



Certificate of Analysis

Number: 6030-23100025-001A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

Randy Ferrell
3R Operating
4000 N. Big Spring
Ste. 210
Midland, TX 79705

Oct. 10, 2023

Station Name: Hackberry Hills Fed #4

Station Number: 111131

Station Location: 3R Operating

Sample Point: Meter Run

Instrument: 6030_GC6 (Inficon GC-3000 Micro)

Last Inst. Cal.: 10/09/2023 0:00 AM

Analyzed: 10/10/2023 12:36:46 by EBH

Sampled By: SS

Sample Of: Gas Spot

Sample Date: 10/03/2023

Sample Conditions: 83 psig, @ 87 °F Ambient: 87 °F

Effective Date: 10/03/2023

Method: GPA-2261M

Cylinder No: 1111-000222

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.73 psia		
Hydrogen Sulfide	0.0000	0.0060	0.0092		GPM TOTAL C2+	6.332
Nitrogen	4.6462	4.7966	6.0242		GPM TOTAL C3+	3.394
Methane	70.7693	73.0610	52.5480		GPM TOTAL iC5+	0.664
Carbon Dioxide	0.0725	0.0748	0.1476			
Ethane	10.6032	10.9465	14.7568	2.938		
Propane	6.3673	6.5735	12.9954	1.817		
Iso-butane	0.8180	0.8445	2.2006	0.277		
n-Butane	1.9472	2.0103	5.2384	0.636		
Iso-pentane	0.5111	0.5276	1.7066	0.194		
n-Pentane	0.4825	0.4981	1.6112	0.181		
Hexanes Plus	0.6404	0.6611	2.7620	0.289		
	96.8577	100.0000	100.0000	6.332		

Calculated Physical Properties

Total

C6+

Relative Density Real Gas

0.7728

3.2176

Calculated Molecular Weight

22.30

93.19

Compressibility Factor

0.9962

GPA 2172 Calculation:

Calculated Gross BTU per ft³ @ 14.73 psia & 60°F

Real Gas Dry BTU

1273

5141

Water Sat. Gas Base BTU

1251

5052

Ideal, Gross HV - Dry at 14.73 psia

1268.0

5141.1

Ideal, Gross HV - Wet

1246.0

5051.6

Comments: Reran Sample Confirmed GC Analysis

H2S Field Content 60 ppm

Hydrocarbon Laboratory Manager

Quality Assurance:

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

Calculations for the total Mcf flared

End Meter Volume – the Begin Meter Volume.

***Composition for the gas has been entered into the question portion of the C-129.

If further back up is needed please let us know and will provide requested data.

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District IV
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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

DEFINITIONS

Action 275316

DEFINITIONS

Operator: 3R Operating, LLC 4000 N BIG SPRING ST Midland, TX 79705	OGRID: 331569
	Action Number: 275316
	Action Type: [C-129] Venting and/or Flaring (C-129)

DEFINITIONS

For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application: • this application's operator, hereinafter "this operator"; • venting and/or flaring, hereinafter "vent or flare"; • any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms"; • the statements in (and/or attached to) this, hereinafter "the statements in this"; • and the past tense will be used in lieu of mixed past/present tense questions and statements.
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QUESTIONS

Action 275316

QUESTIONS

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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	[30-015-10805] HACKBERRY HILLS FEDERAL #004
Incident Facility	Unavailable.

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 this vent or flare caused by an emergency or malfunction	No
Did this vent or flare last eight hours or more cumulatively within any 24-hour period from a single event	Yes
Is this considered a submission for a vent or flare event	Yes, minor 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 at least 50 MCF of natural gas vented and/or flared during this event	Yes
Did this vent or flare 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 vent or flare within an incorporated municipal boundary or within 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	73
Nitrogen (N2) percentage, if greater than one percent	5
Hydrogen Sulfide (H2S) PPM, rounded up	60
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.

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QUESTIONS, Page 2

Action 275316

QUESTIONS (continued)

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QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	10/05/2023
Time vent or flare was discovered or commenced	12:00 AM
Time vent or flare was terminated	11:59 PM
Cumulative hours during this event	24

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Other Producing Well Natural Gas Flared Released: 57 Mcf Recovered: 0 Mcf Lost: 57 Mcf.
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	No available pipeline.
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 this vent or flare a result of downstream activity	No
Was notification of downstream activity received by this operator	Not answered.
Downstream OGRID that should have notified this operator	Not answered.
Date notified of downstream activity requiring this vent or flare	Not answered.
Time notified of downstream activity requiring this vent or flare	Not answered.

Steps and Actions to Prevent Waste	
For this event, this operator could not have reasonably anticipated the current event and it was beyond this operator's control.	True
Please explain reason for why this event was beyond this operator's control	No available pipeline.
Steps taken to limit the duration and magnitude of vent or flare	No available pipeline.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	No available pipeline.

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ACKNOWLEDGMENTS

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ACKNOWLEDGMENTS

☒	I acknowledge that I am authorized to submit a <i>Venting and/or Flaring</i> (C-129) report on behalf of this operator and understand that this report can be a complete C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
☒	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to this operator) to track any C-129 forms, pursuant to 19.15.27.7 and 19.15.28.8 NMAC and understand that this submission meets the notification requirements of Paragraph (1) of Subsection G and F respectively.
☒	I hereby certify the statements in this report are true and correct to the best of my knowledge and acknowledge that any false statement may be subject to civil and criminal penalties under the Oil and Gas Act.
☒	I acknowledge that the acceptance of any C-129 forms by the OCD does not relieve this operator of liability should their operations have failed to adequately investigate, report, and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment.
☒	I acknowledge that OCD acceptance of any C-129 forms does not relieve this operator of responsibility for compliance with any other applicable federal, state, or local laws and/or regulations.

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CONDITIONS

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CONDITIONS

Created By	Condition	Condition Date
gkirkland	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.	10/13/2023