Certificate of Analysis

Number: 6030-21050241-003A

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:	West Red Lake Unit	Sampled By:	Javier Lazo
Station Number:	75691-00	Sample Of:	Gas Spot
Station Location:	Redwood	Sample Date:	05/24/2021 07:30
Sample Point:	Meter run	Sample Conditions:	37 psia, @ 88 °F Ambient: 70 °F
Instrument:	70104251 (Inficon GC-MicroFusion)	Effective Date:	05/24/2021 07:30
Last Inst. Cal.:	05/18/2021 0:00 AM	Method:	GPA-2261M
Analyzed:	05/26/2021 07:16:48 by KNF	Cylinder No:	5030-01026

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.696 psia
Nitrogen	1.548	1.58608	1.810	
Carbon Dioxide	2.360	2.41868	4.336	
Methane	65.679	67.30380	43.985	
Ethane	14.922	15.29130	18.731	4.099
Propane	7.195	7.37297	13.245	2.036
Iso-Butane	0.934	0.95710	2.266	0.314
n-Butane	2.110	2.16188	5.119	0.683
Iso-Pentane	0.545	0.55797	1.640	0.205
n-Pentane	0.571	0.58543	1.721	0.213
Hexanes	0.455	0.46574	1.635	0.192
Heptanes	1.027	1.05230	4.296	0.487
Octanes	0.125	0.12819	0.597	0.066
Nonanes Plus	0.116	0.11856	0.619	0.067
	97.587	100.00000	100.000	8.362

Calculated Physical Properties	Total	C9+
Calculated Molecular Weight	24.55	128.26
Compressibility Factor	0.9951	
Relative Density Real Gas	0.8514	4.4283
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.696 psia & 60°F		
Real Gas Dry BTU	1386.5	6996.3
Water Sat. Gas Base BTU	1363.0	6874.3
Ideal, Gross HV - Dry at 14.696 psia	1379.7	6996.3
Ideal, Gross HV - Wet	1355.6	6874.3

Comments: H2S Field Content 1.2 %
Mcf/day 516

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.

WEST RED LAKE CDP FLARE GAS METER

Location 32.768704 -104.314858

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	506	506	1	2183	60	0.6	60	14.73	17	24	129,348	129,854	7/21/2021 0:00	7/21/2021 0:00	DAKOTABOLEN
FLARE	7/20/2021	7/21/2021	FLARE	GAS	MCF	164	164	1	1919	60	0.6	60	14.73	17	24	129,184	129,348	7/20/2021 0:00	7/20/2021 0:00	DAKOTABOLEN
						670														

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 37891

QUESTIONS

Operator: Redwood Operating LLC PO Box 1370 Artesia, NM 882111370	OGRID: 330211
	Action Number: 37891
	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 addional 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 19.15.29.7 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 occuring at a facility that does not have an Facility ID (f#) 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	67
Nitrogen (N2) percentage, if greater than one percent	2
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 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: 670 Mcf | Recovered: 0 Mcf | Lost: 670 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

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

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Operator: Redwood Operating LLC PO Box 1370 Artesia, NM 882111370	OGRID: 330211
	Action Number: 37891
	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