



## Certificate of Analysis

Number: 6030-20120040-002A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

Matt Erickson  
Marathon Oil Corporation  
4111 S. Tidwell  
Carlsbad, NM 88220

Dec. 07, 2020

Station Name: Black River 2H Production  
Station Number: 17458GP  
Station Location: Marathon  
Sample Point: RGA  
Type of Sample: Spot-Cylinder  
Heat Trace Used: N/A  
Sampling Method: Fill and Purge  
Sampling Company: SPL  
Analyzed: 12/07/2020 10:47:24 by PGS

Sampled By: Jonah Reza  
Sample Of: Gas Spot  
Sample Date: 12/04/2020 12:14  
Sample Conditions: 124.73 psig, @ 57.23 °F Ambient: 48 °F  
Effective Date: 12/04/2020 12:14  
Method: GPA-2261M  
Cylinder No: 5030-03110  
Instrument: 70104251 (Inficon GC-MicroFusion)  
Last Inst. Cal.: 12/07/2020 0:00 AM

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Hydrogen Sulfide	0.000	0.00050	0.001		GPM TOTAL C2+	6.402
Nitrogen	1.229	1.21923	1.563		GPM TOTAL C3+	3.237
Methane	76.594	76.01588	55.806		GPM TOTAL iC5+	0.584
Carbon Dioxide	0.216	0.21397	0.431			
Ethane	11.945	11.85451	16.312	3.165		
Propane	6.176	6.12971	12.369	1.686		
Iso-butane	0.865	0.85798	2.282	0.280		
n-Butane	2.199	2.18251	5.805	0.687		
Iso-pentane	0.546	0.54208	1.790	0.198		
n-Pentane	0.579	0.57434	1.896	0.208		
Hexanes Plus	0.412	0.40929	1.745	0.178		
	100.761	100.00000	100.000	6.402		

## Calculated Physical Properties

Relative Density Real Gas	Total	C6+
Calculated Molecular Weight	0.7572	3.2176
Compressibility Factor	21.85	93.19
	0.9961	

## GPA 2172 Calculation:

Calculated Gross BTU per ft<sup>3</sup> @ 14.65 psia & 60°F

Real Gas Dry BTU	1298	5113
Water Sat. Gas Base BTU	1275	5024
Ideal, Gross HV - Dry at 14.65 psia	1292.5	5113.2
Ideal, Gross HV - Wet	1269.9	5023.7

**Comments:** H<sub>2</sub>S Field Content 5 ppm  
Mcf/day 933.121

Hydrocarbon Laboratory Manager

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

Flaring/Venting Event Volume (MCF):	355.36
Flare or vent:	Flare
Date discovered:	6/22/2021
Time discovered:	9:23 AM
Date terminated:	6/22/2021
Time terminated:	11:59 PM
Total Duration (hrs):	14

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

### Notification to Upstream Operators

Effective May 25, 2021

Notification must be provided to each Operator for which scheduled or unscheduled maintenance, replacement, repair, or emergency of a natural gas gathering system (NGGS) may affect line pressure or available capacity. NGGS operators may use this form or another method of communication that complies with 19.15.28.8(D) NMAC.

I. NGGS Operator: Sendero Carlsbad Midstream

Notice Date: 6/23/2021

II. Upstream Operator: Marathon Oil Company

III. Event Type:

☐ **Scheduled Maintenance; Replacement or Repair:** Provide written notice no less than 14 days prior to date of activity.  
Brief description of activity: \_\_\_\_\_

☒ **Unscheduled Maintenance, Emergency or Malfunction:** Provide verbal notification as soon as possible but no more than 12 hours after discovery and follow-up written confirmation within 24 hours of discovery.  
Brief description of activity: Plant upset caused high line pressure and reduced capacity

IV. Notification Information:

☒ **Verbal Notification:**

Person Contacted: Marathon Control Center Telephone Number 575-323-9465  
Date and Time: 6/23/21 @ 8:30 AM

☒ **Written Confirmation:**

Person Contacted: Marathon Control Center  
Address: Permian Control Center @ marothonoil.com  
Date and Time: 6/23/21 10:00 AM Delivery Method: ☒ e-Mail ☐ Certified Mail ☐ Other (Explain) \_\_\_\_\_

V. Affected Well or Facility:

API/Facility/Meter No	Well/Facility/Meter Name	Unit	Section	Township	Range
	<u>See Attached Listing</u>				

☒ List of additional wells and facilities attached.

VI. Anticipated Schedule: Date and time of the expected duration of NGGS:

Out of Service Start Date and Time: 06/22/2021 @ 0825 (mm/dd/yyyy - hh:mm xm)  
Return to Service Date and Time: 06/23/2021 @ 1000 (mm/dd/yyyy - hh:mm xm)

VII. Record Keeping: Operator shall make and keep a record of each notification for no less than five years and make such records available for inspection by the division upon request.

VIII. Notification completed by:

Printed Name: Julian Martinez

Title: Operations Foreman

Signature: [Signature]

Date: 6/23/2021

Email: Jmartinez@senderomidstream.com

Phone: 575-689-7249

	Meter	Section	Township	Range
Black River	30-10020	15	24S	27E
Cass	30-10003	16	23S	27E
Fiddle Fee	30-10005	23	24S	28E
Fiddle Fee 2	30-10029	23	24S	28E
Red Light	30-10024	27	23S	26E
So Com	30-10115	25	24S	28E
Sterling	30-10026	20	23S	27E
Hermes	30-10045	30	23S	28E
Gravel Grinder	30-10055	18	23S	28E
Fiddle Fee 3	30-10061	23	24S	28E
Sweet Tea	30-10047	31	24S	29E
Trebuchet	30-10051	30	23S	28E
Mariner 11H	30-10049	20	23S	28E
Mariner 1H	30-10074	18	23S	28E
Sweet Tea Fed	30-10090	31	24S	29E
Catapult	30-10096	26	22S	26E
Airport	30-10097	26	22S	26E
So Com 36	30-10116	36	24S	28E
Blue Steel Fed	30-10103	28	23S	29E
Blue Steel Fee	30-10112	20	23S	29E

**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 34633

**QUESTIONS**

Operator: MARATHON OIL PERMIAN LLC 5555 San Felipe St. Houston, TX 77056	OGRID: 372098
	Action Number: 34633
	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	Yes
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, minor venting or flaring of natural gas.
<b>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.</b>	
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	Producing Well
Additional details for Equipment Involved. Please specify	flare

**Representative Compositional Analysis of Vented or Flared Natural Gas**

Please provide the mole percent for the percentage questions in this group.

Methane (CH4) percentage	77
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	0
Oxygen (O2) percentage, if greater than one percent	0
<b>If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.</b>	
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	06/22/2021
Time venting or flaring was discovered or commenced	09:23 AM
Is the venting or flaring event complete	Yes
Date venting or flaring was terminated	06/22/2021
Time venting or flaring was terminated	11:59 PM
Total duration of venting or flaring in hours, if venting or flaring has terminated	14
Longest duration of cumulative hours within any 24-hour period during this event	14

**Measured or Estimated Volume of Vented or Flared Natural Gas**

Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: High Line Pressure   Producing Well   Natural Gas Flared   Spilled: 355 Mcf   Recovered: 0 Mcf   Lost: 355 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 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	Yes
Date notified of downstream activity requiring this venting or flaring	06/23/2021
Time notified of downstream activity requiring this venting or flaring	08:30 AM

**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	high line pressure, notification was given a day after
Steps taken to limit the duration and magnitude of venting or flaring	Notification of event was provided a day after and therefore limiting the duration or magnitude of event was not feasible
Corrective actions taken to eliminate the cause and reoccurrence of venting or flaring	Exploring different equipment to react immediately

**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**

CONDITIONS  
  
Action 34633

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 5555 San Felipe St. Houston, TX 77056	OGRID: 372098
	Action Number: 34633
	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.	7/1/2021