CASE STUDY

BLUE ST R Power Systems Inc.

Bakken Shale

Location: Williston, North Dakota, USA

Challenge: To provide power to remote well pumping applications

Solution: 36 Qty: JD250-02



With billions of dollars at stake, the Bakken oil shale boom is bigger than the gold rush. The extraction of black gold is a costly and arduous process that requires a dependable power source like Blue Star Power Systems.



Since 2008, North Dakota's Williston Basin has experienced an evergrowing oil rush. Situated in the Williston Basin, the Bakken oil shale is a deposit of oil-containing shale located deep below the earth's surface. With estimates of more than ten billion barrels of oil in the Bakken, top oil companies from around the world are placing a high priority on drilling in the area.

"The costs associated with operating and drilling in the Bakken are extraordinarily high," says Rory Anderson, partner at Industrial Equipment Sales and Service (IESS) and Blue Star Power Systems distributor for the Williston area. "We are fairly remote out here with little or no infrastructure to support all the wells. The demand for reliable power is essential to the success of the remote wells."

Formerly a Stewart & Steveson branch, IESS serves the local natural gas, oil field, and industrial business with a brand array of generator sets, power units, light towers, pumps, and various other machinery and supplies.

When IESS was contacted for a large order of 36 250 kWe diesel gensets, IESS went directly to Blue Star Power Systems to fulfill the request. "Extended run times and longer maintenance intervals where key to this order and we knew Blue Star Power Systems could accommodate our requirements," said Anderson. Each gen-set is driven by a John Deere 6090HF484 (TPEM) diesel engine rated 422 Hp. The engine drives a 432CS16210 alternator with a DVR2000E+ digital voltage regulator. Features that specifically target the serviceability requirement include a two-stage air filter, location of all points on the same side of the unit, and the addition of a tengallon Kenco oil leveling system. All units incorporate control panels that include switches for on/off/auto/run/idle and gauges for engine parameters including an amp meter, volt meter, and frequency meter. The units were built in a combination of open power units, enclosed units, and trailer mountable units.

"The demand for reliable power is essential"

Anderson added, "In the oil field, the simpler you keep the control panel the better. This, along with Blue Star Power Systems flexibility and the units' ability to stand up to the harshest of conditions, are what made this project so successful."