STRATEGIC AND CRITICAL MATERIALS IN SOUTHEAST NEBRASKA: THE ELK CREEK SUPERALLOYS PROJECT

SAME Omaha Post 2018 Industry Day

May 1, 2018

Omaha, Ne
Disclaimer Regarding Forward-Looking Statements

This presentation contains forward-looking statements, including statements regarding the results of the feasibility study, including, but not limited to, metal price and exchange rate assumptions, cash flow forecasts, projected capital and operating costs, metal or mineral recoveries, mine life and production rates; the Company’s potential plans and operating performance; the estimation of the tonnage, grades and content of deposits, and the extent of the resource and reserves estimates; potential production from and viability of the Project; estimates of future production and operating costs; estimates of permitting submissions and timing; the timing and receipt of necessary permits and project approvals for future operations and access to project funding. Such forward-looking statements are based upon NioCorp’s reasonable expectations and business plan at the date hereof, which are subject to change depending on economic, political and competitive circumstances and contingencies. Readers are cautioned that such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause a change in such assumptions and the actual outcomes and estimates to be materially different from those estimated or anticipated future results, achievements or position expressed or implied by those forward-looking statements. Risks, uncertainties and other factors that could cause NioCorp’s plans or prospects to change include risks related to the Company’s ability to operate as a going concern; risks related to the Company’s requirement of significant additional capital; changes in demand for and price of commodities (such as fuel and electricity) and currencies; changes in economic valuations of the Project, such as Net Present Value calculations, changes or disruptions in the securities markets; legislative, political or economic developments; the need to obtain permits and comply with laws and regulations and other regulatory requirements; the possibility that actual results of work may differ from projections/expectations or may not realize the perceived potential of NioCorp’s projects; risks of accidents, equipment breakdowns and labor disputes or other unanticipated difficulties or interruptions; the possibility of cost overruns or unanticipated expenses in development programs; operating or technical difficulties in connection with exploration, mining or development activities; the speculative nature of mineral exploration and development, including the risks of diminishing quantities of grades of reserves and resources; and the risks involved in the exploration, development and mining business and the risks set forth in the Company’s filings with the SEC at www.sec.gov. NioCorp disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.
VIDEO: The Elk Creek Superalloy Materials Project
US PERSPECTIVE: CRITICAL AND STRATEGIC MATERIALS

**Niobium**
- Military aircraft engine turbines
- Rocket sub-assemblies
- Memory metal for hydraulic couplings
- Superconducting magnets
- Gas turbines and heat-resistant combustion equipment
- Tool bits and cutting tools

**US Dependence on Foreign Supplies:**
**100%**

**Scandium**
- Military aircraft
- Naval ships and hardware
- Mobile bridges
- Lasers
- Solid Oxide Fuel Cells

**US Dependence on Foreign Supplies:**
**100%**

**Titanium**
- Military aircraft
- Numerous weapons systems
- Protective armor
- Naval ships and hardware
- Medical implants
- Power generation

**US Dependence on Foreign Supplies of Titanium Mineral Concentrate:**
**91%**
**Niobium**

Name: Niobium

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atomic Number</td>
<td>41</td>
</tr>
<tr>
<td>Element Classification</td>
<td>Metal</td>
</tr>
<tr>
<td>Phase at Room Temp.</td>
<td>Solid</td>
</tr>
<tr>
<td>Melting Point</td>
<td>2750 K (2477°C or 4491°F)</td>
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<tr>
<td>Boiling Point</td>
<td>5017 K (4744°C or 8571°F)</td>
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<tr>
<td>Density</td>
<td>8.57 grams per cubic centimeter</td>
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</table>

Strengthens steel, allowing for lighter structures and vehicles, and makes steel more corrosion resistant.

Vital to many markets, including aerospace, construction, transportation, oil & gas, superalloys.

Demand implies a global market value of $2B–$3B, with 4-6% CAGRs.
Niobium’s Use in Global Markets

- Steel Mega Projects, 46%
- Automotive, 23%
- Oil & Gas, 16%
- Stainless Steel, 6%
- Other, 9%

Source: Roskill, 2017
FerroNiobium: Market Share by Producer

CBMM: 73%
Magris: 15%
CMOC: 13%

NOTE: Anglo Brazil’s Niobium asset was sold in 2016 to China Molybdenum (CMIC) for $1.5B

- There were a dozen bids on the asset.
- Winning bid was $300M-$500M more than expected, representing 10X of 2015 EBITDA

Source: Roskill, 2017
Ferroniobium Product Pricing is Stable

Average monthly value of ferroniobium imports
2009 – 2015 (US $ / kg Nb)

- In early 2012, a 30% interest in CBMM was sold in two transactions to Japanese/South Korean and Chinese consortiums for a combined sale price of USD $3.95 billion.

- Market prices for FeNb have been relatively stable since that time.
**Name**: Scandium

| Atomic Number | 21 |
| Element Classification | Metal |
| Phase at Room Temp. | Solid |
| Melting Point | Melting Point: 1814 K (1541°C or 2806°F) |
| Boiling Point | 3109 K (2836°C or 5137°F) |
| Density | 2.99 grams per cubic centimeter |

Major uses today are in Solid Oxide Fuel Cells and aluminum alloys.

Current global consumption (10-15 tpa) constrained by limited, unreliable and inefficient supply sources.

With reliable supply, demand is forecast to grow strongly. Estimated demand in aerospace alone is ~300 tpa.¹

¹OnG Commodities LLC
Estimates and Analysis
Scandium-based fuel cells offer unmatched reliability in mission-critical power supply markets.

- Compared to fossil fuel central power generation plants, Solid Oxide Fuel Cells (SOFC) generate electricity with higher efficiency, fewer greenhouse gases, and other pollutants; involve less water use; require a smaller footprint; and enjoy greatly enhanced reliability (99.99%+ uptime).*

- Scandium improves the expected lifespan for SOFC stacks to a decade-plus versus only a few years for non-scandium-based fuel cell stacks.

- Scandium-doped zirconia has improved oxygen transport characteristics, providing higher cell efficiencies and power output levels.

* Source: Bloom Energy
Scandium Aluminum Alloys

- Scandium strengthens aluminum by up to 100%, allowing for lighter products. This can deliver up to a 20% weight reduction in aircraft, with comparable benefits in reduced fuel burn – a huge value.

- Scandium allows for more dependable welding of aluminum in high-performance applications. It stabilizes and allows for a finer alloy grain size, and minimizes recrystallization in a weld’s heat-affected zone.

- Aluminum alloys with < 1% scandium can eliminate the need for air frame rivets, resulting in simpler and lower-cost manufacturing.
Scandium is poised to deliver truly revolutionary benefits to the commercial aviation industry.

- Analysis shows that Scandium-contained aluminum alloys can save airline operators approximately $10-15 million in net present value for a single narrow body jetliner, assuming Scandium Oxide pricing at $3,500/kg.
THE DISRUPTIVE POTENTIAL OF SCANDIUM: PART II

For commercial aircraft manufacturers, AlSc alloys allow aluminum components to be welded instead of joined via hundreds of thousands of rivets per plane. For manufacturers, this could amount to:

- Tens of millions of dollars/year in lower bill of materials costs.
- Tens of millions of dollars/year in lower direct manufacturing costs.
- Higher manufacturing throughput: a 1% increase in annual production of a narrow body jet is worth ~$500 million in added revenue to an original equipment manufacturer (OEM).

Source: OnG Commodities LLC.
Titanium

<table>
<thead>
<tr>
<th>Name</th>
<th>Titanium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atomic Number</td>
<td>22</td>
</tr>
<tr>
<td>Element</td>
<td>Metal</td>
</tr>
<tr>
<td>Classification</td>
<td></td>
</tr>
<tr>
<td>Phase at Room</td>
<td>Solid</td>
</tr>
<tr>
<td>Temp.</td>
<td></td>
</tr>
<tr>
<td>Melting Point</td>
<td>1941 K (1668°C or 3034°F)</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>3560 K (3287°C or 6091°F)</td>
</tr>
<tr>
<td>Density</td>
<td>4.5 grams per cubic centimeter</td>
</tr>
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</table>

Primarily used for pigments in paints, plastics and paper.

Also used to make strong, lightweight alloys for aerospace, armor, chemical processing, marine hardware, medical implants, power generation, etc.

Domestic and international markets are large, with capacity to expand.
## Executive Orders: Strategic / Critical Materials

<table>
<thead>
<tr>
<th>EO Number</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
</table>
| 13766     | 24Jan17 | **Expediting Environmental Reviews and Approvals for High Priority Infrastructure Projects**  
  - Establishes a new system to fast-track the construction of infrastructure projects  
  - Many infrastructure projects utilize HSLA steels containing Niobium |
| 13788     | 18Apr17 | **Buy American and Hire American**  
  - Establishes a federal policy to buy American and hire American  
  - The US is 100% dependent of foreign supplies of Niobium and Scandium |
| 13817     | 20Dec17 | **A Federal Strategy To Ensure Secure and Reliable Supplies of Critical Minerals**  
  - Directs the Secretary of the Interior publish a list of critical minerals and to prepare a report outlining a strategy to reduce the dependence on imported minerals  
  - The US is 100% dependent of foreign supplies of Niobium and Scandium  
  - Members of the Nebraska congressional delegation have submitted letters to the federal government in support of adding Scandium to the list of Critical Minerals  
  - Niobium and Titanium are already classified as Critical Minerals by the USGS |
MINERAL RESOURCES AND RESERVES

LARGE RESOURCE WITH LONG-TERM POTENTIAL

• **Probable Reserves** of 31.7 million tonnes of ore at 0.79% niobium (Nb₂O₅), 71.6 grams per tonne (g/t) scandium (Sc), and 2.81% TiO₂.

• **Indicated Mineral Resources** are 90.9 million tonnes at 0.66% Nb₂O₅, 70 g/t Sc, and 2.59% TiO₂.

• **Inferred Mineral Resources** of 133.6 million tonnes at 0.48% Nb₂O₅, 59 g/t Sc, and 2.23% TiO₂.¹

• Deposit is open in three directions: to the northwest, southwest, and at depth.

¹ See endnotes
UNDERGROUND MINE INFRASTRUCTURE

- Shaft Vent
- Truck Unloading
- Crusher
- Shops
- Bins
- Loading Pocket
- Intake Raise
- Exhaust Raise
- Ramp Raise
- Production Levels
- Main Fans
- Crusher Dump
- Shops
- Vent
- Shaft
Creating Value: Process Flow Sheet

Mined Material
(2,760 tonnes per day)

HPGR → HCl Leach → Acid Bake

Scandium Recovery

Titanium Recovery

PRODUCT:
Scandium Trioxide

PRODUCT:
Titanium Dioxide

PRODUCT:
Ferroniobium

Niobium Recovery

Electric Arc Furnace

TSX: NB | OTCQX: NIOBF | FSE: BR3
Creating Value: Process Flow Sheet

Mined Material 2700 mtpd → HPGR → HCl Leach → Acid Bake → Niobium Recovery

HCl Regen → Scandium Recovery

Scandium Trioxide

Titanium Recovery → Titanium Dioxide

Electric Arc Furnace → Ferroniobium

Reagent Regeneration Loop 1

Product: Scandium Trioxide
Product: Titanium Dioxide
Product: Ferroniobium
**Creating Value: Process Flow Sheet**

- **Mined Material (2,700 metric tons per day)**
- **Crushing**
- **HCl Leach**
- **Acid Bake**
- **Niobium Recovery**
- **Electric Arc Furnace**

**Reagent Regeneration Loop 2**

**PRODUCT:**
- Scandium Trioxide
- Titanium Dioxide
- Ferroniobium
This project schedule is contingent upon the timing of financing for the project.
NEXT STEPS

- Secure Project Financing
- Complete selection of engineering and construction firms
- Complete project permitting necessary to move to construction
- Conclude additional offtake agreement(s)
- Launch construction
- Start-up / Commissioning
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ENDNOTES

i This presentation includes certain forward-looking non-GAAP financial measures, including EBITDA and Free Cash Flow. Reconciliations of these forward-looking non-GAAP financial measures to the most directly comparable GAAP financial measures are not provided because the Company is unable to provide such reconciliations without unreasonable effort, due to the uncertainty and inherent difficulty of predicting the occurrence and the financial impact of such items impacting comparability and the periods in which such items may be recognized. For the same reasons, the Company is unable to address the probable significance of the unavailable information, which could be material to future results.

ii Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate and have been used to derive sub-totals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material. All composites have been capped where appropriate. The reporting standard adopted for the reporting of the MRE uses the terminology, definitions and guidelines given in the Canadian Institute of Mining, Metallurgy and Petroleum Standards on Mineral Resources and Mineral Reserves (May 10, 2014) as required by NI 43-101.