



SECUTOR
CAPITAL MANAGEMENT CORPORATION

COMPANY SUMMARY

Location:	NW Ontario
Flagship:	Separation Rapids Lithium Project
Ownership:	100%
Commodity:	Lithium
Status:	Resource, markets being defined
Resource:	11.6 M t @ 1.34% Li ₂ O
Catalysts:	Pilot plant, process development results, initial PEA on lithium chemicals

MARKET DATA

Price:	\$0.125
Market Cap:	\$20 M
Common Shares:	160 M
Fully Diluted:	184 M
52 Wk Range:	\$0.105 - \$0.475
3 Month Avg Vol:	170,000



RECENT FINANCINGS

December 2015: 6 M flow-through units (1 flow-through share + ½ warrant at \$0.175 for 24 months) at \$0.125/unit

May 2015: 6.4 M flow-through shares @ \$0.39 and 4.4 M units (1 share + 1/2 warrant @ \$0.425 for 18 months) @ \$0.34/unit



Source: quotemedia.com

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Company Update

January 27, 2016

Avalon Rare Metals Inc. T-AVL

Under the Radar Advanced Lithium Play

Avalon Rare Metals offers investors diversified exposure to a broad range of specialty metals and minerals. All of its projects are located in Canada and 100% owned.

Avalon's current focus is the Separation Rapids Lithium Project in northwestern Ontario. The project is relatively advanced, having being the subject of a pre-feasibility study and environmental assessment in 2000. It hosts a resource defined in 2000 of an indicated 8.9 million tonnes and an inferred 2.7 million tonnes, with both grading 1.34% lithium (Li₂O). Further drilling is tentatively planned for H2 2016, the first drilling on the project in 15 years, to explore extensions of the deposit to depth and along strike to add to the current lithium resources.

Separation Rapids offers a unique opportunity to serve two growing but independent lithium markets. The first is a specialty industrial mineral product for the glass/ceramics industry. Metallurgical test-work has produced high purity concentrates averaging 4.31% Li₂O and less than 0.01% iron. Several potential customers from the glass/ceramics industry have analyzed the concentrate samples, confirmed that the quality and purity meet their requirements, and have requested larger quantities for further evaluation.

The second market is high purity lithium chemicals for use in rechargeable batteries, notably in portable electronics, electric vehicles and energy storage systems. This is the largest and highest growth segment of the global lithium market. Initial work on concentrates from Separation Rapids has readily produced battery-grade (>99.5%) lithium carbonate using known processing technologies. Avalon is also investigating a number of processes for the production of lithium hydroxide, now preferred in some battery cathode chemistries as it offers better power density, a longer life cycle and higher prices compared to lithium carbonate.

Avalon also has the rights to the past producing East Kemptville tin mine in Nova Scotia. Growing demand for tin in the electronics sector has created an opportunity to re-develop the site as a new North American producer of tin. A preliminary economic assessment is being prepared in H1 2016.

Given the re-balancing of its business priorities away from rare earths and toward lithium, management is proposing a name change to Avalon Advanced Materials Inc. at the annual general meeting in February.

The Nechalacho Rare Earth Element (REE) Project in the Northwest Territories is on hold until REE prices rebound. A feasibility study was completed in 2013 and permits for pre-construction work were received in 2014.

Avalon has approximately \$2.5 million in cash following an equity financing in December 2015 that raised \$750,000. Management and close associates own 15% of the shares, with institutional investors owing 20% and retail investors owing 65%.

Map of Avalon's Main Projects



Source: Company Filings

MANAGEMENT

Avalon Rare Metals is led by Donald Bubar, President and CEO, a geologist with over 35 years of experience in mineral exploration in Canada. He has been President and CEO of Avalon since 1995.

Dave Marsh, Senior Vice President, Metallurgy and Technology Development, has over 30 years of experience in the metallurgical and mineral processing industries.

William Mercer Ph.D., Vice President, Exploration spent over 30 years with Noranda/Falconbridge, working on international projects in over 30 countries and ultimately serving as Director-Geology and Geochemistry.

Pierre Neatby, Vice President, Sales and Marketing joined Avalon in early 2010 after spending 19 years with the Noranda/Falconbridge group in various sales and marketing roles, including Managing Director of Noranda's London, UK based sales company. He has marketing, sales and trading experience in London Metal Exchange traded metals, industrial chemicals and industrial minerals.

Jim Andersen, Vice President, Finance, Corporate Secretary and CFO is a chartered accountant with over 20 years of experience in the mining industry.

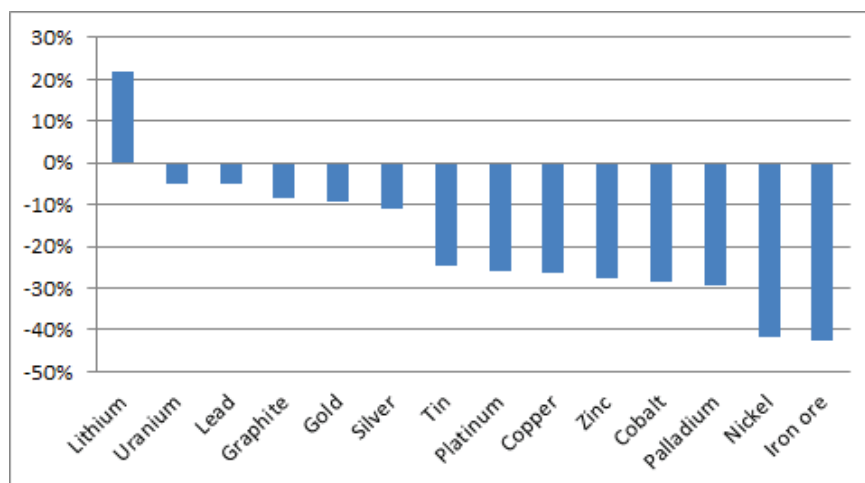


SEPARATION RAPIDS LITHIUM PROJECT

Avalon's current focus is the Separation Rapids Lithium Project in northwestern Ontario.

Lithium prices were up over 20% in 2015, a significant outperformance compared to most commodities that posted negative returns.

Price Performance of Select Commodities in 2015





Source: Benchmark Mineral Intelligence, Bloomberg, IndexMundi

Approximately half of global lithium production is from hard rock deposits, such as Separation Rapids, with the other half from saline brines predominantly in South America.

Lithium has a wide range of industrial applications. Traditionally the largest user was the glass/ceramics sector. Lithium strengthens both glass and ceramics, making them more resistant to thermal shocks, scratches and breakage. As well, it reduces viscosity and melting temperatures, providing energy savings and molding benefits. Another large traditional use is in industrial greases.

Yet the largest and highest growth segment of the global lithium market is its use in rechargeable batteries, notably in portable electronics, electric vehicles and energy storage systems.

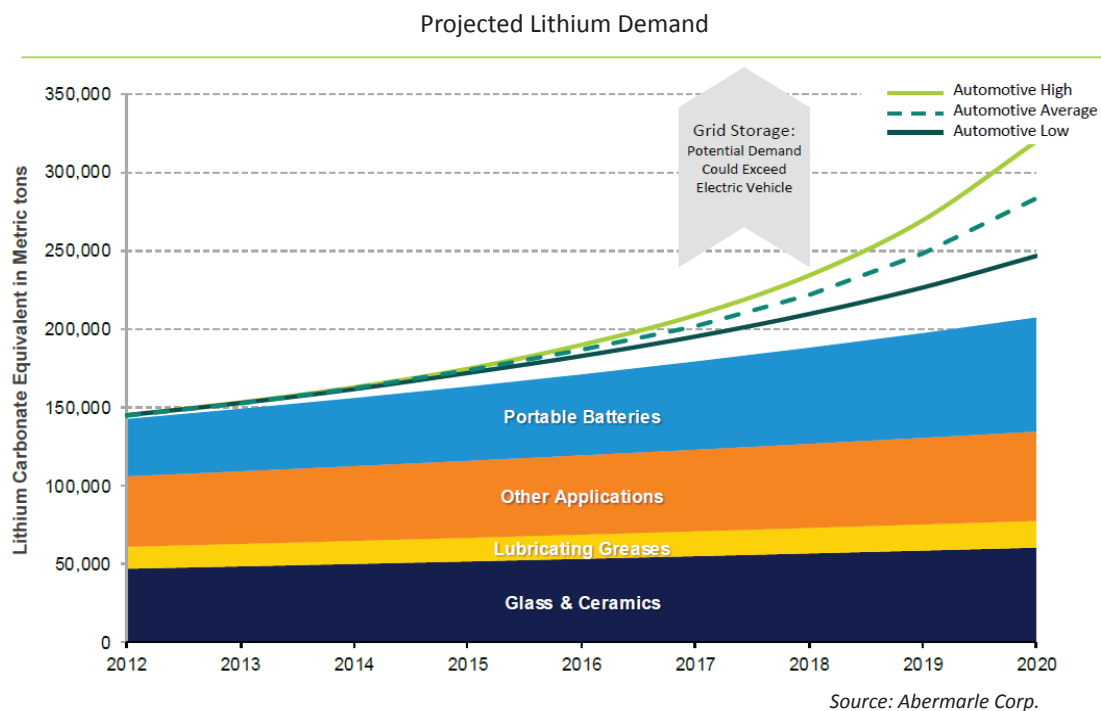
Lithium Requirements in Various Battery Applications

	2014 Sales (M Units)	Li Content per Unit (LCE Basis)	2014 Total Li Content (LCE Basis)	Projected CAGR (2014 – 2024)
Smartphone 	1,200	5 – 7 grams	8,400 MT	8-10%
Tablet 	260	20 – 30grams	7,800 MT	
Notebook 	170	35 – 45 grams	7,650 MT	
Power Tools 	65	40 – 60 grams	3,900 MT	>15%
HEV 	1.8	5 kilograms	9,000 MT	20-30%
PHEV & BEV 	0.3	40 – 80 kilograms	18,000 MT	
Stationary 	[650 MWh Installed]	1.5 MT	1,000 MT	>30%

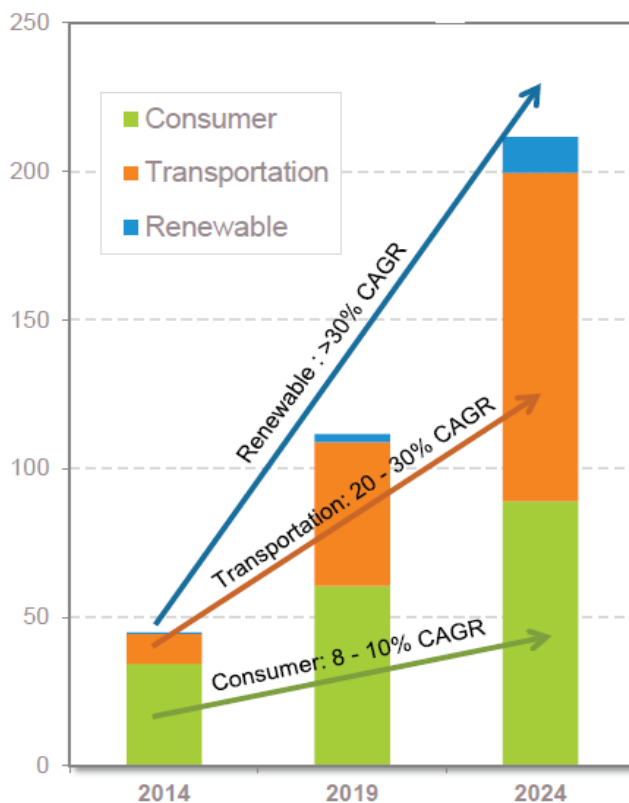
Source: Abermarle Corp.



Growing demand for rechargeable batteries in electric vehicles and energy storage systems is expected to result in continued growth in consumption of lithium.



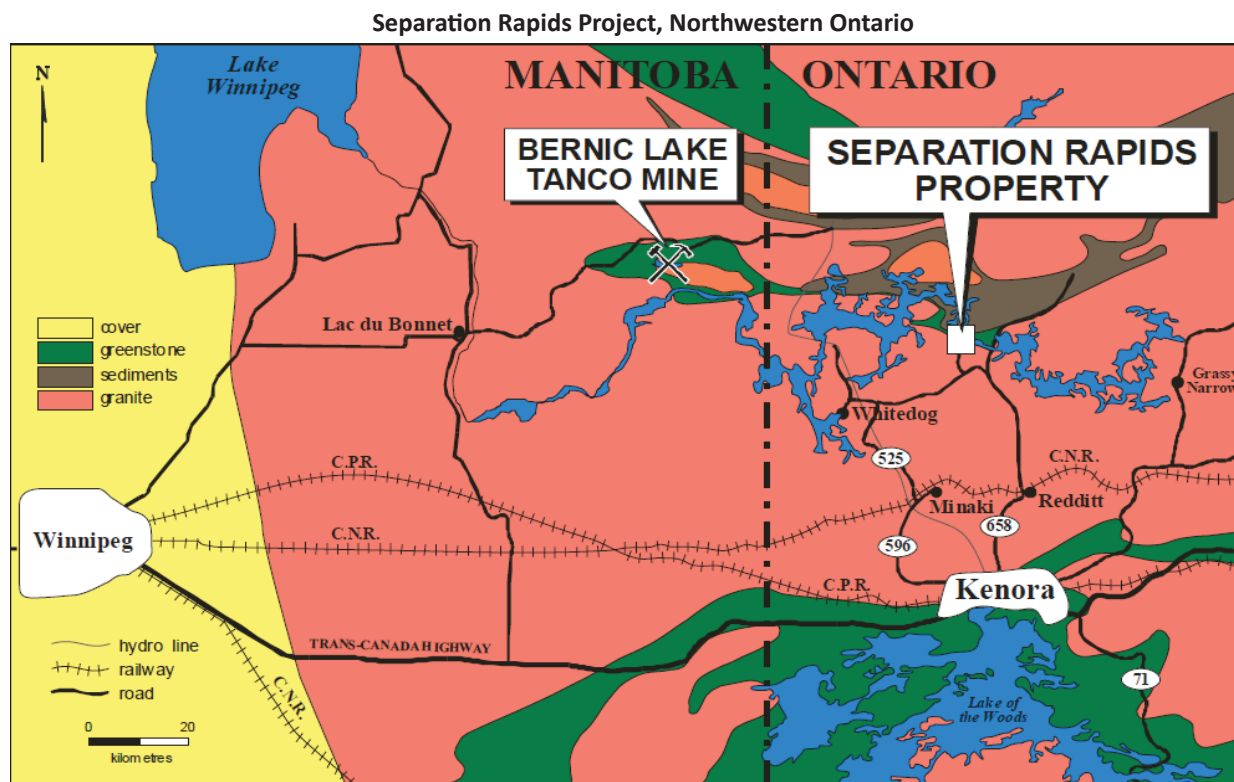
Projected Battery Demand for Lithium (thousand tonnes lithium carbonate equivalent)



Benchmark Mineral Intelligence estimates that growth in rechargeable batteries will require an additional 70,000 to 100,000 tonnes of lithium carbonate equivalent by 2021, necessitating new producers to come on stream.

LOCATION

Separation Rapids is located 70 kilometres north of Kenora in northwestern Ontario. It is accessible by a private road and a rail line is located 50 kilometres to the south, connecting Winnipeg to the west and Thunder Bay to the east.



Source: Company Reports

The property lies within the traditional land use area of the Wabaseemoong Independent Nations of WhiteDog, Ontario, an aboriginal community located approximately 35 kilometres southwest of the property and is the closest community to the project site.

The land package covers 1,455 hectares and is not encumbered by a net smelter return royalty.

To date Avalon has spent approximately \$6 million on the project.

GEOLOGY

Lithium at Separation Rapids is contained in the mineral petalite within a highly-evolved, specialized granitic intrusion called a pegmatite characterized by large crystals.

Petalite is currently used to make thermal and shock resistant glass ceramics and is produced from the Bikita mine in Zimbabwe. Recent (January 2016) news reports indicate the mine could be shut down for breaching environmental regulations.

Separation Rapids hosts the world's largest undeveloped known resource of petalite.



HISTORIC RESOURCE

In 1998, Avalon announced a resource, now considered historical, of an indicated 8.9 million tonnes and an inferred 2.7 million tonnes, with both resources grading 1.34% lithium (Li₂O). For reference, Nemaska Lithium Inc. (V-NMX), up 161% over the past year, has an in-pit resource of 32.7 million tonnes grading 1.56% lithium oxide.

The Separation Rapids resource is based on over 10,000 metres of drilling in 69 holes. The deposit is delineated over a strike length of 600 metres and to a maximum vertical depth of 250 metres. The mineralized zone is well exposed at surface in a low dome-shaped hill, where it averages 55 metres in width over 400 metres in strike length. A conceptual open pit designed for a 1999 pre-feasibility study contains a probable reserve of 7.72 million tonnes grading 1.4% lithium oxide.

Separation Rapids was last drilled 2001. Subsequent drilling was not performed as the deposit was significantly large relative to the size of market at that time. Drilling is planned for 2016 in order to delineate NI 43-101 compliant measured and indicated resources.

SPECIALTY MINERAL PRODUCT FOR GLASS/CERAMICS SECTOR

In the first half of 2014, metallurgical test-work conducted by a commercial laboratory in Germany produced 20 kilograms of high purity petalite concentrate from samples taken from Separation Rapids. The concentrate yielded assays from five laboratories averaging 4.31% Li₂O and less than 0.01% iron. Several potential customers from the glass/ceramics industry have analyzed the concentrate samples, confirmed that the quality and purity meet their requirements, and have requested larger quantities for further evaluation. Based on the results, Avalon developed a new metallurgical flow sheet.

A 30 tonne bulk sample was shipped in September 2015 to a laboratory in Germany and is being processed using this new flow sheet, with samples of concentrate available for distribution in February 2016. These will be delivered to potential customers that have already tested and approved smaller samples, as well as initial test samples to a number of new potential customers and material for follow-up lithium chemicals process development.

Rehabilitation work on the access road to the site was completed in October 2015 to support future development work including a planned 5,000 tonne bulk sample. A bulk sample of this size would allow the production of a minimum 800 tonnes of petalite concentrate for full-scale plant trials that are required by glass/ceramic customers before formal off-take agreements can be signed. The plan is to process the bulk sample at a pilot plant to be assembled in Kenora. Avalon will need to acquire the necessary permits and funding to proceed with this work.

HIGH PURITY LITHIUM CHEMICALS FOR USE IN BATTERIES

In addition to producing a petalite concentrate for the glass/ceramics sector, Avalon is also working on producing high purity lithium chemical products for use in batteries.

Lithium Carbonate

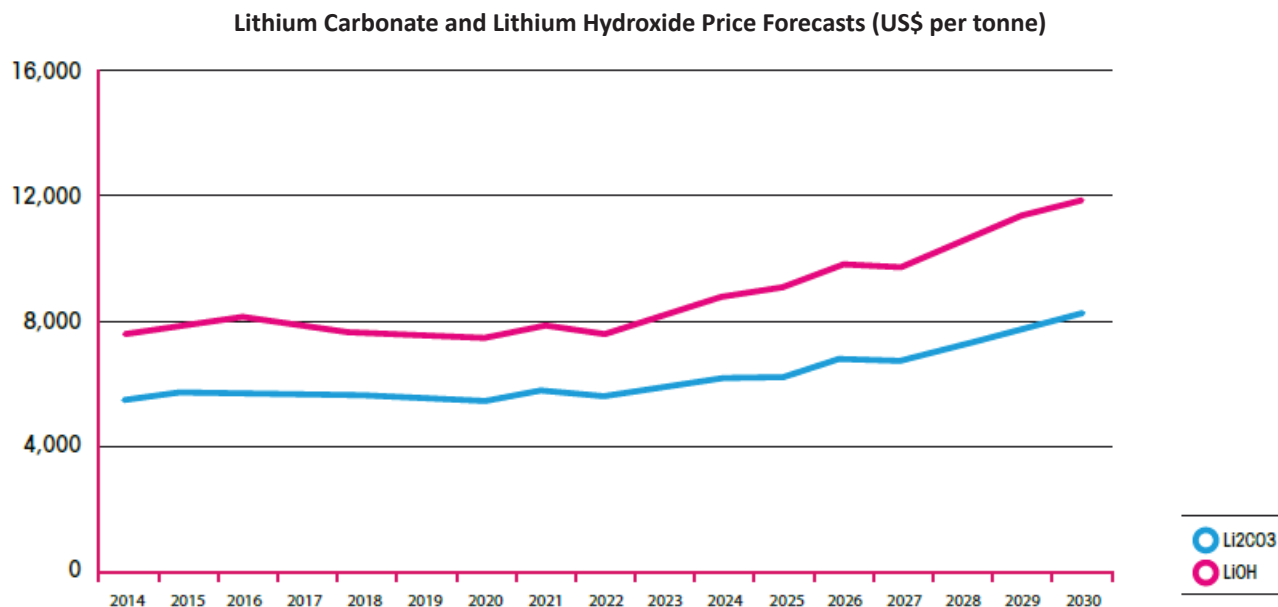
To date, the focus of many battery manufacturers was on the use of lithium carbonate in lithium ion battery cathodes as it is the most readily available form of lithium chemical from current suppliers.

Initial work carried out at a laboratory in Saskatoon, Saskatchewan on petalite concentrate from Separation Rapids readily produced battery-grade (>99.5%) lithium carbonate using known processing technologies. The low impurities, notably iron, in the petalite creates an advantage for Avalon by reducing the number of impurity removal steps in the process flow sheet to achieve a high purity product.

Lithium Hydroxide

Lithium hydroxide (LiOH) is now preferred in some battery cathode chemistries as it offers better power density (and thereby longer range for electric vehicles) and a longer life cycle compared to lithium carbonate. Tesla Motors Inc. uses lithium hydroxide batteries for their vehicles.





Avalon is investigating a number of processes for the production of lithium hydroxide from Separation Rapids petalite and will be proceeding with more laboratory test-work in Q1 2016.

PRELIMINARY ECONOMIC ASSESSMENT

Results of an initial preliminary economic assessment on the lithium chemicals business are expected to be announced in the first half of 2016. This study will also evaluate the potential of both a mineral product for customers in the glass-ceramics industry and lithium chemicals for use in batteries.

Metallurgical test-work has also successfully produced a marketable feldspar product from the petalite tailings. As a result, Avalon has hired an engineering firm to conduct a market study on the market for feldspars in North America. The cash flow from such an industrial minerals business could potentially reduce investment risk.

EAST KEMPTVILLE TIN-INDIUM PROJECT

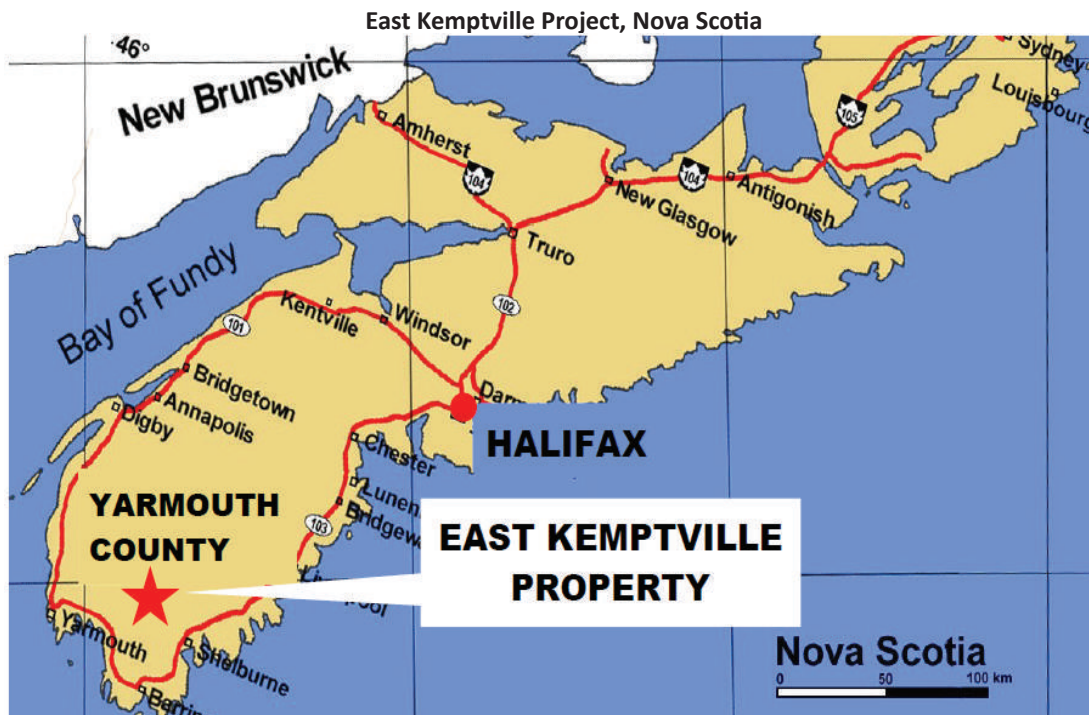
The past producing East Kemptville mine is located in Nova Scotia, 45 kilometres northeast of Yarmouth and 270 kilometres west of Halifax.

The property can be accessed via paved highway and grid power is on site. The mine commenced operations in 1985, closing in 1992 due to low tin prices with significant resources left unmined. Since that time new demand for tin has developed through its increasing use in solders as a non-toxic alternative to lead. This application now accounts for more than 50% of global demand. Indium is used in electronics along with tin in computer display screens.

Avalon holds mineral rights to East Kemptville through a 2,880 acre "Special License", a form of mineral tenure granted by the Province where there is a history of previous industrial land use activity such as mining. The license has a term of three years beginning February 2, 2015 and includes an obligation to incur \$5.25 million in expenditures over the three years including \$750,000 in the first year (\$909,571 had been incurred by August 31, 2015). It is renewable for an additional two, one-year periods.

Management expects to be able to conclude an arrangement with Rio Algom Limited and the Province of Nova Scotia for transfer of surface tenure to the lands covered by the Special License in the first quarter of 2016.





Source: Company Reports

The higher grades at Olive are believed to more than offset the slightly lower recoveries, indicating this zone could provide higher recovered grades for about two years starting in the third year of operations at Eagle. Given the small trucking distance, this would both enhance the economics and extend the mine life of Eagle.

Resource

In October 2014, Avalon announced its first NI 43-101 compliant resource estimate for East Kemptville. The estimate is based on 275 drill holes totaling 29,587 metres drilled between 1979 and 1991 by previous operators and seven holes totaling 984 metres drilled by Avalon in 2014.

East Kemptville October 2014 Resource Estimate

Classification	Sn Cut-off Grade	Tonnes (mT)	Sn %	Zn %	Cu %
INDICATED	>= 0.05	46.07	0.104	0.132	0.051
	>= 0.10	18.47	0.176	0.173	0.064
	>= 0.15	6.83	0.239	0.204	0.077
	>= 0.20	3.16	0.337	0.268	0.093
	>= 0.25	2.93	0.344	0.275	0.092
INFERRED	>= 0.05	34.29	0.102	0.104	0.052
	>= 0.10	16.95	0.148	0.122	0.062
	>= 0.15	2.66	0.203	0.13	0.075
	>= 0.20	0.82	0.311	0.138	0.12
	>= 0.25	0.58	0.342	0.171	0.117

The base case 0.10% tin cut-off grade is based on the historical cut-off grade.



In 2015, 22 holes were drilled totaling 4,514 metres with the objective of upgrading inferred mineral resources into the indicated and measured categories, acquiring geotechnical data, testing other known tin occurrences in the area and providing additional samples for metallurgical testing.

Assays have been reported for eight holes, confirming continuity of the mineralized zone to depth. The best result came from hole EKA-15-10 that intersected 82.3 metres of 0.46% tin, 0.62% zinc and 25.2 grams per tonne indium. Further assays are awaited following which an updated resource estimate will be produced.

A 20,000 metre drill program is tentatively planned for 2016 pending financing.

Metallurgical Testing

Bench scale metallurgical testing was just completed at a commercial laboratory in Cornwall, England. This program investigated all aspects of the flow sheet including tin recovery by both gravity and flotation processes as well as the recovery of indium to the zinc concentrate.

This test program will eventually lead to larger scale pilot plant testing using representative bulk samples collected from ongoing drilling and existing ore stockpiles.

Preliminary Economic Assessment and Feasibility Study Scheduled for 2016

A preliminary economic assessment (PEA) is targeted for completion in the first quarter of 2016. Management plans to evaluate a number of alternative development scenarios for the scale of the operation, including starting production at a relatively small scale by processing the existing ore stockpiles to just produce a gravity concentrate of tin before eventually re-starting full-scale mining. This scenario could quickly generate cash flow with a small initial capital investment in a mill and gravity circuit to produce tin concentrate.

Avalon is also completing preliminary environmental studies to prepare for a comprehensive environmental assessment this year. A feasibility study could also be finalized later in the second half of 2016 if project financing is available.

NECHALACHO RARE EARTH ELEMENTS PROJECT

The Nechalacho Rare Earth Element (REE) Project is located at Thor Lake in the Northwest Territories, five kilometres north of the Hearne Channel of Great Slave Lake and 100 kilometres southeast of the city of Yellowknife.

Nechalacho REE Project, NWT



Source: Company Reports



The property package is over 6,100 hectares in size, with most of it subject to a 2.5% net smelter return royalty that Avalon has the right to buy out on the basis of a fixed formula that is currently worth \$1.4 million.

Year round access is primarily achieved by aircraft. There is no road access from Yellowknife, although there is a five kilometre road from the property to the shore of Great Slave Lake that can be used to haul supplies shipped by barge or trucked on an ice road.

REE Market

Rare earth elements are critical in numerous industrial applications, notably modern defense systems and renewable energy technologies (e.g., electric vehicles, wind power turbines).

The light REEs (LREE) consist of the elements lanthanum, cerium, praseodymium, neodymium, promethium, samarium, europium and gadolinium. In general the heavy REEs (HREE) are more valuable than the LREEs, in some cases by orders of magnitude, and consist of terbium, dysprosium, holmium, erbium, thulium, ytterbium and lutetium. On a value basis, Nechalacho is skewed to the HREEs.

China produces over 95% of global REE supplies. Prices spiked earlier this decade after the country implemented quotas, leading to concerns of security of supply of certain REEs in major REEs consuming countries such as Japan, Korea, Germany and the United States. However prices have fallen dramatically, partly the result of illegal mining in, and availability of product out of, China. The decrease in prices, notably LREE prices, was a factor in the high profile bankruptcy of Molycorp Inc. and its Mountain Pass mine in California.

In early 2015, China replaced its rare earth export quota system with an export licensing system as a response to a ruling by the WTO on its export practices. It is believed that the new licensing system will allow China to manage and control exports more closely and with less transparency than there was under the export quota system.

April 2013 Feasibility Study

Avalon has invested over \$100 million to date in taking the project through completion of a feasibility study released in April 2013.

In the study, sales of five critical REEs (neodymium, europium, terbium, dysprosium and yttrium) account for over 82% of revenues, with the lower value LREEs lanthanum and cerium representing less than 4.5% of total revenues.

Initial capital expenditures are estimated at \$1.5 billion. At the then elevated REE prices, the project was estimated to generate a net present value discounted at 10% of \$900 million and an internal rate of return of 19.6%, both on an after-tax basis.

August 2013 Resource

The feasibility study was based on 14.6 million tonnes of reserves grading 1.7% REE oxides. Subsequently, a resource update was released in August 2013.



August 2013 Nechalacho Resource Estimate

Category	Zone	Tonnes	TREO	HREO	HREO/ TREO	ZrO ₂	Nb ₂ O ₅	Ta ₂ O ₅
		(millions)	(%)	(%)	(%)	(%)	(%)	(%)
Measured	Basal	12.56	1.71	0.38	22.50	3.20	0.405	0.0404
	Upper	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Total Measured		12.56	1.71	0.38	22.50	3.20	0.405	0.0404
Indicated	Basal	49.33	1.62	0.35	21.27	3.07	0.405	0.0398
	Upper	47.21	1.52	0.15	10.11	2.12	0.291	0.0195
Total Indicated		96.54	1.57	0.25	16.00	2.61	0.349	0.0299
Measured and Indicated	Basal	61.90	1.64	0.35	21.53	3.10	0.405	0.0399
	Upper	47.21	1.52	0.15	10.11	2.12	0.291	0.0195
Total Measured and Indicated		109.11	1.59	0.27	16.81	2.67	0.356	0.0311
Inferred	Basal	58.16	1.38	0.26	18.89	2.80	0.380	0.0351
	Upper	102.09	1.38	0.13	9.70	2.38	0.334	0.0204
Total Inferred		160.25	1.38	0.18	13.07	2.53	0.351	0.0257

US\$345 per tonne cut-off

Total measured and indicated resources would conceivably be sufficient to support continued mining operations at Nechalacho for over 90 years, if the mining rate is unchanged and resources are converted to reserves at the same conversion rate in the feasibility study.

Environmental Assessment Approved

An environmental assessment for the Nechalacho project was approved by the Federal Government in November 2013. Land and Water Use permits for pre-construction work were received in April and May 2014 respectively. Full construction and operational permits are expected to be granted approximately four to six months once management initiates the final application process commences. Avalon contemplates re-starting this process in 2016.

Avalon has signed an Accommodation Agreement with the Deninu K'ue First Nation and negotiations towards signing similar accommodation agreements with the Lutsel K'e Dene First Nation and the Yellowknives Dene First Nation continue intermittently. As well, a Participation Agreement with the Northwest Territory Métis Nation has been signed and management has commenced negotiating an agreement with the North Slave Métis Alliance.

Optimizing Metallurgy

Since completing the feasibility study, Avalon has been optimizing the process flow sheets to improve recoveries and reduce costs. It has also been studying various alternatives for refining and hydrometallurgical plant locations. Notably, an alkali cracking process has been designed that enables recovery of 90% of the HREE in the flotation concentrate, compared to 52% recovery in the feasibility study using a sulphuric acid bake process. This process also suppresses the precipitation of, and separates, cerium and lanthanum respectively, both of which are LREEs and dilute the value of the HREE product. In addition, it allows for the production of a marketable zirconium sulphate product.



Optimization of the alkali cracking process flowsheet is substantially complete. A further integrated pilot plant campaign has been planned, though at an estimated cost of \$4 million will only proceed when funding becomes available. The eight tonne bulk sample of material required for this testing is being stored in Yellowknife and Lakefield, Ontario.

Avalon is monitoring rare earths markets for signs of increased demand and better pricing to justify re-activating the project. The Nechalacho resource also hosts other rare metal resources such as zirconium, gallium, tantalum, niobium and beryllium in a satellite deposit called the "North T". Avalon is monitoring markets for all the rare metals for opportunities as new technology creates new demand as has recently been the case with lithium.



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Ticker	Company	1	2	3	4	5	6
T-AVL	Avalon Rare Metals Inc.			X		X	

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