



Volumetrics Inc.

3710 East Rio Grande St, Victoria, TX-77901

Phone: 361-827-4024

Company: OXY USA INC
Field/Location : NMSW
Station Name : CEDAR CANYON 28 COMP STA FUEL INLET
Station Number : NA
Sample Date: 5/6/22 12:20 PM
Analysis Date: 5/9/22 1:00 PM
Instrument: INFICON
Calibration/Verification Date: 5/9/2022
Heat Trace used: YES

Work Order: 4000595140
Sampled by: OXY/JE
Sample Type : SPOT-CYLINDER
Sample Temperature (F): NA
Sample Pressure (PSIG): 65
Flow rate (MCF/Day): NA
Ambient Temperature (F): 92
Sampling method: FILL & EMPTY
Cylinder Number: 27765

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	1.3966	1.4225			
Methane	73.8165	75.1904			
Carbon Dioxide	0.2787	0.2839			
Ethane	11.7436	11.9622	3.194	3.212	3.276
Propane	5.8394	5.9481	1.636	1.645	1.678
Isobutane	0.7746	0.7890	0.258	0.259	0.264
N-butane	1.9443	1.9804	0.623	0.627	0.639
Isopentane	0.4841	0.4931	0.180	0.181	0.185
N-Pentane	0.5569	0.5672	0.205	0.206	0.211
Hexanes(C6's)	0.3958	0.4031	0.166	0.166	0.170
Heptanes (C7's)	0.4035	0.4110	0.189	0.190	0.194
Octanes (C8's)	0.3339	0.3401	0.174	0.175	0.178
Nonanes Plus (C9+)	0.2052	0.2090	0.117	0.118	0.120
Total	98.1730	100.0000			

Physical Properties (Calculated)

	14.650 psia	14.730 psia	15.025 psia
Total GPM Ethane+	6.742	6.780	6.916
Total GPM Iso-Pentane+	1.031	1.037	1.059
Compressibility (Z)	0.9958	0.9957	0.9956
Specific Gravity (Air=1) @ 60 °F	0.7832	0.7832	0.7833
Molecular Weight	22.596	22.596	22.596

Gross Heating Value

	14.650 psia	14.730 psia	15.025 psia
Dry, Real (BTU/Ft ³)	1332.6	1340.0	1367.0
Wet, Real (BTU/Ft ³)	1309.3	1316.6	1343.1
Dry, Ideal (BTU/Ft ³)	1327.0	1334.2	1361.0
Wet, Ideal (BTU/Ft ³)	1303.8	1310.9	1337.2

Temperature base 60 °F

Comment: FIELD H2S =0 PPM

Verified by

Mostaq Ahammad
 Petroleum Chemist

Approved by

Deann Friend
 Laboratory Manager

UPSET VENTING EVENT SPECIFIC JUSTIFICATIONS FORM**Facility:** Cedar Canyon 28-4 CTB**Vent Date:** 05/15/2024**Duration of Event:** 4 Hours 50 minutes**MCF Vented:** 50**Start Time:** 11:50 AM**End Time:** 04:40 PM**Cause:** Venting Leak > Underground Pipeline > Corrosion**Method of Vented Gas Measurement:** Allocation

Comments: An external flyover report received by Oxy in September 2024 indicated that this event meets the C-129 reporting guidelines, as the estimated daily venting meets the NMOCD's threshold of 50 MCF/D and may have started earlier than Oxy was aware.

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

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 by good design, operation, and preventative maintenance practices. 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. Recently, OXY received an external flyover report and found that venting observations made during an internal flyover conducted May 2024, indicated that venting from the gas injection line might have potentially commenced on or about May 14th, 2024.

This exceedance of NMOCD's threshold of 50 MCF/D was not known to OXY and its operations personnel until an external flyover report was received in September 2024. This submittal is in response to the findings provided to Oxy during the September 2024 flyover. Previously in May 2024, Oxy operations had performed their own internal area flyover, which in turn, prompted an OXY emissions technician to physically verify the finding with a FLIR camera and found that the gas injection line was indeed venting, from underground. The affected section of the gas injection line was then isolated, and the appropriate wells were shut down to facilitate immediate repairs. It was determined that the sudden, unforeseen failure of the gas injection line, had developed a small hole due to corrosion, which caused the venting leak. The venting leak was isolated, repaired, and thoroughly tested to ensure it did not recur. Based on the May 2024 vent leak investigation, Oxy initially estimated that the gas released was below the NMOCD threshold of 50 MCF/D. After reviewing the findings of the September 2024 flyover report, it was determined that the initial estimated volume of vented gas was incorrect and 50 MCF is the correct volume of gas emitted. This venting circumstance was beyond OXY's control, yet, OXY took all possible measures to reduce emissions effectively.

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

It is OXY's policy to route all stranded gas to a flare rather than vent during an unforeseen and unavoidable emergency or malfunction, that is beyond OXY's control to avoid, prevent or foresee, to minimize emissions as much as possible as part of the overall steps taken to limit duration and magnitude of venting or flaring. Recently, OXY received an external flyover report and found that venting observations made during an internal flyover conducted May 2024, indicated that venting from the gas injection line might have potentially commenced on or about May 14th, 2024.

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3. Corrective Actions taken to eliminate the cause and reoccurrence of venting or flaring:

OXY's ability to address and prevent recurrence of vent leaks from injection lines due to corrosion is limited as these types of vent leaks can be sudden, unpredictable, and happen without any prior warning. OXY cannot predict or foresee when vent leaks will occur in underground gas injection pipelines, but OXY is committed to detecting, isolating, and halting such vent emissions whenever possible and when identified. The limited actions that OXY can do in these types of circumstances is to resolve the vent leak issues, should they occur, in a timely manner and continue with its area flyover surveying as part of its overall positive operation and maintenance programs.

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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 386860

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 386860
	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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QUESTIONS

Action 386860

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID:	16696
	Action Number:	386860
	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	Unavailable.
Incident Facility	[fAB1901048503] CEDAR CANYON 28-4 CTB

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, minor 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	Venting Leak > Underground Pipeline > Corrosion

Representative Compositional Analysis of Vented or Flared Natural Gas Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	75
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 (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 Sufide (H2S) PPM quality requirement	Not answered.
Carbon Dioxide (C02) percentage quality requirement	Not answered.
Oxygen (O2) percentage quality requirement	Not answered.

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QUESTIONS, Page 2

Action 386860

QUESTIONS (continued)

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	Action Number: 386860
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	05/15/2024
Time vent or flare was discovered or commenced	11:50 AM
Time vent or flare was terminated	04:40 PM
Cumulative hours during this event	5

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Cause: Other Other (Specify) Natural Gas Vented Released: 50 Mcf Recovered: 0 Mcf Lost: 50 Mcf.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	Allocation
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	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 by good design, operation, and preventative maintenance practices. 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. Recently, OXY received an external flyover report and found that venting observations made during an internal flyover conducted May 2024, indicated that venting from the gas injection line might have potentially commenced on or about May 14th, 2024. This exceedance of NMOCD's threshold of 50 MCF/D was not known to OXY and its operations personnel until an external flyover report was received in September 2024. This submittal is in response to the findings provided to Oxy during the September 2024 flyover. Previously in May 2024, Oxy operations had performed their own internal area flyover, which in turn, prompted an OXY emissions technician to physically verify the finding with a FLIR camera and found that the gas injection line was indeed venting, from underground. The affected section of the gas injection line was then isolated, and the appropriate wells were shut down to facilitate immediate repairs. It was determined that the sudden, unforeseen failure of the gas injection line, had developed a small hole due to corrosion, which caused the venting leak. The venting leak was isolated, repaired, and thoroughly tested to ensure it did not recur. Based on the May 2024 vent leak investigation,

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Steps taken to limit the duration and magnitude of vent or flare	It is OXY's policy to route all stranded gas to a flare rather than vent during an unforeseen and unavoidable emergency or malfunction, that is beyond OXY's control to avoid, prevent or foresee, to minimize emissions as much as possible as part of the overall steps taken to limit duration and magnitude of venting or flaring. Recently, OXY received an external flyover report and found that venting observations made during an internal flyover conducted May 2024, indicated that venting from the gas injection line might have potentially commenced on or about May 14th, 2024. This exceedance of NMOC threshold of 50 MCF/D was not known to OXY and its operations personnel until an external flyover report was received in September 2024. This submittal is in response to the findings provided to Oxy during the September 2024 flyover. Previously in May 2024, Oxy operations had performed their own internal area flyover, which in turn, prompted an OXY emissions technician to physically verify the finding with a FLIR camera and found that the gas injection line was indeed venting, from underground. The affected section of the gas injection line was then isolated, and the appropriate wells were shut down to facilitate immediate repairs. It was determined that the sudden, unforeseen failure of the gas injection line, had developed a small hole due to corrosion, which caused the venting leak. The venting leak was isolated, repaired, and thoroughly tested to ensure it did not recur. Based on the May 2024 vent leak investigation, Oxy initially estimated that the gas released was below the NMOC threshold of 50 MCF/D. After reviewing the findings of the September 2024 flyover report, it was determined that the initial estimated volume of vented gas was incorrect and 50 MCF is the correct volume of gas emitted. This venting circumstance was beyond OXY's control, yet, OXY took all possible measures to reduce emissions effectively.
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ACKNOWLEDGMENTS

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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 a complete C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
☒	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.
☒	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

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	Action Number: 386860
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CONDITIONS

Created By	Condition	Condition Date
shelbyschoepf	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.	9/25/2024