



Certificate of Analysis

Number: 6030-21050271-002A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

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

May 28, 2021

Station Name: Brainard Gas Com #2

Station Number: 720189-00

Station Location: Redwood

Sample Point: Meter run

Instrument: 70104251 (Inficon GC-MicroFusion)

Last Inst. Cal.: 05/18/2021 0:00 AM

Analyzed: 05/28/2021 07:47:56 by KNF

Sampled By: Javier Lazo

Sample Of: Gas Spot

Sample Date: 05/25/2021 02:00

Sample Conditions: 47 psig, @ 120 °F Ambient: 89 °F

Effective Date: 05/25/2021 02:00

Method: GPA-2261M

Cylinder No: 1111-001203

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.696 psia
Nitrogen	1.230	1.24817	1.497	
Carbon Dioxide	1.764	1.78928	3.370	
Methane	70.951	71.97619	49.423	
Ethane	13.499	13.69387	17.624	3.669
Propane	5.953	6.03848	11.397	1.667
Iso-Butane	0.731	0.74125	1.844	0.243
n-Butane	1.760	1.78512	4.441	0.564
Iso-Pentane	0.481	0.48795	1.507	0.179
n-Pentane	0.520	0.52710	1.628	0.191
Hexanes	0.437	0.44291	1.634	0.182
Heptanes	1.036	1.05046	4.505	0.486
Octanes	0.120	0.12173	0.595	0.062
Nonanes Plus	0.096	0.09749	0.535	0.055
	98.578	100.00000	100.000	7.298

Calculated Physical Properties

	Total	C9+
Calculated Molecular Weight	23.36	128.26
Compressibility Factor	0.9955	
Relative Density Real Gas	0.8100	4.4283

GPA 2172 Calculation:

Calculated Gross BTU per ft³ @ 14.696 psia & 60°F

Real Gas Dry BTU	1343.6	6996.3
Water Sat. Gas Base BTU	1320.7	6874.3
Ideal, Gross HV - Dry at 14.696 psia	1337.5	6996.3
Ideal, Gross HV - Wet	1314.2	6874.3

Comments: H₂S Field Content .4 %
Mcf/day 391

Report generated by: Krystle Fitzwater

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

BRAINARD /HIGGINS CAHOON																				
Location		32.766514 -104.348671																		
Meter Type	Prod Date	Entry Date	Disposition	Product	UOM	Volume	Vol Rate	Energy Factor	Energy	Flow Temp	Gas Gravity	Base Temp	Base Press	Flow Press	Run Hours	Meter Begin	Meter End	Begin Date	End Date	Last Updated
FLARE	7/21/2021	7/22/2021	FLARE	GAS	MCF	240	240	1	240	67	0.6	60	14.73	13	24	0	240	7/21/2021 0:00	7/21/2021 0:00	TJRODRIGUEZ
FLARE	7/20/2021	7/21/2021	FLARE	GAS	MCF	361	361	1	361	67	0.6	60	14.73	13	24	0	361	7/20/2021 0:00	7/20/2021 0:00	TJRODRIGUEZ

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 37952

QUESTIONS

Operator: Redwood Operating LLC PO Box 1370 Artesia, NM 88211370	OGRID: 330211
	Action Number: 37952
	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	Yes
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	Not answered.
Facility Type	Not answered.

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	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	2
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	07/20/2021
Time venting or flaring was discovered or commenced	05:00 PM
Is the venting or flaring event complete	Yes
Date venting or flaring was terminated	07/22/2021
Time venting or flaring was terminated	11:00 AM
Total duration of venting or flaring in hours, if venting or flaring has terminated	42
Longest duration of cumulative hours within any 24-hour period 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	Not answered.
Other Released Details	Cause: Midstream Scheduled Maintenance Pipeline (Any) Natural Gas Flared Spilled: 601 Mcf Recovered: 0 Mcf Lost: 601 Mcf]
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	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.

Steps and Actions to Prevent Waste

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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	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 venting or flaring	Flaring was caused from DCP needing Redwood to curtail production to repair and maintenance, unfortunately the only thing we can do is continue communication with the Midstream Operator.

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CONDITIONS

Action 37952

CONDITIONS

Operator: Redwood Operating LLC PO Box 1370 Artesia, NM 882111370	OGRID: 330211
	Action Number: 37952
	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.	7/26/2021