

15-007-22475-0001

22-345-15w

NATURAL GAS ANALYSIS REPORT

Sampled by:

Trilobite Testing, Inc.
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Scott City, Kansas
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Analyzed by:

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Lab Number: 20021305

Analyzed: 03/27/02

Sample From: Davis Ranch 3-22 GOR Test
Producer: M&M Exploration

Pressure:
Temperature:

Date: Location: 22-34-15

Time:
Sampler:
Source:

County: Barber
State: Kansas
Formation: Oswego

		Mole %	GPM
Helium	He:	0.057	0.000
Hydrogen	H2:	0.006	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	8.077	0.000
Carbon Dioxide	CO2:	0.881	0.000
Methane	C1:	74.526	0.000
Ethane	C2:	9.220	2.466
Propane	C3:	4.607	1.269
Iso Butane	iC4:	0.467	0.153
Normal Butane	nC4:	1.312	0.414
Iso Pentane	iC5:	0.218	0.080
Normal Pentane	nC5:	0.265	0.096
Hexanes Plus	C6+:	0.364	0.159

TOTAL: 100.000 4.636

Z Fact: 0.9970

SP.GR.: 0.7322

BTU (SAT): 1114.0 @ 14.73 psia

BTU (DRY): 1133.7 @ 14.73 psia

OCTANE RATING: 112.9

COMMENTS:

0.000



Company Name M&M Exploration
Well Name Davis Ranch 3-22
Type of Test GOR Test
Date(s) of Test 3/25-3/26 2002



Date	Time	Cum.Time	Tubing	Static
		hr	psig	psig
2002/03/25	10:33:00	0.1653	586.038	40.382
2002/03/25	10:38:00	0.2486	593.139	44.034
2002/03/25	10:43:00	0.3319	596.860	49.405
2002/03/25	10:48:00	0.4153	598.339	49.148
2002/03/25	10:53:00	0.4986	603.431	53.053
2002/03/25	10:58:00	0.5819	545.997	55.443
2002/03/25	11:03:00	0.6653	576.314	15.754
2002/03/25	11:08:00	0.7486	516.753	55.609
2002/03/25	11:13:00	0.8319	517.708	12.088
2002/03/25	11:18:00	0.9153	495.551	47.105
2002/03/25	11:23:00	0.9986	475.740	49.433
2002/03/25	11:28:00	1.0819	488.112	10.650
2002/03/25	11:33:00	1.1653	464.718	8.294
2002/03/25	11:38:00	1.2486	476.082	8.711
2002/03/25	11:43:00	1.3319	453.059	52.870
2002/03/25	11:48:00	1.4153	458.507	31.532
2002/03/25	11:53:00	1.4986	462.100	19.691
2002/03/25	11:58:00	1.5819	460.305	10.359
2002/03/25	12:03:00	1.6653	455.288	37.400
2002/03/25	12:08:00	1.7486	456.209	11.987
2002/03/25	12:13:00	1.8319	453.485	39.344
2002/03/25	12:18:00	1.9153	456.895	6.375
2002/03/25	12:23:00	1.9986	455.357	5.854
2002/03/25	12:28:00	2.0819	447.726	43.500
2002/03/25	12:33:00	2.1653	456.021	11.736
2002/03/25	12:38:00	2.2486	468.648	7.119
2002/03/25	12:43:00	2.3319	419.942	12.857
2002/03/25	12:48:00	2.4153	418.664	28.861
2002/03/25	12:53:00	2.4986	417.895	40.871
2002/03/25	12:58:00	2.5819	415.680	11.245
2002/03/25	13:03:00	2.6653	404.173	6.196
2002/03/25	13:08:00	2.7486	409.668	18.332
2002/03/25	13:13:00	2.8319	426.654	3.730
2002/03/25	13:18:00	2.9153	438.471	4.491
2002/03/25	13:23:00	2.9986	444.811	6.974
2002/03/25	13:28:00	3.0819	444.545	9.822
2002/03/25	13:33:00	3.1653	439.208	10.290
2002/03/25	13:38:00	3.2486	432.343	9.681
2002/03/25	13:43:00	3.3319	426.120	9.336
2002/03/25	13:48:00	3.4153	418.920	9.581
2002/03/25	13:53:00	3.4986	414.133	8.555
2002/03/25	13:58:00	3.5819	408.933	8.130
2002/03/25	14:03:00	3.6653	403.998	7.772
2002/03/25	14:08:00	3.7486	400.148	7.094
2002/03/25	14:13:00	3.8319	396.151	7.105
2002/03/25	14:18:00	3.9153	392.790	7.061
2002/03/25	14:23:00	3.9986	388.241	6.800
2002/03/25	14:28:00	4.0819	385.823	6.705
2002/03/25	14:33:00	4.1653	368.868	12.216
2002/03/25	14:38:00	4.2486	347.492	49.979



Company Name M&M Exploration
Well Name Davis Ranch 3-22
Type of Test GOR Test
Date(s) of Test 3/25-3/26 2002



Date	Time	Cum.Time	Tubing	Static
		hr	psig	psig
2002/03/25	14:43:00	4.3319	351.679	2.872
2002/03/25	14:48:00	4.4153	362.431	55.669
2002/03/25	14:53:00	4.4986	357.780	4.235
2002/03/25	14:58:00	4.5819	332.919	3.068
2002/03/25	15:03:00	4.6653	317.959	20.639
2002/03/25	15:08:00	4.7486	317.011	2.119
2002/03/25	15:13:00	4.8319	323.793	13.134
2002/03/25	15:18:00	4.9153	360.283	4.820
2002/03/25	15:23:00	4.9986	333.408	2.892
2002/03/25	15:28:00	5.0819	327.200	2.397
2002/03/25	15:33:00	5.1653	324.797	3.301
2002/03/25	15:38:00	5.2486	329.465	30.315
2002/03/25	15:43:00	5.3319	331.210	1.725
2002/03/25	15:48:00	5.4153	343.824	3.915
2002/03/25	15:53:00	5.4986	343.612	2.755
2002/03/25	15:58:00	5.5819	347.350	2.320
2002/03/25	16:03:00	5.6653	348.084	3.478
2002/03/25	16:08:00	5.7486	379.166	4.133
2002/03/25	16:13:00	5.8319	351.015	18.219
2002/03/25	16:18:00	5.9153	352.011	43.291
2002/03/25	16:23:00	5.9986	368.486	2.056
2002/03/25	16:28:00	6.0819	377.621	2.206
2002/03/25	16:33:00	6.1653	383.716	3.414
2002/03/25	16:38:00	6.2486	367.717	1.806
2002/03/25	16:43:00	6.3319	380.745	2.222
2002/03/25	16:48:00	6.4153	377.038	3.394
2002/03/25	16:53:00	6.4986	369.967	1.336
2002/03/25	16:58:00	6.5819	375.291	27.122
2002/03/25	17:03:00	6.6653	377.741	3.313
2002/03/25	17:08:00	6.7486	368.884	28.557
2002/03/25	17:13:00	6.8319	372.595	1.309
2002/03/25	17:18:00	6.9153	369.154	2.191
2002/03/25	17:23:00	6.9986	382.916	3.705
2002/03/25	17:28:00	7.0819	398.667	4.913
2002/03/25	17:33:00	7.1653	404.394	7.727
2002/03/25	17:38:00	7.2486	404.811	8.921
2002/03/25	17:43:00	7.3319	403.949	8.955
2002/03/25	17:48:00	7.4153	402.355	9.629
2002/03/25	17:53:00	7.4986	395.817	9.940
2002/03/25	17:58:00	7.5819	391.384	9.152
2002/03/25	18:03:00	7.6653	387.647	9.134
2002/03/25	18:08:00	7.7486	383.863	8.778
2002/03/25	18:13:00	7.8319	381.944	7.582
2002/03/25	18:18:00	7.9153	360.914	5.505
2002/03/25	18:23:00	7.9986	393.690	0.551
2002/03/25	18:28:00	8.0819	351.579	27.803
2002/03/25	18:33:00	8.1653	374.523	0.864
2002/03/25	18:38:00	8.2486	378.058	1.031
2002/03/25	18:43:00	8.3319	363.218	0.544
2002/03/25	18:48:00	8.4153	383.951	1.494



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Date	Time	Cum. Time	Tubing	Static
		hr	psig	psig
2002/03/25	18:53:00	8.4986	400.422	3.312
2002/03/25	18:58:00	8.5819	409.164	4.644
2002/03/25	19:03:00	8.6653	413.207	6.274
2002/03/25	19:08:00	8.7486	420.660	8.470
2002/03/25	19:13:00	8.8319	370.869	-0.248
2002/03/25	19:18:00	8.9153	402.353	3.030
2002/03/25	19:23:00	8.9986	370.572	28.294
2002/03/25	19:28:00	9.0819	379.721	1.446
2002/03/25	19:33:00	9.1653	400.040	3.473
2002/03/25	19:38:00	9.2486	414.802	4.206
2002/03/25	19:43:00	9.3319	418.024	6.647
2002/03/25	19:48:00	9.4153	417.489	7.656
2002/03/25	19:53:00	9.4986	415.758	7.798
2002/03/25	19:58:00	9.5819	410.932	3.944
2002/03/25	20:03:00	9.6653	417.250	5.454
2002/03/25	20:08:00	9.7486	419.445	6.787
2002/03/25	20:13:00	9.8319	419.051	6.810
2002/03/25	20:18:00	9.9153	412.459	0.506
2002/03/25	20:23:00	9.9986	400.083	0.798
2002/03/25	20:28:00	10.0819	397.892	0.588
2002/03/25	20:33:00	10.1653	416.577	27.267
2002/03/25	20:38:00	10.2486	399.487	29.663
2002/03/25	20:43:00	10.3319	418.612	2.277
2002/03/25	20:48:00	10.4153	426.647	2.039
2002/03/25	20:53:00	10.4986	435.025	3.930
2002/03/25	20:58:00	10.5819	435.914	7.429
2002/03/25	21:03:00	10.6653	438.177	7.130
2002/03/25	21:08:00	10.7486	416.007	0.553
2002/03/25	21:13:00	10.8319	420.156	2.104
2002/03/25	21:18:00	10.9153	435.669	3.904
2002/03/25	21:23:00	10.9986	441.234	6.723
2002/03/25	21:28:00	11.0819	438.854	8.360
2002/03/25	21:33:00	11.1653	438.050	7.120
2002/03/25	21:38:00	11.2486	437.829	7.166
2002/03/25	21:43:00	11.3319	440.066	7.711
2002/03/25	21:48:00	11.4153	426.372	32.182
2002/03/25	21:53:00	11.4986	413.950	2.422
2002/03/25	21:58:00	11.5819	424.194	2.032
2002/03/25	22:03:00	11.6653	401.699	0.592
2002/03/25	22:08:00	11.7486	423.117	1.619
2002/03/25	22:13:00	11.8319	437.601	2.855
2002/03/25	22:18:00	11.9153	447.227	4.133
2002/03/25	22:23:00	11.9986	450.862	5.581
2002/03/25	22:28:00	12.0819	452.164	6.712
2002/03/25	22:33:00	12.1653	452.277	7.003
2002/03/25	22:38:00	12.2486	452.443	6.787
2002/03/25	22:43:00	12.3319	453.244	6.600
2002/03/25	22:48:00	12.4153	454.349	6.634
2002/03/25	22:53:00	12.4986	459.627	2.419
2002/03/25	22:58:00	12.5819	431.121	27.729



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Date(s) of Test 3/25-3/26 2002



Date	Time	Cum. Time	Tubing	Static
		hr	psig	psig
2002/03/25	23:03:00	12.6653	438.032	2.007
2002/03/25	23:08:00	12.7486	460.010	3.211
2002/03/25	23:13:00	12.8319	425.736	2.168
2002/03/25	23:18:00	12.9153	438.761	2.856
2002/03/25	23:23:00	12.9986	453.049	3.363
2002/03/25	23:28:00	13.0819	460.002	4.328
2002/03/25	23:33:00	13.1653	462.445	5.986
2002/03/25	23:38:00	13.2486	463.397	6.548
2002/03/25	23:43:00	13.3319	471.123	6.642
2002/03/25	23:48:00	13.4153	442.134	2.128
2002/03/25	23:53:00	13.4986	457.818	3.590
2002/03/25	23:58:00	13.5819	470.737	4.939
2002/03/26	00:03:00	13.6653	443.072	1.929
2002/03/26	00:08:00	13.7486	459.545	2.992
2002/03/26	00:13:00	13.8319	467.830	4.104
2002/03/26	00:18:00	13.9153	471.887	5.558
2002/03/26	00:23:00	13.9986	470.214	4.822
2002/03/26	00:28:00	14.0819	470.977	6.459
2002/03/26	00:33:00	14.1653	469.766	5.099
2002/03/26	00:38:00	14.2486	470.579	6.392
2002/03/26	00:43:00	14.3319	472.732	4.089
2002/03/26	00:48:00	14.4153	446.709	23.686
2002/03/26	00:53:00	14.4986	449.670	1.979
2002/03/26	00:58:00	14.5819	468.676	2.484
2002/03/26	01:03:00	14.6653	455.479	26.034
2002/03/26	01:08:00	14.7486	461.821	2.274
2002/03/26	01:13:00	14.8319	474.939	3.508
2002/03/26	01:18:00	14.9153	471.537	28.169
2002/03/26	01:23:00	14.9986	459.890	1.564
2002/03/26	01:28:00	15.0819	472.350	3.465
2002/03/26	01:33:00	15.1653	476.510	5.427
2002/03/26	01:38:00	15.2486	478.287	5.667
2002/03/26	01:43:00	15.3319	482.457	6.133
2002/03/26	01:48:00	15.4153	453.746	14.765
2002/03/26	01:53:00	15.4986	458.026	1.420
2002/03/26	01:58:00	15.5819	476.258	2.888
2002/03/26	02:03:00	15.6653	457.179	15.336
2002/03/26	02:08:00	15.7486	471.143	2.511
2002/03/26	02:13:00	15.8319	466.758	2.726
2002/03/26	02:18:00	15.9153	479.655	3.481
2002/03/26	02:23:00	15.9986	485.324	4.386
2002/03/26	02:28:00	16.0819	486.192	6.503
2002/03/26	02:33:00	16.1653	487.475	6.751
2002/03/26	02:38:00	16.2486	464.020	15.556
2002/03/26	02:43:00	16.3319	475.860	2.864
2002/03/26	02:48:00	16.4153	460.748	24.274
2002/03/26	02:53:00	16.4986	455.304	1.800
2002/03/26	02:58:00	16.5819	474.486	2.752
2002/03/26	03:03:00	16.6653	467.831	28.363
2002/03/26	03:08:00	16.7486	475.547	2.293



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Well Name Davis Ranch 3-22
Type of Test GOR Test
Date(s) of Test 3/25-3/26 2002



Date	Time	Cum.Time	Tubing	Static
		hr	psig	psig
2002/03/26	03:13:00	16.8319	484.743	3.892
2002/03/26	03:18:00	16.9153	487.859	19.270
2002/03/26	03:23:00	16.9986	470.509	2.284
2002/03/26	03:28:00	17.0819	482.638	3.933
2002/03/26	03:33:00	17.1653	491.323	6.124
2002/03/26	03:38:00	17.2486	463.242	1.612
2002/03/26	03:43:00	17.3319	467.967	2.419
2002/03/26	03:48:00	17.4153	484.418	3.319
2002/03/26	03:53:00	17.4986	468.377	19.120
2002/03/26	03:58:00	17.5819	477.531	2.366
2002/03/26	04:03:00	17.6653	474.745	2.259
2002/03/26	04:08:00	17.7486	468.444	0.761
2002/03/26	04:13:00	17.8319	465.233	1.030
2002/03/26	04:18:00	17.9153	467.974	1.793
2002/03/26	04:23:00	17.9986	487.073	3.047
2002/03/26	04:28:00	18.0819	466.275	0.911
2002/03/26	04:33:00	18.1653	465.427	0.913
2002/03/26	04:38:00	18.2486	462.088	0.499
2002/03/26	04:43:00	18.3319	483.088	2.634
2002/03/26	04:48:00	18.4153	473.021	2.989
2002/03/26	04:53:00	18.4986	471.270	6.588
2002/03/26	04:58:00	18.5819	476.066	1.915
2002/03/26	05:03:00	18.6653	472.990	0.636
2002/03/26	05:08:00	18.7486	464.858	0.733
2002/03/26	05:13:00	18.8319	478.873	2.254
2002/03/26	05:18:00	18.9153	494.214	3.482
2002/03/26	05:23:00	18.9986	469.053	3.212
2002/03/26	05:28:00	19.0819	483.356	3.020
2002/03/26	05:33:00	19.1653	492.778	3.601
2002/03/26	05:38:00	19.2486	495.462	5.202
2002/03/26	05:43:00	19.3319	496.609	5.907
2002/03/26	05:48:00	19.4153	484.654	27.265
2002/03/26	05:53:00	19.4986	481.871	1.278
2002/03/26	05:58:00	19.5819	475.430	1.286
2002/03/26	06:03:00	19.6653	470.466	24.215
2002/03/26	06:08:00	19.7486	475.424	0.595
2002/03/26	06:13:00	19.8319	472.106	0.642
2002/03/26	06:18:00	19.9153	477.419	0.820
2002/03/26	06:23:00	19.9986	475.708	25.908
2002/03/26	06:28:00	20.0819	480.114	1.878
2002/03/26	06:33:00	20.1653	480.116	0.729
2002/03/26	06:38:00	20.2486	479.199	12.769
2002/03/26	06:43:00	20.3319	470.673	25.323
2002/03/26	06:48:00	20.4153	489.446	6.458
2002/03/26	06:53:00	20.4986	481.266	0.473
2002/03/26	06:58:00	20.5819	480.915	19.306
2002/03/26	07:03:00	20.6653	491.831	9.929
2002/03/26	07:08:00	20.7486	489.935	2.422
2002/03/26	07:13:00	20.8319	478.411	24.808
2002/03/26	07:18:00	20.9153	481.054	5.503



Company Name M&M Exploration
Well Name Davis Ranch 3-22
Type of Test GOR Test
Date(s) of Test 3/25-3/26 2002



Date	Time	Cum.Time	Tubing	Static
		hr	psig	psig
2002/03/26	07:23:00	20.9986	485.617	1.246
2002/03/26	07:28:00	21.0819	485.627	2.327
2002/03/26	07:33:00	21.1653	482.423	22.866
2002/03/26	07:38:00	21.2486	482.274	1.339
2002/03/26	07:43:00	21.3319	494.607	2.830
2002/03/26	07:48:00	21.4153	504.147	3.669
2002/03/26	07:53:00	21.4986	507.969	4.828
2002/03/26	07:58:00	21.5819	514.307	4.987
2002/03/26	08:03:00	21.6653	485.428	25.421
2002/03/26	08:08:00	21.7486	493.239	2.481
2002/03/26	08:13:00	21.8319	478.967	24.510
2002/03/26	08:18:00	21.9153	498.700	2.912
2002/03/26	08:23:00	21.9986	478.727	25.523
2002/03/26	08:28:00	22.0819	477.566	4.019
2002/03/26	08:33:00	22.1653	493.309	2.769
2002/03/26	08:38:00	22.2486	506.957	4.076
2002/03/26	08:43:00	22.3319	486.279	24.795
2002/03/26	08:48:00	22.4153	484.719	2.784
2002/03/26	08:53:00	22.4986	494.864	24.015
2002/03/26	08:58:00	22.5819	492.139	3.468
2002/03/26	09:03:00	22.6653	495.584	26.247
2002/03/26	09:08:00	22.7486	494.056	3.172
2002/03/26	09:13:00	22.8319	490.628	3.538
2002/03/26	09:18:00	22.9153	440.705	90.737
2002/03/26	09:23:00	22.9986	390.693	95.144
2002/03/26	09:28:00	23.0819	362.356	85.975
2002/03/26	09:33:00	23.1653	359.277	76.120
2002/03/26	09:38:00	23.2486	356.821	68.751
2002/03/26	09:43:00	23.3319	366.847	72.701
2002/03/26	09:48:00	23.4153	289.041	92.270
2002/03/26	09:53:00	23.4986	272.978	54.435
2002/03/26	09:58:00	23.5819	310.122	40.426
2002/03/26	10:03:00	23.6653	391.746	24.664
2002/03/26	10:08:00	23.7486	401.290	55.651
2002/03/26	10:13:00	23.8319	343.740	81.423
2002/03/26	10:18:00	23.9153	343.859	58.990
2002/03/26	10:23:00	23.9986	352.513	57.704
2002/03/26	10:28:00	24.0819	394.033	16.325
2002/03/26	10:33:00	24.1653	366.513	58.957
2002/03/26	10:38:00	24.2486	379.234	52.276
2002/03/26	10:43:00	24.3319	358.904	22.232
2002/03/26	10:48:00	24.4153	355.223	18.717
2002/03/26	10:53:00	24.4986	363.769	47.681

M&M Exploration
22 34s 15w Barber KS
Start Test Date: 2002/03/25

FieldNotes Field Measurements

Davis Ranch 3-22

	Date	Clock Time	Comments	Tubing		Static1		Meter1 Temp °F	Measured Fld1 Lev in	Total Oil Vol bbl	Oil1 Rate bbl/d	Gas1	
				Pres	psl(g)	Pres	psl(g)					Rate	GOR
1	2002/03/25	10:45:00			593.12	43.40	36.00	38.00	0.000			0.076	
2		11:33:00			474.72	8.29	38.00					0.024	
3		12:33:00			456.02	11.74	36.00					0.047	
4		13:33:00			439.21	10.29	38.00					0.043	
5		14:33:00			368.86	12.21	38.00	45.000	11.690	73.832	0.048	6.5e-4	
6		15:33:00			324.80	3.30	40.00					0.018	
7		16:33:00			383.70	3.40	40.00					0.018	
8		17:33:00			404.39	7.70	40.00					0.035	
9		18:33:00			374.52	0.86	40.00					0.006	
10		19:33:00			400.04	3.47	40.00					0.019	
11		20:33:00			416.57	27.27	40.00					0.083	
12		21:33:00			438.05	7.12	40.00					0.033	
13		22:33:00			452.27	7.00	38.00					0.033	
14		23:33:00			462.44	5.99	38.00					0.030	
15	2002/03/26	00:33:00			469.77	5.10	38.00					0.026	
16		01:33:00			476.51	5.43	38.00					0.027	
17		02:33:00			487.48	6.75	38.00					0.032	
18		03:33:00			491.32	6.12	38.00					0.031	
19		04:33:00			465.43	0.91	38.00					0.007	
20		05:33:00			492.78	3.60	38.00					0.019	
21		06:33:00			480.12	0.73	38.00					0.006	
22		07:33:00			482.42	22.87	38.00					0.073	
23		08:33:00			493.31	2.77	38.00					0.016	
24		09:33:00			359.28	76.12	38.00					0.185	
25		10:33:00			366.51	58.96	38.00					0.149	
26		10:55:00			366.00	48.00	44.00	86.000	80.160	80.685	0.126	0.0	

2002/03/25 10:45:00 To 2002/03/26 06:33:00

Gas 0.025 Cum. 0.025 MMCF
Oil 11.690 Cum. 11.690 bbl
Water 0.000 Cum. 0.000 bbl

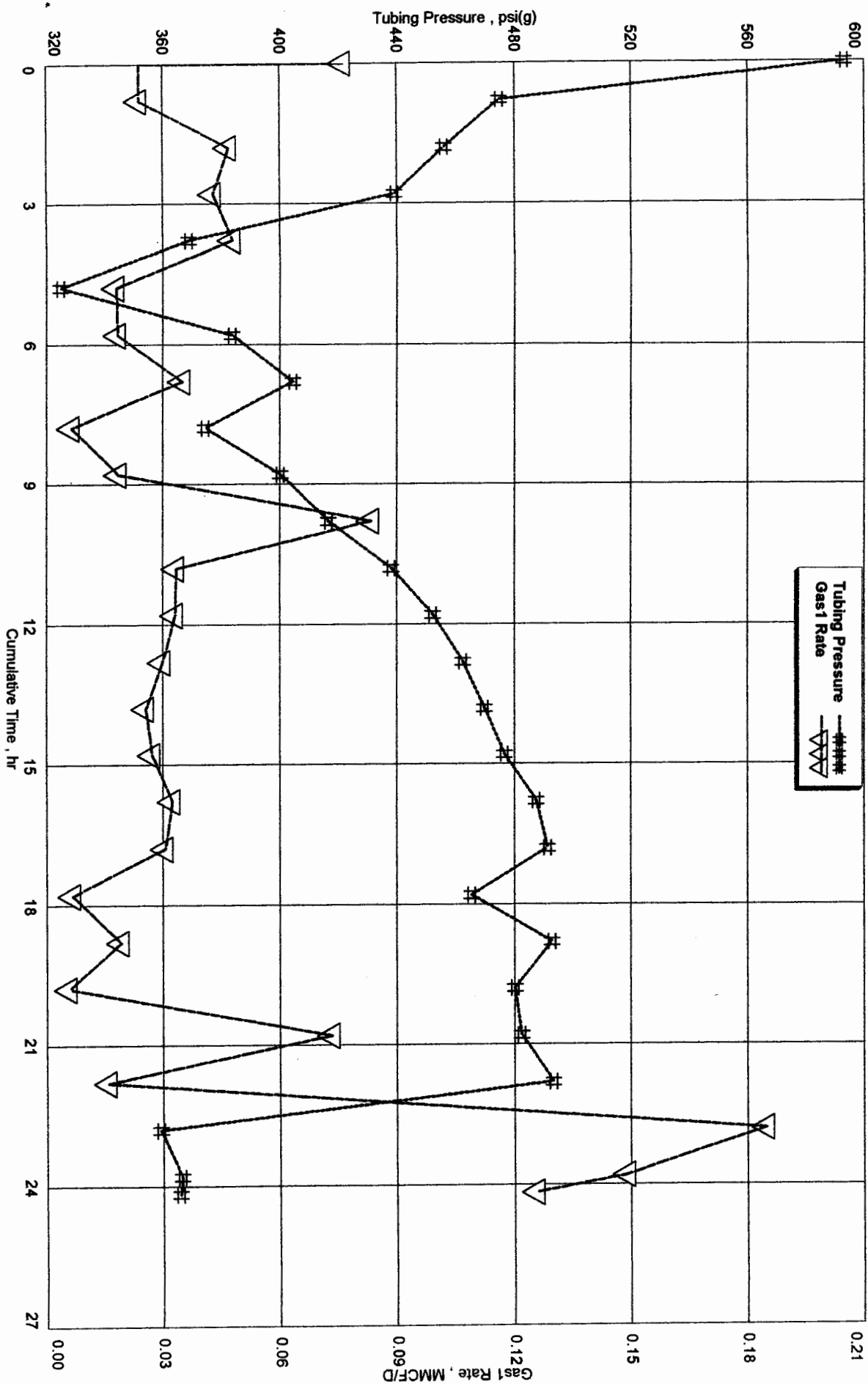
Davis Ranch 3-22

Print Filter Off

M&M Exploration
 22 34s 15w Barber KS
 Start Test Date: 2002/03/25

Davis Ranch 3-22

Plot





Company Name M&M Exploration
Well Name Davis Ranch 3-22
Type of Test GOR Test
Date(s) of Test 3/25-3/26 2002



M&M Davis Trust

