



## CUSTOMER SUCCESS STORY

# VIRTUAL FIBER™ ANSWERS THE CALL FOR MULTI-SERVICE LOCATION CONNECTIVITY TO IMPROVE PRODUCTION AND SAFETY

### SITUATION

A leading Oil & Gas producer needed high-speed communication coverage over a wide area to improve team collaboration and productivity, reduce operational costs and enhance Safety & Security.

### TASK

Develop, build and deliver a single wireless network solution that could:

- Enable fast and continuous connectivity
- Provide capacity that enables use of new drilling and production applications
- Function reliably in highly fluctuating weather
- Operate with minimal support

### ACTION

Redline designed and delivered a solution with the required range and capacity and nomadic capability to enable connectivity throughout the oilfield.

### RESULTS

The customer realized:

- Uninterrupted operation, improving production efficiency
- Capacity for multiple applications for enhanced team collaboration
- A system that kept up to the climate challenges
- A reliable solution requiring no in-field telecom support

One of the greatest challenges Oil & Gas companies face is establishing communications in the most remote areas of the world, as reliable communication infrastructure is not readily available and building one can cost millions.

A leading global Oil & Gas producer faced this very challenge at their North Dakota and Texas oilfields. Combined, the fields cover an area of more than 600,000 net acres (2,400 sq km) and both regions are afflicted with temperature extremes and tornadoes. Needing to enhance collaboration among teams in the office and the field, as well as deploy new high performance real-time drilling and production applications, the customer needed a communication solution that could reliably transport a number of different applications across hundreds of miles, without fail, and one which would require minimal IT training and support.

### AN UPHILL CHALLENGE

With a large coverage area coupled with harsh climate and terrain challenges, the customer needed:

- Fast and continuous connectivity to roll-out new drilling and production applications to optimize drilling
- High capacity transmission to deliver large volumes of data to enable true real-time monitoring and team collaboration
- A way to reduce the need for in-field time and improve worker safety
- A low-maintenance solution requiring minimal in-field telecom engineer support
- A network that could reliably operate in varying climatic and geographic conditions
- A solution that could seamlessly integrate with their existing IT architecture and applications

For months, they unsuccessfully tested various networking options hoping to find the right mix of solutions to turn their oilfields into high performing and cost effective digital oilfields. Each network option failed to achieve some or all of their needs or was far too expensive.

## FINDING THE RIGHT PARTNER

Recognized for our ability to securely and reliably deliver simultaneous voice, data, M2M and video communications for the world's most mission-critical applications, Redline was tested and selected as the vendor of choice.

Redline Virtual Fiber™ wireless solution, designed specifically for the Oil & Gas market, is a network solution designed using rugged broadband wireless systems, including the RAS-Elite nomadic platform for rig connectivity. The system combines a high-speed wireless radio with a built-in, solid-state antenna system to allow instant wireless connectivity to nomadic assets anywhere within a coverage area.

The RAS-Elite contains no moving parts, and once installed is an auto-acquiring, self-provisioning antenna system, meaning that it is easy to install and maintain and requires no specialized telecom personnel on-site. It is also remotely reconfigurable and upgradable to suit the customer's changing needs, ensuring the system will be a long-term solution.



## THE RIGHT SOLUTION

With a thorough test process completed in record time, the Redline solution was selected to wirelessly connect the oilfields and office teams.

The Redline solution provided the required wide-area coverage and enabled auto-acquire touchless operation, even as drilling rigs moved from site to site. This eliminated the need for their field telecom engineers to travel to the site to move, align and reconfigure the communications gear each time it is moved, resulting in time and cost savings.

With so much more capacity, the customer had the data to support all the required drilling applications, like real-time drilling and seismic applications, video conference, voice, live drilling video feeds, contractor Wi-Fi and more. This significantly improved operational safety and efficiency, and team collaboration by allowing drilling experts to supervise and make real-time decisions remotely.

Built to last, the Redline solution has remained reliable and operational in the rain, sleet, snow and dramatic temperature swings.

Redline is credited as a key contributor to the customer's success in achieving real-time connectivity—access to corporate information is now available anytime and anywhere in the field.

## ABOUT REDLINE COMMUNICATIONS

Redline Communications is the creator of powerful wide-area wireless networks for the world's most challenging applications and locations. Used by Oil & Gas companies, militaries, municipalities and telecom service providers, Redline's powerful and versatile networks securely and reliably deliver voice, data, M2M and video communications for mission-critical applications.