



## Certificate of Analysis

Number: 6030-21050282-006A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

Jeffery Cook  
Advanced Energy Partners, LLC  
11490 Westheimer Road  
Suite 950  
Houston, TX 77077

May 28, 2021

Station Name: Merchant st 510H  
Station Number: 2340096  
Sample Point: Meter run  
Instrument: 6030\_GC2 (Agilent GC-7890B)  
Last Inst. Cal.: 05/18/2021 10:28 AM  
Analyzed: 05/28/2021 13:03:00 by EJ

Sampled By: Mike West  
Sample Of: Gas Spot  
Sample Date: 05/25/2021 12:32  
Sample Conditions: 110 psig, @ 117.11 °F Ambient: 90 °F  
Effective Date: 05/25/2021 12:32  
Method: GPA-2261M  
Cylinder No: 5030-03118

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.73 psia	
Hydrogen Sulfide	0.000	0.00200	0.003		GPM TOTAL C2+ 7.227
Nitrogen	2.361	2.43525	2.968		GPM TOTAL C3+ 3.565
Methane	68.637	70.79560	49.411		GPM TOTAL iC5+ 0.677
Carbon Dioxide	1.412	1.45641	2.788		
Ethane	13.222	13.63783	17.840	3.662	
Propane	6.887	7.10359	13.627	1.965	
Iso-butane	0.809	0.83444	2.110	0.274	
n-Butane	1.989	2.05155	5.188	0.649	
Iso-pentane	0.397	0.40949	1.285	0.150	
n-Pentane	0.407	0.41980	1.318	0.153	
Hexanes Plus	0.828	0.85404	3.462	0.374	
	96.949	100.00000	100.000	7.227	

## Calculated Physical Properties

	<b>Total</b>	<b>C6+</b>
Relative Density Real Gas	0.7967	3.2176
Calculated Molecular Weight	22.99	93.19
Compressibility Factor	0.9958	

## GPA 2172 Calculation:

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

Real Gas Dry BTU	1315	5141
Water Sat. Gas Base BTU	1292	5052
Ideal, Gross HV - Dry at 14.73 psia	1309.2	5141.1
Ideal, Gross HV - Wet	1286.4	5051.6

Comments: H2S Field Content 20 ppm

Report generated by:

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



11490 Westheimer Road, Suite 950, Houston, Texas 77077 • Phone 832-672-4700 • Fax 832-672-4609

To whom it may concern:

For flare volume calculation, we use a high-pressure flare meter to get the best and most accurate flare readings.

**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 44377

**QUESTIONS**

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	OGRID: 372417
	Action Number: 44377
	Action Type: [C-129] Venting and/or Flaring (C-129)

**QUESTIONS****Prerequisites**

Any messages presented in this section, will prevent submission of this application. Please resolve these issues before continuing with the rest of the questions.

Incident Well	[30-025-46702] MERCHANT STATE UNIT #510H
Incident Facility	Not answered.

**Determination of Reporting Requirements**

Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.

Was or is this venting and/or flaring caused by an emergency or malfunction	Yes
Did or will this venting and/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 and/or flaring	Yes, major venting and/or flaring of natural gas.
An operator shall file a form C-141 instead of a form C-129 for a release that, includes liquid during venting and/or flaring that is or may be a major or minor release under 19.15.29.7 NMAC.	
Was there or will there be at least 50 MCF of natural gas vented and/or flared during this event	Yes
Did this venting and/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
Was the venting and/or flaring within an incorporated municipal boundary or withing 300 feet from an occupied permanent residence, school, hospital, institution or church in existence	No

**Equipment Involved**

Primary Equipment Involved	Not answered.
Additional details for Equipment Involved. Please specify	Not answered.

**Representative Compositional Analysis of Vented or Flared Natural Gas**

Please provide the mole percent for the percentage questions in this group.

Methane (CH4) percentage	71
Nitrogen (N2) percentage, if greater than one percent	2
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	1
Oxygen (O2) percentage, if greater than one percent	0

If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.

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.

**Date(s) and Time(s)**

Date venting and/or flaring was discovered or commenced	08/02/2021
Time venting and/or flaring was discovered or commenced	07:37 AM
Time venting and/or flaring was terminated	11:30 AM
Cumulative hours during this event	4

**Measured or Estimated Volume of Vented or Flared Natural Gas**

Natural Gas Vented (Mcf) Details	Not answered.
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Natural Gas Flared (Mcf) Details	Cause: Midstream Emergency Maintenance   Gas Plant   Natural Gas Flared   Released: 856 Mcf   Recovered: 0 Mcf   Lost: 856 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 significant Mcf values reported)	Yes, according to supplied volumes this appears to be a "gas only" report.

**Venting or Flaring Resulting from Downstream Activity**

Was or is this venting and/or flaring a result of downstream activity	Yes
Date notified of downstream activity requiring this venting and/or flaring	08/02/2021
Time notified of downstream activity requiring this venting and/or flaring	07:37 AM

**Steps and Actions to Prevent Waste**

For this event, the operator could not have reasonably anticipated the current event and it was beyond the operator's control.	True
Please explain reason for why this event was beyond your operator's control	3rd party downtime - emergency maintenance
Steps taken to limit the duration and magnitude of venting and/or flaring	Communication with 3rd party
Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring	Constant communication with 3rd party

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CONDITIONS  
  
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	Action Number: 44377
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
lanz	If the information provided in this report requires an amendment, submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	8/25/2021