



30-045-06312

2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: MG180038
Cust No: 50000-10210

Well/Lease Information

Customer Name: M & G DRILLING CO., INC.
Well Name: MARRON #42; CSG
County/State:
Location:
Field:
Formation:
Cust. Stn. No.:

Source: CASING
Well Flowing: Y
Pressure: 100 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: 14 MCF/D
Sample Method:
Sample Date: 10/01/2018
Sample Time: 1.52 PM
Sampled By: DANIEL
Sampled by (CO): M&G DRILLING

NMOCB
OCT 24 2018
DISTRICT III

Heat Trace:
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5428	0.5357	0.0600	0.00	0.0052
CO2	0.5321	0.5252	0.0910	0.00	0.0081
Methane	73.8870	72.9238	12.5770	746.26	0.4093
Ethane	12.5803	12.4163	3.3780	222.63	0.1306
Propane	7.1917	7.0980	1.9890	180.95	0.1095
Iso-Butane	1.1175	1.1029	0.3670	36.34	0.0224
N-Butane	2.1258	2.0981	0.6730	69.35	0.0427
I-Pentane	0.6403	0.6320	0.2350	25.62	0.0160
N-Pentane	0.5244	0.5176	0.1910	21.02	0.0131
Hexane Plus	0.8581	0.8469	0.3840	45.23	0.0284
Total	100.0000	98.6965	19.9450	1347.40	0.7852

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0043
BTU/CU.FT IDEAL: 1350.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1356.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1332.8
DRY BTU @ 15.025: 1383.6
REAL SPECIFIC GRAVITY: 0.7883

CYLINDER #: 6104
CYLINDER PRESSURE: 86 PSIG
ANALYSIS DATE: 10/08/2018
ANALYSIS TIME: 03:19:02 PM
ANALYSIS RUN BY: PATRICIA KING

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500

Last Cal/Verify: 10/10/2018

GC Method: C6+ Gas



M & G DRILLING CO., INC.
WELL ANALYSIS COMPARISON

Lease: MARRON #42; CSG
Stn. No.:
Mtr. No.:

CASING

10/10/2018
50000-10210

Smpl Date: 10/01/2018
Test Date: 10/08/2018
Run No: MG180038

Nitrogen: 0.5428
CO2: 0.5321
Methane: 73.8870
Ethane: 12.5803
Propane: 7.1917
I-Butane: 1.1175
N-Butane: 2.1258
I-Pentane: 0.6403
N-Pentane: 0.5244
Hexane+: 0.8581

BTU: 1356.4
GPM: 19.9450
SPG: 0.7883



2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: MG180039
Cust No: 50000-10215

Well/Lease Information

Customer Name: M & G DRILLING CO., INC.
Well Name: MARRON #42; INT CSG
County/State:
Location:
Field:
Formation:
Cust. Stn. No.:

Source: INTERMEDIATE CASING
Well Flowing: Y
Pressure: 100 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: 14 MCF/D
Sample Method:
Sample Date: 10/02/2018
Sample Time: 12.02 PM
Sampled By: DANIEL
Sampled by (CO): M&G DRILLING

Heat Trace:
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5481	0.5414	0.0610	0.00	0.0053
CO2	0.5303	0.5239	0.0910	0.00	0.0081
Methane	73.7476	72.8509	12.5540	744.85	0.4085
Ethane	12.5261	12.3738	3.3640	221.67	0.1300
Propane	7.1596	7.0726	1.9810	180.14	0.1090
Iso-Butane	1.1114	1.0979	0.3650	36.14	0.0223
N-Butane	2.1184	2.0926	0.6710	69.11	0.0425
I-Pentane	0.6431	0.6353	0.2360	25.73	0.0160
N-Pentane	0.5351	0.5286	0.1950	21.45	0.0133
Hexane Plus	1.0803	1.0672	0.4840	56.94	0.0358
Total	100.0000	98.7842	20.0020	1356.04	0.7908

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0044
BTU/CU.FT IDEAL: 1359.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1365.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1341.4
DRY BTU @ 15.025: 1392.5
REAL SPECIFIC GRAVITY: 0.794

CYLINDER #: 4212
CYLINDER PRESSURE: 85 PSIG
ANALYSIS DATE: 10/08/2018
ANALYSIS TIME: 03:38:05 PM
ANALYSIS RUN BY: PATRICIA KING

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500

Last Cal/Verify: 10/10/2018

GC Method: C6+ Gas



M & G DRILLING CO., INC.
WELL ANALYSIS COMPARISON

Lease: MARRON #42; INT CSG
Stn. No.:
Mtr. No.:

INTERMEDIATE CASING

10/10/2018
50000-10215

Smpl Date: 10/02/2018
Test Date: 10/08/2018
Run No: MG180039

Nitrogen: 0.5481
CO2: 0.5303
Methane: 73.7476
Ethane: 12.5261
Propane: 7.1596
I-Butane: 1.1114
N-Butane: 2.1184
I-Pentane: 0.6431
N-Pentane: 0.5351
Hexane+: 1.0803

BTU: 1365.2
GPM: 20.0020
SPG: 0.7940



2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: MG180040
Cust No: 50000-10220

Well/Lease Information

Customer Name: M & G DRILLING CO., INC.
Well Name: MARRON #42; TBG
County/State:
Location:
Field:
Formation:
Cust. Stn. No.:

Source: TUBING
Well Flowing: Y
Pressure: 100 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: 14 MCF/D
Sample Method:
Sample Date: 10/01/2018
Sample Time: 1.42 PM
Sampled By: DANIEL
Sampled by (CO):

Heat Trace:
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5430	0.5370	0.0600	0.00	0.0053
CO2	0.5243	0.5185	0.0900	0.00	0.0080
Methane	73.5048	72.6864	12.5120	742.40	0.4071
Ethane	12.8563	12.7132	3.4520	227.52	0.1335
Propane	7.5048	7.4213	2.0760	188.83	0.1143
Iso-Butane	1.1660	1.1530	0.3830	37.92	0.0234
N-Butane	2.1762	2.1520	0.6890	70.99	0.0437
I-Pentane	0.6396	0.6325	0.2350	25.59	0.0159
N-Pentane	0.5116	0.5059	0.1860	20.51	0.0127
Hexane Plus	0.5734	0.5670	0.2570	30.22	0.0190
Total	100.0000	98.8868	19.9400	1343.98	0.7828

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0043
BTU/CU.FT IDEAL: 1347.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1352.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1329.4
DRY BTU @ 15.025: 1380.0
REAL SPECIFIC GRAVITY: 0.7859

CYLINDER #: 6055
CYLINDER PRESSURE: 143 PSIG
ANALYSIS DATE: 10/08/2018
ANALYSIS TIME: 03:01:34 AM
ANALYSIS RUN BY: PATRICIA KING

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500

Last Cal/Verify: 10/10/2018

GC Method: C6+ Gas



M & G DRILLING CO., INC.
WELL ANALYSIS COMPARISON

Lease: MARRON #42; TBG
Stn. No.:
Mtr. No.:

TUBING

10/10/2018
50000-10220

Smpl Date: 10/01/2018
Test Date: 10/08/2018
Run No: MG180040
Nitrogen: 0.5430
CO2: 0.5243
Methane: 73.5048
Ethane: 12.8563
Propane: 7.5048
I-Butane: 1.1660
N-Butane: 2.1762
I-Pentane: 0.6396
N-Pentane: 0.5116
Hexane+: 0.5734
BTU: 1352.9
GPM: 19.9400
SPG: 0.7859