

Case Study

Providing Dry, Emission-Free Air for the Oil & Gas Industry

The Challenge

Across North America, oilfield operators are under increasing pressure to eliminate natural-gas-powered instrumentation due to the environmental impact of vented gas emissions.

At the same time, the compressed-air systems replacing these natural-gas setups must deliver extremely dry air to prevent freezing of valves and controls during harsh winter conditions.



In multiple New Mexico oil fields, operators faced two critical problems:

- Emissions from natural gas instrument systems were no longer compliant with new environmental regulations.
- Moisture in air lines caused frozen instruments and downtime during cold weather.

They needed a reliable, low-maintenance air-drying solution that could withstand remote field conditions while ensuring consistent, frost-free operation.



The Super-Dry Solution

Our distributor Double M Energy, LLC in New Mexico worked closely with local oilfield operators to field-test the Super-Dry Model D-1 Desiccant Air Dryer.

- ✓ Drop-in replacement for gas-powered systems — supplies clean, dry, emission-free air to pneumatic valves and instrumentation.
- ✓ Point-of-use installation — ideal for decentralized oilfield layouts and skid-mounted compressor systems.
- ✓ No power required — simple design, easy to maintain, and rugged enough for outdoor operation.

Double M Energy deployed and tested the Super-Dry D-1 across multiple oil-field locations. The results were immediate — the D-1 eliminated freezing issues and provided consistent dew-point performance even in low-temperature environments.

Results



Zero Freezing Events

Valves and instruments operated smoothly through cold weather with no moisture-related shutdowns.



Emission-Free Operation

Operators transitioned from natural-gas actuation to clean, dry compressed air — eliminating vented methane emissions.



Simplified Maintenance

Rugged, cartridge-based design required minimal service, ideal for remote well sites.



Adopted as the Industry Standard

After extensive field testing, the Super-Dry D-1 became the preferred solution for dry compressed air in oil-field automation.

Outcome Summary

By adopting Super-Dry technology, oil-field operators can meet environmental standards, prevent winter freeze-ups, and ensure reliable pneumatic control — all without power, drains, or complex regeneration systems.

The Super-Dry D-1 delivers the performance and dependability the industry demands, with unmatched simplicity and field-proven results.

Product Highlight

Model Used: Super-Dry D-1 Desiccant Air Dryer

Application: Instrument-air drying for valve and control systems in oil & gas production

Environment: Outdoor field use with sub-zero winter conditions

Result: Reliable, emission-free operation with no freezing or downtime

Industry Description

Oil-field operations depend on precise pneumatic control systems for production, safety, and automation. Transitioning from natural-gas actuation to compressed-air systems requires clean, moisture-free air to protect sensitive instrumentation and comply with environmental emission standards.



Partner Description

Double M Energy, LLC, based in New Mexico, provides oil-field service and equipment solutions focused on reliability, efficiency, and environmental compliance.

Their technical expertise and close collaboration with end users have made them a trusted partner in helping operators adopt dry, emission-free air solutions powered by Super-Dry systems.