CleanConnect.ai AI Solutions For Energy

Upstream · Field Operations Optimization

Operate by Exception — Smarter Field Crews Through AI-Driven Site Intelligence

How upstream operators are using CleanConnect.ai's smart cameras to monitor remote, marginal-rate sites autonomously — sending field crews only when the data says they're needed.

SECTOR	SITE TYPE	PRODUCTS USED	OUTCOME
Upstream · E&P	Remote / Marginal Wells	Minerva · Symmetry · A365	Reduced Truck Rolls

THE CHALLENGE

For upstream operators managing large portfolios of remote wellsites — particularly marginal-rate or low-production assets — the economics of traditional field supervision are broken. Sending crews on a fixed schedule burns cost, time, and introduces unnecessary safety risk.

> The math is difficult to ignore: A field technician spending 4+ hours round-trip to inspect a low-rate well with no issues is pure cost with zero return. Multiply that across dozens of remote locations and the inefficiency erodes margins on assets that are already thin.

■ SCHEDULE-BASED FIELD OPERATIONS

- Fixed-schedule visits regardless of actual site conditions
- High cost per visit on remote, low-production assets
- Hours-long response delays when real incidents occur
- Crews spending majority of time driving, not producing value
- Safety risk from frequent travel to isolated locations

✓ EXCEPTION-BASED WITH CLEANCONNECT.AI

- Sites monitored 24/7 — crews dispatched only on confirmed alerts
- Marginal assets stay viable because oversight is affordable
- Incidents detected in minutes, not days
- Field personnel focused on high-priority, revenue-impacting work
- Reduced travel means reduced vehicle incidents and fatigue risk

THE SOLUTION

CleanConnect.ai's Minerva smart camera system and Autonomous365 software suite transform remote wellsites into self-monitoring assets. The platform detects, classifies, and prioritizes issues automatically — notifying the right personnel so every trip is productive.

1. **Flexible Deployment**
   Minerva units can deploy on a fixed tower or mobile trailer using line power, solar, or a generator — with rapid mobilization at even the most remote locations.
2. **Secure Connectivity**
   Sites connect via cellular, Starlink, or existing network infrastructure — all with full data security.
3. **Continuous AI Monitoring**
   Visual AI monitors for gas leaks, liquid spills, fire/smoke, equipment anomalies, tank levels, and unauthorized access 24/7/365.
4. **Intelligent Alert Triage**
   Symmetry classifies and prioritizes incidents by severity, generating actionable work tickets and routing alerts immediately.
5. **Informed Dispatch**
   Before any truck rolls, staff review real-time visual context via LiveView and Autonomous365 — confirming the issue before departure.

RETURN ON INVESTMENT

10×	↓ 70%	<5 min
Improvement in operational efficiency vs. traditional monitoring	Reduction in non-productive field visits on monitored sites	Average time from incident detection to operations alert

Unlock Marginal Asset Economics

Low-rate wells become viable when supervision costs drop to a fraction of the traditional model.

Measurable Safety Improvement

Every avoided trip reduces vehicle miles — directly reducing the largest source of industry fatalities.

Reduce Fleet & Travel Costs

Fewer truck rolls means lower fuel costs, less vehicle wear, and a larger footprint without fleet growth.

Faster Incident Resolution

Crews arrive with full situational awareness — pre-diagnosed issue and visual confirmation in hand.

Gas Leak Detection · Liquid Spill Detection · Tank Level Monitoring · Fire & Smoke Detection · Unauthorized Access Alerts · Automated Work Tickets · Starlink / Cellular Ready

Stop paying for trips that don't need to happen.

CleanConnect.ai's exception-based monitoring can be operational at your remote sites in days.

Book a Demo → cleanconnect.ai

CleanConnect.ai · sales@cleanconnect.ai · cleanconnect.ai

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