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

Sample Information

	Sample Information
Sample Name	OXY__Cedar Canyon CDP Check 4__GC1-102119-23
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 Name	Ret. Time	Peak Area	Norm%	GPM (Dry) (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 FLARE EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: Cedar Canyon CDP CTB **Flare Date:** 06/28/2021

Duration of event: 1 Hour 39 minutes **MCF Flared:** 677

Start Time: 04:28 PM **End Time:** 06:07 PM

Cause: Downstream Activity > Enterprise > Facility Station Shutdown

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:

The 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 that impacted OXY's upstream facility. Third-party pipeline operator, Enterprise, who owns and operates the gas pipeline, did not provide advance notice of the disruption to their gas pipeline. OXY personnel contacted Enterprise about the sudden and unforeseeable pipeline shut-in interruption and when they would be back online. Enterprise personnel informed OXY that the cause of the disruption was due to their downstream compressor station being unexpectedly shutdown as a result of a gas detector malfunctioning and triggering an emergency shutdown of their facility. OXY was in communication with Enterprise throughout this event and brought the OXY facility compression equipment back online as soon as the disruption was over. OXY routed its stranded gas to a flare in order to minimize emissions as much as possible.

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

It is OXY's policy to route all stranded gas to a flare during an unforeseen and unavoidable emergency or malfunction, as the part of the overall process or steps to take to limit duration and magnitude of flaring. Oxy personnel are in the field 24/7 and can physically see when we are flaring which in turn are communicated to additional Oxy field personnel. Internal OXY procedures ensure that upon gas compressor unit and/or multiple unit shutdown, increased sensor line pressure alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible in order to take prompt corrective action and minimize emissions. Oxy production technicians must assess whether the issue or circumstance is due to damage and repair is needed, or whether there are other reasons for its cause.

In this case, the steps taken to limit duration and magnitude of flaring was that as soon as OXY was informed of Enterprise's downstream compressor station facility being shut down due to a malfunctioning gas detector, and their gas pipeline was shut-in with no ETA on return to service, Oxy production techs immediately initiated emergency offloading alternative reactive plans, by contacting a secondary offload operator and offloading as much possible gas to them, until Oxy production techs could shut in enough wells to reduce gas production and thereby, minimize emissions and cease flaring. All OXY operations and facility equipment were running at maximized optimization prior to the 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 is limited in the 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, prevent from happening or reoccurring. Enterprise's downstream facilities and associated facilities, may have issues which will reoccur from time to time and may trigger a spike in their gas line pressure, which in turn, directly impacts Oxy's ability to send gas to them. When Enterprise has downstream activity 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 not pushed into the Enterprise gas pipeline, 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.

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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

QUESTIONS

Action 52529

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 52529
	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 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 any 24-hour period from a single event	No
Is this considered a submission for a venting and/or flaring event	**Yes, major 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 or will there be **at least 50 MCF** of natural gas vented and/or flared during this event	Yes
Did this venting and/or flaring result in the release of **ANY** liquids (not fully and/or completely flared) that reached (or has a chance of reaching) the ground, a surface, a watercourse, or otherwise, with reasonable probability, endanger public health, the environment or fresh water	No
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 > Compressor Station Shutdown

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	06/28/2021
Time venting and/or flaring was discovered or commenced	04:28 PM
Time venting and/or flaring was terminated	06:07 PM
Cumulative hours during this event	2

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

Natural Gas Flared (Mcf) Details	Cause: Other | Other (Specify) | Natural Gas Flared | Released: 677 Mcf | Recovered: 0 Mcf | Lost: 677 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 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	The 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 that impacted OXY's upstream facility. Third-party pipeline operator, Enterprise, who owns and operates the gas pipeline, did not provide advance notice of the disruption to their gas pipeline. OXY personnel contacted Enterprise about the sudden and unforeseeable pipeline shut-in interruption and when they would be back online. Enterprise personnel informed OXY that the cause of the disruption was due to their downstream compressor station being unexpectedly shutdown as a result of a gas detector malfunctioning and triggering an emergency shutdown of their facility. OXY was in communication with Enterprise throughout this event and brought the OXY facility compression equipment back online as soon as the disruption was over. OXY routed its stranded gas to a flare in order to minimize emissions as much as possible.
Steps taken to limit the duration and magnitude of venting and/or flaring	It is OXY's policy to route all stranded gas to a flare during an unforeseen and unavoidable emergency or malfunction, as the part of the overall process or steps to take to limit duration and magnitude of flaring. Oxy personnel are in the field 24/7 and can physically see when we are flaring which in turn are communicated to additional Oxy field personnel. Internal OXY procedures ensure that upon gas compressor unit and/or multiple unit shutdown, increased sensor line pressure alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible in order to take prompt corrective action and minimize emissions. Oxy production technicians must assess whether the issue or circumstance is due to damage and repair is needed, or whether there are other reasons for its cause. In this case, the steps taken to limit duration and magnitude of flaring was that as soon as OXY was informed of Enterprise's downstream compressor station facility being shut down due to a malfunctioning gas detector, and their gas pipeline was shut-in with no ETA on return to service, Oxy production techs immediately initiated emergency offloading alternative reactive plans, by contacting a secondary offload operator and offloading as much possible gas to them, until Oxy production techs could shut in enough wells to reduce gas production and thereby, minimize emissions and cease flaring. All OXY operations and facility equipment were running at maximized optimization prior to the 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 is limited in the 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, prevent from happening or reoccurring. Enterprise's downstream facilities and associated facilities, may have issues which will reoccur from time to time and may trigger a spike in their gas line pressure, which in turn, directly impacts Oxy's ability to send gas to them. When Enterprise has downstream activity 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 not pushed into the Enterprise gas pipeline, 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.

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CONDITIONS

Action 52529

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	Action Number: 52529
	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.	9/28/2021