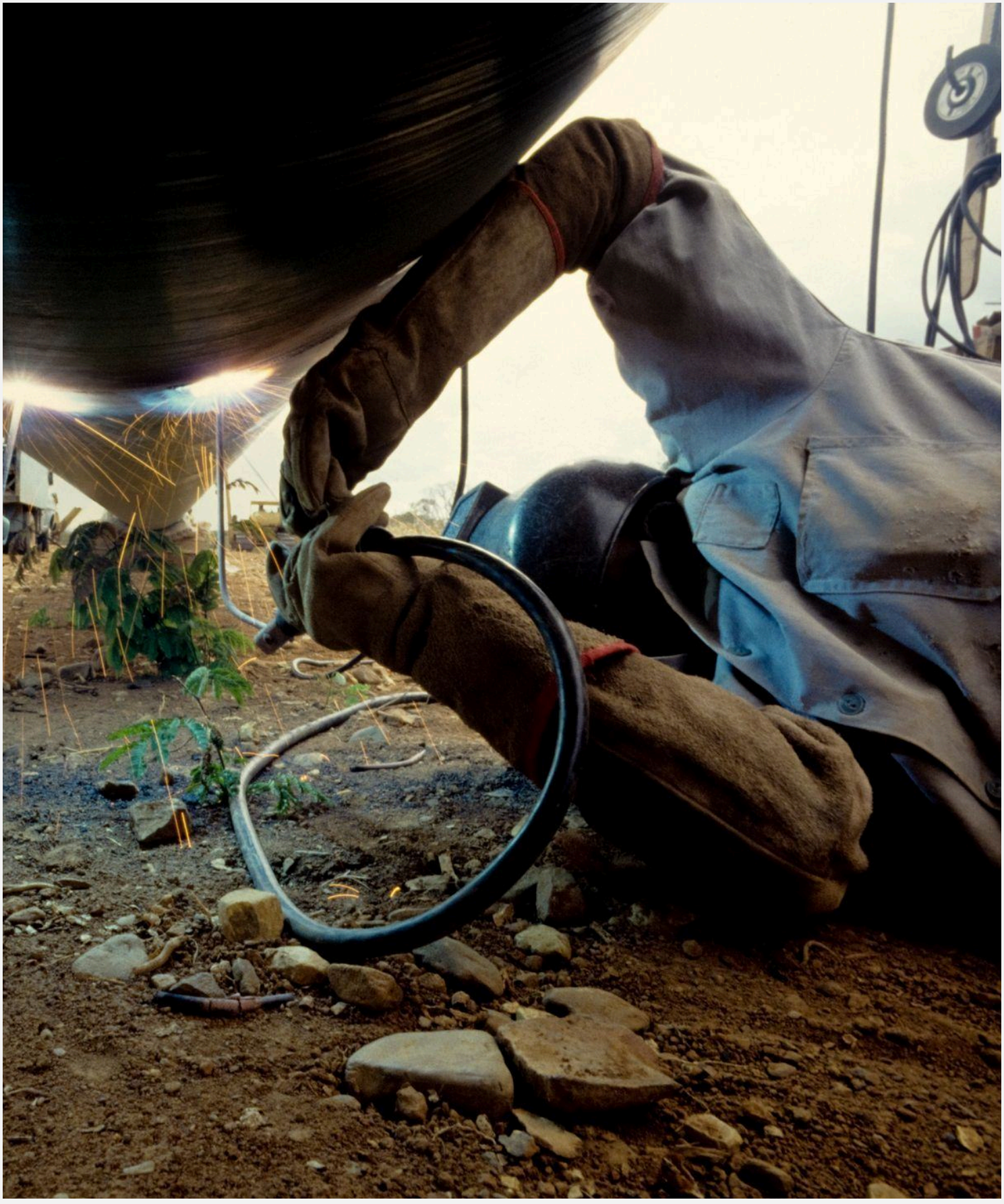

Reference Project

Groundwater Treatment for
Trans Mountain Pipeline

CarboNet

Trans Mountain Corp. delivers some 300,000 barrels of petroleum daily to the West Coast. The Trans Mountain Expansion aims to increase capacity and expand access to global markets.

An ambitious expansion:

The installation of 900 km of new pipeline will greatly expand the existing pipeline that measures 1,261 km across Alberta and British Columbia.

Increased scrutiny and regulations:

As the largest project in TMP's history, the expansion requires dredging, dewatering, and discharge to waterways and irrigation channels. Groundwater treatment is crucial to ensure released water is within regulatory specifications.

The chosen chemistry:

SimpleFloc, an anionic flocculant backed by the NanoNet platform, emerged as the solution for clarification, demonstrating enhanced flocculation, reduced active chemistry, and much lower toxicity.

A simpler solution for complex operations:

SimpleFloc is delivered ready to use, eliminating make-down, cutting chemical consumption, and reducing polymer by 80%.

Benefits beyond cost:

Not just cost-effective, SimpleFloc tackled DAF carry-over issues, reducing stress on the system and improved operator conditions, particularly in cold weather.

> "**It's the most technologically innovative water treatment application I have laid eyes on this decade.** It has been excellent in helping our project operate within spec, and in simplifying our overall process. It's the difference between a system that just meets regulations and one that's set up to accelerate and scale."

Randy Khalil
Dewatering & Water Treatment SME

RESULTS

KPI	TARGET	RESULT
Turbidity	<10 NTU	0.05 - 1.0 NTU
Iron	<1 ppm from DAF	0.01 - 0.2 ppm

IMPACT

- 80% reduction in Polyacrylamide
- 77% reduction in Scope 3 CO2 emissions
- 8.4 million litres of water conserved

CarboNet: As freshwater becomes increasingly scarce and regulated, companies from energy and mining to food and beauty turn to CarboNet to reduce, recycle, and renew the water they need to compete.