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575.397.3713 2609 W Marland Hobbs NM 88240

C6+ Gas Analysis Report

| | | | |
|----------------------------|---------------------------|-------------------------------------|------------------------------------------|
| 6073G | NCW0001040 | Cottonberry 20 Fed Com 4H Ck | |
| Sample Point Code | Sample Point Name | Sample Point Location | |
| Laboratory Services | 2021038761 | 0471 | I Rangel - Spot |
| Source Laboratory | Lab File No | Container Identity | Sampler |
| USA | USA | USA | New Mexico |
| District | Area Name | Field Name | Facility Name |
| Jan 26, 2021 12:15 | Jan 26, 2021 12:15 | Feb 2, 2021 11:59 | Feb 2, 2021 |
| Date Sampled | Date Effective | Date Received | Date Reported |
| 32.00 | 970.25 | Torrance | 88 @ 64 |
| Ambient Temp (°F) | Flow Rate (Mcf) | Analyst | Press PSI @ Temp °F Source Conditions |
| Cimarex Energy | | | NG |
| Operator | | | Lab Source Description |

| Component | Normalized Mol % | Un-Normalized Mol % | GPM |
|--------------------|------------------|---------------------|---------------|
| H2S (H2S) | 0.0000 | 0 | |
| Nitrogen (N2) | 1.6120 | 1.61232 | |
| CO2 (CO2) | 0.3750 | 0.37452 | |
| Methane (C1) | 78.0140 | 78.0132 | |
| Ethane (C2) | 11.6240 | 11.62441 | 3.1080 |
| Propane (C3) | 5.1880 | 5.18792 | 1.4290 |
| I-Butane (IC4) | 0.5840 | 0.58382 | 0.1910 |
| N-Butane (NC4) | 1.4380 | 1.43815 | 0.4530 |
| I-Pentane (IC5) | 0.3100 | 0.31017 | 0.1130 |
| N-Pentane (NC5) | 0.3400 | 0.34001 | 0.1230 |
| Hexanes Plus (C6+) | 0.5150 | 0.51546 | 0.2230 |
| TOTAL | 100.0000 | 100.0000 | 5.6400 |

| Gross Heating Values (Real, BTU/ft³) | | | |
|--------------------------------------|-----------|-----------------------|-----------|
| 14.696 PSI @ 60.00 Å°F | | 14.73 PSI @ 60.00 Å°F | |
| Dry | Saturated | Dry | Saturated |
| 1,246.9 | 1,226.6 | 1,249.8 | 1,229.4 |

| Calculated Total Sample Properties | |
|-----------------------------------------------|------------------------|
| GPA2145-16 *Calculated at Contract Conditions | |
| Relative Density Real | Relative Density Ideal |
| 0.7288 | 0.7265 |
| Molecular Weight | |
| 21.0390 | |

| C6+ Group Properties | | |
|----------------------|--------------|--------------|
| Assumed Composition | | |
| C6 - 60.000% | C7 - 30.000% | C8 - 10.000% |

| |
|--------------------|
| Field H2S 0 PPM |
|--------------------|

PROTREND STATUS: Passed By Validator on Feb 2, 2021
DATA SOURCE: Imported

PASSED BY VALIDATOR REASON: Close enough to be considered reasonable.

VALIDATOR: Torrance Galvan

VALIDATOR COMMENTS: OK

Method(s): Gas C6+ - GPA 2261, Extended Gas - GPA 2286, Calculations - GPA 2172

| Analyzer Information | | | |
|----------------------|-------------------|----------------|--------------|
| Device Type: | Gas Chromatograph | Device Make: | Shimadzu |
| Device Model: | GC-2014 | Last Cal Date: | Jan 28, 2021 |

EFM History Command History

From: 05/01/2021 12:00 AM To: 05/31/2021 12:00 AM

Reset Dates Refresh Data

Daily Hourly Alarms Events

Row Count: 31

| DateTimeStamp | Volume | Energy | StaticPress | DiffPress | Temp | Flow Time (mins) | Flow Up Time Pct | Flow Down Time Pct |
|---------------|--------|--------|-------------|-----------|------|------------------|------------------|--------------------|
| 121-05-31 | | | | | | | | |
| 121-05-30 | | | | | | | | |
| 121-05-29 | | | | | | | | |
| 121-05-28 | | | | | | | | |
| 121-05-27 | | | | | | | | |
| 121-05-26 | 0 | 0 | 88.87 | 0 | 96 | 0 | 0 | 10 |
| 121-05-25 | 51.97 | 64.98 | 143.58 | 7.36 | 85 | 95.28 | 6.62 | 93.3 |
| 121-05-24 | 0 | 0 | 92.37 | 0 | 82 | 0 | 0 | 10 |
| 121-05-23 | 0 | 0 | 68.36 | 0 | 83 | 0 | 0 | 10 |

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 29734

QUESTIONS

| | |
|----------------------------------------------------------------------------------|--------------------------------------------------------|
| Operator: CIMAREX ENERGY CO. 600 N. Marienfeld Street Midland, TX 79701 | OGRID: 215099 |
| | Action Number: 29734 |
| | Action Type: [C-129] Venting and/or Flaring (C-129) |

QUESTIONS

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| Determination of Reporting Requirements | |
| <i>Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.</i> | |
| 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 19-1-297 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 | |
| <i>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.</i> | |
| Facility or Site Name | COTTONBERRY 20 FED COM 4H 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 | |
| <i>Please provide the mole percent for the percentage questions in this group.</i> | |
| 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 | 05/26/2021 |
| 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: Equipment Failure Gas Compressor Station Natural Gas Flared Spilled: 52 Mcf Recovered: 0 Mcf Lost: 52 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 | Midstream compressor went down. |
| Steps taken to limit the duration and magnitude of venting or flaring | Return of compressor to online status 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 |