

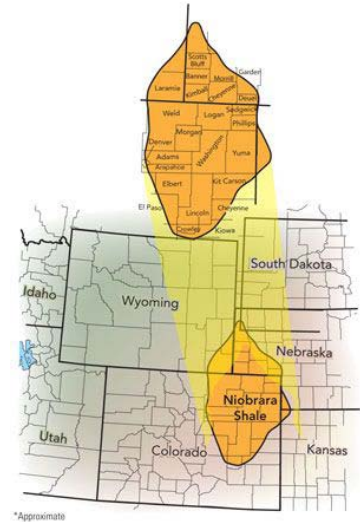


## Niobrara VRU

Can a VRU handle two gas streams at different pressures using one compressor? YES!

The Niobrara shale play has huge oil potential, characterized as the “most important Western unconventional resource play not named the Bakken” by the Oil & Gas Journal.

The Niobrara is situated in northeastern Colorado (Denver-Julesburg Basin) and parts of adjacent Wyoming, Nebraska, and Kansas. Environmental impact scrutiny is heightened in this area, particularly green house gases, and VOC’s including BTEX vapors.



This application requires capturing vapors from two sources at a single well site facility predicted to have a significant gas flow fluctuation. One of the vapor generators, four Crude Oil Storage Tanks, has a design pressure of 2 oz. The other, a Gas Treater, is 25 PSIG. The original request was for two separate units. Unimac LP proposed a single package designed to safely handle the two independent gas streams using one compressor.

This innovative approach and customized solution achieves the goal of reducing fugitive emissions while lowering overall project costs. Multiple package components, including pressure transmitters, process control valves and a variable frequency drive combine to handle variable flows and pressures smoothly at the well site.



Additional design features included weather protection enclosure, capability to operate with ambient temperatures ranging from -20°F to 105°F, Class 1 Div 1 electrical, environmental skid pan, remote PLC with color touch pad HMI, and lift off panels fastened with quarter turn latches for easy service access.