

How Hydraulic Fracturing Teams Stay Connected and Protected with Sensear

Client: U.S. Hydraulic Fracturing Operations

Industry: Oil and Gas

Overview

Hydraulic fracturing is fast-paced, complex, and noisy—requiring flawless communication between dozens of workers surrounded by heavy equipment and moving vehicles. Traditional headsets and two-way radios weren't just unreliable—they were unsafe.



That all changed when fracking crews began using **Sensear's SENS[®] powered headsets**—enabling real-time communication, environmental awareness, and reliable hearing protection in the harshest conditions.

The Challenge

Fracking teams are under pressure to operate safely and efficiently at sites that span up to half a mile. Each crew includes up to 20 workers handling tasks like ignition control, troubleshooting, vehicle operation, and maintenance—often in high-noise zones.

- **Blocked Awareness:** Standard noise-cancelling headsets cut off all sound—making face-to-face communication impossible without removing them.
- **Dangerous Volumes:** Workers turned up radios beyond 110 dB(A) just to hear each other, unknowingly risking long-term hearing damage.
- **Poor Integration:** Conventional radio-connected headsets lacked speech enhancement or environmental awareness.
- **Missed Cues:** Operators couldn't hear machinery, vehicles, or voices nearby—leading to safety and operational hazards.

As fracking operations became louder and more complex, the demand for Intrinsically Safe (IS) communication technology grew—ensuring crews could stay safe, connected, and compliant in explosive-prone environments.



The Solution

Fracking teams upgraded to Sensear headsets equipped with patented SENS® Technology, which filters background noise, enhances speech, and allows workers to stay situationally aware. Crews could finally talk face-to-face, use two-way radios, and hear what's happening around them—all while being protected.

What Made the Difference:

- **Full Situational Awareness** while using Two-way radios or Bluetooth® devices
- **Clear Face-To-Face Conversation** without removing PPE
- **FM Short-Range Communication**—ideal for 1:1 comms within 50 meters
- **Rugged, Over-Ear Design** built for harsh field conditions
- **Future-Ready** planning for IS headset deployment in hazardous zones

The Results

The impact of switching to Sensear was immediate:

- **Safety Boosted:** Workers could finally align hearing protection with communication—no more compromising one for the other.
- **Improved Workflow:** Ignition, shutdowns, and troubleshooting became smoother with real-time communication.
- **Reduced Fatigue and Risk:** Operators no longer needed to strain to hear or shout over noise.
- **Universal Fit:** Compatible with a wide range of radios and PPE setups across the site.

Looking Ahead

As fracking sites grow in scale and complexity, the need for hearing protection that enhances—not blocks—communication will only increase. Sensear's headsets are now seen as essential gear in fracking operations, protecting workers while improving team performance.

Conclusion

Whether it's a truck operator on the edge of a half-mile-wide site or an engineer maintaining a high-pressure pump—

Sensear makes it possible.

Sensear connects them all—safely, clearly, and efficiently.

“From a safety perspective, we’re just happy to be able to align hearing protection with communication—and have them work effectively.”

— *Hydraulic Fracturing Professional*

Global Sales Headquarters

Sensear Inc.
1141 East Main Street, Suite 201
East Dundee, IL 60118
United States of America
Toll-Free: 1-888-973-6732

Corporate Headquarters

Sensear Pty Ltd
4 Hehir Street
Belmont, Western Australia 6104
Australia
Toll-Free: +61 8 9277 7332

www.sensear.com