

Oil Recovery and Water Treatment from Shipwreck

Darryl Lasenby, Trevor Thera, Claytek Inc
Shawn Brennan, Silverback Rentals

The MV Schiedyk, a 147-metre cargo ship, sank in 1968 after striking a submerged ledge on the west coast of Vancouver Island (Nootka Sound). The importance to effectively remediate this area was heightened to protect Nootka Sound, an area rich in natural beauty, history, culture, wildlife, and in the traditional territory of the Mowachaht/Muchalaht First Nation. The wreck sits in 120 metres of water. An oily sheen was reported on the water in December 2020, and the Canadian Coast Guard launched a cleanup operation. An international marine salvage company (Resolve Marine) was awarded the contract and executed the operation from the Canadian Registered platform supply vessel (Atlantic Condor) from which remotely operated vehicles were used to drill holes into the sunken vessel's four fuel tanks and secure a drainage valve with a hose attached for pumping operations. Claytek was asked to lead the water treatment (and oil water separation) component associated with the removal of the heavy fuel oil, which also required hot water to be injected into the tanks to liquefy the oil within. The oil and water mixture was pumped to the surface through the hoses and onboard the Atlantic Condor, where the oil and water were separated by our team. The tanks were flushed until fuel was no longer detected. Claytek designed and operated a system to treat 30-90 gpm of heated seawater comingled with fuel oil that will be circulated through the tanks of the Schiedyk using an umbilical hose assembly. This heated water and fuel oil mixture was treated (fuel oil removed) and the seawater heated re-used in the system on a continuous loop, while the extracted fuel oil was stored on board the Atlantic Condor throughout the duration of the project until it was disposed of at a facility.

Trevor Thera

Trevor Thera is a co-founder and Director of Business Development for Claytek. Trevor is an expert in enhancing value propositions, developing strategic alliances and leading teams. He has a proven track record of building relationships across a wide variety of sectors and disciplines and is dedicated to maintaining a reputation built on quality, service, and results.

He prides himself on the knowledge he's acquired over the years while working to improve Alberta's innovation system. He has worked between the academic, venture capital and

industrial communities to bring new technologies to market and championing applied research aimed at developing solutions for industrial and environmental challenges locally and globally. Trevor has worked collaboratively with some of the world's most innovative companies to bring new technologies to market.

Trevor helped launch Claytek in 2020. Prior to Claytek Trevor assisted the successful launch three other startup companies in the environmental sector. Previous to this Trevor held senior leadership positions in both the public and not for profit sector and maintains his relationships built over that time. He has a bachelor of science in ecology, a masters degree in population modelling and management and has studied business and leadership at the University of Alberta, the Banff Centre for Leadership and Harvard Business School.

Darryl Lasenby

Darryl Lasenby is the founder and President for Claytek and is based in Edmonton, Alberta, Canada. He prides himself on the knowledge he's acquired over the years initially as a heavy-duty diesel mechanic and later in the environmental services industry. He is a strong believer in providing effective, innovative solutions for clients. His strong technical, logistical and mechanical knowledge is appreciated by his customer base. Having worked in the environmental services industry over 20 years he has a strong track record in providing reliable service and instilling confidence in effective project execution on even the most challenging projects. Darryl has been an entrepreneur for over 30 years and has worked alongside and provided solutions for some of the largest companies in the energy, construction and environmental services sectors.

Claytek partnered with KETEK Group Inc. in 2020 which has provided Darryl with further capacity to provide an even wider range of solutions to his existing customers as well as new customers. He works with engineers, drillers, construction managers and environmental scientists and governments across the country to solve some of the industry's toughest remediation challenges.