



Certificate of Analysis

Number: 6030-21110287-001A

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

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

Dec. 06, 2021

Station Name: Hawk CTB
Station Number: 742853-00
Station Location: Redwood
Sample Point: Meter run
Instrument: 6030_GC6 (Inficon GC-3000 Micro)
Last Inst. Cal.: 11/30/2021 0:00 AM
Analyzed: 12/06/2021 07:27:46 by ERG

Sampled By: Nathan Payne
Sample Of: Gas Spot
Sample Date: 11/24/2021 09:30
Sample Conditions: 60 psig, @ 72 °F Ambient: 58 °F
Effective Date: 11/24/2021 09:30
Method: GPA-2261M
Cylinder No: 1111-002619

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.696 psia		
Hydrogen Sulfide	0.000	1.00000	1.407		GPM TOTAL C2+	8.292
Nitrogen	1.834	1.79565	2.077		GPM TOTAL C3+	4.225
Methane	67.992	66.57730	44.092		GPM TOTAL IC5+	0.862
Carbon Dioxide	1.716	1.68000	3.052			
Ethane	15.498	15.17517	18.837	4.067		
Propane	8.152	7.98210	14.531	2.204		
Iso-butane	1.124	1.10032	2.640	0.361		
n-Butane	2.578	2.52456	6.058	0.798		
Iso-pentane	0.607	0.59388	1.769	0.218		
n-Pentane	0.596	0.58360	1.738	0.212		
Hexanes Plus	1.008	0.98742	3.799	0.432		
	101.105	100.00000	100.000	8.292		

Calculated Physical Properties

	Total	C6+
Relative Density Real Gas	0.8400	3.2176
Calculated Molecular Weight	24.22	93.19
Compressibility Factor	0.9953	

GPA 2172 Calculation:

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

Real Gas Dry BTU	1371	5129
Water Sat. Gas Base BTU	1347	5040
Ideal, Gross HV - Dry at 14.696 psia	1364.1	5129.2
Ideal, Gross HV - Wet	1340.2	5039.7

Comments: H2S Field Content 1.0 %
Mcf/day 529

Hydrocarbon Laboratory Manager

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

HAWK 9H CTB

Location		32.7628952 -104.2720252																		
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	12/4/2021	12/5/2021	FLARE	GAS	MCF	1,829.00	1,829.00	1	1,829.00	60	0.6	60	14.73	22	24	25,984	27,813	12/4/2021 0:00	12/4/2021 0:00	COLEJOHNSON
FLARE	12/3/2021	12/4/2021	FLARE	GAS	MCF	521.00	521.00	1	521.00	60	0.6	60	14.73	22	24	25,463	25,984	12/3/2021 0:00	12/3/2021 0:00	COLEJOHNSON

2,350.00

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 65331

QUESTIONS

Operator: Redwood Operating LLC PO Box 1370 Artesia, NM 88211370	OGRID: 330211
	Action Number: 65331
	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	[30-015-46817] HAWK 9 FEDERAL COM #001H
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 additional 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	67
Nitrogen (N2) percentage, if greater than one percent	2
Hydrogen Sulfide (H2S) PPM, rounded up	1
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 and/or flaring was discovered or commenced	12/03/2021
Time venting and/or flaring was discovered or commenced	12:30 AM
Time venting and/or flaring was terminated	06:30 AM
Cumulative hours during this event	30

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: 2,350 Mcf Recovered: 0 Mcf Lost: 2,350 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.	True
Please explain reason for why this event was beyond your operator's control	DCP plant froze up
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's plant freezing up, unfortunately the only thing we can do is continue communication with the midstream operator

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CONDITIONS

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	Action Number: 65331
	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.	12/7/2021