



## Certificate of Analysis

Number: 6030-21080062-006A

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

Aug. 09, 2021

Station Name: Dagger Lake 503H	Sampled By: Mike West
Station Number: 2340032	Sample Of: Gas Spot
Station Location: Advance	Sample Date: 08/03/2021
Sample Point: Meter Run	Sample Conditions: 110 psig, @ 102.9 °F Ambient: 82 °F
Instrument: 6030_GC6 (Inficon GC-3000 Micro)	Effective Date: 08/03/2021
Last Inst. Cal.: 08/02/2021 0:00 AM	Method: GPA-2261M
Analyzed: 08/09/2021 09:35:58 by KNF	Cylinder No: 1111-001213

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.73 psia	
Hydrogen Sulfide	0.000	0.00000	0.000		GPM TOTAL C2+
Nitrogen	2.243	2.25758	2.782		GPM TOTAL C3+
Methane	71.667	72.13624	50.911		GPM TOTAL iC5+
Carbon Dioxide	1.607	1.61772	3.132		
Ethane	12.638	12.72101	16.828	3.415	
Propane	6.603	6.64641	12.894	1.838	
Iso-butane	0.807	0.81228	2.077	0.267	
n-Butane	2.144	2.15803	5.518	0.683	
Iso-pentane	0.460	0.46341	1.471	0.170	
n-Pentane	0.516	0.51968	1.650	0.189	
Hexanes Plus	0.663	0.66764	2.737	0.292	
	99.348	100.00000	100.000	6.854	

<b>Calculated Physical Properties</b>	<b>Total</b>	<b>C6+</b>
Relative Density Real Gas	0.7877	3.2176
Calculated Molecular Weight	22.73	93.19
Compressibility Factor	0.9959	
<b>GPA 2172 Calculation:</b>		
<b>Calculated Gross BTU per ft<sup>3</sup> @ 14.73 psia &amp; 60°F</b>		
Real Gas Dry BTU	1300	5141
Water Sat. Gas Base BTU	1278	5052
Ideal, Gross HV - Dry at 14.73 psia	1294.4	5141.1
Ideal, Gross HV - Wet	1271.8	5051.6

**Comments:** H2S Field Content 0 ppm  
CO2 1.5%  
Mcf/day 1387

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.



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 41209

**QUESTIONS**

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	OGRID: 372417
	Action Number: 41209
	Action Type: [C-129] Venting and/or Flaring (C-129)

**QUESTIONS****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 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, major venting or flaring of natural gas.
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 19.13.29.7 NMAC	
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

**Unregistered Facility Site**

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.

Facility or Site Name	Dagger Lake Pad D Battery
Facility Type	Tank Battery - (TB)

**Equipment Involved**

Primary Equipment Involved	Gas Plant
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	72
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	0
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 or flaring was discovered or commenced	07/31/2021
Time venting or flaring was discovered or commenced	06:33 AM
Is the venting or flaring event complete	Yes
Date venting or flaring was terminated	07/31/2021
Time venting or flaring was terminated	11:30 AM
Total duration of venting or flaring in hours, if venting or flaring has terminated	5
Longest duration of cumulative hours within any 24-hour period during this event	5

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

Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Midstream Emergency Maintenance   Gas Plant   Natural Gas Flared   Spilled: 710 Mcf   Recovered: 0 Mcf   Lost: 710 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.

**Venting or Flaring Resulting from Downstream Activity**

Was or is this venting or flaring a result of downstream activity	Yes
Date notified of downstream activity requiring this venting or flaring	07/31/2021
Time notified of downstream activity requiring this venting or flaring	06:33 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 unscheduled maintenance
Steps taken to limit the duration and magnitude of venting or flaring	communication with 3rd party
Corrective actions taken to eliminate the cause and reoccurrence of venting or flaring	Constant communication with 3rd party about when pipeline will be back up and running

**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 41209

CONDITIONS

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	OGRID: 372417
	Action Number: 41209
	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.	8/11/2021