

Background

Purifics' **Cuf** (Continuous Ultra Filtration) system has been installed (2019) to purify surface water to potable water in the Village of Granisle BC, a remote village located on the shores of Babine Lake in the Northern Interior of British Columbia. The year-round population is approximately 303 people, with fluctuations during tourists season. The **Cuf** system purifies lake water of pathogens, TOC, colour and metals. Weekly DIT is performed as per regulatory requirements using Purifics' particulate marker method.

Purifics' process has been designed for 25-year life with high durability, reliability and redundancy for continuous 24/7 duty. The purification train has fully automated 0 to 100% turndown capability and other unique features to minimize OPEX. There is no need for direct operator involvement; the process is audited by the operator locally or remotely. The service interval, outside of instrument calibration, is 20,000 hours.

Surface Water Purification Solution

Purifics' **Cuf** DM36 platform is shown on the next page. The capacity is 2 MLD (1 MGD) with 100% redundancy. NSF/ANSI 61 Compliant.

Performance

The **Cuf** system eliminates all pre-treatment requirements. It produces consistent, low NTU filtrate (0.025), independent of influent turbidity, weather events or water temperature. eliminates permanganate, polymer & ammonia for chloramination. Enhanced TOC/DOC removal allows the use of Free Chlorine for secondary disinfection.

Influent water temperature reaches as low as 1.4°C in the winter months, without affecting flux or performance. Extreme low water temperatures shrink the pores of polymeric membrane drastically reducing flux

Installed Solution





Surface Water 1.5'C/35'F



Surface Water - May





Location

