CORNELL PUMP COMPANY

APPLICATIONS

MINING

THE 16NHG22's EMPLOYED ON TWO BARGES.

HARSH CONDITIONS REQUIRE HEAVY DUTY EQUIPMENT. CORNELL WAS RIGHT AT HOME.

50M CARATS OF DIAMOND HAVE BEEN EXTRACTED SINCE 2003.

DIAMOND MINE IN NORTHERN TERRITORIES TESTS DEWATERING PUMPS

Cornell 16NHG22 Redi-Prime® Pumps Move 2.6 Billion Gallons of Water in Seven Weeks.

Diamonds are one of the most expensive items; extracting them can be difficult. In the far Canadian North, a diamond consortium investigated promising geological formations for diamond deposits. They were stunned when they discovered three columns of diamonds with an estimated yield of more than 130 million carats.

The diamond columns were located about 12 meters (36 feet) underneath Lac de Gras in the Northern Territories. To retrieve the diamonds, the consortium planned to build dike walls around the column of diamonds and pump out the water entrapped behind the dike. It would be a colossal task under any circumstance, but to keep to a mining schedule and remove the water during the short Arctic summer, the former makes the bed around the mine would have to be dewatered in seven weeks.

To move 2.6 billion gallons of water from the mine area and back into the lake, a fleet of eight Cornell 16NHG22 Redi-Prime® pumps was employed on two barges. Pumping more than 36,800 gallons per minute around the clock for 49 days, the pumps worked like champions in harsh conditions, operating 125 miles south of the Arctic Circle.

Without the ability to move that much water quickly and without breakdown, the mine might have been delayed more than six months in its opening, costing the consortium tens of millions of dollars. The mine is expected to operate in 2021, extracting high-quality diamonds.