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575.397.3713 2609 W Marland Hobbs NM 88240

C6+ Gas Analysis Report

11051G	NHU WIB Inlet		NHU WIB Inlet
Sample Point Code	Sample Point Name		Sample Point Location
Laboratory Services	2021048592	1839	D Jett - Spot
Source Laboratory	Lab File No	Container Identity	Sampler
USA	USA	USA	New Mexico
District	Area Name	Field Name	Facility Name
Nov 22, 2021 08:30	Nov 22, 2021 08:30	Nov 22, 2021 15:03	Nov 23, 2021
Date Sampled	Date Effective	Date Received	Date Reported
50.00	System Administrator	32 @	
Ambient Temp (°F)	Flow Rate (Mcf)	Analyst	Press PSI @ Temp °F Source Conditions
Oxy	NG		
Operator	Lab Source Description		

Component	Normalized Mol %	Un-Normalized Mol %	GPM
H2S (H2S)	2.4000	2.4	
Nitrogen (N2)	0.1330	0.136	
CO2 (CO2)	88.9190	91.111	
Methane (C1)	2.8960	2.965	
Ethane (C2)	0.3320	0.34	0.0890
Propane (C3)	1.4580	1.493	0.4020
I-Butane (IC4)	0.3910	0.4	0.1280
N-Butane (NC4)	1.0480	1.073	0.3300
I-Pentane (IC5)	0.6150	0.63	0.2250
N-Pentane (NC5)	0.5370	0.55	0.1950
Hexanes Plus (C6+)	1.2710	1.302	0.5510
TOTAL	100.0000	102.4000	1.9200

Gross Heating Values (Real, BTU/ft³)			
14.696 PSI @ 60.00 Å°F		14.73 PSI @ 60.00 Å°F	
Dry	Saturated	Dry	Saturated
246.2	242.8	246.8	243.4

Calculated Total Sample Properties	
GPA2145-16 *Calculated at Contract Conditions	
Relative Density Real	Relative Density Ideal
1.5302	1.5206
Molecular Weight	
44.0473	

C6+ Group Properties		
Assumed Composition		
C6 - 60.000%	C7 - 30.000%	C8 - 10.000%

Field H2S
24000 PPM

**PROTREND STATUS:** Passed By Validator on Nov 24, 2021  
**DATA SOURCE:** Imported

**PASSED BY VALIDATOR REASON:** Close enough to be considered reasonable.

**VALIDATOR:** Dustin Armstrong  
**VALIDATOR COMMENTS:** OK

Method(s): Gas C6+ - GPA 2261, Extended Gas - GPA 2286, Calculations - GPA 2172

Analyzer Information			
Device Type:	Gas Chromatograph	Device Make:	Shimadzu
Device Model:	GC-2014	Last Cal Date:	Nov 14, 2021

### UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM

**Facility:** North Hobbs Unit WIB

**Flare Date:** 5/29/2022

**Duration of event:** 7 hours and 15 minutes

**MCF Flared:** 604

**Start Time:** 4:45 AM

**End Time:** 12:00 PM

**Cause:** Equipment Malfunction >Lube Oil system Malfunction>Seal Failed

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

**Comments:** This upset event was not caused by any wells associated with the facility

1. **Reason why this event was beyond Operator's control:** Oxy engages in respectable and good facility operation practices while also maintaining its continuous equipment preventative maintenance program. Internal OXY procedures ensure that upon a gas compressor unit shutdown, production techs are promptly notified via an equipment alarm notification app and are trained to respond immediately in order to assess the issue as soon as possible, so that prompt corrective actions are taken to minimize emissions. Oxy production techs must assess whether a gas compressor unit shutdown is due to damage and repair is needed, or whether there are other reasons for its cause.

In this case, this facility is an unmanned location and therefore, the Oxy production tech, upon receiving the malfunction alarm for the North Hobbs Unit WIB, quickly drove to the facility from another distant facility location. Upon the production tech's arrival, the immediate steps taken was to check the lube oil level and inspect the unit for additional potential issues. The Oxy production tech determined that the cause of the Gas Sales compressor was due to a low lube oil malfunction causing the seal to failed. We cut the inlets back to reduce the flow into the facility reducing the flare until the seal was replaced. The Oxy production tech did not find any other issues affecting the unit, and as the lube oil level was normal, the production tech reset the control panel and restarted the unit. The compressor unit was working as designed and operated normally prior to the sudden and without warning automatic shutdown of the compressor unit.

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 a sudden, unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. 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. In this case, the immediate steps taken to limit duration and magnitude of flaring was for the Oxy production tech, upon his arrival to the facility from another distant facility, was to check the lube oil level and inspect the compressor unit for additional potential issues. The Oxy production tech determined that the cause

of the Gas Sales compressor was due to Lube oil seal failure. The Oxy production tech did not find any other issues affecting the unit, and as the lube oil level was normal, the production tech reset the control panel and restarted the unit. The Gas Sales compressor unit was working as designed and operated normally prior to the sudden and without warning automatic shutdown of the compressor unit. Flaring ceased as soon as the compressor unit was up to normal working condition and speed.

3. **Corrective Actions taken to eliminate the cause and reoccurrence of venting or flaring:** This emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process 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 or prevented by good design, operation, and preventative maintenance practices. It is OXY's policy to route all stranded sales gas to a flare during a sudden, unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. 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 ensure flame is lit and meeting opacity requirements. Oxy is limited in the corrective actions available to them to eliminate the cause and potential reoccurrence of compressor malfunctions as notwithstanding compressor engine design and operation, compressors are inherently dynamic and even the smallest alarms, false or true, can be sudden, reasonably unforeseeable and unexpected which can cause compression malfunctions to occur, thereby, triggering the unit's sensors to automatically shut down the unit to avoid catastrophic damage to the internal engine components. 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. The Toromont compressor unit was working as designed and operated normally prior to the sudden and without warning automatic shutdown of the compressor unit. Oxy has a strong and positive compression equipment preventative maintenance program in place.

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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**

DEFINITIONS

Action 118219

**DEFINITIONS**

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 118219
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

**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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QUESTIONS

Action 118219

**QUESTIONS**

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	Action Number: 118219
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

**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 Operator	[157984] OCCIDENTAL PERMIAN LTD
Incident Type	Flare
Incident Status	Closure Not Approved
Incident Well	Not answered.
Incident Facility	[fAPP2126544726] NORTH HOBBS UNIT WIB

*Only valid Vent, Flare or Vent with Flaring incidents (selected above in the Application Details section) that are assigned to your current operator can be amended with this C-129A application.*

**Determination of Reporting Requirements**  
*Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.*

Was this vent or flare caused by an emergency or malfunction	Yes
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, 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 <b>at least 50 MCF</b> of natural gas vented and/or flared during this event	Yes
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 within 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	Equipment Malfunction >Lube Oil system Malfunction>Seal Failed

**Representative Compositional Analysis of Vented or Flared Natural Gas**  
*Please provide the mole percent for the percentage questions in this group.*

Methane (CH4) percentage	3
Nitrogen (N2) percentage, if greater than one percent	0
Hydrogen Sulfide (H2S) PPM, rounded up	24,000
Carbon Dioxide (CO2) percentage, if greater than one percent	89
Oxygen (O2) 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 Sulfide (H2S) PPM quality requirement	Not answered.
Carbon Dioxide (CO2) percentage quality requirement	Not answered.
Oxygen (O2) percentage quality requirement	Not answered.

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QUESTIONS, Page 2

Action 118219

**QUESTIONS (continued)**

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	Action Number: 118219
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

**QUESTIONS**

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	05/29/2022
Time vent or flare was discovered or commenced	04:45 AM
Time vent or flare was terminated	12:00 PM
Cumulative hours during this event	7

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: 604 Mcf   Recovered: 0 Mcf   Lost: 604 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)	<b>Yes, according to supplied volumes this appears to be a "gas only" report.</b>

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.

Steps and Actions to Prevent Waste	
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	Oxy engages in respectable and good facility operation practices while also maintaining its continuous equipment preventative maintenance program. Internal OXY procedures ensure that upon a gas compressor unit shutdown, production techs are promptly notified via an equipment alarm notification app and are trained to respond immediately in order to assess the issue as soon as possible, so that prompt corrective actions are taken to minimize emissions. Oxy production techs must assess whether a gas compressor unit shutdown is due to damage and repair is needed, or whether there are other reasons for its cause. In this case, this facility is an unmanned location and therefore, the Oxy production tech, upon receiving the malfunction alarm for the North Hobbs Unit WIB, quickly drove to the facility from another distant facility location. Upon the production tech's arrival, the immediate steps taken was to check the lube oil level and inspect the unit for additional potential issues. The Oxy production tech determined that the cause of the Gas Sales compressor was due to a low lube oil malfunction causing the seal to failed. We cut the inlets back to reduce the flow into the facility reducing the flare until the seal was replaced. The Oxy production tech did not find any other issues affecting the unit, and as the lube oil level was normal, the production tech reset the control panel and restarted the unit. The compressor unit was working as designed and operated normally prior to the sudden and without warning automatic shutdown of the compressor unit.
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ACKNOWLEDGMENTS

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**ACKNOWLEDGMENTS**

<input checked="" type="checkbox"/>	I acknowledge that with this application I will be amending an existing incident file (assigned to this operator) for a vent or flare event, pursuant to 19.15.27 and 19.15.28 NMAC.
<input checked="" type="checkbox"/>	I acknowledge that amending an incident file does not replace original submitted application(s) or information and understand that any C-129 forms submitted to the OCD will be logged and stored as public record.
<input checked="" type="checkbox"/>	I hereby certify the statements in this amending 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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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

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**CONDITIONS**

Created By	Condition	Condition Date
srojas	If the information provided in this report requires further amendment(s), submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	6/17/2022