



Well Name: JICARILLA 107 #2;BHD
 API #: 37035-30
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: LG20250392
 Cust No: 46600-11840

Well/Lease Information

Customer Name: LOGOS OPERATING LLC	Source: BRADENHEAD
Well Name: JICARILLA 107 #2;BHD	Well Flowing: Y
County/State: RIO ARRIBA NM	Pressure: 87 PSIG
Location:	Flow Temp: 730 DEG. F
Lease/PA/CA:	Ambient Temp: 700 DEG. F
Formation: PC	Flow Rate: 0 MCF/D
Cust. Stn. No.: 37035-30	Sample Method: Purge & Fill
	Sample Date: 09/05/2025
CC#3132050A	Sample Time: 11.09 AM
AREA 2	Sampled By: CULLAN KELLER
Heat Trace: N	Sampled by (CO):
Remarks:	

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4361	0.4356	0.0480	0.00	0.0042
CO2	0.3334	0.3330	0.0570	0.00	0.0051
Methane	86.3765	86.2700	14.6850	872.40	0.4784
Ethane	6.9869	6.9783	1.8740	123.65	0.0725
Propane	3.3583	3.3542	0.9280	84.50	0.0511
Iso-Butane	0.6417	0.6409	0.2110	20.87	0.0129
N-Butane	0.7987	0.7977	0.2530	26.06	0.0160
I-Pentane	0.2971	0.2967	0.1090	11.89	0.0074
N-Pentane	0.2110	0.2107	0.0770	8.46	0.0053
Hexane Plus	0.5603	0.5596	0.2510	29.53	0.0185
Total	100.0000	99.8767	18.4930	1177.35	0.6715

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0031	CYLINDER #:	7048
BTU/CU.FT IDEAL:	1180.1	CYLINDER PRESSURE:	85 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1183.7	ANALYSIS DATE:	09/16/2025
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1163.1	ANALYSIS TIME:	11:23:56 AM
DRY BTU @ 15.025:	1207.4	ANALYSIS RUN BY:	SAMI ARMENTA
REAL SPECIFIC GRAVITY:	0.6733		

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 107 #2;BHD	BRADENHEAD	09/18/2025
Stn. No.:	37035-30	PC	46600-11840
Mtr. No.:			

Smpl Date:	09/05/2025	06/13/2022
Test Date:	09/16/2025	06/15/2022
Run No:	LG20250392	LG20220160
Nitrogen:	0.4361	0.4529
CO2:	0.3334	0.2290
Methane:	86.3765	87.8679
Ethane:	6.9869	6.1426
Propane:	3.3583	3.1569
I-Butane:	0.6417	0.6220
N-Butane:	0.7987	0.7550
I-Pentane:	0.2971	0.2697
N-Pentane:	0.2110	0.1815
Hexane+:	0.5603	0.3225
BTU:	1183.7	1161.6
GPM:	18.4930	18.2960
SPG:	0.6733	0.6576



Well Name: JICARILLA 107-2; CSG
 API #: 30-039-06228
 Source: CASING
 Sample Type: GAS
 Analysis No: LG20250393
 Cust No: 46600-12330

Well/Lease Information

Customer Name:	LOGOS OPERATING LLC	Source:	CASING
Well Name:	JICARILLA 107-2; CSG	Well Flowing:	Y
County/State:	RIO ARRIBA NM	Pressure:	90 PSIG
Location:		Flow Temp:	73 DEG. F
Lease/PA/CA:		Ambient Temp:	70 DEG. F
Formation:		Flow Rate:	0 MCF/D
Cust. Stn. No.:	30-039-06228	Sample Method:	Purge & Fill
	37035	Sample Date:	09/05/2025
	CC: 3132050A	Sample Time:	11.09 AM
	AREA 2	Sampled By:	CULLAN KELLER
Heat Trace:	N	Sampled by (CO):	LOGOS
Remarks:			

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4589	0.4571	0.0510	0.00	0.0044
CO2	0.2613	0.2603	0.0450	0.00	0.0040
Methane	86.2636	85.9300	14.6640	871.26	0.4778
Ethane	7.0877	7.0603	1.9010	125.43	0.0736
Propane	3.6674	3.6532	1.0130	92.28	0.0558
Iso-Butane	0.6324	0.6300	0.2080	20.57	0.0127
N-Butane	0.7908	0.7877	0.2500	25.80	0.0159
I-Pentane	0.2751	0.2740	0.1010	11.01	0.0069
N-Pentane	0.1845	0.1838	0.0670	7.40	0.0046
Hexane Plus	0.3783	0.3768	0.1690	19.94	0.0125
Total	100.0000	99.6132	18.4690	1173.68	0.6682

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.003	CYLINDER #:	4219
BTU/CU.FT IDEAL:	1176.4	CYLINDER PRESSURE:	87 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1179.9	ANALYSIS DATE:	09/16/2025
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1159.4	ANALYSIS TIME:	12:00:15 PM
DRY BTU @ 15.025:	1203.5	ANALYSIS RUN BY:	SAMI ARMENTA
REAL SPECIFIC GRAVITY:	0.6699		

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

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

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oecd/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 508024

CONDITIONS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 508024
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

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