



## **enhanced oil recovery:**

Innovating Heavy Oil and Bitumen Extraction  
with Radio Frequency Heating

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February 7, 2019

# FORWARD LOOKING STATEMENTS & ADVISORY

Certain statements in this presentation include forward-looking information (as defined in Canadian securities legislation). Such statements appear in Slide 4 [Benefits of the RF Solution], Slide 6 [Investing in AXE: Value Proposition], Slide 12 [RF Economics for E&P Companies], Slide 13 [Magnitude of RF Application], Slide 14 [Environmental Benefits of RF], and Slides 16 to Slide 17 [RF Path to Commercialization].

These statements involve numerous assumptions about future economic conditions and courses of action, and are therefore subject to various risks and uncertainties. These risks and uncertainties include, but are not restricted to, the ability of Acceleware Ltd. (“Acceleware”, “AXE” or the “Corporation”) to fund its research and development (“R&D”) activities, the timing of such R&D, the likelihood that the patent applications filed by the Corporation will be granted, continued increased demand for the Corporation's products, the Corporation's ability to maintain its technological leadership in various fields, the future price and cost of producing heavy oil and bitumen, the availability of key components and the Corporation's ability to attract and retain key employees and defend itself against any future patent infringement claims.

There can be no assurance that such statements will prove to be accurate. Actual results could differ materially from those anticipated in such statements. These and all subsequent written and oral forward-looking statements are based on the estimates and opinions of management on the dates they are made and expressly qualified in their entirety by this notice. The Corporation assumes no obligation to update forward-looking statements should circumstances, or management's estimates or opinions, change except as required by law.

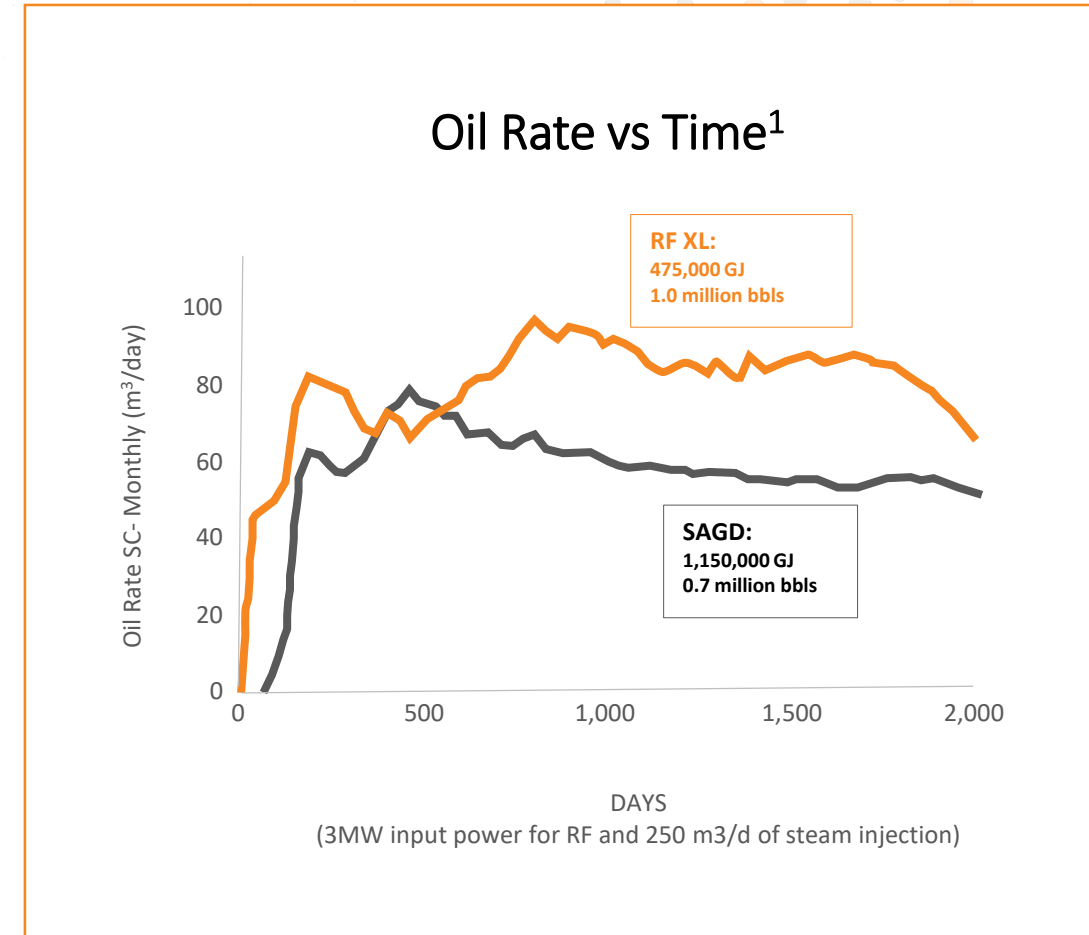
# ACCELEWARE RF HEATING TECHNOLOGY

Driving a More Energy Efficient, Accessible and Environmentally-Friendly Solution

We are a clean-tech energy innovator developing low-cost, low-carbon extraction solutions for the oil industry.

## Technology Benefits

- Lower capex - \$26,000/flowing bbl
- Lower opex - \$7.10/bbl
- Lower GHG's (25% - 100%)
- No water or solvent.
- Commercial scale pilot in 2019.



1. Internal AXE estimate

# FINANCING SINCE PROPEL 2017

Acceleware has succeeded in raising the funds and support required to complete a commercial pilot test

- PROPEL 2017 GOAL: RAISE \$5-10 M
- Raised \$1.8 Million in equity financing
- Secured \$5 million in non-repayable grants from SDTC
- Secured \$5 million in non-repayable grants from ERA
- Generated \$3.3 million in revenue from AMD
- Secured \$2 million in project funding from major oil sands partner

**TOTAL of \$17.1 in financing and funding**

# COMMERCIALIZATION SINCE PROPEL 2017

Acceleware is ready to move into final design and construction to test RF XL at commercial scale in 2019

## PROPEL 2017 GOAL: LAUNCH COMMERCIAL RF XL PILOT

- March 2017: Successful 1/20th scale field test.
- June 2017: Best Emerging Clean Tech company at GPS.
- Jan 2018: Launched RF XL pilot project.
- June 2018: Launched six-member advisory board.
- July 2018: Signed Prosper as test site partner.
- Nov 2018: Funding & tech deal with major oil sands operator.

## RF XL Pilot Project launched and well underway

# IP DEVELOPED SINCE PROPEL 2017

Acceleware continues to build on its' portfolio of intellectual property

## PROPEL 2017 GOAL: DEVELOP IP AND FILE NEW PATENTS

- Two patents granted
- Twelve patents pending
- Ten patents underway

**Continued growth of the AXE IP portfolio**

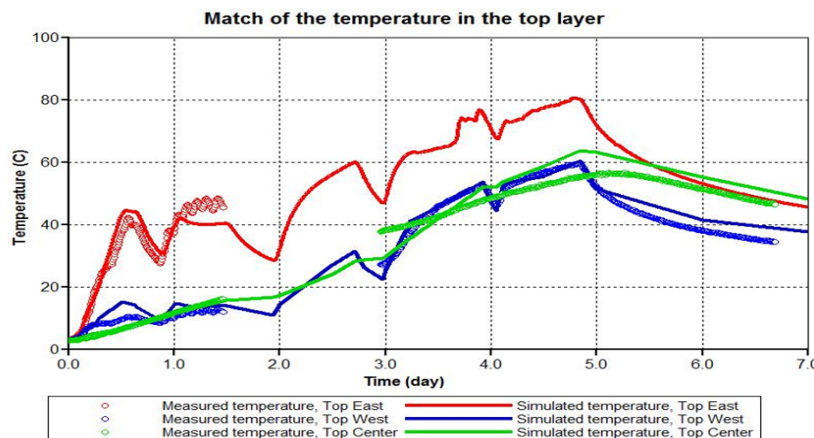


# RF PATH TO COMMERCIALIZATION

## Setting The Table For Success

### 1/20 Scale Test Success

- Delivered high power to the formation with scaled components
- Heated the formation as predicted by simulation
- Tested and confirmed proprietary system design



2020

Complete commercial-scale test, begin selling RF XL system

2019

Begin commercial-scale test

2018

Signed commercial-scale test agreement with Prosper Petroleum Ltd.

2017

RF XL 1:20 scale field demo

2016

GE partnership announced & additional RF XL Patents filed

2015

AXE modular RF tank tests & patent filing

2011

Design, simulation & field tests begin

2010

AXE RF Heating studies for super-major oil company

2005

AXE EM Solver SW was released

# PROPEL 2019 GOALS

Acceleware is ready to move into final design and construction to test RF XL at commercial scale in 2019

## Commercialization of RF XL and Financing Objectives

GMP First Energy is now engaged as advisor for AXE

- Secure two more 'Active Observer' partners (\$2M each)
  - Partners benefit from discounts and first-mover advantage
  - Full benefits of hosting an RF XL Pilot at minimal cost
- Additional financing to support commercialization path.



# RF ECONOMICS FOR E&P COMPANIES

Deploying Capital More Efficiently than SAGD

1,000 Meter Horizontals <sup>1</sup>		AXE RF XL <sup>2</sup> Greenfield	SAGD <sup>3</sup> Greenfield
WTI (constant pricing)	US/bbl	\$65.00	\$65.00
Steam Oil Ratio	bbl/bbl	N/A	3.0
Energy/Oil Ratio	GJ/m3	3.25	7.65
Initial Capital - Facilities	000	\$591,000	\$1,512,000
Initial Capital - Wells	000	\$282,000	\$440,000
Subsequent Capital	000	\$2,236,000	\$3,308,000
Total Capital	000	\$3,109,000	\$5,260,000
Estimated Ultimate Recovery	000 bbls	403,000	403,000
Average Production Rate	bbls/d	36,800	36,800
Time to First Oil	Years	<2	3
After Tax NPV 10%	000	\$1,211,485	(\$78,840)
F&D	\$/bbl	\$7.72	\$13.05
Capital Intensity	/bbl/d	\$21,830	\$48,800
Opex	/bbl	\$7.00	\$10.41
Payback	Years	4.8	10.5
IRR after tax		28%	9%

**Economics reflect a 40,000 bbl/d operation, a standard measure for SAGD projects**

- RF generates a significantly higher return
- RF economics relative to SAGD improve further with smaller project sizes

**RF opens the door to smaller heavy oil and bitumen projects**

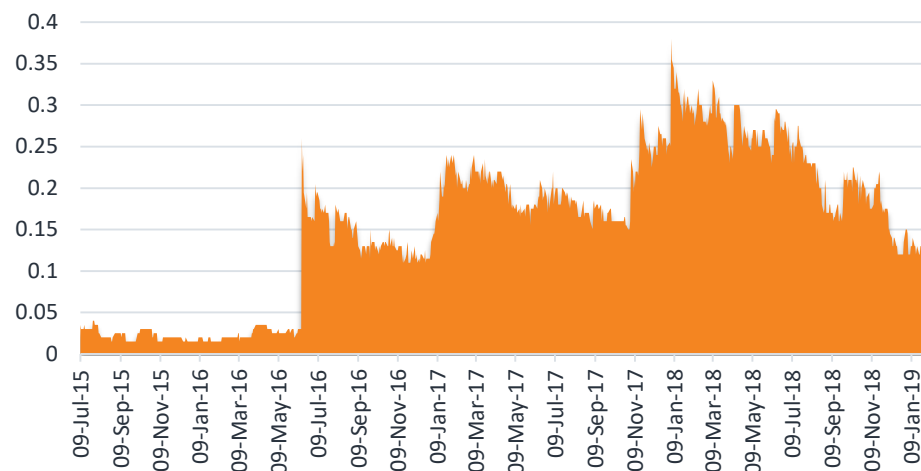
1. 40 well pairs: 1 producing well paired with 1 RF/steam injector
2. Source – Internal Estimate
3. Source – GMP First Energy

# AXE TRADING & CAPITAL STRUCTURE

## Trading Information

Symbol	TSXV: AXE
Shares outstanding (basic)	103 million
Shares outstanding (diluted)	114 million
Recent price	\$0.14

Four Year Share Price



## Capital Structure

Market capitalization	\$14.4 million
Net debt (Jan 18/19)	\$0.17 million
Enterprise value	\$14.2 million
Management ownership	18%
Key institutional shareholders	
NVIDIA	4%
Resource Merchant Capital	9%

Significant management ownership strongly aligns with interests of shareholders

# AXE SUMMARY

An Established Technology Company With a New Solution that Will Transform EOR

- Transformational Technology
- Lower capital and operating costs
- Zero GHG production is our 2020 objective
- Scalable capital structure opens the door for investment and growth - **one well or pad at a time**

# CORPORATE CONTACT & ADVISORS

Setting Up RF as a Better, Cleaner Alternative for Enhanced Recovery

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