

# Hydraulic Fracturing Industry

## Case Study



Sensear



AWARENESS • COMMUNICATION • PROTECTION

[www.sensear.com](http://www.sensear.com)



### Background

Hydraulic fracturing is a technique used to release petroleum or gas in order for it to be extracted from the ground. Hydraulic fracturing or 'fracking' sites range in size from as small as just 150 feet up to half a mile wide. Anywhere from 10-20 workers work on-site around heavy machinery and vehicles at one time. The different types of job functions performed on-site include truck operation, maintenance and repair, engineering and manual labor.

### Problem

During a hydraulic fracturing operation communication needs to take place constantly between workers in order for critical functions to run safely and efficiently. Functions include but are not limited to:

- Ignition or emergency shut down,
- Location assistance of ground or machinery operators
- Troubleshooting and maintaining sensitive electronic equipment

Workers currently use noise cancelling headsets connected to two way radios in order to communicate with one another. The noise cancelling headset is currently the solution of choice for many workers although it is often ineffective and dangerous for the following reasons:

- The headsets block out all the outside noise so workers can no longer talk face to face and as a result they will often remove the headset in order to hear, risking serious damage to their hearing.
- Workers are unable to hear the noise and/or voices of the surrounding equipment, vehicles and fellow employees, all of which are important from a safety and troubleshooting perspective.
- There is no limiter on the volume inside the headset so workers are still exposed to volumes in excess of 110dB just from turning the radio up too loud.

### Sensear's Solution

Sensear's headsets all solve the problem of complete noise cancellation. Each product includes **SENS™** technology which suppresses the background noise to a safe level and enhances speech so workers can still talk to one another face to face or via the two way radio while remaining aware of surrounding noises.

Part of the **SENS™** technology also ensures that volumes inside the headset are limited to 82dB so even with an increase in the volume of the radio or surrounding noise the worker is still protected.

### Result

For the hydraulic fracturing industry the results of implementing Sensear have been very positive as all of the fundamental functions and benefits of the Sensear headsets are required within this work environment.

In the words of a hydraulic fracturing professional, 'From a safety perspective we're just happy to be able to align hearing protection with communication, and have them work effectively.'



Sensear

AWARENESS • COMMUNICATION • PROTECTION