

CLEAN RESOURCES

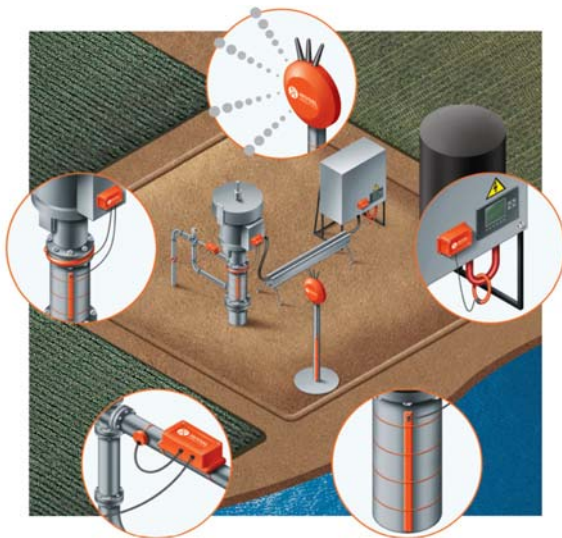
ADVANCED HYDROCARBONS

CLEANER HYDROCARBON PRODUCTION - DIGITAL OILFIELD

FUNDING DETAILS

Digital Remote Oil and Gas Leak Detection and Well Monitoring

REVIVAL has developed a unique wireless and battery-operated technology which solves some of the major pinch points affecting the operators of legacy wells. This involved the development of proprietary sensors and algorithms, that monitor produced water leaks and measure vibration, temperature, and electrical current draw. REVIVAL's mobile app provides operators with the status of equipment, immediate alerts in the event of a failure and ultimately uses data-based pattern recognition for predictive maintenance. The benefit to Alberta and Legacy Oil producers is significantly reduced environmental impact of conventional oil and gas operations, improved technical information and reduced costs. This will allow companies to extend the life of existing wells and more efficiently exploit known reserves.



RECIPIENT:

Revival
Analytics Ltd.



PARTNERS:

ACAMP
DevFacto
IRAP
Motsai Research
3 Oil Producers



TOTAL BUDGET:

\$989,532



AI FUNDING:

\$200,000



PROJECT DATES:

MAR 2020 –
AUG 2021



PROJECT TRL:

Start: 4-6
End: 8-9

APPLICATION

There are 70,000 oil and gas wells in western Canada producing less than 25 boe per day. Most of these wells have no monitoring technology. Currently available systems are uneconomic for use for mature wells and leak detection is unreliable. For operators of mature oil assets, balancing returns with environmental risk has been a challenge. By incorporating passive leak detection with well function monitoring, the use of REVIVAL's service results in fewer daily visits, lower operating costs and reduced environmental risk and impact.

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PROJECT GOALS

- REVIVAL's main project goal was to develop technology that will result in the reduction of the environmental impact of Legacy Oil and Gas operations, while improving global competitiveness.
- The target was to 1) develop a remote monitoring solution which could passively detect leaks anywhere on a site 2) monitor wellhead functionality and 3) send push notifications to alert the operators to any anomaly.
- Only by achieving these Targets at affordable terms could an oil company feel confident to reduce site visits. The technology is offered as a monthly subscription, at a low enough cost that the customer will have an immediate positive cash flow effect.
- Data will be compiled and analyzed for pattern recognition and preventative maintenance.

BENEFITS TO ALBERTA

- By incorporating low-cost digital monitoring and communications on legacy oil and gas producing and treatment sites, REVIVAL is addressing an underserved segment of the industry for inclusion in the Digital Oilfield, allowing operators to minimize environmental impact, reduce costs and optimize production.
- With only a 30% reduction in site visits (though over time, as the system is more trusted by customers, visits can be reduced by more than 90%), the reduction in driving alone would reduce GHG emissions by 20 ktCO₂e/yr, or the equivalent of removing 4,000 cars from the road.
- Leak monitoring minimizes the impact of fluid releases on water bodies and agricultural lands. There have been more than 2,000 reported spills in Alberta over the last five years.



**3 New
Products/Services**



**20 kt/yr Future
GHGs Reduced**



1 Student Trained



9 Project Jobs



25 Future Jobs

CURRENT STATUS

AUG 2021

Technology has been successfully field tested. Software is at Proof-of-Concept stage and is functioning on customers' sites. Commercial launch scheduled for late Q4 2021.