

Scientific Drilling Planning Report

Company: Newburg Producing Company	Date: 9/28/98	Time: 16:17:35	Page: 2
Field: Buffalo Penn Gas East	Co-ordinate(NE) Reference: Site, Lea County, New Mexico, True North		
Site: Lea County, New Mexico	Vertical (TVD) Reference: SITE 0.0 above Mean Sea Level		
Well: Viper "3" Federal #1	Section (VS) Reference: Site (0.0E-0.0N, 358.0A2)		
Wellpath: OH Original Hole	Plan: Plan #1		

Section 2 : Slant Part 2 Build 2.25

MD	Incl	Azim	TVD	N-S	E-W	VS	DLS	Build	Turn	TFO
ft	deg	deg	ft	ft	ft	ft	d/100ft	d/100ft	d/100ft	deg

Section 3 : Slant Part 3 Hold

MD	Incl	Azim	TVD	N-S	E-W	VS	DLS	Build	Turn	TFO
ft	deg	deg	ft	ft	ft	ft	d/100ft	d/100ft	d/100ft	deg
6000.0	10.17	358.00	5996.9	48.5	-1.7	48.5	0.00	0.00	0.00	0.00
6100.0	10.17	358.00	6095.3	66.1	-2.3	66.2	0.00	0.00	0.00	0.00
6200.0	10.17	358.00	6193.7	83.8	-2.9	83.8	0.00	0.00	0.00	0.00
6300.0	10.17	358.00	6292.2	101.4	-3.5	101.5	0.00	0.00	0.00	0.00
6400.0	10.17	358.00	6390.6	119.1	-4.2	119.1	0.00	0.00	0.00	0.00
6500.0	10.17	358.00	6489.0	136.7	-4.8	136.8	0.00	0.00	0.00	0.00
6600.0	10.17	358.00	6587.4	154.4	-5.4	154.6	0.00	0.00	0.00	0.00
6700.0	10.17	358.00	6685.9	172.0	-6.0	172.1	0.00	0.00	0.00	0.00
6800.0	10.17	358.00	6784.3	189.7	-6.6	189.8	0.00	0.00	0.00	0.00
6900.0	10.17	358.00	6882.7	207.3	-7.2	207.6	0.00	0.00	0.00	0.00
7000.0	10.17	358.00	6981.2	225.0	-7.9	225.1	0.00	0.00	0.00	0.00
7100.0	10.17	358.00	7079.6	242.6	-8.5	242.8	0.00	0.00	0.00	0.00
7200.0	10.17	358.00	7178.0	260.3	-9.1	260.5	0.00	0.00	0.00	0.00
7300.0	10.17	358.00	7276.4	277.9	-9.7	278.1	0.00	0.00	0.00	0.00
7400.0	10.17	358.00	7374.9	295.6	-10.3	295.8	0.00	0.00	0.00	0.00
7500.0	10.17	358.00	7473.3	313.3	-11.0	313.4	0.00	0.00	0.00	0.00
7600.0	10.17	358.00	7571.7	330.9	-11.6	331.1	0.00	0.00	0.00	0.00
7700.0	10.17	358.00	7670.1	348.6	-12.2	348.8	0.00	0.00	0.00	0.00
7800.0	10.17	358.00	7768.6	366.2	-12.8	366.4	0.00	0.00	0.00	0.00
7900.0	10.17	358.00	7867.0	383.9	-13.4	384.1	0.00	0.00	0.00	0.00
8000.0	10.17	358.00	7965.4	401.6	-14.0	401.8	0.00	0.00	0.00	0.00
8100.0	10.17	358.00	8063.9	419.2	-14.7	419.4	0.00	0.00	0.00	0.00
8200.0	10.17	358.00	8162.3	436.8	-15.3	437.1	0.00	0.00	0.00	0.00
8300.0	10.17	358.00	8260.7	454.5	-15.9	454.8	0.00	0.00	0.00	0.00
8400.0	10.17	358.00	8359.1	472.1	-16.6	472.4	0.00	0.00	0.00	0.00
8500.0	10.17	358.00	8457.6	489.8	-17.1	490.1	0.00	0.00	0.00	0.00
8600.0	10.17	358.00	8556.0	507.4	-17.7	507.7	0.00	0.00	0.00	0.00
8700.0	10.17	358.00	8654.4	525.1	-18.4	525.4	0.00	0.00	0.00	0.00
8800.0	10.17	358.00	8752.8	542.7	-19.0	543.1	0.00	0.00	0.00	0.00
8900.0	10.17	358.00	8851.3	560.4	-19.6	560.7	0.00	0.00	0.00	0.00
9000.0	10.17	358.00	8949.7	578.0	-20.2	578.4	0.00	0.00	0.00	0.00
9100.0	10.17	358.00	9048.1	595.7	-20.8	596.1	0.00	0.00	0.00	0.00
9200.0	10.17	358.00	9146.6	613.4	-21.4	613.7	0.00	0.00	0.00	0.00
9300.0	10.17	358.00	9245.0	631.0	-22.1	631.4	0.00	0.00	0.00	0.00
9400.0	10.17	358.00	9343.4	648.7	-22.7	649.1	0.00	0.00	0.00	0.00
9500.0	10.17	358.00	9441.8	666.3	-23.3	666.7	0.00	0.00	0.00	0.00
9600.0	10.17	358.00	9540.3	684.0	-23.9	684.4	0.00	0.00	0.00	0.00
9700.0	10.17	358.00	9638.7	701.6	-24.5	702.0	0.00	0.00	0.00	0.00
9800.0	10.17	358.00	9737.1	719.3	-25.1	719.7	0.00	0.00	0.00	0.00
9900.0	10.17	358.00	9835.6	736.9	-25.8	737.4	0.00	0.00	0.00	0.00
10000.0	10.17	358.00	9934.0	754.6	-26.4	755.0	0.00	0.00	0.00	0.00
10100.0	10.17	358.00	10032.4	772.2	-27.0	772.7	0.00	0.00	0.00	0.00
10200.0	10.17	358.00	10130.8	789.9	-27.6	790.4	0.00	0.00	0.00	0.00
10300.0	10.17	358.00	10229.3	807.5	-28.2	808.0	0.00	0.00	0.00	0.00
10400.0	10.17	358.00	10327.7	825.2	-28.9	825.7	0.00	0.00	0.00	0.00
10500.0	10.17	358.00	10426.1	842.8	-29.5	843.4	0.00	0.00	0.00	0.00
10600.0	10.17	358.00	10524.6	860.5	-30.1	861.0	0.00	0.00	0.00	0.00
10700.0	10.17	358.00	10623.0	878.2	-30.7	878.7	0.00	0.00	0.00	0.00
10800.0	10.17	358.00	10721.4	895.8	-31.3	896.4	0.00	0.00	0.00	0.00
10900.0	10.17	358.00	10819.8	913.5	-31.9	914.0	0.00	0.00	0.00	0.00
11000.0	10.17	358.00	10918.3	931.1	-32.6	931.7	0.00	0.00	0.00	0.00
11100.0	10.17	358.00	11016.7	948.8	-33.2	949.3	0.00	0.00	0.00	0.00
11200.0	10.17	358.00	11115.1	966.4	-33.8	967.0	0.00	0.00	0.00	0.00
11300.0	10.17	358.00	11213.5	984.1	-34.4	984.7	0.00	0.00	0.00	0.00
11400.0	10.17	358.00	11312.0	1001.7	-35.0	1002.3	0.00	0.00	0.00	0.00
11500.0	10.17	358.00	11410.4	1019.4	-35.6	1020.0	0.00	0.00	0.00	0.00
11600.0	10.17	358.00	11508.8	1037.0	-36.3	1037.7	0.00	0.00	0.00	0.00
11700.0	10.17	358.00	11607.3	1054.7	-36.9	1055.3	0.00	0.00	0.00	0.00