

Dickson, Laura

From: Dickson, Laura
Sent: Wednesday, November 2, 2022 7:43 AM
To: Juarez, Allie M.
Subject: RE: [EXTERNAL] Harmon Creek (PA-63-01011) - Leaks and OGI

Hi Allie,

Thank you for this information!

Best Regards,
Laura

From: Juarez, Allie M. <AJuarez@marathonpetroleum.com>
Sent: Tuesday, November 1, 2022 3:12 PM
To: Dickson, Laura <ldickson@pa.gov>
Subject: RE: [EXTERNAL] Harmon Creek (PA-63-01011) - Leaks and OGI

Hi Laura,

The OGI monitoring is conducted using a FLIR GF320 or GFx320. The OOOOa compliance certification for those models is attached.

Thanks,
Allie

From: Dickson, Laura <ldickson@pa.gov>
Sent: Tuesday, November 1, 2022 1:34 PM
To: Juarez, Allie M. <AJuarez@marathonpetroleum.com>
Subject: [EXTERNAL] Harmon Creek (PA-63-01011) - Leaks and OGI

Hi Allie,

As we talked about this morning, it was observed that the detection level proposed for quarterly OGI monitoring (specific to compressors and connectors) is 10,000 ppm. Upon further analysis, I do have an update regarding it. I have provided a screenshot that I pulled from GP-5 conditions which provides the definition of a leak. Per the definition, 500 ppm pertains to Method 21. When utilizing OGI methods, it must meet the highlighted portion of the definition below. Does MarkWest propose to calibrate the OGI camera according to 40 CFR § 60.18 and a detection sensitivity level of 60 grams/hour?

Leak – A leak is defined as any release of gaseous hydrocarbons that is detected (AVO) inspection; an optical gas imaging (OGI) camera calibrated according to a sensitivity level of 60 grams/hour; a gas leak detector that meets the requirements of Method 21 that detects a concentration of 500 ppm calibrated as methane or greater approved by the Department's Division of Source Testing and Monitoring. However, a component designed by the manufacturer to protect the equipment, controller, or prevent contamination, gas migration, or an emergency situation is not considered a leak.

Thank you!

Laura S. Dickson, P.E. | Environmental Engineer *She/her/hers*
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DEP is now accepting permit and authorization applications, as well as other documents and correspondence, electronically through the OnBase Electronic Forms Upload tool. Please use the link below to view the webpage, get instructions, and submit documents:

<https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx>



EPA 0000a CERTIFIED

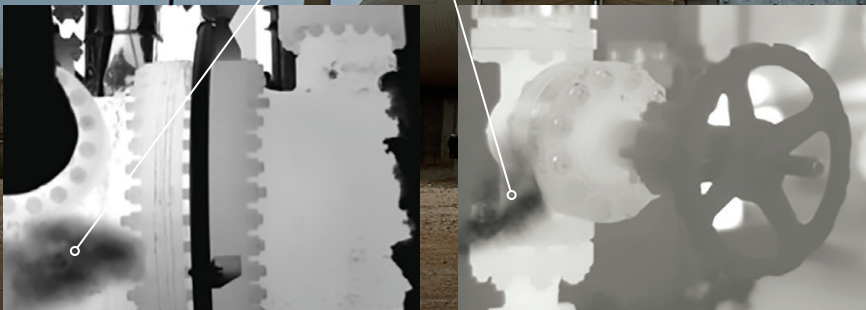
INDEPENDENT TESTING DEEMS FLIR CAMERAS COMPLIANT

FLIR is proud to announce its GF620, GFx320, GF320, GF300, and G300a cameras have been independently tested and deemed compliant with the EPA's NSPS 40 CFR part 60, subpart 0000a sensitivity standard for optical gas imaging equipment.

Testing was performed by the National Physical Laboratory (NPL), which confirmed the FLIR GF620, GFx320, GF320, GF300, and G300a optical gas imaging cameras are capable of imaging a gas that is half methane/half propane at a concentration of 10,000 ppm at a flow rate of ≤ 60 g/hr from a quarter inch diameter orifice.

*Note: GFx320, GF320, GF300, and G300a cameras have identical detectors, hydrocarbon filters, optical platforms, and HSM algorithms. **The GF620 has a higher resolution detector.***

Methane leaks now visible with FLIR OGI cameras



Calibration Requirements

Gas Detection: No Calibration Required

The GF620, GFx320, GF320, GF300, and G300a camera's ability to detect gases is not influenced by any calibration process and will not degrade over time.

Gas Compound Detection

The GF620, GFx320, GF320, GF300, and G300a optical gas imaging cameras are capable of imaging a wide array of gas compounds, but were specifically designed to see the following hydrocarbons:

Methane	Ethylene	Octane
Benzene	Heptane	Pentane
Propane	Hexane	Propylene
Butane	Isoprene	Toluene
Ethane	MEK	Xylene
Ethanol	Methanol	1-Pentene
Ethylbenzene	MIBK	

Questions And User Manuals

To download the latest GF Manual or address questions to the FLIR Gas Detection team, please go to our FLIR Customer Support Portal: <http://flir.custhelp.com>

Gas Detection Training

Learn about ITC training courses for gas detection and 0000a program development: www.infraredtraining.com

Visit our blog for the latest updates in FLIR Gas Detection: www.flir.com/FLIRNews

To See All Optical Gas Imaging Cameras Offered By FLIR Visit:

www.flir.com/ogi