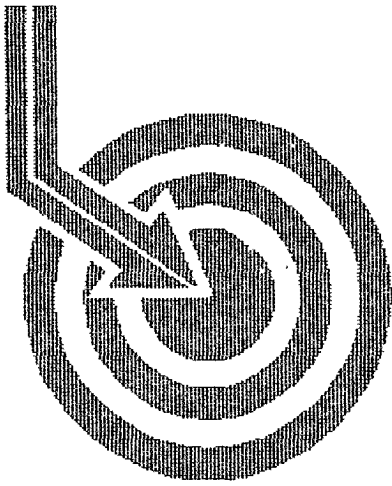
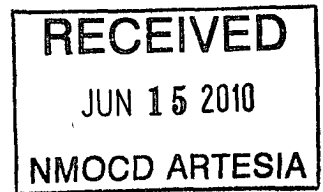


30.015-26753



Scientific Drilling



COG RESOURCES

Field: Grayburg Jackson
Site: Eddy County, NM
Well: GJ West Coop #96
Wellpath: VH - Job #32K0310183
Survey: 03/15/10

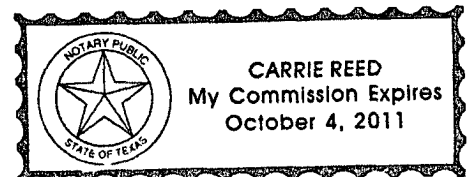
NR

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

Bluhart
Company Representative

Notarized this date 13th of April, 2010.

Carrie Reed
Notary Signature
County of Midland
State of Texas





Scientific
Drilling

Scientific Drilling International, Inc.

Survey Report

Company: COG RESOURCES
Field: Grayburg Jackson
Site: Eddy County, NM
Well: GJ West Coop #96
Wellpath: VH - Job #32K0310183

Date: 3/22/2010 Time: 16 29 06 Page: 1
Co-ordinate(NE) Reference: Site Eddy County, NM, Grd North
Vertical (TVD) Reference: SITE 0 0
Section (VS) Reference: Well (0.00N,0 00E,199 88Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 03/15/10
KSRG 0'-5447'

Start Date: 3/15/2010

Company: Scientific Drilling Internatio
Tool: Keeper, Keeper Gyro

Engineer: Guebara/Sutherland
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 0	0 00	0 00	0 0	0 0	0 0	0 0	0 00	0 0	0 00
100 0	0 54	323 23	100 0	-0 3	0 4	-0 3	0 54	0 5	323 23
200 0	0 61	311 40	200 0	-0 7	1 1	-1 0	0 14	1 5	318 97
300 0	0 54	313 55	300 0	-1 1	1 8	-1 7	0 07	2 5	316 30
400 0	0 64	331 74	400 0	-1 7	2 6	-2 3	0 21	3 5	318 38
500 0	0 65	14 21	500 0	-2 6	3 6	-2 4	0 47	4 4	326 23
600 0	0 78	27 31	600 0	-3 8	4 8	-2 0	0 21	5 2	337 53
700 0	0 93	36 52	700 0	-5 3	6 1	-1 2	0 20	6 2	348 89
800 0	0 86	33 60	799 9	-6 8	7 3	-0 3	0 08	7 3	357 73
900 0	0 74	39 31	899 9	-8 1	8 5	0 5	0 14	8 5	3 61
1000 0	0 35	30 71	999 9	-9 0	9 2	1 1	0 40	9 3	6 80
1100 0	0 35	13 95	1099 9	-9 6	9 8	1 3	0 10	9 9	7 74
1200 0	0 29	331 97	1199 9	-10 1	10 3	1 3	0 24	10 4	7 10
1300 0	0 40	281 89	1299 9	-10 2	10 6	0 8	0 31	10 6	4 44
1400 0	0 48	263 47	1399 9	-10 0	10 6	0 1	0 16	10 6	0 35
1500 0	0 45	214 93	1499 9	-9 4	10 2	-0 6	0 38	10 3	356 78
1600 0	0 49	183 60	1599 9	-8 7	9 5	-0 8	0 26	9 5	355 02
1700 0	0 44	177 61	1699 9	-7 9	8 7	-0 8	0 07	8 7	354 49
1800 0	0 41	202 13	1799 9	-7 2	8 0	-1 0	0 18	8 0	353 15
1900 0	0 46	187 32	1899 9	-6 4	7 2	-1 1	0 12	7 3	351 03
2000 0	0 43	214 19	1999 9	-5 7	6 5	-1 4	0 21	6 7	347 86
2100 0	0 48	190 45	2099 9	-4 9	5 8	-1 7	0 19	6 1	343 77
2200 0	0 46	205 62	2199 9	-4 1	5 0	-1 9	0 13	5 4	338 93
2300 0	0 51	212 75	2299 9	-3 2	4 3	-2 4	0 08	4 9	331 29
2400 0	0 40	213 06	2399 9	-2 5	3 6	-2 8	0 11	4 6	322 52
2500 0	0 38	218 83	2499 9	-1 8	3 1	-3 2	0 04	4 4	314 08
2600 0	0 10	306 30	2599 9	-1 5	2 9	-3 5	0 39	4 5	309 72
2700 0	0 24	272 41	2699 9	-1 5	2 9	-3 7	0 17	4 8	308 13
2800 0	0 15	253 30	2799 9	-1 3	2 9	-4 1	0 11	5 0	305 51
2900 0	0 26	229 73	2899 9	-1 1	2 7	-4 4	0 14	5 2	301 91
3000 0	0 37	251 92	2999 9	-0 7	2 5	-4 9	0 16	5 5	297 03
3100 0	0 77	268 68	3099 9	-0 2	2 4	-5 8	0 43	6 3	292 04
3200 0	0 85	263 50	3199 9	0 3	2 3	-7 2	0 11	7 6	287 35
3300 0	0 62	275 55	3299 9	0 8	2 2	-8 5	0 28	8 8	284 68
3400 0	0 62	252 17	3399 9	1 3	2 1	-9 6	0 25	9 8	282 48
3500 0	0 67	240 94	3499 9	2 0	1 7	-10 6	0 14	10 7	278 95
3600 0	0 61	222 90	3599 8	3 0	1 0	-11 5	0 21	11 5	274 95
3700 0	0 54	249 75	3699 8	3 8	0 4	-12 3	0 28	12 3	272 06
3800 0	0 83	232 05	3799 8	4 7	-0 2	-13 3	0 36	13 3	269 28
3900 0	1 27	214 47	3899 8	6 4	-1 5	-14 5	0 54	14 6	263 99
4000 0	1 75	196 43	3999 8	9 0	-3 9	-15 5	0 67	16 0	255 90
4100 0	1 99	174 96	4099 7	12 1	-7 1	-15 8	0 74	17 3	245 84
4200 0	2 12	162 18	4199 7	15 1	-10 6	-15 1	0 48	18 4	234 97
4300 0	2 09	155 56	4299 6	17 9	-14 0	-13 8	0 24	19 7	224 54
4400 0	1 48	166 10	4399 6	20 2	-16 9	-12 7	0 69	21 2	216 94
4500 0	1 48	189 51	4499 5	22 6	-19 5	-12 6	0 60	23 2	212 99
4600 0	1 41	187 11	4599 5	25 1	-21 9	-13 0	0 09	25 5	210 63
4700 0	1 21	187 85	4699 5	27 3	-24 2	-13 3	0 20	27 6	208 76
4800 0	1 11	174 98	4799 4	29 2	-26 2	-13 3	0 28	29 4	206 98



Scientific
Drilling

Scientific Drilling International, Inc.

Survey Report

Company: COG RESOURCES
Field: Grayburg Jackson
Site: Eddy County, NM
Well: GJ West Coop #96
Wellpath: VH - Job #32K0310183

Date: 3/22/2010 Time: 16 29 06 Page: 2
Co-ordinate(NE) Reference: Site Eddy County, NM, Grnd North
Vertical (TVD) Reference: SITE 0 0
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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
4900 0	0 91	179 53	4899 4	30 8	-28 0	-13 3	0 22	31 0	205 35
5000 0	0 91	172 78	4999 4	32 3	-29 6	-13 2	0 11	32 4	203 98
5100 0	0 98	168 38	5099 4	33 7	-31 2	-12 9	0 10	33 7	202 44
5200 0	0 84	175 44	5199 4	35 1	-32 8	-12 6	0 18	35 1	201 11
5300 0	0 87	189 60	5299 4	36 5	-34 2	-12 7	0 21	36 5	200 38
5400 0	0 80	189 59	5399 4	38 0	-35 7	-13 0	0 07	38 0	199 96
5447 0	0 78	200 86	5446 4	38 6	-36 3	-13 1	0 33	38 6	199 88