



**CERTIFICATE OF ANALYSIS**  
**18110568-002A**

**Houston Laboratories**  
8820 Interchange Drive  
Houston, TX 77054  
Phone 713.660.0901

**Customer:** COMM Engineering  
**Attn:** Ethan McMahon  
1319 W. Pinhook Rd., Suite 401  
Lafayette, LA 70503

**Report Date:** 12/12/18

**PO / Ref. No.:**

**Company:** COMM Engineering  
**Field:**  
**Well:** Cooper Jal Unit\_18110072

**Sample Of:** Liquid  
**Sample Date/Time:** 11/05/18  
**Sample Psig & Temp:** 38.7 psia @ 67 °F  
**Sampled By:** JW  
**Cylinder # :** 1030-06326

**Sample Point:** Spot / Oil Dump

**Comments:** EOS Flash Gas Composition

Staged Flash from 38.7 psia @ 67°F to 14.7 psia @ 72°F

|                        | <u>MOL %</u>   | <u>WEIGHT %</u> | <u>GPM's @ 14.696</u> |
|------------------------|----------------|-----------------|-----------------------|
| NITROGEN               | 15.590         | 16.003          |                       |
| METHANE                | 56.513         | 33.220          |                       |
| CO2                    | 2.896          | 4.671           |                       |
| ETHANE                 | 7.795          | 8.588           | 2.089                 |
| PROPANE                | 6.475          | 10.462          | 1.788                 |
| I-BUTANE               | 1.394          | 2.969           | 0.457                 |
| N-BUTANE               | 4.136          | 8.808           | 1.307                 |
| I-PENTANE              | 1.620          | 4.282           | 0.594                 |
| N-PENTANE              | 1.608          | 4.252           | 0.584                 |
| I-HEXANE               | 0.579          | 1.830           | 0.239                 |
| N-HEXANE               | 0.389          | 1.229           | 0.160                 |
| 2,2,4 TRIMETHYLPENTANE | 0.005          | 0.019           | 0.002                 |
| BENZENE                | 0.051          | 0.146           | 0.014                 |
| HEPTANES               | 0.604          | 2.139           | 0.279                 |
| TOLUENE                | 0.062          | 0.210           | 0.021                 |
| OCTANES                | 0.211          | 0.868           | 0.108                 |
| E-BENZENE              | 0.013          | 0.049           | 0.005                 |
| m,o,&p-XYLENE          | 0.017          | 0.065           | 0.006                 |
| NONANES                | 0.041          | 0.190           | 0.023                 |
| DECANES PLUS           | 0.000          | 0.000           | 0.000                 |
| <b>TOTALS</b>          | <u>100.000</u> | <u>100.000</u>  | <u>7.678</u>          |

**CALCULATED VALUES**

|                                        |            |            |
|----------------------------------------|------------|------------|
| CALCULATED MOLECULAR WEIGHT TOTAL      | 27.317     |            |
| REAL, DRY BTU AT 14.696 PSIA, 60 DEG.F | 1289.2     |            |
| REAL, WET BTU AT 14.696 PSIA, 60 DEG.F | 1266.7     |            |
| REAL, RELATIVE DENSITY                 | 0.9474     |            |
| COMPRESSIBILITY FACTOR                 | 0.99521    |            |
|                                        | <u>C2+</u> | <u>C5+</u> |
| REAL, GPM's @ 14.696 psia, 60 Deg.F    | 7.678      | 2.037      |

**New Mexico OCD C-129**

**Calculations or Specific Justification for Volumes**

- **Calculations**  
No calculations of volume of vent/flare necessary. Volumes are metered.
- **Specific Justification for Volumes**  
Metered volumes that were previously sold via pipeline. Must flare gas due to sales pipeline being shut-in.

**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**

DEFINITIONS

Action 103709

**DEFINITIONS**

|                                                                                  |                                                        |
|----------------------------------------------------------------------------------|--------------------------------------------------------|
| Operator:<br>LEGACY RESERVES OPERATING, LP<br>15 Smith Road<br>Midland, TX 79705 | OGRID:<br>240974                                       |
|                                                                                  | Action Number:<br>103709                               |
|                                                                                  | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

**DEFINITIONS**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application: <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> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**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 103709

**QUESTIONS**

|                                                                                  |                                                        |
|----------------------------------------------------------------------------------|--------------------------------------------------------|
| Operator:<br>LEGACY RESERVES OPERATING, LP<br>15 Smith Road<br>Midland, TX 79705 | OGRID:<br>240974                                       |
|                                                                                  | Action Number:<br>103709                               |
|                                                                                  | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

**QUESTIONS****Prerequisites**

Any messages presented in this section, will prevent submission of this application. Please resolve these issues before continuing with the rest of the questions.

|                   |                                          |
|-------------------|------------------------------------------|
| Incident Well     | Not answered.                            |
| Incident Facility | [fAPP2135049532] Cooper Jal Unit BT20419 |

**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 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 | Yes                                               |
| Is this considered a submission for a vent or flare event                                                  | Yes, minor venting and/or flaring of natural gas. |

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.

|                                                                                                                                                                                                                                                                                            |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Was there at least 50 MCF 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 withing 300 feet from an occupied permanent residence, school, hospital, institution or church in existence                                                                                                             | No  |

**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                                     | 57     |
| Nitrogen (N2) percentage, if greater than one percent        | 16     |
| Hydrogen Sulfide (H2S) PPM, rounded up                       | 37,000 |
| Carbon Dioxide (CO2) percentage, if greater than one percent | 3      |
| 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. |

**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, Page 2

Action 103709

QUESTIONS (continued)

|                                                                                  |                                                        |
|----------------------------------------------------------------------------------|--------------------------------------------------------|
| Operator:<br>LEGACY RESERVES OPERATING, LP<br>15 Smith Road<br>Midland, TX 79705 | OGRID:<br>240974                                       |
|                                                                                  | Action Number:<br>103709                               |
|                                                                                  | 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 | 04/23/2022 |
| Time vent or flare was discovered or commenced | 12:00 AM   |
| Time vent or flare was terminated              | 11:59 PM   |
| Cumulative hours during this event             | 24         |

| Measured or Estimated Volume of Vented or Flared Natural Gas              |                                                                                                                                  |
|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Natural Gas Vented (Mcf) Details                                          | Not answered.                                                                                                                    |
| Natural Gas Flared (Mcf) Details                                          | Cause: Midstream Scheduled Maintenance   Separator   Natural Gas Flared   Released: 148 Mcf   Recovered: 0 Mcf   Lost: 148 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 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            | Yes                                  |
| Was notification of downstream activity received by this operator | Yes                                  |
| Downstream OGRID that should have notified this operator          | [24650] TARGA MIDSTREAM SERVICES LLC |
| Date notified of downstream activity requiring this vent or flare | 04/23/2022                           |
| Time notified of downstream activity requiring this vent or flare | 12:00 AM                             |

| 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                                                      | Sales pipeline shut in.                                                 |
| Steps taken to limit the duration and magnitude of vent or flare                                                                 | Communicate with sales pipeline for anticipated date of return service. |
| Corrective actions taken to eliminate the cause and reoccurrence of vent or flare                                                | Communicate with sales pipeline for anticipated date of return service. |

**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**

ACKNOWLEDGMENTS

Action 103709

**ACKNOWLEDGMENTS**

|                                                                                  |                                                        |
|----------------------------------------------------------------------------------|--------------------------------------------------------|
| Operator:<br>LEGACY RESERVES OPERATING, LP<br>15 Smith Road<br>Midland, TX 79705 | OGRID:<br>240974                                       |
|                                                                                  | Action Number:<br>103709                               |
|                                                                                  | 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.                                                                                                                          |

**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 103709

CONDITIONS

|                                                                                  |                                                        |
|----------------------------------------------------------------------------------|--------------------------------------------------------|
| Operator:<br>LEGACY RESERVES OPERATING, LP<br>15 Smith Road<br>Midland, TX 79705 | OGRID:<br>240974                                       |
|                                                                                  | Action Number:<br>103709                               |
|                                                                                  | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

CONDITIONS

| Created By | Condition                                                                                                                                                                          | Condition Date |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| reyesm01   | 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. | 5/4/2022       |