



**LABORATORY SERVICES**  
Natural Gas Analysis

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575.397.3713 2609 W Marland Hobbs NM 88240

For: Cimarex Energy  
Attention: Chris Prater  
600 N. Mariefeld, Suite 600  
Midland, Texas 79701

Sample: Sta# NCP1471232  
Identification: James 29-38 CDP  
Company: Cimarex Energy  
Lease:  
Plant:

Sample Data: Sample Date: 6/26/2018  
Analysis Date: 7/10/2018  
Sample Temp: 109 F  
Sample Press.: 630 PSIA

Sampled by: B. Eicher  
Analysis by: V. McDaniel  
Atmos Temp: 85 F  
Sample Time: 9:45 AM

H2S = 1 PPM

Press. Base: 14.73

#### Component Analysis

|                  |     | Mol<br>Percent | GPM<br>Real  | GPM<br>Ideal |
|------------------|-----|----------------|--------------|--------------|
| Hydrogen Sulfide | H2S |                |              |              |
| Nitrogen         | N2  | 2.140          |              |              |
| Methane          | C1  | 71.937         |              |              |
| Carbon Dioxide   | CO2 | 9.403          |              |              |
| Ethane           | C2  | 8.895          | 2.378        | 2.373        |
| Propane          | C3  | 4.245          | 1.169        | 1.166        |
| I-Butane         | IC4 | 0.531          | 0.174        | 0.173        |
| N-Butane         | NC4 | 1.223          | 0.385        | 0.385        |
| I-Pentane        | IC5 | 0.396          | 0.144        | 0.144        |
| N-Pentane        | NC5 | 0.393          | 0.170        | 0.142        |
| Hexanes Plus     | C6+ | <u>0.837</u>   | <u>0.363</u> | <u>0.362</u> |
|                  |     | 100.000        | 4.783        | 4.745        |

REAL BTU/CU.FT.

|           |            |
|-----------|------------|
| At 14.65  | 1122.9 Dry |
|           | 1104.6 Wet |
| At 14.696 | 1126.4 Dry |
|           | 1108.1 Wet |
| At 14.73  | 1129.0 Dry |
|           | 1110.7 Wet |

Specific Gravity:

|            |         |       |
|------------|---------|-------|
| Calculated | (Real)  | 0.805 |
|            | (Ideal) | 0.802 |

Remarks:

|            |       |       |        |      |     |        |       |       |
|------------|-------|-------|--------|------|-----|--------|-------|-------|
| 2021-05-29 | 0     | 0     | 108.33 | 0    | 76  | 0      | 0     | 100   |
| 2021-05-28 | 70.76 | 77.64 | 184.68 | 7.96 | 70  | 150.73 | 10.47 | 89.53 |
| 2021-05-27 | 40    | 43.88 | 182.85 | 5.48 | 108 | 109.02 | 7.57  | 92.43 |
| 2021-05-26 | 0.59  | 0.64  | 182.76 | 0.79 | 108 | 4.07   | 0.28  | 99.72 |
| 2021-05-25 | 0     | 0     | 137.52 | 0    | 82  | 0      | 0     | 100   |

**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 29999

**QUESTIONS**

|                                                                                  |                                                        |
|----------------------------------------------------------------------------------|--------------------------------------------------------|
| Operator:<br>CIMAREX ENERGY CO.<br>600 N. Marienfeld Street<br>Midland, TX 79701 | OGRID:<br>215099                                       |
|                                                                                  | Action Number:<br>29999                                |
|                                                                                  | Action Type:<br>[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                                                                                                                                                                  | No                                            |
| 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 19.13.297 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 | JAMES 29 FEDERAL CDP FLARE |
| Facility Type         | Flare Stack - (FS)         |

**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                                                                                | 2             |
| Hydrogen Sulfide (H2S) PPM, rounded up                                                                                               | 1             |
| Carbon Dioxide (CO2) percentage, if greater than one percent                                                                         | 9             |
| 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                                 | 06/01/2021 |
| Time venting or flaring was discovered or commenced                                 | 07:15 AM   |
| Is the venting or flaring event complete                                            | Yes        |
| Date venting or flaring was terminated                                              | 05/28/2021 |
| Time venting or flaring was terminated                                              | 01:00 AM   |
| Total duration of venting or flaring in hours, if venting or flaring has terminated | 2          |
| Longest duration of cumulative hours within any 24-hour period during this event    | 2          |

**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   Gas Compressor Station   Natural Gas Flared   Spilled: 70 Mcf   Recovered: 0 Mcf   Lost: 70 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 | 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. | True                                                                                                                       |
| Please explain reason for why this event was beyond your operator's control                                                    | We had the compressor go down on this facility; which forced us to go to high pressure flare.                              |
| Steps taken to limit the duration and magnitude of venting or flaring                                                          | We have communicated the urgency to the compressor company and they are taking measures to improve compressor performance. |
| Corrective actions taken to eliminate the cause and reoccurrence of venting or flaring                                         | Dialogue with compressor company to take measures to improve compressor performance.                                       |

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CONDITIONS  
  
Action 29999

CONDITIONS

|                                                                                  |                                                        |
|----------------------------------------------------------------------------------|--------------------------------------------------------|
| Operator:<br>CIMAREX ENERGY CO.<br>600 N. Marienfeld Street<br>Midland, TX 79701 | OGRID:<br>215099                                       |
|                                                                                  | Action Number:<br>29999                                |
|                                                                                  | Action Type:<br>[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. | 6/8/2021       |