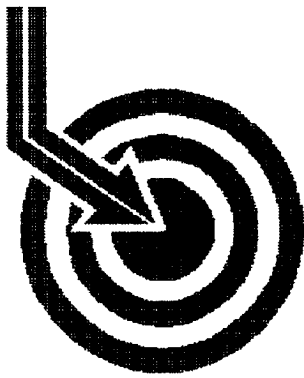




Scientific Drilling



E.O.G.

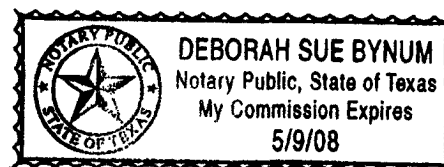
Field: Cottonwood Creek
Site: Eddy County, NM
Well: Congo A 10 Fee #2H
Wellpath: VH - Job #32K0806666
Survey: 08/17/06

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

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

Notorized this date 7th of September, 2006.

Deborah Sue Bynum
Notary Signature
County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: E.O.G.	Date: 09/08/2006	Time: 14:37:09	Page: 1
Field: Cottonwood Creek	Co-ordinate(NE) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Congo A 10 Fee #2H	Section (VS) Reference:	Well (0.00N,0.00E,171.27Azi)	
Wellpath: VH - Job #32K080666	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 08/17/06	Start Date: 08/17/2006
Company: Scientific Drilling Internatio	Engineer: Lilja w/
Tool: Keeper;Keeper Surface Readout Gyro	Tied-to: From Surface

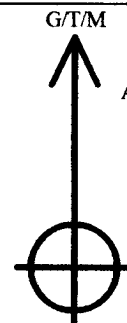
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ChD ft	ChA deg
0.00	0.00	359.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.23	249.21	100.00	0.04	-0.07	-0.19	0.23	0.20	249.21
200.00	0.48	285.67	200.00	-0.09	-0.03	-0.78	0.33	0.78	267.84
300.00	0.65	298.30	299.99	-0.60	0.35	-1.68	0.21	1.72	281.85
400.00	0.84	285.35	399.98	-1.24	0.82	-2.89	0.25	3.00	285.77
500.00	0.81	268.34	499.97	-1.63	0.99	-4.30	0.25	4.41	282.95
600.00	0.78	276.63	599.96	-1.90	1.05	-5.68	0.12	5.78	280.44
700.00	0.86	279.15	699.95	-2.31	1.25	-7.10	0.09	7.21	279.95
800.00	0.86	248.27	799.94	-2.37	1.09	-8.54	0.46	8.61	277.25
900.00	0.96	247.61	899.93	-2.00	0.49	-10.01	0.10	10.02	272.80
1000.00	0.99	245.17	999.92	-1.57	-0.19	-11.57	0.05	11.57	269.05
1100.00	0.99	241.57	1099.90	-1.04	-0.97	-13.11	0.06	13.15	265.79
1200.00	1.04	243.72	1199.89	-0.47	-1.78	-14.69	0.06	14.79	263.09
1300.00	0.85	234.23	1299.87	0.14	-2.61	-16.10	0.25	16.31	260.78
1400.00	0.72	243.28	1399.86	0.67	-3.33	-17.26	0.18	17.58	259.08
1500.00	0.71	244.09	1499.86	1.05	-3.88	-18.38	0.01	18.79	258.07
1600.00	0.77	247.08	1599.85	1.40	-4.42	-19.56	0.07	20.05	257.28
1700.00	0.87	242.34	1699.84	1.81	-5.03	-20.85	0.12	21.45	256.44
1800.00	0.91	239.97	1799.82	2.34	-5.78	-22.21	0.05	22.95	255.41
1900.00	0.89	247.04	1899.81	2.82	-6.48	-23.61	0.11	24.49	254.65
2000.00	1.09	247.23	1999.80	3.24	-7.15	-25.21	0.20	26.20	254.16
2100.00	1.11	253.27	2099.78	3.61	-7.80	-27.01	0.12	28.11	253.89
2200.00	0.91	270.71	2199.76	3.61	-8.07	-28.73	0.36	29.84	254.32
2300.00	0.64	280.26	2299.75	3.30	-7.96	-30.08	0.30	31.11	255.18
2400.00	0.53	279.95	2399.75	2.97	-7.78	-31.08	0.11	32.04	255.95
2500.00	0.47	286.06	2499.75	2.65	-7.59	-31.93	0.08	32.82	256.64
2600.00	0.48	289.94	2599.74	2.28	-7.33	-32.72	0.03	33.53	257.37
2700.00	0.43	259.62	2699.74	2.09	-7.25	-33.48	0.24	34.26	257.78
2800.00	0.39	245.00	2799.74	2.19	-7.47	-34.16	0.11	34.96	257.67
2900.00	0.43	240.38	2899.73	2.42	-7.79	-34.79	0.05	35.66	257.37
3000.00	0.47	248.63	2999.73	2.65	-8.13	-35.50	0.08	36.42	257.10
3100.00	0.30	213.41	3099.73	2.93	-8.50	-36.03	0.28	37.02	256.73
3200.00	0.15	173.36	3199.73	3.26	-8.85	-36.16	0.21	37.22	256.25
3300.00	0.20	149.94	3299.73	3.55	-9.13	-36.05	0.09	37.19	255.79
3400.00	0.13	171.01	3399.73	3.83	-9.39	-35.95	0.09	37.15	255.36
3500.00	0.27	126.33	3499.73	4.11	-9.64	-35.74	0.20	37.02	254.90
3600.00	0.58	100.44	3599.72	4.44	-9.87	-35.05	0.36	36.42	254.27
3700.00	1.01	106.29	3699.71	4.98	-10.21	-33.71	0.44	35.22	253.15
3800.00	1.36	97.53	3799.69	5.68	-10.62	-31.69	0.39	33.42	251.48
3900.00	1.92	98.36	3899.65	6.51	-11.01	-28.85	0.56	30.88	249.11
4000.00	1.55	99.30	3999.60	7.42	-11.48	-25.86	0.37	28.29	246.07
4100.00	1.22	99.37	4099.58	8.17	-11.87	-23.48	0.33	26.31	243.18
4200.00	1.76	96.85	4199.54	8.91	-12.22	-20.90	0.54	24.21	239.68
4300.00	2.34	94.24	4299.48	9.78	-12.56	-17.34	0.59	21.41	234.09
4400.00	3.63	88.89	4399.34	10.66	-12.65	-12.14	1.32	17.53	223.82
4500.00	4.25	90.82	4499.10	11.69	-12.64	-5.27	0.63	13.69	202.63
4600.00	4.08	93.82	4598.84	13.08	-12.93	1.99	0.28	13.08	171.27



**Scientific
Drilling**

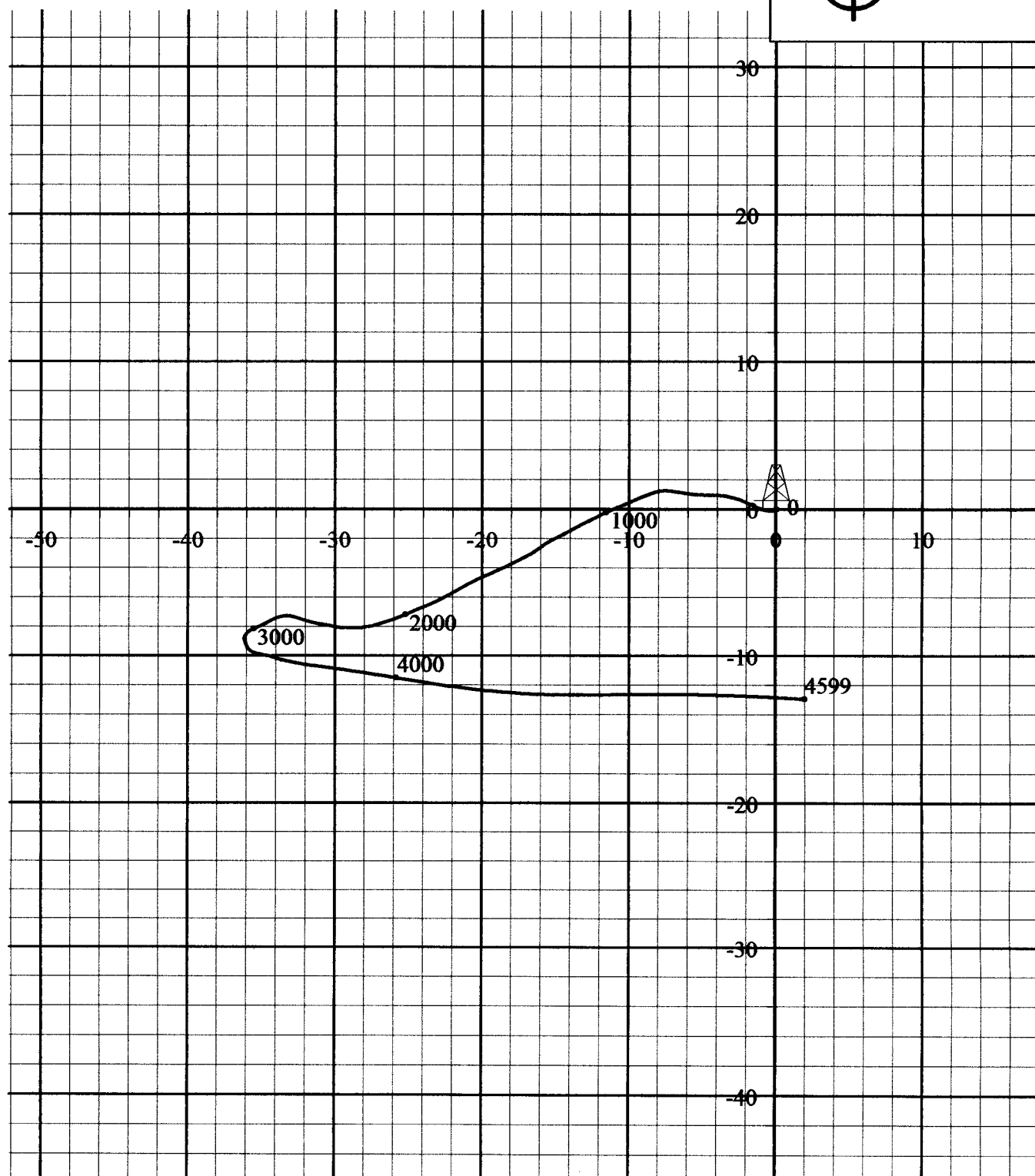
Field: Cottonwood Creek
Site: Eddy County, NM
Well: Congo A 10 Fee #2H
Wellpath: VH - Job #32K0806666
Survey: 08/17/06



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

Magnetic Field
Strength: 0nT
Dip Angle: 0.00°
Date: 09/06/2006
Model: igrf2000

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



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

Date: 8/29/2006

Time: 10:17 am

Wellpath ID: 101005750

Created: 8/20/2006

Revision: 8/29/2006

Survey Reference: WELLHEAD
Vertical Section Reference: WELLHEAD
Closure Reference: WELLHEAD
TVD Reference: WELLHEAD

EOG Resources
Congo A 10 Fee #2H
McVay #4
Eddy Co. NM
101005750

DECL= 8.69

KBH= 16.5'

PATHFINDER MWD SUPERVISOR: Cody Mebane

PATHFINDER FIELD ENGINEER: Chris Parsons

Measured Depth (ft)	Inc'l (deg.)	Drift Dir. (deg.)	Course Length (ft)	Vertical Section (ft)	TVD (ft)	T O T A L Rectangular Offsets (ft)	Closure Dist. (ft)	Dir. (deg.)	DLS (dg/100ft)
TIE-IN 4300.00	2.34	94.24	0.00	17.29	4299.47	12.56 S	21.41 @	234.08	0.00
THE FOLLOWING ARE GOOD MWD SURVEYS									
4322.00	2.90	93.07	22.00	16.29	4321.45	12.62 S	20.65 @	232.31	2.56
4353.00	2.64	86.56	31.00	14.79	4352.41	12.62 S	19.48 @	229.62	1.32
4384.00	1.85	30.22	31.00	13.83	4383.39	12.15 S	18.44 @	228.80	7.20
4416.00	4.04	316.39	32.00	14.35	4415.35	10.88 S	18.05 @	232.91	12.33
4447.00	7.91	297.50	31.00	17.00	4446.18	9.11 S	19.32 @	241.88	13.84

Survey Report

Calculated using the Minimum Curvature Method
Computed using PDS VER2.2.6
Vertical Section Plane: 270.23 deg.

Date
Last

Congo A 10 Fee #2H Final Surveys.TXT

4479.00	12.31	291.43	32.00	22.14	4477.68	6.84 S	22.17 W	23.20 @	252.85	14.13
4510.00	16.44	288.97	31.00	29.38	4507.70	4.21 S	29.40 W	29.70 @	261.85	13.46
4541.00	20.66	286.60	31.00	38.79	4537.09	1.22 S	38.79 W	38.81 @	268.20	13.83
4573.00	23.83	283.26	32.00	50.51	4566.70	1.88 N	50.50 W	50.53 @	272.13	10.66
4604.00	26.29	279.39	31.00	63.39	4594.78	4.43 N	63.37 W	63.52 @	274.00	9.53
4636.00	28.75	275.00	32.00	78.06	4623.16	6.26 N	78.03 W	78.28 @	274.59	9.96
4667.00	31.66	272.54	31.00	93.62	4649.95	7.27 N	93.59 W	93.87 @	274.44	10.20
4699.00	34.73	272.10	32.00	111.12	4676.73	7.98 N	111.09 W	111.38 @	274.11	9.62
4730.00	38.69	270.34	31.00	129.65	4701.58	8.36 N	129.61 W	129.88 @	273.69	13.22
4762.00	42.74	268.23	32.00	150.51	4725.83	8.08 N	150.48 W	150.70 @	273.08	13.37
4793.00	46.69	267.44	31.00	172.30	4747.85	7.25 N	172.27 W	172.42 @	272.41	12.87
4824.00	50.30	268.76	31.00	195.49	4768.39	6.49 N	195.47 W	195.58 @	271.90	12.07
4856.00	53.46	269.99	32.00	220.66	4788.14	6.22 N	220.64 W	220.73 @	271.62	10.33
4887.00	56.89	271.04	31.00	246.10	4805.84	6.46 N	246.08 W	246.17 @	271.50	11.41
4919.00	60.06	272.27	32.00	273.37	4822.57	7.25 N	273.34 W	273.44 @	271.52	10.43
4950.00	63.22	272.89	31.00	300.62	4837.30	8.48 N	300.59 W	300.71 @	271.62	10.34
4982.00	66.13	273.15	32.00	329.51	4850.98	10.00 N	329.47 W	329.62 @	271.74	9.12
5013.00	69.29	273.59	31.00	358.15	4862.74	11.69 N	358.10 W	358.29 @	271.87	10.28
5045.00	72.72	272.89	32.00	388.36	4873.16	13.40 N	388.31 W	388.54 @	271.98	10.92
5077.00	74.74	273.24	32.00	419.04	4882.12	15.04 N	418.98 W	419.25 @	272.06	6.40
5108.00	77.38	272.27	31.00	449.09	4889.59	16.49 N	449.03 W	449.33 @	272.10	9.04

□

Pathfinder Energy Services

Date: 8/29/2006

Wellpath ID: 101005750

Survey Report

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	Course Length (ft)	Vertical Section (ft)	TVD (ft)	TOTAL Rectangular Offsets (ft)	Closure Dist. (ft)	Dir. (deg.)	DLS (dg/100ft)
5139.00	78.52	269.73	31.00	479.40	4896.06	17.01 N	479.34 W	272.03	8.82
5171.00	81.07	268.03	32.00	510.88	4901.73	16.40 N	510.82 W	271.84	9.53
5202.00	84.33	267.35	31.00	541.60	4905.67	15.16 N	541.54 W	271.60	10.74
5234.00	87.67	268.58	32.00	573.49	4907.90	14.03 N	573.44 W	271.40	11.12
5265.00	89.52	268.76	31.00	604.47	4908.66	13.31 N	604.42 W	271.26	6.00
5296.00	89.87	269.46	31.00	635.46	4908.83	12.82 N	635.41 W	271.16	2.52
5328.00	89.96	269.55	32.00	667.46	4908.87	12.55 N	667.41 W	271.08	0.40

Congo A 10 Fee #2H Final Surveys.TXT							
5391.00	89.87	269.46	63.00	730.45	4908.97	12.00 N	730.41 W
5454.00	89.43	269.73	63.00	793.45	4909.35	11.56 N	793.41 W
5517.00	89.52	270.25	63.00	856.44	4909.93	11.55 N	856.40 W
5580.00	89.87	269.37	63.00	919.44	4910.26	11.34 N	919.40 W
5674.00	91.45	268.41	94.00	1013.40	4909.18	9.52 N	1013.37 W
5769.00	91.54	268.05	95.00	1108.31	4906.70	6.58 N	1108.30 W
5863.00	91.89	268.23	94.00	1202.21	4903.89	3.53 N	1202.20 W
5895.00	92.42	268.32	32.00	1234.17	4902.69	2.57 N	1234.17 W
5926.00	90.66	267.09	31.00	1265.12	4901.85	1.33 N	1265.13 W
5958.00	91.28	268.05	32.00	1297.09	4901.31	0.03 S	1297.10 W
6022.00	90.92	268.41	64.00	1361.03	4900.08	2.00 S	1361.05 W
6085.00	91.01	270.60	63.00	1424.02	4899.02	2.55 S	1424.04 W
6148.00	92.95	271.92	63.00	1486.96	4896.85	1.16 S	1486.98 W
6211.00	92.42	270.78	63.00	1549.88	4893.89	0.32 N	1549.89 W
6306.00	91.10	271.04	95.00	1644.83	4890.98	1.83 N	1644.83 W
6402.00	90.22	270.17	96.00	1740.82	4889.87	2.84 N	1740.82 W
6496.00	90.57	270.69	94.00	1834.81	4889.22	3.55 N	1834.82 W
6591.00	90.31	270.60	95.00	1929.81	4888.49	4.62 N	1929.81 W
6686.00	89.69	270.52	95.00	2024.81	4888.49	5.55 N	2024.80 W
6781.00	89.16	270.34	95.00	2119.80	4889.45	6.26 N	2119.79 W
6876.00	89.52	269.11	95.00	2214.79	4890.54	5.80 N	2214.78 W
6971.00	91.63	269.46	95.00	2309.77	4889.59	4.62 N	2309.77 W
7064.00	91.23	268.85	93.00	2402.72	4887.27	3.25 N	2402.73 W
7159.00	92.95	269.29	95.00	2497.63	4883.80	1.70 N	2497.65 W
7254.00	90.66	267.26	95.00	2592.52	4880.81	1.15 S	2592.55 W
7317.00	91.63	268.64	63.00	2655.46	4879.55	3.41 S	2655.49 W
7380.00	91.57	268.10	63.00	2718.40	4877.79	5.20 S	2718.44 W
7443.00	91.62	268.19	63.00	2781.33	4876.04	7.24 S	2781.38 W
7537.00	91.17	268.34	94.00	2875.25	4873.75	10.08 S	2875.31 W
7665.00	92.01	269.82	128.00	3003.17	4870.20	12.14 S	3003.24 W
7791.00	92.24	269.87	126.00	3129.08	4865.53	12.48 S	3129.15 W
7917.00	92.35	269.97	126.00	3254.98	4860.48	12.65 S	3255.05 W
8041.00	91.40	269.56	124.00	3378.90	4856.42	13.16 S	3378.98 W
8137.00	90.48	269.32	96.00	3474.88	4854.85	14.10 S	3474.96 W
8264.00	92.42	269.59	127.00	3601.82	4851.64	15.31 S	3601.91 W
8358.00	92.24	269.19	94.00	3695.73	4847.81	16.31 S	3695.83 W

8418.00	92.59	269.31	60.00	Congo A 10 Fee	#2H	Final Surveys.TXT	3755.81 @ 269.74	0.62
PROJECTION TO BIT				4845.29		17.09 S	3755.77 W	
8482.00	92.59	269.31	64.00	3819.60	4842.39	17.86 S	3819.74 @ 269.73	0.00

□