Certificate of Analysis

Number: 6030-21050241-002A

Artesia Laboratory
200 E Main St.
Artesia, NM 88210
Phone 575-746-3481

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

May 26, 2021

Station Name:	Hawk 8K Fed	Sampled By:	Javier Lazo
Station Number:	75141-00	Sample Of:	Gas Spot
Station Location:	Redwood	Sample Date:	05/24/2021
Sample Point:	Meter run	Sample Conditions:	44 psig, @ 105 °F Ambient: 80 °F
Instrument:	70104251 (Inficon GC-MicroFusion)	Effective Date:	05/24/2021
Last Inst. Cal.:	05/18/2021 0:00 AM	Method:	GPA-2261M
Analyzed:	05/26/2021 07:22:42 by KNF	Cylinder No:	1111-003911

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.696 psia
Nitrogen	1.108	1.11924	1.210	
Carbon Dioxide	2.221	2.24413	3.810	
Methane	63.067	63.72963	39.442	
Ethane	16.346	16.51802	19.162	4.431
Propane	8.499	8.58778	14.610	2.373
Iso-Butane	1.182	1.19422	2.678	0.392
n-Butane	2.809	2.83800	6.364	0.898
Iso-Pentane	0.769	0.77667	2.162	0.285
n-Pentane	0.776	0.78456	2.184	0.285
Hexanes	0.619	0.62530	2.079	0.258
Heptanes	1.327	1.34074	5.183	0.621
Octanes	0.146	0.14794	0.652	0.076
Nonanes Plus	0.093	0.09377	0.464	0.053
	98.962	100.00000	100.000	9.672

Calculated Physical Properties	Total	C9+
Calculated Molecular Weight	25.92	128.26
Compressibility Factor	0.9943	
Relative Density Real Gas	0.8997	4.4283
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.696 psia & 60°F		
Real Gas Dry BTU	1473.7	6996.3
Water Sat. Gas Base BTU	1448.6	6874.3
Ideal, Gross HV - Dry at 14.696 psia	1465.3	6996.3
Ideal, Gross HV - Wet	1439.8	6874.3

Comments: H2S Field Content 2.2 %
Mcf/day 555

Report generated by: Eric Ramirez

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

HAWK 8/17 CTB

Location 32.75873 -104.30046

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	10/15/2021	10/16/2021	FLARE	GAS	MCF	464	464	1	464	464	0.6	60	14.73	18	24	82,488	82,952	10/15/2021 0:00	10/15/2021 0:00	MARTYQUIROZ
FLARE	10/14/2021	10/15/2021	FLARE	GAS	MCF	437	437	1	437	437	0.6	60	14.73	18	24	82,051	82,488	10/14/2021 0:00	10/14/2021 0:00	MARTYQUIROZ
FLARE	10/13/2021	10/14/2021	FLARE	GAS	MCF	479	479	1	479	479	0.6	60	14.73	21	24	81,572	82,051	10/13/2021 0:00	10/13/2021 0:00	COLEJOHNSON
FLARE	10/12/2021	10/13/2021	FLARE	GAS	MCF	457	457	1	457	457	0.6	60	14.73	18	24	81,115	81,572	10/12/2021 0:00	10/12/2021 0:00	COLEJOHNSON
FLARE	10/11/2021	10/12/2021	FLARE	GAS	MCF	485	485	1	485	485	0.6	60	14.73	17	24	80,630	81,115	10/11/2021 0:00	10/11/2021 0:00	COLEJOHNSON
FLARE	10/10/2021	10/11/2021	FLARE	GAS	MCF	370	370	1	370	370	0.6	60	14.73	21	24	80,260	80,630	10/10/2021 0:00	10/10/2021 0:00	COLEJOHNSON
FLARE	10/9/2021	10/10/2021	FLARE	GAS	MCF	465	465	1	465	465	0.6	60	14.73	19	24	79,795	80,260	10/9/2021 0:00	10/9/2021 0:00	COLEJOHNSON
FLARE	10/8/2021	10/9/2021	FLARE	GAS	MCF	405	405	1	405	405	0.6	60	14.73	18	24	79,390	79,795	10/8/2021 0:00	10/8/2021 0:00	COLEJOHNSON
FLARE	10/7/2021	10/8/2021	FLARE	GAS	MCF	481	481	1	481	481	0.6	60	14.73	17	24	78,909	79,390	10/7/2021 0:00	10/7/2021 0:00	COLEJOHNSON
FLARE	10/6/2021	10/7/2021	FLARE	GAS	MCF	464	464	1	464	464	0.6	60	14.73	18	24	78,445	78,909	10/6/2021 0:00	10/6/2021 0:00	COLEJOHNSON
FLARE	10/5/2021	10/6/2021	FLARE	GAS	MCF	444	444	1	444	444	0.6	60	14.73	20	24	78,001	78,445	10/5/2021 0:00	10/5/2021 0:00	COLEJOHNSON
FLARE	10/4/2021	10/5/2021	FLARE	GAS	MCF	449	449	1	449	449	0.6	60	14.73	18	24	77,552	78,001	10/4/2021 0:00	10/4/2021 0:00	COLEJOHNSON
FLARE	10/3/2021	10/4/2021	FLARE	GAS	MCF	499	499	1	499	499	0.6	60	14.73	17	24	77,053	77,552	10/3/2021 0:00	10/3/2021 0:00	MARTYQUIROZ
FLARE	10/2/2021	10/3/2021	FLARE	GAS	MCF	437	437	1	437	437	0.6	60	14.73	21	24	76,616	77,053	10/2/2021 0:00	10/2/2021 0:00	MARTYQUIROZ
FLARE	10/1/2021	10/2/2021	FLARE	GAS	MCF	415	415	1	415	415	0.6	60	14.73	18	24	76,201	76,616	10/1/2021 0:00	10/1/2021 0:00	MARTYQUIROZ
FLARE	9/30/2021	10/1/2021	FLARE	GAS	MCF	437	437	1	437	437	0.6	60	14.73	18	24	75,764	76,201	9/30/2021 0:00	9/30/2021 0:00	MARTYQUIROZ
FLARE	9/29/2021	9/30/2021	FLARE	GAS	MCF	354	354	1	354	354	0.6	60	14.73	19	24	75,410	75,764	9/29/2021 0:00	9/29/2021 0:00	COLEJOHNSON

7542

District I
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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 56531

QUESTIONS

Operator: Redwood Operating LLC PO Box 1370 Artesia, NM 882111370	OGRID: 330211
	Action Number: 56531
	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	**[30-015-29016] HAWK 8 N FEDERAL #007**
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 addional 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	Yes
Is this considered a submission for a venting and/or flaring event	**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	64
Nitrogen (N2) percentage, if greater than one percent	1
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (C02) percentage, if greater than one percent	2
Oxygen (02) 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 Sufide (H2S) PPM quality requirement	*Not answered.*
Carbon Dioxide (C02) percentage quality requirement	*Not answered.*
Oxygen (02) percentage quality requirement	*Not answered.*

Date(s) and Time(s)	
Date venting and/or flaring was discovered or commenced	09/29/2021
Time venting and/or flaring was discovered or commenced	04:00 PM
Time venting and/or flaring was terminated	11:59 PM
Cumulative hours during this event	400

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 | Pipeline (Any) | Natural Gas Flared | Released: 7,542 Mcf | Recovered: 0 Mcf | Lost: 7,542 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	No
Was notification of downstream activity received by you or your operator	*Not answered.*
Downstream OGRID that should have notified you or your operator	*Not answered.*
Date notified of downstream activity requiring this venting and/or flaring	*Not answered.*
Time notified of downstream activity requiring this venting and/or flaring	*Not answered.*

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.	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 and/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 and/or flaring	Flaring was caused from DCP gas line leak. unfortunately the only thing we can do is continue communication with the midstream operator

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CONDITIONS

Action 56531

CONDITIONS

Operator: Redwood Operating LLC PO Box 1370 Artesia, NM 882111370	OGRID: 330211
	Action Number: 56531
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
dweaver	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.	10/18/2021