

# HALLGARTEN & COMPANY

**Initiating Coverage** 

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Search Minerals (TSX-V: SMY)

Strategy: LONG

Key Metrics				
Price (CAD)	\$	0.09		
12-Month Target Price (CAD)	\$	0.27		
Upside to Target		200%		
12 mth high-low	\$0	0.05-\$0.10		
Market Cap (CAD mn)	\$	13.1		
Shares Outstanding (millions)		146.0		
Fully Diluted (millions)		184.0		
		FY15*	FY16e	FY17e
Consensus EPS			n/a	n/a
Hallgarten EPS (CAD)			-0.007	-0.009
Actual EPS (CAD)		-0.003		
P/E		n/a	n/a	n/a
* November FY				

## Search Minerals

### The Tough Survivor in REEs in Canada

- + One of the very few Rare Earth projects that has continued moving forward within Canada
- + District concept 70 km x 8 km, containing Foxtrot Resource and Deep Fox and Fox Meadow prospects, and up to 20 other potential prospects
- + Pilot plant designed using proprietary technology has yielded first batch of commercially viable REE oxides for further refining opportunities,
- + Successful pilot plant results could increase economics of project, with increased recovery rates of Neodymium and Praseodymium, and lower operating costs by substituting high cost hydrochloric acid with lower cost sulfuric acid
- + Initial capex of \$152mn on the open-pittable resource and with potential to head underground
- + Growing recognition that demand for Rare Earth magnets for use in EVs/HEVs should parallel (if not exceed) the growth in demand for Lithium or Cobalt
- + While in an isolated province the deposits all have excellent port and road access
- + Strong relations with the local communities and the NunatuKavut Community Council
- Financing remains a challenge in the REE space, with offtakers still wary after their experiences during the late boom when so many players turn out to not be serious, while equity markets interest in REE has not manifested itself in funds for financings
- The Rare Earth space is not out of the woods yet and is only as fragile, or as strong, as the reactivation in the broader mining markets

#### **Survival of the Fittest**

If one had been asked in 2010 to predict which of the 200-plus (supposedly) players in the REE space on the TSX and TSX-V would be the amongst the top ten survivors seven years later, Search Minerals would unlikely have been on the list. And yet by a recent reckoning that we undertook the tally of the surviving (credible) listed stocks dedicated to Rare Earths on Canadian markets consists of less than one handful. Merely surviving was a prodigious task and to have actually maintained forward momentum is an even more notable achievement by Search.

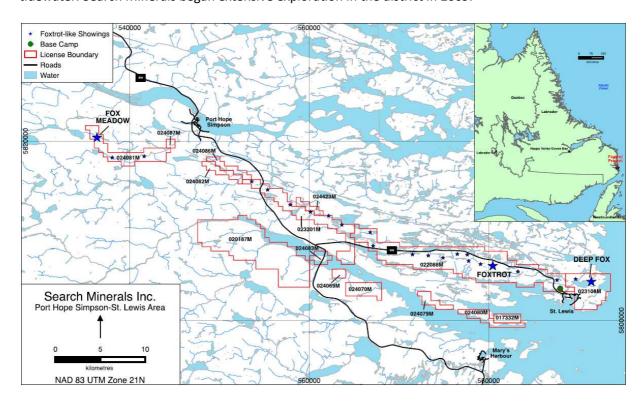
The company's strategy is to leverage its scalable breakthrough Direct Extraction Metallurgical Process (patent pending) and its accessible district-scale resources in SE Labrador to attract two important strategic partners:

- > an investor to finance the bankable feasibility study for development of its Foxtrot project
- > an offtake partner whose long-term commitments will provide the stable income necessary to access capital financing for the project

Search believes that success in securing strategic partners is linked to the completion of the pilot testing of its proprietary Direct Extraction Metallurgical Process. The pilot plant testing has demonstrated the ability to produce a high purity mixed rare earth oxide (REO) concentrate. With the proceeds from its first development, Search will accelerate its exploration cycle in the District and bring other deposits into production achieving operational economies and increasing shareholder value.

#### **Port Hope Simpson**

The company's focus is on the exploration and development of the Port Hope Simpson Critical Rare Earth Element District in Southeastern Labrador. This district is comprised of 15 licenses, totaling 730 mineral claims covering an area of 18,250 ha. The Project is located approximately 36 km east-southeast of Port Hope Simpson, and approximately 10 km west-northwest of St. Lewis, Labrador. The majority of the property is accessible via Highway 513, which is an all season gravel highway and accessible on tidewater. Search Minerals began extensive exploration in the district in 2009.



The nearby communities of Port Hope Simpson, in the northwest, and St. Lewis and Mary's Harbour, (both at the lower right on the map), have port access as well as airstrips that can facilitate transportation of goods required for exploration and development programs. All three communities have deep-water dock facilities.

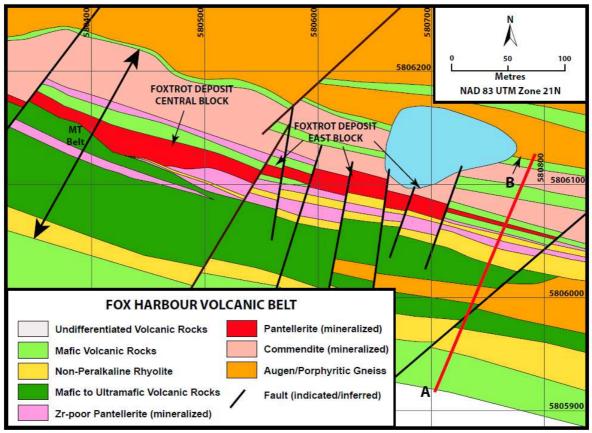
#### Geology

Search's territory is considered to be part of the Eastern Grenville Geological Province. The Foxtrot deposit is located approximately 10 km west of St. Lewis and 0.5 km south of Highway 513 in the MT

sub-belt of the Fox Harbour volcanic belt, which is part of the Fox Harbour domain. The Fox Harbour domain is bounded to the north by the Lake Melville terrane, to the west and southwest by the Mealy Mountains terrane, and to the south by the Pinware terrane.

The Fox Harbour volcanic belt is approximately 64 km-long and ranges in width from less than 50 m in the northwest to 3 km in the east. Units strike westerly to northwesterly, parallel to bounding faults, and dip steeply northward.

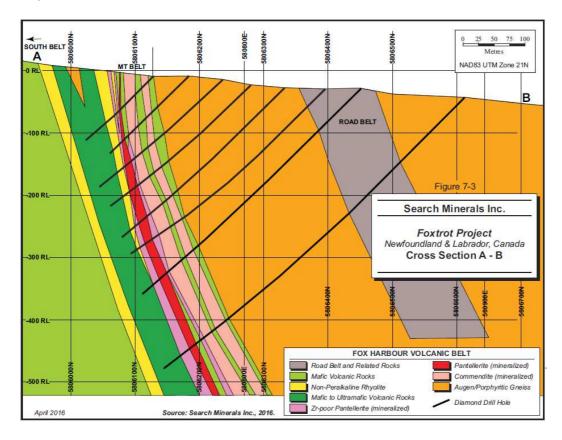
The belt contains one (in the northwest) to three (in the east) sub-belts of bimodal rocks with mainly REE-bearing felsic peralkaline flows and ash-flow tuffs and mafic to ultramafic volcanic and related subvolcanic units. Feldspar augen gneisses and porphyritic units, including crystal tuffs in the eastern portion of the belt, predominantly occur between the three sub belts. Sedimentary supracrustal units, including quartzite and locally derived volcanoclastic rocks sourced by felsic (commonly peralkaline) and mafic units, are locally abundant.



The three bimodal sub-belts (Road belt, Magnetite belt and South belt) have been the focus of REE exploration. The Road belt, is on the northern boundary of the Fox Harbour Volcanic belt, and can be traced throughout its full length, but the Magnetite and South belts have only been observed in the eastern 30 km. The mineralized units within the subbelts, predominantly pantellerite (a peralkaline rhyolite with high Fe and low Al contents) and commendite (similar to pantellerite but with less Fe and more Al), outcrop poorly and commonly occur in bogs or water-filled topographic lows. These units exhibit relatively high radiometric (anomalous U and Th values) and relatively high magnetic (anomalous

concentrations of magnetite) signatures that, when combined, are excellent indicators of REE mineralization.

Airborne and ground-based radiometric-magnetic surveys clearly outline the three mineralized belts. High-grade mineralization, characterized by Dy from 100–300 ppm, is predominantly hosted by fine-grained, layered to massive, pantellerite. Lower grade mineralization, characterized by Dy from 20–100ppm, is predominantly hosted by fine-grained, mostly massive commendite. Mineralized units are commonly interbedded with mafic volcanic units, quartzite, and locally derived volcanogenic sedimentary rocks. Most of the REE mineralization occurs in allanite and fergusonite; minor amounts of REE occur in chevkinite, monazite, bastnasite and zircon. Most of the light REE (i.e., La to Sm) in the mineralization occurs in allanite, whereas most of the heavy REE (i.e., Eu to Lu) and Y occurs in both fergusonite and allanite.



Primary magmatic deposits can be subdivided into peralkaline oversaturated, peralkaline undersaturated, and carbonatite deposits. Peralkaline deposits, both oversaturated (quartz bearing or quartz normative) and undersaturated (nepheline-bearing or nepheline normative) are mainly HREE-enriched, while carbonatite deposits are LREE-enriched; some carbonatite high level vein systems are also HREE-enriched. These REE deposits are formed by concentration of REE and other incompatible elements (e.g., Zr, Nb, F, U, Th) in the upper portions of magma chambers. These incompatible element enriched magmas are either crystallized in place, transported to locations proximal to the magma chamber, or transported to surface and deposited as volcanic products. Peralkaline oversaturated

volcanic-hosted deposits are predominant on Search's territory (e.g., Foxtrot, Deepwater Fox) and the Brockman deposit in Australia.

#### **Exploration**

Since the discovery in 2010, extensive exploration has been completed on the Foxtrot deposit. Exploration in 2010-2015 consisted of prospecting, mapping, litho-geochemical grab sampling, clearing, hand trenching, channel sampling, and diamond drilling. A total of 72 diamond drill holes for approximately 18,900m were completed at the project in three phases between 2010 and 2012. The drilling was followed by an extensive surface channel sampling program with a total of 300 samples totaling 133.7m in length collected during the 2014 and 2015 field seasons.

#### **Pilot Plant & Metallurgy**

In recent weeks the company announced the initial results from the now completed pilot plant operation that it has located at SGS Laboratories in Lakefield, Ontario. This cost CAD\$1.9mn, of which \$1.25mn was funded \$500,000 with from Atlantic Canada Opportunities Agency (ACOA) and \$750,000 of RDC (Research & Development Corporation of Newfoundland & Labrador).

The plant processed over three tonnes of material representative of the Foxtrot Deposit using the patented Search Minerals Direct Extraction Process. The pilot plant testing demonstrated the ability to produce a high purity mixed Rare Earth Oxide concentrate. In addition, the pilot plant testing demonstrated the ability to bring uranium, thorium, zinc, and iron levels below those thresholds expected by refineries that separate mixed REO concentrates into individual Rare Earth elements.



The process starts with finely crushed ore (vial 1 on the far left). The ore is then treated with acid, heated to  $180^{\circ}$  C and then water leached. The pH is then raised to precipitate iron to give an orangey stained residue (as seen in vial 2). This is the major solid product from the process and it is 'dry stackable' to give a stable, compact residue impoundment.

The solution is then treated with uranium ion exchange and precipitation to produce an impure mixed rare earth carbonate (vial 3). This material is about 35% REE content by this stage and is re-leached and purified in a second step in the Search process.

After re-leaching, the process removes thorium, iron, aluminum and silica as a precipitate (which is recycled so it does not show up as a final product) and then the zinc is precipitated as zinc sulphide (Vial 4). This is +60% Zn and saleable as synthetic zinc concentrate.

Then the solution (that is now Thorium-, Uranium- and Zinc-free) is treated with oxalic acid to form a high purity rare earth oxalate (Vial 5). The rare earth oxalate is then heated to a high enough temperature to convert the rare earth oxalate to a rare earth oxide (Vial 6). The rare earth oxide is red due to formation of cerium dioxide when heated. This vial's contents are the Holy Grail of the Rare Earth world, a sellable end product.

The program achieved what the company deemed to be "excellent" metallurgical results. Some of the highlights of the pilot plant run are:

- Average extractions of 85% neodymium (Nd), 86% praseodymium (Pr), 68% dysprosium(Dy) by acid treatment/water leaching
- Average Losses of 2% Nd, 2% Pr and 0.3% Dy through iron removal
- > Separation of uranium from the rare earths by ion exchange to below detection limits in solution
- Precipitation of +99.9% of the rare earth elements as a mixed carbonate product containing ~35% total rare earth content. (Average of 5.3% Nd, 1.48% Pr, 0.58% Dy)
- Demonstration of the re-leaching and purification of the mixed carbonate product to produce REO material for refining with low Th (8.6 g/t), U (<0.5 g/t) and Zn (64 g/t)
- > The refining of the mixed rare earth carbonate product was performed in a sulfuric acid medium with careful control of thorium (precipitation with magnesium carbonate) and zinc (precipitation with hydrogen sulfide)
- The final product was formed by oxalic acid precipitation and calcination
- Generated engineering data for all parts of the circuit from sample preparation to production of the mixed rare earth oxide
- > Produced environmental samples (leach residues, precipitates, and barren solutions) for characterization.

#### The testing process included:

- extensive bench scale testing of the new sample and optimization of the chemical conditions for rare earth element recovery from the Foxtrot material
- ➤ a 5-day commissioning campaign in December 2016 to ensure smooth pilot operation
- > a 10-day production campaign in January 2017 from crushed sample to mixed rare earth carbonate
- > a 4-day refinery campaign to process mixed rare earth carbonate precipitate to mixed rare earth oxide

#### **Resource Estimate**

The latest NI43-101 Technical Report and revised resource estimate dates from April 2016 and was prepared by Roscoe Postle Associates (RPA). The current Mineral Resource estimate is based on data from all three phases of the aforementioned drilling, and all channel sampling from 2010 to 2015.

RPA prepared two previous Technical Reports on the Foxtrot Project, a PEA dated June 15, 2012 and a PEA Update dated May 9, 2013. The 2012 Mineral Resource estimate, used as a basis for the two previous technical reports was carried out by Benchmark Six Inc..

The previous Mineral Resource estimate on the Foxtrot Project, in 2012, had a lower grade and a higher tonnage. The increase in TREE grade and the decrease in tonnage for the Foxtrot Mineral Resource is partly due to reinterpretation of wireframe models. The cut-off methodology has been changed, which contributed to the increase in grade and decrease in tonnage, as does the constraint of Mineral Resources within a design pit shell.

	Cut-off	Tonnage	Dy	Nd	Pr	LREE	HREE	TREE
	NSR	Ore	•			%	%	%
OPEN PIT	NSN	Ole	ppm	ppm	ppm	/0	/0	/0
	Ć1CE	4 120 000	177	1 202	272	0.00	0.17	0.00
Indicated	\$165	4,129,000		1,393	372	0.69		0.86
Inferred	\$165	228,000	179	1,378	368	0.68	0.17	0.85
UNDERGROUND								
Indicated	\$260	3,263,000	209	1,602	429	0.78	0.19	0.97
Inferred	\$260	1,730,000	201	1,602	430	0.80	0.19	0.99
Total Indicated		7,392,000	191	1,485	397	0.73	0.18	0.92
Total Inferred		1,958,000	199	1,576	423	0.79	0.18	0.97
OXIDES	Cut-off	Tonnage	DyO3	NdO3	Pr6O11	LREO	HREO	TREO
	NSR	Ore	ppm	ppm	ppm	%	%	%
OPEN PIT								
Indicated	\$165	4,129,000	203	1,625	449	0.83	0.20	1.03
Inferred	\$165	228,000	206	1,607	445	0.82	0.20	1.02
UNDERGROUND								
	\$260	3,263,000	240	1,868	518	0.94	0.23	1.17
Indicated	\$260 \$260	3,263,000 1,730,000	240 231	1,868 1,868	518 520	0.94 0.96	0.23 0.23	
UNDERGROUND Indicated Inferred Total Indicated	•			,				1.17 1.19 1.09

The Foxtrot deposit is open at depth. Current drilling suggests that the resource shows good grade continuity with depth, with no notable drop in grade down dip.

There is potential for the delineation of additional resources at depth along strike, both east and west of the currently delineated Foxtrot deposit, however, significant pantellerite mineralization has not been mapped at surface to the east and west along strike. Drilling indicates that the area immediately northeast (down plunge) of the current wireframe solids shows good potential to extend the Foxtrot resource.

#### **Project Economics**

In its latest iteration the Foxtrot Project is projected to process 360,000 tonnes annually at full production, at an average grade of 0.98% TREE. At this throughput it would produce an average of 3.3 million kilograms of REOs per year.

Key metrics for the project are:

- > 1,000 tonnes per day processing rate
- Feed grade-weighted average REE recovery of 76.8%
- ➤ LREE separation charge of US\$10/kg (only applied to elements deemed economic for separation and purification Pr and Nd)
- ➤ HREE separation charge of US\$20/kg (only applied to elements deemed economic for separation and purification Eu, Gd, Tb, Dy, Er, Yb, and Lu)
- Revenue is assumed to be realized at the time of production
- Average NSR value is \$353/t. Pre-production period: two years
- ➤ Life of Mine: 14 years
- ➤ Mine life capital consists of \$152mn initial capital, \$79mn sustaining and closure capital for a total capex of \$232mn
- ➤ Average operating cost over the mine life is \$238/t processed

It is assumed that elements that are not economic to separate in current market conditions will be kept by the separator with the option to refine to market grade purity should market conditions improve. This mirrors the stated plans of a number of developers in the REE space.

The study used Rare Earth prices based on independent, long-term forecasts.

The economic analysis indicates that the project yields:

- pre-tax Net Present Value (NPV) of \$93mn at a 10% discount rate
- > after-tax NPV of \$48mn at a 10% discount rate

Foxtrot Project - CapEx				
Item	CapEx \$mn			
Open Pit & Surface Infrastructure	19.50			
Processing	72.00			
Indirects/Owners	28.10			
Contingency	32.60			
Total Initial Capital	152.20			
Sustaining Capital	8.80			
Underground Capital	56.70			
Reclamation/Closure	14.00			
Total Capex	231.70			

Total pre-tax and after-tax undiscounted cash flow is \$327 million and \$226 million, respectively.

Over the LOM, the pre-tax and after-tax Internal Rate of Return (IRR) is 22% and 17%, respectively, with an after-tax payback period of approximately 4.4 years.

It is important to note that the latest metallurgy (vial 2) yields a tailings "product" that is a dry inert stackable residue that can be backfilled into the pit.

#### And....

The Deep Fox (formerly known as Deepwater Fox – despite it being on a hill) prospect is located 12 km east of the Foxtrot deposit, and is the second major discovery within the Fox Harbour volcanic belt. The Deep Fox prospect is easily accessed via a small boat trip across Fox Harbour Pond, as well as by foot via a cut trail near the St. Lewis airport. This deposit has so far been subject to extensive channel sampling that has yielded some significant REE values.

In addition to the Foxtrot deposit and the Deep Fox prospect, Search Minerals has identified and carried out exploration on 19 other Foxtrot-like prospects (Fox Run, Pond West, and Foxy Lady) within the Fox Harbour mineralized belt.

#### **Next Steps**

The plan going forward in 2017 is twofold. Firstly, a drilling program at Deep Fox to determine better the potential of Deep Fox to possibly become the first target for open pit exploitation. Meanwhile environmental permitting will also be undertaken.

The next sizeable undertaking is the work towards a Feasibility Study. This could potentially cost \$16mn including an infill drilling program aimed at upgrading the existing resource's category at either Foxtrot or Deepr Fox.

#### Rare Earths - that sometime object of desire

In 2009 the Rare Earth fervour swept in upon investors who were still grappling with the enthusiasm that had been generated around lithium. Indeed such was the confusion and blending of different nascent "supply crises" in investors' minds that we met with asset managers who were referring to lithium as a REE because no-one had differentiated the two totally different stories for them.

Enthusiasm amongst investors was admirable, but rather indiscriminate. The word "technology" has a special resonance for US investors and they charged at the REE space without really knowing what the technological issues were. Europium was being touted as something new when in fact it has been used in cathode ray tubes since colour television first debuted for the mass market. Pundits initially fanned the excitement with talk of hybrid electric vehicle applications usage but investors then failed to grasp that it was Neodymium and Praseodymium, two of the Light Rare Earths (LREE) that are used in the engines of hybrid autos rather than the HREE.

High strength magnets are used in high-efficiency electric motors, demand for which is growing strongly due to growing demand for electric vehicles and renewable energy infrastructure such as wind turbines. According to IMCOA the permanent magnet market represents 79% of the global rare earth market by value with Neodymium and Praseodymium representing approximately 85% of this market by value.

#### Critical Rare Earth Oxides - a New Buzz

In the first go around of the Rare Earth boom the word "strategic" was the most commonly used term. It seems that "strategic" has gone into eclipse because when one thinks about it the implication is that there is a strategy to which the REE space adheres and excepting China, which is indeed strategic in its approach, there is no evidence of strategy elsewhere. The rising term now is "critical", implying that the metals are critical to the on-going usage and development of various technologies but also that the supply situation (with the Chinese stranglehold and their on-going degradation of their ultimately finite resources) can lead in the short term to a supply "crisis". Hence the birth of the Critical Rare Earth (CREO) designation to discriminate between those Rare Earths that are merely humdrum (e.g. Cerium) and those with the potential to be labelled in the future as having criticality of supply.

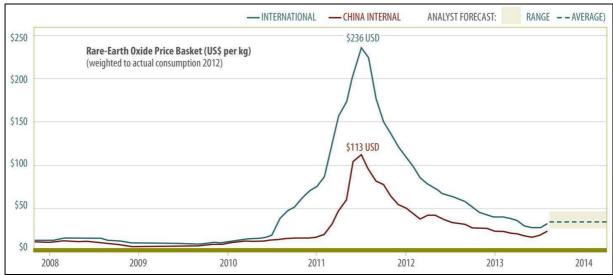
Search, in their interpretation, consider neodymium, praseodymium, and dysprosium to be neo-CREOs because there is a high probability they will be in short supply by 2025, and they are vital to NdFeB magnets used widely in renewable power generation, electric mobility, and energy-efficient technologies. Some consider terbium to be a neo-CREO because upon experiencing shortages of dysprosium, consumers in the magnet industry will rapidly consume available terbium supplies in its place for applications involving renewable power generation, electric mobility and energy efficient technologies. More iconoclastically, Search describes Lanthanum as a potential neo-CREO because some perceive a high probability that it will be in short supply by 2025 and because it is widely used in catalytic converters and rechargeable batteries, and will be increasingly used as a thermal stabilizer by producers of poly-vinyl chloride (PVC) to minimize lead consumption and improve the energy efficiency of PVC and other processing equipment.

#### **Pricing trends**

One does not need to be a conspiracy theorist to perceive that the rise and then plunge in Rare Earth prices between 2009 and 2011 was largely a manufactured event. In retrospect it could have been handled much better by the Chinese, and by their customers.

The legacy of the up-move, after decades of somnolence, was an increased awareness of the fragility and fickleness of supply, combined with a generalized feeling that strategically, no matter where prices were, the West would be better served by having a greater choice of non-Chinese sources. The strange thing about the rise was that Cerium and Lanthanum, two metals that were never in short supply joined in the price rise as much as the scarcer and more sought after REEs.

The price surge and then plunge is even better documented by the chart below:



Source: Metal Pages/IMCOA

There has been little improvement since 2014. We remain bullish though on virtually all the Rare Earths, except the ubiquitous Lanthanum and Cerium. These two really spoil the mix and the onset of production from Molycorp and Lynas, which were with sizeable components of these two elements, made the price appreciation prospects for them look grim and put the lid on many projects that are overly weighted towards these "mass-market" elements.

The table below shows the current spot prices are almost all trading at below the long-term average price. Our outlook for 2018 is shown below.

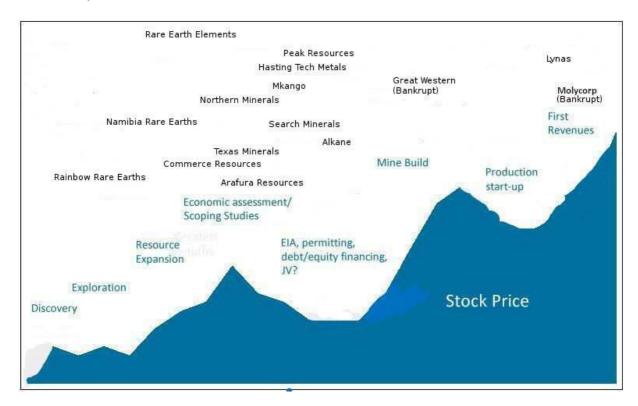
OXIDES			
Price Deck	Price	Av. Long-	Hallgarten
\$ per kg	<b>Mar-17</b>	Term	2018
	\$	\$	\$
Lanthanum	2.10	8.14	3.20
Cerium	1.75	5.81	2.50
Praesodymium	49.20	71.93	90.00
Neodymium	39.20	74.64	92.00
Samarium	1.97	9.33	5.00
Europium	66.00	956.41	95.00
Gadolinium	29.00	30.64	93.00
Terbium	438.00	1213.14	630.00
Dysprosium	197.00	684.35	393.00
Yttrium	3.68	29.25	8.50

Source: Argus Metals/Hallgarten

We believe that the time is ripe for the Chinese to tighten up the REE market and reset prices higher. Any tightening up by the Chinese indicates they want to sell at higher prices and they, of all players, are the ones best positioned to achieve that goal.

#### The REE Lifecycle

The left-side of this diagram has become totally denuded of junior explorers. The players that inhabited this area once rhapsodized about their eudialytes, bastnaesites and other exotic mineralisations but have in their entirety been cast into the dustbin of history. The only denizen on the explorer category is the newcomer, Rainbow Rare Earths which hopes to revive an old REE mine (in some material described as "alluvial") in Burundi.



If the names shown on the chart make it to production then there will be NO NEED for any juniors to follow in their wake for a decade or two. We have been brutal in this latest version and purged the names of companies that have projects that are too large, have drifted into side activities or who have delisted or changed to some sort of listing that is essentially inaccessible to the main body of likely investors.

The survivors are interesting because time has created a dispersal of focus. What was once largely an exercise in *Where's Wally*, with hundreds (maybe) of lookalike companies with lookalike deposits pleading for attention, has become a far smaller group differentiated by strategy, location, mineralisation style and backers/supporters.

#### **Local Communities**

Search has had meetings with the local town councils since commencing work in the region. Search also has a strong working relationship with the NunatuKavut Community Council (NCC). The NCC is the representative governing body for approximately 6,000 Inuit of south and central Labrador, collectively known as the Southern Inuit of NunatuKavut. NunatuKavut means "Our Ancient Land" in Inuktitut and is the traditional territory of the Southern Inuit.

#### **Shareholders**

While around in the first flush of the Rare Earth boom, Search did not figure prominently and decided to avoid the scrum and be a locavore as far as consuming capital was concerned. As a result it has largely conserved a tight shareholding structure. It speaks of management owned holdings as being over 30% of which Raymond Saunders holds around 20%. Then there is around 20% held by a Brazilian investment entity, Sercor, and another 30% by what are described as Newfoundland & Labrador-based investors. Thus around 80% of the base is in firm hands. There are 146mn shares on issue and 184mn fully diluted. With the balance of warrants and options are not in the balance (with most being priced around 10cts) it is expected that these will be exercised when the bulk of them fall due in late 2017.

#### **Financing**

In late March, Search announced a non-brokered private placement of up to 34 million units at \$0.09 per unit for potential gross proceeds of up to \$3,060,000. Each unit consists of one common share and a half-warrant entitling the holder to purchase a common share at a price of \$0.18 for a period of twelve months from the closing.

The proceeds are designated to complete the aforementioned drilling program on the Deep Fox prospect, to complete the environmental assessment applications and for general working capital requirements. The proceeds will be allocated with \$1mn for the environmental application process and general working capital, and up to \$2.06mn for the Deep Fox drill program and other exploration in the district.

#### **Management & Directors**

James Clucas is a director and Executive Chairman. He was Chief Financial Officer of Inco's Canadian operations until 1984 and has been involved in the development of several mineral deposits, including the Snow Lake Mine (High River Gold Mines), Montana Tunnels (Pegasus Mining), the Fenix Project (HudBay Minerals Inc.). He was the founder of International Nickel Ventures which acquired and developed the Santa Fe/Ipora Nickel Laterite deposit in Brazil.

**Greg Andrews** is the President and Chief Executive Officer (and is expected to join board at May 2017 AGM). He has over 20 years of experience in strategic planning, financial and administrative management consulting to public and private companies. He has held positions as General Manager of a Registered Portfolio Management company, General Manager of a Private Family Office and President of a wholesale distribution company. Mr. Andrews has also held various directorships in TSX Venture

listed companies since 1993, including those involved in mining, oil and gas, technology and biotechnology.

**Dr. David Dreisinger** is an executive director and Vice President of Metallurgy. He holds the position of Professor and Industrial Research Chair, Hydrometallurgy at the University of British Columbia where he has been a professor since 1988. He has published over 250 papers and has been involved as a process consultant in industrial research programs with metallurgical companies. He has participated in 19 U.S. patents for work in areas such as pressure leaching, ion exchange removal of impurities from process solutions, use of thiosulfate as an alternative to cyanide in gold leaching, and leach-electrolysis treatment of copper matte. He also co-invented the Mt. Gordon Copper Process for copper recovery from sulfide ores and the Sepon Copper Process for copper recovery from sulphidic-clayey ores. He has been actively involved in the development of the proposed metallurgical flow sheet for Boleo and is one of the recognized experts in the world in the area of hydrometallurgy. He is also a director of Polymet Mining and holds officer positions at Trimetals Mining Inc.

Leo Power is a non-executive director. He has extensive experience in the mining and oil and gas sectors and understands the complexities of the markets for minor metals. He brings a wealth international project finance and development experience to Search and years of experience in dealing with government agencies in Newfoundland and Labrador and in Ottawa. He is graduate of the Kellogg-Schulich Joint MBA program at York University, Toronto and Northwestern University, Evanston, Illinois and holds a Masters in Oil and Gas Studies from Memorial University of Newfoundland and Labrador. He is also a graduate of the Directors Education Program of the Rotman School of Management, University of Toronto. Mr. Power currently holds the following positions: Executive Chairman - Barite Mud Services Inc.; CEO and Director- Ptarmigan Energy Inc.; Director - Canada Fluorspar Inc.; Board Member - Institute of Corporate Directors, Newfoundland and Labrador Chapter; Board Member - Atlantic Cabinet, Nature Conservancy of Canada and Newfoundland; and Labrador Vice Chair - Atlantic Institute of Market Studies (AIMS).

**Roberto Giannetti da Fonseca** is a non-executive director. He is currently CEO of Kaduna Consulting Group, which provides extensive service as a business advisor to more than 50 Brazilian and multinational companies. He is also Executive Director of International Affairs and Foreign Trade (FIESP), a Sao Paulo State business industrial association with more than 130,000 associates. From 2000-2002, he was the Secretary of Foreign Trade, Brazilian Federal Government.

**Dr. James Patterson**, is a non-executive director. He is a professional geologist and an independent economic and exploration geological consultant with over forty years' experience in initiating, developing, conducting and supervising all phases of mineral exploration, ore reserve audits and valuations worldwide including Canada, Ireland, Thailand, Malaysia and Indonesia. He was Exploration Vice-President of FNX Mining and assisted with the revival and building of FNX from a \$20 million company to a \$2.5 billion leading Canadian mining company. He is currently a Director of Merrex Gold, International Millennium Mining Corp, Acme Resources corp., Frontline Gold Corp. and Southeast Asia Mining Company.

**Raymond Saunders** is a non-executive director. He has been an entrepreneur and businessman in the Province of Newfoundland & Labrador for 40 years. His primary focus related to the start-up, purchase and consolidation of several transportation companies providing services throughout the province.

Having retired from the transportation business Mr. Saunders continues to be an active investor and shareholder in a number of businesses throughout Atlantic Canada. He is a co-founder of Alterra Resources and a director of Search since 2009.

**Dr. Randy Miller**, is Vice-President, Exploration, and has been with Search since 2009. He has extensive experience studying rare earth elements including field mapping and supervision of diamond drilling on the Strange Lake deposit in NW Labrador for the Iron Ore Company of Canada. He spent 12 years with the Newfoundland and Labrador Geological Survey as their Rare Earth Specialist. Hispublications include papers and reports on the Strange Lake REE deposit, on the mineralization and geology of the Nuiklavik REE-bearing volcanic rocks and on the Mann-type Be-REE mineralization in the Letitia Lake area, Labrador. The model of rare earth element metallogeny developed from these studies is the basis of Search Mineral's REE exploration program in Labrador.

#### **Risks**

After a scorching (not in a good way) last six years the Rare Earth survivors and analysts thereof can feel pretty confident that they can identify what could possibly go wrong because virtually everything that could go awry has done so. Nevertheless some companies have projects that are subject to certain risks because of mineralisation, location or local communities that differ from the specific risks of other REE developers.

Therefore it's important to highlight what the potential pitfalls with the Foxtrot project might be:

- That the REE prices fail to recover
- That financing proves difficult to achieve
- X That an offtaker is not brought on board
- Environmental concerns raise their head
- Issues with local communities

REE prices are still captive to Chinese whims. There seems to be a perception that at least in the more strategic REEs (i.e. not Lanthanum and Cerium) that the Chinese would prefer to see higher prices but they do not want to trigger a rush of wannabes into the space that would threaten their dominance. The REE space has shrunk to a sufficiently small number of players that the Chinese can permit some price increases without triggering a rush of new entrants. The danger of prices going lower is negligible.

Financing will be available if prices start to rise. Already sentiment in the space has improved without prices having shown a meaningful improvement. This would be accentuated if the positive vibes start to expand. Government assistance, and sale of assets, has allowed Search to continue to work on the project using non-dilutive financing of over \$ 2M over the past two years.

Likewise, when a project starts to look more real the offtakers also awaken from their slumbers. This would be accentuated if international tensions break out between the Trump Administration and China.

Search has one of the best relationships we have seen in the mining space, let alone Rare Earths, with its local communities as we cannot recall having encountered a situation where the NCC was willing to become shareholders in the company. This is the least risky risk at Search.

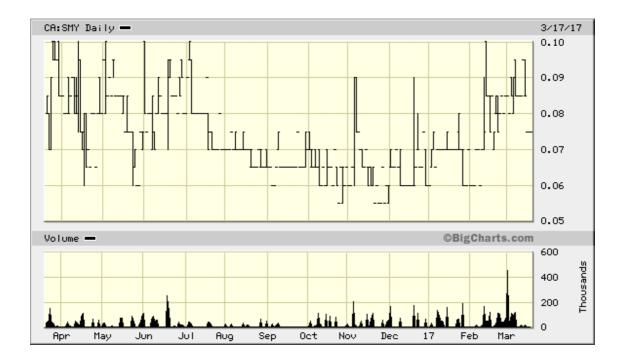
#### Conclusion

In any species the survival instinct is key, for without it one ends up as a stuffed exhibit in the museum or totally forgotten, which is even worse. The Rare Earth space has some notably "stuffed" trophies on the wall and the vast bulk of the 2009-11 crowd have been long forgotten. Search Minerals and a small group of others have survived the vicissitudes and are appearing out into the sunlight at the end of a very long tunnel.

Yet again, in Search Minerals, we find a case of "hare & tortoise" with a below-the-radar REE hunter moving further down the road to the end goal, verily as some of the more storied names of the REE space have "gone to their maker" having burned through enormous piles of money with nothing to show. Search, instead, has spent the "downtime" of the last four years, proving up its resource and getting its thoughts in order for a cogent production plan. With the plan and team in place the all-important funding phase begins.

Rare Earths are something of a tinder box. They are one of the few minerals to have not shown a meaningful appreciation in the rerating of the mining space since early 2016. However they are exceedingly vulnerable to any outbreak of sharp elbows in the South China Sea or as a bargaining piece in a Trump-China trade dispute escalation. A little crisis will go a long way in pushing REE prices much higher and then sparking an investor frenzy to find what is left of the REE universe. Search with its advanced status and located in a good jurisdiction will rise to the top in any filter that investors run on the remaining listed players.

In light of this, we regard Search Minerals at this time as a **Long** opportunity with a twelve-month target price of CAD\$0.27.



#### Important disclosures

I, Christopher Ecclestone, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

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