



# PTAC Webinar Sprint Reducing Methane Emissions from Tanks

March 30<sup>th</sup> to April 1<sup>st</sup>, 2020

# Reducing Methane Emissions From Tanks Seminar

## About NAL Resources Ltd

- Private oil and gas company owned by Manulife Financial, operating in the Western Canadian Sedimentary Basin for 29 years.
- In 2019, NAL produced approximately 39,100 boe per day of conventional oil and natural gas in core areas of central and northwestern Alberta and southeastern and southwestern Saskatchewan.
- As an innovator and industry leader, NAL is focused on growth, efficiency, operational and environmental excellence.
- NAL's culture of smart risk taking and collaboration encourages investment in innovative technologies.
- NAL is currently investing in a broad range of methane-reduction solutions which support long-term, sustainable energy development that have the potential to benefit the entire industry.
- NAL is heavily involved in PTAC, CAPP and CRIN and has greatly benefitted from a variety of collaborations with industry peers, vendors, academics and other industry associations.

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## Qualitative Observations\*

- Tanks and pneumatics are the largest sources of emissions. Alberta and BC field studies have observed these sources to emit >60% of total methane emissions
  - Pneumatics - solutions for controllers, chem pumps are pervasive and can be supported by carbon offsets where applicable,
  - Tanks - novel and economic solutions are not as pervasive

## **WHAT CAN TARGETED, EFFECTIVE COLLABORATION ACHIEVE?**

\*Clearstone Alberta Update of Equipment, Component and Fugitive Emission Factors for Alberta Upstream Oil and Gas.

\*Cap-Op Energy British Columbia Oil & Gas Methane Emissions Field Study

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## Challenges

### Measurement:

- Access, Ambient conditions, Operating conditions/maintenance, Safety, Cost, Accuracy & Reproducibility, Methodology, Variability, Tank design

### Analytics:

- Software, Interpretation, Integration, Quality (of data), Shelf life, Alt-FEMP, Value proposition, Data (storage)

### Mitigation:

- Variability in operating conditions, Max and Min allowable working pressure, Scalability, Variability in measurement, Controlled vs uncontrolled tanks, Wellsite attributes; Pipeline connected?, Grid-connected?, Funding, Cost, Root Cause, Economics

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## NAL Collaborations:

Vendors  
E&P's  
AER  
MER  
SRC  
PTAC  
CAPP  
FEMP EA  
Alt-FEMP  
AMFC 1.0, 2.0  
CanERIC  
STV  
MCP  
ERA  
AI  
EEA  
UofC  
Harrisburgh U

