

Scientific Drilling International

Survey Report

Company: PHILLIPS PETROLEUM
 Field: Vacuum Gionetta East
 Site: Lea County, NM
 Well: EVGSAU #3229-013
 Wellpath: VH - Job #32K0501274

Date: 6/5/2001 Time: 22:04:59 Page: 1
 Co-ordinate(NE) Reference: Site: Lea County, NM, True North
 Vertical (TVD) Reference: SITE 0.0 above Mean Sea Level
 Section (VS) Reference: Well (0.0E,0.0N,85.4Azi)
 Survey Calculation Method: Minimum Curvature

Survey: 5/8/01
 KSRG 0'-4228'

Start Date: 6/5/2001

Company: Scientific Drilling Internatio
 Tool: Keeper

Engineer: Jeff Cossey

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	ClsD ft	ClsA deg
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.00
100.0	0.05	163.87	100.0	0.0	0.0	0.0	0.0	163.87
200.0	0.20	246.82	200.0	-0.1	-0.2	-0.1	0.2	221.76
300.0	0.07	315.58	300.0	-0.4	-0.2	-0.3	0.4	242.38
400.0	0.15	277.82	400.0	-0.5	-0.1	-0.5	0.5	257.21
500.0	0.17	242.36	500.0	-0.8	-0.2	-0.8	0.8	257.80
600.0	0.27	156.54	600.0	-0.8	-0.5	-0.8	0.9	240.85
700.0	0.31	137.56	700.0	-0.6	-0.9	-0.5	1.0	211.61
800.0	0.24	182.11	800.0	-0.5	-1.3	-0.4	1.3	195.72
900.0	0.28	206.50	900.0	-0.6	-1.7	-0.5	1.8	195.60
1000.0	0.26	203.37	1000.0	-0.8	-2.1	-0.7	2.2	197.57
1100.0	0.05	135.58	1100.0	-0.9	-2.4	-0.7	2.5	197.21
1200.0	0.09	1.27	1200.0	-0.9	-2.3	-0.7	2.4	196.82
1300.0	0.03	33.10	1300.0	-0.9	-2.2	-0.7	2.3	197.15
1400.0	0.22	175.75	1400.0	-0.8	-2.4	-0.7	2.5	195.37
1500.0	0.41	195.78	1500.0	-1.0	-2.9	-0.7	3.0	194.20
1600.0	0.66	183.89	1600.0	-1.2	-3.8	-0.9	3.9	192.84
1700.0	0.82	172.82	1700.0	-1.2	-5.1	-0.8	5.2	189.15
1800.0	0.86	170.03	1800.0	-1.1	-6.6	-0.6	6.6	185.27
1900.0	0.80	173.74	1900.0	-1.0	-8.0	-0.4	8.0	182.87
2000.0	0.91	184.22	1999.9	-1.1	-9.5	-0.4	9.5	182.31
2100.0	0.82	189.60	2099.9	-1.4	-11.0	-0.6	11.0	182.92
2200.0	0.84	188.00	2199.9	-1.8	-12.4	-0.8	12.5	183.60
2300.0	0.68	187.13	2299.9	-2.1	-13.7	-1.0	13.8	183.99
2400.0	0.34	149.40	2399.9	-2.0	-14.6	-0.9	14.6	183.46
2500.0	0.31	99.23	2499.9	-1.7	-14.9	-0.5	14.9	181.78
2600.0	0.50	64.27	2599.9	-1.0	-14.7	0.2	14.7	179.23
2700.0	0.56	81.31	2699.9	-0.1	-14.5	1.1	14.5	175.76
2800.0	0.71	73.97	2799.9	1.0	-14.2	2.2	14.4	171.40
2900.0	0.66	72.87	2899.9	2.2	-13.9	3.3	14.3	166.65
3000.0	0.53	58.00	2999.9	3.1	-13.5	4.2	14.1	162.54
3100.0	0.47	67.69	3099.9	3.9	-13.1	5.0	14.0	159.03
3200.0	0.45	37.43	3199.9	4.6	-12.6	5.6	13.8	155.94
3300.0	0.38	343.55	3299.9	4.8	-12.0	5.8	13.3	154.26
3400.0	0.38	337.60	3399.9	4.6	-11.4	5.6	12.6	153.93
3500.0	0.38	339.07	3499.9	4.4	-10.7	5.3	12.0	153.69
3600.0	0.64	341.24	3599.9	4.2	-9.9	5.0	11.1	153.15
3700.0	0.92	334.10	3699.9	3.8	-8.6	4.5	9.7	152.61
3800.0	0.96	326.43	3799.8	3.1	-7.2	3.7	8.1	153.10
3900.0	0.79	322.10	3899.8	2.3	-6.0	2.8	6.6	153.08
4000.0	0.74	327.25	3999.8	1.6	-4.9	2.0	5.3	157.71
4100.0	0.81	321.95	4099.8	0.9	-3.8	1.2	4.0	162.16
4200.0	0.90	313.08	4199.8	0.0	-2.7	0.2	2.7	175.49
4228.0	0.69	312.88	4227.8	-0.3	-2.4	-0.1	2.4	181.65