



NMOCB
DEC 20 2019
DISTRICT III

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

Analysis No: DR190034
Cust No: 21300-10455

Well/Lease Information

Customer Name: D.J.R.
Well Name: JICARILLA APACHE B 9; TBG
County/State: RIO ARRIBA NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 30-039-05420

Source: TUBING
Well Flowing: Y
Pressure: 19 PSIG
Flow Temp: DEG. F
Ambient Temp: 35 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 12/11/2019
Sample Time: 10.40 AM
Sampled By: J. HARTER
Sampled by (CO): COTTONWOOD

Heat Trace: N

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.7134	0.7171	0.0790	0.00	0.0069
CO2	0.4989	0.5015	0.0850	0.00	0.0076
Methane	76.8881	77.2875	13.0840	776.57	0.4259
Ethane	12.7718	12.8381	3.4280	226.02	0.1326
Propane	4.7098	4.7343	1.3020	118.50	0.0717
Iso-Butane	0.9254	0.9302	0.3040	30.09	0.0186
N-Butane	1.1871	1.1933	0.3760	38.73	0.0238
I-Pentane	0.4725	0.4750	0.1730	18.90	0.0118
N-Pentane	0.3420	0.3438	0.1240	13.71	0.0085
Hexane Plus	1.4910	1.4987	0.6670	78.59	0.0493
Total	100.0000	100.5195	19.6220	1301.12	0.7567

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.004
BTU/CU.FT IDEAL: 1304.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1309.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1286.6
DRY BTU @ 15.025: 1335.6
REAL SPECIFIC GRAVITY: 0.7594

CYLINDER #: 4132
CYLINDER PRESSURE: 21 PSIG
ANALYSIS DATE: 12/17/2019
ANALYSIS TIME: 01:09:44 PM
ANALYSIS RUN BY: SHYANN ELLEDGE

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: 12/18/2019

GC Method: C6+ Gas



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

Analysis No: DR190033
Cust No: 21300-10450

Well/Lease Information

Customer Name: D.J.R.
Well Name: JICARILLA APACHE B 9; CSG
County/State: RIO ARRIBA NM
Location:
Lease/PA/CA:
Formation:
Cust. Strn. No.: API # 30-039-05420

Source: CASING
Well Flowing: Y
Pressure: 194 PSIG
Flow Temp: DEG. F
Ambient Temp: 35 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 12/11/2019
Sample Time: 10.45 AM
Sampled By: J. HARTER
Sampled by (CO): COTTONWOOD

Heat Trace: N

Remarks:

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6975	0.7093	0.0770	0.00	0.0067
CO2	0.4973	0.5057	0.0850	0.00	0.0076
Methane	77.1685	78.4685	13.1260	779.40	0.4274
Ethane	13.6921	13.9228	3.6740	242.31	0.1422
Propane	4.9446	5.0279	1.3670	124.41	0.0753
Iso-Butane	0.8304	0.8444	0.2730	27.00	0.0167
N-Butane	1.0713	1.0894	0.3390	34.95	0.0215
I-Pentane	0.4132	0.4202	0.1520	16.53	0.0103
N-Pentane	0.2531	0.2574	0.0920	10.15	0.0063
Hexane Plus	0.4320	0.4393	0.1930	22.77	0.0143
Total	100.0000	101.6849	19.3780	1257.52	0.7282

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
BTU/CU.FT IDEAL: 1260.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1265.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1243.0
DRY BTU @ 15.025: 1290.3
REAL SPECIFIC GRAVITY: 0.7306

CYLINDER #: 6036
CYLINDER PRESSURE: 180 PSIG
ANALYSIS DATE: 12/17/2019
ANALYSIS TIME: 12:33:32 AM
ANALYSIS RUN BY: SHYANN ELLEDGE

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: 12/18/2019

GC Method: C6+ Gas



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

Analysis No: DR190032
Cust No: 21300-10445

Well/Lease Information

Customer Name: D.J.R.
Well Name: JICARILLA APACHE B 9; BHD
County/State: RIO ARRIBA NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 30-039-05420

Source: BRADENHEAD
Well Flowing: Y
Pressure: 183 PSIG
Flow Temp: DEG. F
Ambient Temp: 35 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 12/11/2019
Sample Time: 10.50 AM
Sampled By: J. HARTER
Sampled by (CO): COTTONWOOD

Heat Trace: N

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.7031	0.7142	0.0780	0.00	0.0068
CO2	0.4562	0.4634	0.0780	0.00	0.0069
Methane	77.5751	78.8025	13.1950	783.51	0.4297
Ethane	13.6765	13.8929	3.6700	242.03	0.1420
Propane	4.7704	4.8459	1.3190	120.03	0.0726
Iso-Butane	0.7791	0.7914	0.2560	25.34	0.0156
N-Butane	1.0218	1.0380	0.3230	33.33	0.0205
I-Pentane	0.3921	0.3983	0.1440	15.69	0.0098
N-Pentane	0.2370	0.2407	0.0860	9.50	0.0059
Hexane Plus	0.3887	0.3949	0.1740	20.49	0.0129
Total	100.0000	101.5822	19.3230	1249.92	0.7227

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
BTU/CU.FT IDEAL: 1252.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1257.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1235.4
DRY BTU @ 15.025: 1282.5
REAL SPECIFIC GRAVITY: 0.725

CYLINDER #: 4153
CYLINDER PRESSURE: 184 PSIG
ANALYSIS DATE: 12/17/2019
ANALYSIS TIME: 12:50:52 AM
ANALYSIS RUN BY: SHYANN ELLEDGE

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: 12/18/2019

GC Method: C6+ Gas