## Atchafalaya Measurement Inc 416 East Main Street, Artesia NM 88210 575-746-3481

## **Sample Information**

|                           | Sample Information                        |
|---------------------------|-------------------------------------------|
| Sample Name               | OXY_Cedar Canyon CDP Check 4GC1-102119-23 |
| Station Number            | 14970C                                    |
| Lease Name                | Cedar Canyon CDP Check 4                  |
| Analysis For              | OXY USA                                   |
| Producer                  | OXY USA                                   |
| Field Name                | Cedar Canyon                              |
| County/State              | Eddy,NM                                   |
| Frequency/Spot Sample     | Monthly                                   |
| Sampling Method           | Fill EMpty                                |
| Sample Deg F              | 107                                       |
| Atmos Deg F               | 68                                        |
| Flow Rate                 | 6084.144                                  |
| Line PSIG                 | 828                                       |
| Date Sampled/Time Sampled | 10-15-19                                  |
| Cylinder Number           | N/A                                       |
| Cylinder Clean Date       | N/A                                       |
| Sampled By                | Cameron Rivera                            |
| Analysis By               | Pat Silvas                                |
| Verified/Calibrated Date  | 10-21-19                                  |
| Report Date               | 2019-10-21 13:24:07                       |

# **Component Results**

| Component<br>Name | Ret.<br>Time | Peak<br>Area | Norm%    | GPM (Dry)<br>(Gal. / 1000 cu.ft.) |
|-------------------|--------------|--------------|----------|-----------------------------------|
| Nitrogen          | 22.920       | 12008.6      | 2.3046   | 0.000                             |
| H2S               | 46.000       | 0.0          | 0.0000   | 0.000                             |
| Methane           | 23.720       | 314345.6     | 77.4265  | 0.000                             |
| Carbon Dioxide    | 28.000       | 6671.3       | 1.0746   | 0.000                             |
| Ethane            | 37.440       | 78209.3      | 11.5237  | 3.075                             |
| Propane           | 78.980       | 47907.2      | 5.2440   | 1.441                             |
| i-Butane          | 29.940       | 42089.3      | 0.6030   | 0.197                             |
| n-Butane          | 32.320       | 96517.2      | 1.3238   | 0.416                             |
| i-Pentane         | 39.000       | 0.0          | 0.0000   | 0.000                             |
| n-Pentane         | 43.200       | 21055.0      | 0.2394   | 0.087                             |
| C6's              | 52.000       | 5380.0       | 0.0549   | 0.023                             |
| C7's              | 67.000       | 8272.0       | 0.1264   | 0.058                             |
| C8's              | 84.000       | 4555.0       | 0.0594   | 0.030                             |
| C9's              | 102.000      | 1495.0       | 0.0151   | 0.008                             |
| C10 Plus          | 146.000      | 1187.0       | 0.0046   | 0.003                             |
| Total:            |              |              | 100.0000 | 5.338                             |

## **Results Summary**

| Result                                   | Dry      | Sat. (Base) |
|------------------------------------------|----------|-------------|
| Total Raw Mole% (Dry)                    | 102.5235 |             |
| Pressure Base (psia)                     | 14.650   |             |
| Temperature Base                         | 60.00    |             |
| Gross Heating Value (BTU / Ideal cu.ft.) | 1201.2   | 1180.2      |
| Gross Heating Value (BTU / Real cu.ft.)  | 1205.2   | 1184.6      |
| Relative Density (G), Ideal              | 0.7208   | 0.7191      |
| Relative Density (G), Real               | 0.7230   | 0.7215      |
| Compressibility (Z) Factor               | 0.9966   | 0.9962      |

#### **UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM**

Facility: Cedar Canyon CDP CTB Flare Date: 07/20/2021

**Duration of event:** 1 Hour **MCF Flared:** 207

Start Time: 03:40 PM End Time: 04:40 PM

**Cause:** Downstream Activity > Enterprise > Facility Shut Down

**Method of Flared Gas Measurement:** Gas Flare Meter

Well API Associated with Facility: 30-015-41024 Cedar Canyon 16 State 002H

**Comments:** This upset event was not caused by any wells associated with the facility. This emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable issue that was beyond the owner/operator's control, and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices.

### 1. Reason why this event was beyond Operator's control:

This emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable interruption, restriction or complete shut-in of a gas pipeline by a third-party pipeline operator, which impacted Oxy's ability to send gas to a third-party gas pipeline. This interruption, restriction or complete shut-in of the gas pipeline by a third-party pipeline operator is downstream of Oxy's custody transfer point and out of Oxy's control to avoid or prevent from happening and did not stem from any of Oxy's upstream facility activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. It is Oxy's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible.

In this case, this was a sudden and reasonably unforeseeable incident outside of OXY's control, but impacted OXY's upstream facility. The problem occurred downstream of OXY's custody transfer point and out of OXY's control. Third-party pipeline operator, Enterprise, who owns and operates the gas pipeline, did not provide advance notice of the disruption to their gas pipeline due to their downstream facility shutting down unexpectedly. OXY was in communication with Enterprise and continually monitored the line pressure as well. OXY routed all routed its stranded gas to a flare in order to minimize emissions as much as possible. Flaring did not occur until Enterprise's downstream facility unexpectedly shutdown and was unable to handle the volume of gas loads sent to them from Oxy's upstream facility. This incident was completely out of Oxy's control to prevent from happening.

#### 2. Steps Taken to limit duration and magnitude of venting or flaring:

It is Oxy's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. Oxy personnel are in the field 24/7 and can physically see when its facilities are flaring. In this case, the unexpected shutdown of third-party pipeline operator, Enterprise's mid-stream downstream facility, caused an immediate spike in high line pressure in Enterprise's gas pipeline, which triggered a flaring event at Oxy's upstream facility. Until Enterprise 's downstream facility was able to take the volume of gas sent to them, the spike in line pressure forced Oxy's upstream facility to route all its stranded

gas to a flare, as it was not able to push all its gas into Enterprise's gas pipeline. Flaring did not occur until Enterprise's downstream facility was having facility operational issues and was unable to handle the volume of gas loads sent to them from Oxy's upstream facility. All OXY operations and facility equipment were running at maximized optimization prior to the interruption, restriction and/or shutdown of Enterprise's downstream facility and their inability to take Oxy's volume of gas. This incident was completely out of Oxy's control to prevent from happening yet OXY made every effort to control and minimize emissions as much as possible during this event.

### 3. Corrective Actions taken to eliminate the cause and reoccurrence of venting or flaring:

Oxy cannot take any corrective actions to eliminate the cause and potential reoccurrence of an Enterprise gas flow pipeline restriction or shut-in, as this control issue is downstream of Oxy's custody transfer point and out of Oxy's control to avoid or prevent from happening or reoccurring. Enterprise's downstream facility issues will re-occur from time to time and may trigger a spike in their gas line pressure, which in turn, is out of Oxy's control to avoid or prevent from happening yet directly impacts Oxy's ability to send gas to them and causes Oxy's upstream facility to flare. When Enterprise's downstream facility and/or its facility equipment has issues or greatly struggles to handle the volume of gas being sent to them by Oxy, Enterprise then restricts Oxy's ability to send gas, which then prompts Oxy to route all of its stranded gas to flare. OXY makes every effort to control and minimize emissions as much as possible. The only actions that Oxy can take and handle that is within its control, is to keep continually communicate with Enterprise personnel during these types of situations. Oxy continually strives to maintain and operate its facility equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events.

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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 52851

#### **QUESTIONS**

| Operator: OXY USA INC                                                                               | OGRID:<br>16696                                                |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| P.O. Box 4294<br>Houston, TX 772104294                                                              | Action Number:<br>52851                                        |
|                                                                                                     | Action Type:  [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                                                                                   | [fAPP2126642013] CEDAR CANOYN GAS GATHERING                    |
|                                                                                                     |                                                                |
| Determination of Reporting Requirements                                                             |                                                                |
| Answer all questions that apply. The Reason(s) statements are calculated based on your answers a    | and may provide addional guidance.                             |
| Was or is this venting and/or flaring caused by an emergency or malfunction                         | Yes                                                            |
| Did or will this venting and/or flaring last eight hours or more cumulatively within                | No                                                             |

| Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide addional guidance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                              |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--|--|
| Was or is this venting and/or flaring caused by an emergency or malfunction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Yes                                                                                          |  |  |
| Did or will this venting and/or flaring last eight hours or more cumulatively within<br>any 24-hour period from a single event                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No                                                                                           |  |  |
| Is this considered a submission for a venting and/or flaring 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 very light of the control of the contr | enting and/or flaring that is or may be a major or minor release under 19.15.29.7 NMAC.  Yes |  |  |
| during this event  Did this venting and/or flaring 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 venting and/or flaring 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                                | Other (Specify)                                                         |
| Additional details for Equipment Involved. Please specify | Emergency Flare > Downstream Activity > Enterprise > Facility Shut Down |

| Representative Compositional Analysis of Vented or Flared Natural Gas                                                         |               |  |  |
|-------------------------------------------------------------------------------------------------------------------------------|---------------|--|--|
| Please provide the mole percent for the percentage questions in this group.                                                   |               |  |  |
| Methane (CH4) percentage                                                                                                      | 77            |  |  |
| Nitrogen (N2) percentage, if greater than one percent                                                                         | 2             |  |  |
| Hydrogen Sulfide (H2S) PPM, rounded up                                                                                        | 0             |  |  |
| Carbon Dioxide (C02) percentage, if greater than one percent                                                                  | 1             |  |  |
| Oxygen (02) 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 Sufide (H2S) PPM quality requirement                                                                                 | Not answered. |  |  |
| Carbon Dioxide (C02) percentage quality requirement                                                                           | Not answered. |  |  |
| Oxygen (02) percentage quality requirement                                                                                    | Not answered. |  |  |

| Date(s) and Time(s)                                     |            |  |
|---------------------------------------------------------|------------|--|
| Date venting and/or flaring was discovered or commenced | 07/20/2021 |  |
| Time venting and/or flaring was discovered or commenced | 03:40 PM   |  |
| Time venting and/or flaring was terminated              | 04:40 PM   |  |
| Cumulative hours during this event                      | 1          |  |

| Measured or Estimated Volume of Vented or Flared Natural Gas |               |  |
|--------------------------------------------------------------|---------------|--|
| Natural Gas Vented (Mcf) Details                             | Not answered. |  |
|                                                              |               |  |

| Natural Gas Flared (Mcf) Details                                          | Cause: Other   Other (Specify)   Natural Gas Flared   Released: 207 Mcf   Recovered: 0 Mcf   Lost: 207 Mcf ] |
|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Other Released Details                                                    | Not answered.                                                                                                |
| Additional details for Measured or Estimated Volume(s). Please specify    | Gas Flare Meter                                                                                              |
| 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 or is this venting and/or flaring a result of downstream activity      | Yes                                    |  |  |
| Was notification of downstream activity received by you or your operator   | No                                     |  |  |
| Downstream OGRID that should have notified you or your operator            | [713731] Enterprise Crude Pipeline LLC |  |  |
| Date notified of downstream activity requiring this venting and/or flaring | Not answered.                          |  |  |
| Time notified of downstream activity requiring this venting and/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                                                    | This emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable interruption, restriction or complete shut-in of a gas pipeline by a third-party pipeline operator, which impacted Oxy's ability to send gas to a third-party gas pipeline. This interruption, restriction or complete shut-in of the gas pipeline by a third-party pipeline operator is downstream of Oxy's custody transfer point and out of Oxy's control to avoid not prevent from happening and did not stem from any of Oxy's upstream facility activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. It is Oxy's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. In this case, this was a sudden and reasonably unforeseeable incident outside of OXY's control, but impacted OXY's upstream facility. The problem occurred downstream of OXY's custody transfer point and out of OXY's control. Third-party pipeline operator, Enterprise, who owns and operates the gas pipeline, did not provide advance notice of the disruption to their gas pipeline due to their downstream facility shutting down unexpectedly. OXY was in communication with Enterprise and continually monitored the line pressure as well. OXY routed all routed its stranded gas to a flare in order to minimize emissions as much as possible. Flaring did not occur until Enterprise's downstream facility unexpectedly shutdown and was unable to handle the volume of gas loads sent to them from Oxy's upstream facility. This incident was completely out of Oxy's control to prevent from happening. |  |  |
| Steps taken to limit the duration and magnitude of venting and/or flaring                                                      | It is Oxy's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. Oxy personnel are in the field 24/7 and can physically see when its facilities are flaring. In this case, the unexpected shutdown of third-party pipeline operator, Enterprise's mid-stream downstream facility, caused an immediate spike in high line pressure in Enterprise's gas pipeline, which triggered a flaring event at Oxy's upstream facility. Until Enterprise 's downstream facility was able to take the volume of gas sent to them, the spike in line pressure forced Oxy's upstream facility to route all its stranded gas to a flare, as it was not able to push all its gas into Enterprise's gas pipeline. Flaring did not occur until Enterprise's downstream facility was having facility operational issues and was unable to handle the volume of gas loads sent to them from Oxy's upstream facility. All OXY operations and facility equipment were running at maximized optimization prior to the interruption, restriction and/or shutdown of Enterprise's downstream facility and their inability to take Oxy's volume of gas. This incident was completely out of Oxy's control to prevent from happening yet OXY made every effort to control and minimize emissions as much as possible during this event.                                                                                                                                                                                                                                                                                                                                                                                 |  |  |
| Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring                                     | Oxy cannot take any corrective actions to eliminate the cause and potential reoccurrence of an Enterprise gas flow pipeline restriction or shut-in, as this control issue is downstream of Oxy's custody transfer point and out of Oxy's control to avoid or prevent from happening or reoccurring. Enterprise's downstream facility issues will re-occur from time to time and may trigger a spike in their gas line pressure, which in turn, is out of Oxy's control to avoid or prevent from happening yet directly impacts Oxy's ability to send gas to them and causes Oxy's upstream facility to flare. When Enterprise's downstream facility and/or its facility equipment has issues or greatly struggles to handle the volume of gas being sent to them by Oxy, Enterprise then restricts Oxy's ability to send gas, which then prompts Oxy to route all of its stranded gas to flare. OXY makes every effort to control and minimize emissions as much as possible. The only actions that Oxy can take and handle that is within its control, is to keep continually communicate with Enterprise personnel during these types of situations. Oxy continually strives to maintain and operate its facility equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |

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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** 

CONDITIONS

Action 52851

### **CONDITIONS**

| Operator:             | OGRID:                                 |
|-----------------------|----------------------------------------|
| OXY USA INC           | 16696                                  |
| P.O. Box 4294         | Action Number:                         |
| Houston, TX 772104294 | 52851                                  |
|                       | Action Type:                           |
|                       | [C-129] Venting and/or Flaring (C-129) |

#### CONDITIONS

| Created By | Condition                                                                                                                                                                          | Condition Date |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| marialuna  | 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. | 9/29/2021      |