

#### **Volumetrics US Inc.**

3001 N Cameron St, Victoria, TX-77901 Phone: 361-827-4024

Company:OXY USA INCWork Order4000230136Field/Location:NMSWSampled by:VOLUMETRICS/JAStation Name:FEDERAL 1-1Sample Type:SPOT-CYLINDER

 Station Number :
 2300150020
 Sample Temperature (F):
 50

 Sample Date:
 3/2/21 8:01 AM
 Sample Pressure (PSIG):
 60

 Analysis Date:
 3/23/21 1:43 PM
 Flow rate (MCF/Day):
 30.8

 Instrument:
 VARIAN CP 490 GC
 Ambient Temperature (F):
 41

 Calibration/Verification Date:
 3/23/2021
 Sampling method:
 FILL & EMPTY

 Heat Trace used:
 YES
 Cylinder Number:
 1095

#### **NATURAL GAS ANALYSIS: GPA 2261**

Components	Un-Normalized Mol%	Normalized Mol%	GPM 14.650	GPM 14.730	GPM 15.025
Hydrogen Sulfide	0.0000	0.0000			
Nitrogen	5.6205	5.7973			
Methane	63.0422	65.0250			
Carbon Dioxide	0.0798	0.0823			
Ethane	14.1343	14.5789	3.893	3.915	3.993
Propane	9.8799	10.1907	2.804	2.819	2.875
Isobutane	0.9613	0.9915	0.324	0.326	0.332
N-butane	2.0318	2.0957	0.660	0.663	0.677
Isopentane	0.3760	0.3878	0.142	0.142	0.145
N-Pentane	0.3170	0.3270	0.118	0.119	0.121
Hexanes Plus	0.5078	0.5238	0.228	0.230	0.234
Total	96.9506	100.0000			

Hexanes plus split (60%-30%-10%)

Physical Properties (Calculated)	14.650 psia	14.730 psia	15.025 psia
Total GPM Ethane+	8.169	8.214	8.378
Total GPM Iso-Pentane+	0.488	0.491	0.501
Compressibility (Z)	0.9957	0.9957	0.9956
Specific Gravity ( Air=1) @ 60 °F	0.8238	0.8239	0.8239
Molecular Weight	23.767	23.767	23.767
Gross Heating Value	14.650 psia	14.730 psia	15.025 psia
Dry, Real (BTU/Ft <sup>3</sup> )	1328.8	1336.1	1363.0
Wet, Real (BTU/Ft <sup>3</sup> )	1305.7	1312.9	1339.3
Dry, Ideal (BTU/Ft <sup>3</sup> )	1323.1	1330.3	1357.0
Wet, Ideal (BTU/Ft <sup>3</sup> )	1300.1	1307.2	1333.4

Temperature base 60 °F

Comment: FIELD H2S = 0 PPM

Verified by

Mostaq Ahammad Petroleum Chemist Approved by

Deann Friend

Deann Friend Laboratory Manager

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

Facility: Federal 1-1 CTB Flare Date: 07/05/2021

**Duration of event:** 20 Hours 30 Minutes **MCF Flared:** 3515

Start Time: 12:00 AM End Time: 08:30 PM

**Cause:** Downstream Activity Issue > DCP > Zia Gas Plant Power Outage

Method of Flared Gas Measurement: Gas Flare Meter 68873

**Comments:** This upset event was not caused by any wells associated with the facility. This emissions event was caused by a third-party pipeline operator's downstream activity, which is beyond the owner/operator's control.

## 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.

In this case, the high line pressure spike in DCP's gas pipeline impacted Oxy's ability to send gas to them, as their downstream facility was unable to handle the gas loads sent to them as a result of DCP's, Zia Gas Plant, having a power outage. Until DCP's downstream facilities were able to handle 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 DCP's gas pipeline. No advance warning was provided to Oxy personnel from DCP regarding issues with their gas system pipeline or their Zia Gas Plant.

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

In this case, it is OXY's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, as part of the steps to take to limit duration and magnitude of flaring. Upon flaring alarms being received by the on-call Oxy production tech, DCP personnel were contacted about the unforeseeable pipeline restriction and/or shut-in and when normal gas service would be restored. Oxy was informed that the cause of the spike in DCP's pipeline pressure was due to an issue with their downstream facility, Zia Gas Plant, and no estimation of when normal gas service would be restored. The flare at this facility has a 98% combustion efficiency in order to lessen emissions as much as possible. The flare is regularly monitored to the ensure flame is lit and meeting opacity requirements. Oxy strives to take additional steps, when possible, to minimize the volume of gas flared by choking back well production and maintaining continual communication with DCP to ensure that gas is safely directed back to sales as soon as DCP resumes normal gas services.

# 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 interruption, restriction or complete shut-in of the gas pipeline by a third-party pipeline operator, as this issue is downstream of Oxy's custody transfer point and out of Oxy's control to avoid or prevent from happening again. DCP's downstream facility issues will re-occur from time to time and which in turn, directly impacts Oxy's ability to send gas to them. When DCP's downstream facility equipment has issues or greatly struggles to handle the volume of gas being sent to them by Oxy, DCP then restricts Oxy's ability to send gas, which then initiates Oxy to route all of its stranded gas not pushed into the DCP 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 DCP personnel during these types of circumstances and whenever possible, choke back well production to reduce volume of gas flared.

<u>District I</u> 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

Phone:(505) 334-6178 Fax:(505) 334-6170 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

1000 Rio Brazos Rd., Aztec, NM 87410

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

QUESTIONS

Action 53581

Q	UESTIONS	
Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294		OGRID: 16696 Action Number: 53581 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 wit	th the rest of the questions.
Incident Well	Not answered.	
Incident Facility	[fAPP2127059734] FEDER/	AL 01 BATTERY
Determination of Reporting Requirements		
Answer all questions that apply. The Reason(s) statements are calculated based on your answers an		
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	Yes	
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 v	enting and/or flaring that is or may	y be a major or minor release under 19.15.29.7 NMAC.
Was there or will there be <b>at least 50 MCF</b> of natural gas vented and/or flared during this event	Yes	
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	
For the word have been		
Equipment Involved	I	
Primary Equipment Involved	Other (Specify)	
Additional details for Equipment Involved. Please specify	Emergency Flare > Downs	tream Activity Issue > DCP > Zia Gas Plant Power Outage
Representative Compositional Analysis of Vented or Flared Natural Gas		1
Please provide the mole percent for the percentage questions in this group.		
Methane (CH4) percentage	65	
Nitrogen (N2) percentage, if greater than one percent	6	
Hydrogen Sulfide (H2S) PPM, rounded up	0	
Carbon Dioxide (C02) percentage, if greater than one percent	0	
Oxygen (02) percentage, if greater than one percent	0	
	::: :: :	
If you are venting and/or flaring because of Pipeline Specification, please provide the required spec		
Methane (CH4) percentage quality requirement	Not answered.	
Nitrogen (N2) percentage quality requirement	Not answered.  Not answered.	
Hydrogen Sufide (H2S) PPM quality requirement  Carbon Dioxide (C02) percentage quality requirement	Not answered.	
Oxygen (02) percentage quality requirement	Not answered.	
engen (42) percentage quality requirement		
Date(s) and Time(s)		
Date venting and/or flaring was discovered or commenced	07/05/2021	
Time venting and/or flaring was discovered or commenced	12:00 AM	
Time venting and/or flaring was terminated	08:30 PM	
Cumulative hours during this event	21	

Not answered.

Natural Gas Vented (Mcf) Details

Measured or Estimated Volume of Vented or Flared Natural Gas

Natural Gas Flared (Mcf) Details	Cause: Other   Other (Specify)   Natural Gas Flared   Released: 3,515 Mcf   Recovered: 0 Mcf   Lost: 3,515 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	[229527] DCP MIDSTREAM, L.P.	
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 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. In this case, the high line pressure spike in DCP's gas pipeline impacted Oxy's ability to send gas to them, as their downstream facility was unable to handle the gas loads sent to them as a result of DCP's, Zia Gas Plant, having a power outage. Until DCP's downstream facilities were able to handle 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 DCP's gas pipeline. No advance warning was provided to Oxy personnel from DCP regarding issues with their gas system pipeline or their Zia Gas Plant.		
Steps taken to limit the duration and magnitude of venting and/or flaring	In this case, it is OXY's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, as part of the steps to take to limit duration and magnitude of flaring. Upon flaring alarms being received by the on-call Oxy production tech, DCP personnel were contacted about the unforeseeable pipeline restriction and/or shut-in and when normal gas service would be restored. Oxy was informed that the cause of the spike in DCP's pipeline pressure was due to an issue with their downstream facility, Zia Gas Plant, and no estimation of when normal gas service would be restored. The flare at this facility has a 98% combustion efficiency in order to lessen emissions as much as possible. The flare is regularly monitored to the ensure flame is lit and meeting opacity requirements. Oxy strives to take additional steps, when possible, to minimize the volume of gas flared by choking back well production and maintaining continual communication with DCP to ensure that gas is safely directed back to sales as soon as DCP resumes normal gas services.		
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 interruption, restriction or complete shut-in of the gas pipeline by a third-party pipeline operator, as this issue is downstream of Oxy's custody transfer point and out of Oxy's control to avoid or prevent from happening again. DCP's downstream facility issues will re-occur from time to time and which in turn, directly impacts Oxy's ability to send gas to them. When DCP's downstream facility equipment has issues or greatly struggles to handle the volume of gas being sent to them by Oxy, DCP then restricts Oxy's ability to send gas, which then initiates Oxy to route all of its stranded gas not pushed into the DCP 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 DCP personnel during these types of circumstances and whenever possible, choke back well production to reduce volume of gas flared.		

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CONDITIONS

Action 53581

#### **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	53581
	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.	10/1/2021