curvature	Db: Sybase

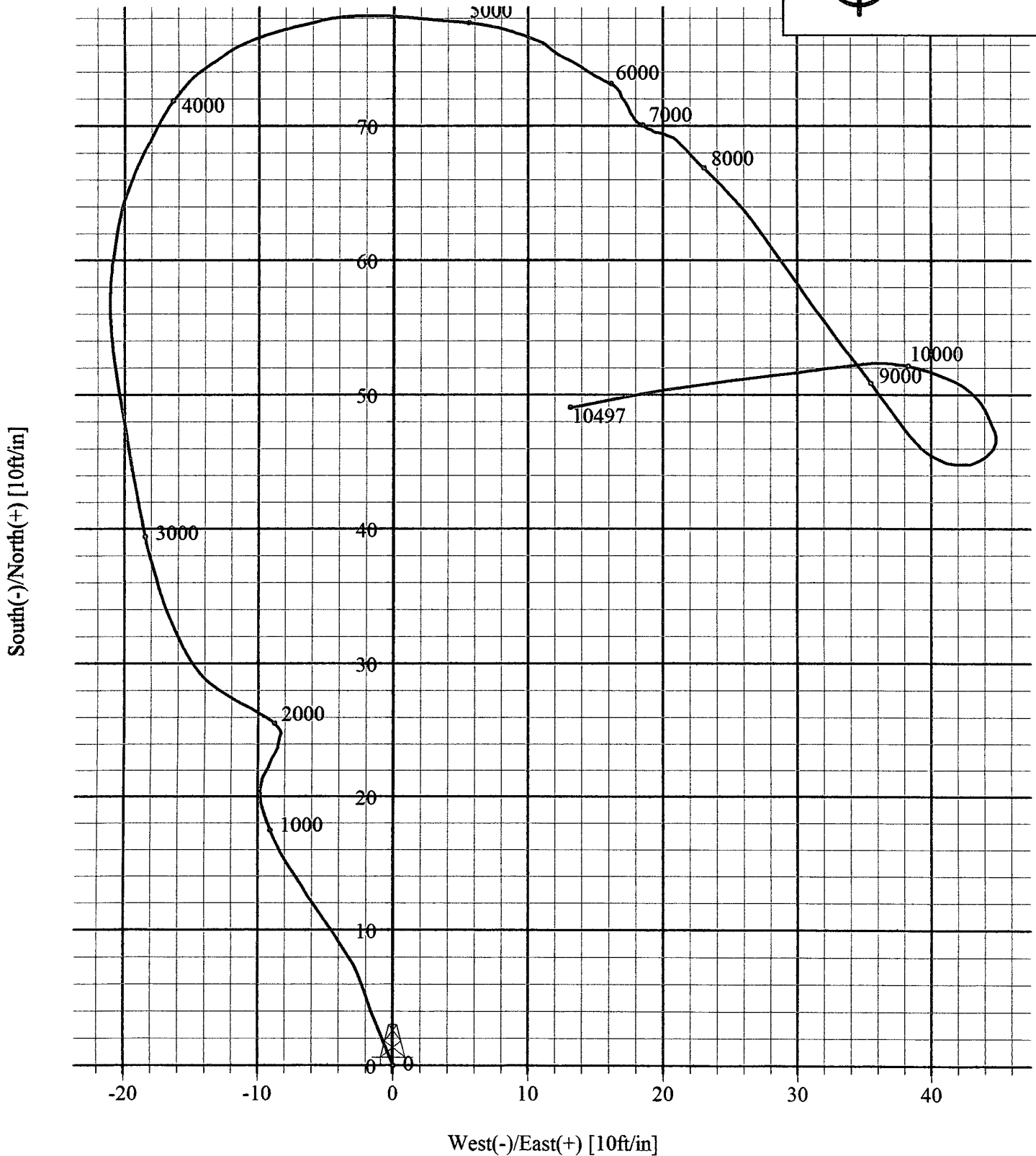
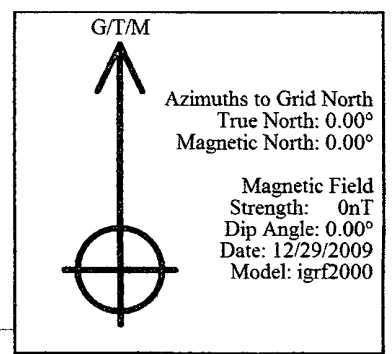
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
10300.00	3.22	262.52	10297.74	55.72	51.04	24.81	0.37	56.75	25.92
10350.00	3.25	262.08	10347.66	54.63	50.66	22.01	0.08	55.24	23.49
10400.00	3.42	259.84	10397.58	53.45	50.20	19.14	0.43	53.73	20.87
10450.00	3.49	259.39	10447.49	52.15	49.66	16.18	0.15	52.23	18.04
10500.00	3.58	258.11	10497.39	50.79	49.06	13.15	0.24	50.79	15.01



**Scientific
Drilling**

Field: Pitchfork Ranch Morrow
Site: Lea County, NM
Well: Diamond 8 Federal #1
Wellpath: VH - Job #32K1209578
Survey: 12/20/09



PathFinder Energy Services, Inc.

Survey Report

EOG RESOURCES, INC.
DIAMOND 8 FED COM #1H
LEA COUNTY
Rig:MCVAY 4
PathFinder Office Supervisor: FRAINCISCO SINISTERRA
PathFinder Field Engineers: CHRIS CARSON

Page 01/04
Tie-in Date: 01/22/2010
Date Completed: 01/30/2010

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.9.1.2379 N LON:103.29.25.6020 W
Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 760867.7757 Y: 419437.6866
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.26°EAST TO GRID
Vertical Section Plane: 178.21
Survey Vert. Reference: 18.50' Rotary Table To Ground
Altitude:3360.50' Ground To MSL

Survey Calculations by RX5 V6.02B using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)	TEMP (F)
TIE-IN TO GYRODATA SURVEY @ 8950'MD.										
8950.00	1.34	141.43	8948.33	-50.73	51.84 N	34.76 E	62.42@	33.84	0.00	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
9053.00	16.62	166.45	9049.78	-35.25	36.49 N	38.99 E	53.40@	46.90	14.97	115.48
9084.00	18.11	169.40	9079.36	-26.15	27.44 N	40.91 E	49.26@	56.15	5.58	115.48
9115.00	20.31	170.36	9108.64	-16.06	17.40 N	42.70 E	46.11@	67.83	7.17	111.87
9145.00	23.74	173.15	9136.44	-4.88	6.27 N	44.29 E	44.73@	81.95	11.95	104.64
9176.00	26.73	176.24	9164.48	8.31	6.89 S	45.49 E	46.01@	98.61	10.54	108.25
9207.00	28.93	176.81	9191.90	22.77	21.33 S	46.37 E	51.04@	114.71	7.15	104.64
9238.00	32.45	176.11	9218.55	38.59	37.12 S	47.35 E	60.17@	128.10	11.41	104.64
9269.00	36.93	175.06	9244.03	56.20	54.71 S	48.72 E	73.26@	138.32	14.58	108.25
9300.00	39.31	174.46	9268.42	75.30	73.76 S	50.47 E	89.38@	145.62	7.77	108.25
9331.00	41.59	175.10	9292.01	95.38	93.79 S	52.30 E	107.39@	150.86	7.48	104.64
9362.00	44.32	175.83	9314.70	116.48	114.85 S	53.96 E	126.89@	154.83	8.95	104.64
9393.00	48.36	176.89	9336.09	138.89	137.22 S	55.38 E	147.98@	158.02	13.27	108.25
9424.00	51.70	178.65	9356.00	162.64	160.96 S	56.29 E	170.52@	160.72	11.62	108.25
9455.00	55.05	177.84	9374.50	187.51	185.82 S	57.06 E	194.39@	162.93	11.01	108.25
9486.00	58.56	175.99	9391.47	213.44	211.72 S	58.46 E	219.64@	164.56	12.37	108.25
9518.00	61.82	174.59	9407.37	241.17	239.39 S	60.75 E	246.97@	165.76	10.87	108.25
9546.00	64.72	176.09	9419.97	266.14	264.31 S	62.78 E	271.66@	166.64	11.41	108.25
9577.00	69.20	177.30	9432.10	294.65	292.78 S	64.41 E	299.78@	167.59	14.89	108.25
9608.00	74.22	179.34	9441.82	324.07	322.19 S	65.27 E	328.74@	168.55	17.36	111.87
9639.00	77.29	179.87	9449.45	354.11	352.23 S	65.48 E	358.27@	169.47	10.04	115.48
9670.00	79.58	180.61	9455.66	384.46	382.60 S	65.35 E	388.14@	170.31	7.75	111.87
9701.00	82.48	180.83	9460.50	415.04	413.22 S	64.96 E	418.29@	171.07	9.38	115.48
9732.00	84.15	180.13	9464.11	445.81	444.00 S	64.71 E	448.69@	171.71	5.83	108.25
9769.00	88.99	179.54	9466.32	482.72	480.93 S	64.81 E	485.27@	172.32	13.18	115.48

PathFinder Energy Services, Inc.

Survey Report

EOG RESOURCES, INC.
DIAMOND 8 FED COM #1H
LEA COUNTY
RIG:MCVAY 4

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)	TEMP (F)
9831.00	90.48	180.27	9466.61	544.69	542.92 S	64.91 E	546.79@	173.18	2.68	115.48
9894.00	88.99	179.59	9466.90	607.65	605.92 S	64.99 E	609.40@	173.88	2.60	115.48
9958.00	89.96	179.99	9467.48	671.63	669.92 S	65.23 E	673.08@	174.44	1.64	119.09
10021.00	87.93	180.63	9468.64	734.57	732.90 S	64.89 E	735.77@	174.94	3.38	119.09
10083.00	88.99	181.15	9470.31	796.48	794.87 S	63.92 E	797.44@	175.40	1.90	119.09
10145.00	86.97	179.29	9472.50	858.40	856.83 S	63.68 E	859.19@	175.75	4.43	119.09
10207.00	85.30	178.19	9476.67	920.25	918.67 S	65.04 E	920.97@	175.95	3.22	119.09
10269.00	84.94	177.43	9481.95	982.02	980.40 S	67.40 E	982.71@	176.07	1.35	122.71
10331.00	87.41	176.44	9486.08	1043.86	1042.16 S	70.71 E	1044.56@	176.12	4.29	119.09
10394.00	88.11	176.16	9488.55	1106.78	1104.98 S	74.78 E	1107.51@	176.13	1.20	122.71
10457.00	87.76	174.66	9490.82	1169.66	1167.74 S	79.81 E	1170.46@	176.09	2.44	122.71
10520.00	88.99	174.42	9492.60	1232.51	1230.43 S	85.81 E	1233.42@	176.01	1.99	122.71
10583.00	89.43	174.24	9493.47	1295.36	1293.11 S	92.03 E	1296.38@	175.93	0.75	122.71
10645.00	89.34	174.26	9494.14	1357.20	1354.80 S	98.24 E	1358.35@	175.85	0.15	122.71
10707.00	90.22	174.39	9494.38	1419.06	1416.49 S	104.37 E	1420.33@	175.79	1.44	126.32
10769.00	91.45	174.66	9493.47	1480.92	1478.20 S	110.29 E	1482.31@	175.73	2.03	126.32
10831.00	90.75	175.89	9492.28	1542.83	1539.98 S	115.39 E	1544.29@	175.71	2.28	122.71
10893.00	89.34	177.12	9492.23	1604.80	1601.86 S	119.17 E	1606.29@	175.75	3.02	122.71
10955.00	88.20	176.80	9493.56	1666.77	1663.76 S	122.46 E	1668.26@	175.79	1.91	126.32
11018.00	89.08	177.01	9495.06	1729.74	1726.65 S	125.86 E	1731.23@	175.83	1.44	126.32
11080.00	91.28	176.72	9494.86	1791.71	1788.55 S	129.25 E	1793.21@	175.87	3.58	126.32
11142.00	91.63	176.73	9493.29	1853.67	1850.43 S	132.79 E	1855.19@	175.90	0.56	126.32
11204.00	90.84	176.50	9491.95	1915.63	1912.31 S	136.45 E	1917.17@	175.92	1.33	126.32
11266.00	91.10	176.58	9490.90	1977.60	1974.18 S	140.19 E	1979.15@	175.94	0.44	126.32
11329.00	91.71	177.10	9489.36	2040.56	2037.07 S	143.66 E	2042.13@	175.97	1.27	126.32
11391.00	91.54	179.01	9487.60	2102.53	2099.00 S	145.77 E	2104.06@	176.03	3.09	126.32
11453.00	91.01	179.71	9486.22	2164.50	2160.98 S	146.46 E	2165.94@	176.12	1.42	122.71
11516.00	88.90	180.06	9486.27	2227.47	2223.98 S	146.59 E	2228.81@	176.23	3.39	126.32
11578.00	90.75	180.92	9486.46	2289.42	2285.98 S	146.06 E	2290.64@	176.34	3.29	126.32

PathFinder Energy Services, Inc.

Survey Report

EOG RESOURCES, INC.
DIAMOND 8 FED COM #1H
LEA COUNTY
RIG:MCVAY 4

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)	TEMP (F)
11640.00	89.78	181.20	9486.17	2351.34	2347.96 S	144.91 E	2352.43@	176.47	1.63	126.32
11702.00	89.87	180.28	9486.36	2413.28	2409.96 S	144.11 E	2414.26@	176.58	1.49	126.32
11764.00	89.78	179.82	9486.55	2475.25	2471.96 S	144.05 E	2476.15@	176.66	0.76	129.94
11826.00	90.66	178.94	9486.31	2537.24	2533.95 S	144.72 E	2538.08@	176.73	2.01	129.94
11888.00	89.69	180.19	9486.12	2599.22	2595.95 S	145.19 E	2600.00@	176.80	2.55	129.94
11950.00	89.60	180.00	9486.51	2661.18	2657.95 S	145.09 E	2661.90@	176.88	0.34	129.94
12013.00	89.43	177.38	9487.04	2724.17	2720.92 S	146.53 E	2724.86@	176.92	4.17	129.94
12075.00	88.46	177.38	9488.18	2786.15	2782.85 S	149.37 E	2786.85@	176.93	1.56	129.94
12137.00	87.93	176.71	9490.14	2848.11	2844.73 S	152.56 E	2848.82@	176.93	1.38	129.94
12199.00	88.72	177.45	9491.95	2910.07	2906.62 S	155.72 E	2910.79@	176.93	1.75	129.94
12262.00	88.99	177.24	9493.21	2973.05	2969.54 S	158.63 E	2973.78@	176.94	0.54	129.94
12324.00	87.23	176.29	9495.25	3034.99	3031.41 S	162.13 E	3035.74@	176.94	3.23	133.55
12386.00	89.52	175.46	9497.01	3096.91	3093.22 S	166.59 E	3097.70@	176.92	3.93	129.94
12448.00	89.08	174.53	9497.77	3158.81	3154.98 S	172.00 E	3159.66@	176.88	1.66	133.55
12510.00	88.72	173.94	9498.96	3220.65	3216.65 S	178.22 E	3221.58@	176.83	1.11	133.55
12573.00	87.93	172.46	9500.80	3283.38	3279.18 S	185.68 E	3284.43@	176.76	2.66	133.55
12635.00	89.52	172.53	9502.18	3345.05	3340.63 S	193.78 E	3346.25@	176.68	2.57	133.55
12697.00	89.87	172.58	9502.51	3406.75	3402.11 S	201.81 E	3408.09@	176.61	0.57	133.55
12759.00	89.87	172.26	9502.65	3468.43	3463.56 S	209.99 E	3469.92@	176.53	0.52	133.55
12821.00	90.40	172.07	9502.51	3530.09	3524.99 S	218.44 E	3531.75@	176.45	0.91	133.55
12884.00	86.00	171.01	9504.48	3592.62	3587.25 S	227.70 E	3594.47@	176.37	7.18	133.55
12946.00	85.74	170.97	9508.95	3653.96	3648.33 S	237.38 E	3656.04@	176.28	0.42	133.55
13008.00	87.67	172.26	9512.51	3715.45	3709.56 S	246.41 E	3717.74@	176.20	3.74	133.55
13071.00	88.81	172.86	9514.45	3778.11	3772.00 S	254.56 E	3780.58@	176.14	2.05	133.55
13133.00	89.78	173.52	9515.21	3839.87	3833.56 S	261.91 E	3842.49@	176.09	1.89	137.17
13195.00	90.04	172.94	9515.31	3901.63	3895.12 S	269.22 E	3904.42@	176.05	1.03	137.17
13257.00	91.45	173.86	9514.50	3963.41	3956.71 S	276.35 E	3966.34@	176.00	2.72	137.17
13320.00	91.19	173.63	9513.05	4026.20	4019.31 S	283.21 E	4029.28@	175.97	0.55	137.17
13382.00	91.45	173.98	9511.62	4088.00	4080.93 S	289.90 E	4091.22@	175.94	0.70	137.17

PathFinder Energy Services, Inc.

Survey Report

EOG RESOURCES, INC.
DIAMOND 8 FED COM #1H
LEA COUNTY
RIG:MCVAY 4

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)	TEMP (F)
13443.00	91.28	173.71	9510.17	4148.80	4141.57 S 296.44 E	4152.16@ 175.91	0.52	137.17
13486.00	91.63	173.74	9509.08	4191.66	4184.29 S 301.14 E	4195.12@ 175.88	0.82	137.17
STRAIGHT-LINE PROJECTION TO BIT @ 13530' MD (9507.83' TVD).								
13530.00	91.63	173.74	9507.83	4235.51	4228.01 S 305.93 E	4239.07@ 175.86	0.00	137.20