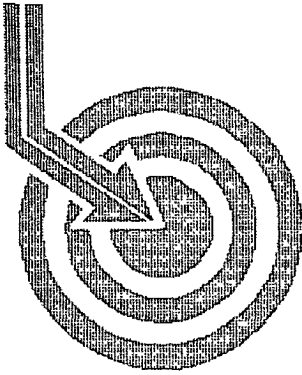


30-015-35945



Scientific Drilling

COG RESOURCES

Field: Loco Hills
Site: Eddy County, NM
Well: Juniper State #5
Wellpath: DH - Job #32D0108072
Survey: 01/28/08-02/06/08

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

.....L. Wharton.....Company Representative

Notorized this date 3rd of April, 2008.

Carrie Reed

Notary Signature
County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: COG RESOURCES Date: 03/09/2008 Time: 11:43.49 Page: 1
Field: Loco Hills Co-ordinate(NE) Reference: Site, Eddy County, NM, Grid North
Site: Eddy County, NM Vertical (TVD) Reference: SITE 0.0
Well: Juniper State #5 Section (VS) Reference: Well (0.00N,0.00E,89.90Azi)
Wellpath: VH - Job #32K0108076 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 01/29/08 Start Date: 01/29/2008
KSRG 0'-1343'
Company: Scientific Drilling Internatio Engineer: Guebara w/GeoGyro
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	359.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.25	338.15	100.00	-0.08	0.20	-0.08	0.25	0.22	338.15
200.00	0.09	310.53	200.00	-0.22	0.46	-0.22	0.18	0.51	334.03
300.00	0.36	168.74	300.00	-0.22	0.20	-0.22	0.43	0.30	312.07
400.00	1.06	147.30	399.99	0.34	-0.89	0.34	0.74	0.95	159.00
500.00	1.09	146.91	499.97	1.36	-2.46	1.36	0.03	2.81	151.10
600.00	1.20	154.87	599.95	2.32	-4.21	2.32	0.19	4.81	151.09
700.00	0.91	131.35	699.94	3.35	-5.68	3.36	0.52	6.60	149.36
800.00	0.89	100.89	799.92	4.71	-6.35	4.72	0.47	7.92	143.37
900.00	1.21	83.32	899.91	6.52	-6.38	6.53	0.45	9.13	134.29
1000.00	1.26	86.18	999.88	8.67	-6.18	8.68	0.08	10.66	125.45
1100.00	0.89	90.88	1099.87	10.54	-6.12	10.55	0.38	12.20	120.10
1200.00	0.80	97.07	1199.86	12.01	-6.22	12.02	0.13	13.53	117.34
1300.00	0.57	102.77	1299.85	13.19	-6.41	13.20	0.24	14.68	115.91
1343.00	0.49	93.87	1342.85	13.58	-6.47	13.59	0.27	15.06	115.46



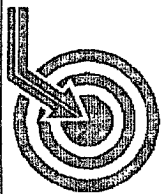
Scientific Drilling International Survey Report

Company: COG RESOURCES	Date: 04/02/2008	Time: 15:49:28	Page: 1
Field: Loco Hills	Co-ordinate(NE) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Juniper State #5	Section (VS) Reference:	Well (0.00N,0.00E,89.90Azi)	
Wellpath: DH - Job #32D0108072	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 01/28/08-02/06/08	Start Date: 01/28/2008
MWD 1381'-5893'	
Company: Scientific Drilling Internatio	Engineer: Johns/Glass/Graham
Tool: MWD;MWD	Tied-to: From: Definitive Path

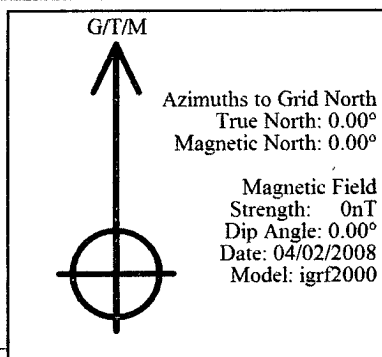
Survey

MD ft	Incl deg	Azlm deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
1343.00	0.49	93.87	1342.85	13.58	-6.47	13.59	0.00	15.06	115.46
1381.00	0.48	79.98	1380.85	13.90	-6.45	13.91	0.31	15.34	114.89
1457.00	1.61	101.60	1456.83	15.26	-6.61	15.27	1.55	16.64	113.42
1551.00	3.69	100.64	1550.73	19.53	-7.44	19.54	2.21	20.91	110.84
1645.00	5.53	94.87	1644.42	27.01	-8.38	27.02	2.02	28.29	107.23
1738.00	7.95	95.41	1736.77	37.88	-9.37	37.89	2.60	39.03	103.89
1832.00	9.52	88.92	1829.68	52.12	-9.83	52.14	1.97	53.06	100.68
1957.00	8.56	83.93	1953.13	71.71	-8.66	71.73	0.99	72.25	96.88
2134.00	8.19	86.06	2128.24	97.39	-6.40	97.40	0.27	97.61	93.76
2206.00	8.84	93.33	2199.45	108.03	-6.37	108.04	1.74	108.23	93.37
2269.00	9.69	91.59	2261.62	118.16	-6.79	118.17	1.42	118.37	93.29
2363.00	9.55	85.61	2354.30	133.85	-6.42	133.86	1.07	134.01	92.74
2487.00	8.50	88.13	2476.77	153.26	-5.33	153.27	0.90	153.37	91.99
2550.00	9.47	88.94	2538.99	163.10	-5.08	163.11	1.55	163.19	91.78
2614.00	11.09	90.59	2601.97	174.52	-5.05	174.53	2.57	174.60	91.66
2709.00	10.83	90.41	2695.23	192.58	-5.21	192.59	0.28	192.66	91.55
2837.00	10.37	90.84	2821.05	216.12	-5.46	216.13	0.36	216.20	91.45
2928.00	9.67	90.27	2910.66	231.96	-5.62	231.97	0.78	232.03	91.39
3021.00	9.57	90.15	3002.35	247.50	-5.67	247.51	0.11	247.57	91.31
3114.00	10.17	89.78	3093.97	263.44	-5.66	263.45	0.65	263.51	91.23
3236.00	10.11	89.87	3214.07	284.92	-5.60	284.93	0.05	284.98	91.13
3359.00	9.99	90.28	3335.18	306.38	-5.63	306.39	0.11	306.44	91.05
3483.00	9.78	88.53	3457.34	327.67	-5.41	327.68	0.30	327.72	90.95
3608.00	9.48	89.85	3580.58	348.57	-5.11	348.58	0.30	348.62	90.84
3701.00	9.94	89.57	3672.25	364.26	-5.03	364.27	0.50	364.30	90.79
3825.00	9.59	89.43	3794.45	385.29	-4.84	385.30	0.28	385.33	90.72
3917.00	9.38	90.43	3885.19	400.45	-4.83	400.46	0.29	400.49	90.69
4041.00	9.85	86.89	4007.45	421.15	-4.33	421.15	0.61	421.18	90.59
4166.00	9.89	86.33	4130.60	442.54	-3.06	442.54	0.08	442.55	90.40
4320.00	9.42	85.78	4282.42	468.31	-1.28	468.31	0.31	468.31	90.16
4414.00	9.03	90.77	4375.21	483.36	-0.82	483.36	0.95	483.36	90.10
4538.00	8.43	92.54	4497.77	502.16	-1.35	502.17	0.53	502.17	90.15
4640.00	8.81	86.30	4598.62	517.43	-1.18	517.43	0.99	517.43	90.13
4733.00	9.65	90.21	4690.41	532.33	-0.75	532.33	1.13	532.34	90.08
4859.00	9.43	91.31	4814.67	553.21	-1.02	553.21	0.23	553.22	90.11
4952.00	9.24	92.71	4906.44	568.29	-1.55	568.29	0.32	568.29	90.16
5044.00	8.89	93.08	4997.29	582.76	-2.28	582.77	0.39	582.77	90.22
5106.00	9.03	92.03	5058.53	592.41	-2.71	592.41	0.35	592.42	90.26
5231.00	9.32	92.09	5181.94	612.32	-3.43	612.33	0.23	612.34	90.32
5357.00	9.80	89.09	5306.19	633.24	-3.63	633.25	0.55	633.26	90.33
5513.00	9.74	88.87	5459.92	659.71	-3.16	659.72	0.05	659.72	90.27
5669.00	9.31	86.10	5613.77	685.49	-2.04	685.50	0.40	685.50	90.17
5795.00	8.90	86.69	5738.19	705.40	-0.78	705.40	0.33	705.40	90.06
5893.00	8.37	86.38	5835.07	720.08	0.11	720.09	0.54	720.09	89.99

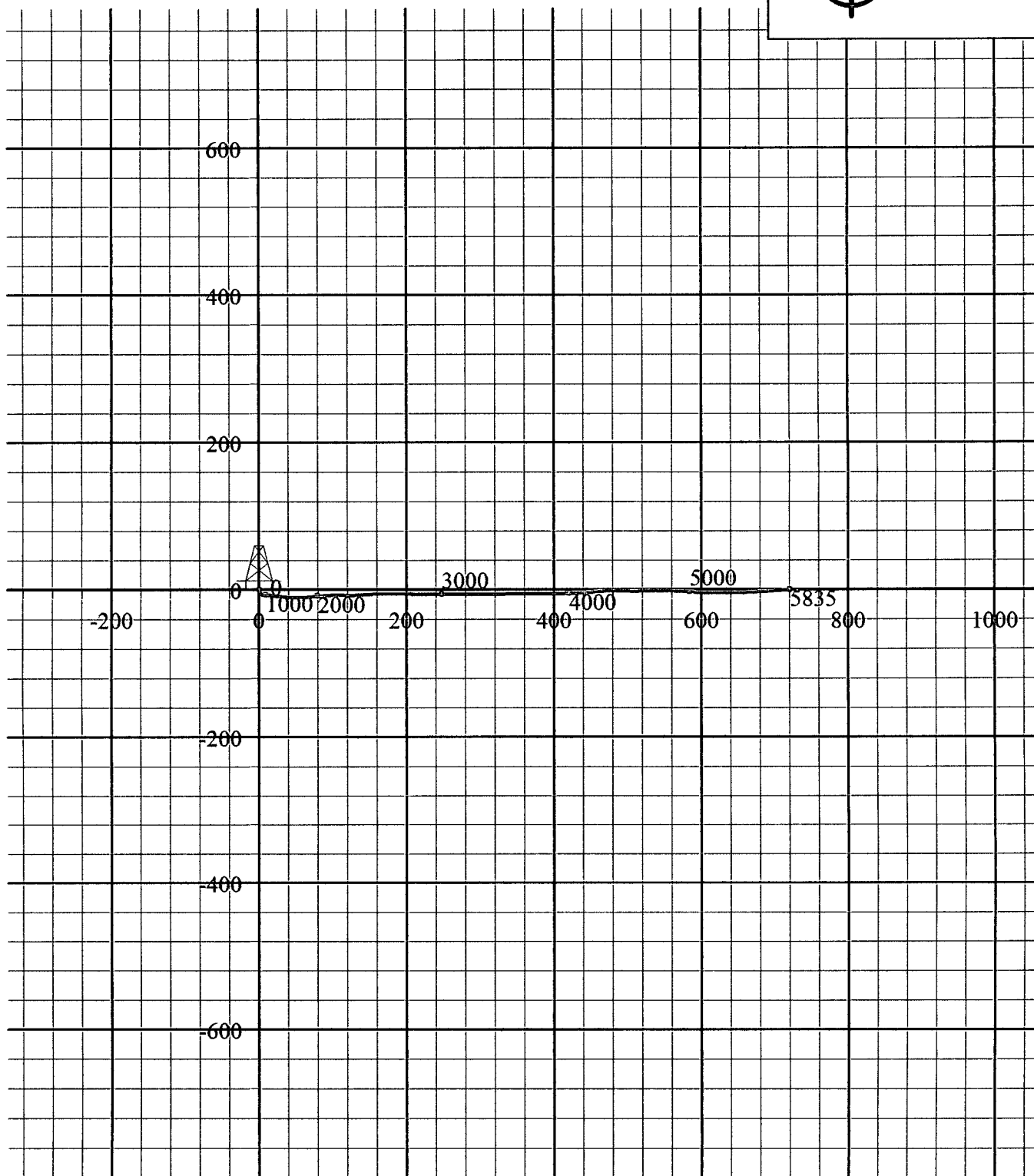


**Scientific
Drilling**

Field: Loco Hills
Site: Eddy County, NM
Well: Juniper State #5
Wellpath: DH - Job #32D0108072
Survey: 01/28/08-02/06/08



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



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