Harvest Midstream

Natural Gas Analysis

Sample Information

	Sample Information
Sample Name	94007
Cylinder Number	0039
Effective Date	07/01/2021 08:00
Sample Date	07/23/2021
Temperature (F)	75
Pressure (psig)	81
Tech	G Gurule
Sample Type	S
Analyzed Date	2021-07-27 14:14:32
Source Data File	94007.dat
NGA Phys. Property Data Source	GPA Standard 2145-16 (FPS)
Data Source	Agilent OpenLab/EZChrom Connector

Component Results

Component Name	Norm Mole%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)	
Nitrogen	0.2603	0.00	0.0025	0.029	
Methane	83.5479	845.79	0.4628	14.207	
CO2	1.2527	0.00	0.0190	0.214	
Ethane	7.9356	140.76	0.0824	2.129	
Propane	3.9734	100.21	0.0605	1.098	
iso-Butane	0.6932	22.59	0.0139	0.228	
n-Butane	0.9740	31.85	0.0195	0.308	
iso-Pentane	0.3961	15.88	0.0099	0.145	
n-Pentane	0.2685	10.79	0.0067	0.098	
C6+	0.6983	35.90	0.0225	0.304	
Total:	100.0000	1203.77	0.6997	18.760	

Results Summary

Result	Dry	
Unnormalized Mole% (Dry)	97.9510	
Pressure Base (psia)	14.730	
Gross Heating Value (BTU / Real cu.ft.)	1207.76	
Relative Density (G), Real	0.7017	
Gas Density, Real (lbm / cu.ft.)	0.05370	
Compressibility (Z) Factor	0.99670	

Line Leak Calc 1

Orifice Diameter	0.360	inches
Pressure	73	psig
Time/date Discovered	7/28/2021 11:30	
Time/date Isolated	7/29/2021 14:00	
Total Hours Blown	26.50	hours
Area of Orifice	0.10179	sq. inches
Lost Gas From Line Leak 1	**250.71**	**Mcf**

Line Leak Calc 2

Orifice Diameter	0.300	inches
Pressure	73	psig
Time/date Discovered	7/28/2021 11:30	
Time/date Isolated	7/29/2021 14:00	
Total Hours Blown	26.50	hours
Area of Orifice	0.07069	sq. inches
Lost Gas From Line Leak 2	**174.11**	**Mcf**

Line Leak Calc 3

Orifice Diameter	0.220	inches
Pressure	73	psig
Time/date Discovered	7/28/2021 11:30	
Time/date Isolated	7/29/2021 14:00	
Total Hours Blown	26.50	hours
Area of Orifice	0.03801	sq. inches
Lost Gas From Line Leak 3	**93.63**	**Mcf**
Total Lost Gas From Line Leak	**518.45**	**Mcf**

Blowdown Calc

Length	781	feet
Actual Pipe OD	4.500	inches
Wall Thickness	0.156	inches
Pressure	73	psig
Lost Gas From Blowdown	**0.372**	**Mcf**

Total Gas Loss	**518.82**	**Mcf**

Lost Gas=(Orifice Diameter)^2*Pressure*Time Blown
Lost Gas=(Inside Diameter)^2*Pressure*Length*0.372/1000000

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
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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

QUESTIONS

Action 40088

QUESTIONS

Operator: Harvest Four Corners, LLC 1111 Travis Street Houston, TX 77002	OGRID: 373888
	Action Number: 40088
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

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 or flaring caused by an emergency or malfunction	Yes
Did or will this venting or flaring last eight hours or more cumulatively within any 24-hour period from a single event	Yes
Is this considered a submission for a notification of a major venting or flaring	**Yes, major venting or flaring of natural gas.**
The operator shall file a form C-141 instead of a form C-129 for a release that includes liquid during venting 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 or flared during this event	Yes
Did this venting 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

Unregistered Facility Site	
Please provide the facility details, if the venting or flaring occurred or is occuring at a facility that does not have an Facility ID (f#) yet.	
Facility or Site Name	27-5 CDP #1
Facility Type	Pipeline - Gas Gathering - (PGG)

Equipment Involved	
Primary Equipment Involved	Pipeline (Any)
Additional details for Equipment Involved. Please specify	*Not answered.*

Representative Compositional Analysis of Vented or Flared Natural Gas	
Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	84
Nitrogen (N2) percentage, if greater than one percent	0
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (C02) percentage, if greater than one percent	1
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 or flaring was discovered or commenced	07/29/2021
Time venting or flaring was discovered or commenced	02:00 PM
Is the venting or flaring event complete	Yes
Date venting or flaring was terminated	07/29/2021
Time venting or flaring was terminated	02:00 PM
Total duration of venting or flaring in hours, if venting or flaring has terminated	26
Longest duration of cumulative hours within any 24-hour period during this event	24

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Cause: Corrosion | Pipeline (Any) | Natural Gas Vented | Spilled: 519 Mcf | Recovered: 0 Mcf | Lost: 519 Mcf]
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Additional details for Measured or Estimated Volume(s). Please specify	*Not answered.*
Is this a gas only submission (i.e. only 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 or flaring a result of downstream activity	*Not answered.*
Date notified of downstream activity requiring this venting or flaring	*Not answered.*
Time notified of downstream activity requiring this venting 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	Leak discovered by aerial leak detection survey. Investigation showed leak was result of internal corrosion. Harvest could not have reasonably anticipated or prevented this leak.
Steps taken to limit the duration and magnitude of venting or flaring	Upon receiving notification of the potential leak, Harvest immediately investigated, isolated, and stopped the leak.
Corrective actions taken to eliminate the cause and reoccurrence of venting or flaring	Section of leaking pipeline was removed and replaced with new pipe before putting the line back into service.

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CONDITIONS

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Operator: Harvest Four Corners, LLC 1111 Travis Street Houston, TX 77002	OGRID: 373888
	Action Number: 40088
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
system	If the information provided in this report requires an amendment, submit a [C-129] Request to Amend Venting and/or Flaring Incident, utilizing your incident number from this event.	8/5/2021