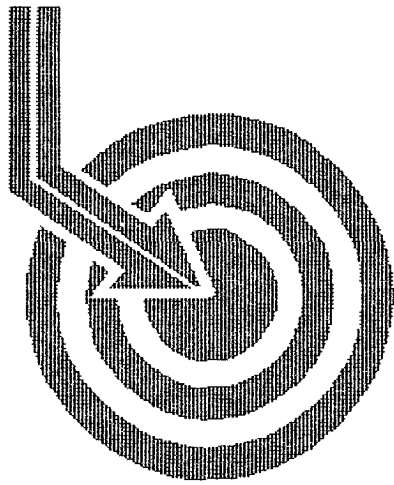
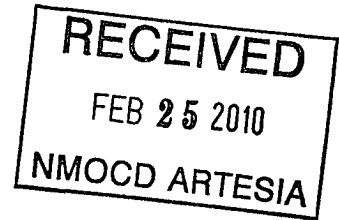


30 015 31565



Scientific Drilling



COG RESOURCES

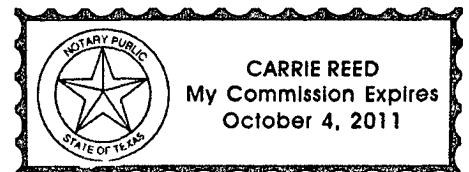
Field: Loco Hills Paddock
Site: Eddy County, NM
Well: Polaris B Federal #1
Wellpath: VH - Job #32K0110068
Survey: 01/29/10

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

Richard
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	Date: 2/1/2010	Time: 14 50 37	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: Polaris B Federal #1	Section (VS) Reference: Well (0 00N,0 00E,187 32Az)		
Wellpath: VH - Job #32K0110068	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: 01/29/10	Start Date: 1/29/2010
Company: KSRG 0'-5844'	
Tool: Scientific Drilling Internatio	Engineer: Melendez w/Halliburton
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 51	348 18	100 0	-0 4	0 4	-0 1	0 51	0 4	348 18
200 0	0 97	300 12	200 0	-1 2	1 3	-0 9	0 73	1 6	324 79
300 0	1 00	288 28	300 0	-1 7	2 0	-2 5	0 21	3 2	308 86
400 0	0 40	299 23	400 0	-2 0	2 4	-3 6	0 61	4 4	304 05
500 0	0 26	324 28	500 0	-2 3	2 8	-4 0	0 20	4 9	304 62
600 0	0 20	336 61	600 0	-2 6	3 1	-4 2	0 08	5 3	306 46
700 0	0 26	332 01	700 0	-2 9	3 5	-4 4	0 06	5 6	308 34
800 0	0 19	342 08	800 0	-3 2	3 9	-4 6	0 08	6 0	310 09
900 0	0 50	55 02	900 0	-3 7	4 3	-4 3	0 48	6 0	314 93
1000 0	0 80	58 74	1000 0	-4 4	4 9	-3 3	0 30	5 9	325 75
1100 0	1 04	66 38	1099 9	-5 3	5 6	-1 9	0 27	5 9	341 34
1200 0	0 92	79 73	1199 9	-6 0	6 1	-0 3	0 26	6 1	357 47
1300 0	0 80	91 04	1299 9	-6 3	6 2	1 2	0 21	6 4	11 04
1400 0	0 53	99 32	1399 9	-6 4	6 2	2 4	0 29	6 6	21 09
1500 0	0 62	97 53	1499 9	-6 4	6 0	3 4	0 09	6 9	29 26
1600 0	0 78	126 18	1599 9	-6 1	5 5	4 5	0 38	7 1	38 81
1700 0	0 62	129 82	1699 9	-5 4	4 8	5 4	0 17	7 2	48 54
1800 0	0 72	157 03	1799 9	-4 6	3 9	6 1	0 33	7 2	57 57
1900 0	0 48	160 81	1899 9	-3 7	2 9	6 5	0 24	7 1	65 92
2000 0	0 44	169 40	1999 9	-2 9	2 1	6 7	0 08	7 0	72 41
2100 0	0 47	159 41	2099 9	-2 2	1 4	6 9	0 08	7 0	78 89
2200 0	0 49	160 32	2199 9	-1 5	0 6	7 2	0 02	7 2	85 49
2300 0	0 39	165 54	2299 9	-0 8	-0 2	7 4	0 11	7 4	91 29
2400 0	0 44	186 40	2399 9	-0 1	-0 9	7 4	0 16	7 5	96 73
2500 0	0 24	180 01	2499 9	0 5	-1 5	7 4	0 20	7 5	101 23
2600 0	0 34	163 72	2599 9	1 0	-2 0	7 5	0 13	7 7	104 70
2700 0	0 39	173 65	2699 9	1 6	-2 6	7 6	0 08	8 0	108 79
2800 0	0 39	158 66	2799 9	2 2	-3 2	7 8	0 10	8 4	112 66
2900 0	0 43	193 52	2899 9	2 9	-3 9	7 8	0 25	8 7	116 70
3000 0	0 44	180 90	2999 9	3 7	-4 7	7 7	0 10	9 0	121 22
3100 0	0 40	162 25	3099 8	4 4	-5 4	7 8	0 14	9 5	124 61
3200 0	0 39	149 98	3199 8	4 9	-6 0	8 1	0 09	10 1	126 65
3300 0	0 30	176 86	3299 8	5 5	-6 6	8 3	0 18	10 6	128 48
3400 0	0 42	230 03	3399 8	6 0	-7 1	8 0	0 34	10 7	131 46
3500 0	0 49	232 13	3499 8	6 6	-7 6	7 4	0 07	10 6	135 70
3600 0	0 45	217 55	3599 8	7 2	-8 1	6 8	0 13	10 6	140 10
3700 0	0 63	216 72	3699 8	8 0	-8 9	6 2	0 18	10 9	144 95
3800 0	0 73	206 80	3799 8	9 1	-9 9	5 6	0 15	11 4	150 41
3900 0	0 80	219 19	3899 8	10 3	-11 0	4 9	0 18	12 1	156 04
4000 0	0 59	220 83	3999 8	11 3	-11 9	4 1	0 21	12 6	160 98
4100 0	0 58	200 75	4099 8	12 2	-12 8	3 6	0 20	13 3	164 29
4200 0	0 67	190 97	4199 8	13 3	-13 9	3 3	0 14	14 2	166 56
4300 0	0 63	200 75	4299 8	14 4	-14 9	3 0	0 12	15 2	168 63
4400 0	0 42	179 05	4399 8	15 3	-15 8	2 8	0 29	16 1	169 91
4500 0	0 45	150 23	4499 8	16 0	-16 5	3 0	0 22	16 8	169 66
4600 0	0 35	155 14	4599 8	16 6	-17 1	3 3	0 11	17 5	168 98
4700 0	0 38	139 94	4699 8	17 1	-17 7	3 7	0 10	18 1	168 23
4800 0	0 74	229 69	4799 8	17 8	-18 3	3 4	0 83	18 7	169 49



Scientific Drilling International, Inc.

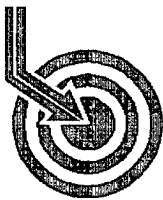
Survey Report

Company: COG RESOURCES
Field: Loco Hills Paddock
Site: Eddy County, NM
Well: Polans B Federal #1
Wellpath: VH - Job #32K0110068

Date: 2/1/2010 Time: 14 50 37 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,187 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 84	227 63	4899 8	18 8	-19 3	2 4	0 10	19 4	172 99
5000 0	0 69	217 05	4999 8	19 9	-20 2	1 5	0 21	20 3	175 86
5100 0	0 54	211 84	5099 8	20 8	-21 1	0 9	0 16	21 1	177 69
5200 0	0 37	193 92	5199 7	21 6	-21 8	0 5	0 22	21 8	178 62
5300 0	0 24	229 16	5299 7	22 1	-22 3	0 3	0 22	22 3	179 25
5400 0	0 42	249 42	5399 7	22 4	-22 5	-0 2	0 21	22 5	180 54
5500 0	0 61	216 76	5499 7	23 0	-23 1	-0 9	0 34	23 1	182 16
5600 0	0 86	206 26	5599 7	24 2	-24 2	-1 5	0 28	24 2	183 60
5700 0	0 91	209 51	5699 7	25 6	-25 6	-2 2	0 07	25 7	185 02
5800 0	1 12	212 19	5799 7	27 3	-27 1	-3 2	0 22	27 3	186 65
5844 0	1 07	206 65	5843 7	28 0	-27 8	-3 6	0 27	28 0	187 32



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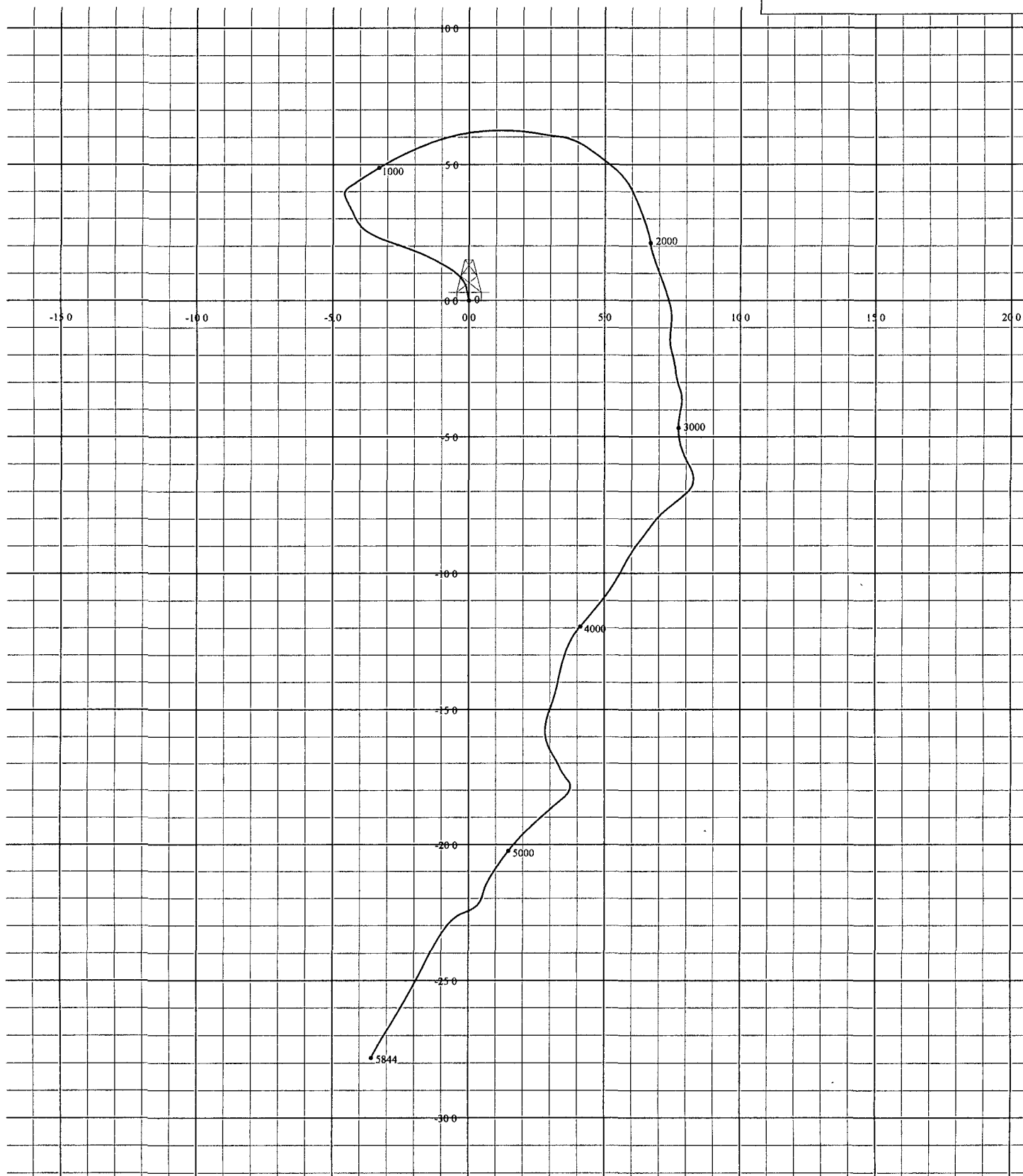
Field: Loco Hills Paddock
Site: Eddy County, NM
Well: Polaris B Federal #1
Survey: 01/29/10



Azimuths to True North
Magnetic North 0 00°

Strength 0nT
Date 2/1/2010
Model igrf2000

South(-)/North(+) [5ft/m]



West(-)/East(+) [5ft/m]