



Well Name: JICARILLA 120-C 17; BHD  
 API #: 30-039-22074  
 Source: BRADENHEAD  
 Sample Type: GAS  
 Analysis No: LG20250394  
 Cust No: 46600-12335

**Well/Lease Information**

Customer Name:	LOGOS OPERATING LLC	Source:	BRADENHEAD
Well Name:	JICARILLA 120-C 17; BHD	Well Flowing:	Y
County/State:	RIO ARRIBA NM	Pressure:	51 PSIG
Location:		Flow Temp:	84 DEG. F
Lease/PA/CA:		Ambient Temp:	75 DEG. F
Formation:		Flow Rate:	12 MCF/D
Cust. Stn. No.:	30-039-22074	Sample Method:	Purge & Fill
	85227	Sample Date:	09/05/2025
	CC: 3144367A	Sample Time:	12.05 PM
	AREA 2	Sampled By:	CULLAN KELLER
Heat Trace:	N	Sampled by (CO):	
Remarks:			

**Analysis**

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.7104	0.7068	0.0780	0.00	0.0069
CO2	0.1208	0.1202	0.0210	0.00	0.0018
Methane	82.9461	82.5274	14.1060	837.76	0.4594
Ethane	7.6543	7.6157	2.0530	135.46	0.0795
Propane	5.0295	5.0041	1.3900	126.55	0.0766
Iso-Butane	0.9883	0.9833	0.3240	32.14	0.0198
N-Butane	1.1959	1.1899	0.3780	39.01	0.0240
I-Pentane	0.4296	0.4274	0.1580	17.19	0.0107
N-Pentane	0.2872	0.2858	0.1040	11.51	0.0072
Hexane Plus	0.6379	0.6347	0.2850	33.62	0.0211
<b>Total</b>	<b>100.0000</b>	<b>99.4953</b>	<b>18.8970</b>	<b>1233.24</b>	<b>0.7070</b>

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

\*\*@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0034	CYLINDER #:	4089
BTU/CU.FT IDEAL:	1236.1	CYLINDER PRESSURE:	49 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1240.3	ANALYSIS DATE:	09/16/2025
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1218.7	ANALYSIS TIME:	12:36:04 AM
DRY BTU @ 15.025:	1265.1	ANALYSIS RUN BY:	SARAH BALLARD
REAL SPECIFIC GRAVITY:	0.7091		

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: 09/18/2025

GC Method: C6+ Gas



LOGOS OPERATING LLC  
WELL ANALYSIS COMPARISON

**Lease:** JICARILLA 120-C 17; BHD  
**Stn. No.:** 30-039-22074  
**Mtr. No.:** 85227

BRADENHEAD

09/18/2025  
46600-12335

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**Smpl Date:** 09/05/2025  
**Test Date:** 09/16/2025  
**Run No:** LG20250394  
**Nitrogen:** 0.7104  
**CO2:** 0.1208  
**Methane:** 82.9461  
**Ethane:** 7.6543  
**Propane:** 5.0295  
**I-Butane:** 0.9883  
**N-Butane:** 1.1959  
**I-Pentane:** 0.4296  
**N-Pentane:** 0.2872  
**Hexane+:** 0.6379  
**BTU:** 1240.3  
**GPM:** 18.8970  
**SPG:** 0.7091



Well Name: JICARILLA 120-C 17; CSG  
 API #: 30-039-22074  
 Source: CASING  
 Sample Type: GAS  
 Analysis No: LG20250395  
 Cust No: 46600-12340

**Well/Lease Information**

Customer Name:	LOGOS OPERATING LLC	Source:	CASING
Well Name:	JICARILLA 120-C 17; CSG	Well Flowing:	Y
County/State:	RIO ARRIBA NM	Pressure:	72 PSIG
Location:		Flow Temp:	84 DEG. F
Lease/PA/CA:		Ambient Temp:	75 DEG. F
Formation:		Flow Rate:	12 MCF/D
Cust. Stn. No.:	30-039-22074	Sample Method:	Purge & Fill
	85227	Sample Date:	09/05/2025
	CC: 3144367A	Sample Time:	12.05 PM
	AREA 2	Sampled By:	CULLEN KELLER
Heat Trace:	N	Sampled by (CO):	LOGOS
Remarks:			

**Analysis**

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6758	0.6737	0.0750	0.00	0.0065
CO2	0.1400	0.1396	0.0240	0.00	0.0021
Methane	83.2832	83.0224	14.1630	841.16	0.4613
Ethane	7.6384	7.6145	2.0490	135.18	0.0793
Propane	4.9811	4.9655	1.3770	125.33	0.0758
Iso-Butane	0.9739	0.9709	0.3200	31.67	0.0195
N-Butane	1.1567	1.1531	0.3660	37.74	0.0232
I-Pentane	0.4065	0.4052	0.1490	16.26	0.0101
N-Pentane	0.2609	0.2601	0.0950	10.46	0.0065
Hexane Plus	0.4835	0.4820	0.2160	25.49	0.0160
<b>Total</b>	<b>100.0000</b>	<b>99.6870</b>	<b>18.8340</b>	<b>1223.28</b>	<b>0.7005</b>

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

\*\*@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0034	CYLINDER #:	5032
BTU/CU.FT IDEAL:	1226.1	CYLINDER PRESSURE:	61 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1230.2	ANALYSIS DATE:	09/16/2025
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1208.8	ANALYSIS TIME:	12:47:23 AM
DRY BTU @ 15.025:	1254.8	ANALYSIS RUN BY:	SARAH BALLARD
REAL SPECIFIC GRAVITY:	0.7025		

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: 09/18/2025

GC Method: C6+ Gas



LOGOS OPERATING LLC  
WELL ANALYSIS COMPARISON

Lease: JICARILLA 120-C 17; CSG CASING 09/18/2025  
Stn. No.: 30-039-22074 46600-12340  
Mtr. No.: 85227

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Smpl Date: 09/05/2025  
Test Date: 09/16/2025  
Run No: LG20250395  
Nitrogen: 0.6758  
CO2: 0.1400  
Methane: 83.2832  
Ethane: 7.6384  
Propane: 4.9811  
I-Butane: 0.9739  
N-Butane: 1.1567  
I-Pentane: 0.4065  
N-Pentane: 0.2609  
Hexane+: 0.4835  
BTU: 1230.2  
GPM: 18.8340  
SPG: 0.7025

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 508026

**CONDITIONS**

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 508026
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

**CONDITIONS**

Created By	Condition	Condition Date
jagarcia	Accepted for record	4/9/2026