



Volumetrics US Inc.
3001 N Cameron St, Victoria, TX-77901
Phone: 361-827-4024

Company: OXY USA INC
Field/Location : NMSW
Station Name : FEDERAL 1-1
Station Number : 2300150020
Sample Date: 3/2/21 8:01 AM
Analysis Date: 3/23/21 1:43 PM
Instrument: VARIAN CP 490 GC
Calibration/Verification Date: 3/23/2021
Heat Trace used: YES

Work Order 4000230136
Sampled by: VOLUMETRICS/JA
Sample Type : SPOT-CYLINDER
Sample Temperature (F): 50
Sample Pressure (PSIG): 60
Flow rate (MCF/Day): 30.8
Ambient Temperature (F): 41
Sampling method: FILL & EMPTY
Cylinder Number: 1095

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	5.6205	5.7973			
Methane	63.0422	65.0250			
Carbon Dioxide	0.0798	0.0823			
Ethane	14.1343	14.5789	3.893	3.915	3.993
Propane	9.8799	10.1907	2.804	2.819	2.875
Isobutane	0.9613	0.9915	0.324	0.326	0.332
N-butane	2.0318	2.0957	0.660	0.663	0.677
Isopentane	0.3760	0.3878	0.142	0.142	0.145
N-Pentane	0.3170	0.3270	0.118	0.119	0.121
Hexanes Plus	0.5078	0.5238	0.228	0.230	0.234
Total	96.9506	100.0000			

Hexanes plus split (60%-30%-10%)

Physical Properties (Calculated)	14.650 psia	14.730 psia	15.025 psia
Total GPM Ethane+	8.169	8.214	8.378
Total GPM Iso-Pentane+	0.488	0.491	0.501
Compressibility (Z)	0.9957	0.9957	0.9956
Specific Gravity (Air=1) @ 60 °F	0.8238	0.8239	0.8239
Molecular Weight	23.767	23.767	23.767
Gross Heating Value	14.650 psia	14.730 psia	15.025 psia
Dry, Real (BTU/Ft ³)	1328.8	1336.1	1363.0
Wet, Real (BTU/Ft ³)	1305.7	1312.9	1339.3
Dry, Ideal (BTU/Ft ³)	1323.1	1330.3	1357.0
Wet, Ideal (BTU/Ft ³)	1300.1	1307.2	1333.4

Temperature base 60 °F

Comment: FIELD H2S = 0 PPM

Verified by

Mostaq Ahammad
Petroleum Chemist

Approved by

Deann Friend

Deann Friend
Laboratory Manager

UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM**Facility:** Federal 1-1 CTB**Flare Date:** 10/04/2021**Duration of event:** 3 Hours 21 minutes**MCF Flared:** 117**Intermittent Flaring Times:** 02:39 PM to 06:00 PM**Cause:** Downstream Activity > DCP > High Line Pressure**Method of Flared Gas Measurement:** Gas Flare Meter 68873**Well API Associated with Facility:** 30-015-26843 Federal 1 #004

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.

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

This interruption, restriction or complete shut-in of the gas pipeline by a third-party pipeline operator is downstream of Oxy's custody transfer point and out of Oxy's control to avoid or prevent from happening and did not stem from any of Oxy's upstream facility activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices.

In this case, there were multiple instances of high line pressure spikes in DCP's gas system pipeline, which impacted Oxy's ability to fully send gas to them, as their downstream facility, DCP Hat Mesa compression station, was unable to handle the volume of gas loads sent to them as a result of their facility having recurring equipment issues. DCP's Hat Mesa compressor station's equipment issues are downstream of Oxy's custody transfer point and control, yet greatly impacted the volume of gas flow from Oxy's upstream facility to their gas pipeline, which in turn triggered immediate recurring spikes in high line pressure in their pipeline, which then activated several brief instances of flaring at Oxy's upstream facility in a little over 3-hour period. Until DCP and its associating downstream Hat Mesa compressor station were able to handle the volume of gas sent to them, the recurring spikes in high line pressure forced Oxy's upstream facility to route its stranded gas to a flare, as it was not able to push the full volume of gas into DCP's gas service pipeline due to the restrictions and/or constraints on their gas sales service at various times, prompted by the high line pressure spikes. No advance warning was provided to Oxy personnel by DCP personnel regarding high line pressures issues with their gas service system pipeline or their Hat Mesa compressor station.

The Federal 1-1 CTB flare is a gas gathering flare system for multiple tank batteries across Oxy's defined Lost Tank 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 at this facility, as it was necessary to maintain a minimal amount of gas flow to restart the facility's compression equipment, specifically the gas lift compressors, across the Lost Tank area, when DCP was ready and able to start taking gas. 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 Lost Tank area.

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, that is beyond Oxy's control to avoid, prevent or foresee, in order to minimize emissions as much as possible, as part of the overall steps taken to limit duration and magnitude of flaring. In this case, flaring was triggered by the restriction, constraint and/or interruption to DCP's gas service which was caused by several sudden and unexpected spikes in high line pressure within DCP's gas service system pipeline due to their associating downstream facility, Hat Mesa compressor station, having equipment issues, which in turn, affected their gas sales pipeline operation. Once initial flaring was triggered, Oxy personnel immediately contacted DCP personnel to determine its cause and began. Oxy personnel were informed that DCP's associating downstream facility, Hat Mesa compressor station, was having equipment issues which affected DCP's line pressure. Until DCP and its downstream facility were able to resolve their gas service pipeline pressure and equipment issues, OXY had to route all its stranded gas to a flare, as it was not able to push the gas into DCP's gas service pipeline due to the restrictions and/or constraints on their gas sales service. Subsequent flaring alarms received by the on-call Oxy production techs were resolved by contacting DCP personnel and being informed that Hat Mesa compressor station was still having equipment issues and no estimated time of return to service. In addition, Oxy production techs began shutting in the Lost Tank production area to minimize flare volumes.

The Federal 1-1 CTB flare is a gas gathering flare system for multiple tank batteries across Oxy's defined Lost Tank 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 at this facility, as it was necessary to maintain a minimal amount of gas flow to restart the facility's compression equipment, specifically the gas lift compressors, across the Lost Tank area, when DCP was ready and able to start taking gas. 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 Lost Tank area.

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

Oxy cannot take any corrective actions to eliminate the cause and potential reoccurrence of a DCP gas service flow pipeline restriction or shut-in, due to high line pressure spikes in their gas system pipeline, as this control issue is downstream of Oxy's custody transfer point and out of Oxy's control to avoid or prevent from happening or reoccurring. DCP's downstream facility issues will re-occur from time to time and may trigger a spike in their gas line pressure, which in turn, directly impacts Oxy's ability to send gas to them. When DCP's downstream facilities has equipment issues or greatly struggles to handle the volume of gas being sent to them by Oxy, DCP then restricts Oxy's ability to send gas, which then allows no other option but for Oxy to route all of its stranded gas not pushed into the DCP gas system pipeline, to flare. OXY makes every effort to control and minimize emissions as much as possible. The only actions that Oxy can take and handle that is within its control, is to communicate frequently with DCP personnel during these types of situations and adjust its production and/or compression equipment until DCP resumes normal gas service operations.

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 56836

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 56836
	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	Not answered.
Incident Facility	[fAPP2127059734] FEDERAL 01 BATTERY

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 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

Equipment Involved

Primary Equipment Involved	Other (Specify)
Additional details for Equipment Involved. Please specify	Emergency Flare > Downstream Activity > DCP > High Line Pressure

Representative Compositional Analysis of Vented or Flared Natural Gas

Please provide the mole percent for the percentage questions in this group.

Methane (CH4) percentage	65
Nitrogen (N2) percentage, if greater than one percent	6
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.

Date(s) and Time(s)

Date venting and/or flaring was discovered or commenced	10/04/2021
Time venting and/or flaring was discovered or commenced	02:39 PM
Time venting and/or flaring was terminated	06:00 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: 117 Mcf Recovered: 0 Mcf Lost: 117 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	Yes
Was notification of downstream activity received by you or your operator	No
Downstream OGRID that should have notified you or your operator	[229153] DCP MIDSTREAM L.P.
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	<p>In this case, there were multiple instances of high line pressure spikes in DCP's gas system pipeline, which impacted Oxy's ability to fully send gas to them, as their downstream facility, DCP Hat Mesa compression station, was unable to handle the volume of gas loads sent to them as a result of their facility having recurring equipment issues. DCP's Hat Mesa compressor station's equipment issues are downstream of Oxy's custody transfer point and control, yet greatly impacted the volume of gas flow from Oxy's upstream facility to their gas pipeline, which in turn triggered immediate recurring spikes in high line pressure in their pipeline, which then activated several brief instances of flaring at Oxy's upstream facility in a little over 3-hour period. Until DCP and its associating downstream Hat Mesa compressor station were able to handle the volume of gas sent to them, the recurring spikes in high line pressure forced Oxy's upstream facility to route its stranded gas to a flare, as it was not able to push the full volume of gas into DCP's gas service pipeline due to the restrictions and/or constraints on their gas sales service at various times, prompted by the high line pressure spikes. No advance warning was provided to Oxy personnel by DCP personnel regarding high line pressures issues with their gas service system pipeline or their Hat Mesa compressor station. The Federal 1-1 CTB flare is a gas gathering flare system for multiple tank batteries across Oxy's defined Lost Tank 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 at this facility, as it was necessary to maintain a minimal amount of gas flow to restart the facility's compression equipment, specifically the gas lift compressors, across the Lost Tank area, when DCP was ready and able to start taking gas.</p>
Steps taken to limit the duration and magnitude of venting and/or flaring	<p>It is OXY's policy to route all stranded gas to a flare during an unforeseen and unavoidable emergency or malfunction, that is beyond Oxy's control to avoid, prevent or foresee, in order to minimize emissions as much as possible, as part of the overall steps taken to limit duration and magnitude of flaring. In this case, flaring was triggered by the restriction, constraint and/or interruption to DCP's gas service which was caused by several sudden and unexpected spikes in high line pressure within DCP's gas service system pipeline due to their associating downstream facility, Hat Mesa compressor station, having equipment issues, which in turn, affected their gas sales pipeline operation. Once initial flaring was triggered, Oxy personnel immediately contacted DCP personnel to determine its cause and began. Oxy personnel were informed that DCP's associating downstream facility, Hat Mesa compressor station, was having equipment issues which affected DCP's line pressure. Until DCP and its downstream facility were able to resolve their gas service pipeline pressure and equipment issues, OXY had to route all its stranded gas to a flare, as it was not able to push the gas into DCP's gas service pipeline due to the restrictions and/or constraints on their gas sales service. Subsequent flaring alarms received by the on-call Oxy production techs were resolved by contacting DCP personnel and being informed that Hat Mesa compressor station was still having equipment issues and no estimated time of return to service. In addition, Oxy production techs began shutting in the Lost Tank production area to minimize flare volumes.</p>
Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring	<p>Oxy cannot take any corrective actions to eliminate the cause and potential reoccurrence of a DCP gas service flow pipeline restriction or shut-in, due to high line pressure spikes in their gas system pipeline, as this control issue is downstream of Oxy's custody transfer point and out of Oxy's control to avoid or prevent from happening or reoccurring. DCP's downstream facility issues will re-occur from time to time and may trigger a spike in their gas line pressure, which in turn, directly impacts Oxy's ability to send gas to them. When DCP's downstream facilities has equipment issues or greatly struggles to handle the volume of gas being sent to them by Oxy, DCP then restricts Oxy's ability to send gas, which then allows no other option but for Oxy to route all of its stranded gas not pushed into the DCP gas system pipeline, to flare. OXY makes every effort to control and minimize emissions as much as possible. The only actions that Oxy can take and handle that is within its control, is to communicate frequently with DCP personnel during these types of situations and adjust its production and/or compression equipment until DCP resumes normal gas service operations.</p>

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 56836

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 56836
	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