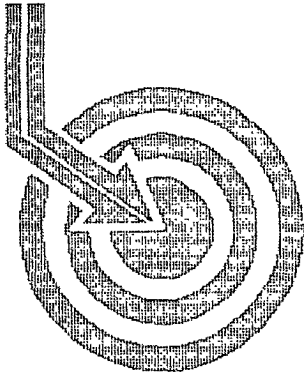


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COG RESOURCES

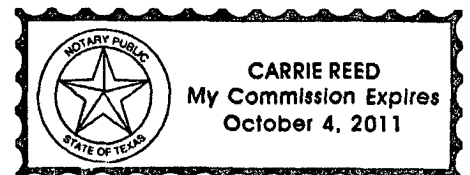
Field: Fren
Site: Eddy County, NM
Well: Skelly Unit #996
Wellpath: DH - Job #32D0909337
Survey: 09/08/09-09/14/09

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

.....Robert.....Company Representative

Notorized this date 6th of October, 2009.

Carrie Reed
Notary Signature
County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: COG RESOURCES Date: 09/08/2009 Time: 15:47:21 Page: 1
Field: Fren Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North
Site: Eddy County, NM Vertical (TVD) Reference: SITE 0.0
Well: Skelly Unit #996 Section (VS) Reference: Well (0.00N,0.00E,324.66Azi)
Wellpath: VH - Job #32K0909343 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 09/07/09 Start Date: 09/07/2009
KSRG 0'-1780'
Company: Scientific Drilling Internatio Engineer: Madrid/Garza/Paradez
Tool: Keeper;Keeper Gyro Tied-to: From Surface

Site: Eddy County, NM

Site Position: Northing: ft Latitude: ft
From: Local Only Easting: ft Longitude: ft
Position Uncertainty: 0.00 ft North Reference: Grid deg
Ground Level: 0.00 ft Grid Convergence: deg

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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	359.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.39	171.80	100.00	-0.30	-0.34	0.05	0.39	0.34	171.80
200.00	0.07	168.81	200.00	-0.66	-0.73	0.11	0.32	0.74	171.55
300.00	0.43	223.78	300.00	-0.79	-1.06	-0.14	0.39	1.07	187.43
400.00	0.32	194.65	400.00	-1.04	-1.61	-0.47	0.22	1.67	196.29
500.00	0.27	179.90	499.99	-1.41	-2.11	-0.54	0.09	2.18	194.33
600.00	0.47	194.06	599.99	-1.87	-2.74	-0.64	0.22	2.82	193.10
700.00	0.50	185.75	699.99	-2.47	-3.58	-0.78	0.08	3.66	192.33
800.00	0.81	209.55	799.98	-3.09	-4.63	-1.17	0.41	4.77	194.24
900.00	0.81	230.85	899.97	-3.44	-5.69	-2.07	0.30	6.05	200.01
1000.00	0.99	245.03	999.96	-3.33	-6.50	-3.40	0.29	7.33	207.64
1100.00	0.60	256.76	1099.95	-2.98	-6.98	-4.70	0.42	8.41	213.92
1200.00	0.24	286.09	1199.95	-2.62	-7.04	-5.41	0.41	8.88	217.50
1300.00	0.63	46.47	1299.95	-2.38	-6.61	-5.21	0.78	8.41	218.25
1400.00	0.93	51.39	1399.94	-2.25	-5.72	-4.18	0.31	7.08	216.12
1500.00	1.15	54.30	1499.92	-2.20	-4.63	-2.73	0.23	5.37	210.49
1600.00	1.28	56.43	1599.90	-2.23	-3.43	-0.98	0.14	3.57	195.98
1700.00	1.21	65.32	1699.87	-2.46	-2.37	0.91	0.21	2.54	159.01
1780.00	1.46	54.96	1779.85	-2.62	-1.43	2.51	0.43	2.89	119.68



Scientific Drilling International Survey Report

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Company: COG RESOURCES
Field: Fren
Site: Eddy County, NM
Well: Skelly Unit #996
Wellpath: DH - Job #32D0909337

Date: 09/18/2009 Time: 13:48:14
Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,324.66Az)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 09/08/09-09/14/09
MWD 1868'-6687'

Start Date: 09/08/2009

Company: Scientific Drilling Internatio
Tool: MWD;MWD

Engineer: Foster/Ramirez
Tied-to: From: Definitive Path

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
1780.00	1.46	54.96	1779.85	-2.62	-1.43	2.51	0.00	2.89	119.68
1868.00	1.46	52.16	1867.82	-2.58	-0.10	4.31	0.08	4.32	91.33
1931.00	1.41	9.01	1930.81	-1.99	1.16	5.07	1.68	5.20	77.13
1994.00	2.06	348.76	1993.78	-0.40	3.03	4.97	1.40	5.82	58.59
2056.00	3.23	335.53	2055.71	2.33	5.72	4.03	2.12	6.99	35.17
2116.00	3.21	331.87	2115.62	5.66	8.74	2.54	0.34	9.10	16.19
2182.00	4.26	334.12	2181.47	9.91	12.57	0.60	1.61	12.59	2.71
2245.00	4.91	327.24	2244.27	14.91	16.94	-1.88	1.35	17.05	353.65
2307.00	6.12	329.50	2305.98	20.86	22.02	-5.00	1.98	22.58	347.21
2370.00	6.97	333.09	2368.57	27.98	28.33	-8.43	1.50	29.55	343.42
2434.00	7.38	327.40	2432.07	35.93	35.25	-12.40	1.28	37.37	340.61
2496.00	8.56	323.47	2493.47	44.52	42.31	-17.30	2.10	45.71	337.77
2558.00	9.39	325.65	2554.71	54.19	50.20	-22.90	1.45	55.17	335.48
2621.00	9.86	320.89	2616.83	64.71	58.63	-29.20	1.47	65.50	333.52
2691.00	9.29	321.77	2685.85	76.34	67.72	-36.48	0.84	76.92	331.69
2784.00	9.70	319.80	2777.58	91.64	79.60	-46.18	0.56	92.02	329.88
2878.00	8.05	321.42	2870.45	106.10	90.79	-55.40	1.78	106.36	328.61
2940.00	9.03	323.59	2931.76	115.30	98.10	-60.99	1.66	115.51	328.13
3003.00	9.91	326.45	2993.90	125.66	106.60	-66.92	1.58	125.86	327.88
3065.00	9.34	325.40	3055.03	136.03	115.19	-72.73	0.96	136.22	327.73
3128.00	10.28	327.47	3117.11	146.75	124.13	-78.65	1.59	146.95	327.64
3190.00	9.53	325.58	3178.18	157.41	133.03	-84.53	1.32	157.62	327.57
3284.00	10.34	324.91	3270.77	173.63	146.35	-93.78	0.87	173.82	327.35
3347.00	10.17	326.43	3332.77	184.84	155.61	-100.10	0.51	185.03	327.25
3410.00	10.50	325.82	3394.75	196.14	165.00	-106.40	0.55	196.33	327.18
3503.00	9.89	323.67	3486.28	212.60	178.44	-115.90	0.77	212.78	327.00
3566.00	9.77	325.49	3548.35	223.35	187.21	-122.13	0.53	223.52	326.88
3628.00	9.77	321.55	3609.45	233.87	195.66	-128.38	1.08	234.02	326.73
3722.00	8.91	323.28	3702.21	249.11	207.74	-137.69	0.96	249.23	326.46
3784.00	10.13	324.16	3763.35	259.36	216.01	-143.76	1.98	259.47	326.36
3878.00	10.33	322.40	3855.86	276.05	229.39	-153.74	0.39	276.14	326.17
3972.00	9.72	324.80	3948.42	292.40	242.55	-163.46	0.79	292.49	326.02
4066.00	9.83	321.33	4041.06	308.35	255.30	-173.04	0.64	308.42	325.87
4160.00	9.51	321.62	4133.72	324.12	267.65	-182.88	0.34	324.16	325.66
4253.00	9.29	324.41	4225.47	339.29	279.78	-192.02	0.54	339.33	325.54
4348.00	9.06	320.73	4319.26	354.42	291.81	-201.21	0.66	354.45	325.41
4441.00	9.98	321.91	4410.98	369.78	303.82	-210.82	1.01	369.80	325.24
4535.00	9.88	325.35	4503.57	385.98	316.86	-220.43	0.64	385.99	325.17
4629.00	9.40	324.77	4596.24	401.72	329.77	-229.44	0.52	401.74	325.17
4723.00	9.64	323.13	4688.95	417.26	342.33	-238.60	0.39	417.28	325.12
4817.00	9.38	326.59	4781.66	432.79	355.02	-247.54	0.67	432.80	325.11
4880.00	9.12	323.48	4843.84	442.91	363.32	-253.33	0.89	442.92	325.11
4942.00	8.18	326.29	4905.13	452.23	370.94	-258.71	1.66	452.25	325.11
5005.00	7.68	322.18	4967.53	460.92	377.99	-263.77	1.20	460.93	325.09
5067.00	7.60	323.21	5028.98	469.16	384.55	-268.77	0.26	469.17	325.05
5130.00	6.36	326.26	5091.51	476.81	390.79	-273.20	2.05	476.82	325.04
5193.00	5.02	321.33	5154.20	483.05	395.84	-276.86	2.26	483.06	325.03
5256.00	3.87	327.37	5217.01	487.92	399.79	-279.73	1.97	487.93	325.02
5318.00	3.01	321.88	5278.90	491.64	402.83	-281.87	1.48	491.65	325.02



Scientific Drilling International Survey Report

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Company: COG RESOURCES Date: 09/18/2009 Time: 13:48:14
Field: Fren Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North
Site: Eddy County, NM Vertical (TVD) Reference: SITE 0.0
Well: Skelly Unit #996 Section (VS) Reference: Well (0.00N, 0.00E, 324.66Azi)
Wellpath: DH - Job #32D0909337 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
5381.00	3.74	321.99	5341.79	495.34	405.75	-284.15	1.16	495.35	325.00
5443.00	4.05	323.84	5403.65	499.55	409.11	-286.69	0.54	499.56	324.98
5539.00	3.90	331.13	5499.42	506.19	414.71	-290.27	0.55	506.20	325.01
5636.00	3.71	326.85	5596.20	512.60	420.22	-293.58	0.35	512.61	325.06
5724.00	3.58	326.67	5684.02	518.19	424.90	-296.64	0.15	518.21	325.08
5787.00	3.30	330.21	5746.91	521.96	428.12	-298.62	0.56	521.98	325.10
5850.00	3.45	335.47	5809.80	525.63	431.42	-300.31	0.55	525.65	325.16
5917.00	4.48	324.67	5876.64	530.23	435.39	-302.66	1.89	530.25	325.19
6006.00	5.30	323.27	5965.32	537.81	441.52	-307.13	0.93	537.83	325.18
6074.00	3.81	313.52	6033.10	543.17	445.59	-310.65	2.46	543.19	325.12
6132.00	3.63	311.08	6090.98	546.84	448.12	-313.43	0.41	546.85	325.03
6194.00	3.99	318.97	6152.84	550.90	451.04	-316.32	1.02	550.91	324.96
6289.00	4.27	312.61	6247.60	557.65	455.93	-321.10	0.56	557.65	324.84
6383.00	3.98	313.57	6341.35	564.27	460.54	-326.04	0.32	564.27	324.70
6489.00	3.97	316.89	6447.10	571.51	465.76	-331.21	0.22	571.52	324.58
6572.00	3.45	314.05	6529.92	576.82	469.59	-334.97	0.66	576.82	324.50
6687.00	3.28	320.25	6644.72	583.50	474.53	-339.56	0.35	583.50	324.41