

## **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	97 3638	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 Flare Date: 08/09/2022

**Duration of event:** 20 Minutes **MCF Flared:** 59

Start Time: 09: 40 AM End Time: 10:00 AM

Cause: Preventative Maintenance Work > Corral 2 North CS > Unit # 2

Method of Flared Gas Measurement: Gas Flare Meter

**Comments:** 

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

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 alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible 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, USA Compression sent a compressor mechanic to perform scheduled maintenance on compressor unit # 2 at the Corral 2 North compressor station, yet, failed to inform proper Oxy personnel, in advance, that such work was being scheduled and/or performed for this unit. Once gas compressor unit #2 was shut down, the wells flowing to this facility began to surge. The Oxy production tech received the compressor malfunction alarm indicating that gas compressor unit #2 was offline, as well as receiving a flaring alarm. Upon arrival to the facility, the Oxy production tech encounter USA Compression's compressor mechanic and was informed that preventative maintenance was being performed on unit #2. The Oxy production tech remained on-site while preventative maintenance work on the turbo's was performed. During the preventative maintenance work period, the wells in the field began to surge, which triggered flaring to occur at the Corral 2 South compressor station, as the flare at this facility can accommodate a higher volume of gas. The facility's well optimizer adjusted the injection rate and shut in several wells to mitigate flaring until it stopped. Once the preventative maintenance work was completed, gas compressor unit # 1 was brought back to maximized working service.

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

It is OXY's policy to route its 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 notice of flaring, malfunction gas compressor unit and/or multiple unit shutdown alarms, increased sensor line pressure alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible

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. 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 alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible 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, USA Compression sent a compressor mechanic to perform scheduled maintenance on compressor unit # 2 at the Corral 2 North compressor station, yet, failed to inform proper Oxy personnel, in advance, that such work was being scheduled and/or performed for this unit. Once gas compressor unit #2 was shut down, the wells flowing to this facility began to surge. The Oxy production tech received the compressor malfunction alarm indicating that gas compressor unit #2 was offline, as well as receiving a flaring alarm. Upon arrival to the facility, the Oxy production tech encountered USA Compression's compressor mechanic and was informed that turbo preventative maintenance was being performed on unit #2. The Oxy production tech remained on-site while preventative maintenance work on the turbo's was performed. During the preventative maintenance work period, the wells in the field began to surge, which triggered flaring to occur at the Corral 2 South compressor station. The facility's well optimizer adjusted the injection rate and shut in several wells to mitigate flaring until it stopped. Once the preventative maintenance work was completed, gas compressor unit # 1 was brought back to maximized working service The flare at the Corral 2 South compressor station, accommodate a higher volume of gas and to protect equipment, environment, and personnel.

# 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 flaring caused by unexpected compression preventative maintenance work by the compression equipment's owner, USA Compression, when notice of such is not received. Typically, Oxy does its utmost best to communicate, coordinate and have personnel team members on-site, when preventative maintenance is scheduled in advance, and is informed of such actions that will be taking place so that advance preparations, such as having spare compression equipment ready and operational at neighboring facilities, are also made to ensure that flaring while this type of maintenance work is performed on compression equipment, does not occur. 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. Oxy has a strong and positive compression equipment preventative maintenance program in place. The only actions that Oxy can take and handle that is within its control, is to continue with its compression equipment preventative maintenance program for this facility and increase communication with compression equipment owners regarding preventative maintenance work that is scheduled or plan to be scheduled.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III

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

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 137755

#### **DEFINITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	137755
	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.

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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 137755

Phone: (505) 476-3470 Fax: (505) 476-3462		
	QUESTIONS	
Operator:	·	OGRID:
OXY USA INC P.O. Box 4294		16696 Action Number:
Houston, TX 772104294		137755
		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 w	with the rest of the questions.
Incident Well	Not answered.	
Incident Facility	[fAPP2126640958] CORRA	AL #2 SOUTH COMP STATION
Determination of Panasting Paguinaments		
Determination of Reporting Requirements  Answer all questions that apply. The Reason(s) statements are calculated based on your answers a	and may provide addianal quidane	•
Was this vent or flare caused by an emergency or malfunction	Yes	0.
Did this vent or flare last eight hours or more cumulatively within any 24-hour period from a single event	No	
Is this considered a submission for a vent or flare event	Yes, minor venting and/or	r 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 ma	ay be a major or minor release under 19 15 29 7 NMAC
Was there at least 50 MCF of natural gas vented and/or flared during this event	Yes	y be a major of minor release under 15.16.25.1 Nintre.
Did this vent or flare result in the release of <b>ANY</b> liquids (not fully and/or completely flared) that reached (or has a chance of reaching) the ground, a surface, a watercourse, or otherwise, with reasonable probability, endanger public health, the environment or fresh water	No	
Was the vent or flare within an incorporated municipal boundary or withing 300 feet from an occupied permanent residence, school, hospital, institution or church in existence	No	
Equipment Involved		
Primary Equipment Involved	Other (Specify)	
Additional details for Equipment Involved. Please specify	Emergency Flare > Prever	ntative Maintenance Work > Corral 2 North CS > Unit # 2
	<u> </u>	
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 spe	ecifications 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.	

Not answered.

Oxygen (02) percentage quality requirement

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Phone: (505) 334-6178 Fax: (505) 334-6170 **District IV** 

Steps and Actions to Prevent Waste

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

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

QUESTIONS, Page 2

Action 137755

QUESTIONS (continued)
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Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	137755
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

## QUESTIONS

Date(s) and Time(s)		
Date vent or flare was discovered or commenced	08/09/2022	
Time vent or flare was discovered or commenced	09:40 AM	
Time vent or flare was terminated	10:00 AM	
Cumulative hours during this event	0	

leasured 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: 59 Mcf   Recovered: 0 Mcf   Lost: 59 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	No	
Was notification of downstream activity received by this operator	Not answered.	
Downstream OGRID that should have notified this operator	Not answered.	
Date notified of downstream activity requiring this vent or flare	Not answered.	
Time notified of downstream activity requiring this vent or flare	Not answered.	

For this event, this operator could not have reasonably anticipated the current event 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 alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible 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, USA Compression sent a compressor mechanic to perform scheduled maintenance on compressor unit # 2 at the Corral 2 North compressor station, yet, failed to inform proper Oxy personnel, in advance, that such work was being scheduled and/or performed for this unit. Once gas compressor unit #2 was shut down, the wells flowing to this facility began to Please explain reason for why this event was beyond this operator's control surge. The Oxy production tech received the compressor malfunction alarm indicating that gas compressor unit #2 was offline, as well as receiving a flaring alarm. Upon arrival to the facility, the Oxy production tech encounter USA Compression's compressor mechanic and was informed that preventative maintenance was being performed on unit #2. The Oxy production tech remained on-site while preventative maintenance work on the turbo's was performed. During the preventative maintenance work period, the wells in the field began to surge, which triggered flaring to occur at the Corral 2 South compressor station, as the flare at this facility can accommodate a higher volume of gas. The facility's well optimizer adjusted the injection rate and shut in several wells to mitigate flaring until it stopped. Once the preventative maintenance work was completed, gas compressor unit # 1 was brought back to maximized working service In this case, USA Compression sent a compressor mechanic to perform scheduled maintenance on compressor unit # 2 at the Corral 2 North compressor station, yet, failed to inform proper Oxy personnel, in advance, that such work was being scheduled and/or performed for this unit. Once gas compressor unit #2 was shut down, the wells flowing to this facility began to surge. The Oxy production tech received the compressor malfunction alarm indicating that gas compressor unit #2 was offline, as well as receiving a flaring alarm. Upon arrival to the facility, the Oxy production tech encountered USA Compression's compressor mechanic and was informed that turbo preventative maintenance was being Steps taken to limit the duration and magnitude of vent or flare performed on unit #2. The Oxy production tech remained on-site while preventative maintenance work on the turbo's was performed. During the preventative maintenance work period, the wells in the field began to surge, which triggered flaring to occur at the Corral 2 South compressor station. The facility's well optimizer adjusted the injection rate and shut in several wells to mitigate flaring until it stopped. Once the preventative maintenance work was completed, gas compressor unit # 1 was brought back to maximized working service The flare at the Corral 2 South compressor station, accommodate a higher volume of gas and to protect equipment, environment, and personnel. Oxy is limited in the corrective actions to eliminate the cause and potential reoccurrence of flaring caused by unexpected compression preventative maintenance work by the compression equipment's owner, USA Compression, when notice of such is not received. Typically, Oxy does its utmost best to communicate, coordinate and have personnel team members on-site, when preventative maintenance is scheduled in advance, and is informed of such actions that will be taking place so that advance preparations, such as having spare compression equipment ready and operational at neighboring facilities, are also made to ensure that flaring while this type of maintenance work is performed on compression Corrective actions taken to eliminate the cause and reoccurrence of vent or flare equipment, does not occur. Oxy continually strives to maintain and operate its facility

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ACKNOWLEDGMENTS

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P.O. Box 4294	Action Number:
Houston, TX 772104294	137755
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

## **ACKNOWLEDGMENTS**

V	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.
V	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 137755

# **CONDITIONS**

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P.O. Box 4294	Action Number:
Houston, TX 772104294	137755
	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.	8/24/2022	