



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

Analysis No: DU150708
Cust No: 23000-22645

30-045-26406

Well/Lease Information

Customer Name: DUGAN PRODUCTION CORP.
Well Name: RAINBOW SEEKER #1; TBG
County/State: SAN JUAN NM
Location:
Field:
Formation:
Cust. Stn. No.:

Source: TUBING
Pressure: 205 PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 11/09/2015
Sampled By: JIMMY DAVIS
Foreman/Engr.: JIMMY DAVIS

Remarks: BRADENHEAD TESTING

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.448	0.0490	0.00	0.0043
CO2	1.210	0.2070	0.00	0.0184
Methane	79.398	13.5040	801.92	0.4398
Ethane	11.436	3.0680	202.38	0.1187
Propane	4.850	1.3410	122.03	0.0738
Iso-Butane	0.692	0.2270	22.50	0.0139
N-Butane	1.153	0.3650	37.61	0.0231
I-Pentane	0.295	0.1080	11.80	0.0073
N-Pentane	0.179	0.0650	7.18	0.0045
Hexane Plus	0.339	0.1520	17.87	0.0112
Total	100.000	19.0860	1223.30	0.7151

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0035
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1230.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1208.9
REAL SPECIFIC GRAVITY: 0.7173

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

DRY BTU @ 14.650: 1223.6
DRY BTU @ 14.696: 1227.5
DRY BTU @ 14.730: 1230.3
DRY BTU @ 15.025: 1254.9

CYLINDER #: 4125
CYLINDER PRESSURE: 206 PSIG
DATE RUN: 11/11/15 12:00 AM
ANALYSIS RUN BY: PATRICIA KING



DUGAN PRODUCTION CORP.
WELL ANALYSIS COMPARISON

Lease: RAINBOW SEEKER #1; TBG
Stn. No.:
Mtr. No.:

TUBING

11/12/2015
23000-22645

Smpl Date: 11/09/2015
Test Date: 11/11/2015
Run No: DU150708

Nitrogen: 0.448
CO2: 1.210
Methane: 79.398
Ethane: 11.436
Propane: 4.850
I-Butane: 0.692
N-Butane: 1.153
I-Pentane: 0.295
N-Pentane: 0.179
Hexane+: 0.339

BTU: 1230.3
GPM: 19.0860
SPG: 0.7173



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

Analysis No: DU150685
Cust No: 23000-22550

Well/Lease Information

Customer Name: DUGAN PRODUCTION CORP.
Well Name: RAINBOW SEEKER #1
County/State: SAN JUAN NM
Location:
Field:
Formation:
Cust. Stn. No.:

Source: BRADENHEAD
Pressure: 10 PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 10/26/2015
Sampled By: JIM DAVIS
Foreman/Engr.:

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.312	0.0340	0.00	0.0030
CO2	0.144	0.0250	0.00	0.0022
Methane	78.024	13.2810	788.04	0.4322
Ethane	8.463	2.2720	149.77	0.0879
Propane	7.740	2.1410	194.74	0.1178
Iso-Butane	1.314	0.4320	42.73	0.0264
N-Butane	1.312	0.4150	42.80	0.0263
I-Pentane	0.442	0.1620	17.68	0.0110
N-Pentane	0.449	0.1630	18.00	0.0112
Hexane Plus	1.800	0.8060	94.88	0.0596
Total	100.000	19.7310	1348.65	0.7775

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0043
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1357.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1334.0
REAL SPECIFIC GRAVITY: 0.7806

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

DRY BTU @ 14.650: 1350.2
DRY BTU @ 14.696: 1354.5
DRY BTU @ 14.730: 1357.6
DRY BTU @ 15.025: 1384.8

CYLINDER #: 4008
CYLINDER PRESSURE: 12 PSIG
DATE RUN: 10/28/15 9:05 AM
ANALYSIS RUN BY: PATRICIA KING



DUGAN PRODUCTION CORP.
WELL ANALYSIS COMPARISON

Lease: RAINBOW SEEKER #1
Stn. No.:
Mtr. No.:

BRADENHEAD

10/30/2015
23000-22550

Smpl Date: 10/26/2015
Test Date: 10/28/2015
Run No: DU150685

Nitrogen: 0.312
CO2: 0.144
Methane: 78.024
Ethane: 8.463
Propane: 7.740
I-Butane: 1.314
N-Butane: 1.312
I-Pentane: 0.442
N-Pentane: 0.449
Hexane+: 1.800

BTU: 1357.6
GPM: 19.7310
SPG: 0.7806