



## Certificate of Analysis

Number: 6030-24100641-001A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

Field:  
 Station Name: Bell Lake North- Inlet to the Dehy  
 Station Number:  
 Station Location: MPLX  
 Sample Point: The Gas to the Contactor  
 Meter Number:  
 Method: GPA 2286  
 Cylinder No: 5030-03353  
 Instrument: 6030\_GC2 (Agilent GC-7890B)  
 Last Inst. Cal.: 10/08/2024 07:06:35  
 Analyzed: 10/18/2024 07:11:39 by EBH

Report Date: 10/18/2024  
 Sampled By: Anthony Olivas  
 Sample Of: Gas  
 Sample Type: Spot  
 Sample Date: 10/16/2024 01:10  
 Sample Conditions: 1108 psig, @ 65 °F Ambient: 65 °F  
 Received Date: 10/17/2024  
 Login Date: 10/17/2024  
 Effective Date: 10/16/2024 01:10  
 Flow Rate:  
 Sampling Method:  
 Heating Method:

## Analytical Data

| Components       | Un-normalized<br>Mol % | Mol. %   | Wt. %    | GPM at<br>14.73 psia |                      |
|------------------|------------------------|----------|----------|----------------------|----------------------|
| Hydrogen Sulfide | 0.0000                 | 0.0000   | 0.0000   |                      | GPM TOTAL C2+ 6.069  |
| Nitrogen         | 1.8350                 | 1.8810   | 2.3670   |                      | GPM TOTAL C3+ 3.536  |
| Methane          | 75.2370                | 77.1410  | 55.5940  |                      | GPM TOTAL iC5+ 1.019 |
| Carbon Dioxide   | 0.2690                 | 0.2760   | 0.5460   |                      |                      |
| Ethane           | 9.2010                 | 9.4340   | 12.7430  | 2.533                |                      |
| Propane          | 5.1260                 | 5.2560   | 10.4120  | 1.453                |                      |
| Iso-butane       | 0.8900                 | 0.9130   | 2.3840   | 0.300                |                      |
| n-Butane         | 2.3520                 | 2.4120   | 6.2980   | 0.764                |                      |
| Iso-pentane      | 0.7130                 | 0.7310   | 2.3690   | 0.269                |                      |
| n-Pentane        | 0.7760                 | 0.7960   | 2.5800   | 0.290                |                      |
| Hexanes Plus     | 1.1310                 | 1.1600   | 4.7070   | 0.460                |                      |
|                  | 97.5300                | 100.0000 | 100.0000 | 6.069                |                      |

## Calculated Physical Properties

|                             |              |            |
|-----------------------------|--------------|------------|
|                             | <b>Total</b> | <b>C6+</b> |
| Relative Density Real Gas   | 0.7714       | 3.1170     |
| Calculated Molecular Weight | 22.26        | 90.28      |
| Compressibility Factor      | 0.9960       |            |

## GPA 2172 Calculation:

Calculated Gross BTU per ft<sup>3</sup> @ 14.73 psia & 60°F

|                                     |        |        |
|-------------------------------------|--------|--------|
| Real Gas Dry BTU                    | 1312.3 | 4855.6 |
| Water Sat. Gas Base BTU             | 1289.5 | 4771.1 |
| Ideal, Gross HV - Dry at 14.73 psia | 1307.1 | 4855.6 |
| Ideal, Gross HV - Wet               | 1284.3 | 0.000  |

Comments: H2S Field Content: 0 %

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated. The test results apply to the sample as received.



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Station Number:

Station Location: MPLX

Sample Point: The Gas to the Contactor

Meter Number:

Instrument 1: 6030\_GC1, HP7890 Signal 1

Instrument 2: 6030\_GC2, HP7890 Signal 1

Analyzed: 10/18/2024 07:09:47 by EBH

Report Date: 10/18/2024

Sampled By: Anthony Olivas

Sample Of: Gas Spot

Sample Date: 10/16/2024 01:10

Sample Conditions: 1108 psig, @ 65 °F

Received Date: 10/17/2024

Login Date: 10/17/2024

Method: GPA 2286

Cylinder No: 5030-03353

## Analytical Data

| Components       | Mol. %  | Wt. %   | GPM at<br>14.73 psia |
|------------------|---------|---------|----------------------|
| Hydrogen Sulfide | 0.000   | 0.000   |                      |
| Nitrogen         | 1.881   | 2.367   |                      |
| Methane          | 77.141  | 55.594  |                      |
| Carbon Dioxide   | 0.276   | 0.546   |                      |
| Ethane           | 9.434   | 12.743  | 2.533                |
| Propane          | 5.256   | 10.412  | 1.453                |
| Iso-Butane       | 0.913   | 2.384   | 0.300                |
| n-Butane         | 2.412   | 6.298   | 0.764                |
| Iso-Pentane      | 0.731   | 2.369   | 0.269                |
| n-Pentane        | 0.796   | 2.580   | 0.290                |
| i-Hexanes        | 0.317   | 1.203   | 0.127                |
| n-Hexane         | 0.192   | 0.727   | 0.078                |
| Benzene          | 0.075   | 0.265   | 0.021                |
| Cyclohexane      | 0.127   | 0.475   | 0.043                |
| i-Heptanes       | 0.195   | 0.813   | 0.079                |
| n-Heptane        | 0.044   | 0.196   | 0.020                |
| Toluene          | 0.046   | 0.189   | 0.015                |
| i-Octanes        | 0.116   | 0.546   | 0.052                |
| n-Octane         | 0.008   | 0.043   | 0.004                |
| Ethylbenzene     | 0.003   | 0.016   | 0.001                |
| Xylenes          | 0.010   | 0.046   | 0.004                |
| i-Nonanes        | 0.014   | 0.084   | 0.007                |
| n-Nonane         | 0.003   | 0.018   | 0.002                |
| Decanes Plus     | 0.010   | 0.086   | 0.007                |
|                  | 100.000 | 100.000 | 6.069                |



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Received Date: 10/17/2024

Login Date: 10/17/2024

Method: GPA 2286

Cylinder No: 5030-03353

**Calculated Physical Properties**

Calculated Molecular Weight

**Total**

22.26

**C10+**

166.12

**GPA 2172 Calculation:****Calculated Gross BTU per ft<sup>3</sup> @ 14.73 psia & 60°F**

Real Gas Dry BTU

1312.3

9068.7

Water Sat. Gas Base BTU

1289.5

8875.2

Relative Density Real Gas

0.7714

5.7358

Compressibility Factor

0.9960

Ideal, Gross HV - Wet

1284.3

Ideal, Gross HV - Dry at 14.73 psia

1307.1

Net BTU Dry Gas - real gas

1192

Net BTU Wet Gas - real gas

1172

**Comments:** H2S Field Content: 0 %

Hydrocarbon Laboratory Manager

Quality Assurance:

The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated. The test results apply to the sample as received.

## Breakdown of Bell Lake North Compressor Station

| Compressor Packages |              |             |                   |                 |                           |
|---------------------|--------------|-------------|-------------------|-----------------|---------------------------|
| Tag #               | Manufacturer | Engine Size | Initial Mass (lb) | Emissions (scf) | Volume (ft <sup>3</sup> ) |
| CM-0500             | Toromont     | 3516        |                   |                 |                           |
| CM-0700             | Enerflex     | 3516        | 205               | 3,152           | 146                       |
| CM-0900             | Enerflex     | 3516        | 205               | 3,152           | 146                       |
| CM-1100             | Exterran     | 3516        | 200               | 3,107           | 124                       |
| CM-1300             | Exterran     | 3516        | 200               | 3,107           | 124                       |
| CM-1500             | Exterran     | 3516        | 200               | 3,107           | 124                       |
| CM-1700             | AG           | 3516        | 198               | 3,042           | 142                       |
| Total               |              |             | 1,208             | 18,667          | 806                       |

| Lines and Equipment |                   |                 |                           |
|---------------------|-------------------|-----------------|---------------------------|
| Description         | Initial Mass (lb) | Emissions (scf) | Volume (ft <sup>3</sup> ) |
| Piping              | 4,727             | 39,408          | 1,824                     |
| Equipment           | 29,878            | 40,632          | 3,303                     |
| Total               | 34,605            | 80,040          | 5,126                     |

|                            |        |                 |
|----------------------------|--------|-----------------|
| Station Volume Total       | 5,933  | ft <sup>3</sup> |
| Station Initial Mass Total | 35,813 | lb              |
| Station Emission Total     | 98,707 | scf             |

**Comments and Assumptions**

- 1) For compressor packages: connection line volumes to and from the suction and discharge headers were included. This is due to the main isolation valves being located next to the main header
- 2) Equipment volumes were determined from dimensions from the P&IDs and/or Equipment Drawings
- 3) Piping lengths and schedules were pulled from the as-built 3D models of the compressor station.
- 4) Initial Hydrocarbon Mass was calculated from using the simulated mass density in VMG.
- 5) Emissions for single phase vapor streams are calculated by using Equation W-14A of 40 CFR Part 98, Section 233, Paragraph (i) and the station is not assumed to purged.
- 6) Emissions for two phase or liquid streams are calculated by flash calculations in VMG.

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

DEFINITIONS

Action 421276

DEFINITIONS

|                                                                                                        |                                                        |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Operator:<br>MarkWest Energy West Texas Gas Company, L.L.C<br>1515 Arapahoe Street<br>Denver, CO 80202 | OGRID:<br>329252                                       |
|                                                                                                        | Action Number:<br>421276                               |
|                                                                                                        | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

DEFINITIONS

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application:</p> <ul style="list-style-type: none"><li>• this application's operator, hereinafter "this operator";</li><li>• venting and/or flaring, hereinafter "vent or flare";</li><li>• any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms";</li><li>• the statements in (and/or attached to) this, hereinafter "the statements in this";</li><li>• and the past tense will be used in lieu of mixed past/present tense questions and statements.</li></ul> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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**Santa Fe, NM 87505**

QUESTIONS

Action 421276

**QUESTIONS**

|                                                                                                        |                                                        |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Operator:<br>MarkWest Energy West Texas Gas Company, L.L.C<br>1515 Arapahoe Street<br>Denver, CO 80202 | OGRID:<br>329252                                       |
|                                                                                                        | Action Number:<br>421276                               |
|                                                                                                        | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

**QUESTIONS**

|                                                                                                                                                                                                   |                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| <b>Prerequisites</b><br><i>Any messages presented in this section, will prevent submission of this application. Please resolve these issues before continuing with the rest of the questions.</i> |                                                       |
| Incident Well                                                                                                                                                                                     | Unavailable.                                          |
| Incident Facility                                                                                                                                                                                 | [fAPP2125136221] Permian Natural Gas Gathering System |

|                                                                                                                                                                                                                                                                                            |                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| <b>Determination of Reporting Requirements</b><br><i>Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.</i>                                                                                               |                                                   |
| Was this vent or flare caused by an emergency or malfunction                                                                                                                                                                                                                               | Yes                                               |
| Did this vent or flare last eight hours or more cumulatively within any 24-hour period from a single event                                                                                                                                                                                 | No                                                |
| Is this considered a submission for a vent or flare event                                                                                                                                                                                                                                  | Yes, minor venting and/or flaring of natural gas. |
| <i>An operator shall file a form C-141 instead of a form C-129 for a release that, includes liquid during venting and/or flaring that is or may be a major or minor release under 19.15.29.7 NMAC.</i>                                                                                     |                                                   |
| Was there <b>at least 50 MCF</b> of natural gas vented and/or flared during this event                                                                                                                                                                                                     | Yes                                               |
| Did this vent or flare result in the release of <b>ANY</b> 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                                                |
| Was the vent or flare within an incorporated municipal boundary or within 300 feet from an occupied permanent residence, school, hospital, institution or church in existence                                                                                                              | No                                                |

|                                                           |                              |
|-----------------------------------------------------------|------------------------------|
| <b>Equipment Involved</b>                                 |                              |
| Primary Equipment Involved                                | Gas Compressor Station       |
| Additional details for Equipment Involved. Please specify | Compressor Station Blowdown. |

|                                                                                                                                                                    |               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <b>Representative Compositional Analysis of Vented or Flared Natural Gas</b><br><i>Please provide the mole percent for the percentage questions in this group.</i> |               |
| Methane (CH4) percentage                                                                                                                                           | 77            |
| Nitrogen (N2) percentage, if greater than one percent                                                                                                              | 2             |
| Hydrogen Sulfide (H2S) PPM, rounded up                                                                                                                             | 0             |
| Carbon Dioxide (CO2) percentage, if greater than one percent                                                                                                       | 1             |
| Oxygen (O2) percentage, if greater than one percent                                                                                                                | 0             |
| <i>If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.</i>                               |               |
| 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. |

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QUESTIONS, Page 2

Action 421276

**QUESTIONS (continued)**

|                                                                                                        |                                                        |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Operator:<br>MarkWest Energy West Texas Gas Company, L.L.C<br>1515 Arapahoe Street<br>Denver, CO 80202 | OGRID:<br>329252                                       |
|                                                                                                        | Action Number:<br>421276                               |
|                                                                                                        | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

**QUESTIONS**

| Date(s) and Time(s)                            |            |
|------------------------------------------------|------------|
| Date vent or flare was discovered or commenced | 01/01/2025 |
| Time vent or flare was discovered or commenced | 10:00 AM   |
| Time vent or flare was terminated              | 10:05 AM   |
| Cumulative hours during this event             | 0          |

| Measured or Estimated Volume of Vented or Flared Natural Gas              |                                                                                                                  |
|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Natural Gas Vented (Mcf) Details                                          | Cause: Other   Gas Compressor Station   Natural Gas Vented   Released: 98 Mcf   Recovered: 0 Mcf   Lost: 98 Mcf. |
| Natural Gas Flared (Mcf) Details                                          | Not answered.                                                                                                    |
| Other Released Details                                                    | Not answered.                                                                                                    |
| Additional details for Measured or Estimated Volume(s). Please specify    | Estimated volumes                                                                                                |
| Is this a gas only submission (i.e. only significant Mcf values reported) | Yes, according to supplied volumes this appears to be a "gas only" report.                                       |

| Venting or Flaring Resulting from Downstream Activity             |               |
|-------------------------------------------------------------------|---------------|
| Was this vent or flare a result of downstream activity            | No            |
| Was notification of downstream activity received by this operator | Not answered. |
| Downstream OGRID that should have notified this operator          | Not answered. |
| Date notified of downstream activity requiring this vent or flare | Not answered. |
| Time notified of downstream activity requiring this vent or flare | Not answered. |

| Steps and Actions to Prevent Waste                                                                                               |                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For this event, this operator could not have reasonably anticipated the current event and it was beyond this operator's control. | True                                                                                                                                                                                                       |
| Please explain reason for why this event was beyond this operator's control                                                      | Station has flame detection sensors placed throughout site. Activation of sensors results in an emergency shut down of all compressors on site. Component on sensor failed. Sensor failure causes shutdown |
| Steps taken to limit the duration and magnitude of vent or flare                                                                 | Proper notifications were made, and immediate fixes were implemented                                                                                                                                       |
| Corrective actions taken to eliminate the cause and reoccurrence of vent or flare                                                | Reported to I&E department, created work order to get flame detector replaced, and reset the system                                                                                                        |



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ACKNOWLEDGMENTS

Action 421276

**ACKNOWLEDGMENTS**

|                                                                                                        |                                                        |
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|                                                                                                        | Action Number:<br>421276                               |
|                                                                                                        | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

**ACKNOWLEDGMENTS**

|                                     |                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | I acknowledge that I am authorized to submit a <i>Venting and/or Flaring</i> (C-129) report on behalf of this operator and understand that this report can be a <b>complete</b> C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.                                                                                      |
| <input checked="" type="checkbox"/> | I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to this operator) to track any C-129 forms, pursuant to 19.15.27.7 and 19.15.28.8 NMAC and understand that this submission meets the notification requirements of Paragraph (1) of Subsection G and F respectively. |
| <input checked="" type="checkbox"/> | I hereby certify the statements in this report are true and correct to the best of my knowledge and acknowledge that any false statement may be subject to civil and criminal penalties under the Oil and Gas Act.                                                                                                        |
| <input checked="" type="checkbox"/> | I acknowledge that the acceptance of any C-129 forms by the OCD does not relieve this operator of liability should their operations have failed to adequately investigate, report, and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment.                       |
| <input checked="" type="checkbox"/> | I acknowledge that OCD acceptance of any C-129 forms does not relieve this operator of responsibility for compliance with any other applicable federal, state, or local laws and/or regulations.                                                                                                                          |

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CONDITIONS

Action 421276

CONDITIONS

|                                                                                                        |                                                        |
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|                                                                                                        | Action Number:<br>421276                               |
|                                                                                                        | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

CONDITIONS

|            |                                                                                                                                                                                    |                |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Created By | Condition                                                                                                                                                                          | Condition Date |
| mtyler     | If the information provided in this report requires an amendment, submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event. | 1/16/2025      |