



## Certificate of Analysis

Number: 6030-21050216-004A

Artesia Laboratory

200 E Main St.  
Artesia, NM 88210  
Phone 575-746-3481Chandler Montgomery  
Occidental Petroleum  
1502 W Commerce Dr.  
Carlsbad, NM 88220

May 25, 2021

Field: Turkey  
 Station Name: Turkey Track CTB Check B  
 Station Number: 14670B  
 Station Location: CTB  
 Sample Point: Meter  
 Formation: Spot  
 County: Eddy  
 Type of Sample: : Spot-Cylinder  
 Heat Trace Used: N/A  
 Sampling Method: : Fill and Purge  
 Sampling Company: : SPL

Sampled By: Michael Mirabal  
 Sample Of: Gas Spot  
 Sample Date: 05/20/2021 10:47  
 Sample Conditions: 79 psia, @ 82 °F Ambient: 75 °F  
 Effective Date: 05/20/2021 10:47  
 Method: GPA-2261M  
 Cylinder No: 5030-00537  
 Instrument: 6030\_GC6 (Inficon GC-3000 Micro)  
 Last Inst. Cal.: 05/03/2021 0:00 AM  
 Analyzed: 05/25/2021 07:28:39 by KNF

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Hydrogen Sulfide	0.000	0.000	0.000		GPM TOTAL C2+	5.984
Nitrogen	2.015	2.042	2.652		GPM TOTAL C3+	2.878
Methane	75.693	76.715	57.062		GPM TOTAL iC5+	0.649
Carbon Dioxide	0.232	0.235	0.480			
Ethane	11.483	11.638	16.226	3.106		
Propane	5.288	5.359	10.957	1.473		
Iso-butane	0.679	0.688	1.854	0.225		
n-Butane	1.667	1.689	4.552	0.531		
Iso-pentane	0.421	0.427	1.428	0.156		
n-Pentane	0.431	0.437	1.462	0.158		
Hexanes Plus	0.760	0.770	3.327	0.335		
	98.669	100.000	100.000	5.984		

## Calculated Physical Properties

Relative Density Real Gas	Total	C6+
	0.7472	3.2176
Calculated Molecular Weight	21.57	93.19
Compressibility Factor	0.9963	

## GPA 2172 Calculation:

Calculated Gross BTU per ft<sup>3</sup> @ 14.65 psia & 60°F

Real Gas Dry BTU	1268	5113
Water Sat. Gas Base BTU	1246	5024
Ideal, Gross HV - Dry at 14.65 psia	1263.2	5113.2
Ideal, Gross HV - Wet	1241.1	5023.7
Net BTU Dry Gas - real gas	1151	
Net BTU Wet Gas - real gas	1131	

Comments: H2S Field Content 0 ppm  
 Mcf/day 19263

Report generated by:

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

**UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM****Facility:** Turkey Track CTB**Flare Date:** 10/04/2021**Duration of event:** 30 Minutes**MCF Flared:** 254**Start Time:** 11:00 AM**End Time:** 11:30 AM**Cause:** Enterprise > Shut In due to High O2**Method of Flared Gas Measurement:** Gas Flare Meter**Well API Associated with Facility:** 30-015-44143 Turkey Track 8 7 State 023 H

**Comments:** This upset event was not caused by any wells associated with the facility. This emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable issue 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.

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

In this case, sales gas had to be flared rather than be compressed when O2 was introduced into the gas system, Both Oxy's upstream facility and gas lift station automatically shut down on high discharge pressure, due to Enterprise shutting us in on high O2 levels, caused by VRU #3 transmitter malfunctioning, which allowed O2 to be pulled in from the water tanks. This event could not have been foreseen, avoided or prevented as VRU # 3 should have shut down prior it to pulling a vacuum on the water tanks allowing O2 into the system. As a result of Enterprise's pipeline sales valve detecting the high O2 and its valve shutting in, Enterprise shut in their pipeline until OXY cleared the O2 in the gas stream, for safety reasons.

**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 during an unforeseen and unavoidable emergency or malfunction, as the part of the overall process or steps to take to limit duration and magnitude of flaring. Oxy personnel are in the field 24/7 and can physically see when we are flaring, which in turn, are communicated to additional Oxy field personnel. Internal OXY procedures ensure that upon gas compressor unit and/or multiple unit shutdown, increased sensor pressure/level alarms, other process equipment issues, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible in order to take prompt corrective action and minimize emissions. Oxy production technicians must assess whether the issue or circumstance is due to damage and repair is needed, or whether there are other reasons for its cause. The flare at this facility has a 98% combustion efficiency in order to lessen emissions as much as possible. In this case, when Enterprise's gas service pipeline shut in, OXY's valves did their job based on set points and safety measures and sent the stranded gas to the flare. The additional steps taken as well during this event, was for Oxy production techs to quickly shut down all VRU's on location, until the O2 could be purged from the line. Once O2 was cleared from the gas sales line, the compression equipment was restarted, and Enterprise reopened their gas service pipeline, did flaring cease.

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

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. Oxy has a strong and positive compression and facility equipment preventative maintenance program in place. This incident was completely out of OXY's control to foresee, avoid or prevent from happening. OXY made every effort to control and minimize emissions as much as possible during this event. In this case, VRU #3 was identified as the unit causing the problem. VRU #3 has been shut down and is currently under a troubleshooting work order and repair. The only actions that Oxy can take and handle that is within its control, is to keep continue with its compression and facility equipment preventative maintenance program.

**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  
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**District III**

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**District IV**

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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**

QUESTIONS

Action 56835

**QUESTIONS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 56835
	Action Type: [C-129] Venting and/or Flaring (C-129)

**QUESTIONS**

<b>Prerequisites</b>	
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	Not answered.
Incident Facility	[fAB1829628786] TURKEY TRACK CTB

<b>Determination of Reporting Requirements</b>	
Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.	
Was or is this venting and/or flaring caused by an emergency or malfunction	Yes
Did or will this venting and/or flaring last eight hours or more cumulatively within any 24-hour period from a single event	No
Is this considered a submission for a venting and/or flaring 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 or will there be at least 50 MCF of natural gas vented and/or flared during this event	Yes
Did this venting and/or flaring 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 venting and/or flaring within an incorporated municipal boundary or withing 300 feet from an occupied permanent residence, school, hospital, institution or church in existence	No

<b>Equipment Involved</b>	
Primary Equipment Involved	Other (Specify)
Additional details for Equipment Involved. Please specify	Emergency Flare > Enterprise > Shut In due to High O2

<b>Representative Compositional Analysis of Vented or Flared Natural Gas</b>	
Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	77
Nitrogen (N2) percentage, if greater than one percent	2
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) 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 Sulfide (H2S) PPM quality requirement	Not answered.
Carbon Dioxide (CO2) percentage quality requirement	Not answered.
Oxygen (O2) percentage quality requirement	Not answered.

<b>Date(s) and Time(s)</b>	
Date venting and/or flaring was discovered or commenced	10/04/2021
Time venting and/or flaring was discovered or commenced	11:00 AM
Time venting and/or flaring was terminated	11:30 AM
Cumulative hours during this event	1

<b>Measured or Estimated Volume of Vented or Flared Natural Gas</b>	
Natural Gas Vented (Mcf) Details	Not answered.

Natural Gas Flared (Mcf) Details	Cause: Other   Other (Specify)   Natural Gas Flared   Released: 254 Mcf   Recovered: 0 Mcf   Lost: 254 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 or is this venting and/or flaring a result of downstream activity	No
Was notification of downstream activity received by you or your operator	Not answered.
Downstream OGRID that should have notified you or your operator	Not answered.
Date notified of downstream activity requiring this venting and/or flaring	Not answered.
Time notified of downstream activity requiring this venting and/or flaring	Not answered.

Steps and Actions to Prevent Waste	
For this event, the operator could not have reasonably anticipated the current event and it was beyond the operator's control.	True
Please explain reason for why this event was beyond your operator's control	In this case, sales gas had to be flared rather than be compressed when O2 was introduced into the gas system. Both Oxy's upstream facility and gas lift station automatically shut down on high discharge pressure, due to Enterprise shutting us in on high O2 levels, caused by VRU #3 transmitter malfunctioning, which allowed O2 to be pulled in from the water tanks. This event could not have been foreseen, avoided or prevented as VRU # 3 should have shut down prior to pulling a vacuum on the water tanks allowing O2 into the system. As a result of Enterprise's pipeline sales valve detecting the high O2 and its valve shutting in, Enterprise shut in their pipeline until OXY cleared the O2 in the gas stream, for safety reasons.
Steps taken to limit the duration and magnitude of venting and/or flaring	It is OXY's policy to route all stranded gas to a flare during an unforeseen and unavoidable emergency or malfunction, as the part of the overall process or steps to take to limit duration and magnitude of flaring. Oxy personnel are in the field 24/7 and can physically see when we are flaring, which in turn, are communicated to additional Oxy field personnel. Internal OXY procedures ensure that upon gas compressor unit and/or multiple unit shutdown, increased sensor pressure/level alarms, other process equipment issues, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible in order to take prompt corrective action and minimize emissions. Oxy production technicians must assess whether the issue or circumstance is due to damage and repair is needed, or whether there are other reasons for its cause. The flare at this facility has a 98% combustion efficiency in order to lessen emissions as much as possible. In this case, when Enterprise's gas service pipeline shut in, OXY's valves did their job based on set points and safety measures and sent the stranded gas to the flare. The additional steps taken as well during this event, was for Oxy production techs to quickly shut down all VRU's on location, until the O2 could be purged from the line. Once O2 was cleared from the gas sales line, the compression equipment was restarted, and Enterprise reopened their gas service pipeline, did flaring cease.
Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring	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. Oxy has a strong and positive compression and facility equipment preventative maintenance program in place. This incident was completely out of OXY's control to foresee, avoid or prevent from happening. OXY made every effort to control and minimize emissions as much as possible during this event. In this case, VRU #3 was identified as the unit causing the problem. VRU #3 has been shut down and is currently under a troubleshooting work order and repair. The only actions that Oxy can take and handle that is within its control, is to keep continue with its compression and facility equipment preventative maintenance program.

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CONDITIONS  
  
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Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 56835
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
marialuna	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.	10/19/2021