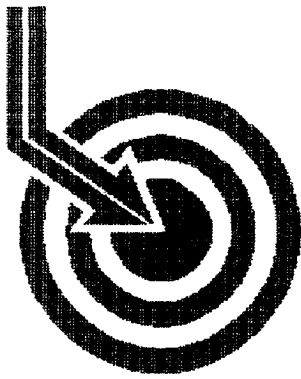




Scientific Drilling

CONFIDENTIAL

POGO

Field: Undes Codan Canyon
Site: Eddy County, NM
Well: Cypress 34 Fed #1
Wellpath: VH - Job #32K0906723
Survey: 09/05/06

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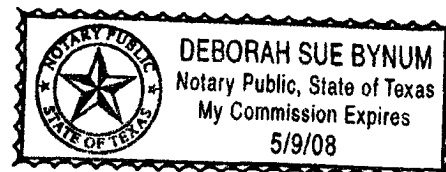
BUREAU OF LAND MANAGEMENT
OFFICE

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

.....R. Wharton.....Company Representative

Notorized this date 26th of September, 2006.

Deborah Sue Bynum
Notary Signature
County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: POGO	Date: 09/26/2006	Time: 10:11:19	Page: 1
Field: Undes Codan Canyon	Co-ordinate(NE) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Cypress 34 Fed #1	Section (VS) Reference:	Well (0.00N,0.00E,272.90Azi)	
Wellpath: VH - Job #32K0906723	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 09/05/06	Start Date: 09/05/2006
Company: Scientific Drilling Internatio	Engineer: Rehders 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	359.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.31	24.17	100.00	-0.10	0.25	0.11	0.31	0.27	24.17
200.00	0.18	16.74	200.00	-0.23	0.64	0.27	0.13	0.70	22.50
300.00	0.78	289.63	300.00	0.38	1.02	-0.33	0.79	1.07	342.17
400.00	1.40	271.56	399.98	2.25	1.29	-2.19	0.70	2.54	300.39
500.00	1.62	268.97	499.94	4.89	1.29	-4.83	0.23	5.00	285.00
600.00	1.63	279.75	599.90	7.71	1.51	-7.64	0.31	7.79	281.17
700.00	1.71	282.56	699.86	10.59	2.07	-10.50	0.11	10.70	281.17
800.00	1.31	256.93	799.83	13.16	2.14	-13.07	0.78	13.24	279.30
900.00	1.12	246.91	899.80	15.14	1.50	-15.08	0.28	15.16	275.67
1000.00	0.64	237.85	999.79	16.47	0.82	-16.45	0.50	16.47	272.84
1100.00	0.42	220.77	1099.79	17.16	0.24	-17.17	0.27	17.17	270.81
1200.00	0.75	39.87	1199.79	16.99	0.47	-16.99	1.17	16.99	271.58
1300.00	1.89	35.87	1299.76	15.70	2.31	-15.60	1.14	15.77	278.41
1400.00	1.92	35.92	1399.70	13.89	5.00	-13.65	0.03	14.54	290.11
1500.00	1.19	33.24	1499.66	12.45	7.22	-12.10	0.73	14.09	300.84
1600.00	0.74	34.44	1599.65	11.59	8.63	-11.16	0.45	14.11	307.69
1700.00	0.40	63.10	1699.64	10.95	9.32	-10.49	0.43	14.03	311.61
1800.00	0.35	91.19	1799.64	10.34	9.47	-9.87	0.19	13.68	313.80
1900.00	0.51	107.75	1899.64	9.60	9.33	-9.14	0.20	13.06	315.57
2000.00	0.58	77.25	1999.64	8.68	9.30	-8.22	0.29	12.42	318.52
2100.00	0.37	68.68	2099.63	7.90	9.53	-7.43	0.22	12.08	322.06
2200.00	0.41	79.78	2199.63	7.26	9.71	-6.78	0.09	11.84	325.09
2300.00	0.67	59.51	2299.63	6.42	10.07	-5.92	0.32	11.68	329.55
2400.00	0.63	52.30	2399.62	5.52	10.70	-4.98	0.09	11.81	335.04
2500.00	0.67	73.78	2499.61	4.55	11.20	-3.99	0.25	11.89	340.42
2600.00	0.69	95.98	2599.61	3.39	11.30	-2.83	0.26	11.65	345.97
2700.00	0.79	111.96	2699.60	2.14	10.98	-1.59	0.23	11.10	351.78
2800.00	1.03	134.62	2799.59	0.82	10.09	-0.31	0.43	10.10	358.25
2900.00	1.40	139.18	2899.56	-0.70	8.54	1.13	0.38	8.61	7.54
3000.00	1.70	148.90	2999.53	-2.37	6.34	2.70	0.40	6.89	23.02
3100.00	1.84	159.29	3099.48	-3.84	3.57	4.03	0.35	5.38	48.44
3200.00	1.65	164.75	3199.43	-4.93	0.68	4.98	0.25	5.02	82.20
3300.00	1.55	167.95	3299.39	-5.73	-2.03	5.64	0.13	5.99	109.81
3400.00	1.35	168.40	3399.36	-6.38	-4.51	6.16	0.20	7.63	126.21
3500.00	1.26	175.40	3499.34	-6.81	-6.76	6.48	0.18	9.36	136.19
3600.00	1.28	177.83	3599.31	-7.06	-8.97	6.61	0.06	11.14	143.60
3700.00	1.13	181.24	3699.29	-7.18	-11.07	6.63	0.17	12.90	149.07
3800.00	1.04	170.41	3799.27	-7.41	-12.95	6.76	0.22	14.61	152.43
3900.00	0.93	178.57	3899.26	-7.67	-14.66	6.93	0.18	16.21	154.68
4000.00	0.74	171.50	3999.25	-7.86	-16.11	7.05	0.22	17.58	156.36
4100.00	0.53	163.97	4099.24	-8.13	-17.19	7.27	0.23	18.67	157.07
4200.00	0.42	159.98	4199.24	-8.43	-17.98	7.53	0.11	19.49	157.29
4300.00	0.27	160.26	4299.23	-8.66	-18.55	7.73	0.15	20.09	157.37
4400.00	0.26	167.98	4399.23	-8.81	-18.99	7.86	0.04	20.55	157.52
4500.00	0.31	165.43	4499.23	-8.95	-19.47	7.97	0.05	21.04	157.73
4600.00	0.26	168.49	4599.23	-9.09	-19.96	8.09	0.05	21.53	157.94
4700.00	0.23	170.65	4699.23	-9.18	-20.38	8.16	0.03	21.95	158.17
4800.00	0.31	202.29	4799.23	-9.14	-20.83	8.09	0.17	22.34	158.76



Scientific Drilling International Survey Report

Company: POGO
Field: Undes Codan Canyon
Site: Eddy County, NM
Well: Cypress 34 Fed #1
Wellpath: VH - Job #32K0906723

Date: 09/26/2006 Time: 10:11:19 Page: 2
Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,272.90Azi)
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
4900.00	0.38	206.71	4899.23	-8.91	-21.37	7.84	0.07	22.77	159.85
5000.00	0.34	224.94	4999.22	-8.58	-21.88	7.48	0.12	23.12	161.12
5100.00	0.54	228.98	5099.22	-8.04	-22.40	6.92	0.20	23.44	162.83
5200.00	0.65	220.18	5199.22	-7.36	-23.14	6.20	0.14	23.96	165.01
5300.00	0.62	228.40	5299.21	-6.63	-23.93	5.43	0.10	24.54	167.22
5400.00	1.00	243.12	5399.20	-5.49	-24.69	4.24	0.43	25.05	170.25
5500.00	1.03	239.80	5499.18	-3.98	-25.53	2.69	0.07	25.67	173.99
5600.00	1.08	245.44	5599.17	-2.39	-26.38	1.05	0.12	26.40	177.71
5700.00	1.02	242.10	5699.15	-0.79	-27.19	-0.59	0.09	27.19	181.24
5800.00	1.14	243.95	5799.13	0.85	-28.04	-2.27	0.12	28.13	184.63
5900.00	1.04	233.23	5899.11	2.42	-29.02	-3.89	0.23	29.28	187.64
6000.00	1.03	233.22	5999.10	3.81	-30.10	-5.34	0.01	30.57	190.05
6100.00	0.98	235.35	6099.08	5.18	-31.12	-6.76	0.06	31.85	192.25
6200.00	0.92	224.28	6199.07	6.39	-32.19	-8.02	0.19	33.17	194.00
6300.00	0.89	221.47	6299.06	7.40	-33.34	-9.10	0.05	34.56	195.26
6400.00	1.03	215.23	6399.04	8.37	-34.66	-10.13	0.17	36.11	196.30
6500.00	0.97	212.46	6499.03	9.26	-36.11	-11.10	0.08	37.78	197.10
6600.00	0.98	213.34	6599.01	10.11	-37.54	-12.03	0.02	39.42	197.77
6700.00	0.84	210.35	6699.00	10.89	-38.88	-12.87	0.15	40.96	198.31
6800.00	0.86	200.81	6798.99	11.45	-40.22	-13.51	0.14	42.42	198.56
6900.00	1.22	200.99	6898.97	12.02	-41.91	-14.15	0.36	44.24	198.66
7000.00	1.02	198.62	6998.95	12.59	-43.75	-14.82	0.21	46.19	198.71
7100.00	0.74	187.97	7098.94	12.89	-45.23	-15.19	0.32	47.72	198.57
7200.00	0.96	161.05	7198.93	12.63	-46.66	-15.01	0.45	49.02	197.83
7300.00	2.12	151.87	7298.89	11.37	-49.09	-13.87	1.18	51.01	195.77
7400.00	2.83	148.48	7398.80	9.02	-52.82	-11.70	0.72	54.10	192.49
7500.00	4.06	152.31	7498.62	5.82	-58.06	-8.77	1.25	58.72	188.59
7600.00	2.89	153.76	7598.43	2.79	-63.46	-6.01	1.17	63.74	185.41
7700.00	1.54	147.88	7698.35	0.79	-66.86	-4.18	1.37	66.99	183.58
7800.00	1.55	124.73	7798.32	-1.13	-68.77	-2.35	0.62	68.81	181.96
7900.00	3.15	119.78	7898.23	-4.73	-70.90	1.14	1.61	70.91	179.08
8000.00	2.96	123.98	7998.09	-9.39	-73.71	5.67	0.29	73.93	175.60
8100.00	2.65	123.48	8097.97	-13.59	-76.43	9.74	0.31	77.05	172.74
8160.00	2.97	117.70	8157.90	-16.20	-77.92	12.27	0.71	78.88	171.05



Scientific
Drilling

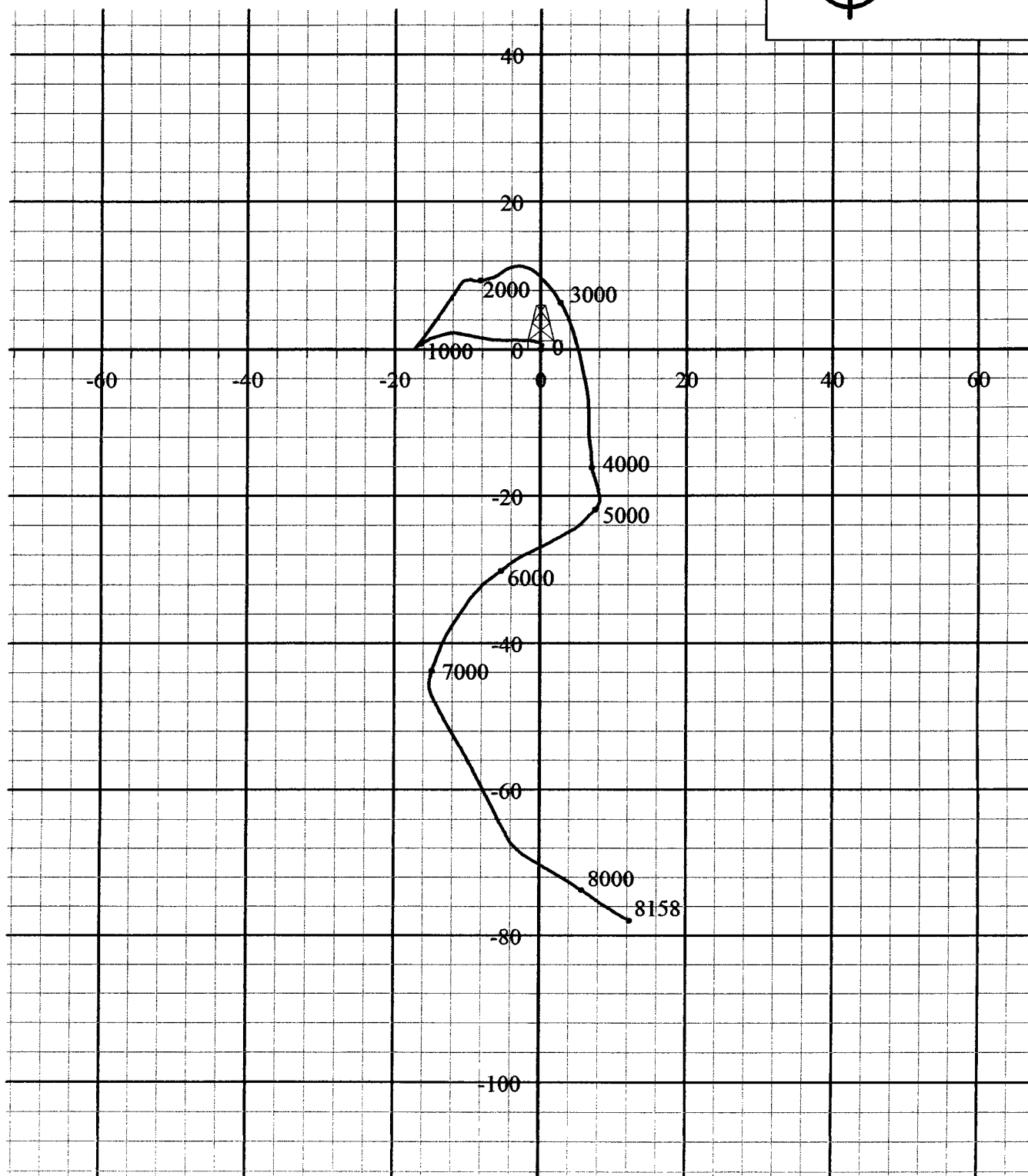
Field: Undes Codan Canyon
Site: Eddy County, NM
Well: Cypress 34 Fed #1
Wellpath: VH - Job #32K0906723
Survey: 09/05/06



Azimuths to Grid North
True North: 0.00°
Magnetic North: 0.00°

Magnetic Field
Strength: 0nT
Dip Angle: 0.00°
Date: 09/26/2006
Model: igrf2000

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



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