



Well Name: JICARILLA 96 #5B; BHD
 API #: 30-039-06534
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: LG20250390
 Cust No: 46600-12300

Well/Lease Information

Customer Name: LOGOS OPERATING LLC	Source: BRADENHEAD
Well Name: JICARILLA 96 #5B; BHD	Well Flowing:
County/State: RIO ARRIBA NM	Pressure: 43 PSIG
Location:	Flow Temp: DEG. F
Lease/PA/CA: JICARILLA CONTRACT 96	Ambient Temp: 78 DEG. F
Formation: BLANCO MESA VERDE	Flow Rate: MCF/D
Cust. Stn. No.: 30-039-06534	Sample Method: Purge & Fill
83423-01	Sample Date: 09/05/2025
AREA 2	Sample Time: 1.05 PM
CC: 3129229A	Sampled By: CRASANDA BOSS
Heat Trace:	Sampled by (CO): LOGOS
Remarks:	

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5663	0.5668	0.0630	0.00	0.0055
CO2	0.3644	0.3647	0.0620	0.00	0.0055
Methane	77.9319	77.9940	13.2590	787.11	0.4317
Ethane	10.9424	10.9511	2.9370	193.65	0.1136
Propane	6.1768	6.1817	1.7080	155.41	0.0940
Iso-Butane	0.9733	0.9741	0.3200	31.65	0.0195
N-Butane	1.6567	1.6580	0.5240	54.05	0.0332
I-Pentane	0.5037	0.5041	0.1850	20.15	0.0125
N-Pentane	0.3791	0.3794	0.1380	15.20	0.0094
Hexane Plus	0.5054	0.5058	0.2260	26.64	0.0167
Total	100.0000	100.0797	19.4220	1283.86	0.7418

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0038	CYLINDER #:	4190
BTU/CU.FT IDEAL:	1286.8	CYLINDER PRESSURE:	38 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1291.7	ANALYSIS DATE:	09/16/2025
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1269.2	ANALYSIS TIME:	11:27:32 AM
DRY BTU @ 15.025:	1317.6	ANALYSIS RUN BY:	SAMI ARMENTA
REAL SPECIFIC GRAVITY:	0.7444		

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 96 #5B; BHD	BRADENHEAD	09/18/2025
Stn. No.:	30-039-06534	BLANCO MESA VERDE	46600-12300
Mtr. No.:	83423-01		

Smpl Date:	09/05/2025	08/06/2025
Test Date:	09/16/2025	08/13/2025
Run No:	LG20250390	LG20250365
Nitrogen:	0.5663	0.4150
CO2:	0.3644	0.3859
Methane:	77.9319	77.6282
Ethane:	10.9424	10.9856
Propane:	6.1768	6.2619
I-Butane:	0.9733	0.9867
N-Butane:	1.6567	1.7180
I-Pentane:	0.5037	0.5469
N-Pentane:	0.3791	0.4398
Hexane+:	0.5054	0.6320
BTU:	1291.7	1305.1
GPM:	19.4220	19.5120
SPG:	0.7444	0.7517



Well Name: JICARILLA 96 #5 B; CSG
 API #: 30-039-26587
 Source: CASING
 Sample Type: GAS
 Analysis No: LG20250391
 Cust No: 46600-12325

Well/Lease Information

Customer Name: LOGOS OPERATING LLC	Source: CASING
Well Name: JICARILLA 96 #5 B; CSG	Well Flowing:
County/State: RIO ARRIBA NM	Pressure: 46 PSIG
Location:	Flow Temp: DEG. F
Lease/PA/CA: JICARILLA CONTRACT 96	Ambient Temp: 78 DEG. F
Formation: BLANCO / MV	Flow Rate: MCF/D
Cust. Stn. No.: 30-039-26587	Sample Method: Purge & Fill
3423-01	Sample Date: 09/05/2025
CC: 3120217A	Sample Time: 1.15 PM
AREA 2	Sampled By: CRASANDRA BOSS
Heat Trace:	Sampled by (CO): LOGOS
Remarks:	

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4380	0.4380	0.0480	0.00	0.0042
CO2	0.5812	0.5812	0.1000	0.00	0.0088
Methane	77.1410	77.1378	13.1270	779.12	0.4273
Ethane	10.9268	10.9264	2.9330	193.37	0.1134
Propane	6.2523	6.2521	1.7290	157.31	0.0952
Iso-Butane	1.0020	1.0020	0.3290	32.58	0.0201
N-Butane	1.7682	1.7681	0.5600	57.68	0.0355
I-Pentane	0.5730	0.5730	0.2100	22.93	0.0143
N-Pentane	0.4718	0.4718	0.1720	18.91	0.0118
Hexane Plus	0.8457	0.8457	0.3790	44.58	0.0280
Total	100.0000	99.9961	19.5870	1306.49	0.7586

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.004	CYLINDER #:	7042
BTU/CU.FT IDEAL:	1309.5	CYLINDER PRESSURE:	42 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1314.8	ANALYSIS DATE:	09/16/2025
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1291.9	ANALYSIS TIME:	12:19:26 AM
DRY BTU @ 15.025:	1341.1	ANALYSIS RUN BY:	SAMI ARMENTA
REAL SPECIFIC GRAVITY:	0.7613		

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 96 #5 B; CSG
Stn. No.: 30-039-26587
Mtr. No.: 3423-01

CASING
BLANCO / MV

09/18/2025
46600-12325

Smpl Date: 09/05/2025
Test Date: 09/16/2025
Run No: LG20250391
Nitrogen: 0.4380
CO2: 0.5812
Methane: 77.1410
Ethane: 10.9268
Propane: 6.2523
I-Butane: 1.0020
N-Butane: 1.7682
I-Pentane: 0.5730
N-Pentane: 0.4718
Hexane+: 0.8457
BTU: 1314.8
GPM: 19.5870
SPG: 0.7613

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 507629

CONDITIONS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 507629
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

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