

Rare Earth Elements Letter

INTERNATIONAL

the independent information and advice bulletin for Rare Earth Elements and related investments

Special Situation – October 2011 Update

www.kirrinresources.com



Kirrin Resources Inc. (Cdn\$ 0.06)

TSX.V	: KYM
H+L prices (12 months)	: Cdn\$ 0.16 - 0.04
Net shares issued	: 46.5 million
Fully diluted shares	: 70 million
Market Capitalization	: Cdn\$ 2.8 million

Next price target: Cdn\$ 0.25

Company profile

Kirrin Resources explores for rare earth elements (REE) and uranium. It operates two **REE** exploration projects, in **Newfoundland & Labrador** and **Quebec**, and two **uranium** projects in **Newfoundland & Labrador** and **Saskatchewan, Canada**. Kirrin is acquisitive by nature and new projects are expected during 2011.

Kirrin's first **REE** project, **Bottom Brook** in western Newfoundland was acquired in September 2008, well before the recent upsurge of interest in REE. The Company's second **REE** project, **Grevet** in Quebec, was acquired in February 2010. Both projects bear Kirrin's hallmark of being **close to infrastructure**.



Sampling at **Grevet** in 2011 produced one of the highest TREO results for the Province of Quebec, a remarkable **20.41% TREO**. The property is considered to have geological similarities to the giant Bayan Obo mine in China and was acquired because of its open pit potential and proximity to infrastructure. Based on its sampling, Kirrin is hopeful of finding an in-situ resource with per tonne rock values up to \$9,000 per tonne. Kirrin expanded its land holdings at Grevet earlier in 2011 and the results of its intense 2011 prospecting program are due shortly. Kirrin's budget for its 2012 outline program amounts to Cdn\$ 0.7 million.

While mineralization at **Bottom Brook** shows a significant enrichment in the light rare earth elements (**LREE**, **La – Sm**), drilling and prospecting has defined a substantial heavy rare earth elements (**HREE**, **Eu – Lu**) component to the Bottom Brook mineralization which consistently gives a HREO/TREO of between 8% and 15%. The highest sample grade to date is 15.71% TREO. Kirrin is commissioning a new INAA and XRF dataset to compare with its existing ICP fusion dataset. Based on its drilling to date, Kirrin's objective is to find an in-situ resource with per tonne rock values up to \$10,000.

Kirrin's one year focus

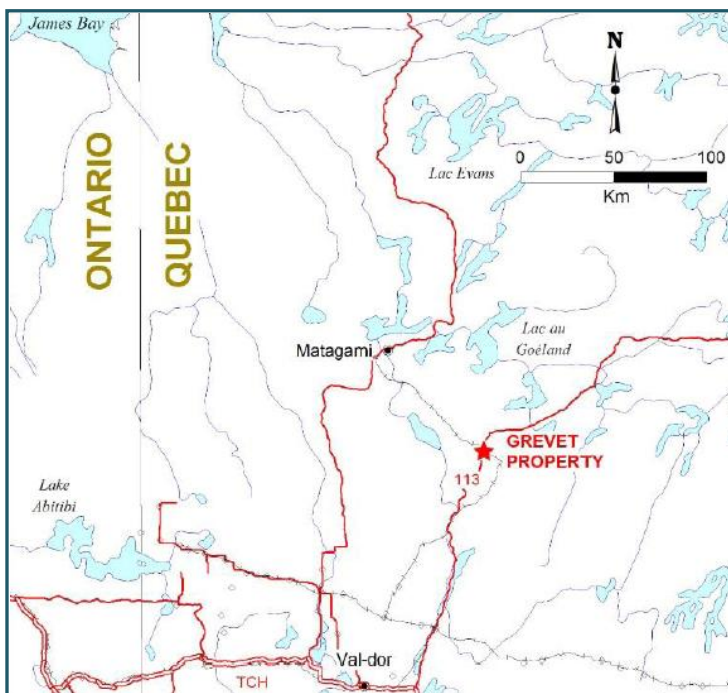
- 2,500 metre drill program at Key Lake SW Uranium project.
- 3,000 metre drill program at Grevet REE project.
- 3,000 metre drill program at Bottom Brook REE project.
- 1,000 metre drill program at Alexis River Uranium project.
- Target new acquisition and strategic partnership opportunities
- Application for new European HREE project.

Overview of Projects

REE properties

➤ Grevet REE Property, north-western Quebec

Kirrin entered an option agreement in February 2010 with Michel Proulx ("MP"), with Kirrin required to spend Cdn\$ 1.85 million on a 4-year exploration program, including a minimum first year commitment of Cdn\$ 200,000, and make payments to MP of Cdn\$ 20,000. In addition, Kirrin will pay Cdn\$ 150,000 to MP on the receipt of a positive feasibility study and MP will retain a 1.0% NSR royalty on all minerals produced from the property, Kirrin being able to purchase half of this NSR for Cdn\$ 500,000.



Interest in the REE potential of the Grevet area began in 1988 with the identification of carbonatite occurrences. Subsequently, a rock grab sample revealed the attractive REE chemistry, with grades of 0.30% up to 5.89% LREO.

Kirrin commenced exploration in April 2010. Historic samplings were confirmed and 29 potential REE related occurrences discovered. 156 rock samples were collected for REE analysis, results confirming the potential of the Grevet REE property to host REE-bearing carbonatite deposits with LREO grades of definite interest. Results included 14.08% LREO and 1.61% LREO over 2.2 metres. The main Grevet carbonatite showing can be traced through several other carbonatite showings along strike for a strike extent that may exceed 2 km.

Kirrin completed a geophysical interpretation program at Grevet in late 2010 that confirmed the relationship between magnetic signatures and the carbonatite and carbonatite-magnetite showings. Importantly, this identified **15 key targets** that were followed-up during the 2011 Grevet exploration program.

On October 12, 2011, Kirrin announced that the summer's sampling results surpassed those from 2010. 92 rock samples were collected during the summer program and results include **20.35% LREO**, an additional four samples from other showings within the Grevet property that assayed **>10% LREO** and 14 samples that ran between **1.0% and 10% LREO**. These REE grades not only confirm the prospectivity of the Grevet REE property to host REE-bearing carbonatite deposits but also extend the area underlain by potentially high-REE grade carbonatite several hundred metres northwest of the main carbonatite showing.

On June 21, 2011, Kirrin announced the doubling of the area of its Grevet REE Project from 1,049 ha to 2,024 ha. The additional lands (“Grevet Extension”) lie adjacent to Grevet’s northern boundary and before the Company recognised their carbonatite potential they enjoyed a 70-year history of gold exploration following the discovery of the Flordin Gold Project adjacent to the west of the Property. Kirrin has the data from 115 holes that have been drilled on the Grevet Extension, of which 45 were drilled along the Lac Cameron Sud showing.

The development of the exploration program for the Grevet Extension will await the results from the current summer field program on Grevet REE, as well as compilation of all existing mineral exploration data.

Kirrin completed an intense prospecting program in summer 2011. Twenty-three new carbonatite showings were discovered during the program and at least 103 carbonatite showings identified during the 2010 program were re-visited to gather additional information. 92 rock samples, comprising 56 diamond saw-cut channel samples, 30 chip samples and 6 grab samples, were collected.

Soil sampling comprised 85 sites that were sampled for both Ah soil horizon and MMI samples along 5 selected lines across the inferred carbonatite body. As well, magnetometer surveying was completed over two areas totalling 11 line-km, one of which corresponds to the area of the inferred carbonatite. Finally, Kirrin also completed a 3.2 line-km reconnaissance gravity survey with stations spaced at 25 m intervals on 3 lines across the area of the inferred carbonatite.

The 2011 program results are being interpreted and the conclusions drawn are expected shortly. Kirrin will integrate all new exploration and other geological data, including the geophysical interpretation of the ground magnetic and gravity data, with the overall intent being to refine target selection and define a specific follow-up program of work, including drill testing in 2012. Kirrin anticipates its consultants will recommend drilling the Grevet REE property by focusing especially on larger, but blind or recessive REE-bearing carbonatites.

It is noteworthy that Grevet is just 20 km north of Lebel-sur-Quévillon, the proposed location for construction by Géoméga of the mill to handle REE ore from its Montviel discovery, 93 km. NNE of Lebel-sur-Quévillon. Grevet enjoys both road and rail connections with this town.

➤ **Bottom Brook REE Property, western Newfoundland**

The **Bottom Brook REE** Property was acquired by Kirrin in 2008 from **Ucore** (UCU – TSX.V). The REE potential was re-evaluated during 2009 and the results of the subsequent exploration program exceeded expectations.

There are now **9 REE target** areas at Bottom Brook. Drilling results indicate that the Upper Zone contains very high-grade mineralization over narrow intervals, for example, drill hole LP08-13 intersected **15% Total Rare Earth Oxide (TREO)** over 0.3m.

The discovery zone at Bottom Brook is the A Zone. Kirrin has added the Bottom Brook B Zone where assay results of **1.69% and 6.80% TREO** were obtained from two grab samples collected from angular boulders containing abundant magnetite and hematite mineralization. The highest grade sample (6.80% TREO) includes individual assays of



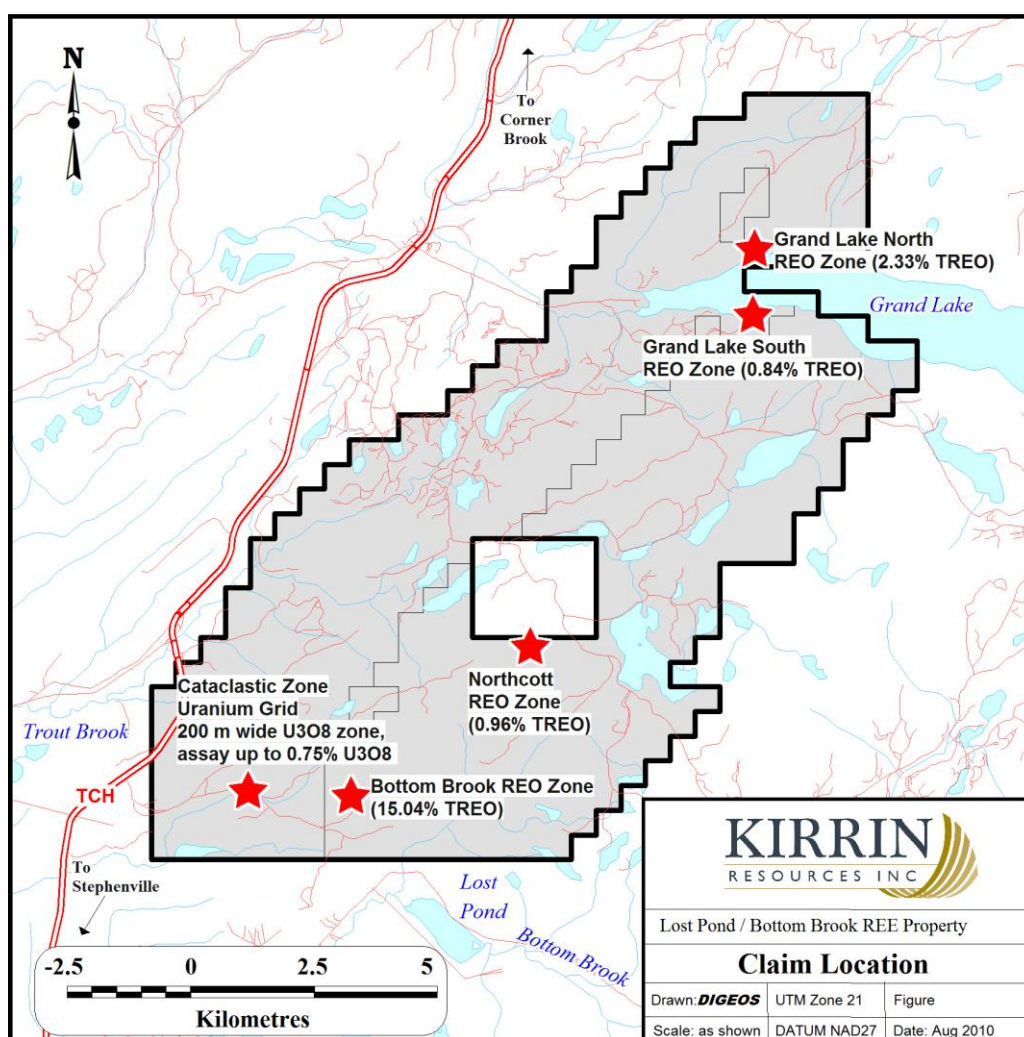
42% Ce, 22% La and 18% Nd. This mineralization is proximal to a discrete isolated magnetic high anomaly, which is located approximately 1 km northeast of the Bottom Brook A Zone.

Kirrin has also added the Bottom Brook C Zone. This area was isolated for follow-up because of the presence of a discrete, isolated magnetic high. Sampling results ranged from **1.50% to 10.04% TREO**. The highest grade sample (10.04% TREO) includes individual assays of 41% Ce, 22% La and 19% Nd. The gamma profile of the hole contains high amplitude spikes with narrow wave-lengths across the mineralized interval. This pattern of gamma profile is similar in all holes of the Upper Zone.

The magnetic high at Bottom Brook A Zone is offset in a north-south direction into Upper and Lower Zones, both of which are associated with REO minerals. Results indicate that the Upper Zone contains very high-grade mineralization over narrow intervals. For example, LP08-13 intersected **15% TREO** over **0.3m**. The gamma profile of the hole contains high amplitude spikes with narrow wave-lengths across the mineralized interval. This pattern of gamma profile is similar in all holes of the Upper Zone.

The Lower Zone contains significant mineralization (**1-2% TREO**) with much wider intersections (**15.3m** and **7.5m**). The gamma profiles of holes drilled into the lower zone tend have more consistent amplitude over the entire mineralized interval. The Lower Zone contains significant mineralization (**1-2% TREO**) with much wider intersections (15.3m and 7.5m). The gamma profiles of holes drilled into the Lower Zone tend have more consistent amplitude over the entire mineralized interval.

Based on its drilling to date Kirrin is hopeful of finding an in-situ resource at Bottom Brook with rock values of up to \$ 10,000 per tonne.



Work to date at Bottom Brook indicates that the REE mineralization is occurring within a cluster of isolated magnetic anomalies in the 0.5 km to 2.0 km size range and sampling in proximity to the magnetic targets has shown good indications of high grade TREO with a substantial Heavy REE component. Additional compilation of the previous analytical results from the drilling and prospecting has defined a substantial Heavy REO component to the Bottom Brook mineralization which consistently gives a HREO/TREO of between 8% and 15%. An unpublished internal report on the mineralogical and chemical characterization of the REO mineralized zones by SGS Lakefield Research Ltd. concludes that monazite, zircon, allanite and apatite are the principle hosts of the REO at the Bottom Brook Zone A.

The proposed 2011 REE exploration program comprises one or more of detailed prospecting, rock sampling, geological mapping, a soil geochemical survey, and a ground based magnetics survey followed by magnetic data modelling and trenching. A 3,000 metre drill program is expected to follow in 2012.

The REO Zone at Bottom Brook is one of the few known occurrences of REE in Newfoundland and represents a new and exciting potential minerals deposit. The Bottom Brook project is **close to infrastructure**, being adjacent to the Trans-Canada Highway and 25 km from the mineral export facility at Stephenville.

Kirrin has expended Cdn\$ 900,000 at Bottom Brook, its budget for 2011 is Cdn\$ 300,000 and for 2012 is Cdn\$ 700,000.

The option agreement with Ucore was revised in October 2011 and allows Kirrin to earn a 50% interest in the Bottom Brook REE Property, which comprises 757 contiguous claims spanning a territory in excess of 270 square kilometres, by spending Cdn\$ 2.0 million on exploration and issuing 300,000 shares to Ucore by 31 December 2014. Kirrin is current on its earn-in obligations.

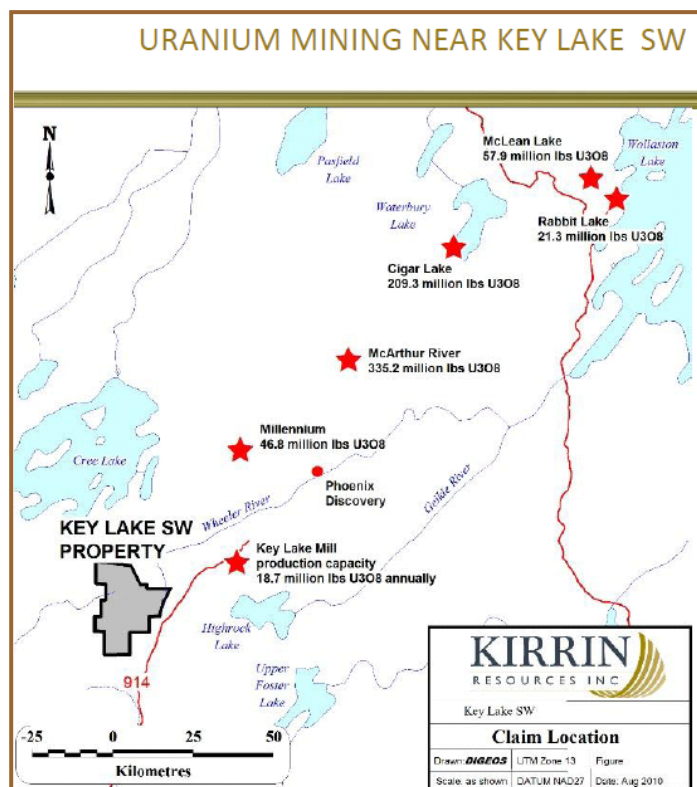
Uranium properties

➤ Key Lake SW Property, Saskatchewan

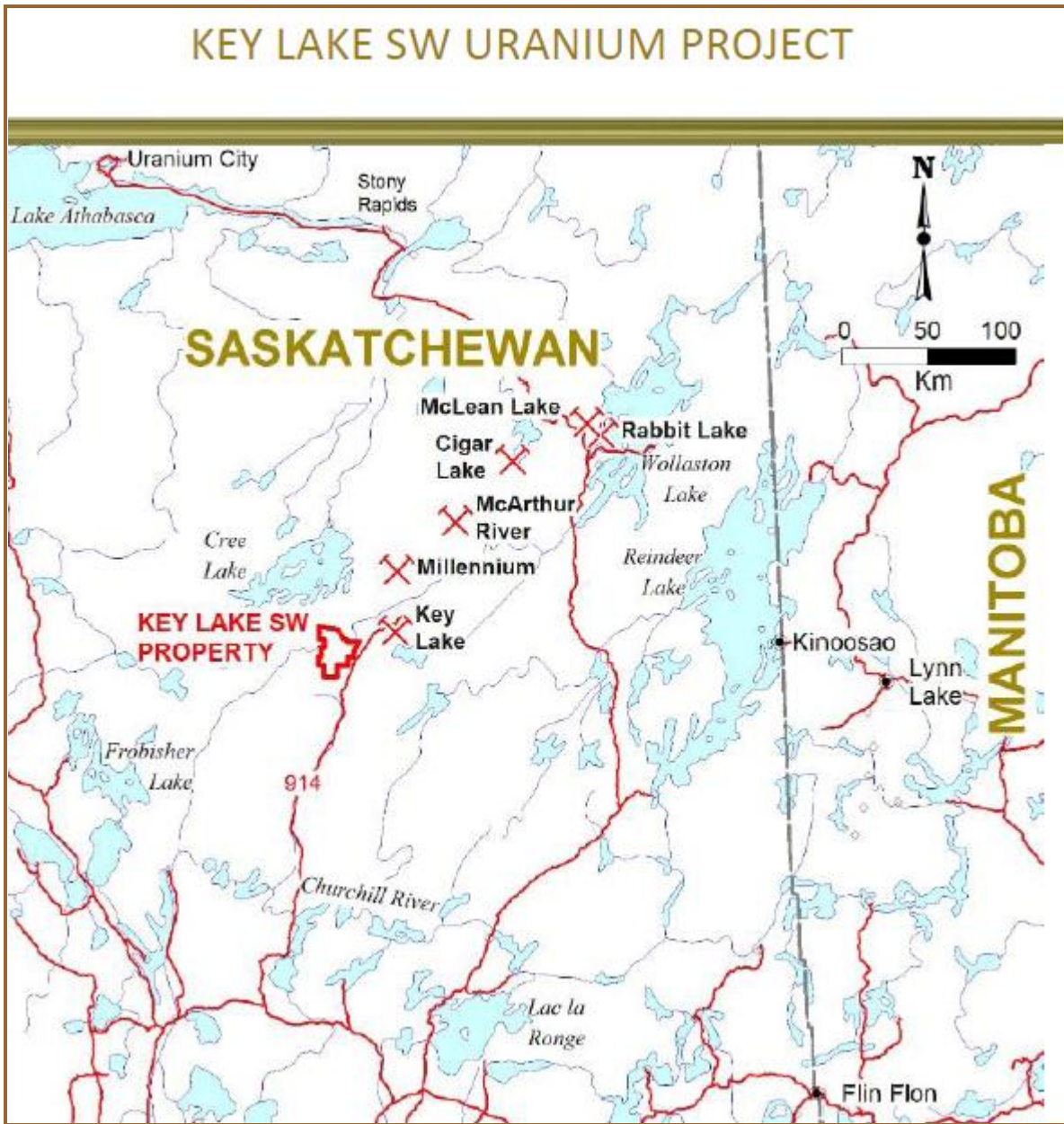
Kirrin's Key Lake SW Property (KLSW) is located at the eastern margin of the Athabasca Basin in Saskatchewan, home to the most productive and highest grade uranium mines in the world, with roughly 25% of global production coming from this area. Kirrin's target at KLSW is basement-hosted unconformity-type uranium, similar to Cameco's basement-hosted Millennium Deposit, which is located about 50 km to the north-northeast, and the former Key Lake Mine which is located about 35 km east-northeast.

Of particular importance, the review of the technical disclosures by Denison Mines (TSX – DML) regarding the recent Phoenix Discovery on the Wheeler River, just 60 km north-east of KLSW, has revealed many geological similarities between Phoenix and KLSW.

The area encompassed by KLSW was subject to several phases of exploration between 1969 and 2009, including airborne magnetic-radiometric-VLF and INPUT EM surveys, as well as limited follow-up geology, sampling and drilling. Follow-up prospecting resulted in anomalous uranium in outcrop ranging up to 0.26% U3O8. During March 2008, Majesta Resources conducted a helicopter-assisted lake water and sediment sampling program at some 180 lakes.



The samples were tested for radon and the lake sediments were analyzed by multi-element ICP for uranium and a suite of other elements.



Exploration on the KLSW Property by Kirrin commenced in April 2010 with a 1,076 line-kilometre magnetic-electromagnetic (EM) airborne survey flown at 400 metre spacing. The Condor Consulting evaluation and interpretation report identified 19 priority targets that warrant follow-up assessment. All are prospective for ingress style (i.e. basement hosted) uranium deposits along the geologically favourable Wollaston Group basement trend. Kirrin then completed a 1,531 line-kilometre helicopter-borne time-domain electromagnetic geophysical survey, flown in February 2011 using Geotech Ltd.'s Versatile Time-Domain Electromagnetic (VTEM Plus) geophysical system, at 150 metre spacing.

Savaria Geophysics Inc. interpreted the 2011 survey data and integrated it with that from 2010. The interpretation by Savaria identified 35 geophysical targets at KLSW, with 13 rated as “*High Priority*”, 5 rated as “*Moderate Priority*” and 17 rated as “*Low Priority*”. Potentially of greater importance, based on a marked change in the magnetic patterns, the Wollaston-Mudjatik domains boundary may actually be a few kilometres west from where it is shown on published government geological maps, and thus Wollaston Domain may

underlie the eastern portion of the KLSW property. Finally, the magnetic and airborne EM data indicates there are outliers of geologically favourable Wollaston Domain volcanic-sedimentary rocks within the eastern part of the Mudjatik Domain which underlies the central and western parts of the KLSW property. These outliers include several linear belts and zones of probable graphitic lithology.

Savaria recommended that follow-up ground geophysical surveys, plus other supplemental exploration be conducted at, as a minimum, the high and moderate priority targets. Ground follow-up field work commenced in August and was completed in September. The conclusions from that program are expected in November.

On September 21, 2011, Kirrin announced that it had staked an additional 4,185 ha adjacent to its KLSW Uranium Property. The staked area is situated in the Wollaston geological domain and is about 50 km south of the Wheeler River, the site of Denison's Phoenix discovery and about 25 km southwest of the former Key Lake Mine. Exploration in the immediate area of the staking is very active.

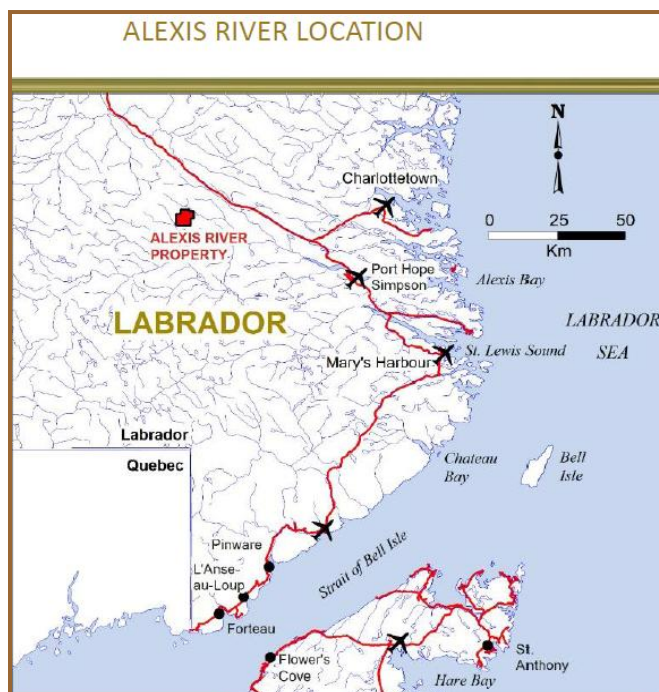
Kirrin may earn a 70% interest in the KLSW Property by spending Cdn\$ 3.0 million on exploration by December 31, 2015, making payments to Majesta Resources of Cdn\$ 268,000 by December 31, 2012 and issuing 350,000 shares to Majesta by June 30, 2010. Upon Kirrin fulfilling its earn-in obligations, the parties will form a 70:30 joint venture, with each partner contributing its pro-rata share of future expenditures, or Majesta may elect to convert to a 2.25% NSR. Kirrin has the right to acquire up to 1.25% of the 2.25% NSR for consideration of \$1.0 million per 1.0% NSR. Kirrin is current on its obligations.

➤ Alexis River Uranium Property, southeastern Labrador

The Alexis River Uranium Property was selected because of a remarkable sample result – over 0.1% U₃O₈ – in lake bottom sediment. The Property was drilled by Kirrin in its second season and the best intercepts were 0.754% U₃O₈ across 0.2 metres at 58.9 metres depth and 0.188% U₃O₈ across 0.85 metre at 197.7 metres.

Radon results from Alexis River were released in September 2011 and Kirrin believes it has now pinpointed the drill sites for a 1,000 metre drill program in 2012.

The most anomalous sample site identified by a government sponsored survey in the 1980s, with 1,030 parts per million (ppm) U, was in southeastern Labrador on the Alexis River Property. The survey comprised 18,640 lake sediment and water samples and the average uranium content was 3.8 ppm U. Follow-up sampling by Kirrin increased this grade to a remarkable 2,370 ppm U with the average being 721 ppm or 0.085 wt.% U₃O₈ and 175 to 1,070 ppm molybdenum. These results were confirmed by further systematic lake sediment sampling conducted in February and June 2008.



Kirrin drilled 1,295.5 metres in 5 holes in autumn 2008 to test beneath Anomaly Lake. Assay results from the core included 0.754% U₃O₈ across 0.20 m, 0.044% U₃O₈ across 5.00 m, 0.069% U₃O₈ across 2.00 m (hole AL 0802) and up to 0.188% U₃O₈ across 0.85 m (hole AL 0805).

On September 12, 2011, Kirrin announced the completion of radium analysis at the Alexis River Property. The interpretation concluded that the most likely explanation for the anomalous lake sediment U content is that a high grade uranium source exists in either the rocks immediately beneath or adjacent Anomaly Lake, and both uranium and radium were leached from this source and transported hydromorphically along a structure passing through Anomaly Lake. Interpretation of the analysis points to two narrow uranium anomalies, correlating well with uranium values, as drill targets within the confines of Anomaly Lake.

Alexis River is not affected by the Inuit Labrador moratorium. One uranium consultant described the project as “probably one of the best grass-roots properties we know of outside the Athabasca Basin, in an exploration friendly environment and relatively close to infrastructure”.

Under an agreement in July 2007 with **Altius Minerals** (ALS - TSX) Kirrin may earn a minimum 60% interest in the Alexis River Property over 5 years by spending Cdn\$ 1.25 million on exploration, including a minimum first year commitment of Cdn\$ 175,000, and issuing 250,000 shares to Altius. Upon Kirrin fulfilling its earn-in obligations, Altius may elect to either form a 60:40 joint venture, with each partner contributing to its pro-rate share of future expenditures with Altius retaining the right to dilute to a 10% net profits interest. Kirrin is current on its obligations.

Finance

At the end of December 2010, Kirrin closed a non-brokered private placement of 15 million flow-through units at Cdn\$ 0.10 per unit for gross proceeds of Cdn\$ 1.5 million. Each flow-through consists of one flow-through common share and one-half of one common share purchase warrant. Each full warrant is exercisable into one common share at a price of Cdn\$ 0.14 per common share for 12 months from the date of the issuance and Cdn\$ 0.18 per common share for the following 12 months.

At the end of June 2011, Kirrin had a working capital of Cdn\$ 349,000.

Management

Bryan Benitz, Chairman, is a specialist in corporate finance and development. He enjoys an international reputation for identifying growth opportunities and has an enviable track record of success.

Derek Moran, Director, President and CEO, his career in natural resources commenced in 1977 and now includes extensive management and international corporate finance and development experience. He qualified as a chartered accountant while with KPMG.

Peter Farkas, Director, CFO and Company Secretary, is a finance executive and lawyer, provides practical financial, strategic planning, legal and other senior management advice to his clients. He was previously a senior corporate partner with Howard Mackie (now Borden Ladner Gervais) of Canada.

Jack Perraton, is Senior Partner of Perraton Law of Calgary. He was Chancellor of the University of Calgary 1998-2002. Mr Perraton has forty years of experience in natural resource transactions in Canada and is a director and audit committee member of several listed companies.

Henry Tondowski, is an independent investment banker. He had a long career in London, culminating as a Director of Industrial Bank of Japan International. He advises a private natural resources fund in Switzerland and is a director and audit committee member of several companies.

Technical team

Dr. David Lentz, REE Technical Advisor, has particular expertise in rare earth elements and other granophile mineralized systems. His responsibilities with Kirrin include REE project selection both in Canada and internationally. Dr Lentz is Professor of Economic Geology at the University of New Brunswick. Prior to this he worked as a researcher with the Geological Survey of Canada and the New Brunswick Department of Natural Resources. Dr Lentz is a qualified person under the meaning of National Instrument 43-101

Dr Reg A Olson Ph.D., P. Geol., North American Uranium Advisor, one of Canada's foremost uranium advisors for which he commenced exploring in 1969. Between then and 1982, he explored extensively in western and northern Canada for various types of uranium deposits, including both Athabasca-type and Elliott Lake-type unconformity-related deposits, sedimentary and roll-front type deposits, vein type deposits,

uranium-bearing IOGC deposits, and uraniferous pegmatites. Among his exploration successes are the discovery of the George Lake and Goose Lake gold deposits at Back River region, NWT and the gold deposits existing within the Committee Bay region of Nunavut. Dr Olson is a qualified person under the meaning of National Instrument 43-101.

Investment recommendation:

Kirrin Resources operates two **REE** exploration projects in **Newfoundland & Labrador** and **Quebec** and two uranium exploration targets in **Newfoundland & Labrador** and **Saskatchewan, Canada**.

The **Grevet Property** encompasses a carbonatite intrusive body and dyke complex and its acquisition was premised on the potential for an open pit operation. Sampling results include a remarkable **20.35% LREO (20.41% TREO)** in a grab sample from a carbonatite dykelet and 1.61% LREO across 2.2 metres from a wider carbonatite dyke. An additional four samples from other showings assayed >10% LREO and 14 samples ran between 1.0% and 10% LREO.

These results confirm the potential of the Property to host REE-bearing carbonatite deposits with LREO grades of definite interest. The 20.41% TREO grade may be the highest recorded in Quebec.

On June 21, 2011, Kirrin announced the doubling of the area of its Grevet REE Project from 1,049 ha to 2,024 ha.

Mineralization in the REO Target Area at **Bottom Brook** shows a significant enrichment in the light rare earth elements (LREE, La – Sm) versus the heavy rare earth elements (HREE, Eu – Lu) although additional compilation of previous analytical results from drilling and prospecting has defined a substantial HREO component to the Bottom Brook mineralization which consistently gives a HREO/TREO of between 8% and 15%. Intensive sampling yielded **14.47% LREO** (including 51% cerium, 27% lanthanum and 15% neodymium), consistent across all samples with >1% TREO. Drilling has intersected multiple zones of mineralization including 4.32% TREO over 2 metres and 1.16% TREO over 15.3 metres.

A recently completed re-evaluation of the airborne data and the prospect sampling data base has defined a total of nine target areas for follow-up. Based on its results to date, Kirrin is hopeful of finding an in-situ resource with per tonne rock values up to \$ 10,000.

The **Bottom Brook** and **Grevet** REE projects are both situated close to infrastructure.

As a new and dynamic participant in REE and uranium exploration, at a current depressed market capitalization of just Cdn\$ 2.8 million, strongly supported by its highly skilled management and technical team, in our view, the shares of Kirrin offer a strong upward potential.

Our next price target is Cdn\$ 0.25.