Reduce the running

R&D relies on reliable power to lessen the number of long-distance trips into Canada's bush country

A northern Alberta oil camp relies on an R&D support unit with twin 100-kW Frontier gen-sets, enclosed in a blue doghouse.

Servicing oilfield support equipment in the isolated drilling camps of northwestern Canada often requires driving painfully long distances. R&D Management, Ltd. near Edmonton, Alberta, rents light towers and electrical support units to these oil and gas companies with camps, and company owner Bob Andersen figures the fewer required trips to service them, the better.

"The camps are way back in the bush and not easy to drive to. So we need equipment built with longevity and dependability," says Bob. And that's the reason why the Edmonton, Alberta, company equips its oilfield support units with John Deere-powered gen-sets custom built by Frontier Power of Edmonton, Alberta.

"When you have guys staying in remote camps and a unit goes down, everything freezes up, and you have a lot of unhappy people in a big hurry. There are no airstrips or helicopter pads, so you often have to drive 20 hours. Fortunately for us, the Frontier gen-sets are very, very dependable and reliable, and the men are happy with them."

Because the units operate in remote locations, R&D purposefully designs its support units for long, reliable, uninterrupted use. A typical R&D support unit features a 100-kW gen-set, supported by a twin standby gen-set, both skid mounted with a 2,700-liter (700 gal.) fuel tank and two 3,784-liter (1,000 gal.) propane tanks. Frontier designs, builds, and supplies the gen-sets with a sound-attenuated enclosure, complete with cold-weather shutter stats, block heaters, and an oil sump with 120 liters (32 gal.) of oil.

"The extended oil sump allows the unit to run 2,400 hours between oil changes," explains Bob. "As a result, we only have to send a mechanic into the bush about every two months."

Until recently, Tier 1 PowerTech 6068T engines powered a lion's share of the support units. However, R&D Management will soon make the leap to Tier 3 engine models, and Bob expects the same long-lasting, reliable performance from the new generation of engines as those he's used up until now.

"We've been using John Deere for over 10 years now," says Bob. "We have some engines with 30,000 hours on them. To run that long is very, very good."

An R&D electrical support unit features a single 100-kW Frontier gen-set.

Emissions Cert.	Tier 3
Engine Model	PowerTech E 6068HF285
Displacement	6.8L
Rated Power	134 kW (180 hp) @ 1800 rpm (prime)
Cylinders	6
Aspiration	Air-to-air aftercooled
Distributor	Frontier Power Products Delta, British Columbia (604) 946-5531 www.frontierpower.com

The 100-kW support unit supplies electricity to a telescoping light tower and well-site housing at an oil-rig drilling site.