SOLUTION BRIEF – OIL & GAS

EPA-Approved LDAR from Wellpad to Pipeline

Xplorobot Laser OGI, handheld or on a drone, can replace manual OGI cameras and combines detection, tagging, repair verification and reporting in one workflow.







One Sensor, Air and Ground

A drone flight can screen an entire site in minutes, after which the same Laser OGI sensor is used on the ground at each component. Both use one app, one tagging workflow and one compliance record.

ASSETS	REGULATIONS	DEPLOYMENT	OUTPUTS
Wellpads, tank batteries, compressor stations, gas plants, pipelines, orphan wells	NSPS OOOOa/b/c, Subpart W, EU Methane Regulation, OGMP 2.0	Handheld and drone	Leak and zero-emission tags, g/hr rates, work orders

THE CHALLENGE	THE XPLOROBOT SOLUTION
OGI Cameras Require Specialists Camera surveys rely on certified thermographers and often miss leaks with low thermal contrast.	**Full OGI Replacement** Under EPA MATM-003 and ALT-158, Laser OGI can replace 100% of manual OGI surveys in upstream and midstream LDAR.
Quantification Requires a Second Visit Measured inventories and OGMP 2.0 Level 4 require g/hr rates, which typically means bagging or a Hi Flow Sampler.	**Quantification on the First Visit** A 2-minute arc scan gives a g/hr rate on the device (0.04 g/hr detection limit, 1.45× factor uncertainty per GTI Energy).
Paperwork After Every Pad Survey notes, DOR tracking and repair records are typically rebuilt after the fact for audits.	**Automatically Generated Records** Digital Emission Tags, zero-emission tags and work orders are uploaded automatically to one compliance database.
More Sites, Same Crews OOOOb/c and state plans bring thousands of existing sites into periodic monitoring, and orphan well programs require screening at scale.	**Screening at Scale** Drone flights screen dozens of wells per day (0.16 kg/hr DL90 at METEC), and the same device is used for ground follow-up.

© 2026 by Exploration Robotics Technologies Inc.

The Four-Step, EPA-Approved LDAR Workflow

Tagging, upload, work orders and repair verification are built into the app.

1 Detect

The leak is visualized on the live image and quantified in g/hr.

2 Tag & Work Order

One trigger pull creates a Digital Emission Tag and a work order.

3 Verify Repair

The repair is confirmed with the same device on site (ALT-158).

4 Report & Reinspect

Records are automatic; tagged components are reinspected.

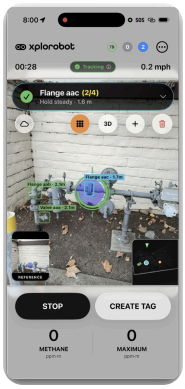
PROVEN PERFORMANCE

100%
OGI camera replacement under MATM-003 and ALT-158

50%
more emissions found than OGI cameras (8-site field test)

91.4%
true positive rate in METEC handheld blind testing

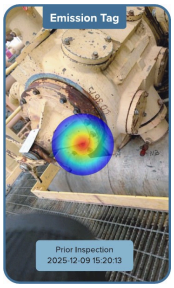
0.16 kg/hr
drone DL90 in METEC blind testing



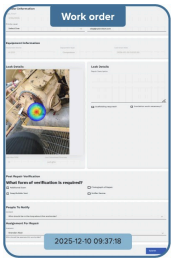
Automated Re-Inspection Workflow

At wellpads and compressor, M&R and storage stations, the app guides the technician back to every tagged component, with AR labels, a reference photo from the last visit and a live 3D map of the next component.

- ✓ Progress counter, so no component is skipped
- ✓ Each check logged automatically, with no re-keying



Leak tag

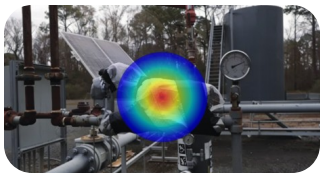


Work order



Repair verified

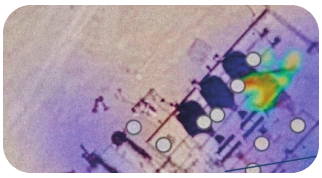
Applications



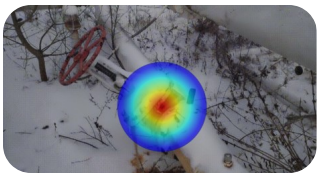
Onshore
Multi-well pads, tank batteries and compressors.



Orphan Wells
Low-cost screening of legacy wells.



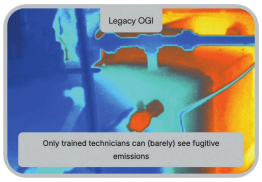
Aerial
Drone flights can screen dozens of wells per day.

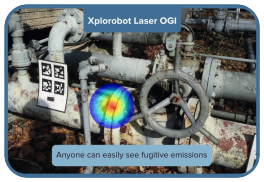


Pipelines
Long stretches and valve sites, GPS-tagged.

Why Not a Legacy OGI Camera?

Legacy OGI cameras are designed for specialists, are expensive and difficult to operate, and often miss small leaks. Laser OGI provides a clear, color image of the leak to any operator.





> This technology has the ability to leapfrog camera-based OGI at about half the cost … it shows if you have a leak exactly where it is, how much it is, and then shows you where you didn't have a leak, and it has a digital record. — **Paul Espenan** · Senior Vice President EHS&R, Diversified Energy

© 2026 by Exploration Robotics Technologies Inc.