Atchafalaya Measurement Inc
416 East Main Street, Artesia NM 88210 575-746-3481

Sample Information

	Sample Information
Sample Name	OXY__Burton Flats CTB Production__GC2-73019-12
Station Number	14071P
Lease Name	Burton Flats CTB Production
Analysis For	OXY USA
Producer	OXY USA
Field Name	Burton Flats
County/State	N/A
Frequency/Spot Sample	Spot
Sampling Method	Fill Empty
Sample Deg F	97
Atmos Deg F	79
Flow Rate	153.142
Line PSIG	48
Date Sampled/Time Sampled	7-23-19
Cylinder Number	N/A
Cylinder Clean Date	N/A
Sampled By	Derek Sauder
Analysis By	Pat Silvas
Verified/Calibrated Date	7-29-19
Report Date	2019-07-30 10:46:10

Component Results

Component Name	Ret. Time	Peak Area	Norm%	GPM (Dry) (Gal. / 1000 cu.ft.)	
Nitrogen	23.100	30269.9	2.1819	0.000	
H2S	0.000	0.0	0.0000	0.000	
Methane	23.860	787502.9	75.1296	0.000	
Carbon Dioxide	27.900	5825.9	0.3597	0.000	
Ethane	36.960	202456.6	11.6915	3.121	
Propane	77.160	133263.6	5.8157	1.600	
i-Butane	29.820	64807.6	0.7713	0.252	
n-Butane	32.080	165504.2	1.9549	0.615	
i-Pentane	39.120	49926.9	0.5126	0.187	
n-Pentane	41.900	54913.2	0.5487	0.199	
C6's	50.750	43911.0	0.3860	0.158	
C7's	67.000	54984.0	0.4654	0.214	
C8's	84.000	18044.0	0.1628	0.083	
C9's	102.000	4888.0	0.0159	0.009	
C10 Plus	146.000	1090.0	0.0040	0.002	
Total:			100.0000	6.441	

Results Summary

Result	Dry	Sat. (Base)	
Total Raw Mole% (Dry)	103.9585		
Pressure Base (psia)	14.650		
Temperature Base	60.00		
Gross Heating Value (BTU / Ideal cu.ft.)	1294.9	1272.2	
Gross Heating Value (BTU / Real cu.ft.)	1300.1	1277.9	
Relative Density (G), Ideal	0.7687	0.7661	
Relative Density (G), Real	0.7715	0.7692	
Compressibility (Z) Factor	0.9960	0.9956	

UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: Burton Flats CTB

Flare Date: 09/22/2021

Duration of event: 1 Hour

MCF Flared: 81

Start Time: 09:10 PM

End Time: 10:10 PM

Cause: Compressor Malfunction > Detonation

Method of Flared Gas Measurement: Gas Flare Meter

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 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. Oxy engages in respectable and good facility operation practices while also maintaining its continuous facility equipment preventative maintenance program.

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

In this case, the facility's gas compressor went down on a CAT panel shutdown due to detonation on cylinder #3. A detonation compressor malfunction can be caused by any number of things, such as fuel quality change, temperature changes, psi changes, oil issues, plugs and valves failing, etc., yet as it pertains to this event, there were no alarms on the compressor Murphy or CAT panel, to indicate why a detonation malfunction occurred, given that a recent compressor 90-day preventative maintenance work was performed last month by the compression owner, USA Compression. Detonation is an internal compressor malfunction and notwithstanding proper gas compressor design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable and unexpected which can cause compressor unit malfunctions to occur without warning or advance notice. With the gas compressor down, there was no gas takeaway, and thus field psi increased until set psi levels were reached which triggered flaring, as a safety measure for operations, facility equipment, and personnel. USA gas compressor unit was working as designed and operated normally prior to the sudden and without warning detonation malfunction of the compressor unit. This incident was completely out of OXY's control to prevent from happening yet OXY made every effort to control and minimize emissions as much as possible during this event by working safely and diligently during this event.

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 alarms, increased sensor pressure alarms, 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.

In this case, the facility's gas compressor went down on a CAT panel shutdown due to detonation on cylinder #3. The on-call Oxy production tech, who received the facility alarm notifications, drove to the facility, as this is an unmanned facility, and upon arrival, immediately began to inspect the gas compressor. Finding no other cause for the detonation malfunction, the production tech was able to clear the malfunction alarm and restart the gas compressor, which shortly thereafter, once the gas compressor reached its optimized working operation and speed, did flaring cease. The production tech stayed on-site for a short period of time in order to monitor the gas compressor unit. No further incidents occurred. OXY made every effort to control and minimize emissions as much as possible during this event by working safely and diligently to resolve the issues.

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 which can cause compressor unit malfunctions to occur without warning or advance notice. On September 23, 2021, the very next day after the gas compressor malfunction occurred, both Oxy's internal compression team members and USA Compression, inspected the unit thoroughly and found no issues or indication of what might have caused a detonation malfunction to have occurred. 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 equipment preventative maintenance program in place. The only actions that Oxy can take and handle that is within its control, is to keep continue with its compression equipment preventative maintenance program for this unit.

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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 53245

QUESTIONS

Operator: OXY USA WTP LIMITED PARTNERSHIP P.O. Box 4294 Houston, TX 772104294	OGRID: 192463
	Action Number: 53245
	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	**[fAPP2126552654] BURTON FLATS FED CTB**

Determination of Reporting Requirements	
Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide addional 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 > Compressor Malfunction > Detonation

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	2
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (C02) percentage, if greater than one percent	0
Oxygen (02) 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 (02) percentage quality requirement	*Not answered.*

Date(s) and Time(s)	
Date venting and/or flaring was discovered or commenced	09/22/2021
Time venting and/or flaring was discovered or commenced	09:10 PM
Time venting and/or flaring was terminated	10:10 PM
Cumulative hours during this event	1

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: 81 Mcf | Recovered: 0 Mcf | Lost: 81 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, the facility's gas compressor went down on a CAT panel shutdown due to detonation on cylinder #3. A detonation compressor malfunction can be caused by any number of things, such as fuel quality change, temperature changes, psi changes, oil issues, plugs and valves failing, etc., yet as it pertains to this event, there were no alarms on the compressor Murphy or CAT panel, to indicate why a detonation malfunction occurred, given that a recent compressor 90-day preventative maintenance work was performed last month by the compression owner, USA Compression. Detonation is an internal compressor malfunction and notwithstanding proper gas compressor design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable and unexpected which can cause compressor unit malfunctions to occur without warning or advance notice. With the gas compressor down, there was no gas takeaway, and thus field psi increased until set psi levels were reached which triggered flaring, as a safety measure for operations, facility equipment, and personnel. USA gas compressor unit was working as designed and operated normally prior to the sudden and without warning detonation malfunction of the compressor unit. This incident was completely out of OXY's control to prevent from happening yet OXY made every effort to control and minimize emissions as much as possible during this event by working safely and diligently during this event.
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 alarms, increased sensor pressure alarms, 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. In this case, the facility's gas compressor went down on a CAT panel shutdown due to detonation on cylinder #3. The on-call Oxy production tech, who received the facility alarm notifications, drove to the facility, as this is an unmanned facility, and upon arrival, immediately began to inspect the gas compressor. Finding no other cause for the detonation malfunction, the production tech was able to clear the malfunction alarm and restart the gas compressor, which shortly thereafter, once the gas compressor reached its optimized working operation and speed, did flaring cease. The production tech stayed on-site for a short period of time in order to monitor the gas compressor unit. No further incidents occurred. OXY made every effort to control and minimize emissions as much as possible during this event by working safely and diligently to resolve the issues.
Corrective actions taken to eliminate the cause and reoccurrence of venting and/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 which can cause compressor unit malfunctions to occur without warning or advance notice. On September 23, 2021, the very next day after the gas compressor malfunction occurred, both Oxy's internal compression team members and USA Compression, inspected the unit thoroughly and found no issues or indication of what might have caused a detonation malfunction to have occurred. 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 equipment preventative maintenance program in place. The only actions that Oxy can take and handle that is within its control, is to keep continue with its compression equipment preventative maintenance program for this unit.

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CONDITIONS

Action 53245

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Operator: OXY USA WTP LIMITED PARTNERSHIP P.O. Box 4294 Houston, TX 772104294	OGRID: 192463
	Action Number: 53245
	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.	9/30/2021