

30-039-07117



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

Analysis No: LG170047
Cust No: 46600-10685

Well/Lease Information

Customer Name: LOGOS OPERATING LLC
Well Name: JICARILLA 89 #4; CSG
County/State: RIO ARRIBA NM
Location:
Field:
Formation: PC/MV
Cust. Stn. No.:

Source: CASING
Pressure: 130 PSIG
Sample Temp: DEG. F
Well Flowing: N
Date Sampled: 03/02/2017
Sampled By: EUGENE BURBANK
Foreman/Engr.:

OIL CONS. DIV DIST. 3
MAY 30 2017

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.984	0.1090	0.00	0.0095
CO2	0.178	0.0300	0.00	0.0027
Methane	80.801	13.7430	816.09	0.4476
Ethane	8.347	2.2400	147.72	0.0867
Propane	6.044	1.6710	152.07	0.0920
Iso-Butane	1.193	0.3920	38.80	0.0239
N-Butane	1.359	0.4300	44.33	0.0273
I-Pentane	0.424	0.1560	16.96	0.0106
N-Pentane	0.279	0.1010	11.18	0.0070
Hexane Plus	0.391	0.1750	20.61	0.0129
Total	100.000	19.0470	1247.77	0.7201

* @ 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): 1255.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1233.2
REAL SPECIFIC GRAVITY: 0.7224

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

DRY BTU @ 14.650: 1248.2
DRY BTU @ 14.696: 1252.1
DRY BTU @ 14.730: 1255.0
DRY BTU @ 15.025: 1280.1

CYLINDER #: 4212
CYLINDER PRESSURE: 143 PSIG
DATE RUN: 3/10/17 9:35 AM
ANALYSIS RUN BY: Shyann Elledge

30-039-67117



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

Analysis No: LG170046
Cust No: 46600-10680

Well/Lease Information

Customer Name: LOGOS OPERATING LLC
Well Name: JICARILLA 89 #4; BHD
County/State: RIO ARRIBA NM
Location:
Field:
Formation: PC/MV
Cust. Stn. No.:

Source: BRADENHEAD
Pressure: 101 PSIG
Sample Temp: DEG. F
Well Flowing: N
Date Sampled: 03/02/2017
Sampled By: EUGENE BURBANK
Foreman/Engr.:

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.951	0.1050	0.00	0.0092
CO2	0.007	0.0010	0.00	0.0001
Methane	79.258	13.4840	800.50	0.4390
Ethane	8.473	2.2740	149.95	0.0880
Propane	6.665	1.8430	167.70	0.1015
Iso-Butane	1.459	0.4790	47.45	0.0293
N-Butane	1.719	0.5440	56.08	0.0345
I-Pentane	0.605	0.2220	24.21	0.0151
N-Pentane	0.404	0.1470	16.20	0.0101
Hexane Plus	0.459	0.2050	24.19	0.0152
Total	100.000	19.3040	1286.28	0.7419

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0038
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1294.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1271.7
REAL SPECIFIC GRAVITY: 0.7444

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

DRY BTU @ 14.650: 1287.2
DRY BTU @ 14.696: 1291.2
DRY BTU @ 14.730: 1294.2
DRY BTU @ 15.025: 1320.1

CYLINDER #: 6136
CYLINDER PRESSURE: 63 PSIG
DATE RUN: 3/10/17 12:00 AM
ANALYSIS RUN BY: Shyann Elledge