



LABORATORY SERVICES
Natural Gas Analysis

www.permianls.com

575.397.3713 2609 W Marland Hobbs NM 88240

| | | |
|--------------|---|---|
| For: | Cimarex Energy Attention: Steve Fine 600 N. Mariefeld, Suite 600 Midland, Texas 79701 | Sample: Sta# NCP95888452 Identification: Da Vinci 7 Fed CDP Check Company: Cimarex Energy Lease: Plant: |
| Sample Data: | Sample Date: 7/23/2018 Analysis Date: 8/1/2018 Sample Temp: 96 F Sample Press.: 116 PSIA | Sampled by: Sheldon G Analysis by: D Armstrong Atmos Temp: 101 F Sample Time: 1:32 PM |

H2S =

Press. Base: 14.73

Component Analysis

| | | Mol Percent | GPM Real | GPM Ideal |
|------------------|-----|----------------|--------------|--------------|
| Hydrogen Sulfide | H2S | | | |
| Nitrogen | N2 | 1.650 | | |
| Methane | C1 | 77.237 | | |
| Carbon Dioxide | CO2 | 0.321 | | |
| Ethane | C2 | 11.811 | 3.158 | 3.151 |
| Propane | C3 | 5.398 | 1.487 | 1.483 |
| I-Butane | IC4 | 0.644 | 0.211 | 0.210 |
| N-Butane | NC4 | 1.582 | 0.499 | 0.497 |
| I-Pentane | IC5 | 0.328 | 0.119 | 0.120 |
| N-Pentane | NC5 | 0.391 | 0.170 | 0.141 |
| Hexanes Plus | C6+ | <u>0.638</u> | <u>0.277</u> | <u>0.276</u> |
| | | 100.000 | 5.921 | 5.878 |

REAL BTU/CU.FT.

| | |
|-----------|------------|
| At 14.65 | 1259.5 Dry |
| | 1238.9 Wet |
| At 14.696 | 1263.4 Dry |
| | 1242.8 Wet |
| At 14.73 | 1266.4 Dry |
| | 1245.6 Wet |

Specific Gravity:

| | | |
|------------|---------|-------|
| Calculated | (Real) | 0.740 |
| | (Ideal) | 0.738 |

Remarks:

| Row Count: 31 | | | | | | | | |
|---------------|--------|--------|-------------|-----------|------|------------------|------------------|--------------------|
| DateTimeStamp | Volume | Energy | StaticPress | DiffPress | Temp | Flow Time (mins) | Flow Up Time Pct | Flow Down Time Pct |
| 2021-05-31 | | | | | | | | |
| 2021-05-30 | | | | | | | | |
| 2021-05-29 | | | | | | | | |
| 2021-05-28 | | | | | | | | |
| 2021-05-27 | | | | | | | | |
| 2021-05-26 | 0 | 0 | 76.05 | 0 | 85 | 0 | 0 | 1 |
| 2021-05-25 | 96.34 | 121.78 | 121.63 | 5.34 | 98 | 205.18 | 14.25 | 85 |
| 2021-05-24 | 0.54 | 0.68 | 119.89 | 0.44 | 101 | 3.68 | 0.26 | 99 |
| 2021-05-23 | 0 | 0 | 84.23 | 0 | 81 | 0 | 0 | 1 |

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 29742

QUESTIONS

| | |
|--|--|
| Operator: CIMAREX ENERGY CO. 600 N. Marienfeld Street Midland, TX 79701 | OGRID: 215099 |
| | Action Number: 29742 |
| | 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 | No |
| Is this considered a submission for a notification of a major venting or flaring | Yes, minor 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 19.13.297 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 occurring at a facility that does not have an Facility ID (##) yet.

| | |
|-----------------------|--------------------------|
| Facility or Site Name | DA VINCI 7 FEDERAL 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 | 78 |
| 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 |
| 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 or flaring was discovered or commenced | 05/25/2021 |
| 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 | 05/25/2021 |
| Time venting or flaring was terminated | 01:00 AM |
| Total duration of venting or flaring in hours, if venting or flaring has terminated | 3 |
| Longest duration of cumulative hours within any 24-hour period during this event | 3 |

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 Gas Compressor Station Natural Gas Flared Spilled: 96 Mcf Recovered: 0 Mcf Lost: 96 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

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|--|---|
| 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 | Midstream compressor went down. |
| Steps taken to limit the duration and magnitude of venting or flaring | Worked with Midstream to bring compressor online ASAP |
| Corrective actions taken to eliminate the cause and reoccurrence of venting or flaring | Coordinate with midstream provider to investigate cause of compressor malfunction and ensure it does not go down again. |

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CONDITIONS

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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. | 5/30/2021 |