



OCD Received
5/20/2020

Well Name: ROSA 16; BHD
API #: CC # 62051432
Source: BRADENHEAD
Sample Type: GAS
Analysis No: LG200097
Cust No: 46600-11690

Well/Lease Information

Customer Name: LOGOS OPERATING LLC
Well Name: ROSA 16; BHD
County/State: RIO ARRIBA NM
Location:
Lease/PA/CA:
Formation: MV/DK
Cust. Stn. No.: CC # 62051432

Source: BRADENHEAD
Well Flowing:
Pressure: 108 PSIG
Flow Temp: DEG. F
Ambient Temp: 75 DEG. F
Flow Rate: 30 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/07/2020
Sample Time: 3.30 PM
Sampled By: ROBERT JORDAN
Sampled by (CO): LOGOS

AREA 1 CENTRAL

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0927	0.0922	0.0100	0.00	0.0009
CO2	1.8972	1.8862	0.3240	0.00	0.0288
Methane	94.6462	94.0972	16.0770	955.93	0.5242
Ethane	2.8048	2.7885	0.7520	49.64	0.0291
Propane	0.3849	0.3827	0.1060	9.68	0.0059
Iso-Butane	0.0760	0.0756	0.0250	2.47	0.0015
N-Butane	0.0403	0.0401	0.0130	1.31	0.0008
I-Pentane	0.0189	0.0188	0.0070	0.76	0.0005
N-Pentane	0.0074	0.0074	0.0030	0.30	0.0002
Hexane Plus	0.0316	0.0314	0.0140	1.67	0.0010
Total	100.0000	99.4201	17.3310	1021.75	0.5930

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
BTU/CU.FT IDEAL: 1024.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1026.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1008.5
DRY BTU @ 15.025: 1047.0
REAL SPECIFIC GRAVITY: 0.5941

CYLINDER #: 4106
CYLINDER PRESSURE: 111 PSIG
ANALYSIS DATE: 05/11/2020
ANALYSIS TIME: 07:56:18 AM
ANALYSIS RUN BY: RICHARD WILSON

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: 05/12/2020

GC Method: C6+ Gas



LOGOS OPERATING LLC
WELL ANALYSIS COMPARISON

Lease: ROSA 16; BHD
Stn. No.: CC # 62051432
Mtr. No.:

BRADENHEAD
MV/DK

05/12/2020
46600-11690

Smpl Date: 05/07/2020
Test Date: 05/11/2020
Run No: LG200097

Nitrogen: 0.0927
CO2: 1.8972
Methane: 94.6462
Ethane: 2.8048
Propane: 0.3849
I-Butane: 0.0760
N-Butane: 0.0403
I-Pentane: 0.0189
N-Pentane: 0.0074
Hexane+: 0.0316

BTU: 1026.4
GPM: 17.3310
SPG: 0.5941