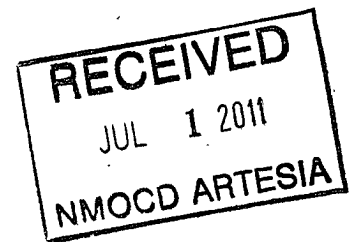


Scientific Drilling

30-015-36832

COG RESOURCES

Field: Fren
Site: Eddy County, NM
Well: Skelly Unit #621
Wellpath: DH - Job #32D0609233
Survey: 06/29/09-07/06/09

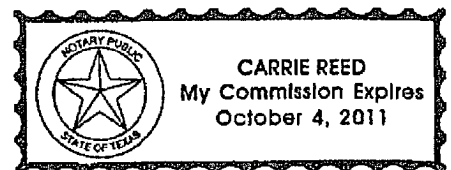


This survey is correct to the best of my knowledge
and is supported by actual field data.

.....*L. Hart*.....Company Representative

Notorized this date 3/00 of July, 2009.

Carrie Reed
Notary Signature
County of Midland
State of Texas





Scientific
Drilling

Scientific Drilling International Survey Report

Company: COG RESOURCES	Date: 06/30/2009	Time: 15:12:18	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 #621	Section (VS) Reference:	Well: (0.00N,0.00E,268.20Azi)	
Wellpath: VH - Job #32K0609235	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 06/29/09	Start Date: 06/29/2009
KSRG 0'-1573'	
Company: Scientific Drilling Internatio	Engineer: Guebara/Garza/Williams
Tool: Keeper, Keeper 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.44	185.67	100.00	0.05	-0.38	-0.04	0.44	0.38	185.67
200.00	0.53	185.18	200.00	0.16	-1.22	-0.12	0.09	1.23	185.49
300.00	0.75	164.43	299.99	0.06	-2.32	0.02	0.32	2.32	179.60
400.00	0.90	152.19	399.98	-0.44	-3.64	0.56	0.23	3.68	171.28
500.00	0.89	151.14	499.97	-1.14	-5.02	1.30	0.02	5.18	165.47
600.00	0.90	146.41	599.95	-1.91	-6.35	2.11	0.07	6.69	161.63
700.00	0.97	149.93	699.94	-2.72	-7.74	2.97	0.09	8.29	159.02
800.00	0.88	145.24	799.93	-3.54	-9.10	3.83	0.12	9.87	157.18
900.00	0.72	147.85	899.92	-4.28	-10.26	4.60	0.16	11.25	155.85
1000.00	0.44	151.36	999.91	-4.77	-11.13	5.12	0.28	12.25	155.30
1100.00	0.41	154.52	1099.91	-5.08	-11.79	5.46	0.04	12.99	155.16
1200.00	0.32	164.80	1199.91	-5.29	-12.38	5.69	0.11	13.63	155.34
1300.00	0.34	183.78	1299.91	-5.33	-12.95	5.74	0.11	14.16	156.10
1400.00	0.16	68.53	1399.91	-5.43	-13.20	5.85	0.43	14.43	156.09
1500.00	0.46	38.13	1499.90	-5.82	-12.83	6.23	0.33	14.26	154.11
1573.00	1.12	35.03	1572.90	-6.44	-12.01	6.82	0.91	13.81	150.43



Scientific Drilling International Survey Report

Company: COG RESOURCES	Date: 07/31/2009	Time: 09:36:51	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 #621	Section (VS) Reference:	Well (0.00N,0.00E,268.20Azi)	
Wellpath: DH - Job #32D0609233	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 06/29/09-07/06/09 MWD 1696'-5150'	Start Date: 06/29/2009
Company: Scientific Drilling Internatio	Engineer: Smith/Noack/Ramirez
Tool: MWD;MWD	Tied-to: From: Definitive Path

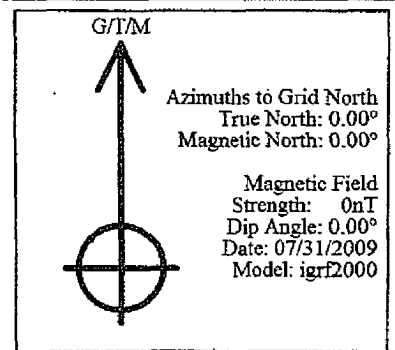
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
1573.00	1.12	35.03	1572.90	-6.44	-12.01	6.82	0.00	13.81	150.43
1696.00	1.54	24.97	1695.86	-7.90	-9.53	8.21	0.39	12.58	139.27
1790.00	1.76	23.12	1789.83	-9.08	-7.06	9.31	0.24	11.68	127.18
1886.00	2.16	290.30	1885.79	-8.02	-5.07	8.19	2.97	9.63	121.79
1981.00	4.42	280.73	1980.63	-2.79	-3.77	2.91	2.44	4.76	142.34
2077.00	4.46	282.00	2076.34	4.45	-2.31	-4.37	0.11	4.95	242.20
2170.00	3.66	268.99	2169.11	10.93	-1.61	-10.88	1.31	11.00	261.60
2266.00	5.63	268.50	2264.79	18.70	-1.78	-18.65	2.05	18.74	264.53
2360.00	7.06	267.62	2358.21	29.09	-2.15	-29.03	1.52	29.11	265.77
2455.00	8.17	266.74	2452.37	41.67	-2.77	-41.61	1.17	41.70	266.19
2550.00	7.63	266.16	2546.47	54.72	-3.58	-54.64	0.57	54.76	266.25
2645.00	6.85	267.66	2640.71	66.69	-4.23	-66.59	0.84	66.73	266.36
2740.00	8.19	265.99	2734.89	79.12	-4.94	-79.00	1.43	79.16	266.42
2835.00	8.94	268.08	2828.83	93.26	-5.66	-93.13	0.85	93.30	266.52
2931.00	7.97	269.93	2923.78	107.37	-5.91	-107.24	1.05	107.40	266.84
3025.00	7.38	270.45	3016.94	119.92	-5.88	-119.80	0.63	119.94	267.19
3120.00	8.29	269.08	3111.05	132.87	-5.94	-132.74	0.98	132.88	267.44
3183.00	7.97	268.73	3173.42	141.77	-6.11	-141.65	0.51	141.78	267.53
3247.00	7.54	268.67	3236.84	150.41	-6.30	-150.29	0.67	150.42	267.60
3342.00	8.18	271.07	3330.94	163.39	-6.32	-163.27	0.76	163.40	267.78
3437.00	8.05	270.38	3424.99	176.79	-6.15	-176.68	0.17	176.79	268.01
3501.00	7.92	271.72	3488.37	185.67	-5.99	-185.57	0.35	185.67	268.15
3596.00	8.53	270.04	3582.39	199.24	-5.79	-199.16	0.69	199.24	268.34
3691.00	8.91	264.99	3676.30	213.63	-6.42	-213.53	0.90	213.63	268.28
3755.00	7.92	266.53	3739.61	222.99	-7.12	-222.87	1.59	222.99	268.17
3851.00	7.42	266.23	3834.75	235.79	-7.93	-235.66	0.52	235.79	268.07
3946.00	7.94	265.80	3928.90	248.48	-8.82	-248.33	0.55	248.48	267.97
4009.00	7.95	265.89	3991.29	257.18	-9.45	-257.01	0.03	257.18	267.89
4103.00	7.54	267.19	4084.43	269.84	-10.22	-269.65	0.47	269.85	267.83
4199.00	8.12	268.05	4179.54	282.92	-10.76	-282.72	0.62	282.93	267.82
4294.00	7.67	268.84	4273.64	295.97	-11.11	-295.77	0.49	295.97	267.85
4389.00	8.35	267.41	4367.71	309.21	-11.55	-308.99	0.75	309.21	267.86
4484.00	8.14	266.10	4461.73	322.82	-12.32	-322.60	0.30	322.83	267.81
4579.00	7.93	268.47	4555.80	336.10	-12.95	-335.86	0.41	336.11	267.79
4674.00	7.96	267.35	4649.88	349.23	-13.43	-348.98	0.17	349.24	267.80
4770.00	7.99	267.07	4744.96	362.55	-14.08	-362.28	0.05	362.56	267.77
4834.00	6.50	268.54	4808.44	370.62	-14.40	-370.35	2.35	370.63	267.77
4896.00	6.50	270.72	4870.04	377.63	-14.45	-377.36	0.40	377.64	267.81
4960.00	5.55	265.78	4933.69	384.34	-14.63	-384.07	1.69	384.35	267.82
5024.00	4.14	260.78	4997.46	389.72	-15.23	-389.44	2.30	389.74	267.76
5088.00	2.93	270.63	5061.34	393.65	-15.58	-393.36	2.11	393.66	267.73
5150.00	1.26	266.74	5123.29	395.92	-15.60	-395.62	2.70	395.93	267.74



Scientific
Drilling

Field: Fren
Site: Eddy County, NM
Well: Skelly Unit #621
Wellpath: DH - Job #32D0609233
Survey: 06/29/09-07/06/09



West(-)/East(+) [100ft/in]

South(-)/North(+) [100ft/in]

