



Natural Gas Analysis Report

GPA 2172-09/API 14.5 Report with GPA 2145-16 Physical Properties

	Sample Information
Sample Name	CEDAR CANYON LP TO ENTERPRISE
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	03-09-2023
Meter Number	14809C
Air temperature	56
Flow Rate (MCF/Day)	41659
Heat Tracing	HEATED HOSE & GASIFIER
Sample description/mtr name	CEDAR CANYON LP TO ENTERPRISE
Sampling Method	FILL & EMPTY
Operator	OCCIDENTAL PETROLEUM
State	NEW MEXICO
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	NMSW
FLOC	OP-L0967-BT001
Sample Sub Type	CDP
Sample Name Type	METER
Vendor	AKM MEASUREMENT
Cylinder #	3052
Sampled by	J E
Sample date	3-9-2023
Analyzed date	3-15-2023
Method Name	C9
Injection Date	2023-03-15 16:55:06
Report Date	2023-03-15 17:00:57
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	d616d38e-1ef0-43ac-940b-70858213bc73
NGA Phys. Property Data Source	GPA Standard 2145-16 (FPS)
Data Source	INFICON Fusion Connector

Component Results

Component Name	Peak Area	Raw Amount	Response Factor	Norm Mole%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)	
Nitrogen	20279.7	1.1489	0.00005665	1.1511	0.0	0.01113	0.127	
Methane	1026331.0	75.0975	0.00007317	75.2390	761.7	0.41675	12.804	
CO2	9621.2	0.4538	0.00004717	0.4547	0.0	0.00691	0.078	
Ethane	262551.1	11.9875	0.00004566	12.0101	213.0	0.12469	3.224	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	187774.5	6.1281	0.00003264	6.1397	154.8	0.09348	1.698	
iso-butane	80466.7	0.8972	0.00001115	0.8989	29.3	0.01804	0.295	
n-Butane	196029.9	2.1635	0.00001104	2.1676	70.9	0.04350	0.686	
iso-pentane	55079.7	0.5342	0.00000970	0.5352	21.5	0.01333	0.196	
n-Pentane	65775.1	0.6222	0.00000946	0.6234	25.0	0.01553	0.227	
hexanes	53531.0	0.4052	0.00000757	0.4060	19.4	0.01208	0.168	
heptanes	42936.0	0.2653	0.00000618	0.2658	14.7	0.00920	0.123	
octanes	17502.0	0.0951	0.00000543	0.0953	6.0	0.00376	0.049	
nonanes+	2977.0	0.0132	0.00000442	0.0132	0.9	0.00058	0.007	
Total:		99.8117		100.0000	1317.1	0.76898	19.683	

Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	99.8117		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	75.0		
Flowing Temperature (Deg. F)	81.0		

Result	Dry	Sat.	
Gross Heating Value (BTU / Ideal cu.ft.)	1317.1	1294.2	
Gross Heating Value (BTU / Real cu.ft.)	1322.5	1300.1	
Relative Density (G), Real	0.7718	0.7696	

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	99.8117	97.0000	103.0000	Pass	

UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM**Facility:** Cedar Canyon CPD**Flare Date:** 06/21/2023**Duration of event:** 9 hours**MCF Flared:** 212**Start Time:** 10:25 AM**End Time:** 07:25 PM**Cause:** Compression Equipment Malfunctions > Cedar Canyon Area > Several Facilities > Various Causes**Method of Flared Gas Measurement:** Gas Flare Meter

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

In this case, there were multiple gas compression equipment issues at several facilities within the Cedar Canyon area, which suddenly and without warning, would trigger small intermittent instances of flaring to occur at the Cedar Canyon CDP gas gathering system flare, as the flare at this location can accommodate a higher volume of gas and to protect equipment, environment, and personnel. In each instance in which a gas compressor malfunctioned and shut down due to detonation, bad valves, overheating, sensor issues, etc., brought on by the area's extreme hot weather conditions and temperatures, Oxy production techs would receive compression malfunction and flaring alarms. Oxy production techs responded to each facility alarm received as quickly and safely as possible. USA compression and NGSG compressor mechanics were in the area to assist Oxy field personnel, while numerous compressors were malfunctioning over a period of time, which was triggering brief intermittent instances of flaring. Oxy productions techs and the compressor mechanics responded to each compression malfunction alarm and quickly took steps to get the units back up and running at optimized efficiency. OXY made every effort to control and minimize emissions as much as possible.

The Cedar Canyon CPD is a gas gathering flare system for multiple tank batteries across Oxy's defined Cedar Canyon area. Oxy made every effort to shut in as much of production/wells as possible, yet it was absolutely critical to Oxy's operational safety and start up procedures to allow some production to occur across the area, as it was necessary to maintain a minimal amount of gas flow to restart the compression equipment, specifically the gas lift compressors, across the Cedar Canyon area. The minimal amount of gas flow allowed to be produced and flare was done out of necessity to protect personnel and equipment as a safeguard against potential issues that could occur when restarting production across the Cedar Canyon area.

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, 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 flaring. The flare at this facility has a 98% combustion efficiency to lessen emissions as much as possible. In each instance in which a gas compressor malfunctioned and shut down due to detonation, bad valves, overheating, sensor issues, etc., brought on by the area's extreme hot weather conditions and temperatures, Oxy production techs would receive compression malfunction and flaring alarms. Oxy production techs responded to each facility alarm received as quickly and safely as possible. USA compression and NGSG compressor mechanics were in the area

to assist Oxy field personnel, while numerous compressors were malfunctioning over a period, which in turn triggered brief intermittent instances of flaring. Oxy productions techs and the compressor mechanics responded to each compression malfunction alarm and quickly took steps to get the units back up and running at optimized efficiency. Several times throughout the day, various facility mitigation optimizers were able to cut injection rates to wells in the field to reduce injection and sales gas to reduce emissions. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.

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

Oxy is limited in the corrective actions to eliminate this type of cause and potential reoccurrence of flaring as notwithstanding proper gas compressor design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable and unexpected, especially during extreme hot weather conditions and temperatures, which can cause compressor unit malfunctions to occur without warning or advance notice. Oxy continually strives to maintain and operate all its facility locations 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 all its facilities and continually work with its compression rental owners during periods of extreme weather temperature conditions affecting facility equipment to resolve those issues in a timely manner, should they occur suddenly and without warning.

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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
District IV
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 236862

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 236862
	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 236862

QUESTIONS

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	Action Number: 236862
	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	[fAPP2126642013] CEDAR CANOYN GAS GATHERING

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	Yes
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	Compression Equipment Malfunctions > Cedar Canyon Area > Several Facilities > Various Causes

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 236862

QUESTIONS (continued)

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QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	06/21/2023
Time vent or flare was discovered or commenced	10:25 AM
Time vent or flare was terminated	07:25 PM
Cumulative hours during this event	9

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: 212 Mcf Recovered: 0 Mcf Lost: 212 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.

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	In this case, there were multiple gas compression equipment issues at several facilities within the Cedar Canyon area, which suddenly and without warning, would trigger small intermittent instances of flaring to occur at the Cedar Canyon CDP gas gathering system flare, as the flare at this location can accommodate a higher volume of gas and to protect equipment, environment, and personnel. In each instance in which a gas compressor malfunctioned and shut down due to detonation, bad valves, overheating, sensor issues, etc., brought on by the area's extreme hot weather conditions and temperatures, Oxy production techs would receive compression malfunction and flaring alarms. Oxy production techs responded to each facility alarm received as quickly and safely as possible. USA compression and NGSG compressor mechanics were in the area to assist Oxy field personnel, while numerous compressors were malfunctioning over a period of time, which was triggering brief intermittent instances of flaring. Oxy productions techs and the compressor mechanics responded to each compression malfunction alarm and quickly took steps to get the units back up and running at optimized efficiency. OXY made every effort to control and minimize emissions as much as possible.
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Steps taken to limit the duration and magnitude of vent or flare	and shut down due to detonation, bad valves, overheating, sensor issues, etc., brought on by the area's extreme hot weather conditions and temperatures, Oxy production techs would receive compression malfunction and flaring alarms. Oxy production techs responded to each facility alarm received as quickly and safely as possible. USA compression and NGSG compressor mechanics were in the area to assist Oxy field personnel, while numerous compressors were malfunctioning over a period, which in turn triggered brief intermittent instances of flaring. Oxy productions techs and the compressor mechanics responded to each compression malfunction alarm and quickly took steps to get the units back up and running at optimized efficiency. Several times throughout the day, various facility mitigation optimizers were able to cut injection rates to wells in the field to reduce injection and sales gas to reduce emissions. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.
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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

Action 236862

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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.	7/6/2023