Air Quality Division

AGAT Laboratories

FUGITIVE EMISSIONS SERVICES

Contents

Fugitive Emissions Services

AGAT Laboratories is pleased to introduce Fugitive Emissions Monitoring as the latest service that has been added to the Air Quality Monitoring Division. With the extensive expertise that AGAT Laboratories holds in dealing with other streams of air testing, we are well positioned to work with our clients to provide reasonable and efficient solutions to this important issue. Our suite of services include monitoring and quantification equipment which meet or exceed the provincial and federal requirements for emissions testing.

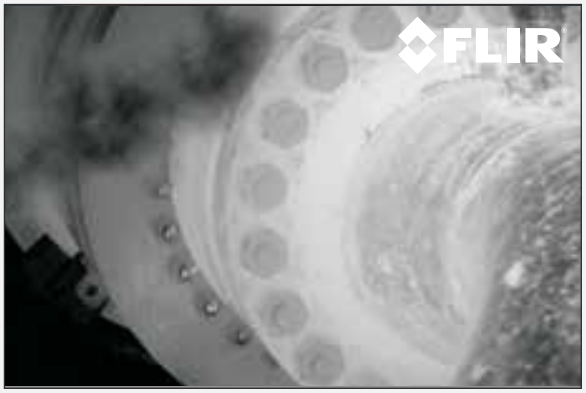
Using our state-of-the art FLIR cameras, we can assist preventative maintenance efforts and detect leaks in real-time in all manner of pipes and connections, at a wide variety of facilities. Thousands of components can be scanned in one shift, and it is a valuable tool to help to increase workplace safety, while also improving your bottom line, by helping to identify costly leaks. Using the latest software, AGAT Laboratories' field specialists can record detailed leak information, pictures and videos directly to an online platform, complete with GPS data, helping clients to track and pinpoint leaks immediately and safely.

Following identification of the leak, AGAT Laboratories' specialists are trained to quantify the leak accurately using the Providence Photonics QL320 Quantitative Optical Gas Imaging device, the latest technology in leak quantification.

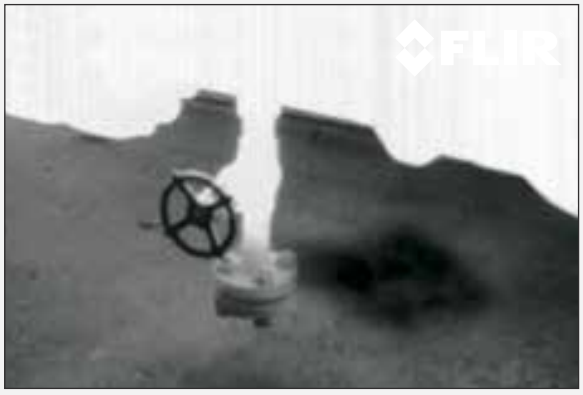
FLIR Camera

More than 80 percent of gas leaks in a facility will occur in less than 1 percent of inspected components. The GF-Series optical gas detection cameras allow AGAT specialists to find hydrocarbon, natural gas, and SF6 leaks quickly, accurately, and safely without shutting systems down for inspection. The FLIR optical gas imaging cameras provide a number of benefits compared to traditional “sniffers”, because they scan a broader area much more rapidly, and they can see into areas that are difficult to reach with contact measurement tools. Invisible to the naked eye, gas leaks look like smoke on infrared optical gas imaging cameras, making them easy to see.

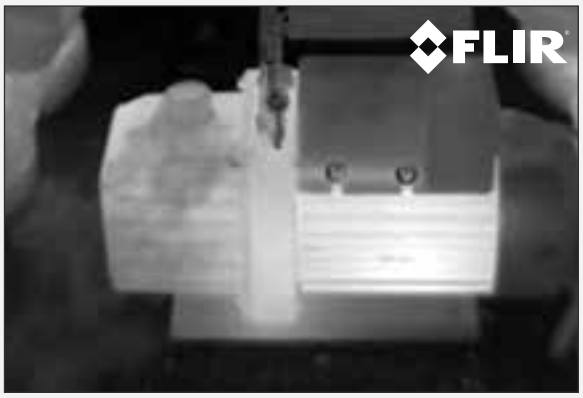
Venting storage tank pressure relief valve.



Natural gas leak on compressor valve.



Methane leak at natural gas facility site.



A/C compressor - Infrared image.

Features

- Real-time Infrared Gas Detection
- Improved High Sensitivity Mode
- Built-in Video Recording, Digital
- Camera, Safety Laser
- Embedded GPS Data
- Fully Calibrated for Temperature
- Measurement Applications
- Automatic (One-Touch) and Manual
- Thermal Focus with 8 X Continuous Digital Zoom
- High Resolution (800 x 480 pixels)
- Operating Ambient Temperature Range -20°C to 350°C
- User-inspired Ergonomics: Rotating
- Handle, Direct Access Buttons
- High Contrast Color LCD

Applications

- Hydrocarbon/Natural Gas Imaging
- SF6 Gas Imaging
- Optical Gas Imaging and Predictive Maintenance Thermography
- EPA Regulation Conformance

Gas Leak Detection

Substances detected by **FLIR GF320**

BENZENE C_6H_6	HEPTANE C_7H_{16}	METHANOL CH_3OH	1-PENTANE	BUTANE C_4H_{10}	HEXANE C_6H_{14}
METHYL ISOBUTYL KETONE (MIBK) $C_6H_{12}O$	PROPANE C_3H_8	ETHANE C_2H_6	ISOPRENE C_5H_8	OCTANE C_8H_{18}	PROPYLENE C_3H_6
ETHYLBENZENE C_8H_{10}	METHANE CH_4	PENTANE C_5H_{12}	TOLUENE CH_3		

QL 320 Quantitative Optical Gas Imaging

Is a portable, battery-powered instrument designed to determine the rate of gas leakage in litres per minute around various pipefittings, valve packings, and compressor seals found in natural gas transmission, storage, and compressor facilities. This is accomplished by connecting directly to the FLIR GF320 and utilizing the thermal calibration embedded in the camera to provide a remote quantitative measurement of mass leak rate. By accurately measuring the flow rate of the sampling stream and the natural gas concentration within that stream, the gas leak rate can be immediately calculated. The instrument automatically compensates for the different specific gravity values of air and natural gas, thus ensuring accurate flow rate calculations. The unit features over 400 Response Factors (RF) which determine chemical composition of a leak.

IN PARTNERSHIP WITH FLIR®

Highlights

- Patented Technology
- Quantification at Distances up to 210 Feet
- Response Factor to Allow Quantification of Most Common Hydrocarbon Compounds
- Rugged and Suitable for Use in Industrial Settings
- Easy to Use, Touch Enabled Interface
- Calculate Value of Lost Product

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wide range of laboratory services.