

## **Volumetrics Inc.**

3710 East Rio Grande St, Victoria, TX-77901

Phone: 361-827-4024

**Work Order** Company: OXY USA INC 4000501489 Field/Location: **NMSW** Sampled by: OXY/JE SPOT-CYLINDER

Station Name: CORRAL COMPRESSOR STA 2 SOUTH FUEL SKID OUTLE Sample Type:

Sample Temperature (F): Station Number: NA Sample Pressure (PSIG): Sample Date: 2/23/22 1:30 PM 125 **Analysis Date:** 3/7/22 11:00 AM Flow rate (MCF/Day): NA Instrument: INFICON Ambient Temperature (F): 23

Sampling method: Calibration/Verification Date: 3/7/2022 FILL & EMPTY

Cylinder Number: Heat Trace used: YES 27784

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

	Un-Normalized	Normalized	GPM	GPM	GPM
Components	Mol%	Mol%	14.650	14.730	15.025
Hydrogen Sulfide	0.0000	0.0000			
Nitrogen	1.3240	1.3598			
Methane	75.6525	77.7008			
Carbon Dioxide	0.1877	0.1928			
Ethane	11.5036	11.8151	3.153	3.170	3.234
Propane	5.8586	6.0172	1.654	1.663	1.696
Isobutane	0.7572	0.7777	0.254	0.255	0.260
N-butane	1.6243	1.6683	0.525	0.528	0.538
Isopentane	0.2101	0.2158	0.079	0.079	0.081
N-Pentane	0.1809	0.1858	0.067	0.068	0.069
Hexanes Plus	0.0650	0.0667	0.029	0.029	0.030
Total	07.2620	100 0000			

Total 97.3638 100.0000

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

Physical Properties (Calculated)	14.650 psia	14.730 psia	15.025 psia
Total GPM Ethane+	5.761	5.792	5.908
Total GPM Iso-Pentane+	0.175	0.176	0.179
Compressibility (Z)	0.9965	0.9965	0.9964
Specific Gravity (Air=1) @ 60 °F	0.7242	0.7242	0.7243
Molecular Weight	20.911	20.911	20.911
Gross Heating Value	14.650 psia	14.730 psia	15.025 psia
Dry, Real (BTU/Ft <sup>3</sup> )	1244.9	1251.8	1276.9
Wet, Real (BTU/Ft <sup>3</sup> )	1223.3	1230.0	1254.7
Dry, Ideal (BTU/Ft <sup>3</sup> )	1240.6	1247.4	1272.3
Wet, Ideal (BTU/Ft <sup>3</sup> )	1219.0	1225.7	1250.2

Temperature base 60 °F

Comment: FIELD H2S =0 PPM

Verified by

Mostaq Ahammad Petroleum Chemist Approved by

Deann Friend Laboratory Manager

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

Facility: Corral 2S CS Date: 07/26/2022

**Duration of event:** 6 Hours **MCF Flared:** 887

Start Time: 12:00 AM End Time: 06:00 AM

Cause: Downstream Activity> ETC> Unexpected Shut-In > Compression Equipment Issues

Method of Flared Gas Measurement: Gas Flare Meter

Comments: Event was not initially reported as a major flare event to NMOCD as the initial reported volume

did not exceed 500 MCF and/or last more than 8 hours.

## 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. In this case, third party pipeline operator, ETC, apparently was having continuing facility compressor equipment issues, which initially began on 07/25/2022. On 07/25/2022, ETC personnel informed OXY field personal, approximately about 03:30 PM, that they would be shutting in/curtailing their sales gas pipeline service to Oxy unexpectedly, and within 45 minutes from initial notice provided. The ETC communication regarding the unexpected shut-in was extremely short notice and provided little time for Oxy to make alternative offloading arrangements with Enterprise. Oxy was able to send some of its stranded gas to Enterprise, but they were unable to take all its gas, as they were overloaded, so Oxy's intake volume rates were reduced by Enterprise, prompting Oxy to flare the stranded gas not pushed into the Enterprise sales pipeline. ETC is downstream of Oxy's custody transfer point yet ETC's downstream issues greatly impacted the gas flow from Oxy's upstream facility, which then triggered an initial flaring episode to occur; and as Enterprise was not capable of handling all Oxy's gas on short notice, they began cutting back Oxy's volume rates, which aided in triggering additional intermittent flaring instances to occur, within the specified timeframe listed above. Until ETC was able to begin taking gas again, plus able to handle the volume of gas sent to them, the unexpected shut-in/curtailment forced Oxy's upstream facility to route its stranded gas, not pushed into the Enterprise sales gas service pipeline, as a secondary offloading operator, to flare. All Oxy's facility equipment were operating as designed prior to this event occurring.

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

This facility is unmanned, except when Oxy production techs are gathering data daily or conducting daily walk-throughs to ensure that there are no problems, circumstances and/or assist other personnel on-site for maintenance purposes. 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 pressure/level alarms, other process equipment issues, 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. The flare at this facility has a 98% combustion efficiency in order to lessen emissions as much as possible. In this case, third party pipeline operator, ETC, apparently was having continuing facility compressor equipment issues, which initially began on 07/25/2022. On 07/25/2022, ETC personnel informed OXY field personal, approximately about 03:30 PM, that they would be shutting in/curtailing their sales gas pipeline service to Oxy unexpectedly, and within 45 minutes from initial notice provided. The ETC communication regarding the unexpected shut-in was extremely short notice and provided little time for Oxy to make alternative offloading arrangements with Enterprise. Oxy was able to send some of its stranded gas to Enterprise, but they were unable to take all its gas, as they were overloaded, so Oxy's intake volume rates were reduced by Enterprise, prompting Oxy to flare the stranded gas not pushed into the Enterprise sales pipeline. ETC is downstream of Oxy's custody transfer point yet ETC's downstream issues greatly impacted the gas flow from Oxy's upstream facility, which then triggered an initial flaring episode to occur; and as Enterprise was not capable of handling all Oxy's gas on short notice, they began cutting back Oxy's volume rates, which aided in triggering additional intermittent flaring instances to occur, within the specified timeframe listed above. Until ETC was able to begin taking gas again, plus able to handle the volume of gas sent to them, the unexpected shut-in/curtailment forced Oxy's upstream facility to route its stranded gas, not pushed into the Enterprise sales gas service pipeline, as a secondary offloading operator, to flare. As before, OXY field personnel kept in constant communication with ETC in order to stay abreast of a potential re-opening of their sales gas pipeline service. Oxy production techs continually monitored the flare and kept adjusting the well volume pressure rates to minimize flaring, plus, kept several wells shut from the day before. All Oxy's facility equipment were operating as designed prior to this event occurring.

## 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 ETC 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. ETC 's downstream facility issues will re-occur from time to time and cause them to shut in their sales gas service pipeline to Oxy, which, is out of Oxy's control to avoid or prevent from happening yet directly impacts Oxy's ability to send gas to them and directly causes Oxy's upstream facility to flare. When ETC '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, ETC then restricts Oxy's ability to send gas, which then prompts Oxy to route all its stranded gas not pushed into an available secondary offload gas pipeline operator, 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 ETC personnel during these types of situations.

District I
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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

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 132729

### **DEFINITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	132729
	Action Type:
	[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:

- this application's operator, hereinafter "this operator";
- · venting and/or flaring, hereinafter "vent or flare";
- any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms";
- the statements in (and/or attached to) this, hereinafter "the statements in this";
- and the past tense will be used in lieu of mixed past/present tense questions and statements.

**District I** 

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1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170 **District IV** 

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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 132729

## **QUESTIONS**

Operator: OXY USA INC	OGRID: 16696
l	Action Number: 132729
	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	[fAPP2126640958] CORRAL #2 SOUTH COMP STATION	
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 this vent or flare caused by an emergency or malfunction  Yes		

Was this vent or flare caused by an emergency or malfunction

Period from a single event

Is this considered a submission for a vent or flare event

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

Did this vent or flare 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

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 an incorporated municipal contents or may be a major or minor release under 19.15.29.7 NMAC.

Yes

No

Equipment Involved		
Primary Equipment Involved	Other (Specify)	
Additional details for Equipment Involved. Please specify	Emergency Flare > Downstream Activity> ETC> Unexpected Shut-In > Compression Equipment Issues	

Representative Compositional Analysis of Vented or Flared Natural Gas		
Please provide the mole percent for the percentage questions in this group.		
Methane (CH4) percentage	78	
Nitrogen (N2) percentage, if greater than one percent	1	
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 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.	

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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, Page 2

Action 132729

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462	1010
QUEST Operator:	ONS (continued)
OXY USA INC P.O. Box 4294	16696 Action Number:
Houston, TX 772104294	132729
	Action Type: [C-129] Venting and/or Flaring (C-129)
QUESTIONS	
Date(s) and Time(s)	
Date vent or flare was discovered or commenced	07/26/2022
Time vent or flare was discovered or commenced  Time vent or flare was terminated	12:00 AM
Cumulative hours during this event	06:00 AM 6
	1 -
Measured or Estimated Volume of Vented or Flared Natural Gas	T
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Other   Other (Specify)   Natural Gas Flared   Released: 887 Mcf   Recovered: 0 Mcf   Lost: 887 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 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  Date notified of downstream activity requiring this vent or flare	[267255] ENERGY TRANSFER PARTNERS, LP 07/26/2022
Time notified of downstream activity requiring this vent or flare	03:30 PM
F	
Steps and Actions to Prevent Waste	T
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	In this case, third party pipeline operator, ETC, apparently was having continuing facility compressor equipment issues, which initially began on 07/25/2022. On 07/25/2022, ETC personnel informed OXY field personal, approximately about 03:30 PM, that they would be shutting in/curtailing their sales gas pipeline service to Oxy unexpectedly, and within 45 minutes from initial notice provided. The ETC communication regarding the unexpected shut in was extremely short notice and provided little time for Oxy to make alternative offloading arrangements with Enterprise. Oxy was able to send some of its stranded gas to Enterprise, but they were unable to take all its gas, as they were overloaded, so Oxy's intake volume rates were reduced by Enterprise, prompting Oxy to flare the stranded gas not pushed into the Enterprise sales pipeline. ETC is downstream of Oxy's custody transfer point yet ETC's downstream issues greatly impacted the gas flow from Oxy's upstream facility, which then triggered an initial flaring episode to occur, and as Enterprise was not capable of handling a Oxy's gas on short notice, they began cutting back Oxy's volume rates, which aided in triggering additional intermittent flaring instances to occur, within the specified timeframe listed above. Until ETC was able to begin taking gas again, plus able to handle the volume of gas sent to them, the unexpected shut-in/curtailment forced Oxy's upstream facility to route it stranded gas, not pushed into the Enterprise sales gas service pipeline, as a secondary offloading operator, to flare. All Oxy's facility equipment were operating as designed prior to this event occurring.
Steps taken to limit the duration and magnitude of vent or flare	In this case, third party pipeline operator, ETC, apparently was having continuing facility compressor equipment issues, which initially began on 07/25/2022. On 07/25/2022, ETC personnel informed OXY field personal, approximately about 03:30 PM, that they would be shutting in/curtailing their sales gas pipeline service to Oxy unexpectedly, and within 45 minutes from initial notice provided. The ETC communication regarding the unexpected shut in was extremely short notice and provided little time for Oxy to make alternative offloading arrangements with Enterprise. Oxy was able to send some of its stranded gas to Enterprise, but they were unable to take all its gas, as they were overloaded, so Oxy's intake volume rates were reduced by Enterprise, prompting Oxy to flare the stranded gas not pushed into the Enterprise sales pipeline. ETC is downstream of Oxy's custody transfer point yet ETC's downstream issues greatly impacted the gas flow from Oxy's upstream facility, which then triggered an initial flaring episode to occur; and as Enterprise was not capable of handling a Oxy's gas on short notice, they began cutting back Oxy's volume rates, which aided in triggering additional intermittent flaring instances to occur, within the specified timeframe listed above. Until ETC was able to begin taking gas again, plus able to handle the volume o gas sent to them, the unexpected shut-in/curtailment forced Oxy's upstream facility to route it stranded gas, not pushed into the Enterprise sales gas service pipeline, as a secondary offloading operator, to flare. As before, OXY field personnel kept in constant communication with ETC in order to stay abreast of a potential re-opening of their sales gas pipeline service Oxy production techs continually monitored the flare and kept adjusting the well volume pressure rates to minimize flaring, plus, kept several wells shut from the day before. All Oxy's facility equipment were operating as designed prior to this event occurring.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Oxy cannot take any corrective actions to eliminate the cause and potential reoccurrence of an ETC 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. ETC 's downstream facility issues will re-occur from time to time and cause them to shut in their sales gas service pipeline to Oxy, which, is out of Oxy's control to avoid or prevent from happening yet directly impacts Oxy's ability to send gas to them and directly causes Oxy's upstream facility to flare. When ETC 's downstream facility and/or its facility equipment has issues or greatly struggles to handle the volume of gas being sent to them be Oxy, ETC then restricts Oxy's ability to send gas, which then prompts Oxy to route all its stranded gas not pushed into an available secondary offload gas pipeline operator, 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 ETC personnel during these types of situations.

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ACKNOWLEDGMENTS

Action 132729

## **ACKNOWLEDGMENTS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	132729
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

## **ACKNOWLEDGMENTS**

✓	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 <b>a complete</b> C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
V	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.
⋉	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.
V	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.
V	I acknowledge that OCD acceptance of any C-129 forms does not relieve this operator of responsibility for compliance with any other applicable federal, state, or local laws and/or regulations.

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CONDITIONS

Action 132729

## **CONDITIONS**

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P.O. Box 4294	Action Number:
Houston, TX 772104294	132729
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

## CONDITIONS

Created By	Condition	Condition Date
marialuna2	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.	8/10/2022