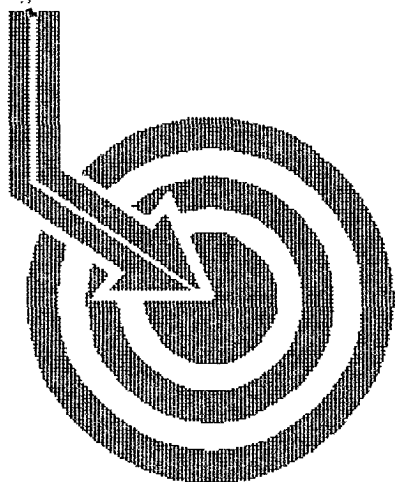
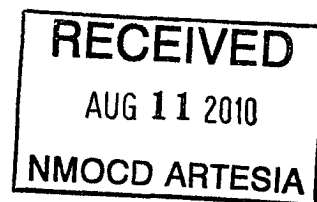




Scientific Drilling



COG RESOURCES

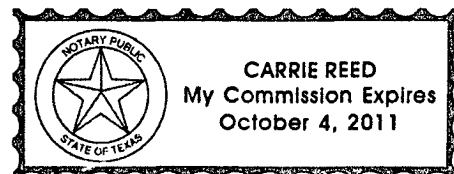
Field: Loco Hills Paddock
Site: Eddy County, NM
Well: Juniper State #1
Wellpath: VH - Job #32K0610421
Survey: 06/07/10

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

[Signature]
Company Representative

Notarized this date 20th of July, 2010.

Carrie Reed
Notary Signature
County of Midland
State of Texas





Scientific Drilling International, Inc.

Survey Report

Company: COG RESOURCES	Date: 6/14/2010	Time: 15:17:25	Page: 1
Field: Loco Hills Paddock	Co-ordinate(NE) Reference:	Site: Eddy County, NM, True North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Juniper State #1	Section (VS) Reference:	Well (0.00N,0.00E,160.09Azi)	
Wellpath: VH - Job #32K0610421	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 06/07/10	Start Date: 6/7/2010
KSRG 0'-5967'	
Company: Scientific Drilling Internatio	Engineer: Madrid w/Halliburton
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
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.0	0.00
100.0	0.03	69.21	100.0	0.0	0.0	0.0	0.03	0.0	69.21
200.0	0.54	134.98	200.0	0.4	-0.3	0.4	0.53	0.5	129.45
300.0	0.83	136.49	300.0	1.5	-1.2	1.2	0.29	1.7	134.01
400.0	2.25	164.38	400.0	4.1	-3.6	2.2	1.57	4.2	148.01
500.0	2.14	172.72	499.9	7.9	-7.3	3.0	0.34	7.9	157.70
600.0	2.09	171.74	599.8	11.5	-11.0	3.5	0.06	11.5	162.31
700.0	2.06	170.30	699.7	15.1	-14.6	4.1	0.06	15.1	164.39
800.0	1.77	160.11	799.7	18.4	-17.8	4.9	0.45	18.5	164.60
900.0	1.83	158.24	899.6	21.5	-20.7	6.0	0.08	21.6	163.81
1000.0	1.61	155.02	999.6	24.5	-23.5	7.2	0.24	24.6	162.95
1100.0	1.50	141.87	1099.6	27.2	-25.8	8.6	0.37	27.2	161.55
1200.0	1.07	133.87	1199.5	29.3	-27.5	10.1	0.46	29.3	159.84
1300.0	0.85	147.45	1299.5	30.8	-28.7	11.2	0.32	30.8	158.78
1400.0	0.58	185.32	1399.5	32.0	-29.9	11.5	0.53	32.0	158.92
1500.0	0.44	203.95	1499.5	32.7	-30.7	11.3	0.22	32.7	159.79
1600.0	0.44	189.65	1599.5	33.3	-31.4	11.1	0.11	33.3	160.58
1700.0	0.57	221.50	1699.5	33.9	-32.2	10.7	0.30	33.9	161.63
1800.0	0.65	218.99	1799.5	34.4	-33.0	10.0	0.08	34.5	163.14
1900.0	0.43	223.32	1899.5	34.9	-33.7	9.4	0.22	35.0	164.44
2000.0	0.33	224.68	1999.5	35.2	-34.2	8.9	0.10	35.3	165.37
2100.0	0.32	219.15	2099.5	35.5	-34.6	8.6	0.03	35.7	166.13
2200.0	0.27	231.29	2199.5	35.7	-35.0	8.2	0.08	35.9	166.82
2300.0	0.28	232.99	2299.5	35.8	-35.3	7.8	0.01	36.1	167.51
2400.0	0.33	221.21	2399.5	36.0	-35.6	7.4	0.08	36.4	168.23
2500.0	0.46	220.10	2499.5	36.4	-36.2	7.0	0.13	36.8	169.08
2600.0	0.37	244.63	2599.5	36.6	-36.6	6.4	0.20	37.2	170.04
2700.0	0.48	212.73	2699.5	36.9	-37.1	5.9	0.26	37.6	170.95
2800.0	0.17	247.26	2799.5	37.2	-37.5	5.5	0.35	37.9	171.59
2900.0	0.32	239.42	2899.5	37.2	-37.7	5.2	0.15	38.1	172.19
3000.0	0.28	196.56	2999.5	37.5	-38.1	4.9	0.22	38.4	172.73
3100.0	0.17	168.27	3099.5	37.8	-38.5	4.8	0.15	38.8	172.86
3200.0	0.13	203.25	3199.5	38.0	-38.7	4.8	0.10	39.0	172.92
3300.0	0.14	203.32	3299.5	38.2	-38.9	4.7	0.01	39.2	173.10
3400.0	0.03	261.15	3399.5	38.3	-39.1	4.6	0.13	39.3	173.23
3500.0	0.18	7.09	3499.5	38.2	-38.9	4.6	0.19	39.2	173.21
3600.0	0.24	73.66	3599.5	38.0	-38.7	4.9	0.24	39.0	172.85
3700.0	0.46	27.12	3699.5	37.8	-38.3	5.2	0.34	38.6	172.21
3800.0	0.55	39.60	3799.5	37.2	-37.5	5.7	0.14	38.0	171.33
3900.0	0.10	56.09	3899.5	37.0	-37.1	6.1	0.45	37.6	170.66
4000.0	0.36	16.69	3999.5	36.7	-36.8	6.3	0.29	37.3	170.33
4100.0	0.27	101.86	4099.5	36.6	-36.5	6.6	0.43	37.1	169.78
4200.0	0.00	250.49	4199.5	36.7	-36.6	6.8	0.27	37.2	169.44
4300.0	0.33	70.90	4299.5	36.7	-36.5	7.1	0.33	37.2	169.00
4400.0	0.22	19.75	4399.5	36.6	-36.2	7.4	0.26	37.0	168.41
4500.0	0.54	45.96	4499.5	36.2	-35.7	7.8	0.36	36.5	167.63
4600.0	0.63	32.07	4599.5	35.7	-34.9	8.5	0.17	35.9	166.37
4700.0	0.87	51.68	4699.4	35.1	-34.0	9.3	0.35	35.2	164.61
4800.0	0.47	69.71	4799.4	34.9	-33.3	10.3	0.45	34.9	162.79



Scientific Drilling International, Inc.

Survey Report

Company: COG RESOURCES
Field: Loco Hills Paddock
Site: Eddy County, NM
Well: Juniper State #1
Wellpath: VH - Job #32K0610421

Date: 6/14/2010 Time: 15:17:25 Page: 2
Co-ordinate(NE) Reference: Site: Eddy County, NM, True North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,160.09Azi)
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	0.61	114.13	4899.4	35.2	-33.4	11.2	0.43	35.3	161.48
5000.0	0.36	85.74	4999.4	35.7	-33.6	12.0	0.34	35.7	160.36
5100.0	0.28	38.99	5099.4	35.7	-33.4	12.5	0.26	35.7	159.54
5200.0	0.32	40.23	5199.4	35.4	-33.0	12.8	0.04	35.4	158.80
5300.0	0.52	31.63	5299.4	35.0	-32.4	13.2	0.21	35.0	157.81
5400.0	0.52	348.18	5399.4	34.2	-31.6	13.4	0.38	34.3	157.06
5500.0	0.38	340.50	5499.4	33.5	-30.8	13.2	0.15	33.5	156.88
5600.0	0.58	323.17	5599.4	32.6	-30.1	12.7	0.24	32.7	157.05
5700.0	0.35	298.31	5699.4	31.9	-29.5	12.2	0.30	32.0	157.61
5800.0	0.32	320.11	5799.4	31.4	-29.2	11.7	0.13	31.5	158.11
5900.0	0.56	279.62	5899.4	30.9	-28.9	11.1	0.38	30.9	159.05
5967.0	0.48	249.91	5966.4	30.8	-28.9	10.5	0.41	30.8	160.09