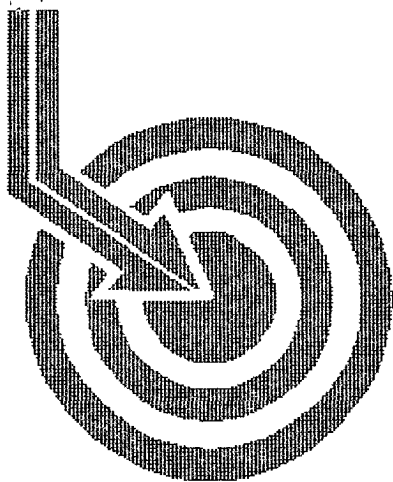
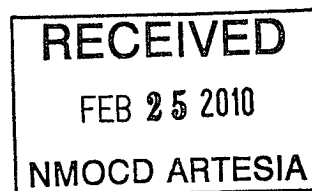


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Scientific Drilling



COG RESOURCES

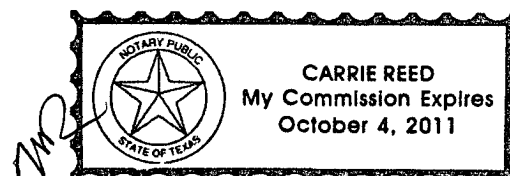
Field: Loco Hills Paddock
Site: Eddy County, NM
Well: Mesilla State #1
Wellpath: VH - Job #32K0110041
Survey: 01/18/10

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

Lu Hart
Company Representative

Notorized this date 16th of February, 2010.

Carrie Reed
Notary Signature
Couty of Midland
State of Texas





Scientific Drilling International, Inc.

Survey Report

Company: COG RESOURCES
Field: Loco Hills Paddock
Site: Eddy County, NM
Well: Mesilla State #1
Wellpath: VH - Job #32K0110041

Date: 2/15/2010
Co-ordinate(NE) Reference: Site. Eddy County, NM, True North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,280.32Azi)
Survey Calculation Method: Minimum Curvature

Page: 1
Db: Sybase

Survey: 01/18/10
Start Date: 1/18/2010
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	0.15	60.49	100.0	-0.1	0.1	0.1	0.15	0.1	60.49
200.0	0.59	288.75	200.0	0.3	0.3	-0.3	0.70	0.4	318.59
300.0	1.05	280.92	300.0	1.7	0.6	-1.6	0.47	1.8	291.04
400.0	1.62	261.42	400.0	4.0	0.6	-3.9	0.72	4.0	278.60
500.0	2.06	238.96	499.9	6.7	-0.5	-6.9	0.84	6.9	265.50
600.0	2.34	233.42	599.8	9.4	-2.7	-10.1	0.35	10.4	255.06
700.0	2.19	229.89	699.8	12.0	-5.1	-13.2	0.20	14.1	248.70
800.0	1.66	226.04	799.7	14.1	-7.4	-15.7	0.55	17.3	244.81
900.0	1.66	242.40	899.7	16.1	-9.0	-18.0	0.47	20.1	243.31
1000.0	1.71	248.44	999.6	18.5	-10.3	-20.7	0.18	23.1	243.58
1100.0	1.23	254.89	1099.6	20.7	-11.1	-23.1	0.51	25.6	244.34
1200.0	0.86	243.17	1199.6	22.3	-11.7	-24.8	0.43	27.4	244.72
1300.0	0.95	220.97	1299.6	23.3	-12.7	-26.0	0.36	28.9	244.01
1400.0	0.93	226.55	1399.5	24.2	-13.9	-27.1	0.09	30.5	242.95
1500.0	0.73	237.42	1499.5	25.2	-14.8	-28.3	0.25	31.9	242.42
1600.0	0.82	226.55	1599.5	26.1	-15.6	-29.3	0.17	33.2	241.99
1700.0	0.72	231.64	1699.5	26.9	-16.5	-30.3	0.12	34.5	241.49
1800.0	0.72	225.11	1799.5	27.7	-17.3	-31.3	0.08	35.7	241.03
1900.0	0.74	275.30	1899.5	28.7	-17.7	-32.4	0.62	36.9	241.33
2000.0	1.55	298.91	1999.5	30.6	-17.0	-34.2	0.92	38.2	243.58
2100.0	1.67	299.51	2099.4	33.2	-15.6	-36.6	0.12	39.8	246.92
2200.0	1.40	295.57	2199.4	35.8	-14.4	-39.0	0.29	41.6	249.78
2300.0	1.27	294.06	2299.4	38.1	-13.4	-41.1	0.13	43.2	251.97
2400.0	1.28	298.45	2399.4	40.2	-12.4	-43.1	0.10	44.9	253.95
2500.0	1.43	302.35	2499.3	42.4	-11.2	-45.2	0.18	46.5	256.07
2600.0	1.34	299.36	2599.3	44.7	-10.0	-47.2	0.12	48.3	258.09
2700.0	1.26	297.33	2699.3	46.8	-8.9	-49.2	0.09	50.0	259.77
2800.0	1.26	295.83	2799.2	48.9	-7.9	-51.2	0.03	51.8	261.23
2900.0	1.31	297.87	2899.2	51.1	-6.9	-53.2	0.07	53.6	262.62
3000.0	1.24	295.56	2999.2	53.2	-5.9	-55.2	0.09	55.5	263.91
3100.0	1.15	296.03	3099.2	55.2	-5.0	-57.1	0.09	57.3	265.01
3200.0	1.15	295.50	3199.2	57.2	-4.1	-58.9	0.01	59.0	266.01
3300.0	1.07	302.30	3299.1	59.0	-3.2	-60.6	0.15	60.6	267.00
3400.0	1.12	306.82	3399.1	60.7	-2.1	-62.1	0.10	62.2	268.07
3500.0	0.99	307.97	3499.1	62.4	-1.0	-63.6	0.13	63.6	269.12
3600.0	0.98	298.89	3599.1	64.0	0.0	-65.0	0.16	65.0	269.98
3700.0	0.99	298.38	3699.1	65.6	0.8	-66.5	0.01	66.5	270.69
3800.0	0.93	297.89	3799.1	67.2	1.6	-68.0	0.06	68.0	271.34
3900.0	0.86	302.36	3899.0	68.7	2.4	-69.4	0.10	69.4	271.95
4000.0	0.91	312.39	3999.0	70.0	3.3	-70.6	0.16	70.7	272.68
4100.0	0.93	315.37	4099.0	71.4	4.4	-71.7	0.05	71.9	273.52
4200.0	1.06	315.67	4199.0	72.8	5.7	-73.0	0.13	73.2	274.43
4300.0	1.17	322.40	4299.0	74.3	7.1	-74.2	0.17	74.6	275.49
4400.0	1.26	329.23	4399.0	75.8	8.9	-75.4	0.17	75.9	276.72
4500.0	1.56	328.97	4498.9	77.4	11.0	-76.7	0.30	77.5	278.16
4600.0	1.44	338.75	4598.9	79.0	13.3	-77.8	0.28	79.0	279.72
4700.0	1.26	323.81	4698.9	80.4	15.4	-78.9	0.39	80.4	281.03
4800.0	1.12	312.87	4798.8	82.0	16.9	-80.3	0.27	82.1	281.91



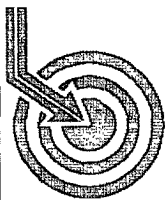
Scientific Drilling International, Inc.

Survey Report

Company: COG RESOURCES Date: 2/15/2010 Time: 21:45:35 Page: 2
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: Mesilla State #1 Section (VS) Reference: Well (0.00N,0.00E,280.32Azi)
Wellpath: VH - Job #32K0110041 Survey Calculation Method: Minimum Curvature Db: Sybase

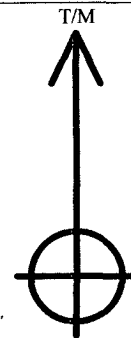
Survey

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	1.42	317.73	4898.8	83.8	18.5	-81.8	0.32	83.9	282.75
5000.0	1.11	315.84	4998.8	85.6	20.1	-83.4	0.31	85.8	283.58
5100.0	1.10	296.63	5098.8	87.3	21.3	-84.9	0.37	87.5	284.06
5200.0	1.34	271.66	5198.8	89.4	21.7	-86.9	0.58	89.6	284.03
5300.0	0.99	243.71	5298.7	91.2	21.4	-88.9	0.66	91.4	283.53
5400.0	0.90	240.90	5398.7	92.5	20.6	-90.3	0.10	92.6	282.85
5500.0	0.95	247.16	5498.7	93.8	19.9	-91.8	0.11	93.9	282.24
5600.0	0.63	226.75	5598.7	94.9	19.2	-92.9	0.42	94.9	281.68
5700.0	0.29	244.51	5698.7	95.4	18.7	-93.6	0.36	95.4	281.32
5800.0	0.58	196.59	5798.7	95.7	18.1	-93.9	0.44	95.7	280.92
5900.0	0.49	233.77	5898.7	96.0	17.4	-94.4	0.35	96.0	280.44
5936.0	0.43	245.67	5934.7	96.2	17.2	-94.7	0.31	96.2	280.32



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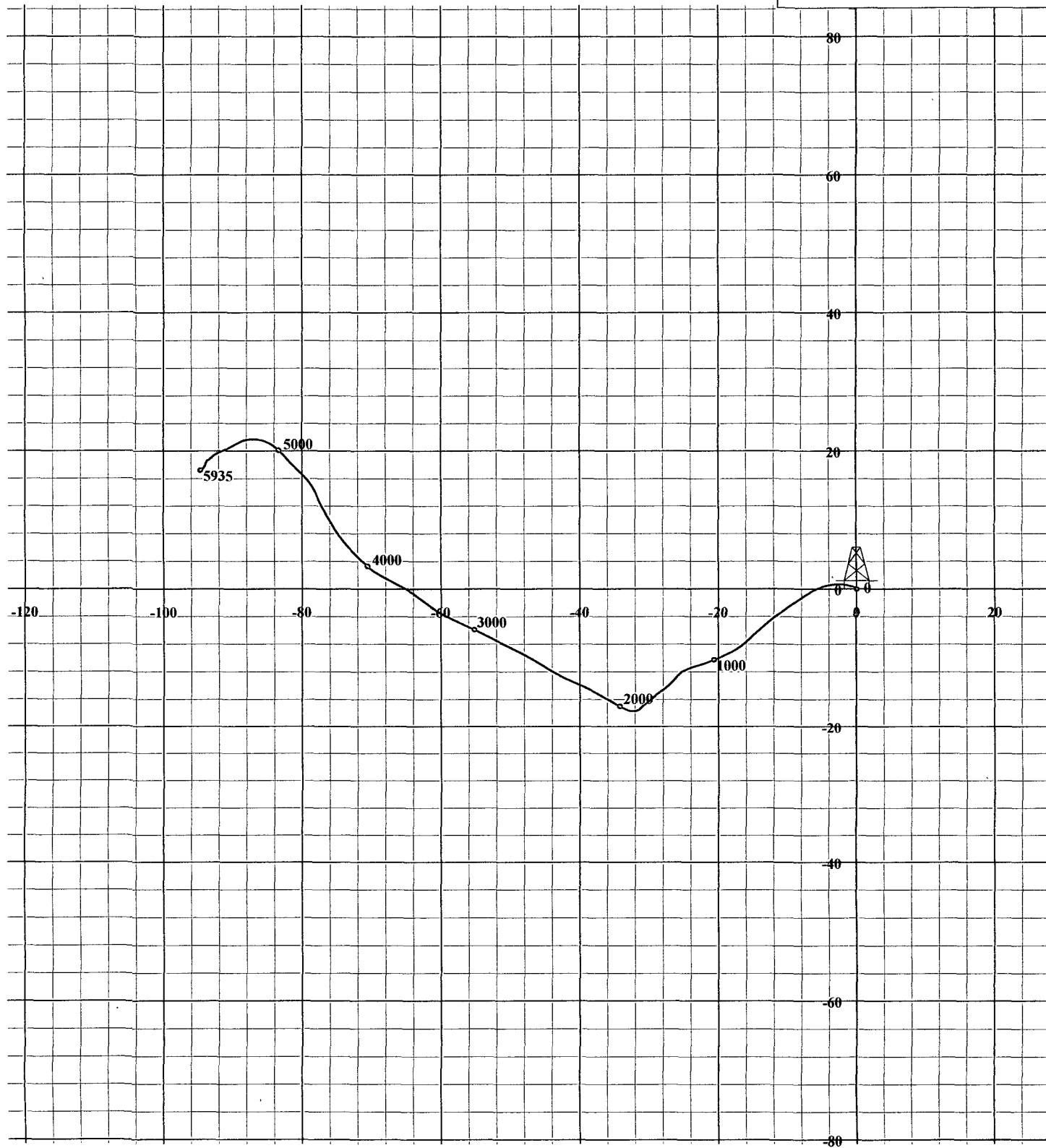
Field: Loco Hills Paddock
Site: Eddy County, NM
Well: Mesilla State #1
Survey: 01/18/10



Azimuths to True North
Magnetic North. 0 00°

Strength 0nT
Date 2/15/2010
Model igrf2000

South(-)/North(+) [20ft/in]



West(-)/East(+) [20ft/in]