A high-grade, low-cost primary producer of **vanadium**

Corporate Presentation | **January 2020**
Forward Looking Information

Market and Industry Data
This corporate presentation of Largo Resources Ltd. ("Largo", or the "Company") includes market and industry data and forecasts that were obtained from third-party sources, industry publications and publicly available information. Third-party sources generally state that the information contained therein has been obtained from sources believed to be reliable, but there can be no assurance as to the accuracy or completeness of included information. Although management believes it to be reliable, management has not independently verified any of the data from third-party sources referred to in this presentation, or analyzed or verified the underlying studies or surveys relied upon or referred to by such sources, or ascertained the underlying economic assumptions relied upon by such sources.

Forward-Looking Statements
This corporate presentation contains “forward-looking information” within the meaning of applicable Canadian securities laws and “forward-looking statements” within the meaning of the United States Private Securities Litigation Reform Act of 1995, (together, “forward-looking statements”), concerning the business, operations and financial performance and condition of the Company. Forward-looking statements include, but are not limited to, statements with respect to the estimation of mineral reserves and mineral resources; the realization of mineral reserve estimates; the timing and amount of estimated future production; costs of production; metal prices and demand for materials; capital expenditures; success of exploration and development activities; permitting time lines and permitting, mining or processing issues; government regulation of mining operations; environmental risks; and title disputes or claims. Generally, forward-looking statements can be identified by the use of forward-looking terminology such as “plans,” “expects” or “does not expect,” “is expected,” “budget,” “scheduled,” “estimates,” “forecasts,” “intends,” “anticipates” or “does not anticipate,” “believes,” “projects” or variations of such words and phrases or state that certain actions, events or results “may,” “could,” “would,” “might” or “will be taken,” “occur” or “be achieved.” ForwardLooking statements are based on the opinions and estimates of management as of the date such statements are made, and they are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking statements, including, but not limited to, unexpected events during operations; variations in ore grade; risks inherent in the mining industry; delay or failure to receive board approvals; timing and availability of external financing on acceptable terms; risks relating to international operations; actual results of exploration activities; conclusions of economic valuations; changes in project parameters as plans continue to be refined; and fluctuating metal prices and currency exchange rates. Although management of the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. The Company cautions readers not to place undue reliance on forward-looking statements, as forward-looking statements involve significant risks and uncertainties. Forward-looking statements should not be read as guarantees of future performance or results and will not necessarily be accurate indications of whether or not the times at or by which such performance or results will be achieved. The Company does not undertake to update any forward-looking statements except in accordance with applicable Canadian securities laws.

Investors are advised that National Instrument 43-101 Standards for disclosure for Mineral Projects ("NI 43-101") of the Canadian Securities Administrators requires that each category of mineral reserves and mineral resources be reported separately. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Cautionary Note to U.S. Investors Concerning Estimates of Measured, Indicated or Inferred Resources
This corporate presentation uses the terms “measured,” “indicated” and “inferred” mineral resources. United States investors are advised that while such terms are recognized and required by Canadian regulations, the United States Securities and Exchange Commission does not recognize these terms. “Inferred mineral resources” have a great amount of uncertainty as to their existence, and as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or other economic studies. United States investors are cautioned not to assume that all or any part of measured or indicated mineral resources will ever be converted into mineral reserves. United States investors are also cautioned not to assume that all or any part of an inferred mineral resource exists, or is economically or legally mineable.

Except as otherwise specifically stated, Mr. Paul Sarjeant B.Sc, Manager of Geology to Largo, and a Qualified Person as defined by NI 43-101 has reviewed and approved the scientific and technical disclosure contained herein.

Trademarks are owned by Largo Resources Ltd.
Tier 1 Asset – Maracás Menchen Mine

Largo Resources is a leading producer and supplier of vanadium pentoxide, high purity vanadium pentoxide and high purity vanadium powder.

MINING VANADIUM RESPONSIBLY

Maintaining focus on responsible mining. Key metrics reported in company’s inaugural 2018 ESG report.

DEBT FREE COMPANY

Company retired all existing debt in 2019.

ROBUST PRODUCTION AND QUALITY PRODUCTS

Steady state production achieved. Multiple production records recorded in 2019 following successful completion of expansion project.

LOWEST-COST PRIMARY PRODUCER

2020 cash operating cost excluding royalties¹ guidance of US$3.30 – 3.50/lb V₂O₅.

HIGHEST KNOWN GRADE VANADIUM DEPOSIT

The Campbell Pit has Proven and Probable reserves of 19 million tonnes grading 1.15% V₂O₅ (head grade) and a magnetic concentrate grade of 3.21% V₂O₅.²

New safety record: 238 days with a Lost Time Injury

Cash balance of $154.8 million exiting Q3 2019.

Building sales team with a focus on high purity vanadium sales.

Continued focus on cost discipline at the mine.

Advancing known deposits to increase reserves and resources.

CONTINUED FOCUS ON VALUE CREATION

¹. Cash operating costs excluding royalties is a non-GAAP measure. Please see information in the “Non-GAAP Measures” section of the Company’s Management Discussion and Analysis for the three and nine months ended September 30, 2019.
2019 production guidance met

Quarterly Production and Costs

- **New annual production record:** 2019 production guidance met, with annual V$_2$O$_5$ production of 10,577 tonnes.

- **Ongoing projects to explore cost improvements at the mine:** The Company expects its 2019 annual average cash operating cost excluding royalties to be lower than its updated 2019 cash cost guidance.

### Production Guidance Met

<table>
<thead>
<tr>
<th></th>
<th>V$_2$O$_5$ production (tonnes)</th>
<th>V$_2$O$_5$ production (Mlbs)$^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual guidance</td>
<td>10,000 – 11,000</td>
<td>22.0 – 24.3</td>
</tr>
<tr>
<td>2019</td>
<td>10,577</td>
<td>23.3</td>
</tr>
</tbody>
</table>

### Updated Cash Operating Cost Excluding Royalties$^1$

<table>
<thead>
<tr>
<th></th>
<th>US$/lb V$_2$O$_5$</th>
<th>CDN$/lb V$_2$O$_5$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual guidance</td>
<td>$3.30 – 3.40</td>
<td>$4.29 – 4.42</td>
</tr>
<tr>
<td>9M-2019</td>
<td>$3.14</td>
<td>4.18</td>
</tr>
</tbody>
</table>

1. Cash operating costs excluding royalties is a non-GAAP measure. Please see information on this non-GAAP measure in the “Non-GAAP Measures” section of the Company’s Management Discussion and Analysis for the three and nine months ended September 30, 2019. The estimated average annual CDN$/US$ exchange rates used for 2019 is approximately 1.30.

2. Conversion of tonnes to pounds, 1 tonne = 2,204.62 pounds or lbs.
Operational update
As of Q4 2019

Maracás Menchen Mine

- **PRODUCTION**: New annual V₂O₅ production record of 10,577 tonnes produced in FY 2019, achieving Company’s annual production guidance of 10,500 tonnes.

- Total V₂O₅ production of 3,011 tonnes was 16% higher than Q4 2018. Production in December 2019 achieved a new monthly record with 1,162 tonnes of V₂O₅ produced.

- Production in Q4 2019 represents the third consecutive quarter-over-quarter of production growth in 2019 and is the strongest quarter of production since commencement of operations in 2014.

- **RECOVERIES**: Global V₂O₅ recovery rates¹ averaged 78.5% in FY 2019 which is an improvement over the 77.0% averaged in FY 2018. Down slightly quarter-over-quarter in FY 2019 primarily due to some process variability during the expansion ramp-up phase.

- **EXPANSION**: Expansion project concluded in December 2019. Increased production in Q3 2019 and Q4 2019 is largely due to the ramp-up and completion of the Company’s expansion project which concluded in December following the commissioning of the pre-evaporator and leaching, de-silication and precipitation tanks.

**SUMMARY**

- ↑16% Increase in production over Q4 2018
- ↓8% Reduction in cash operating costs from Q3 2018
- 3,011t Record quarterly V₂O₅ production in Q4 2019
- 78.5% Global recovery rate¹ achieved in 2019

¹ Global recovery is the product of crushing recovery, milling recovery, leach recovery, leaching recovery and chemical plant recovery.
Financial update
As of 9M-2019

- Profitability continued to be impacted as a result of lower vanadium prices combined with the Company’s re-measurement of trade receivables/payables as a result of its current off-take agreement.

- Average price per lb of V$_2$O$_5$ was approximately US$7.16 in Q3 2019.

- Debt free: Company repaid all of its remaining senior secured notes due 2021 on July 19, 2019.

### Financial Results 2019

<table>
<thead>
<tr>
<th></th>
<th>Q3</th>
<th>Q2</th>
<th>Q1</th>
<th>Q3 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>V$_2$O$_5$ production</td>
<td>kt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V$_2$O$_5$ sold</td>
<td>kt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vanadium sales from a contract with a customer</td>
<td>$m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-measurement of trade receivables / payables</td>
<td>$m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenues</td>
<td>$m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net income (loss)</td>
<td>$m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash operating costs excluding royalties$¹</td>
<td>US$/lb</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Cash operating costs excluding royalties is a non-GAAP measure. Please see information on this non-GAAP measure in the "Non-GAAP Measures" section of the Company’s Management Discussion and Analysis for the three and nine months ended September 30, 2019.
Key priorities and opportunities

Largo has a pipeline of projects and opportunities currently being executed.

Advancing internal sales and trading business

- Offtake agreement with Glencore expires April 30, 2020.
- Appointment of Paul Volland as Director of Sales and Trading, and Francesco D’Alessio as Head of Sales, Americas.
- Following offtake expiry, Largo will receive 100% of premiums associated with its expected high purity vanadium sales – currently 50/50 split with Glencore.

Ferrovanadium conversion plant approval

- Basic engineering studies and permitting associated with the construction of a ferrovanadium conversion plant at the Maracás Menchen Mine ongoing.

Titanium oxide (TiO₂) pilot plant study

- The Company’s non-magnetic tailings are composed of ilmenite which also contain titanium dioxide (TiO₂).
- Advancing basic engineering studies to further evaluate the economics associated with upgrading the non-magnetic tailings using concentrate flotation to produce TiO₂ concentrate.
- Pilot plant study began in October 2019 to prove flotation performance and the Company anticipates results of the ongoing study in early 2020.

Responsible and safe mining initiatives

- Our objective is to become an industry leader in sustainable mining practices while continuing to build on our track record of responsible mining and strong community relations.
Building on the success of 2019

2020 Production, Costs, CAPEX and Sales Guidance

<table>
<thead>
<tr>
<th>2020 Guidance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual V₂O₅ Production Guidance</td>
<td>10,000 – 11,000 tonnes</td>
</tr>
<tr>
<td>Annual Sales* Guidance²</td>
<td>9,500 – 10,000 tonnes</td>
</tr>
<tr>
<td>Average Annual Cash Operating Cost Guidance Excluding Royalties²</td>
<td>US$3.30 – 3.50/lb V₂O₅</td>
</tr>
<tr>
<td>Sustaining Capital Expenditures³</td>
<td>US$9.0 – 11.0 million</td>
</tr>
<tr>
<td>Ferrovanadium Conversion Plant Capital Expenditures</td>
<td>US$5.0 – 7.0 million</td>
</tr>
</tbody>
</table>

- The Company plans to perform cooler refractory maintenance in April 2020 and anticipates lower production during this month and higher cash operating costs in Q2 2020.

- The Company will also utilize this downtime to perform feed rate improvements on the kiln which is expected to further increase the nameplate production capacity to 1,100 tonnes of V₂O₅ per month.

---

1. Inclusive of V₂O₅, high purity V₂O₅, and ferrovanadium.
2. Cash operating costs excluding royalties is a non-GAAP measure. Please see information on this non-GAAP measure in the “Non-GAAP Measures” section of the Company’s Management Discussion and Analysis for the three and nine months ended September 30, 2019.
3. Excludes capitalized waste stripping costs.
Product offering: VPURE™ and VPURE+™

**VPURE+ Flakes**
- VPURE+ Flakes are high purity vanadium flakes with a guaranteed vanadium content of 99.0% and a typical vanadium content of 99.5%.
- VPURE+ Flakes are mainly used in the production of master alloys, where it provides high strength-to-weight ratios for the titanium alloy and aerospace industries.
- Approved by all major master alloys producers.

**VPURE+ Powder**
- An industry preferred high purity vanadium powder.
- VPURE+ Powder has a guaranteed vanadium content of 99.0% and a typical vanadium content of 99.5%, exceeding the industry standard of 99.0%.
- VPURE+ Powder has low levels of impurities which makes it ideal for catalyst applications and vanadium electrolyte which is used in vanadium redox flow Batteries (VRFBs).

**VPURE Flakes**
- Vanadium pentoxide with a high level of purity.
- VPURE Flakes have a guaranteed vanadium content of 98.5% and a typical vanadium content of 99.0%.
- VPURE Flakes are used to produce ferrovanadium and vanadium carbon nitride for the steel industry.
- VPURE Flakes are used to produce ferrovanadium and vanadium carbon nitride, achieving grade specifications in the range of 78.0% to 82.0% vanadium.

**INDUSTRY PREFERRED LINE OF VANADIUM PRODUCTS**
**Expansion project complete**

- **25% increase in V₂O₅ production to 1,000 tonnes/month.**
- **Expected total CAPEX range of ~$27-$29 million in 2019.**

- The expansion project focuses on increasing production capacity of the milling, fusion (deammoniator, furnace and flaking wheel), leaching and filtering areas.

- Operational improvements to the kiln being executed in April 2020 to increase total capacity by an additional 100 tonnes to 1,100 tpm of V₂O₅.

### Timeline

<table>
<thead>
<tr>
<th>2018</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Environmental permit secured.</td>
<td></td>
<td></td>
<td>Production of 1,042 tonnes of V₂O₅ achieved in July.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Construction commenced</td>
<td></td>
<td></td>
<td>Installation of new deammoniator completed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Commissioning of the pre-evaporator and leaching, de-silication and precipitation tanks</td>
</tr>
</tbody>
</table>

---

*Legend:*
- ➡️: Rollout of new deammoniator
- 🎆: Commissioning of new deammoniator
- 🎊: Commissioning of new ball mill and evaporator
- 🎉: Ramp-up concluded
Exploration programs ongoing

Extensive land package offers substantial regional growth:
~25,000 metres of diamond drilling at the satellite deposits and other identified targets in Brazil during 2019.

The Company has developed an Exploration Master Plan for 2019 to 2021 to advance known deposits, increase resources and reserves, further evaluate the potential for along strike continuation of the vanadium rich magnetite mineralization and to maintain the Company’s mineral concessions to the north and south of the Campbell deposit.

**Novo Amparo Norte (NAN) Deposit**

- Substantially upgraded mineral resources at NAN in June 2019.
- The updated resource estimate is based on approximately 12,912 m of diamond drilling over 88 and 5,549 sample interval.
- Total Measured and Indicated Mineral Resources of 12.23 million tonnes grading 0.88% V₂O₅ with magnetic concentrate grades of 2.41% V₂O₅. Inferred Mineral Resources of 11.33 million tonnes grading 0.90% V₂O₅ with magnetic concentrate grades of 2.46% V₂O₅.¹

**Novo Amparo and São José Deposits**

- Exploration on the Novo Amparo deposit in Q3 2019 consisted of 4,646 metres (45 drill holes). Drilling was also completed at the São José deposit which consisted of 2,813 metres (18 drill holes).
- Analytical and Davis Tube Test results for Novo Amparo and São José are in process, and the Company will further assess and upgrade the Mineral Resource base for these deposits, as appropriate.

**Gulçari A Norte, Gulçari B and Gulçari South Targets**

- Diamond drilling continued in Q3 2019 on near mine with a total of 2,761 m metres (18 holes) being drilled on these targets. Drilling on these targets remains ongoing.

¹ Refer to the Company’s news release on June 11, 2019 for full details regarding resource classification.
Mining vanadium responsibly

For Largo, corporate social responsibility means keeping our people safe and healthy. It means minimizing and mitigating our impacts on the environment and practicing continual reclamation of affected land. It means sharing the benefits of mining with the communities in which we live and operate. It means acting ethically, as a company and as individuals.

Our strong safety culture has delivered consistent results: since 2015 Lost Time Incidents (LTIs) have dropped by more than 70%, and in 2018 the mine broke all company safety records to date.

OUR PEOPLE We seek to recruit the best, and to train our employees for rewarding careers with Largo. We take great care in the employment process, with an emphasis on equality, diversity, workplace safety and employee welfare.

HEALTH & SAFETY Our health and safety mission: to ensure a safe work environment where each person returns home healthy.

OUR COMMUNITIES At Largo, we understand the social and economic influence of the Maracás Menchen Mine in the local region. At all times we strive to operate in a manner that respects local communities and supports local culture and identity, while strengthening regional socio-economic development.

ENVIRONMENTAL PERFORMANCE At Largo, we strive for responsible stewardship of the land, air and water in every aspect of our business. Since the Maracás Menchen Mine began operating in 2014, we have met or exceeded all applicable environmental standards and regulations.
What happened to vanadium prices?

**Vanadium price chart**

- Implementation of Grade 3 rebar standard in China
- Electricity power supply disruption in South Africa
- 2018 Chinese rebar standard enacted forcing mills to comply with Grade 3 rebar standard.
- Mills increased inventories of vanadium in preparation of the standard

---

**Niobium substitution**

- Increased imports of ferro niobium (FeNb) into China as a result of increased vanadium prices contributed to a decrease in overall vanadium.
- China imported ~45% more FeNb in 2018 than in 2017 suggesting greater substitution of ferro vanadium (FeV) for Grade 3 rebar.
- Imports of FeNb into China are down significantly following a drop in vanadium prices suggesting that reverse substitution is occurring.
- We believe some market share was lost in the run up in vanadium prices in 2018, however, FeV remains a superior product overall in the production of Grade 3, 4 and 5 high-strength rebar.

---

**Co-product production increases**

- As a result of the Vale dam disaster in 2018, iron ore prices increased dramatically giving Chinese VTM iron ore producers the incentive to increase domestic production.
- Multiple Chinese steel mills restarted operations in 2019 adding ~6,000 tonnes of vanadium to the market.
- Iron ore producers in the Chengde province have average cash costs of ~$75-$80/t.
- We should see a decrease in co-product slag production in 2020 as a result of lower iron ore prices (current prices are ~US$80/t) and from increased environmental restrictions in China.

---

**Stone coal production increases**

- On the back of increased vanadium prices in 2018, restarted stone coal operations added ~4,000t of vanadium in 2018 and early 2019.
- Average cash costs for stone coal operations are ~$8/lb making them high cost marginal producers.
- To produce additional volumes, stone coal producers need to apply for new permits which prove difficult as these operations do not fully comply with new stricter environmental standards in China.
- Production from stone coal operations have declined drastically following the drop in vanadium prices.

---

Source: Largo Resources, Vanitec, Roskill, BMO, CISA, Metal Bulletin
Vanadium demand outlook
2019

Vanadium consumption by end use
- Steel alloy (rebar)
- Aerospace alloy
- Chemical catalyst
- Other (VRB)

High purity vanadium consumption
- Aerospace alloy
- Chemical catalyst
- Other (VRB)

Annual vanadium consumption by country (tpa)

<table>
<thead>
<tr>
<th>Year</th>
<th>RoW</th>
<th>Total Asia Non-China/India</th>
<th>Europe</th>
<th>North America</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>35350</td>
<td>11600</td>
<td>11800</td>
<td>8000</td>
<td>14250</td>
</tr>
<tr>
<td>2017</td>
<td>40075</td>
<td>12300</td>
<td>12700</td>
<td>8425</td>
<td>15100</td>
</tr>
<tr>
<td>2018</td>
<td>44100</td>
<td>13175</td>
<td>13100</td>
<td>8675</td>
<td>15925</td>
</tr>
<tr>
<td>2019</td>
<td>49800</td>
<td>12250</td>
<td>13250</td>
<td>7800</td>
<td>14600</td>
</tr>
</tbody>
</table>

+24%

Largo is one of only two major producers that is qualified to supply high purity vanadium

Aerospace
Largo’s V₂O₅ is approved by all master alloy producers supplying the western world.

Chemical Catalysts
Vanadium is required for critical chemical and catalyst applications.

Vanadium Redox Flow Batteries
High purity V₂O₅ flake and powder yields a price premium over and above standard grade V₂O₅.

Source: Largo Resources, Vanitec, Roskill, Metal Bulletin, BMO.
## Quarterly operational review

### 2019

<table>
<thead>
<tr>
<th>Maracás Menchen Mine Production</th>
<th>Q4 2019</th>
<th>Q3 2019</th>
<th>Q2 2019</th>
<th>Q1 2019</th>
<th>FY 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Ore Mined (tonnes)</td>
<td>329,792</td>
<td>267,257</td>
<td>308,858</td>
<td>205,109</td>
<td>1,156,016</td>
</tr>
<tr>
<td>Ore Grade Mined - Effective Grade(^1) (%)</td>
<td>1.36</td>
<td>1.52</td>
<td>1.21</td>
<td>1.29</td>
<td>1.33</td>
</tr>
<tr>
<td>Effective Grade of Ore Milled (%)</td>
<td>1.57</td>
<td>1.44</td>
<td>1.49</td>
<td>1.51</td>
<td>1.53</td>
</tr>
<tr>
<td>Concentrate Produced (tonnes)</td>
<td>100,879</td>
<td>92,629</td>
<td>102,320</td>
<td>86,673</td>
<td>382,501</td>
</tr>
<tr>
<td>Grade of Concentrate (%)</td>
<td>3.28</td>
<td>3.26</td>
<td>3.30</td>
<td>3.32</td>
<td>3.29</td>
</tr>
<tr>
<td>Contained V(_2)O(_5) (tonnes)</td>
<td>3,310</td>
<td>3,016</td>
<td>3,380</td>
<td>2,874</td>
<td>12,580</td>
</tr>
<tr>
<td>Crushing Recovery (%)</td>
<td>96.6</td>
<td>96.5</td>
<td>98.0</td>
<td>97.0</td>
<td>97.0</td>
</tr>
<tr>
<td>Milling Recovery (%)</td>
<td>96.0</td>
<td>97.0</td>
<td>97.9</td>
<td>96.8</td>
<td>96.9</td>
</tr>
<tr>
<td>Kiln Recovery (%)</td>
<td>89.7</td>
<td>88.8</td>
<td>88.8</td>
<td>89.2</td>
<td>89.1</td>
</tr>
<tr>
<td>Leaching Recovery (%)</td>
<td>96.7</td>
<td>97.2</td>
<td>95.7</td>
<td>97.7</td>
<td>96.8</td>
</tr>
<tr>
<td>Chemical Plant Recovery (%)</td>
<td>96.1</td>
<td>96.7</td>
<td>97.1</td>
<td>97.7</td>
<td>96.8</td>
</tr>
<tr>
<td>Global Recovery(^2) (%)</td>
<td>77.3</td>
<td>78.1</td>
<td>79.1</td>
<td>80.0</td>
<td>78.5</td>
</tr>
<tr>
<td>V(_2)O(_5) Produced (Flake + Powder) (tonnes)</td>
<td>3,011</td>
<td>2,952</td>
<td>2,515</td>
<td>2,099</td>
<td>10,577</td>
</tr>
<tr>
<td>V(_2)O(_5) Produced (Flake + Powder) (lbs)(^3)</td>
<td>6,638,111</td>
<td>6,508,038</td>
<td>5,544,619</td>
<td>4,627,497</td>
<td>23,318,266</td>
</tr>
<tr>
<td>Cash operating costs excluding royalties(^4) (CDN$/lb)</td>
<td>/</td>
<td>3.71</td>
<td>4.43</td>
<td>4.54</td>
<td>/</td>
</tr>
<tr>
<td>Cash operating costs excluding royalties(^4) (US$/lb)</td>
<td>/</td>
<td>2.81</td>
<td>3.30</td>
<td>3.41</td>
<td>/</td>
</tr>
</tbody>
</table>

---

1. Effective grade represents the percentage of magnetic material mined multiplied by the percentage of V\(_2\)O\(_5\) in the magnetic concentrate.
2. Global recovery is the product of crushing recovery, milling recovery, kiln recovery, leaching recovery and chemical plant recovery.
3. Conversion of tonnes to pounds, 1 tonne = 2,204.62 pounds or lbs.
4. Cash operating costs excluding royalties is a non-GAAP measure. Please see information on this non-GAAP measure in the "Non-GAAP Measures" section of the Company’s Management Discussion and Analysis for the three and nine months ended September 30, 2019.
Company overview

Corporate structure

Shares issued/outstanding: 532 million
Warrants: 132.9 million
Options/RSUs: 4.4 million
Market capitalization: $605 million
Cash position: $154.8 million as of Q3 2019

Warrants/Options/RSUs as of September 30, 2019

Investment thesis

Robust operational performance highlighted by multiple production records achieved during 2019.

The lowest-cost primary producer of vanadium, globally.

0%

Debt free.

Among the highest known grade deposits of vanadium in the world. Advancing known deposits to increase reserves and resources.

It is our goal to become an industry leader in responsible mining initiatives.

Advancing the development of our internal sales and trading business with a focus on high purity vanadium sales.

Operations

Highly experienced management and board

PAULO MISK, PRESIDENT AND CHIEF EXECUTIVE OFFICER
ERNEST CLEAVE, CHIEF FINANCIAL OFFICER
LUCIANO CHAVES, VP, FINANCE AND ADMINISTRATION, BRAZIL
ÁLVARO RESENDE, PRODUCTION DIRECTOR
PAUL VOLLANT, DIRECTOR OF SALES AND TRADING

ALBERTO ARIAS, NON-EXECUTIVE CHAIRMAN
DAVID BRACE, DIRECTOR
JONATHAN LEE, DIRECTOR
PAULO MISK, DIRECTOR
DANIEL TELLECHEA, DIRECTOR
KOKO YAMAMOTO, DIRECTOR

Warrants, Options and RSUs are as of November 13, 2019.