



STRATEGIC RARE METALS : TANTALUM & CESIUM

INVESTMENT HIGHLIGHTS OF TANTALUM

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- **Critical Metal**, the European Union (EU) has recently declared tantalum a critical element.
- **Average yearly growth** rate of has been about 8% to 12% in demand since about 1995.
- **Restrictions on Product from Conflict Regions**, Estimated in 2009 about 50% of the tantalum supply was from the DRC and Rwanda, two zones classified as conflict regions.
- **Conflict Minerals Law in the U.S.** aims at restricting the trade of conflict minerals, and many technology companies, like Apple Inc. are taking initiatives to comply with the law. The restrictions regarding conflict minerals are likely to improve tantalum trading conditions and keep prices at sustainable levels for conflict-free tantalum miners.

INVESTMENT HIGHLIGHTS OF CESIUM

- **Demand growth** driven by ongoing industrialization of China, India, Brazil and other emerging economies, and US energy policy to decrease foreign oil dependency. Global drilling expenditure is forecast to grow at an annual average growth rate of about 6.6% from 2009 to 2015.
- **Monopolistic market conditions**, Cesium is produced primarily from the Tanco mine owned by Cabot Corporation which in the mid-1990's, accounted for approximately 82% of the reported world reserves.
- **Supply concern**, The Tanco Mine only contains 400,000 metric tons of ore with an average cesium oxide content of 24%, and a secondary zone of 100,000 metric ton of ore contains an average of 5% providing for approximately 7 years of mine life.

HLM EXPLORATION PROJECT : PAKEAGAMA RARE METALS PROJECT

- **Key attributes** found in all rare metals mines and Pakeagama Rare Metals Pegmatite: large intrusion size, internal zonation and high concentration of **both tantalum and cesium**.
- **Few Competitors**, there are only a few listed exploration companies that offer clear exposure to tantalum and even less so for cesium.
- **Diamond drilling** planned for 2012 on HLM's 100% owned and optioned **Pakeagama Rare Metals Project located in northwestern Ontario, Canada**.

STRATEGIC METALS

The rare metal market interest and supply constraints afford HLM an opportunity to illustrate the outstanding value thought to be contained in the Pakeagama Rare Metals Project. Independent geologists have indicated that this is a highly prospective target containing rare metal signatures similar to Cabot Corporations' Tanco Mine, located 288km away in neighbouring southeastern Manitoba where tantalum and cesium are produced.

There is currently a growing supply gap of tantalum products. The 2008 recession and the low tantalum prices caused by the oversupply of tantalum in the market led many mines in Australia, Canada and Africa to suspend production, leading to a more than 50% decrease in mine production. Increasing demand and conflict free mineral pressures increased prices three-fold in 2011.

Global Advanced Metals (GAM) has just recently closed its Wodgina tantalum mine in Australia despite a price rebound to approximately USD\$100/lb. The only producer of Tantalum in Canada has historically been from Cabot Corporation's Tanco Mine, which began production in 1969, and is expected to re-start production in the near future.

HLM:TSXV

Capital Structure

Shares Outstanding	54,119,056
Warrants	4,539,166
Options	3,550,000
Fully Diluted	62,208,222



STRATEGIC METALS continued...

Tantalum ores are found primarily in Australia, Canada, Brazil, and central Africa, with some additional quantities originating in south-east Asia. The average yearly growth rate of about 8% to 12% in tantalum demand since about 1995 has caused a significant increase in exploration for this element.

Tantalum minerals of the greatest economic importance are tantalite, microlite, and wodginite; however, it is common practice to name any tantalum-containing mineral concentrate as 'tantalite' primarily because it will be processed for the tantalum values and is sold on that basis. Tantalum mineral concentrates may contain from two to more than five different tantalum-bearing minerals from the same mining area. The sale of tantalum mineral concentrates is based on a certified analysis for the tantalum oxide they contain, with a range from 10% or 15% to over 60% depending on the mine source.

In addition to tantalum production, the Tanco mine produces Cesium, which in the mid-1990's accounted for approximately 82% of the reported world reserves. Current world-wide demand is difficult to estimate, but internal best estimation predicts that 500,000 – 3,000,000 pounds per year is produced whereas the chemical and oil industries consume the majority of the supply. Prices have remained stable for the past several years at \$US1000/tonne for a minimum 24% cesium oxide (Cs₂O) concentrate.

The cesium mineral pollucite has been identified within the Pakeagama Lake pegmatite and is only the fourth pollucite occurrence noted in Ontario, and has been suggested to be the most significant by industry experts. Cesium values range from 400 to 1349 g/t Cs. These highly anomalous values compare favourably to those defining the prolific Bernic Lake field (the Tanco mine). In addition, a prominent lithium-cesium anomaly has been identified with a very strong cesium value of over 400 g/t Cs. These factors attest to the high potential for economic cesium mineralization at Pakeagama Lake.

The main pollucite zone at the Tanco Mine approximately contains a mere 400,000 metric tons of pollucite with an average Cs₂O content of 24%, and a secondary zone of approximately 100,000 metric tons of pollucite contains an average of 5% Cs₂O (USGS Cesium 2011).

WHAT IS TANTALUM USED FOR?

About half of the tantalum consumed each year is used in the electronics industry, mainly as powder and wire for capacitors, owing to tantalum's particular ability to store and release electrical energy. This allows components to be exceptionally small and they are therefore favoured in space-sensitive high-end applications in telecommunications, data storage and implantable medical devices. Tantalum is also used for electronic sound filters and as a barrier against copper diffusion in semi-conductors. Tantalum carbide's hardness makes it ideal for cutting tools.



WHAT IS CESIUM USED FOR?

Cesium chemicals are highly reactive alkali metals with the largest atomic radius. Excluding francium, cesium has the lowest boiling and melting points, the highest vapor pressure, the highest density and the lowest ionization potential of the alkali metals. The principal end use of cesium is in formate brines, a high-density, low-viscosity fluid used for high-pressure/high-temperature (HPHT) oil and gas drilling and exploration. Cesium formate possesses anti-oxidant and water-structuring properties that protect drilling polymers from thermal degradation and has the required density needed to maintain well control. Other significant end uses are in biomedical, chemical, and electronic applications.

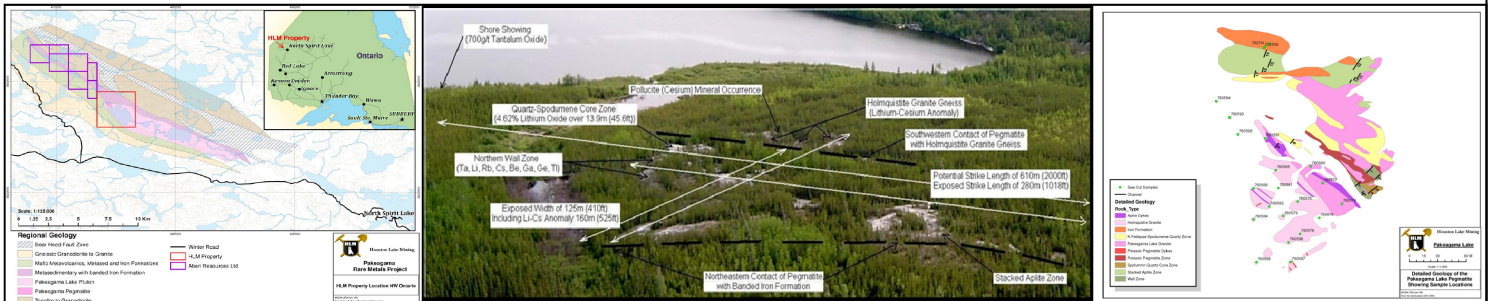




- In late 2011 a 300 sample Mobile Metal Ion (MMI) geochemical survey was conducted on the property. The results are currently being compiled and analyzed and have not yet been disseminated to the public.
- HLM is planning to conduct a Phase I, 2,000m diamond drill program on the Pakeagama Rare Metals Project in 2012.

THE ASSET

The exposed Pakeagama Lake pegmatite is host to the known rare metals mineralization on the project. Initial work on the pegmatite by the OGS and The Open University of the United Kingdom consisted of two field seasons of study, 1648 electron microprobe analyses, 50 bulk chemical analyses, 21 analyses of potassium feldspar and X-ray diffraction work conducted upon 30 samples. Initial channel sampling of the Core Zone yielded 13.9 metres grading 4.62% lithium oxide. The results of these studies have been published by the OGS (Open File Report 6000, Summary of Field Work and Other Activities, November, 1999, pp. 26-1 to 26-12). The Summary Report concludes: "The detailed documentation of a variety of tantalum-rich minerals coupled with the presence of pollucite renders the Pakeagama Lake pegmatite and adjoining area one of the best targets for tantalum and cesium exploration in northwestern Ontario."



In 2008 HLM conducted a program designed to confirm past government work. The work exposed the pegmatite for over 280 metres along strike and in the absence of targeted exploration, it is unknown whether a 700 g/t tantalum oxide showing on the shore of Pakeagama Lake is part of the main Pakeagama Lake pegmatite thereby extending the strike length up to 580 metres or the possibility of an additional pegmatite on the property. Further stripping work has expanded the width to over 125 metres. An adjacent lithium-cesium anomaly may indicate a potential width of 160 metres. These dimensions make the Pakeagama Lake pegmatite one of the largest rare metal pegmatites in Ontario. The pegmatite remains open along strike in all three directions. Channel sampling of an 11.0m section of the Northern Wall Zone averaged 222g/t tantalum oxide, 958 g/t cesium oxide, as well as 1.21% lithium oxide, 0.53% rubidium oxide, 1259 g/t beryllium oxide, 107.0 g/t niobium oxide, 56 g/t gallium, 8.1 g/t germanium, 35.8 g/t thallium, and 120 g/t tin.

MANAGEMENT & DIRECTORS

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| Trevor R. Walker, MBA | President , former VP of <u>Consbec Inc.</u> |
| Reginald (Rick) F. Walker | Chairman , President and sole owner of <u>Consbec Inc.</u> |
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