



OIL CONS. DIV DIST. 3
MAY 30 2017

30-039-22071

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

Analysis No: LG170053
Cust No: 46600-10715

Well/Lease Information

Customer Name: LOGOS OPERATING LLC
Well Name: JICARILLA 123C #27; CSG
County/State: RIO ARRIBA NM
Location:
Field:
Formation: GALLUP/DK
Cust. Stn. No.:

Source: CASING
Pressure: 121 PSIG
Sample Temp: DEG. F
Well Flowing: N
Date Sampled: 03/03/2017
Sampled By: EUGENE BURBANK
Foreman/Engr.:

Remarks: SAMPLE CONTAINED A SMALL AMOUNT OF OIL

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.670	0.0740	0.00	0.0065
CO2	0.651	0.1120	0.00	0.0099
Methane	76.674	13.0510	774.41	0.4247
Ethane	10.736	2.8830	189.99	0.1115
Propane	5.023	1.3890	126.38	0.0765
Iso-Butane	1.115	0.3660	36.26	0.0224
N-Butane	1.979	0.6260	64.56	0.0397
I-Pentane	0.982	0.3610	39.29	0.0245
N-Pentane	0.828	0.3010	33.19	0.0206
Hexane Plus	1.342	0.6010	70.74	0.0444
Total	100.000	19.7640	1334.82	0.7806

* @ 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): 1343.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1320.3
REAL SPECIFIC GRAVITY: 0.7837

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

DRY BTU @ 14.650: 1336.4
DRY BTU @ 14.696: 1340.6
DRY BTU @ 14.730: 1343.7
DRY BTU @ 15.025: 1370.6

CYLINDER #: 4033
CYLINDER PRESSURE: 139 PSIG
DATE RUN: 3/10/17 9:54 AM
ANALYSIS RUN BY: Shyann Elledge



30-039-22071

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

Analysis No: LG170052
Cust No: 46600-10710

Well/Lease Information

Customer Name: LOGOS OPERATING LLC
Well Name: JICARILLA 123C #27; BHD
County/State: RIO ARRIBA NM
Location:
Field:
Formation: GALLUP/DK
Cust. Stn. No.:

Source: BRADENHEAD
Pressure: 97 PSIG
Sample Temp: DEG. F
Well Flowing:
Date Sampled: 03/03/2017
Sampled By: EUGENE BURBANK
Foreman/Engr.:

Remarks: BOTTOM VALVE OPEN.
PRESSURED WITH HELIUM TO 30 LBS.

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	6.015	0.6640	0.00	0.0582
CO2	0.044	0.0080	0.00	0.0007
Methane	76.931	13.0810	777.00	0.4261
Ethane	9.520	2.5540	168.48	0.0988
Propane	4.455	1.2310	112.09	0.0678
Iso-Butane	0.686	0.2250	22.31	0.0138
N-Butane	1.207	0.3820	39.38	0.0242
I-Pentane	0.401	0.1470	16.04	0.0100
N-Pentane	0.299	0.1090	11.99	0.0074
Hexane Plus	0.442	0.1980	23.30	0.0146
Total	100.000	18.5990	1170.58	0.7217

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0032

BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1177.1

BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1156.6

REAL SPECIFIC GRAVITY: 0.7237

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

DRY BTU @ 14.650: 1170.7

DRY BTU @ 14.696: 1174.4

DRY BTU @ 14.730: 1177.1

DRY BTU @ 15.025: 1200.7

CYLINDER #: 4204

CYLINDER PRESSURE: 3 PSIG

DATE RUN: 3/10/17 12:00 AM

ANALYSIS RUN BY: Shyann Elledge