



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

Analysis No: EN170244
Cust No: 25400-11845

Well/Lease Information

Customer Name: ENERVEST
Well Name: JICARILLA CONT. 155 #18; CSG
County/State: RIO ARRIBA NM
Location: 31-26N-05W
Field:
Formation:
Cust. Stn. No.: API 300390622400

Source: CASING
Well Flowing: Y
Pressure: 4 PSIG
Flow Temp: DEG. F
Ambient Temp: 44 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 11/22/2017
Sample Time: 10.10 AM
Sampled By: LEROY MARTINEZ
Sampled by (CO): ENERVEST

OIL CONS. DIV DIST. 3
DEC 01 2017

Remarks: PRESSURED WITH HELIUM TO 30 LBS.

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4074	0.1771	0.0450	0.00	0.0039
CO2	0.3062	0.1331	0.0520	0.00	0.0047
Methane	86.1928	37.4654	14.6540	870.55	0.4774
Ethane	7.1470	3.1066	1.9170	126.48	0.0742
Propane	3.3966	1.4764	0.9380	85.46	0.0517
Iso-Butane	0.4790	0.2082	0.1570	15.58	0.0096
N-Butane	0.8793	0.3822	0.2780	28.69	0.0176
I-Pentane	0.2643	0.1149	0.0970	10.57	0.0066
N-Pentane	0.2163	0.0940	0.0790	8.67	0.0054
Hexane Plus	0.7111	0.3091	0.3180	37.48	0.0235
Total	100.0000	43.4670	18.5350	1183.48	0.6747

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0031
BTU/CU.FT IDEAL: 1186.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1189.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1169.2
DRY BTU @ 15.025: 1213.7
REAL SPECIFIC GRAVITY: 0.6765

CYLINDER #: 102
CYLINDER PRESSURE: PSIG
DATE RUN: 11/27/17 10:10 AM
ANALYSIS RUN BY: RICHARD WILSON

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

GPA Standard: GPA-2261

GC: Danalyzer Model 500

GC Method: C6+ Gas

Last Cal/Verify: 11/28/2017



ENERVEST
WELL ANALYSIS COMPARISON

Lease: JICARILLA CONT. 155 #18; CSG
Stn. No.: API 300390622400
Mtr. No.:

CASING

11/28/2017
25400-11845

Smpl Date: 11/22/2017
Test Date: 11/27/2017
Run No: EN170244
Nitrogen: 0.4074
CO2: 0.3062
Methane: 86.1928
Ethane: 7.1470
Propane: 3.3966
I-Butane: 0.4790
N-Butane: 0.8793
I-Pentane: 0.2643
N-Pentane: 0.2163
Hexane+: 0.7111
BTU: 1189.9
GPM: 18.5350
SPG: 0.6765



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

Analysis No: EN170243
Cust No: 25400-11840

Well/Lease Information

Customer Name: ENERVEST
Well Name: JICARILLA CONT. 155 #18; BHD
County/State: RIO ARRIBA NM
Location: 31-26N-05W
Field:
Formation:
Cust. Stn. No.: API 300390622400

Source: BRADENHEAD
Well Flowing: Y
Pressure: 3 PSIG
Flow Temp: DEG. F
Ambient Temp: 44 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 11/22/2017
Sample Time: 10.20 AM
Sampled By: LEROY MARTINEZ
Sampled by (CO): ENERVEST

Remarks: PRESSURED WITH HELIUM TO 30 LBS.

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3823	0.1501	0.0420	0.00	0.0037
CO2	0.2162	0.0849	0.0370	0.00	0.0033
Methane	86.7941	34.0784	14.7550	876.62	0.4808
Ethane	7.0623	2.7729	1.8940	124.98	0.0733
Propane	3.2870	1.2906	0.9080	82.70	0.0500
Iso-Butane	0.4577	0.1797	0.1500	14.88	0.0092
N-Butane	0.8234	0.3233	0.2600	26.86	0.0165
I-Pentane	0.2432	0.0955	0.0890	9.73	0.0061
N-Pentane	0.1933	0.0759	0.0700	7.75	0.0048
Hexane Plus	0.5405	0.2122	0.2420	28.49	0.0179
Total	100.0000	39.2635	18.4470	1172.02	0.6656

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.003
BTU/CU.FT IDEAL: 1174.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1178.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1157.8
DRY BTU @ 15.025: 1201.9
REAL SPECIFIC GRAVITY: 0.6673

CYLINDER #: 104
CYLINDER PRESSURE: PSIG
DATE RUN: 11/27/17 10:20 AM
ANALYSIS RUN BY: RICHARD WILSON

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: 11/28/2017

GC Method: C6+ Gas



ENERVEST
WELL ANALYSIS COMPARISON

Lease: JICARILLA CONT. 155 #18; BHD
Stn. No.: API 300390622400
Mtr. No.:

BRADENHEAD

11/28/2017
25400-11840

Smpl Date: 11/22/2017
Test Date: 11/27/2017
Run No: EN170243
Nitrogen: 0.3823
CO2: 0.2162
Methane: 86.7941
Ethane: 7.0623
Propane: 3.2870
I-Butane: 0.4577
N-Butane: 0.8234
I-Pentane: 0.2432
N-Pentane: 0.1933
Hexane+: 0.5405
BTU: 1178.3
GPM: 18.4470
SPG: 0.6673