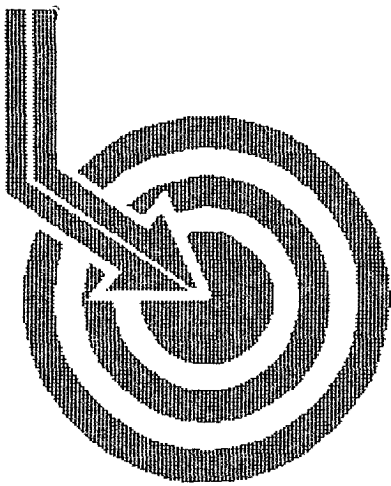
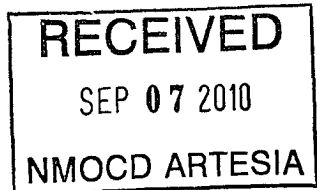


36.015. 31366



Scientific Drilling



COG RESOURCES

Field: Loco Hills Paddock
Site: Eddy County, NM
Well: Mesilla State #2
Wellpath: VH - Job #32K0610451
Survey: 06/18/10

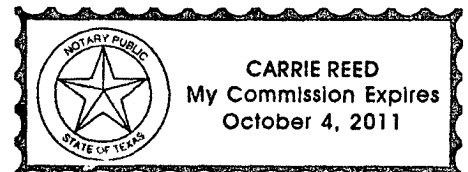
This survey is correct to the best of my knowledge and is supported by actual field data.

[Signature]
Company Representative

Notarized this date 20th of July, 2010.

[Signature]
Notary Signature
County of Midland
State of Texas

m2





Scientific Drilling International, Inc.

Survey Report

Company: COG RESOURCES
Field: Loco Hills Paddock
Site: Eddy County, NM
Well: Mesilla State #2
Wellpath: VH - Job #32K0610451

Date: 6/22/2010
Co-ordinate(NE) Reference: Site: Eddy County, NM, True North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,269.32Azi)
Survey Calculation Method: Minimum Curvature **Db:** Sybase

Page: 1

Survey: 06/18/10
Start Date: 6/18/2010
Company: Scientific Drilling Internatio
Engineer: Sutherland 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	359.80	0.0	0.0	0.0	0.0	0.00	0.0	0.00
100.0	0.55	303.96	100.0	0.4	0.3	-0.4	0.55	0.5	303.96
200.0	0.86	307.94	200.0	1.4	1.0	-1.4	0.31	1.7	305.71
300.0	2.02	311.89	300.0	3.3	2.6	-3.3	1.16	4.2	308.68
400.0	2.74	317.52	399.9	6.2	5.6	-6.2	0.76	8.4	311.88
500.0	2.63	322.04	499.8	9.1	9.1	-9.2	0.24	13.0	314.70
600.0	2.01	327.75	599.7	11.4	12.4	-11.6	0.66	17.0	317.02
700.0	1.87	327.59	699.6	13.2	15.3	-13.4	0.14	20.3	318.79
800.0	1.27	338.05	799.6	14.5	17.7	-14.7	0.66	23.0	320.32
900.0	1.16	3.36	899.6	14.8	19.7	-15.0	0.54	24.8	322.69
1000.0	1.02	11.03	999.5	14.6	21.6	-14.8	0.20	26.2	325.59
1100.0	0.70	359.59	1099.5	14.4	23.1	-14.6	0.36	27.4	327.63
1200.0	0.65	346.30	1199.5	14.5	24.3	-14.8	0.16	28.4	328.65
1300.0	0.37	316.41	1299.5	14.8	25.1	-15.1	0.38	29.3	328.85
1400.0	0.26	324.01	1399.5	15.2	25.5	-15.5	0.12	29.8	328.68
1500.0	0.30	294.84	1499.5	15.6	25.8	-15.9	0.15	30.3	328.37
1600.0	0.16	264.31	1599.5	15.9	25.9	-16.2	0.18	30.5	327.86
1700.0	0.17	260.19	1699.5	16.2	25.8	-16.5	0.02	30.7	327.37
1800.0	0.22	263.61	1799.5	16.6	25.8	-16.9	0.05	30.8	326.80
1900.0	0.14	267.03	1899.5	16.9	25.8	-17.2	0.08	31.0	326.29
2000.0	0.19	265.08	1999.5	17.2	25.7	-17.5	0.05	31.1	325.83
2100.0	0.16	256.93	2099.5	17.5	25.7	-17.8	0.04	31.2	325.32
2200.0	0.18	273.01	2199.5	17.8	25.7	-18.1	0.05	31.4	324.86
2300.0	0.27	256.89	2299.5	18.1	25.6	-18.5	0.11	31.6	324.24
2400.0	0.27	259.11	2399.5	18.6	25.5	-18.9	0.01	31.8	323.46
2500.0	0.38	252.60	2499.5	19.2	25.4	-19.5	0.12	32.0	322.52
2600.0	0.43	251.80	2599.5	19.8	25.2	-20.1	0.05	32.2	321.33
2700.0	0.51	252.80	2699.5	20.6	24.9	-20.9	0.08	32.5	319.99
2800.0	0.55	251.76	2799.5	21.5	24.6	-21.8	0.04	32.9	318.49
2900.0	0.63	259.45	2899.5	22.5	24.4	-22.8	0.11	33.4	316.93
3000.0	0.72	260.41	2999.5	23.7	24.2	-24.0	0.09	34.0	315.26
3100.0	0.80	259.86	3099.5	25.0	23.9	-25.3	0.08	34.8	313.47
3200.0	0.83	255.15	3199.5	26.4	23.6	-26.6	0.07	35.6	311.58
3300.0	0.87	256.87	3299.5	27.8	23.3	-28.1	0.05	36.5	309.65
3400.0	0.94	258.03	3399.4	29.4	22.9	-29.6	0.07	37.5	307.75
3500.0	1.12	262.60	3499.4	31.1	22.6	-31.4	0.20	38.7	305.79
3600.0	1.25	276.13	3599.4	33.2	22.6	-33.5	0.31	40.4	304.08
3700.0	1.23	279.90	3699.4	35.3	22.9	-35.6	0.08	42.3	302.79
3800.0	1.24	281.52	3799.4	37.4	23.3	-37.7	0.04	44.3	301.75
3900.0	1.06	285.16	3899.3	39.4	23.8	-39.7	0.19	46.3	300.96
4000.0	0.85	281.84	3999.3	41.0	24.2	-41.3	0.22	47.8	300.36
4100.0	0.91	282.44	4099.3	42.5	24.5	-42.8	0.06	49.3	299.81
4200.0	0.83	292.74	4199.3	43.9	25.0	-44.2	0.18	50.8	299.44
4300.0	0.37	277.06	4299.3	44.9	25.3	-45.2	0.48	51.8	299.21
4400.0	0.58	258.57	4399.3	45.7	25.2	-46.0	0.26	52.5	298.72
4500.0	0.78	243.84	4499.3	46.8	24.8	-47.1	0.26	53.3	297.77
4600.0	1.05	219.64	4599.3	48.0	23.8	-48.3	0.47	53.9	296.23
4700.0	1.14	200.44	4699.3	49.0	22.2	-49.3	0.38	54.0	294.23
4800.0	0.84	180.68	4799.2	49.4	20.5	-49.6	0.45	53.7	292.46



Scientific Drilling International, Inc.

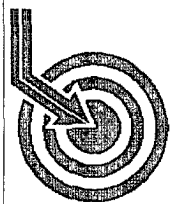
Survey Report

Company: COG RESOURCES
Field: Loco Hills Paddock
Site: Eddy County, NM
Well: Mesilla State #2
Wellpath: VH - Job #32K0610451

Date: 6/22/2010 Time: 13:27:03 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,269.32Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

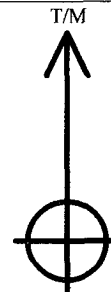
Survey

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	0.88	176.51	4899.2	49.4	19.0	-49.6	0.07	53.1	290.98
5000.0	1.34	179.76	4999.2	49.3	17.1	-49.5	0.46	52.4	289.02
5100.0	1.27	189.61	5099.2	49.5	14.8	-49.7	0.23	51.9	286.59
5200.0	1.24	180.17	5199.2	49.7	12.6	-49.9	0.21	51.5	284.21
5300.0	1.23	181.20	5299.1	49.8	10.5	-49.9	0.02	51.0	281.86
5400.0	1.08	184.82	5399.1	49.9	8.5	-50.0	0.17	50.7	279.61
5500.0	1.17	199.74	5499.1	50.4	6.6	-50.5	0.31	50.9	277.42
5600.0	1.27	212.41	5599.1	51.3	4.7	-51.4	0.29	51.6	275.20
5700.0	1.30	219.19	5699.1	52.7	2.9	-52.7	0.15	52.8	273.10
5800.0	1.02	214.78	5799.0	53.9	1.2	-53.9	0.29	53.9	271.33
5900.0	0.90	220.71	5899.0	54.9	-0.1	-54.9	0.16	54.9	269.92
5951.0	1.01	231.06	5950.0	55.6	-0.7	-55.6	0.40	55.6	269.32



**Scientific
Drilling**

**Field: Loco Hills Paddock
Site: Eddy County, NM
Well: Mesilla State #2
Survey: 06/18/10**



Azimuths to True North
Magnetic North 0 00°

Strength: 0nT
Date 6/22/2010
Model igrf2000

