



MUNICIPAL

CORNELL 8H-VC18 PUMPS FORM A 'GREEN DRAGON'

Muscle, Ingenuity, and Determination need to move Cornell Pumps 250 Miles into the Jungle to Supply Fresh Drinking Water

Two vertical mount 8H-VC18 units were installed in the Colombian jungle on the river Caucasia, about 400 kilometers (248 miles) South of coast. Because of some interesting features, the installation earned the nickname the *Green Dragon*.

The pumps were designed in the vertical position in order to elevate the motors to avoid damage from flooding – a regular occurrence during the rainy season. The pumps replaced a locally manufactured brand, IHM. The pumps were put in series, to overcome a relatively high pressure requirement due to a 1.5 kilometer (~1 mile) distance of piping to a local village. The pumped river water is being used to supply the village with fresh treated water for personal consumption. Due to the Rain-a-flo blue paint color (which actually looks green) and the exotic discharge and suction piping design, the locals named the pump installation the *Green Dragon*.

The logistics required to get the equipment to the job site was interesting in itself. The crew employed traditional banana boats to transport pumps, motors, pipes, etc., across the river to the pump house. Once the equipment arrived, a system of wooden rails and rollers were used to move the pumps and motors along the ground and in some cases, sloped gradients. Ropes and block and tackle apparatus were used to do a lot of the heavy lifting, as no powered cranes were available.

Pump house modification was also required, as the crew removed a large portion of the roof to accommodate the vertical installation and the discharge piping—the snout of the *Green Dragon*. It was an incredible feat of local ingenuity to make this a successful installation; relying solely on manual labor, determination, and brute strength.

The pumps have been successfully in operation since 2010, supplying clean drinking water to the village.



VERTICAL MOTORS TO AVOID
DAMAGE FROM FLOODING



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