LABORATORY SERVICES Natural Gas Analysis
www.permianls.com
575.397.3713 2609 W Marland Hobbs NM 88240

C6+ Gas Analysis Report

Sample Point Code	Sample Point Name	Sample Point Location
11019G	South Hobbs Unit CTB Inlet	South Hobbs Unit CTB Inlet

Source Laboratory	Lab File No	Container Identity	Sampler
Laboratory Services	2020036993	1719	D Armstrong - Spot

District	Area Name	Field Name	Facility Name
USA	USA	USA	New Mexico

Date Sampled	Date Effective	Date Received	Date Reported
Nov 24, 2020 09:58	Nov 24, 2020 09:58	Nov 24, 2020 11:59	Nov 24, 2020

Ambient Temp (°F)	Flow Rate (Mcf)	Analyst	Press PSI @ Temp °F Source Conditions
60.00		Torrance	38 @ 70

Operator	Lab Source Description
Oxy	NG

Component	Normalized Mol %	Un-Normalized Mol %	GPM
H2S (H2S)	0.0000	0	
Nitrogen (N2)	0.1080	0.10806	
CO2 (CO2)	85.2310	85.23111	
Methane (C1)	0.6730	0.67276	
Ethane (C2)	0.6140	0.61395	0.1640
Propane (C3)	3.9190	3.91938	1.0790
I-Butane (IC4)	1.7080	1.70793	0.5590
N-Butane (NC4)	4.2350	4.23453	1.3350
I-Pentane (IC5)	1.4540	1.45438	0.5320
N-Pentane (NC5)	0.9800	0.98005	0.3550
Hexanes Plus (C6+)	1.0780	1.07784	0.4680
TOTAL	100.0000	100.0000	4.4920

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 24, 2020

Gross Heating Values (Real, BTU/ft³)

14.696 PSI @ 60.00 °F		14.73 PSI @ 60.00 °F	
Dry	Saturated	Dry	Saturated
464.3	457.3	465.4	458.4

Calculated Total Sample Properties

GPA2145-16 *Calculated at Contract Conditions

Relative Density Real	Relative Density Ideal
1.5926	1.5805

Molecular Weight
45.7756

C6+ Group Properties

Assumed Composition

C6 - 60.000% C7 - 30.000% C8 - 10.000%

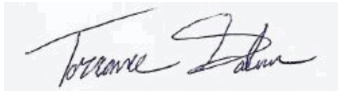
Field H2S
0 PPM

PROTREND STATUS:
Passed By Validator on Nov 24, 2020

DATA SOURCE:
Imported

PASSED BY VALIDATOR REASON:
First sample taken @ this point, composition looks reasonable

VALIDATOR:
Torrance Galvan



VALIDATOR COMMENTS:
OK

UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: South Hobbs CTB

Flare Date: 03/11/2022

Duration of event: 3 hours

MCF Flared: 1058

Start Time: 12:30 AM

End Time: 03:30 PM

Cause: Compression Equipment Shut down > Low Lube Sensor

Method of Flared Gas Measurement: Gas Flare Meter

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

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1. **Reason why this event was beyond Operator's control**: The 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 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. The flare is regularly monitored to the ensure flame is lit and meeting opacity requirements. Internal OXY compression equipment malfunction procedures ensure that upon a compressor unit shutdown, a production tech is promptly notified and is instructed to assess the issue as soon as possible in order to take prompt corrective action and minimize emissions. Upon arrival, production techs must assess whether a compressor shutdown is due to damage and repair is needed, or whether there are other reasons.

   In this case, this facility is an unmanned location and therefore, the Oxy production tech, upon receiving the compressor malfunction alarm for the South Hobbs Unit CTB, quickly drove to the facility from another distant facility location. Upon the production tech's arrival, the immediate steps taken was to quickly check the gas compressor unit and the surrounding area to determine cause of the malfunction. The Oxy production tech determined that the cause of the gas compressor malfunction was due to a low lube oil level sensor, which prompted an automatic shutdown of the unit. The Oxy production tech did not find any other issues affecting the unit, other than the lube oil level sensor was indicating it was low, which triggered a compressor malfunction alarm. Once the production tech added the necessary oil, the control panel was rest and the unit was restarted. The gas compressor unit was working as designed and operated normally prior to the sudden and without warning automatic shutdown of the compressor unit. The production tech remained on-site for a period of time to ensure that additional issues did not arise when the unit was restarted. Once the gas compressor resumed normal optimalization, did flaring cease.

   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 the duration and magnitude of flaring was for the Oxy production tech, upon his arrival to the facility from another distant facility, was to quickly check the gas compressor unit and the surrounding area to determine cause of the malfunction. The Oxy production tech determined that the cause of the gas compressor malfunction was due to a low lube oil level sensor, which prompted an automatic shutdown of the unit. The Oxy production tech did not find any other issues affecting the unit, other than the lube oil level sensor was indicating it was low, which triggered a compressor malfunction alarm. Once the production tech added the necessary oil, the control panel was rest and the unit was restarted. The gas compressor unit was working as designed and operated normally prior to the sudden and without warning automatic shutdown of the compressor unit. The production tech remained on-site for a period of time to ensure that additional issues did not arise when the unit was restarted. Once the gas compressor resumed normal optimalization, did flaring cease.

Corrective Actions taken to eliminate the cause and reoccurrence of venting or flaring: The 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 by good design, operation, and preventative maintenance practices. 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 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's compression equipment.

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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

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 92018
	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 92018

QUESTIONS

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 92018
	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	**[fJXK1520829861] South Hobbs Unit CTB**
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 addional 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 **at least 50 MCF** of natural gas vented and/or flared during this event	Yes
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	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	Compression Equipment Shut down > Low Lube Sensor

Representative Compositional Analysis of Vented or Flared Natural Gas	
Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	1
Nitrogen (N2) percentage, if greater than one percent	0
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (C02) percentage, if greater than one percent	85
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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QUESTIONS (continued)

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 92018
	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	03/11/2022
Time vent or flare was discovered or commenced	12:30 PM
Time vent or flare was terminated	03:30 PM
Cumulative hours during this event	3

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: 1,058 Mcf | Recovered: 0 Mcf | Lost: 1,058 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 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	The 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 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. The flare is regularly monitored to the ensure flame is lit and meeting opacity requirements. Internal OXY compression equipment malfunction procedures ensure that upon a compressor unit shutdown, a production tech is promptly notified and is instructed to assess the issue as soon as possible in order to take prompt corrective action and minimize emissions. Upon arrival, production techs must assess whether a compressor shutdown is due to damage and repair is needed, or whether there are other reasons. In this case, this facility is an unmanned location and therefore, the Oxy production tech, upon receiving the compressor malfunction alarm for the South Hobbs Unit CTB, quickly drove to the facility from another distant facility location. Upon the production tech’s arrival, the immediate steps taken was to quickly check the gas compressor unit and the surrounding area to determine cause of the malfunction. The Oxy production tech determined that the cause of the gas compressor malfunction was due to a low lube oil level sensor, which prompted an automatic shutdown of the unit. The Oxy production tech did not find any other issues affecting the unit, other than the lube oil level sensor was indicating it was low, which triggered a compressor malfunction alarm. Once the production tech added the necessary oil, the control panel was rest and the unit was restarted.
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ACKNOWLEDGMENTS

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 92018
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

ACKNOWLEDGMENTS

☑	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.
☑	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.
☑	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.
☑	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.
☑	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 92018

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	Action Number: 92018
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

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.	3/22/2022