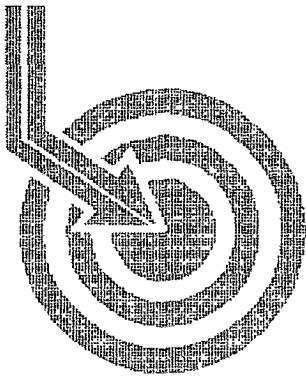




Scientific Drilling

EOG

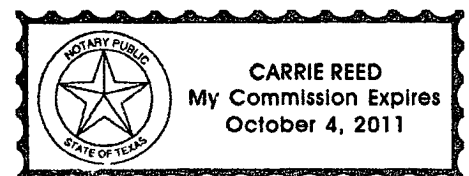
Field: Southeast Quahada Ridge
Site: Eddy County, NM
Well: James Ranch Unit #113H
Wellpath: VH - Job #32K0509176
Survey: 05/11/09

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

.....*L. Wharton*.....Company Representative

Notorized this date 11th of June, 2009.

Carrie Reed
Notary Signature
County of Midland
State of Texas





Scientific
Drilling

Scientific Drilling International Survey Report

Company: EOG	Date: 05/18/2009	Time: 14:38:58	Page: 1
Field: Southeast Quahada Ridge	Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North		
Site: Eddy County, NM	Vertical (TVD) Reference: SITE 0.0		
Well: James Ranch Unit #113H	Section (VS) Reference: Well (0.00N,0.00E,90.30Azi)		
Wellpath: VH- Job #32K0509176	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: 05/11/09	Start Date: 05/11/2009
Company: Scientific Drilling Internatio	Engineer: Madrid/Paredes/Williams
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	ClsD ft	ClsA deg
0.00	0.00	359.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.24	86.56	100.00	0.21	0.01	0.21	0.24	0.21	86.56
200.00	0.29	116.70	200.00	0.64	-0.09	0.64	0.15	0.65	97.83
300.00	0.30	128.93	300.00	1.08	-0.37	1.07	0.06	1.13	108.86
400.00	0.29	161.77	400.00	1.36	-0.77	1.36	0.17	1.56	119.63
500.00	0.37	147.69	499.99	1.62	-1.28	1.61	0.11	2.06	128.62
600.00	0.45	145.10	599.99	2.02	-1.88	2.01	0.08	2.75	133.14
700.00	0.63	144.10	699.99	2.57	-2.65	2.55	0.18	3.68	136.04
800.00	0.49	142.34	799.98	3.15	-3.43	3.14	0.14	4.65	137.57
900.00	0.64	147.83	899.98	3.72	-4.24	3.70	0.16	5.63	138.94
1000.00	0.48	169.63	999.97	4.09	-5.13	4.07	0.26	6.54	141.57
1100.00	0.47	184.99	1099.97	4.14	-5.95	4.11	0.13	7.23	145.37
1200.00	0.77	185.62	1199.96	4.04	-7.03	4.01	0.30	8.09	150.31
1300.00	0.96	183.47	1299.95	3.93	-8.53	3.89	0.19	9.37	155.49
1400.00	0.99	177.95	1399.94	3.92	-10.23	3.87	0.10	10.94	159.28
1500.00	0.92	181.85	1499.92	3.94	-11.90	3.87	0.10	12.51	161.96
1600.00	1.14	180.06	1599.91	3.92	-13.69	3.85	0.22	14.22	164.30
1700.00	1.25	194.90	1699.89	3.65	-15.74	3.57	0.33	16.14	167.23
1800.00	1.24	183.63	1799.86	3.31	-17.88	3.22	0.24	18.16	169.80
1900.00	0.73	96.01	1899.85	3.88	-19.02	3.78	1.41	19.39	168.75
2000.00	1.69	69.62	1999.83	5.90	-18.57	5.80	1.09	19.46	162.66
2100.00	1.52	74.20	2099.79	8.55	-17.70	8.46	0.21	19.62	154.46
2200.00	0.38	20.78	2199.78	9.94	-17.03	9.85	1.33	19.67	149.95
2300.00	0.45	349.44	2299.77	9.98	-16.33	9.90	0.23	19.10	148.79
2400.00	0.55	346.52	2399.77	9.79	-15.48	9.71	0.10	18.27	147.90
2500.00	0.60	3.75	2499.76	9.71	-14.49	9.63	0.18	17.40	146.38
2600.00	0.70	13.28	2599.76	9.88	-13.37	9.81	0.15	16.59	143.74
2700.00	0.73	38.30	2699.75	10.41	-12.28	10.34	0.31	16.06	139.89
2800.00	1.02	61.82	2799.74	11.58	-11.36	11.52	0.46	16.18	134.59
2900.00	1.29	67.01	2899.72	13.40	-10.50	13.34	0.29	16.98	128.20
3000.00	0.99	83.14	2999.70	15.29	-9.96	15.24	0.44	18.20	123.16
3100.00	0.98	125.51	3099.69	16.85	-10.35	16.79	0.71	19.73	121.65
3200.00	1.20	129.27	3199.67	18.36	-11.51	18.30	0.23	21.62	122.17
3300.00	1.30	128.79	3299.64	20.06	-12.88	19.99	0.10	23.79	122.80
3400.00	1.73	127.52	3399.61	22.15	-14.51	22.08	0.43	26.42	123.32
3500.00	0.94	143.18	3499.58	23.85	-16.09	23.76	0.86	28.70	124.10
3600.00	1.09	135.46	3599.57	25.01	-17.42	24.92	0.20	30.41	124.96
3700.00	0.94	128.11	3699.55	26.33	-18.61	26.24	0.20	32.16	125.35
3800.00	0.69	117.52	3799.54	27.52	-19.39	27.42	0.29	33.58	125.27
3900.00	0.45	138.15	3899.53	28.32	-19.96	28.21	0.31	34.56	125.28
4000.00	0.34	150.24	3999.53	28.73	-20.51	28.62	0.14	35.21	125.63
4100.00	0.48	135.13	4099.53	29.17	-21.07	29.06	0.18	35.90	125.94
4200.00	0.50	141.75	4199.53	29.74	-21.71	29.63	0.06	36.73	126.23
4300.00	0.68	132.33	4299.52	30.45	-22.45	30.34	0.20	37.74	126.50
4400.00	0.71	128.91	4399.51	31.38	-23.24	31.26	0.05	38.95	126.63
4500.00	0.74	129.98	4499.51	32.36	-24.04	32.24	0.03	40.21	126.72
4600.00	3.61	112.41	4599.42	35.78	-25.66	35.64	2.91	43.92	125.75
4700.00	5.69	105.48	4699.09	43.48	-28.18	43.33	2.15	51.69	123.04
4800.00	4.92	90.76	4798.66	52.55	-29.56	52.40	1.56	60.16	119.43



Scientific
Drilling

Scientific Drilling International

Survey Report

Company: EOG	Date: 05/18/2009	Time: 14:38:58	Page: 2
Field: Southeast Quahada Ridge	Co-ordinate(NE) Reference:	Site: Eddy County, NM; Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: James Ranch Unit #113H	Section (VS) Reference:	Well (0.00N,0.00E,90.30Azi)	
Wellpath: VH - Job #32K0509176	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	4.64	99.28	4898.32	60.83	-30.27	60.68	0.76	67.81	116.51
5000.00	4.76	109.12	4997.98	68.76	-32.28	68.59	0.81	75.81	115.20
5100.00	4.64	106.04	5097.65	76.58	-34.76	76.40	0.28	83.93	114.46
5200.00	4.89	105.02	5197.30	84.59	-36.98	84.40	0.26	92.15	113.66
5300.00	4.93	97.61	5296.94	92.98	-38.65	92.78	0.64	100.51	112.62
5400.00	5.03	95.31	5396.56	101.61	-39.63	101.40	0.22	108.87	111.35
5500.00	4.58	93.13	5496.21	109.96	-40.25	109.75	0.49	116.90	110.14
5600.00	4.76	94.78	5595.87	118.08	-40.82	117.87	0.22	124.74	109.10
5700.00	5.63	99.38	5695.46	127.06	-41.96	126.85	0.96	133.61	108.30
5800.00	5.90	99.74	5794.96	136.98	-43.63	136.75	0.27	143.54	107.70
5900.00	5.75	99.97	5894.44	146.99	-45.37	146.75	0.15	153.60	107.18
6000.00	5.91	98.04	5993.92	157.03	-46.95	156.78	0.25	163.66	106.67
6100.00	6.78	95.62	6093.31	168.01	-48.25	167.76	0.91	174.56	106.05
6200.00	5.91	95.64	6192.70	179.01	-49.34	178.75	0.87	185.44	105.43
6300.00	6.32	99.11	6292.13	189.57	-50.71	189.31	0.55	195.99	105.00
6400.00	6.45	100.06	6391.51	200.55	-52.57	200.28	0.17	207.06	104.71
6500.00	5.34	99.08	6490.98	210.68	-54.28	210.40	1.11	217.29	104.47
6600.00	6.15	90.66	6590.48	220.64	-55.08	220.35	1.17	227.13	104.03
6700.00	7.10	98.61	6689.81	232.11	-56.07	231.82	1.32	238.50	103.60
6705.00	7.06	95.13	6694.77	232.72	-56.14	232.43	8.61	239.12	103.58



Scientific
Drilling

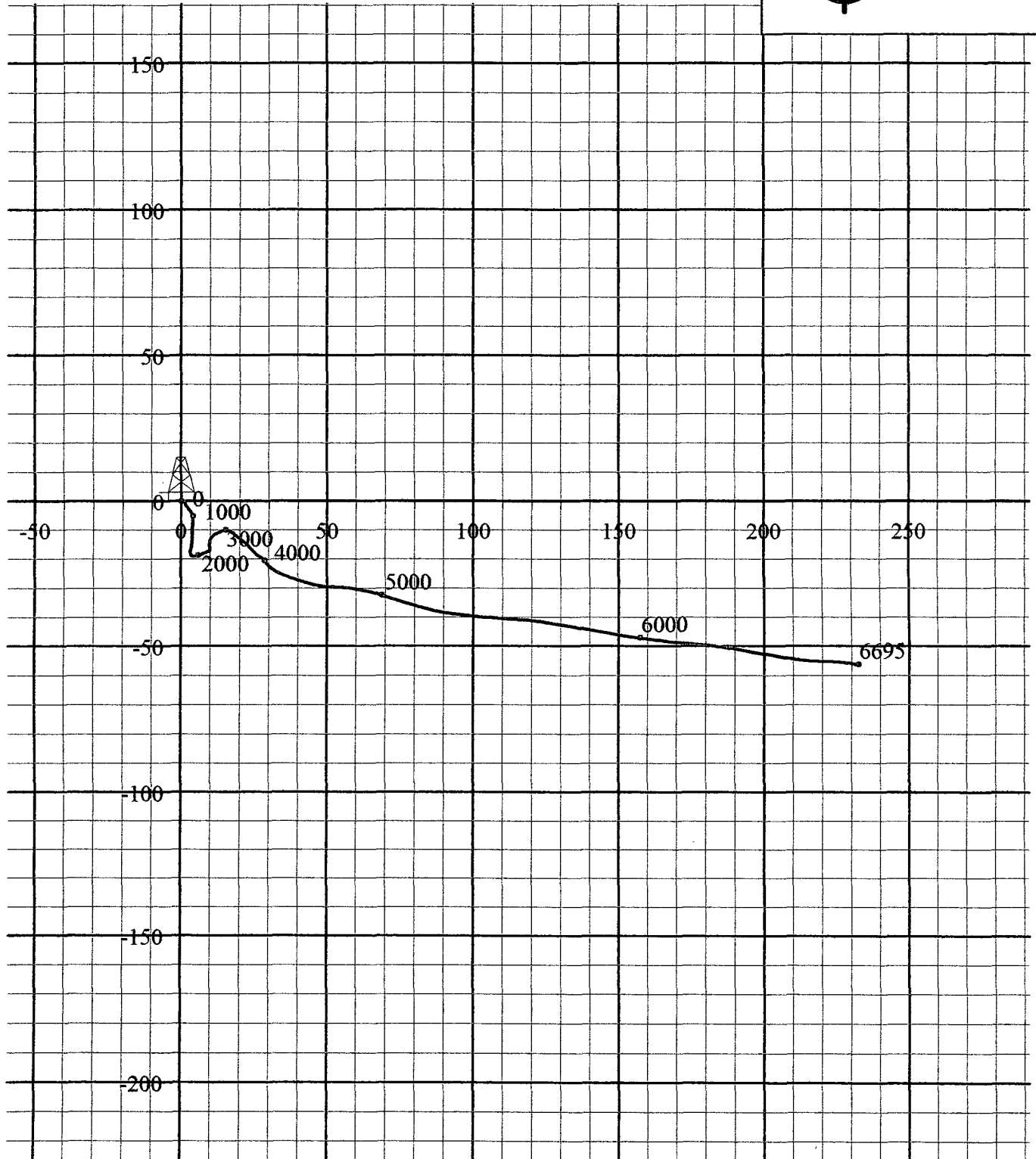
Field: Southeast Quahada Ridge
Site: Eddy County, NM
Well: James Ranch Unit #113H
Wellpath: VH - Job #32K0509176
Survey: 05/11/09



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

Magnetic Field
Strength: 0nT
Dip Angle: 0.00°
Date: 05/18/2009
Model: igrf2000

South(-)/North(+) [50ft/in]



West(-)/East(+) [50ft/in]