



Natural Gas Analysis Report

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

	Sample Information
Sample Name	WHOMPING WILLOW CTB TEST 2 (FMP)
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	02-15-2023
Meter Number	18452T
Air temperature	59
Flow Rate (MCF/Day)	2768.9
Heat Tracing	Heated Hose & Gasifier
Sample description/mtr name	WHOMPING WILLOW CTB TEST 2 (FMP)
Sampling Method	fill and empty
Operator	AKM MEASUREMENT
State	New Mexico
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	WEST
FLOC	OP-L2124-BT001
Sample Sub Type	CTB
Sample Name Type	METER
Vendor	AKM MEASUREMENT
Cylinder #	1196
Sampled by	JONATHAN ALDRICH
Sample date	2-15-2023
Analyzed date	2-20-2023
Method Name	C9
Injection Date	2023-02-20 10:42:26
Report Date	2023-02-20 10:51:53
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	e48bdbcb-16fe-4161-a7af-f37b5cc2e1cf
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	31551.3	1.7782	0.00005636	1.7898	0.0	0.01731	0.198	
Methane	1030557.6	75.5046	0.00007327	75.9956	769.3	0.42094	12.929	
CO2	8798.8	0.4158	0.00004726	0.4185	0.0	0.00636	0.072	
Ethane	260705.7	11.8639	0.00004551	11.9410	211.8	0.12397	3.205	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	172711.4	5.6595	0.00003277	5.6963	143.7	0.08673	1.575	
iso-butane	71564.3	0.7954	0.00001111	0.8005	26.1	0.01606	0.263	
n-Butane	168102.4	1.8465	0.00001098	1.8585	60.8	0.03730	0.588	
iso-pentane	46850.7	0.4551	0.00000971	0.4580	18.4	0.01141	0.168	
n-Pentane	54646.5	0.5174	0.00000947	0.5208	20.9	0.01297	0.189	
hexanes	35880.0	0.2726	0.00000760	0.2744	13.1	0.00816	0.113	
heptanes	26150.0	0.1633	0.00000624	0.1644	9.1	0.00569	0.076	
octanes	12059.0	0.0673	0.00000558	0.0677	4.2	0.00267	0.035	
nonanes+	2323.0	0.0144	0.00000619	0.0145	1.0	0.00064	0.008	
Total:		99.3540		100.0000	1278.4	0.75022	19.419	

Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	99.3540		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	84.3		
Flowing Pressure (psia)	6.0		

Result	Dry	Sat.	
Gross Heating Value (BTU / Ideal cu.ft.)	1278.4	1256.1	
Gross Heating Value (BTU / Real cu.ft.)	1283.2	1261.4	
Relative Density (G), Real	0.7528	0.7508	

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	99.3540	97.0000	103.0000	Pass	

VCU FLARING EVENT SPECIFIC JUSTIFICATIONS FORM**Facility:** Whomping Willow CTB**Date:** 10/05/2023**Duration of event:** >8 hours/day**MCF Flared:** 145**Start Time:** 12:00 AM**End Time:** 11:59 PM**Cause:** Routine Combustion of storage tank vapors using an enclosed combustion device (VCU)**Method of Flared Gas Measurement:** HP VCU meter tracking combusted gas

Comments: No wells were involved with this flaring event as this event is due to combustion of storage tank vapors by an enclosed combustion device which is used routinely at this facility, pursuant to Federal US EPA NSPS OOOO/OOOOa regulations and state air permitting requirements that require the use of such a device to reduce storage tank emissions by 95%.

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

On May 17, 2021, NMOCD issued a notice entitled, "Frequently Asked Questions Regarding the Natural Gas Waste Rules," and states that "... pursuant to 19.15.27.8(G) NMAC, an operator who vents or flares for any reason and that lasts more than 8 hours cumulatively during any 24-hour period must report that event on Form C-129." Combustion of storage tank vapors by this enclosed combustion device is used routinely at this facility pursuant to Federal US EPA NSPS OOOO/OOOOa regulations and state air permitting requirements that require the use of such a device to reduce storage tank emissions by 95%.

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

On May 17, 2021, NMOCD issued a notice entitled, "Frequently Asked Questions Regarding the Natural Gas Waste Rules," and states that "... pursuant to 19.15.27.8(G) NMAC, an operator who vents or flares for any reason and that lasts more than 8 hours cumulatively during any 24-hour period must report that event on Form C-129." Combustion of storage tank vapors by this enclosed combustion device is used routinely at this facility pursuant to Federal US EPA NSPS OOOO/OOOOa regulations and state air permitting requirements that require the use of such a device to reduce storage tank emissions by 95%.

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

On May 17, 2021, NMOCD issued a notice entitled, "Frequently Asked Questions Regarding the Natural Gas Waste Rules," and states that "... pursuant to 19.15.27.8(G) NMAC, an operator who vents or flares for any reason and that lasts more than 8 hours cumulatively during any 24-hour period must report that event on Form C-129." Combustion of storage tank vapors by this enclosed combustion device is used routinely at this facility pursuant to Federal US EPA NSPS OOOO/OOOOa regulations and state air permitting requirements that require the use of such a device to reduce storage tank emissions by 95%.

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
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 277995

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 277995
	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.
--

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

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

QUESTIONS

Action 277995

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 277995
	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	[fAPP2126559749] WHOMPING WILLOW 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	No
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	HP VCU meter tracking combusted gas - No wells were involved with this flaring event as this event is due to combustion of storage tank vapors by an enclosed combustion device which is used routinely at this facility, pursuant to Federal US EPA NSPS OOOO/OOOOa regulations and state air permitting requirements that require the use of such a device to reduce storage tank emissions by 95%.

Representative Compositional Analysis of Vented or Flared Natural Gas Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	76
Nitrogen (N2) percentage, if greater than one percent	2
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.

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

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

QUESTIONS, Page 2

Action 277995

QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID:
	16696
	Action Number:
	277995
Action Type:	
[C-129] Venting and/or Flaring (C-129)	

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	10/05/2023
Time vent or flare was discovered or commenced	12:00 AM
Time vent or flare was terminated	11:59 PM
Cumulative hours during this event	24

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: 145 Mcf Recovered: 0 Mcf Lost: 145 Mcf.
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	HP VCU meter tracking combusted gas
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	On May 17, 2021, NMOCD issued a notice entitled, "Frequently Asked Questions Regarding the Natural Gas Waste Rules," and states that "... pursuant to 19.15.27.8(G) NMAC, an operator who vents or flares for any reason and that lasts more than 8 hours cumulatively during any 24-hour period must report that event on Form C-129." Combustion of storage tank vapors by this enclosed combustion device is used routinely at this facility pursuant to Federal US EPA NSPS OOOO/OOOOa regulations and state air permitting requirements that require the use of such a device to reduce storage tank emissions by 95%.
Steps taken to limit the duration and magnitude of vent or flare	On May 17, 2021, NMOCD issued a notice entitled, "Frequently Asked Questions Regarding the Natural Gas Waste Rules," and states that "... pursuant to 19.15.27.8(G) NMAC, an operator who vents or flares for any reason and that lasts more than 8 hours cumulatively during any 24-hour period must report that event on Form C-129." Combustion of storage tank vapors by this enclosed combustion device is used routinely at this facility pursuant to Federal US EPA NSPS OOOO/OOOOa regulations and state air permitting requirements that require the use of such a device to reduce storage tank emissions by 95%.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	On May 17, 2021, NMOCD issued a notice entitled, "Frequently Asked Questions Regarding the Natural Gas Waste Rules," and states that "... pursuant to 19.15.27.8(G) NMAC, an operator who vents or flares for any reason and that lasts more than 8 hours cumulatively during any 24-hour period must report that event on Form C-129." Combustion of storage tank vapors by this enclosed combustion device is used routinely at this facility pursuant to

	Federal US EPA NSPS OOOO/OOOOa regulations and state air permitting requirements that require the use of such a device to reduce storage tank emissions by 95%.
--	---

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

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

ACKNOWLEDGMENTS

Action 277995

ACKNOWLEDGMENTS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 277995
	Action Type: [C-129] Venting and/or Flaring (C-129)

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.

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
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

CONDITIONS

Action 277995

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 277995
	Action Type: [C-129] Venting and/or Flaring (C-129)

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.	10/21/2023