



# Certificate of Analysis

Number: 6030-21060172-003A

**Artesia Laboratory**  
 200 E Main St.  
 Artesia, NM 88210  
 Phone 575-746-3481

Alex Batista  
 Taprock  
 602 Park Point Drive  
 Ste. 200  
 Golden, CO 80401

June 17, 2021

Station Name: Cosmo 213H Check  
 Station Number: 7060074  
 Sample Point: Meter Run  
 Formation: Quarterly  
 County: Lea  
 Type of Sample: Spot-Cylinder  
 Heat Trace Used: N/A  
 Sampling Method: Fill and Purge  
 Sampling Company: SPL

Sampled By: James Hill  
 Sample Of: Gas Spot  
 Sample Date: 06/16/2021 10:38  
 Sample Conditions: 89.7 psig, @ 84.8 °F Ambient: 84 °F  
 Effective Date: 06/16/2021 10:38  
 Method: GPA-2261M  
 Cylinder No: 5030-03742  
 Instrument: 6030\_GC6 (Inficon GC-3000 Micro)  
 Last Inst. Cal.: 06/07/2021 0:00 AM  
 Analyzed: 06/17/2021 14:25:21 by KNF

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.73 psia		
Hydrogen Sulfide	0.000	0.010	0.015		GPM TOTAL C2+	6.572
Nitrogen	1.426	1.418	1.744		GPM TOTAL C3+	3.226
Methane	72.339	71.940	50.654		GPM TOTAL iC5+	0.516
Carbon Dioxide	3.495	3.476	6.715			
Ethane	12.535	12.466	16.453	3.346		
Propane	6.749	6.712	12.991	1.856		
Iso-butane	0.798	0.794	2.026	0.261		
n-Butane	1.883	1.873	4.778	0.593		
Iso-pentane	0.414	0.412	1.305	0.151		
n-Pentane	0.390	0.388	1.229	0.141		
Hexanes Plus	0.514	0.511	2.090	0.224		
	<u>100.543</u>	<u>100.000</u>	<u>100.000</u>	<u>6.572</u>		

### Calculated Physical Properties

	Total	C6+
Relative Density Real Gas	0.7895	3.2176
Calculated Molecular Weight	22.78	93.19
Compressibility Factor	0.9960	

### GPA 2172 Calculation:

#### Calculated Gross BTU per ft<sup>3</sup> @ 14.73 psia & 60°F

Real Gas Dry BTU	1269	5141
Water Sat. Gas Base BTU	1248	5052
Ideal, Gross HV - Dry at 14.73 psia	1264.2	5141.1
Ideal, Gross HV - Wet	1242.2	5051.6
Net BTU Wet Gas - real gas	1133	

**Comments:** H2S Field Content 100 ppm  
 Mcf/day 849.8

Data reviewed by: Eric Ramirez, Analyst

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

Flaring Summary

date

Data table:  
flare\_report\_data (2)

Colors:

All values

battery	7/8/2021
Cosmo K Battery	164.00
Grand total	164.00

battery

Sum(TOTAL FLARE (HP + LP))

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 36281

**QUESTIONS**

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 36281
	Action Type: [C-129] Venting and/or Flaring (C-129)

**QUESTIONS**

<b>Determination of Reporting Requirements</b>	
<i>Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.</i>	
Was or is this venting or flaring caused by an emergency or malfunction	No
Did or will this venting or flaring last eight hours or more cumulatively within any 24-hour period from a single event	No
Is this considered a submission for a notification of a major venting or flaring	Yes, minor venting or flaring of natural gas.
<b>The operator shall file a form C-141 instead of a form C-129 for a release that includes liquid during venting or flaring that is or may be a major or minor release under 19-1-29, NMAC.</b>	
Was there or will there be at least 50 MCF of natural gas vented or flared during this event	Yes
Did this venting or flaring result in the release of ANY liquids (not fully and/or completely flared) that reached (or has a chance of reaching) the ground, a surface, a watercourse, or otherwise, with reasonable probability, endanger public health, the environment or fresh water	No

<b>Unregistered Facility Site</b>	
<i>Please provide the facility details, if the venting or flaring occurred or is occurring at a facility that does not have an Facility ID (##) yet.</i>	
Facility or Site Name	Cosmo CTB
Facility Type	Tank Battery - (TB)

<b>Equipment Involved</b>	
Primary Equipment Involved	Not answered.
Additional details for Equipment Involved. Please specify	Not answered.

<b>Representative Compositional Analysis of Vented or Flared Natural Gas</b>	
<i>Please provide the mole percent for the percentage questions in this group.</i>	
Methane (CH4) percentage	72
Nitrogen (N2) percentage, if greater than one percent	1
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	3
Oxygen (O2) percentage, if greater than one percent	0
<b>If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.</b>	
Methane (CH4) percentage quality requirement	Not answered.
Nitrogen (N2) percentage quality requirement	Not answered.
Hydrogen Sulfide (H2S) PPM quality requirement	Not answered.
Carbon Dioxide (CO2) percentage quality requirement	Not answered.
Oxygen (O2) percentage quality requirement	Not answered.

<b>Date(s) and Time(s)</b>	
Date venting or flaring was discovered or commenced	07/07/2021
Time venting or flaring was discovered or commenced	06:00 AM
Is the venting or flaring event complete	Yes
Date venting or flaring was terminated	07/07/2021
Time venting or flaring was terminated	06:00 PM
Total duration of venting or flaring in hours, if venting or flaring has terminated	12
Longest duration of cumulative hours within any 24-hour period during this event	4

<b>Measured or Estimated Volume of Vented or Flared Natural Gas</b>	
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Normal Operations   Other (Specify)   Natural Gas Flared   Spilled: 164 Mcf   Recovered: 0 Mcf   Lost: 164 Mcf ]
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	Not answered.
Is this a gas only submission (i.e. only Mcf values reported)	Yes, according to supplied volumes this appears to be a "gas only" report.

<b>Venting or Flaring Resulting from Downstream Activity</b>	
Was or is this venting or flaring a result of downstream activity	Not answered.
Date notified of downstream activity requiring this venting or flaring	Not answered.
Time notified of downstream activity requiring this venting or flaring	Not answered.

<b>Steps and Actions to Prevent Waste</b>	
---	--

For this event, the operator could not have reasonably anticipated the current event and it was beyond the operator's control.	False
Please explain reason for why this event was beyond your operator's control	Not answered.
Steps taken to limit the duration and magnitude of venting or flaring	Lucid sweet and sour line was down, and the decision was made to flow the wells due to malfunction on the midstream company. Once corrected, the flaring numbers will return to as is volumes.
Corrective actions taken to eliminate the cause and reoccurrence of venting or flaring	Lucid sweet and sour line was down, and the decision was made to flow the wells due to malfunction on the midstream company. Once corrected, the flaring numbers will return to as is volumes.

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS  
 Action 36281

**CONDITIONS**

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 36281
	Action Type: [C-129] Venting and/or Flaring (C-129)

**CONDITIONS**

Created By	Condition	Condition Date
system	If the information provided in this report requires an amendment, submit a [C-129] Request to Amend Venting and/or Flaring Incident, utilizing your incident number from this event.	7/14/2021