



## Certificate of Analysis

Number: 6030-21120207-003A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

Redwood  
Redwood  
4910 N. Midkiff Rd.  
Midland, TX 79705

Dec. 20, 2021

Station Name: Kaiser #2  
Station Number: 700323-00  
Station Location: Redwood  
Sample Point: Meter run  
Instrument: 70142339 (Inficon GC-MicroFusion)  
Last Inst. Cal.: 12/13/2021 0:00 AM  
Analyzed: 12/20/2021 10:48:16 by ERG

Sampled By: Michael Mirabal  
Sample Of: Gas Spot  
Sample Date: 12/18/2021 08:21  
Sample Conditions: 60 psig, @ 45 °F Ambient: 37 °F  
Effective Date: 12/18/2021 08:21  
Method: GPA-2261M  
Cylinder No: 5030-02166

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.696 psia
Hydrogen Sulfide	NIL	2.00000	2.822	
Nitrogen	1.263	1.25065	1.450	
Carbon Dioxide	2.770	2.74355	4.998	
Methane	67.766	67.11383	44.568	
Ethane	15.042	14.89718	18.543	3.993
Propane	6.785	6.71952	12.266	1.855
Iso-Butane	0.868	0.85915	2.067	0.282
n-Butane	2.035	2.01572	4.850	0.637
Iso-Pentane	0.570	0.56412	1.685	0.207
n-Pentane	0.618	0.61186	1.827	0.222
Hexanes	0.517	0.51203	1.827	0.211
Heptanes	0.507	0.50183	2.082	0.232
Octanes	0.179	0.17748	0.839	0.091
Nonanes Plus	0.033	0.03308	0.176	0.019
	98.953	100.00000	100.000	7.749

## Calculated Physical Properties

Calculated Molecular Weight	24.16	C9+
Compressibility Factor	0.9953	
Relative Density Real Gas	0.8377	4.4283

## GPA 2172 Calculation:

Calculated Gross BTU per ft<sup>3</sup> @ 14.696 psia & 60°F

Real Gas Dry BTU	1335.7	6996.3
Water Sat. Gas Base BTU	1312.8	6874.3
Ideal, Gross HV - Dry at 14.696 psia	1329.5	6996.3
Ideal, Gross HV - Wet	1306.0	6874.3

Comments: H2S Field Content 2 %  
Mcf/day 79

Hydrocarbon Laboratory Manager

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

Kaiser CTB  
Facility ID: fAPP2205450362  
Location 32.7525406 -104.3111496 A-18-18S-27E 890 FNL 625 FEL

Reference ID	Prod Date	Entry Date	Disposition	Product	UOM	Volume	Calculated Vol*14.73/15.025	Energy Factor	Flow Temp	Gas Gravity	Base Temp	Base Press	Flow Press	Run Hours	Meter Begin	Meter End	Begin Date	End Date	Last Updated
nAPP2205928478	2/27/2022	2/28/2022	FLARE	GAS	MCF	43	42	1	60	0.6	60	14.73	63	24	150	193	2/27/2022 0:00	2/27/2022 0:00	DAKOTABOLEN
nAPP2206051448	2/28/2022	3/1/2022	FLARE	GAS	MCF	52	51	1	60	0.6	60	14.73	63	24	193	245	2/28/2022 0:00	2/28/2022 0:00	DAKOTABOLEN
nAPP2206053171	3/1/2022	3/2/2022	FLARE	GAS	MCF	14	14	1	60	0.6	60	14.73	63	24	245	0	3/1/2022 0:00	3/1/2022 0:00	JAYSONSHANNON

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

DEFINITIONS  
  
Action 87977

DEFINITIONS

Operator: Redwood Operating LLC PO Box 1370 Artesia, NM 88210	OGRID: 330211
	Action Number: 87977
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

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 87977

**QUESTIONS**

Operator: Redwood Operating LLC PO Box 1370 Artesia, NM 88210	OGRID: 330211
	Action Number: 87977
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

**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 Operator	[330211] Redwood Operating LLC
Incident Type	Flare
Incident Status	Closure Not Approved
Incident Well	Not answered.
Incident Facility	[fAPP2205450362] Kaiser CTB

Only valid Vent, Flare or Vent with Flaring incidents (selected above in the Application Details section) that are assigned to your current operator can be amended with this C-129A application.

**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	67
Nitrogen (N2) percentage, if greater than one percent	1
Hydrogen Sulfide (H2S) PPM, rounded up	2
Carbon Dioxide (CO2) percentage, if greater than one percent	3
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 87977

QUESTIONS (continued)

Operator:  Redwood Operating LLC PO Box 1370 Artesia, NM 88210	OGRID:  330211
	Action Number:  87977
	Action Type:  [C-129] Amend Venting and/or Flaring (C-129A)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	02/28/2022
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: Midstream Scheduled Maintenance   Pipeline (Any)   Natural Gas Flared   Released: 51 Mcf   Recovered: 0 Mcf   Lost: 51 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 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	False
Please explain reason for why this event was beyond this operator's control	Not answered.
Steps taken to limit the duration and magnitude of vent or flare	During flaring Redwood only flares newer/higher oil production wells and shut in all smaller/older production
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Flaring was caused from DCP scheduled Kristina Booster Maintenance, unfortunately the only thing we can do is communication with midstream operator

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ACKNOWLEDGMENTS

Action 87977

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**ACKNOWLEDGMENTS**

<input checked="" type="checkbox"/>	I acknowledge that with this application I will be amending an existing incident file (assigned to this operator) for a vent or flare event, pursuant to 19.15.27 and 19.15.28 NMAC.
<input checked="" type="checkbox"/>	I acknowledge that amending an incident file does not replace original submitted application(s) or information and understand that any C-129 forms submitted to the OCD will be logged and stored as public record.
<input checked="" type="checkbox"/>	I hereby certify the statements in this amending 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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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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	Action Number: 87977
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

CONDITIONS

Created By	Condition	Condition Date
dweaver	If the information provided in this report requires further amendment(s), submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	3/9/2022