Rock solid resources.
Proven advice.™

SEARCH MINERALS INC.

TECHNICAL REPORT ON THE FOXTROT PROJECT, NEWFOUNDLAND & LABRADOR, CANADA

NI 43-101 Report

Qualified Persons:
Katharine M. Masun, P.Geo.
Ian C. Weir, P.Eng.
John R. Goode, P.Eng.

April 28, 2016

RPA 55 University Ave. Suite 501 I Toronto, ON, Canada M5J 2H7 I **T** + 1 (416) 947 0907 **www.rpacan.com**

Report Control Form

Document Title	Technical Report on the Foxtrot Project, Newfoundland and Labrador, Canada
Client Name & Address	Search Minerals Inc. 211-901 West Third St. North Vancouver, BC V7P 3P9

Document Reference	Project #2496	***Status & Issue No.***	FINAL Version	
Issue Date	April 28, 2016			

Lead Author	Katharine M. Masun, P.Geo. Ian C. Weir, P.Eng. John R. Goode, P.Eng.	(Signed) (Signed) (Signed)
Peer Reviewer	William E. Roscoe, P.Eng. Jason J. Cox, P.Eng.	(Signed) (Signed)
Project Manager Approval	Ian C. Weir, P.Eng.	(Signed)
Project Director Approval	Jason J. Cox, P.Eng.	(Signed)

Report Distribution

Name	No. of Copies
Client	
RPA Filing	1 (project box)

Roscoe Postle Associates Inc.
55 University Avenue, Suite 501
Toronto, Ontario M5J 2H7
Canada
Tel: +1 416 947 0907
Fax: +1 416 947 0395
mining@rpacan.com

TABLE OF CONTENTS

LIST OF TABLES

PAGE

LIST OF FIGURES

PAGE

1 SUMMARY

EXECUTIVE SUMMARY

INTRODUCTION

Roscoe Postle Associates Inc. (RPA) was retained by Search Minerals Inc. (Search Minerals) to prepare an independent Technical Report on the Foxtrot Rare Earth Element (REE) Project (the Project) near Port Hope Simpson, Newfoundland and Labrador, Canada. The purpose of this report is to disclose the updated results of a Preliminary Economic Assessment (PEA) on the Project based on a new mineral processing method, an updated Mineral Resource estimate, and lower overall capital costs. This Technical Report conforms to National Instrument 43-101 (NI 43-101) Standards of Disclosure for Mineral Projects. RPA visited the Foxtrot Project site and field office on August 27, 2015.

Search Minerals is a public company that trades on the TSX Venture Exchange under the symbol SMY. In addition to the Foxtrot Project, Search Minerals has a number of other mineral prospects on its 100% owned Red Wine and Henley Harbour properties, both located in Labrador.

This Technical Report is considered by RPA to meet the requirements of a PEA as defined in Canadian NI 43-101 regulations. The economic analysis contained in this PEA is based, in part, on Inferred Resources, and is preliminary in nature. Inferred Resources are considered too geologically speculative to have mining and economic considerations applied to them and to be categorized as Mineral Reserves. There is no certainty that the reserves development, production, and economic forecasts on which this PEA is based will be realized.

All currency in this report is Canadian dollars (C$) unless otherwise noted.

CONCLUSIONS

The PEA is based on an updated Mineral Resource estimate as of December 31, 2015 and evaluates a combined open pit and underground mining approach along with processing of 1,000 tpd by crushing, acid baking, water leaching, and precipitation producing a mixed rare earth concentrate. The new process eliminates several steps included in the previous PEA, including fine grinding, flotation, and gravity and magnetic separation.

The PEA indicates that positive economic results can be obtained for the Foxtrot Project and that further advancement of the Project is merited.

The Life of Mine (LOM) plan for the Project indicates that 4.9 Mt, at an average grade of 0.98% Total Rare Earth Elements (TREE), could be mined over a 14 year period, including open pit mining for the first eight years and underground mining thereafter. Production is projected to total 36,700 t of Total Rare Earth Oxides (TREO) in a mixed rare earth precipitate.

Specific conclusions by area are as follows:

GEOLOGY AND MINERAL RESOURCE CONCLUSIONS

A significant deposit of REE mineralization has been delineated at the Foxtrot Project which consists of three steeply dipping mineralized zones: a thicker, predominantly pantellerite core, and a hanging wall and footwall zone consisting mainly of bands of pantellerite and low zirconium (Zr)-pantellerite. Statistical analysis of the resource assays shows that there is a bimodal distribution of REEs within the Foxtrot deposit, with higher grade generally corresponding to pantellerite bands, and moderate grades corresponding to low Zr-pantellerite and mixed pantellerite-mafic intervals.

The mineralization is steeply dipping (70° to 80°), with a strike length of approximately 765 m at an azimuth of 285°. The understanding of the Project geology and mineralization, together with the procedures for drilling, sampling, collection of data, assaying, and quality assurance/quality control (QA/QC) carried out by Search Minerals have produced a drill hole database that is acceptable for Mineral Resource estimation, in the opinion of RPA. Results from 119 drill holes and channels have been used by RPA to estimate Mineral Resources.

The Mineral Resource estimate uses different cut-off grades for potential open pit and underground resources, expressed as Net Smelter Return (NSR) values. RPA considers that open pit material with NSR values greater than $165/t and underground material with NSR values greater than $260/t meet the requirement of the CIM (2014) that Mineral Resources have reasonable prospects for eventual economic extraction.

Combined open pit and underground Indicated Mineral Resources are estimated to total 7.39 Mt at 0.91% TREE (or 1.09% TREO), and combined open pit and underground Inferred Mineral Resources are estimated to total 1.96 Mt at 0.97% TREE (or 1.17% TREO). The level of confidence in the data is not high enough to classify any resource as Measured. Definitions for resource categories used in this report are consistent with those defined by CIM (2014) and adopted by NI 43-101.

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.

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, pantellerite mineralization has not been mapped at surface to the east and west along strike. Drilling indicates that the area immediately east (down plunge) of the current wireframe solids shows good potential to extend the Foxtrot resource.

MINING

For the current PEA, RPA investigated the potential for a smaller open pit/underground mining scenario with lower throughput, lower initial capital costs, and higher grade process feed. Operating costs for open pit and underground methods were evaluated using a process feed rate of 1,000 tpd of REE-bearing material on a stand-alone basis. The break-even stripping ratio, beyond which the underground mining would produce more favourable economic results, was estimated. The depth of the open pit reaches approximately 160 m after which, based on the incremental stripping ratio, it becomes more economic to mine using underground methods.

RPA notes that this trade-off result is specific to the relative costs between the two methods, estimated for a production rate of 1,000 tpd.

A bench-by-bench production schedule was developed for the open pit over an eight year period. In Year 8, underground development commences in order to supply process feed in time for the closing of the open pit. The underground production schedule is based on longhole mining, following a top down sequence. The total LOM is fourteen years.

There is good potential to extend the mine life through addition of resources at depth, exploration of other high-grade prospects in the area, or by processing the low-grade stockpile accumulated under the current LOM plan.

PROCESSING AND METALLURGY

The processing rate, processing methods, and rare earth oxide (REO) production rate differ significantly from those presented in the earlier PEA. As stated above, the mining rate and processing rate considered in this study are 1,000 tpd of mineralized material.

Earlier metallurgical testwork examined various beneficiation techniques to concentrate the REE in the Foxtrot sample followed by hydrometallurgical processes to recover a mixed REE oxide. Although results were promising, Search Minerals elected to investigate an alternative and much-simplified flowsheet. The flowsheet, which has been investigated by SGS Minerals Services Lakefield, involves coarse crushing the mineralized material to - 3.3 mm followed by acid baking with 100 kg/t of concentrated sulphuric acid at 200°C, water leaching, various impurity removal steps, REE precipitation and calcination to an oxide suitable for marketing and separation.

The SGS work is at a preliminary stage with just one sample subjected to testing and a limited number of leach, impurity removal, and product precipitation tests completed. The leach tests were performed on conventionally crushed material. RPA expects that better leach results can be obtained using high pressure grinding rolls (HPGR) on the crushed material. RPA notes that the REE products created in the test work have achieved low levels of Th but have yet to meet the low levels of U and possibly other radionuclide levels (no measurements yet on other radionuclides) required by commercial toll separation plants, and further tests are needed in this area. The proposed process has yet to be demonstrated on a pilot scale. Additionally, RPA notes that there has been no environment-related tests.

Overall recoveries are indicated to be approximately 78% for LREE and 50% to 76% for heavy rare earths (HREE) with the following specific recoveries (in order of contribution to total value): Nd – 79%, Dy – 74%, Pr – 78%, and Tb – 74%.

RPA believes that enough work has been done to prepare a PEA of the process, provided that reasonable allowances and safety factors are applied during process equipment selection, assignment of reagent demand and REE recovery values, and capital and operating costs for the process.

At this early stage of process flowsheet development, RPA is not aware of any processing factors or deleterious elements that could have a significant effect on economic extraction.

RPA has assumed that a mixed REE product will be produced at the mine site and either sold at a discount to published prices for separated REE or separated for Search Minerals by a toll processor at a cost corresponding to the same discount. RPA has assumed that the discount from the published price for the REO, or the toll processing charges, will be US$10/kg REO for the LREE and US$20/kg REO for the HREE.

There is a significant amount of research and development in the REE separation field and improved solvent extraction (SX)-based processes could be available. Furthermore, several workers are investigating radically different, non-SX, REE separation options.

ENVIRONMENT

The Project is at an early stage and therefore Search Minerals has not yet begun environmental baseline work. RPA does not anticipate any fatal flaws regarding environmental issues with the Project as proposed. The process for permitting and developing an open pit/underground mine in Labrador is expected to be manageable.

Search Minerals has initiated community and Aboriginal consultation programs and has signed a Mining Exploration Activities Agreement with the NunatuKavut Community Council (NCC).

MARKETS

Rare earth prices were based on independent, long-term forecasts, which are approximately double current prices.

RPA considers these rare earth prices to be appropriate for a PEA-level study, however, RPA notes that rare earth market volatility and lack of transparency introduces considerably more uncertainty in revenue than a comparable base or precious metals project.

CAPITAL AND OPERATING COSTS

The initial capital cost is approximately $152 million, including approximately $33 million in contingency capital. The average operating cost over the life of the project is approximately $238 per tonne processed.

RECOMMENDATIONS

RPA recommends that Search Minerals continue collecting data to support the feasibility and licensing processes, and proceed with further studies. The purpose of this work should be a prefeasibility study suitable for use in making an investment decision.

Specific recommendations by area are as follows:

GEOLOGY AND MINERAL RESOURCES

- Continue diamond drilling on the Foxtrot deposit to define the physical limits of the deposit. Further drilling should be completed to follow the high grade mineralization at depth down plunge below 400 m towards the east of the Foxtrot mineralized zones. Infill drilling should be carried out at the periphery of wireframes, to bring the confidence level of the resource to Indicated. Other targets within the area are worthy of further exploration.

- Survey all surface channels.

- Resume the regular submission of blank material with regular drill core and surface channel samples.

- Include coarse rejects and selected half core samples in a check assay sampling protocol.

- Incorporate duplicate samples (field, pulp, and coarse reject material) into the Foxtrot Project QA/QC protocol for drill programs.

- Work with an assay laboratory to develop certified reference materials with REE grades similar to those found at the Foxtrot Project.

- Implement a QA monitoring system used to detect failed batches, and in turn, identify sample batches for reanalysis.

- Establish a comprehensive program for bulk density determinations both within the mineralization and in the host rock of the Foxtrot deposit in order to develop a density model. For this purpose, existing half core or channel samples can be used.

- Continue exploration of high-grade Foxtrot-like prospects, including Deepwater Fox.

MINING

- Carry out geotechnical investigations and analysis for use in determining pit slopes and underground stope sizing.

- Carry out hydrological investigations and analysis for use in determining dewatering needs for pit.

- Seismicity issues were not considered in conceptual designs at this point in the Project. The seismicity should be assessed and considered once detailed engineering work begins.

MINERAL PROCESSING AND METALLURGICAL TESTWORK

- The mafic and felsic material are inter-mixed on a fine scale. With the felsic material carrying the mineralization, it would be useful to have some test work done on ore sorting possibilities, such as optical or X-ray sorting, and dense media separation (DMS) processes.

- The testwork performed to date is adequate for a PEA, however, extensive additional work, including, eventually, large-scale pilot plant work, is needed to confirm design parameters, recovery values, and generally progress of the Project.

- Additional tests are needed to better define conditions for removal of Th and other impurities such as U.

- Instead of selling a mixed REE product or accepting toll charges, Search Minerals has the option of building its own separation plant and thereby avoiding the discount/toll processing charges but incurring capital and operating costs for its own facility. This option might be considered in future studies.

ENVIRONMENTAL CONSIDERATIONS

- Begin a program of environmental baseline study work and carry out all necessary data collection and studies to support an Environmental Impact Assessment.

- Continue with community and Aboriginal consultations regarding plans for the Project.

BUDGET

The proposed budget for Project advancement is shown in Table 1-1.

TABLE 1-1 BUDGET FOR PROJECT ADVANCEMENT
Search Minerals Inc. – Foxtrot Project

Item	Cost ($000)
Diamond drilling (35,000 m @ $180/m)	6,300
Mineral Resource Update	100
Geotechnical Investigation	300
Hydrological Investigation	200
Metallurgical Testwork	2,000
Environmental Studies	1,000
Community Consultation	200
Prefeasibility Study	500
Total	**10,600**

ECONOMIC ANALYSIS

The Project evaluation work includes an economic summary and discounted cash flow analysis, as well as capital and operating cost estimates. RPA considers the PEA cost estimates to have an estimation accuracy of +35% to -15%.

The Foxtrot Project is projected to process 360,000 t annually at full production, at an average grade of 0.98% TREE, and to produce an average of 3.3 million kilograms of REOs per year.

ECONOMIC CRITERIA

Key economic inputs to the cash flow are as follows:

Revenue

- 1,000 tonnes per day processing rate.
- Feed grade-weighted average REE recovery of 76.8%.
- Rare earth prices based on independent, long-term forecasts.
- 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)
- 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.
- Revenue is assumed to be realized at the time of production.
- Average NSR value is $353/t.

Costs

- Pre-production period: two years.
- Mine life: fourteen years.
- Mine life capital consists of $152 million initial capital,
  $ 79 million sustaining and closure capital,
  $232 million total capital.

- Average operating cost over the mine life is $238/t processed.

Taxation

- Federal tax rate of 15%.
- Provincial tax rate of 14%.
- All capital assumed to be depreciable on a units-of-production basis.
- A $19.2 million carry-forward tax credit has been applied to the cash flow.

The economic analysis indicates that the Project yields a pre-tax Net Present Value (NPV) at a 10% discount rate of $93 million, and an after-tax NPV of $48 million at the same discount rate. 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.

The economic analysis contained in this report is based, in part, on Inferred Resources, and is preliminary in nature. Inferred Resources are considered too geologically speculative to have mining and economic considerations applied to them and to be categorized as Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. There is no certainty that the reserves development, production, and economic forecasts on which this PEA is based will be realized.

TABLE 1-2 CASH FLOW SUMMARY
Search Minerals Inc. - Foxtrot Project

	Input	Units	Total/Avg.	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
OP Mining																				
Mined Mill Feed		tonnes	2,812,650			360,739	359,754	359,754	359,754	360,739	359,754	359,754	292,404	-	-	-	-	-	-	-
Ore Grade																				
Yttrium		ppm	1,135			1,095	1,110	1,142	1,144	1,132	1,107	1,158	1,201	-	-	-	-	-	-	-
Lanthanum		ppm	1,837			1,843	1,781	1,826	1,812	1,810	1,803	1,899	1,946	-	-	-	-	-	-	-
Cerium		ppm	3,704			3,705	3,600	3,686	3,665	3,661	3,675	3,825	3,845	-	-	-	-	-	-	-
Praesodymium		ppm	423			419	410	418	419	420	415	438	448	-	-	-	-	-	-	-
Neodymium		ppm	1,586			1,546	1,523	1,574	1,575	1,596	1,579	1,647	1,658	-	-	-	-	-	-	-
Samarium		ppm	282			276	274	282	281	282	276	292	297	-	-	-	-	-	-	-
Europium		ppm	14			14	14	14	14	14	14	15	15	-	-	-	-	-	-	-
Gadolinium		ppm	222			215	217	226	223	221	215	229	234	-	-	-	-	-	-	-
Terbium		ppm	35			34	34	35	35	35	35	36	37	-	-	-	-	-	-	-
Dysprosium		ppm	203			196	199	204	203	203	198	207	216	-	-	-	-	-	-	-
Holmium		ppm	39			37	38	39	39	39	38	39	40	-	-	-	-	-	-	-
Erbium		ppm	109			105	107	110	111	109	106	110	113	-	-	-	-	-	-	-
Thulium		ppm	35			34	34	35	35	35	35	36	37	-	-	-	-	-	-	-
Ytterbium		ppm	97			93	95	98	99	96	95	97	101	-	-	-	-	-	-	-
Lutetium		ppm	14			14	14	14	15	14	14	15	15	-	-	-	-	-	-	-
Mined Waste		tonnes	23,977,415			2,174,059	2,549,448	5,520,755	1,661,850	9,086,869	2,091,980	677,960	214,494	-	-	-	-	-	-	-
Total Material Moved		tonnes	26,790,065			2,534,798	2,909,201	5,880,509	2,021,604	9,447,608	2,451,734	1,037,713	506,897	-	-	-	-	-	-	-
Waste to Ore ratio		---	8.52			6.03	7.09	15.35	4.62	25.19	5.82	1.88	0.73	-	-	-	-	-	-	-
UG Mining																				
Mined Mill Feed		tonnes	2,037,205			-	-	-	-	-	-	-	67,596	360,000	360,000	360,000	360,000	360,000	169,608	-
Yttrium		ppm	1,124			-	-	-	-	-	-	-	1,124	1,168	1,114	1,092	1,118	1,104	1,180	-
Lanthanum		ppm	1,940			-	-	-	-	-	-	-	2,176	1,993	1,951	1,897	1,908	1,948	1,854	-
Cerium		ppm	3,810			-	-	-	-	-	-	-	4,100	3,943	3,788	3,692	3,740	3,828	3,824	-
Praesodymium		ppm	436			-	-	-	-	-	-	-	458	448	436	427	430	436	435	-
Neodymium		ppm	1,612			-	-	-	-	-	-	-	1,706	1,660	1,613	1,574	1,580	1,602	1,644	-
Samarium		ppm	293			-	-	-	-	-	-	-	303	300	290	284	291	293	300	-
Europium		ppm	15			-	-	-	-	-	-	-	15	15	14	14	15	15	15	-
Gadolinium		ppm	226			-	-	-	-	-	-	-	223	231	217	221	225	228	241	-
Terbium		ppm	35			-	-	-	-	-	-	-	34	36	34	34	35	35	38	-
Dysprosium		ppm	206			-	-	-	-	-	-	-	201	217	202	193	205	206	218	-
Holmium		ppm	40			-	-	-	-	-	-	-	39	42	39	37	40	40	43	-
Erbium		ppm	112			-	-	-	-	-	-	-	111	117	108	106	112	112	121	-
Thulium		ppm	16			-	-	-	-	-	-	-	16	17	16	15	16	16	18	-
Ytterbium		ppm	99			-	-	-	-	-	-	-	96	103	95	94	99	98	108	-
Lutetium		ppm	15			-	-	-	-	-	-	-	14	15	14	14	15	15	16	-
			-																	
Processing																				
Feed to Mill		'000 tonnes	4,850	-	-	361	360	360	360	361	360	360	360	360	360	360	360	360	170	-
		tpd				1,002	999	999	999	1,002	999	999	1,000	1,000	1,059	1,059	1,059	1,059	499	-
Head Grade																				
Yttrium		ppm	1,130			1,095	1,110	1,142	1,144	1,132	1,107	1,158	1,187	1,168	1,114	1,092	1,118	1,104	1,180	-
Lanthanum		ppm	1,880			1,843	1,781	1,826	1,812	1,810	1,803	1,899	1,989	1,993	1,951	1,897	1,908	1,948	1,854	-
Cerium		ppm	3,749			3,705	3,600	3,686	3,665	3,661	3,675	3,825	3,893	3,943	3,788	3,692	3,740	3,828	3,824	-
Praesodymium		ppm	428			419	410	418	419	420	415	438	450	448	436	427	430	436	435	-
Neodymium		ppm	1,597			1,546	1,523	1,574	1,575	1,596	1,579	1,647	1,667	1,660	1,613	1,574	1,580	1,602	1,644	-
Samarium		ppm	287			276	274	282	281	282	276	292	298	300	290	284	291	293	300	-
Europium		ppm	14			14	14	14	14	14	14	15	15	15	14	14	15	15	15	-
Gadolinium		ppm	224			215	217	226	223	221	215	229	232	231	217	221	225	228	241	-
Terbium		ppm	35			34	34	35	35	35	35	36	37	36	34	34	35	35	38	-
Dysprosium		ppm	204			196	199	204	203	203	198	207	213	217	202	193	205	206	218	-
Holmium		ppm	39			37	38	39	39	39	38	39	40	42	39	37	40	40	43	-
Erbium		ppm	110			105	107	110	111	109	106	110	113	117	108	106	112	112	121	-
Thulium		ppm	27			34	34	35	35	35	35	36	33	17	16	15	16	16	18	-
Ytterbium		ppm	97			93	95	98	99	96	95	97	100	103	95	94	99	98	108	-
Lutetium		ppm	14			14	14	14	15	14	14	15	15	15	14	14	15	15	16	-
LREE Grade		ppm	7,941			7,788	7,588	7,786	7,752	7,769	7,748	8,100	8,297	8,344	8,078	7,874	7,948	8,106	8,057	-
HREE Grade		ppm	1,896			1,836	1,863	1,917	1,919	1,899	1,856	1,942	1,985	1,962	1,853	1,819	1,881	1,869	1,997	-
Total REE Grade		ppm	9,837			9,624	9,451	9,704	9,671	9,668	9,603	10,042	10,282	10,306	9,931	9,693	9,829	9,975	10,054	-
Yttrium	74.3%	%	74.3%			74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%
Lanthanum	77.2%	%	77.2%			77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%
Cerium	77.8%	%	77.8%			77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%
Praesodymium	77.6%	%	77.6%			77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%
Neodymium	78.5%	%	78.5%			78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%
Samarium	78.0%	%	78.0%			78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%
Europium	72.6%	%	72.6%			72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%
Gadolinium	76.3%	%	76.3%			76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%
Terbium	73.5%	%	73.5%			73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%
Dysprosium	73.6%	%	73.6%			73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%
Holmium	72.5%	%	72.5%			72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%
Erbium	69.6%	%	69.6%			69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%
Thulium	63.2%	%	63.2%			63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%
Ytterbium	58.7%	%	58.7%			58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%
Lutetium	49.6%	%	49.6%			49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%
			71.5%																	
			76.8%																	
Material Recovered REE's																				
290.86 Yttrium		kg	4,072,027			293,353	296,511	305,087	305,846	303,324	295,847	309,501	317,420	312,284	297,835	292,133	299,113	295,143	148,630	-
502.60 Lanthanum		kg	7,036,431			512,955	494,300	506,910	502,942	503,847	500,323	526,960	552,522	553,502	541,907	526,796	529,864	540,937	242,666	-
1,010.52 Cerium		kg	14,147,237			1,039,865	1,007,709	1,031,835	1,026,013	1,027,619	1,028,677	1,070,793	1,090,403	1,104,432	1,060,999	1,034,289	1,047,554	1,072,312	504,736	-
115.09 Praesodymium		kg	1,611,271			117,134	114,363	116,541	116,805	117,619	115,905	122,252	125,543	125,078	121,863	119,353	119,965	121,676	57,173	-
434.49 Neodymium		kg	6,082,875			438,067	430,466	444,696	445,160	452,191	446,176	465,315	471,364	469,384	456,198	444,918	446,875	453,087	218,978	-
77.41 Samarium		kg	1,083,769			77,672	76,906	79,232	78,821	79,259	77,472	81,837	83,775	84,330	81,337	79,652	81,637	82,186	39,654	-
3.63 Europium		kg	50,772			3,631	3,645	3,765	3,721	3,741	3,626	3,819	3,904	3,935	3,759	3,739	3,816	3,822	1,850	-
59.14 Gadolinium		kg	827,989			59,272	59,625	61,993	61,186	60,922	58,996	62,860	63,680	63,375	59,656	60,590	61,861	62,756	31,218	-
8.94 Terbium		kg	125,122			8,911	9,031	9,297	9,283	9,353	9,169	9,599	9,683	9,633	8,945	8,914	9,250	9,330	4,724	-
52.03 Dysprosium		kg	728,462			52,050	52,696	53,966	53,829	53,882	52,378	54,890	56,465	57,594	53,612	51,121	54,347	54,469	27,162	-
9.84 Holmium		kg	137,725			9,776	9,960	10,158	10,169	10,107	9,821	10,146	10,469	11,006	10,173	9,695	10,432	10,555	5,257	-
26.54 Erbium		kg	371,609			26,415	26,863	27,578	27,734	27,266	26,591	27,538	28,277	29,384	27,016	26,423	28,154	28,085	14,283	-
5.95 Thulium		kg	83,326			7,671	7,774	8,003	7,991	8,051	7,893	8,264	7,569	3,878	3,546	3,435	3,713	3,658	1,881	-
19.80 Ytterbium		kg	277,163			19,583	20,071	20,697	20,927	20,336	19,972	20,462	21,168	21,744	19,971	19,783	20,996	20,719	10,733	-
2.48 Lutetium		kg	34,725			2,445	2,473	2,533	2,598	2,539	2,505	2,586	2,681	2,743	2,518	2,487	2,655	2,616	1,346	-
Total Material Recovered		kg	36,670,503	-	-	2,668,799	2,612,393	2,682,294	2,673,025	2,680,057	2,655,351	2,776,823	2,844,925	2,852,301	2,749,335	2,683,327	2,720,232	2,761,352	1,310,291	-
Revenue																				
Payable REOs																				
Yttrium		kg	5,171,224			372,540	376,551	387,442	388,405	385,203	375,707	393,047	403,104	396,582	378,232	370,991	379,855	374,814	188,751	-
Lanthanum		kg	8,252,135			601,579	579,702	594,490	589,836	590,898	586,766	618,005	647,983	649,132	635,534	617,812	621,410	634,396	284,593	-
Cerium		kg	17,378,093			1,277,343	1,237,843	1,267,479	1,260,327	1,262,300	1,263,600	1,315,334	1,339,423	1,356,655	1,303,303	1,270,493	1,286,788	1,317,200	620,005	-
Praesodymium		kg	1,946,683			141,517	138,169	140,800	141,120	142,103	140,033	147,700	151,677	151,114	147,231	144,198	144,938	147,005	69,075	-
Neodymium		kg	7,094,963			510,954	502,089	518,686	519,227	527,428	520,412	542,736	549,792	547,481	532,102	518,945	521,227	528,473	255,412	-
Samarium		kg	1,256,750			90,069	89,180	91,879	91,401	91,910	89,838	94,899	97,146	97,790	94,320	92,365	94,667	95,304	45,983	-
Europium		kg	58,790			4,204	4,221	4,360	4,309	4,332	4,198	4,422	4,521	4,556	4,352	4,329	4,419	4,426	2,142	-
Gadolinium		kg	954,355			68,318	68,725	71,455	70,524	70,220	68,000	72,453	73,399	73,047	68,760	69,837	71,302	72,334	35,982	-
Terbium		kg	147,166			10,481	10,622	10,935	10,918	11,001	10,784	11,291	11,389	11,330	10,521	10,485	10,880	10,973	5,556	-

		Input	Units	Total/Avg.	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Dysprosium		kg	836,046			59,737	60,478	61,936	61,779	61,840	60,114	62,997	64,804	66,100	61,530	58,671	62,373	62,514	31,173	-
	Holmium		kg	157,765			11,199	11,409	11,637	11,649	11,578	11,250	11,622	11,993	12,608	11,653	11,105	11,951	12,090	6,022	-
	Erbium		kg	424,928			30,206	30,717	31,535	31,714	31,179	30,407	31,489	32,335	33,600	30,892	30,215	32,193	32,114	16,332	-
	Thulium		kg	95,163			8,761	8,879	9,140	9,126	9,195	9,014	9,438	8,644	4,429	4,050	3,923	4,240	4,177	2,148	-
	Ytterbium		kg	315,603			22,299	22,855	23,568	23,829	23,157	22,742	23,300	24,103	24,760	22,741	22,527	23,908	23,593	12,222	-
	Lutetium		kg	39,488			2,780	2,812	2,881	2,954	2,887	2,849	2,941	3,049	3,119	2,863	2,828	3,019	2,975	1,531	-
	Total Payable Material		kg	44,129,153			3,211,986	3,144,252	3,228,223	3,217,120	3,225,229	3,195,713	3,341,674	3,423,361	3,432,303	3,308,084	3,228,724	3,273,170	3,322,389	1,576,926	-
			t	44,129			3,212	3,144	3,228	3,217	3,225	3,196	3,342	3,423	3,432	3,308	3,229	3,273	3,322	1,577	-
Market Prices																					
	Y_2O_3		US$/kg	$ 20.00			$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20
	La_2O_3		US$/kg	$ 6.00			$ 6	$ 6	$ 6	$ 6	$ 6	$ 6	$ 6	$ 6	$ 6	$ 6	$ 6	$ 6	$ 6	$ 6	$ 6
	CeO_2		US$/kg	$ 3.00			$ 3	$ 3	$ 3	$ 3	$ 3	$ 3	$ 3	$ 3	$ 3	$ 3	$ 3	$ 3	$ 3	$ 3	$ 3
	Pr_6O_{11}		US$/kg	$ 105.00			$ 105	$ 105	$ 105	$ 105	$ 105	$ 105	$ 105	$ 105	$ 105	$ 105	$ 105	$ 105	$ 105	$ 105	$ 105
	Nd_2O_3		US$/kg	$ 80.00			$ 80	$ 80	$ 80	$ 80	$ 80	$ 80	$ 80	$ 80	$ 80	$ 80	$ 80	$ 80	$ 80	$ 80	$ 80
	Sm_2O_3		US$/kg	$ 5.00			$ 5	$ 5	$ 5	$ 5	$ 5	$ 5	$ 5	$ 5	$ 5	$ 5	$ 5	$ 5	$ 5	$ 5	$ 5
	Eu_2O_3		US$/kg	$ 650.00			$ 650	$ 650	$ 650	$ 650	$ 650	$ 650	$ 650	$ 650	$ 650	$ 650	$ 650	$ 650	$ 650	$ 650	$ 650
	Gd_2O_3		US$/kg	$ 30.00			$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30
	Tb_4O_7		US$/kg	$ 800.00			$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800
	Dy_2O_3		US$/kg	$ 500.00			$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
	Ho_2O_3		US$/kg	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Er_2O_3		US$/kg	$ 40.00			$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40
	Tm_2O_3		US$/kg	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Yb_2O_3		US$/kg	$ 30.00			$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30
	Lu_2O_3		US$/kg	$ 1,200.00			$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200
Gross Revenue																					
H	Yttrium		US$ 000s	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
L	Lanthanum		US$ 000s	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
L	Cerium		US$ 000s	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
L	Praesodymium	$ 272,536	US$ 000s	$ 204,402			$ 14,859	$ 14,508	$ 14,784	$ 14,818	$ 14,921	$ 14,703	$ 15,509	$ 15,926	$ 15,867	$ 15,459	$ 15,141	$ 15,219	$ 15,436	$ 7,253	$ -
L	Neodymium	$ 756,796	US$ 000s	$ 567,597			$ 40,876	$ 40,167	$ 41,495	$ 41,538	$ 42,194	$ 41,633	$ 43,419	$ 43,983	$ 43,799	$ 42,568	$ 41,516	$ 41,698	$ 42,278	$ 20,433	$ -
L	Samarium	$ -	US$ 000s	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
H	Europium	$ 50,951	US$ 000s	$ 38,214			$ 2,733	$ 2,743	$ 2,834	$ 2,801	$ 2,816	$ 2,729	$ 2,874	$ 2,939	$ 2,962	$ 2,829	$ 2,814	$ 2,872	$ 2,877	$ 1,392	$ -
H	Gadolinium	$ 38,174	US$ 000s	$ 28,631			$ 2,050	$ 2,062	$ 2,144	$ 2,116	$ 2,107	$ 2,040	$ 2,174	$ 2,202	$ 2,191	$ 2,063	$ 2,095	$ 2,139	$ 2,170	$ 1,079	$ -
H	Terbium	$ 156,977	US$ 000s	$ 117,732			$ 8,385	$ 8,498	$ 8,748	$ 8,735	$ 8,801	$ 8,627	$ 9,033	$ 9,111	$ 9,064	$ 8,417	$ 8,388	$ 8,704	$ 8,779	$ 4,445	$ -
H	Dysprosium	$ 557,364	US$ 000s	$ 418,023			$ 29,869	$ 30,239	$ 30,968	$ 30,889	$ 30,920	$ 30,057	$ 31,498	$ 32,402	$ 33,050	$ 30,765	$ 29,336	$ 31,186	$ 31,257	$ 15,587	$ -
H	Holmium	$ -	US$ 000s	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
H	Erbium	$ 22,663	US$ 000s	$ 16,997			$ 1,208	$ 1,229	$ 1,261	$ 1,269	$ 1,247	$ 1,216	$ 1,260	$ 1,293	$ 1,344	$ 1,236	$ 1,209	$ 1,288	$ 1,285	$ 653	$ -
H	Thulium	$ -	US$ 000s	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
H	Ytterbium	$ 12,624	US$ 000s	$ 9,468			$ 669	$ 686	$ 707	$ 715	$ 695	$ 682	$ 699	$ 723	$ 743	$ 682	$ 676	$ 717	$ 708	$ 367	$ -
H	Lutetium	$ 63,181	US$ 000s	$ 47,386			$ 3,336	$ 3,374	$ 3,457	$ 3,545	$ 3,464	$ 3,419	$ 3,529	$ 3,658	$ 3,743	$ 3,436	$ 3,393	$ 3,623	$ 3,570	$ 1,837	$ -
Total Gross Revenue			US$ 000s	$ 1,448,449			$ 103,984	$ 103,506	$ 106,399	$ 106,424	$ 107,164	$ 105,107	$ 109,994	$ 112,238	$ 112,763	$ 107,455	$ 104,567	$ 107,446	$ 108,358	$ 53,046	$ -
Exchange Rate		1.33	$C/$US	1.33			1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Gross Revenue			C$'000s	$ 1,931,266			$ 138,645	$ 138,007	$ 141,865	$ 141,899	$ 142,885	$ 140,142	$ 146,659	$ 149,650	$ 150,350	$ 143,273	$ 139,422	$ 143,261	$ 144,478	$ 70,728	$ -
Offsite Costs (accounted for above)		US$																			
	LREE Separation	$10.00	C$'000s	$ 120,555			$ 8,700	$ 8,537	$ 8,793	$ 8,805	$ 8,927	$ 8,806	$ 9,206	$ 9,353	$ 9,315	$ 9,058	$ 8,842	$ 8,882	$ 9,006	$ 4,326	$ -
	HREE Separation	$20.00	C$'000s	$ 74,037			$ 5,281	$ 5,345	$ 5,511	$ 5,494	$ 5,456	$ 5,309	$ 5,570	$ 5,696	$ 5,774	$ 5,378	$ 5,304	$ 5,549	$ 5,571	$ 2,798	$ -
	Product Transportation ($/t)	$50.00	C$'000s	$ 2,206			$ 161	$ 157	$ 161	$ 161	$ 161	$ 160	$ 167	$ 171	$ 172	$ 165	$ 161	$ 164	$ 166	$ 79	$ -
	Total		**C$'000s**	**$ 196,798**			**$ 14,141**	**$ 14,039**	**$ 14,466**	**$ 14,460**	**$ 14,545**	**$ 14,275**	**$ 14,943**	**$ 15,220**	**$ 15,260**	**$ 14,601**	**$ 14,307**	**$ 14,595**	**$ 14,744**	**$ 7,204**	**$ -**
NSR Royalty		3%	C$'000s	21,313			3,386	1,380	1,419	1,419	1,429	1,401	1,467	1,497	1,504	1,433	1,394	1,433	1,445	707	-
		1%																			
Net Revenue			**C$'000s**	**$ 1,713,155**			**$ 121,118**	**$ 122,588**	**$ 125,980**	**$ 126,021**	**$ 126,912**	**$ 124,466**	**$ 130,249**	**$ 132,934**	**$ 133,587**	**$ 127,239**	**$ 123,721**	**$ 127,233**	**$ 128,289**	**$ 62,817**	**$ -**
NSR			C$/t	$ 353.24			$ 336	$ 341	$ 350	$ 350	$ 352	$ 346	$ 362	$ 369	$ 371	$ 353	$ 344	$ 353	$ 356	$ 370	$ -
TREO Net Revenue Basket Price			C$/kg	$ 32.63			$ 23	$ 24	$ 24	$ 24	$ 24	$ 24	$ 24	$ 24	$ 24	$ 23	$ 23	$ 24	$ 23	$ 24	$ -
Operating Costs		C$																			
OP Mining by Contractor (Ore)		$ 5.50	C$/t mined	$ 5.50			$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50
OP Mining by Contractor (Waste)		$ 4.50	C$/t mined	$ 4.50			$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50
OP Owners Mine Labour			C$/t processed				$ 10.97	$ 11.00	$ 11.00	$ 11.00	$ 10.97	$ 11.00	$ 11.00	$ 13.53							
UG Mining by owner		$ 87.91	C$/t mined	$ 87.91			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 331.65	$ 77.55	$ 76.05	$ 76.96	$ 77.17	$ 76.98	$ 107.16	$ -
Total Mining			C$/t processed	$ 68.89			$ 43.59	$ 48.39	$ 85.55	$ 37.28	$ 129.82	$ 42.66	$ 24.98	$ 80.41	$ 77.55	$ 76.05	$ 76.96	$ 77.17	$ 76.98	$ 107.16	$ -
Crushing		$ 5.00	C$/t processed	$ 5.00			$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00
Processing - Concentration		$ 141.35	C$/t processed	$ 141.35			$ 141.35	$ 141.35	$ 141.35	$ 141.35	$ 141.35	$ 141.35	$ 141.35	$ 141.35	$ 141.35	$ 141.35	$ 141.35	$ 141.35	$ 141.35	$ 141.35	$ 141.35
G&A (OP followed by UG)		$ 22.73	C$/t processed	$ 22.73			$ 19.47	$ 19.52	$ 19.52	$ 19.52	$ 19.47	$ 19.52	$ 19.52	$ 19.51	$ 25.02	$ 25.02	$ 25.02	$ 25.02	$ 25.02	$ 53.11	$ -
Total Operating Costs			**C$/t processed**	**$ 237.97**			**$ 209.41**	**$ 214.26**	**$ 251.43**	**$ 203.16**	**$ 295.64**	**$ 208.54**	**$ 190.85**	**$ 246.27**	**$ 248.93**	**$ 247.42**	**$ 248.33**	**$ 248.54**	**$ 248.36**	**$ 306.62**	**$ 146.35**
Mining - Open Pit			C$ '000s	$ 155,016			$ 15,723	$ 17,407	$ 30,778	$ 13,413	$ 46,831	$ 15,349	$ 8,986	$ 6,529	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Mining - Underground			C$ '000s	$ 179,093			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 22,418	$ 27,919	$ 27,378	$ 27,707	$ 27,781	$ 27,714	$ 18,175	$ -
Crushing			C$ '000s	$ 24,249			$ 1,804	$ 1,799	$ 1,799	$ 1,799	$ 1,804	$ 1,799	$ 1,799	$ 1,800	$ 1,800	$ 1,800	$ 1,800	$ 1,800	$ 1,800	$ 848	$ -
Processing - Concentration			C$ '000s	$ 685,524			$ 50,990	$ 50,851	$ 50,851	$ 50,851	$ 50,990	$ 50,851	$ 50,851	$ 50,886	$ 50,886	$ 50,886	$ 50,886	$ 50,886	$ 50,886	$ 23,974	$ -
G&A		$ 7,024	C$ '000s	$ 110,240			$ 7,024	$ 7,024	$ 7,024	$ 7,024	$ 7,024	$ 7,024	$ 7,024	$ 7,024	$ 9,008	$ 9,008	$ 9,008	$ 9,008	$ 9,008	$ 9,008	$ -
Total Operating Costs			**C$ '000s**	**$ 1,154,122**			**$ 75,541**	**$ 77,081**	**$ 90,452**	**$ 73,087**	**$ 106,649**	**$ 75,022**	**$ 68,659**	**$ 88,658**	**$ 89,613**	**$ 89,072**	**$ 89,400**	**$ 89,474**	**$ 89,408**	**$ 52,005**	**$ -**
Operating Margin			**C$ '000s**	**$ 559,032**			**$ 45,577**	**$ 45,508**	**$ 35,528**	**$ 52,934**	**$ 20,263**	**$ 49,444**	**$ 61,590**	**$ 44,276**	**$ 43,974**	**$ 38,167**	**$ 34,321**	**$ 37,759**	**$ 38,881**	**$ 10,812**	**$ -**
Capital Cost																					
OP & Surface Infrastructure			C$ '000s	$ 19,525	$ 5,858	$ 13,668															
Processing			C$ '000s	$ 72,005	$ 28,802	$ 43,203															
Indirects/Owners		39%	C$ '000s	$ 28,054	$ 8,416	$ 19,638															
Contingency		27%	C$ '000s	$ 32,652	$ 9,795	$ 22,856	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Initial Capital			**C$ '000s**	**$ 152,235**	**$ 52,871**	**$ 99,364**															
Sustaining Capital			C$ '000s	$ 8,782	$ -	$ -	$ 751	$ 751	$ 751	$ 751	$ 751	$ 751	$ 751	$ 751	$ 555	$ 555	$ 555	$ 555	$ 555	$ -	$ -
Underground Capital			C$ '000s	$ 56,692									$ 41,056	$ 11,520	$ 778	$ 1,071	$ 979	$ 569	$ 718	$ -	$ -
Reclamation and Closure			C$ '000s	$ 14,000																	$ 14,000
Total Capital Cost			**C$ '000s**	**$ 231,710**	**$ 52,871**	**$ 99,364**	**$ 751**	**$ 751**	**$ 751**	**$ 751**	**$ 751**	**$ 751**	**$ 41,807**	**$ 12,271**	**$ 1,333**	**$ 1,626**	**$ 1,534**	**$ 1,123**	**$ 1,273**	**$ -**	**$ 14,000**
Pre-Tax Cash Flow																					
Undiscounted Pre-Tax Cash Flow			**C$ '000s**	**$ 327,323**	**$ (52,871)**	**$ (99,364)**	**$ 44,826**	**$ 44,757**	**$ 34,778**	**$ 52,183**	**$ 19,512**	**$ 48,693**	**$ 19,782**	**$ 32,005**	**$ 42,641**	**$ 36,541**	**$ 32,786**	**$ 36,635**	**$ 37,608**	**$ 10,812**	**$ (14,000)**
Cumulative					$ (52,871)	$ (152,235)	$ (107,410)	$ (62,653)	$ (27,876)	$ 24,307	$ 43,819	$ 92,512	$ 112,294	$ 144,299	$ 186,940	$ 223,481	$ 256,268	$ 292,903	$ 330,511	$ 341,323	$ 327,323
Taxes from Proforma		31%	**C$ '000s**	**$ 101,767**	$ -	$ -	$ 3,969	$ 9,294	$ 6,514	$ 11,188	$ 2,370	$ 10,225	$ 13,325	$ 8,556	$ 8,438	$ 6,964	$ 5,967	$ 6,786	$ 6,937	$ 1,236	$ -
After-Tax Cashflow			**C$ '000s**	**$ 225,555**	$ (52,871)	$ (99,364)	$ 40,856	$ 35,462	$ 28,264	$ 40,995	$ 17,141	$ 38,467	$ 6,458	$ 23,450	$ 34,203	$ 29,577	$ 26,820	$ 29,849	$ 30,671	$ 9,576	$ (14,000)
Cumulative After-Tax Cashflow			**C$ '000s**		$ (52,871)	$ (152,235)	$ (111,379)	$ (75,917)	$ (47,653)	$ (6,657)	$ 10,484	$ 48,951	$ 55,409	$ 78,859	$ 113,062	$ 142,639	$ 169,459	$ 199,308	$ 229,979	$ 239,555	$ 225,555
Project Economics																					
Pre-Tax NPV		5.0%	C$ '000s	$ 178,581																	
Pre-Tax NPV		8.0%	C$ '000s	$ 121,859																	
Pre-Tax NPV		10.0%	C$ '000s	$ 92,890																	
After-Tax NPV		5.0%	C$ '000s	$ 112,301																	
After-Tax NPV		8.0%	C$ '000s	$ 69,421																	
After-Tax NPV		10.0%	C$ '000s	$ 47,643																	
Pre-Tax IRR			%	22.2%																	
After-Tax IRR			%	16.7%																	
Pre-Tax Payback Period			Years	3.5																	

SENSITIVITY ANALYSIS

Project risks can be identified in both economic and non-economic terms. Key economic risks were examined by running cash flow sensitivities on:

- Head Grade
- Recovery
- NSR
- Exchange Rate
- Operating Cost
- Capital Cost

The REE price sensitivity is based on results using a REO base case price forecast, which equates to an NSR value of \$353/t. Current REO prices equate to an NSR value of approximately \$140/t for comparison.

The results of the sensitivity analysis are presented in Table 1-3 and Figure 1-1.

TABLE 1-3 SENSITIVITY ANALYSIS
Search Minerals Inc. – Foxtrot Project

Sensitivity	TREE Head Grade (%)	NPV at 10% (\$000)
0.80	0.79	(60,737)
0.90	0.89	17
1.00	**0.98**	**47,643**
1.10	1.08	102,927
1.20	1.18	158,211

Sensitivity	TREE Recovery (%)	NPV at 10% (\$000)
0.80	57	(60,737)
0.90	64	17
1.00	**72**	**47,643**
1.10	79	102,927
1.20	86	158,211

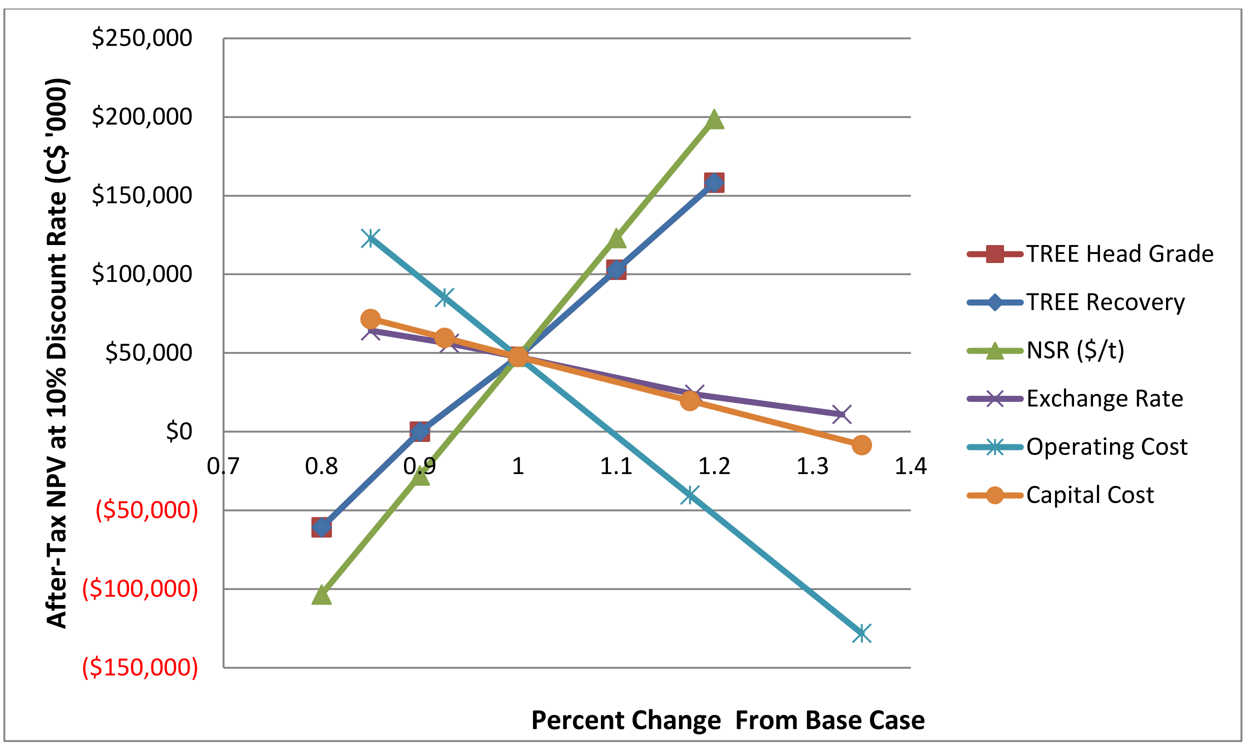
Sensitivity	NSR (\$/t)	NPV at 10% (\$000)
0.80	283	(103,328)
0.90	318	(27,843)
1.00	**353**	**47,643**
1.10	389	123,128
1.20	424	198,614

Sensitivity	Exchange Rate (US$/C$)	NPV at 10% ($000)
0.85	0.64	64,140
0.93	0.70	56,126
1.00	**0.75**	**47,643**
1.18	0.89	23,838
1.34	1.00	11,041

Sensitivity	Operating Cost ($000)	NPV at 10% ($000)
0.85	981,004	122,915
0.93	1,067,563	85,279
1.00	**1,154,122**	**47,643**
1.18	1,356,094	(40,175)
1.35	1,558,065	(127,993)

Sensitivity	Capital Cost ($000)	NPV at 10% ($000)
0.85	196,953	71,665
0.93	214,331	59,654
1.00	**231,710**	**47,643**
1.18	272,259	19,617
1.35	312,808	(8,409)

FIGURE 1-1 AFTER-TAX NPV SENSITIVITY ANALYSIS



TECHNICAL SUMMARY

PROPERTY LOCATION

The Foxtrot Project is located in southeast Labrador, Canada, centred at 580000E and 5806000N, UTM Grid Zone 21N, NAD83. The Project is located approximately 36 km east southeast of Port Hope Simpson, Labrador, and approximately 10 km west of St. Lewis, Labrador.

LAND TENURE

The Foxtrot Project comprises 11 contiguous licences, totalling 952 mineral claims covering an area of 23,800 ha. The licences are registered to Alterra Resources Inc. (Alterra), a wholly owned subsidiary of Search Minerals. No surface rights for construction or quarrying are known to exist. At the time of writing this report, all licences are held in good standing.

The Foxtrot Project Mineral Resource and proposed mine footprint are located on licence 022088M.

LOCAL RESOURCES AND INFRASTRUCTURE

The nearby communities of Port Hope Simpson, St. Lewis, and Mary's Harbour have port access as well as airstrips that can facilitate transportation of goods required for exploration programs. St. Lewis has an ice-free harbour with deep-water dock facilities and a small gravel airstrip suitable for small aircraft. Port Hope Simpson, St. Lewis, and Mary's Harbour, which have populations of approximately 500, 300, and 400 respectively, have various services including grocery stores, hardware stores, hotels, and heavy equipment for rent and labourers for hire.

There is no electricity available on the Project site. The closest source is diesel-generated electricity in the town of St. Lewis, 10 km away.

Water sources are plentiful at the Property.

HISTORY

Geological Survey of Canada (GSC) completed aeromagnetic and lake sediment geochemical surveys over the region in the 1970s and geological mapping was carried out as a five-year Canada-Newfoundland joint project in the 1980s.

In June 1996, Devonian Resources Inc. (Devonian) conducted work on a historic licence presently covered by mineral licence 022088M. Work included ground follow-up of the GCS lake sediment survey that indicated anomalous copper, nickel, and cobalt values. Devonian concluded that no further exploration was recommended.

Greenshield Resources Inc. conducted work in summer 1996 on a historic licence presently covered by parts of mineral licences 022088M and 023108M. The program consisted of geological mapping, prospecting, lithogeochemical sampling, and diamond drilling. Exploration focused on assessing the potential for economic magmatic copper-nickel mineralized areas, however, no significant economic mineralization was discovered.

Search Minerals acquired the Project in 2009 and discovered the Foxtrot deposit in 2010.

GEOLOGY AND MINERALIZATION

The Foxtrot deposit occurs in the 64 km long Fox Harbour Volcanic Belt (FHVB), which ranges in width from less than 50 m in the northwest to three kilometres in the east. Units dip steeply in a northerly direction and strikes generally trend westerly to northwesterly, parallel to bounding faults to the north and south. The FHVB contains one (in the northwest) to three (in the east) sub-belts of bimodal rocks dominated by REE-bearing felsic peralkaline flows and ash-flow tuffs and mafic to ultramafic volcanic and related subvolcanic units.

The three bimodal sub-belts in the FHVB, from north to south: the Road Belt (RB), the Magnetite (MT) Belt and South Belt (SB), have been the focus of REE exploration. The RB, which occurs on the northern boundary of the FHVB, can be traced throughout the FHVB. The MT and South Belts have only been observed in the eastern 30 km of the FHVB. The mineralized units within the belts, predominantly pantellerite and commendite, commonly occur in local topographic lows where ponds, bogs, and poor outcrop predominate.

High-grade mineralization, characterized by Dy from 100 ppm to 300 ppm, is predominantly hosted by fine-grained, layered to massive, pantellerite. Lower grade mineralization, characterized by Dy from 20 ppm to 100 ppm, is predominantly hosted by fine-grained, mostly massive commendite. Mineralized units are commonly interbedded with mafic volcanic units, quartzite, and locally derived volcanogenic sediments.

Most of the rare earth mineralization occurs in allanite and fergusonite; minor amounts of REE occur in chevkinite, monazite, bastnaesite, and zircon. The majority of the light REE (i.e., La to Sm) in the mineralization occurs in allanite, whereas the majority of the heavy REE (i.e., Eu to Lu) occurs in both fergusonite and allanite.

The MT Belt hosts the Foxtrot deposit, and was the target of all three phases of drilling by Foxtrot Minerals. The MT Belt consists of pantellerite, commendite, non-peralkaline rhyolite, and mafic to ultramafic volcanic and related subvolcanic units. Mineralized units commonly range from five to 20 m in thickness. Mineralization is up to 100 m in thickness (commendites plus pantellerites) at the Foxtrot deposit; high grade mineralization is up to 25 m in thickness and typically averages 10 m to 14 m in thickness.

EXPLORATION STATUS

Since the discovery in 2010, extensive exploration has been completed on the Foxtrot deposit. Exploration in 2010-2015 consisted of prospecting, mapping, lithogeochemical grab sampling, clearing, hand trenching, channel sampling, and diamond drilling. A total of 72 diamond drill holes for approximately 18,900 m were completed at the Project in three phases between 2010 and 2012. The drilling was followed by an extensive surface channel sampling program; a total of 300 samples totalling 133.7 m in length were collected during the 2014 and 2015 field seasons. The current Mineral Resource estimate is based on data from all three phases of drilling, and all channel sampling from 2010 to 2015.

MINERAL RESOURCES

RPA updated the Foxtrot Mineral Resource estimate using drill hole and surface channel data available as of December 31, 2015. New information since the previous 2012 estimate comprises assay data from 26 channels across the Foxtrot deposit, up to channel FTC-15-08. Table 1-4 summarizes the estimated Mineral Resources potentially mineable by open pit and underground methods. Different cut-off grades have been used for potential open pit and underground resources, expressed as NSR values. The open pit Mineral Resources were constrained within a design pit shell. No Mineral Reserves have been estimated at the Project.

TABLE 1-4 MINERAL RESOURCE ESTIMATE – DECEMBER 31 2015
Search Minerals Inc. – Foxtrot Project

Classification	Cut-off $NSR	Tonnage 000s	Pr ppm	Nd ppm	Dy ppm	LREE %	HREE %	TREE %
Open Pit								
Indicated	165	4,129	372	1,393	177	0.69	0.17	0.86
Inferred	165	228	368	1,378	179	0.68	0.17	0.85
Underground								
Indicated	260	3,263	429	1,602	209	0.78	0.19	0.97
Inferred	260	1,730	430	1,602	201	0.80	0.19	0.99
Total Indicated		**7,392**	**397**	**1,485**	**191**	**0.73**	**0.18**	**0.91**
Total Inferred		**1,958**	**423**	**1,576**	**199**	**0.79**	**0.18**	**0.97**

Classification	Cut-off $NSR	Tonnage 000s	Pr_6O_{11} ppm	Nd_2O_3 ppm	Dy_2O_3 ppm	LREO %	HREO %	TREO %
Open Pit								
Indicated	165	4,129	449	1,625	203	0.83	0.20	1.03
Inferred	165	228	445	1,607	206	0.82	0.20	1.02
Underground								
Indicated	260	3,263	518	1,868	240	0.94	0.23	1.17
Inferred	260	1,730	520	1,868	231	0.96	0.23	1.19
Total Indicated		**7,392**	**480**	**1,732**	**219**	**0.88**	**0.21**	**1.09**
Total Inferred		**1,958**	**511**	**1,838**	**228**	**0.94**	**0.22**	**1.17**

Notes:
1. CIM definitions were followed for Mineral Resources.
2. Open Pit Resources were reported inside the design pit at a pit discard NSR cut-off of $165/t. Underground Resources were reported as material outside the design pit at a break-even NSR cut-off of $260/t.
3. NSR values were assigned to blocks using metal prices and metallurgical recoveries (as shown in their respective sections of this report) for each of the individual elements and accounting for separation and transportation charges and royalties for the mixed REO product.
4. A minimum mining width of approximately 2.0 m was used for both open pit and underground.
5. Heavy Rare Earth Elements (HREE) = Eu+Gd+Tb+Dy+Ho+Er+Tm+Yb+Lu+Y
6. Light Rare Earth Elements (LREE) = La+Ce+Pr+Nd+Sm
7. Total Rare Earth Elements (TREE) = sum of HREE and LREE
8. HREO, LREO refer to oxides of heavy and light rare earth elements respectively, and TREO is the sum of HREO and LREO.
9. The estimate is of Mineral Resources only and, because these do not constitute Mineral Reserves, they do not have demonstrated economic viability.
10. Totals may not add or multiply accurately due to rounding.

A set of cross-sections and level plans were interpreted to construct three-dimensional wireframe models for three mineralized zones at a NSR cut-off value of $140/t (subsequent adjustments to exchange rates used result in a reporting cut-off value of $165/t). Assays were composited using nominal two metre lengths within discrete mineralized zones. Evaluation of raw assay grades prior to compositing indicated that high grade values do not need capping. Grades for each block within discrete wireframe models were interpolated by Inverse Distance Cubed method using any composites within the corresponding wireframes.

NSR cut-off values were derived from the estimated operating costs for each potential mining method. Grades for all assays were combined with estimated metallurgical recoveries and prices as described in the PEA to estimate an NSR value for each sample.

A density value of 2.71 t/m^3 was assigned to each block within the mineralized zones. The value was derived from the average density of three rocks types that occur within the Foxtrot deposit. Classification into the Indicated and Inferred categories was guided by the drill hole and channel sample spacing and the continuity of the mineralized zones.

MINING METHODS

RPA investigated the potential for a 14 year combined open pit and underground mining scenario with run of mine (ROM) material being processed at a rate of 1,000 tpd or 360,000 tpa in a process plant on site producing a mixed REO concentrate. The mining of both the Indicated and Inferred Mineral Resources was considered, using REE prices appropriate for a PEA. At estimated operating costs, underground mining was found to become more profitable than open pit mining beneath a depth of approximately 160 m below surface.

Open pit mining of REE bearing material and waste will be carried out over an eight year period by contractors to keep the initial capital as low as possible. Little to no pre-stripping of overburden is required above the open pit footprint, as the deposit is exposed on surface.

Open pit possibilities were investigated by pit optimization analysis using Whittle software on the 2015 resource block model. Pit slope angles were selected with a 50° overall slope angle based on the relatively small size of the pit and the competency of the rock observed at site. Pit optimizations were performed based on costs developed using contractor estimates, benchmarking, and costs developed from first principles. The optimization results indicated that a significant portion of the deposit would be economic to mine using open pit methods.

The processing cut-off value for the open pit material was initially estimated at $150/t. In order to achieve an early payback, an elevated NSR cut-off value of $250/t was used. The $250/t optimal NSR cut-off value was determined through an iterative process using a range of NSR cut-off values from $150/t to $350/t. It was determined that the highest NPV from the open pit is achieved using the $250/t NSR cut-off value. All material below the $250/t elevated NSR cut-off value and above the $150/t processing cut-off is sent to a low grade stockpile which reaches 1.9 Mt over the life of the mine. This material is not taken into consideration in the economic evaluation of the Project.

A pit design, complete with 12 m ramps, 5 m benches, and 8 m berms every four benches, was carried out using four pushbacks designed to optimize the access to ore early in the mine life while minimizing excess waste stripping.

Open pit contract mining will be carried out using conventional open pit mining methods consisting of drilling, blasting, loading, and hauling operations. The production equipment will be supported by bulldozers, graders, and water trucks.

The underground mine will be owner-operated. Underground capital (consisting of mobile equipment and mine development) will be spent during open pit operations, allowing funding via operating profit. Given the deposit is steeply dipping to the north (or sub-vertical), the underground mining method will be longhole mining with principally transverse accesses from the deposit footwall through to the hanging wall. Mining will start at the topmost level and progress in a top down fashion with each level being completely mined before starting the next level. The main decline will ramp down from the starter pit to the first level of mining. Cemented rock fill (CRF) will be placed in all stopes.

Underground mining will consist of development and production drilling, ground support, blasting, loading, hauling, and backfilling activities. The stationary equipment required for the mining will include main and secondary ventilation fans combined with a propane heating system, air compressors, and a mine dewatering infrastructure (pumping stations, sumps, and pumps).

Production quantities from both open pit and underground mining total 4.85 Mt, at a grade of 0.98% TREE (equivalent to NSR values of $351/t, $358/t, and $353/t over the open pit, underground, and LOM, respectively.).

MINERAL PROCESSING AND METALLURGICAL TESTING

Beneficiation techniques were studied during earlier testwork with promising results. However, given the high energy costs expected for the remote mine site, coarse whole-ore leaching was investigated as a means of reducing energy demand. Small scale tests showed great promise and testing was scaled up using a rotary kiln processing approximately 2 kg/h of –6 mesh (3.3 mm) material. The resulting calcine was water leached and the solids (residue) and pregnant leach solution (PLS) were separated by filtration. PLS samples have been successfully processed to remove impurities such as thorium and a bulk carbonate precipitate containing 35% REE precipitated using soda ash.

Tests have shown that the REE carbonate can be re-dissolved, treated for the further removal of impurities and the REE precipitated as a high grade oxalate that can be calcined to oxide.

REE recovery varies from 78% for Nd and Pr to 50% for Lu.

The proposed process will utilize coarse and fine crushing to -3.3 mm, mixing of acid and crushed feed, acid baking at 200^0C for 1.5 hours, water leaching the product over a 24 hour period at 90^0C, liquid-solid separation, impurity removal by precipitation, REE precipitation and re-dissolution, secondary impurity removal, and oxalate precipitation and calcining.

Additional testwork, including pilot plant operation, is required to fully define the proposed process.

ENVIRONMENTAL, PERMITTING, AND SOCIAL CONSIDERATIONS

The Project will require environmental baseline study work to support permitting efforts and assist in Project design to avoid or minimize potential adverse effects. No baseline work has been completed to date.

Mining projects in the Province of Newfoundland and Labrador are subject to Environmental Assessment (EA) under the Newfoundland and Labrador Environmental Protection Act. They can also be subject to an environmental assessment under the Canadian Environmental Assessment Act (CEAA) if an approval is required from a federal agency. All provincial and federal EA processes are public.

Search Minerals has initiated a community and Aboriginal consultation process. On August 27, 2012 Search Minerals announced that a Mining Exploration Activities Agreement was signed with the NunatuKavut Community Council (NCC), the political representative body of the Inuit of South-Central Labrador. Key elements in the agreement address environmental protocols and protection for matters of historic values. The agreement highlights hiring and business opportunities for NunatuKavut members and surrounding communities, and Search Minerals' commitment to make an annual payment to the NCC. Search Minerals also reports that it has held meetings with local community councils in St. Lewis, Port Hope Simpson, and Mary's Harbour, and made presentations to local groups in Goose Bay and Port Hope Simpson.

A formal Rehabilitation and Closure Plan is required to obtain approval for project development under the Newfoundland and Labrador Mining Act. This plan is required to be submitted with or immediately following the submission of the Project Development Plan and provides the basis for the establishment of the Financial Assurance for the Project. The Mining Act requirements will only be reviewed following release of the Project from Environmental Assessment, and the review and approval process can typically take four months to one year.

While RPA has not completed a closure plan for the Project, an allowance of $14 million has been included in the current cash flow. This estimate is based on a comparison to similar projects.

MARKETS

The market for rare earth products is small and public information on price forecasts and sales terms are difficult to obtain. Current prices are tracked by sources such as Asian Metal and Metal-Pages, based on transactions, and average approximately $13/kg of REO (net of separation charges).

Rare earth prices used in the current PEA average $33/kg of REO (net of separation charges). Rare earth prices are based on independent, long-term forecasts, which are approximately double current prices. The REO prices used are in line with other recent studies on REE projects such as Tasman Metals Ltd. (Norra Karr), Hastings Rare Metals Ltd. (Yangibana), and Alkane Resources (Dubbo).

RPA considers these REO prices to be appropriate for a PEA-level study, however, RPA notes that the rare earth market volatility and lack of transparency introduce considerably more uncertainty in revenue than a comparable base or precious metals project.

A small number of REE producers outside of China are likely to be in operation by the time the Foxtrot Project is developed. This is expected to saturate the market for some LREO such as La and Ce, however, demand for high-value HREO (such as Dy) is expected to grow, and supply is expected to remain in deficit. Revenue for the Foxtrot Project is dominated by Nd (39%), Dy (29%), Pr (14%), and Tb (8%), elements that are projected to remain in supply deficit.

CAPITAL AND OPERATING COST ESTIMATES

CAPITAL COSTS

The mine, process, and site infrastructure capital costs are summarized in Table 1-5.

TABLE 1-5 CAPITAL COST SUMMARY
Search Minerals Inc. – Foxtrot Project

Area	Capital ($M)
Open Pit and Surface Infrastructure	19.5
Processing	72.0
Indirects/Owners	28.1
Contingency	32.6
Total Initial Capital	**152.2**
Sustaining Capital	8.8
Underground Capital	56.7
Reclamation and Closure	14.0
Total Capital Cost	**231.7**

The initial capital cost and the sustaining capital are $152.2 million and $79.5 million, respectively. The total capital cost, including initial and sustaining, considered for the purpose of the economic analysis is $231.7 million.

The underground mine capital cost required totals $56.7 million and is considered to be a sustaining capital cost as it occurs after production has begun and will be funded by the open pit operations.

Capital costs for the process design were estimated by SNC-Lavalin for a 500 tpd operation. RPA has scaled the costs to a 1,000 tpd operation.

All other capital costs were estimated using cost models, unit prices, suppliers' budget quotes, preliminary designs, general industry knowledge and experience, and other information from recent similar projects.

Contingencies were applied by area, averaging 27% of direct and indirect capital costs.

OPERATING COSTS

Mine life average operating unit costs for the Project are shown in Table 1-6.

TABLE 1-6 UNIT OPERATING COSTS SUMMARY
Search Minerals Inc. – Foxtrot Project

Area	Unit	OP	UG
Open Pit Mining by Contractor	$/t processed	55.11	-
Underground Mining by Owner	$/t processed	-	87.91
Crushing	$/t processed	5.00	5.00
Processing - Concentration	$/t processed	141.35	141.35
G&A	$/t processed	19.52	25.02
Total Operating Costs	**$/t processed**	**220.99**	**259.28**

Note: Open pit mining by contractor based on $5.50/t moved and $4.50/t moved for ore and waste, respectively.

Mine operating costs were estimated using cost models, unit prices, suppliers' budget quotes, general knowledge and experience, preliminary designs, and other information from recent similar projects.

Process operating costs were estimated by SNC-Lavalin and adjustments were made by RPA to reflect exchange rate adjustments and processing rate.

G&A costs comprise the cost of administration services and staff, as well as management, human resources for engineering, geology, environment, and construction. Also included are the room and board costs and the fly-in/fly-out travelling costs for out-of-town employees. The remaining costs are for material and supplies, consultants, insurance and taxes, and communications.

2 INTRODUCTION

Roscoe Postle Associates Inc. (RPA) was retained by Search Minerals Inc. (Search Minerals) to prepare an independent Technical Report on the Foxtrot Rare Earth Element (REE) Project (Foxtrot Project) near Port Hope Simpson, Labrador, Canada. The purpose of this report is to disclose the results of a Preliminary Economic Assessment (PEA) on Search Minerals' Foxtrot Project. This Technical Report conforms to National Instrument 43-101 (NI 43-101) Standards of Disclosure for Mineral Projects. RPA visited the Foxtrot Project site and field house on August 26, 2015.

Search Minerals is a public company that trades on the TSX Venture Exchange under the symbol SMY. In addition to the Foxtrot Project, Search Minerals has a number of other mineral prospects on its 100% owned Red Wine and Henley Harbour properties, both located in Labrador.

This PEA is based on an updated Mineral Resource estimate and new metallurgical processing system and evaluates a combined open pit and underground mining approach along with crushing followed by acid baking, water leaching, precipitation, and calcining steps to produce a mixed rare earth oxide (REO) concentrate. The mine life will be 14 years, with open pit mining during the first eight years and underground mining thereafter. The processing rate will be 1,000 tpd with a feed grade-weighted average REE recovery of 76.8%. This new process eliminates the need for fine grinding, flotation, and gravity and magnetic separation.

This Technical Report is considered by RPA to meet the requirements of a PEA as defined in Canadian NI 43-101 regulations. The economic analysis contained in this section is based, in part, on Inferred Resources, and is preliminary in nature. Inferred Resources are considered too geologically speculative to have mining and economic considerations applied to them and to be categorized as Mineral Reserves. There is no certainty that the reserves development, production, and economic forecasts on which this PEA is based will be realized.

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

SOURCES OF INFORMATION

Ian Weir, P.Eng., RPA Senior Mining Engineer, and Katya Masun, P.Geo., RPA Senior Geologist, visited Search Minerals' Foxtrot Project on August 26, 2015. On site, Mr. Weir and Ms. Masun observed exploration activities and visited the Project's field house to examine core.

Discussions were held with personnel related to the Project:

- Mr. James D. Clucas, Executive Chairman, Director, Search Minerals Inc.
- Mr. Greg Andrews, President/CEO, Search Minerals Inc.
- Dr. David B. Dreisinger, Ph.D., Vice President – Technology, Director, Search Minerals Inc.
- Dr. Randy Miller, Ph.D., P.Geo, Vice President – Exploration, Search Minerals Inc.

Mr. Weir is responsible for the mining and infrastructure portions of the report, including cost estimation for those areas. Ms. Masun has reviewed all of the data and information gathered during the site visit and has responsibility for the resource estimation. Mr. John Goode, FCIM, FAusIMM, ARSM, P.Eng., is responsible for reviewing metallurgical aspects of the Project.

Mr. Weir oversaw preparation of the PEA cash flow and has overall responsibility for this report.

The documentation reviewed, and other sources of information, are listed at the end of this report in Section 27 References.

RARE EARTH ELEMENTS

In this report, the following abbreviations are used:

Eu – Europium	Er – Erbium	La - Lanthanum
Gd – Gadolinium	Tm - Thulium	Ce – Cerium
Tb – Terbium	Yb - Ytterbium	Pr – Praesodymium
Dy – Dysprosium	Lu - Lutetium	Nd – Neodymium
Ho - Holmium	Y- Yttrium	Sm - Samarium

- Heavy Rare Earth Elements (HREE) = Eu+Gd+Tb+Dy+Ho+Er+Tm+Yb+Lu+Y
- Light Rare Earth Elements (LREE) = La+Ce+Pr+Nd+Sm
- Total Rare Earth Elements (TREE) = sum of HREE and LREE

LREO and HREO refer to oxides of light and heavy rare earth elements respectively. In this document, TREO (Total Rare Earth Oxides) refers to LREO and HREO collectively.

LIST OF ABBREVIATIONS

Units of measurement used in this report conform to the Metric system. All currency in this report is Canadian dollars (C$) unless otherwise noted.

a	annum	lb	pound
A	ampere	LREE	light rare earth elements
bbl	barrels	LREO	light rare earth oxides
btu	British thermal units	L/s	litres per second
°C	degree Celsius	m	metre
C$	Canadian dollars	M	mega (million); molar
cal	calorie	m^2	square metre
cfm	cubic feet per minute	m^3	cubic metre
cm	centimetre	µ	micron
cm^2	square centimetre	MASL	metres above sea level
d	day	µg	microgram
dia	diameter	m^3/h	cubic metres per hour
dmt	dry metric tonne	mi	mile
dwt	dead-weight ton	min	minute
°F	degree Fahrenheit	µm	micrometre
ft	foot	mm	millimetre
ft^2	square foot	mph	miles per hour
ft^3	cubic foot	MVA	megavolt-amperes
ft/s	foot per second	MW	megawatt
g	gram	MWh	megawatt-hour
G	giga (billion)	oz	Troy ounce (31.1035g)
Gal	Imperial gallon	oz/st, opt	ounce per short ton
g/L	gram per litre	ppb	part per billion
Gpm	Imperial gallons per minute	ppm	part per million
g/t	gram per tonne	psia	pound per square inch absolute
gr/ft^3	grain per cubic foot	psig	pound per square inch gauge
gr/m^3	grain per cubic metre	REE	rare earth element
ha	hectare	REO	rare earth oxide
hp	horsepower	RL	relative elevation
hr	hour	s	second
HREE	heavy rare earth elements	st	short ton
HREO	heavy rare earth oxides	stpa	short ton per year
Hz	hertz	stpd	short ton per day
in.	inch	t	metric tonne
in^2	square inch	tpa	metric tonne per year
J	joule	tpd	metric tonne per day
k	kilo (thousand)	TREE	total rare earth elements
kcal	kilocalorie	TREO	total rare earth oxides
kg	kilogram	US$	United States dollar
km	kilometre	USg	United States gallon
km^2	square kilometre	USgpm	US gallon per minute
km/h	kilometre per hour	V	volt
kPa	kilopascal	W	watt
kVA	kilovolt-amperes	wmt	wet metric tonne
kW	kilowatt	wt%	weight percent
kWh	kilowatt-hour	yd^3	cubic yard
L	litre	yr	year

3 RELIANCE ON OTHER EXPERTS

This report has been prepared by RPA for Search Minerals. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to RPA at the time of preparation of this report,
- Assumptions, conditions, and qualifications as set forth in this report, and
- Data, reports, and other information supplied by Search Minerals and other third party sources.

For the purpose of this report, RPA has relied on ownership information provided by Search Minerals. RPA has not researched property title or mineral rights for the Foxtrot Project and expresses no opinion as to the ownership status of the property.

RPA has relied on publicly available information with respect to tax rates and rules applicable to the Project. This may include, but is not limited to, any associated municipal, provincial, state, and federal taxes, royalties and other production-based taxes, and other applicable laws that would allow for the modification of taxes applicable to the project. No information was provided by the Client regarding the tax rates or rules and as such the tax modeling in the cash flow should only be taken as a guide.

Except for the purposes legislated under provincial securities law, any use of this report by any third party is at that party's sole risk.

4 PROPERTY DESCRIPTION AND LOCATION

PROPERTY DESCRIPTION

The Foxtrot Project is located in southeast Labrador, Canada, centred at 580000E and 5806000N, UTM Grid Zone 21N, NAD83 (Figures 4-1 and 4-2). The Project is located approximately 36 km east-southeast of Port Hope Simpson, Labrador, and approximately 10 km west of St. Lewis, Labrador.

LAND TENURE

The Foxtrot Project comprises 11 contiguous licences, totalling 952 mineral claims covering an area of 23,800 ha. The licences are registered to Alterra Resources Inc. (Alterra), a wholly owned subsidiary of Search Minerals. No surface rights for construction or quarrying are known to exist. At the time of writing this report, all licences are held in good standing. Licence details and statistics are summarized in Table 4-1.

TABLE 4-1 SUMMARY OF LICENCE AND CLAIM BLOCK STATISTICS
Search Minerals Inc. – Foxtrot Project

License Number	Number of Claims	Area (ha)	Issuance Date	Renewal Date	Next Work Due	Expenditures Required ($)
022088M	245	6,125	21-Dec-09	21-Dec-19	21-Dec-23	172,678.08
023108M	63	1,575	17-Sep-09	17-Sep-19	17-Sep-22	56,452.73
023201M	74	1,850	20-Jun-08	20-Jun-18	20-Jun-17	33,006.66
021631M	43	1,075	28-Nov-13	28-Nov-18	28-Nov-16	8,351.84
022111M	136	3,400	22-Aug-08	22-Aug-18	22-Aug-16	78,789.62
020187M	196	4,900	22-Feb-10	22-Feb-20	22-Feb-23	176,400.00
022016M	20	500	07-Jul-08	7-Jul-18	7-Jul-22	18,000.00
022025M	100	2,500	07-Jul-08	7-Jul-18	7-Jul-16	59,557.22
022073M	30	750	22-Dec-09	22-Dec-19	22-Dec-15	9,329.36
019576M	33	825	12-Dec-11	12-Dec-16	12-Dec-15	583.57
017332M	12	300	22-Feb-10	22-Feb-20	22-Feb-17	3,510.11
TOTAL	**952**	**23,800**				**616,659.19**


Figure 4-1
Search Minerals Inc.
Foxtrot Project
Port Hope Simpson Area,
Newfoundland & Labrador, Canada
Property Location Map
Legend:
National Capitals
Cities
International Boundaries
State/Province Boundaries
Primary Roads
0 50 100 Miles
0 50 100 KM
N
FOXTROT PROJECT
Battle Harbour
Ungava Bay
Labrador Sea
ATLANTIC OCEAN
Gulf of Saint Lawrence
Cabot Strait
Strait of Belle Isle
Labrador
Newfoundland & Labrador
Newfoundland
Québec
New Brunswick
Nova Scotia
PEI
St. Pierre & Miquelon (France)
Schefferville
Labrador City
Wabush
Churchill Falls
Happy Valley-goose Bay
North West River
Nain
Hebron
Hopedale
Makkovik
Postville
Natuashish
Cartwright
Red Bay
St. Anthony
Corner Brook
Gander
Stephenville
St. John's
Sept-Iles
Gaspe
Ile d`Anticosti
April 2016

RPA

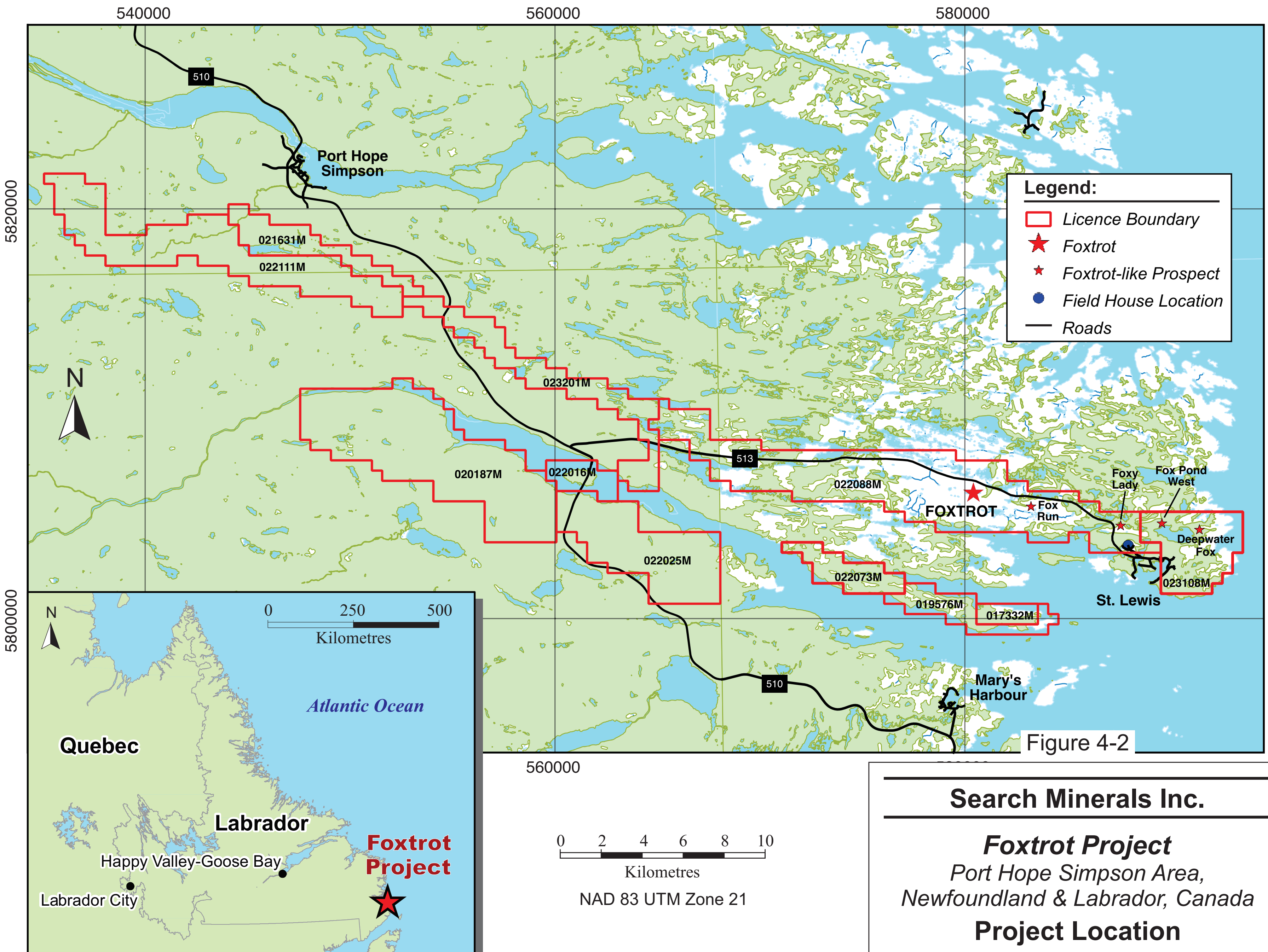


Figure 4-2

Search Minerals Inc.

Foxtrot Project

Port Hope Simpson Area, Newfoundland & Labrador, Canada

Project Location

April 2016

Source: Search Minerals Inc., 2016.

ENVIRONMENTAL STATUS AND PERMITTING

Search Minerals was fully permitted to conduct all work performed during the 2010-2015 exploration programs, and remains fully permitted to conduct all current work being done.

RPA is not aware of any environmental liabilities on the property.

RPA is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform the proposed work program on the property.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

ACCESSIBILITY

The Foxtrot 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. Properties not adjacent to the roadside are within walking distance. Diamond drill hole collars on licence 022088M are located up to 0.5 km from Highway 513.

Travel to the mine site from Goose Bay is available via charter airplane, helicopter, and road. Goose Bay, located 340 km to the northeast, is a preferred hub as it is regularly serviced from eastern Canadian cities including Quebec City and Montreal, Quebec and Halifax, Nova Scotia. Flight time from the exploration site to Goose Bay by helicopter is approximately two hours, and by plane approximately one hour. Road travel from Goose Bay, a distance of approximately 450 km, to the site is approximately six hours. The site is also accessible via road to the Strait of Belle Isle and via a short ferry trip to insular Newfoundland. The flight time to Newfoundland is approximately half an hour.

CLIMATE

Port Hope Simpson is subject to a maritime climate. During the six month field season, temperatures range from an average low of -1°C in May to an average high of 18°C in July and August. Over the same time period, average monthly precipitation ranges from 64 mm in May to 92 mm in June. Average monthly snowfall in May and June are 8 cm and 3 cm, respectively; snow is not expected in the remaining months of the field season. Drilling activities can occur all year around due to relatively mild winters.

LOCAL RESOURCES AND INFRASTRUCTURE

The nearby communities of Port Hope Simpson, St. Lewis and Mary’s Harbour, have port access as well as airstrips that can facilitate transportation of goods required for exploration programs. St. Lewis has deep water dock facilities and a small gravel airstrip suitable for small aircraft. Port Hope Simpson, St. Lewis, and Mary’s Harbour, which have populations of approximately 500, 300, and 400 respectively, have various services including grocery stores, fuel stores, hardware stores, hotels, and heavy equipment for rent and labourers for hire. Core storage and company lodging is located within the town of St. Lewis, in the newly renovated Loran C building (Figure 5-1), formally occupied by the Canadian Coast Guard.

There is no electricity available on the Project site. The closest source is diesel generated electricity in the town of St. Lewis, 10 km away.

Water sources are plentiful at the property.

FIGURE 5-1 CORE STORAGE FACILITY AND COMPANY LODGING

PHYSIOGRAPHY

Elevation ranges from sea level to approximately 100 MASL. Topography is rugged with generally east-west striking ridges and hills with low lying areas containing rivers, ponds, and brooks that generally drain east into St. Lewis Inlet. As an ecoregion, the property can be classified as “Coastal Barrens” with the majority of the property being scrubland. Vegetation consists of isolated black and white spruce stands in sheltered valleys, mosses, lichens, and Labrador tea in more barren areas and lichen-covered bedrock in higher areas and along ridges.

6 HISTORY

PUBLIC SURVEYS/STUDIES

Early knowledge of the area is based mainly on a 1:500,000 scale reconnaissance mapping (Eade, 1962).

Complete aeromagnetic coverage and lake-sediment geochemical surveys were conducted for the region (Geological Survey of Canada (GSC), 1974a, 1974b, 1984). A detailed lake sediment survey was released by the NL Government in 2010 and covered the area of the claims.

Geological mapping at 1:100,000 scale, as a five-year Canada-Newfoundland joint project aimed at mapping an 80 km coastal fringe of the Grenville Province in southern Labrador, was carried out from 1984 to 1987 by Charles F. Gower of the Newfoundland and Labrador Geological Survey (Gower et al., 1987).

Meyer and Dean visited the area in 1988 to investigate a Pb-Cd-W-Cu lake sediment anomaly (Meyer and Dean, 1988).

In 2014, a master's thesis was completed to determine the geology, mineralogy, age, and origin of the rare earth minerals at the Fox Harbour property (Haley, 2014).

MINERAL EXPLORATION

Devonian Resources Inc. (Devonian) conducted work from June 1 to June 27, 1996 on a historic license presently covered by mineral license 022088M. Work included ground follow up of the GSC lake sediment survey that indicated anomalous copper, nickel and cobalt values. Devonian concluded that no further exploration was recommended. It also attempted but failed to relocate the anomalous Zr sample location found by the Newfoundland Geological Survey in 1988. No samples were taken.

Greenshield Resources Inc., conducted work from May 29 to August 3, 1996 on a historic license presently covered by parts of mineral licences 022088M and 023108M. The program consisted of geological mapping, prospecting, lithogeochemical sampling, and diamond drilling. Exploration focused on assessing the potential for economic magmatic copper-nickel mineralized areas within the Alexis River Anorthosite. The program was completed with no significant economic mineralization discovered.

In 2008, Search Minerals began actively trading on the TSX Venture Exchange under the symbol SMY. In 2009, it successfully acquired all outstanding shares of Alterra, now a wholly-owned subsidiary. Alterra holds 1,192 mineral claims including 952 claims in the Port Hope Simpson (PHS) REE district, where the Foxtrot Project is located. Search Minerals began extensive exploration in the district in 2009 after it entered into a binding letter of intent to acquire an undivided 100% interest in certain claims in southeast Labrador owned by B and A Minerals Inc. known as the Port Hope Simpson property; these claims have since been transferred to Alterra as per the option agreement. Subsequent staking acquired adjacent land, including the Fox Harbour volcanic belt and the Foxtrot Project.

There are no historical resource or reserve estimates on the Foxtrot Project.

There is no past production on the Foxtrot Project.

7 GEOLOGICAL SETTING AND MINERALIZATION

REGIONAL GEOLOGY

The Foxtrot deposit occurs in the Fox Harbour Volcanic Belt (FHVB), a portion of the Fox Harbour Domain that is located in a region adjacent to the boundaries of three tectonic terranes within the eastern Grenville Province (Gower, 2012). Units of the Lake Melville Terrane occur north of the FHVB, units of the Mealy Mountain Terrane to the west and southwest, and units of the Pinware Terrane to the south. Differing lithologies, structures, ages, and metamorphic signatures distinguish these terranes from one another; they are largely separated and defined by major fault zones (Gower et al., 1987, 1988; Gower, 2010, 2012; Hanmer and Scott, 1990).

The Lake Melville Terrane is located north of the FHVB. This terrane is characterized by the Alexis River anorthosite, biotite-bearing granite, granodiorite, and quartz diorite-to-diorite gneiss (Gower et al., 1987, 1988; Gower 2010; Hanmer and Scott, 1990). The Fox Harbour fault zone (Gower, 2012) separates the Lake Melville Terrane from the FHVB. Near the Foxtrot deposit, terrane boundary interpretations indicate that a thin sliver (5 km to 6 km wide) of Mealy Mountains Terrane occurs between the Lake Melville Terrane to the north and the Pinware Terrane to the south (Gower, 2012). Detailed mapping indicates that the Fox Harbour Domain, including the FHVB, occurs in the northern half of the sliver and the Deer Harbour Domain in the southern half.

The Fox Harbour Domain, near the Foxtrot deposit, is bordered to the north by the Fox Harbour fault zone and to the south by the Deer Harbour fault zone. This domain has been traced for 64 km; it is terminated by a fault zone at the northwest end and by the Labrador Sea on the eastern end. REE mineralization, peralkaline felsic and mafic volcanic rocks of a bimodal suite (Fox Harbour Volcanic Suite), and an associated anorthositic gabbro distinguish this domain from adjacent domains and terranes. Feldspar porphyries and deformed augen gneisses also occur in this domain.

Regional structural data, satellite image interpretation, geology, and unique lithologies suggest that the Fox Harbour and Deer Harbour domains are not part of the Mealy Mountains Terrane. Similar data suggest that at least two additional domains occur between the Lake Melville and

Mealy Mountain terranes in the western portion of the region. The Camp #1 Domain occurs between the Lake Melville Terrane and the Fox Harbour Domain whereas the Bobby's Pond Domain occurs between the Fox Harbour, Camp #1, and Deer Harbour domains and the Mealy Mountains Terrane. The map pattern in the west shows the Mealy Mountains Terrane and the Bobby's Pond Domain as forming a wedge between the Fox Harbour and Deer Harbour Domains; the Bobby's Pond Domain may be a subunit of the Mealy Mountain Terrane. In the western portion of the study area, the Deer Harbour fault zone separates the Deer Harbour Domain and the Mealy Mountain Terrane/Bobby's Pond Domain.

The Mealy Mountain terrane units, west and southwest of the FHVB, consist of mostly biotite granitic gneiss, potassium feldspar megacrystic granite gneiss, quartz diorite to dioritic gneisses, and pelitic to semipelitic sedimentary gneisses (Gower et al., 1987, 1988; Gower, 2010).

The Pinware Terrane, in the St. Lewis Inlet area, consists of metamorphosed felsic to intermediate intrusions and older intercalated quartzo-feldspathic supracrustal rocks. Intrusions consist mainly of granite, k-feldspar megacrystic granite, quartz monzonite, granodiorite and supracrustal rocks consisting mainly of felsic volcanic rocks and arenitic sediments (Gower, 2007, 2010). The Long Harbour fault zone is interpreted to separate the Deer Harbour Domain from the Pinware Terrane to the south (Gower, 2012).

Mapping and exploration south of the Long Harbour fault zone indicate that peralkaline volcanic and intrusive rocks and related REE mineralization also occur in an area interpreted to be Pinware Terrane (Gower, 2012). These rocks and spatially associated non-peralkaline supracrustal rocks have been grouped into the HighREE Hills Domain. The HighREE Hills Domain is characterized by peralkaline volcanic and subvolcanic rocks and related pegmatite- and vein-hosted REE mineralization. REE prospects in the HighREE Hills Domain include: HighREE Island, Pesky Hill, Toots Cove, and Southern Shore.

Figure 7-1 illustrates the Foxtrot Project regional geology.

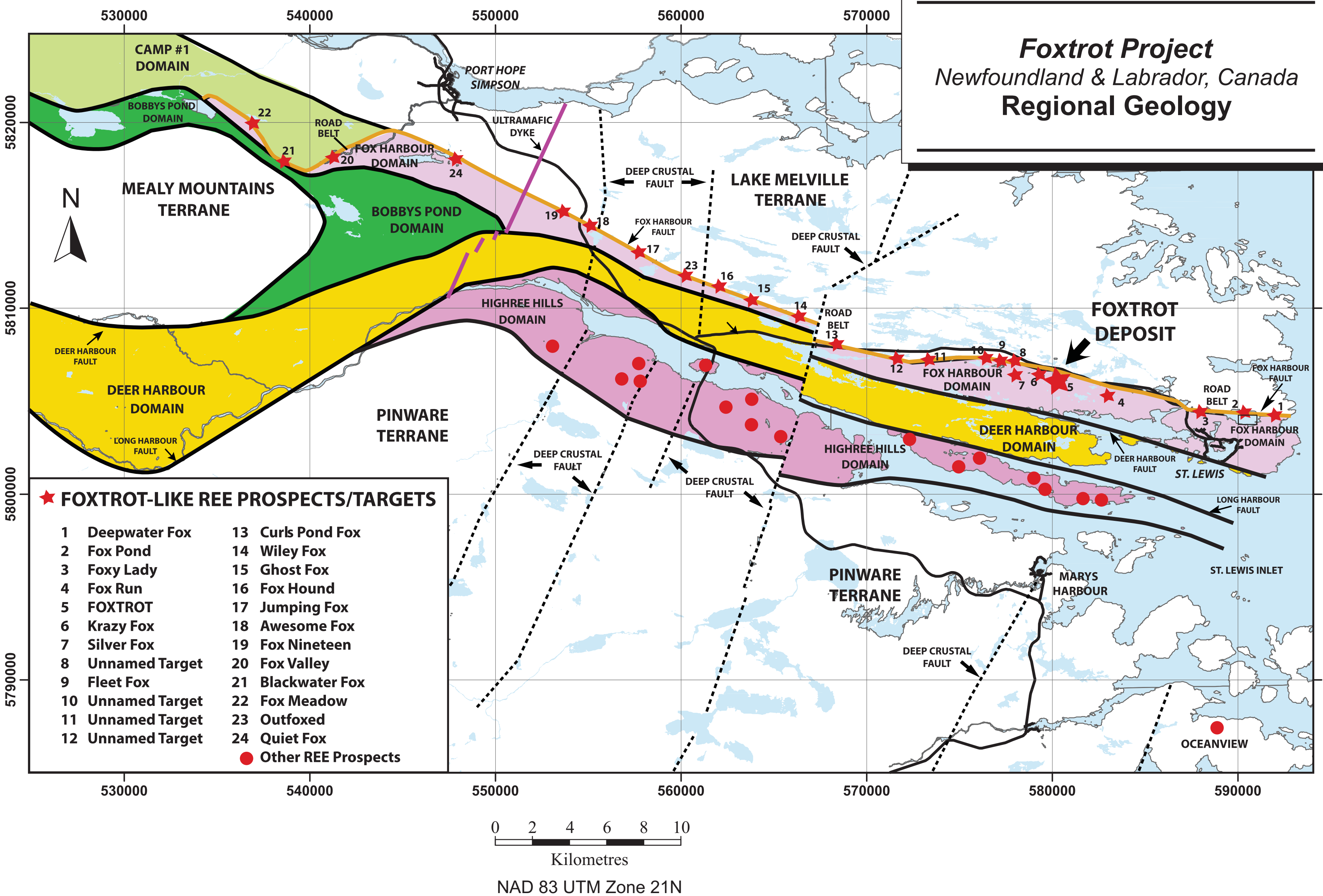
Figure 7-1

Search Minerals Inc.

Foxtrot Project

Newfoundland & Labrador, Canada

Regional Geology



April 2016

Source: Search Minerals Inc., 2016.

www.rpacan.com

LOCAL GEOLOGY

FOX HARBOUR VOLCANIC BELT (FHVB)

The 64 km long FHVB ranges in width from less than 50 m in the northwest to three kilometres in the east. Units dip steeply in a northerly direction and strikes generally trend westerly to northwesterly, parallel to bounding faults to the north and south. The FHVB contains one (in the northwest) to three (in the east) sub-belts of bimodal rocks dominated by REE-bearing felsic peralkaline flows and ash-flow tuffs and mafic to ultramafic volcanic and related subvolcanic units. Feldspar megacrystic/porphyritic units, including crystal tuffs in the eastern portion of the belt, predominantly occur between the three sub-belts. Supracrustal units of sedimentary origin, including quartzite and locally derived volcanogenic sediments formed by erosion of felsic (commonly peralkaline) and mafic units, are locally abundant.

The three bimodal sub-belts in the FHVB, from north to south: the Road Belt (RB), the Magnetite (MT) Belt and South Belt (SB), have been the focus of REE exploration. The RB, which occurs on the northern boundary of the FHVB, can be traced throughout the FHVB. The MT and South Belts have only been observed in the eastern 30 km of the FHVB. The mineralized units within the belts, predominantly pantellerite and commendite, commonly occur in local topographic lows where ponds, bogs, and poor outcrop predominate. Exploration for REE mineralization in the region, however, indicates that 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 mineralization. Airborne and ground-based radiometric-magnetic surveys clearly outline the three mineralized belts (Section 9).

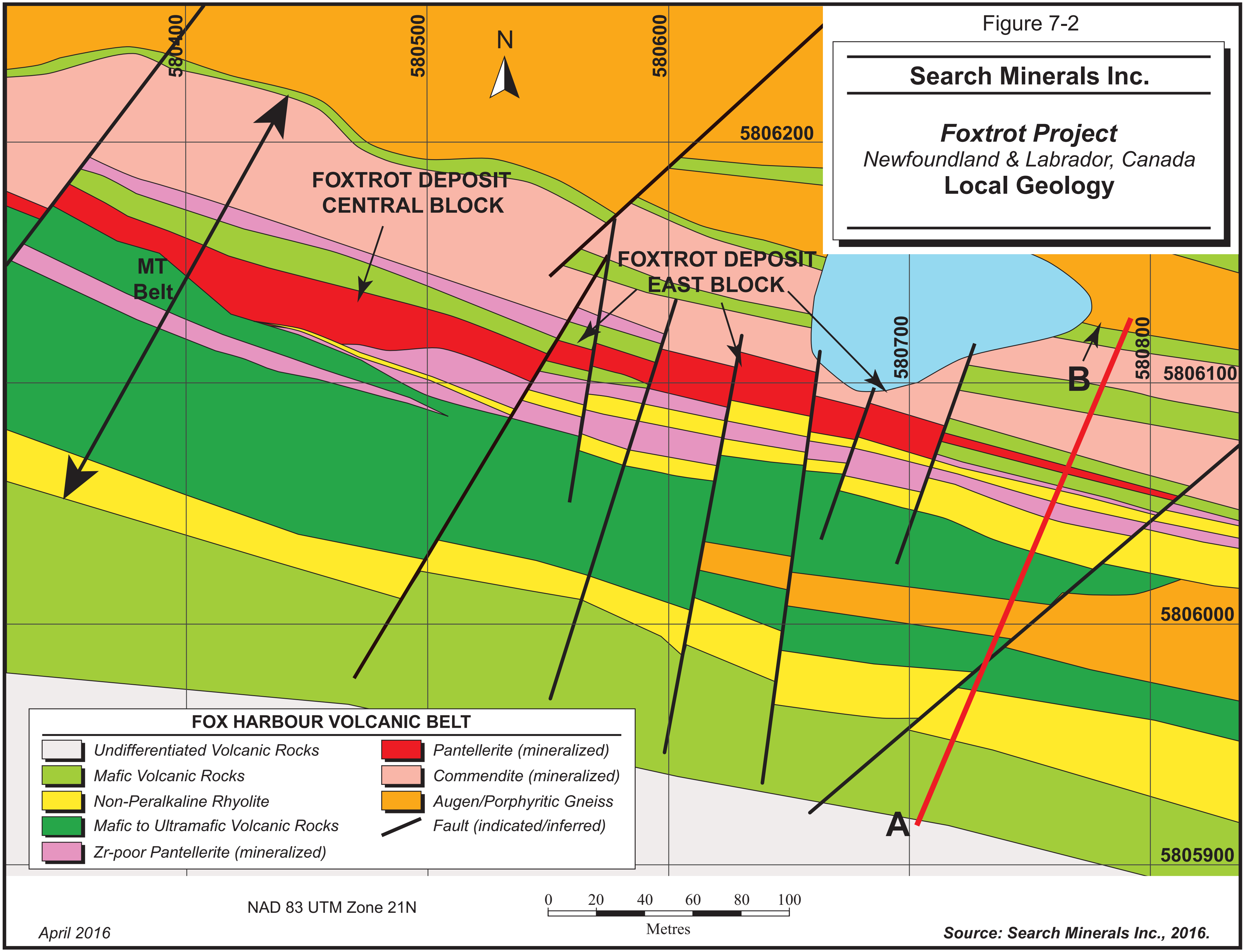
High-grade mineralization, characterized by Dy from 100 ppm to 300 ppm, is predominantly hosted by fine-grained, layered to massive, pantellerite. Lower grade mineralization, characterized by Dy from 20 ppm to 100 ppm, is predominantly hosted by fine-grained, mostly massive commendite. Mineralized units are commonly interbedded with mafic volcanic units, quartzite, and locally derived volcanogenic sediments.

Most of the rare earth mineralization occurs in allanite and fergusonite; minor amounts of REE occur in chevkinite, monazite, bastnaesite, and zircon. The majority of the light REE (i.e., La to Sm) in the mineralization occurs in allanite, whereas the majority of the heavy REE (i.e., Eu to Lu) occurs in both fergusonite and allanite (Section 13).

The RB commonly consists of non-peralkaline porphyritic feldspar-bearing units, mafic volcanic rocks, non-peralkaline felsic volcanic units, commendite, and pantellerite. A medium-grained anorthositic gabbro, with minor amounts of gabbro, always occurs north (i.e., within 25 m) of the RB volcanic units on the southern side of the Fox Harbour fault zone. Mineralized units commonly range from one to ten metres in thickness. The RB hosts several significant REE prospects with high grade REE mineralization including the Fox Pond, Fox Valley, Fox Meadow, and Deepwater Fox prospects. Medium to high grade mineralization at some of these prospects ranges from 10 m to 30 m in thickness.

The MT Belt commonly consists of pantellerite, commendite, non-peralkaline rhyolite, and mafic to ultramafic volcanic and related subvolcanic units. Mineralized units commonly range from five to 20 m in thickness. This belt hosts the Foxtrot deposit and additional significant REE prospects in the area (e.g., Silver Fox and Fox Run). Mineralization is up to 100 m in thickness (commendites plus pantellerites) at the Foxtrot deposit; high grade mineralization is up to 25 m in thickness, but typically averages 10 m to 14 m in thickness.

Lower grade REE mineralization is commonly found in the South Belt (SB). The SB commonly consists of predominantly commendite, minor mafic and pantelleritic units, feldspar-bearing porphyry and locally abundant volcanogenic sediments. Mineralization commonly ranges from 10 m to 50 m in thickness.



RPA
www.rpacan.com

PROPERTY GEOLOGY

MINERALIZATION

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 FHVB (Figures 7-1, 7-2, and 7-3). Near the Foxtrot deposit, the MT belt consists of, from north to south: 1) commendite, 2) pantellerite with interbedded non-peralkaline rhyolite, and 3) a mafic to ultramafic unit with interbedded non-peralkaline rhyolite. Minor units of locally derived volcanogenic sediments, mafic volcanics, and related subvolcanic units and pegmatites occur throughout this sequence. Feldspar porphyry borders the mineralized units to the north and a mafic unit, forming a predominant ridge in the area, occurs to the south. Table 7-1 lists representative REE data for the major units within the Foxtrot deposit.

TABLE 7-1 REE VALUES FOR COMMON ROCK TYPES AT FOXTROT
Search Minerals Inc. – Foxtrot Project

	Unit	Unmineralized Units				
		NPR	Mafic	Commendite	Low Zr	Pantellerite
From	m	16.00	19.70	5.43	0.16	6.87
To	m	16.90	20.85	6.23	0.42	7.88
Length	m	0.90	1.15	0.80	0.26	1.01
Y	ppm	51	17	135	620	1,260
La	ppm	70	6	142	1,150	2,160
Ce	ppm	163	13	299	2,350	4,260
Pr	ppm	18	2	37	269	481
Nd	ppm	62	9	142	1,020	1,810
Sm	ppm	11	3	27	182	329
Eu	ppm	0.5	0.9	4.2	10.2	16.3
Gd	ppm	9	3	24	145	245
Tb	ppm	1.5	0.1	4.3	21.5	38.7
Dy	ppm	9	4	28	116	234
Ho	ppm	1.7	0.1	5.8	22.5	43.3
Er	ppm	5	2	17	62	127
Tm	ppm	0.8	0.3	2.5	9.0	18.4
Yb	ppm	5	2	16	56	113
Lu	ppm	0.9	0.3	2.4	8.2	17.1
LREE	%	0.03	0.00	0.06	0.50	0.90
HREE	%	0.01	0.00	0.02	0.11	0.21
TREE	%	0.04	0.00	0.08	0.61	1.11

Notes:
1. REE assay from surface channel samples
2. NPR Non-peralkaline Rhyolite
3. Mafic = Mafic to Ultramafic Volcanic Unit
4. Low Zr = Low Zr Pantellerite (5,000 ppm to 10,000 ppm Zr)
5. Pantellerite = 10,000 ppm to 15,000 ppm Zr

The commenditic mineralization, which is approximately 50 m in thickness, consists of individual units of fine-grained, commonly less than one metre to two metres in thickness, massive to poorly layered commendite. Commendites commonly contain trace to minor magnetite, exhibit radioactivity three to five times higher than background levels, and contain lower amounts of REE (i.e., 20 ppm to 60 ppm Dy) and other incompatible elements relative to other mineralized units (Table 7-1).

The pantelleritic mineralization may be up to 30 m in thickness, consists of individual units of fine-grained, commonly less than one metre to five metres in thickness, poorly to well-layered pantellerite. Pantellerites contain up to 10% magnetite and localized amphibole and pyroxene. Magnetite is usually fine-grained but may occur as porphyritic grains up to 4.0 mm across. Pantellerites exhibit radioactivity from five to 40 times background. Layering within the pantellerite units, observed as darker and lighter bands, is commonly defined by varying contents of magnetite. Pantellerite units are generally well mineralized, containing potentially economic concentrations of REE (i.e., 60 ppm to 300 ppm Dy) and other incompatible elements (Table 7-1). Differences in average Zr values subdivide the pantellerites into two mappable units: Zr-poor pantellerite (5,000 ppm to 10,000 ppm Zr) and pantellerite (10,000 ppm to 15,000 ppm Zr); Zr-enriched pantellerite (>15,000 ppm Zr) is also observed but is commonly less than one metre in thickness, and is not depicted in Figure 7-2 or 7-3. The Foxtrot deposit comprises predominantly pantelleritic units.

Mafic volcanic units and locally derived sediments, commonly less than 0.5 m in thickness, occur between many individual mineralized units. Thicker mafic units, up to 10 m in thickness, occur within the commenditic unit and near the contact between the commenditic and pantelleritic units. Mafic units commonly contain less than 300 ppm Zr and less than10 ppm Dy.

Locally derived sediments consist of thin quartzite (<20 cm) interbedded with thinly layered (<30 cm) mafic and felsic bands. Felsic bands consist of non-peralkaline rhyolite, commendite, low Zr pantellerite, or a mix of mafic and felsic volcanic units.

Epidote-bearing fragments and a layered appearance characterize the mafic to ultramafic unit. Zr values commonly are less than 100 ppm and Dy values less than 4 ppm. These units mostly occur to the south of the pantelleritic mineralization and are up to 90 m in thickness.

Several units of non-peralkaline rhyolite, one to eight metres in thickness, occur within the mineralized zones, particularly in the eastern part of the deposit (Figures 7-2 and 7-3). They are commonly associated with low Zr-pantellerite, mafic rocks, and locally derived sediments. Non-peralkaline rhyolite is characterized by low Zr values (300 ppm to 600 ppm Zr), low Dy values (<12 ppm Dy) and low mafic mineral concentrations (commonly less than five percent).

Faults, defined by the geology, magnetic survey offsets and topographic lineaments, divide the deposit into two major blocks, the Central Block and the East Block. The observed faults are northerly to north-easterly striking, steeply dipping faults with up to 15m observed horizontal movement and an unknown amount of vertical movement.

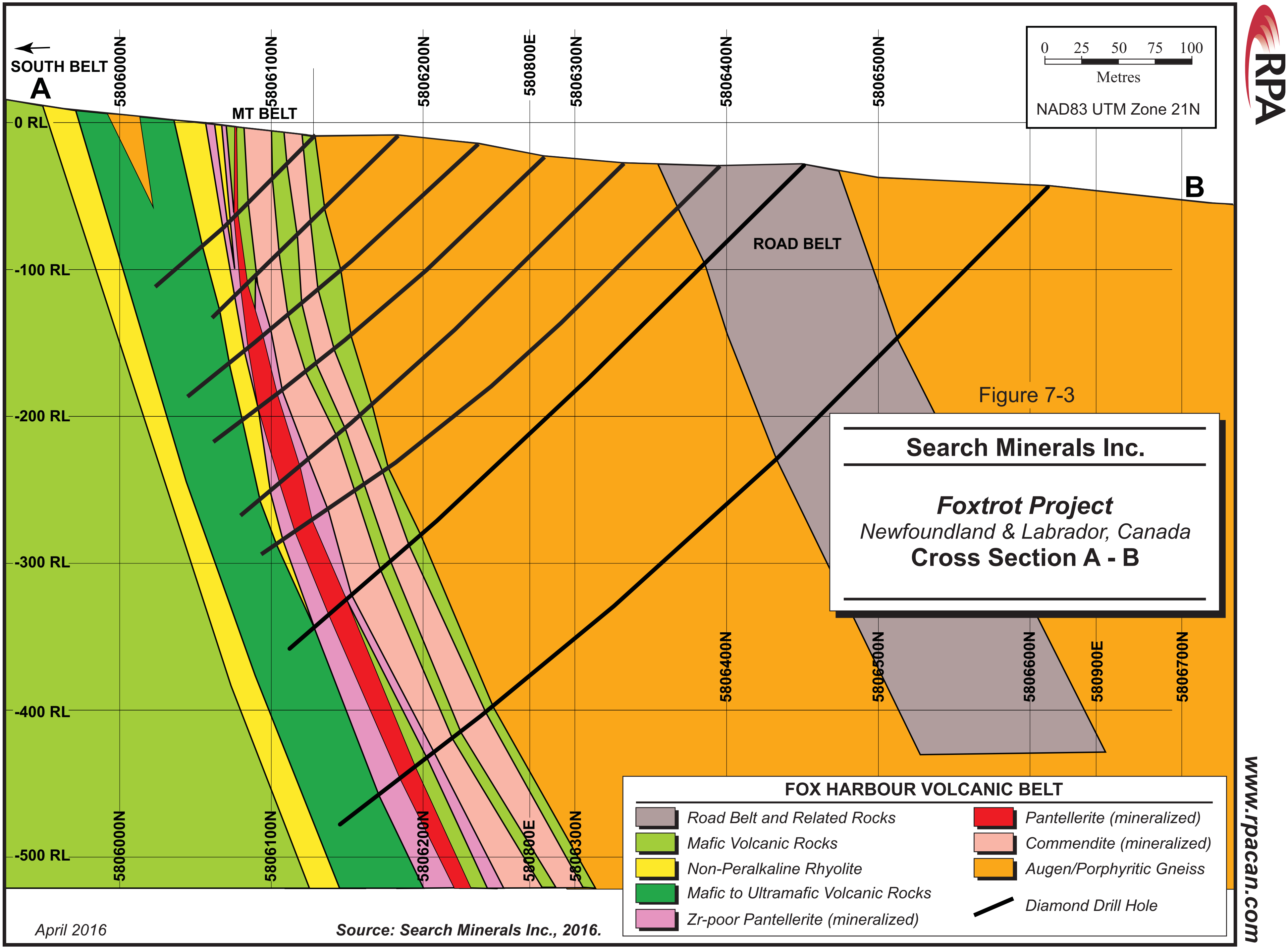
The vertical movement on the faults appears to have been partly responsible for changes along strike in the thickness of units, including the mineralization and the presence or absence of specific units. Change in the thickness of mineralization is observed across the western boundary of the Central Block and across the eastern boundary of the East Block (Figure 7-2). Non-peralkaline rhyolite is prominent in the East Block, where it commonly occurs as two units, and minor in the Central Block, where it occurs as one thinner unit or is absent. Similar changes in thicknesses and absence or presence of specific units also occurs across smaller faults within the East Block and may also occur in the Central Block but other corroborating data is currently absent in this block.

The peralkaline mineralized units and spatially associated mafic-ultramafic, non-peralkaline rhyolite and locally derived sedimentary units of the Foxtrot deposit are interpreted to represent a subaerial bimodal sequence of volcanic and related volcanogenic sediments and subvolcanic intrusions. The probable mantle derivation of the peralkaline and mafic to ultramafic rocks, the subaerial setting, and the occurrence of these units in a narrow belt (the FHVB) over at least a 64 km strike-length suggest that these rocks occur in a continental rift setting. Modern analogues include Pantelleria and the East African Rift.

GENETIC MODEL

REE mineralized peralkaline volcanic rocks, mainly pantellerite (Nuiklavik Volcanic Suite; Miller, 1993), and REE mineralized peralkaline intrusive rocks, granites-syenites (Strange Lake; Miller 1996, Miller et al., 1996; Two Tom Lake syenite; Miller 1987, 1988) and undersaturated syenites (Red Wine Suite; Miller 1987 and 1988), occur elsewhere in Labrador and are of similar age (Miller et al., 1996). In all examples, peralkaline rocks, hosting the REE mineralization, represent low volume late differentiates of high-level (crustal) magma chambers. For intrusions, the mineralization occurs in late pegmatites, vein systems, or small volume intrusions at or near the top of the source magma chamber. In the volcanic settings, the mineralization occurs as vent filling or near vent magma flows and/or ash flow tuffs.

The exploration program at the Foxtrot deposit reveals the relationship between peralkaline volcanic rocks, vent or near-vent locations, and significant REE mineralization. The Foxtrot deposit is being used as a model for further exploration throughout the FHVB. Preliminary data suggest that the Deepwater Fox and Fox Pond prospects also occur in vent or near vent settings in the Road Belt of the FHVB (Figure 7-1). The Fox Run prospect (Figure 7-1) likely occupies a similar site of REE mineralization in the MT Belt of the FHVB.


SOUTH BELT
A
B
MT BELT
ROAD BELT
0 RL
-100 RL
-200 RL
-300 RL
-400 RL
-500 RL
5806000N
5806100N
5806200N
580800E
5806300N
5806400N
5806500N
5806600N
580900E
5806700N
0 25 50 75 100
Metres
NAD83 UTM Zone 21N
RPA
www.rpacan.com
Figure 7-3
Search Minerals Inc.
Foxtrot Project
Newfoundland & Labrador, Canada
Cross Section A - B
FOX HARBOUR VOLCANIC BELT
Road Belt and Related Rocks
Mafic Volcanic Rocks
Non-Peralkaline Rhyolite
Mafic to Ultramafic Volcanic Rocks
Zr-poor Pantellerite (mineralized)
Pantellerite (mineralized)
Commendite (mineralized)
Augen/Porphyritic Gneiss
Diamond Drill Hole
April 2016
Source: Search Minerals Inc., 2016.

8 DEPOSIT TYPES

Rare earth element (REE) and rare earth metal deposits can be divided into two main classifications: primary magmatic REE deposits and secondary REE deposits. The vast majority of deposits are primary magmatic and many of the secondary ones are proximal to REE-enriched primary magmatic sources. Most magmatic deposits are related to mantle-derived magmas and/or magmatism associated with crustal rifting. Metamorphic equivalents of these main categories are also known but not distinguished in this classification.

PRIMARY MAGMATIC REE DEPOSITS

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 well known (e.g., Foxtrot, Deepwater Fox, Brockman deposits). No undersaturated volcanic-hosted deposits have been recognized to date.

PERALKALINE OVERSATURATED DEPOSITS

Peralkaline oversaturated deposits are commonly characterized by complex REE-bearing minerals, such as fergusonite, allanite, zircon, monazite and xenotime, and unusual silicates such as gadolinite, kainosite, and gerinite. REE-bearing carbonates (e.g., bastnaesite) are less common peralkaline oversaturated deposits.

Peralkaline granites and syenites are the most common REE-bearing peralkaline oversaturated deposits. Mineralization is concentrated in the top of magma chambers and is either crystallized in place in cupolas, or as enriched pegmatitic vein systems and related metasomatically-enriched rocks (e.g., part of Strange Lake Main Zone) or as proximal pegmatites/deposits (e.g., Strange Lake B-Zone and part of Main Zone). Other examples include: Bokan Mountain vein systems in Alaska, HighREE Hills mineralized pegmatites and veins systems (e.g., Pesky Hill, HighREE Island) in the Foxtrot area, and Round-Top Mountain disseminated low-grade mineralization in Texas. Volcanic-hosted equivalents include deposits in the Fox Harbour Volcanic Belt (e.g., Foxtrot, Deepwater Fox), Brockman Volcanic rocks, and mineralization in the Nuiklavik volcanic rocks of the Flowers River Igneous Suite. Volcanic hosted mineralization occurs as felsic vent filling or near vent ash-flow tuffs and spatially related subvolcanic pegmatitic equivalents.

PERALKALINE UNDERSATURATED DEPOSITS

Peralkaline undersaturated deposits are commonly characterized by eudialyte (e.g., Norra Karr, Kipawa Complex, Red Wine Complex), alteration products of eudialyte (Nechalacho – allanite, fergusonite, zircon) and other unknown complex Ca-Y silicates (e.g., Red Wine Complex).

Nepheline and eudialyte syenites are common source rocks for this kind of REE mineral deposit. Volcanic equivalents have not been identified. Mineralization occurs as pegmatite vein systems and related rocks (Red Wine Complex, Kipawa) and medium-grained zones within the upper portions of layered syenite intrusions (Norra Karr, Illimassuak, Red Wine Complex, Kipawa).

CARBONATITE DEPOSITS

Carbonatite hosted deposits contain a combination of REE-bearing carbonates (e.g., bastnaesite at Mountain Pass, Bear Lodge), monazite, xenotime, apatite and other rare minerals. The high level vein systems sometimes associated with carbonates contain higher concentrations of HREE and mostly contain predominantly phosphates like xenotime and monazite. Vein system mineralization occurs at Lofdal, Bear Lodge, Steenkampskraal, and Brown's Range

The majority of LREE, particularly La, Ce and Nd, are mined from carbonatites in China (Bayan Obo Deposit) and Australia (Mt. Weld Deposit). This mineralization occurs mostly disseminated in low volume magmatic phases of commonly large carbonatite plutons (e.g., Bear Lodge, Ashram).

Carbonatite high-level vein mineralization is commonly associated with large carbonatite plutons (e.g., Loftdal, Bear Lodge). High-grade mineralization, with similar characteristics but with no known associated plutons, is found at Brown's Range and Steenkampskraal. All represent small volume magmas probably originating from carbonatite magma chambers.

SECONDARY REE DEPOSITS

Three types of secondary REE deposits have been recognized: 1) beach sands and related sedimentary deposits, 2) ionic clay deposits, and 3) in situ laterites. They are all derived by the weathering of REE mineral-bearing rocks.

BEACH SAND DEPOSITS

Rare earth element-enriched heavy minerals, commonly zircon and monazite, are often concentrated in heavy mineral beach deposits. These minerals are separated from the sands and sold as a by-product from beach sand deposits in India and elsewhere. Consolidated beach sands and other clastic sedimentary units such as conglomerates can also contain significant quantities of REE-bearing heavy minerals (e.g., conglomerate in the Pele Mountain deposit).

IONIC CLAY DEPOSITS

Ionic clay REE deposits are derived by weathering of REE mineral bearing units exposed on the earth's surface. Breakdown of REE minerals releases REE species into the environment where clay particles absorb them. Several regions in southern China (e.g., Jiangxi Province) contain HREE-enriched ionic clay deposits. These are thought to have been derived from REE-bearing granites.

IN SITU LATERITES

Surface exposed rocks with REE-bearing mineralization can be upgraded by weathering processes. Two carbonatite-hosted REE deposits are known to have been upgraded by surface weathering processes. One is the Bear Lodge Carbonatite (Wyoming) and the other the Araxa Carbonatite (Brazil). Carbonatites weather easily in surface conditions.

FOXTROT DEPOSIT

The Foxtrot deposit is an example of a primary magmatic REE deposit; the mineralization being hosted in peralkaline oversaturated volcanic rocks. Mineralization occurs mainly in zircon, allanite, and fergusonite.

9 EXPLORATION

SUMMARY

Search Minerals began exploration in the Port Hope Simpson area in 2009, after acquiring 11 mineral licences from an option agreement with B and A Minerals Inc. In the winter of 2009, Search Minerals conducted an Aeroquest airborne radiometric and magnetic survey. Following this survey, anomalous areas of interest were outlined, prioritized, and ground checked during the start of the 2010 field season. An additional 47 mineral licences were staked, covering 864 km^2.

Since the discovery in 2010, extensive exploration has been completed on the Foxtrot deposit. Exploration in 2010-2015 consisted of ground magnetometer surveys, prospecting, mapping, lithogeochemical grab sampling, clearing, hand trenching, channel sampling with a portable circular saw, and diamond drilling. The exploration program was conducted across the entire Fox Harbour volcanic belt, with the main area of focus being the Foxtrot Project. Search Minerals has also identified and completed exploration work on numerous other prospects within the Port Hope Simpson REE District. The work is summarized in Table 9-1. Figure 9-1 shows the location of the Foxtrot deposit and other exploration prospects within the Port Hope Simpson REE District.

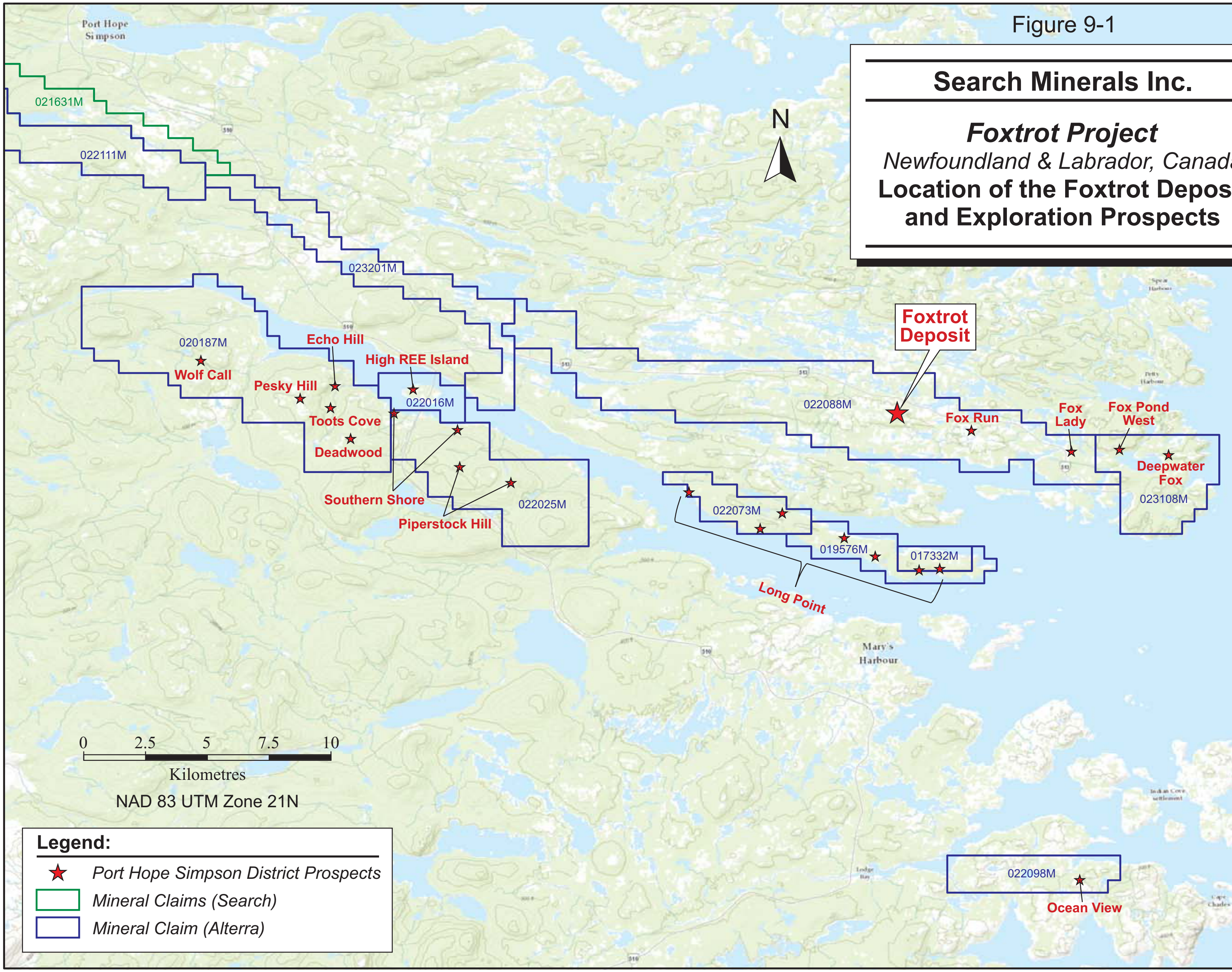
TABLE 9-1 EXPLORATION SUMMARY ON THE PORT HOPE SIMPSON REE DISTRICT
Search Minerals Inc. – Foxtrot Project

Prospect	Mineral Licence	Type of Work Completed	Date	No. of Channel Samples	Total Channel Length (m)	No. of Drill holes	No. of Core Samples	Total Drilling (m)
Foxtrot	022088M	Prospecting, ground mag, lithogeochemical sampling, channel sampling, drilling	2010-2015	644	511	72	14,322	18,837
Foxtrot-Like Prospects								
Deepwater Fox	023108M	Prospecting, ground mag, lithogeochemical sampling, channel sampling	2014-2015	951	523	-	-	-
Fox Run	022088M	Prospecting, ground mag, lithogeochemical sampling, channel sampling	2011, 2014	53	46	-	-	-
Fox Lady	022088M	Prospecting, ground mag, lithogeochemical sampling, channel sampling	2011	55	39	-	-	-

Prospect	Mineral Licence	Type of Work Completed	Date	No. of Channel Samples	Total Channel Length (m)	No. of Drill holes	No. of Core Samples	Total Drilling (m)
Fox Pond West	023108M	Prospecting, ground mag, lithogeochemical sampling, channel sampling	2012	115	59	-	-	-
Other Prospects								
HighREE Island	022016M	Prospecting, ground mag (2010), lithogeochemical sampling, channel sampling, drilling (2010)	2010-2012	195	447	13	2,422	2,029
Pesky Hill	020187M	Drilling (2012), lithogeochemical grab sampling, channel sampling	2010-2015	60	362	38	1,067	1,204
Toots Cove	020187M	Prospecting, lithogeochemical grab samples, ground mag (2011), surface channel sampling	2010-2015	20	112	-	-	-
Deadwood	020187M	Prospecting, lithogeochemical grab samples, surface channel sampling	2010-2015	7	19	-	-	-
Wolf Call	020187M	Prospecting, lithogeochemical grab samples, surface channel sampling	2010-2015	5	37	-	-	-
Echo Hill	020187M	Prospecting, lithogeochemical grab samples, surface channel sampling	2010-2015	14	55	-	-	-
Piperstock Hill	022025M	Prospecting, lithogeochemical grab samples, surface channel sampling	2010-2015	26	83	-	-	-
Southern Shore	022025M	Prospecting, lithogeochemical grab samples, surface channel sampling	2010-2015	22	92	-	-	-
Long Point	022073M, 019576M, and 017332M	Prospecting, lithogeochemical grab samples, surface channel sampling	2010-2015	30	38	-	-	-
Ocean View	022098M	Prospecting, lithogeochemical grab samples, surface channel sampling	2010-2013	28	123	-	-	-

2011 GROUND MAGNETOMETER SURVEYS

To better understand and characterize the REE mineralization at surface, two detailed ground based magnetometer surveys were conducted over most of licences 022088M and 023108M in the area of Foxtrot and Deepwater Fox, during the 2011 field season. The survey completed over the main mineralized zone at Foxtrot was highly detailed, and a less detailed survey was completed outside the main zone to trace the location of the mineralized units beyond the Foxtrot deposit. These surveys were used by Search Minerals to plan diamond drilling and surface channel sampling programs on these licences. The combined ground magnetometer surveys are shown in Figure 9-2.



April 2016

Source: RPA, 2016.

RPA

www.rpacan.com

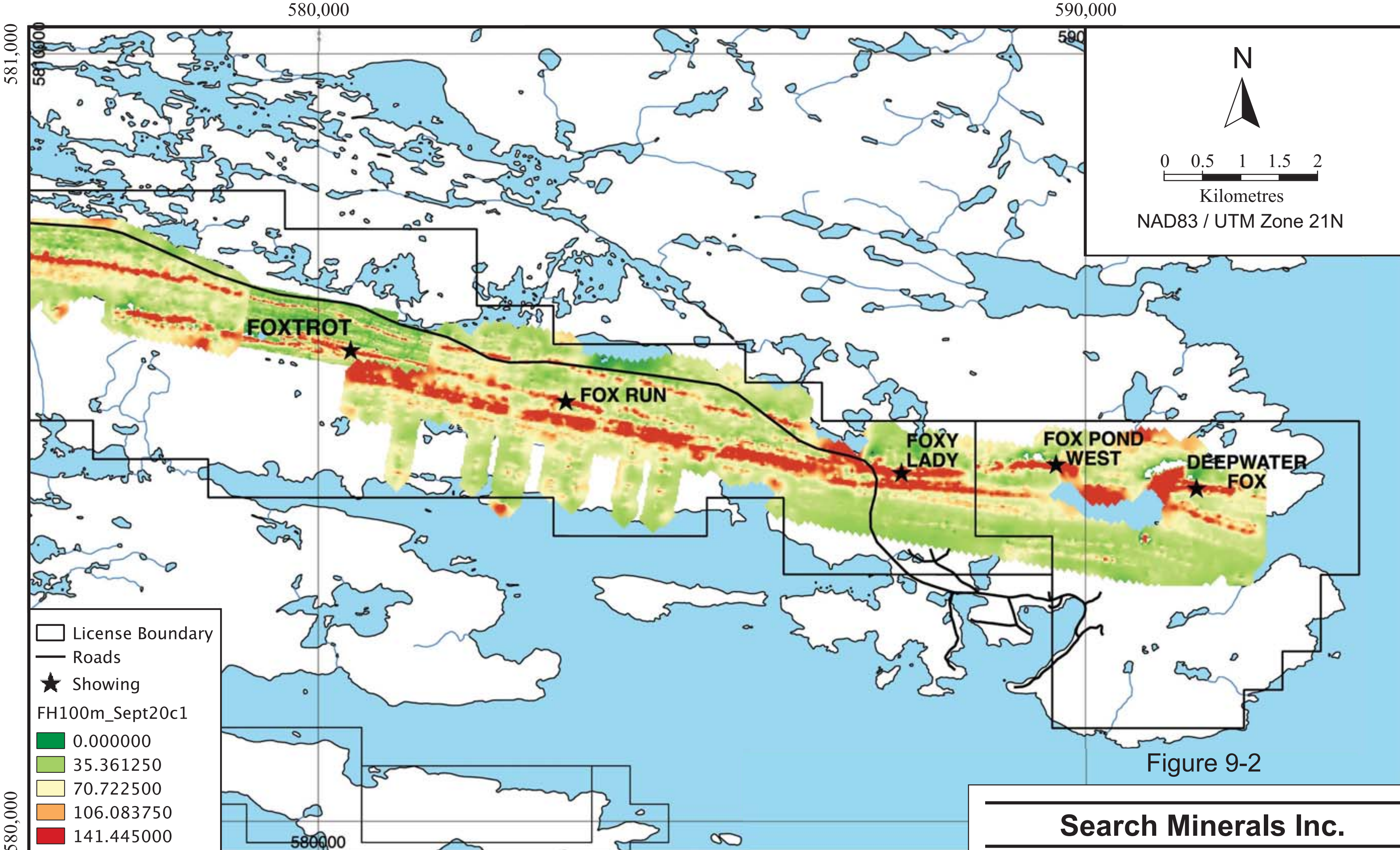


Figure 9-2

Search Minerals Inc.

Foxtrot Project

Newfoundland & Labrador, Canada

Ground Based Magnetic Survey over the Fox Harbour Volcanic Belt

April 2016

Source: Search Minerals Inc., 2016.

CHANNEL SAMPLING

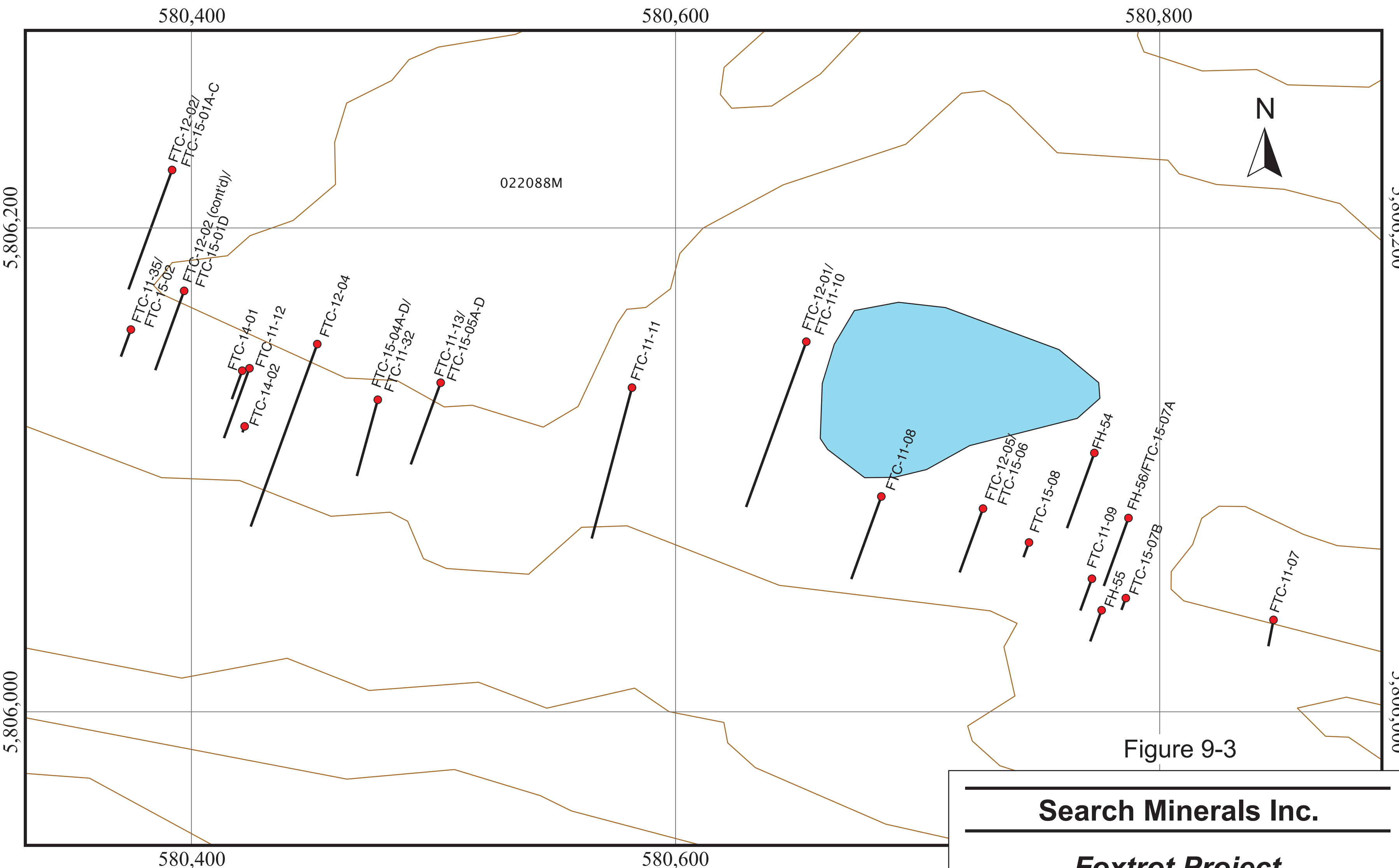
Search Minerals began surface channel sampling in 2010, and continued through 2015. Channel sampling focused on mineralized outcrops found using visual inspection as well as hand-held spectrometers. Channel samples have been taken at the Foxtrot deposit, as well as at the Deepwater Fox prospect, and several other Foxtrot-like prospects on the property.

FOXTROT DEPOSIT

Search Minerals collected 644 surface channel samples totalling 551 m from mineralized outcrops at the Foxtrot deposit from 2010-2015 (Figure 9-3). Channel sampling procedures are discussed in Section 11. Table 9-2 summarizes several significant surface channel REE assay intercepts taken at Foxtrot.

TABLE 9-2 FOXTROT DEPOSIT CHANNEL SAMPLE WEIGHTED AVERAGE ASSAY DATA
Search Minerals Inc. – Foxtrot Project

	Unit	Channel					
		FTC-11-08	FTC-15-01D	FTC-15-04A/ FTC-11-32	FTC-12-04	FTC-11-10	FTC-11-11
From	m	1.47	70.92	0.00	24.70	19.30	23.44
To	m	15.00	85.26	13.71	37.90	31.79	35.34
Length	m	13.53	14.34	13.71	13.20	12.49	11.90
Y	ppm	1,101	1,101	1,266	1,143	1,177	1,100
La	ppm	1,592	2,177	2,061	1,817	2,018	1,744
Ce	ppm	3,459	4,241	4,234	3,653	4,054	3,487
Pr	ppm	399	463	476	420	443	404
Nd	ppm	1,517	1,674	1,740	1,535	1,654	1,498
Sm	ppm	281	297	318	269	303	269
Eu	ppm	15	15	16	14	15	13
Gd	ppm	216	225	242	224	242	208
Tb	ppm	35	35	38	35	36	34
Dy	ppm	202	208	225	202	207	204
Ho	ppm	40	39	44	41	41	38
Er	ppm	113	111	122	112	117	108
Tm	ppm	17	16	18	16	17	15
Yb	ppm	100	97	109	97	102	99
Lu	ppm	16	14	16	15	15	15
LREE	**%**	**0.72**	**0.89**	**0.88**	**0.77**	**0.85**	**0.74**
HREE	**%**	**0.19**	**0.19**	**0.21**	**0.19**	**0.20**	**0.18**
TREE	**%**	**0.91**	**1.08**	**1.09**	**0.96**	**1.05**	**0.92**



Legend:

- Channel
- Channel Trace

April 2016

Source: Search Minerals Inc., 2016.

Figure 9-3

Search Minerals Inc.

Foxtrot Project

Newfoundland & Labrador, Canada

Location of Surface Channel Samples at the Foxtrot Deposit

FOXTROT-LIKE PROSPECTS WITHIN THE FOX HARBOUR VOLCANIC BELT

DEEPWATER FOX PROSPECT

The Deepwater Fox prospect is located 12 km east of the Foxtrot deposit (Figure 9-2), and is the second major discovery within the Fox Harbour Volcanic Belt (part of the Port Hope Simpson REE District). The Deepwater 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.

In the 2014 field season, a single channel sample was cut and 52 samples collected from the Deepwater Fox prospect, located on mineral license 023108M. This discovery channel sample was used to plan the 2015 exploration program.

In 2015, Search Minerals cut 25 surface channels and collected an additional 899 channel samples, totalling 489 m, from mineralized outcrops at the Deepwater Fox prospect. In total, 26 channel samples have been cut at the Deepwater Fox prospect and 951 samples have been collected and analyzed. Table 9-3 summarizes several significant surface channel REE assay intercepts taken at the Deepwater Fox prospect.

TABLE 9-3 DEEPWATER FOX CHANNEL SAMPLE WEIGHTED AVERAGE ASSAY DATA
Search Minerals Inc. – Foxtrot Project

		Channel					
	Unit	FDC-14-01	FDC-15-06	FDC-15-07	FDC-15-08	FDC-15-09	FDC-15-11
From	m	0	11.54	18.69	20.5	20.24	25.52
To	m	17.5	21.71	27.98	27.41	27.27	36.92
Length	m	17.5	10.17	9.29	6.91	7.03	11.4
Y	ppm	1,284	1,435	1,402	1,333	1,248	1,168
La	ppm	2,243	2,368	2,062	2,281	1,772	1,859
Ce	ppm	4,491	4,863	4,483	4,718	3,815	4,021
Pr	ppm	507	525	504	540	443	461
Nd	ppm	1,893	2,049	1,911	1,993	1,682	1,732
Sm	ppm	352	381	369	368	325	331
Eu	ppm	17.3	19.4	19	18.6	16.7	17.2
Gd	ppm	264	306	282	289	248	264
Tb	ppm	41	44	46	44	42	43
Dy	ppm	241	260	270	262	247	253
Ho	ppm	47	49	51	50	47	48
Er	ppm	133	137	144	141	135	134
Tm	ppm	18	19	21	19	19	19
Yb	ppm	111	117	128	120	118	119

	Unit	Channel FDC-14-01	FDC-15-06	FDC-15-07	FDC-15-08	FDC-15-09	FDC-15-11
Lu	ppm	16.2	17.5	18.6	17.4	17.1	16.9
LREE	**%**	**0.95**	**1.02**	**0.93**	**0.99**	**0.80**	**0.84**
HREE	**%**	**0.22**	**0.24**	**0.24**	**0.23**	**0.21**	**0.21**
TREE	**%**	**1.17**	**1.26**	**1.17**	**1.22**	**1.01**	**1.05**

FOX RUN, FOX POND WEST, AND FOXY LADY PROSPECTS

Located within the Fox Harbour Mineralized Belt, along strike, and in between the Foxtrot deposit and the Deepwater Fox prospect, are the Fox Run, Fox Pond West, and Foxy Lady prospects, three Foxtrot-like prospects (Figure 9-1). These Foxtrot-like prospects yield similar rock types, mineralization styles, and REE values to those at the Foxtrot Project.

During the 2011 field season, three channel samples were collected from the Fox Run prospect, and four channel samples collected from the Foxy Lady prospect. With the aid of the ground magnetometer survey, these prospects were easily identified in the field.

In the 2012 field season, five channel samples were collected from the Fox Pond West prospect. This prospect is easily accessed via a short boat trip across Fox Harbour Pond.

Two channel samples were collected from the Fox Run prospect in the 2014 field season. One channel sample was an extension of a 2011 channel, and the other was in a new location.

In RPA's opinion, the surface channel sampling conducted by Search Minerals has been an effective exploration technique in those areas where outcrop is exposed in Fox Harbour Mineralized Belt.

EXPLORATION IN THE PORT HOPE SIMPSON REE DISTRICT

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

HighREE ISLAND

The HighREE Island prospect is located approximately 18 km west of the Foxtrot deposit on mineral licence 022016M and was first discovered by B and A Minerals Inc. in 2009. Search Minerals began exploration on the prospect in 2010. Exploration consisted of prospecting, lithogeochemical sampling, and extensive channel sampling. Exploration continued into the 2011 and 2012 field seasons. To date, Search Minerals has collected 195 channel samples totalling 447 m.

Search Minerals completed a drill program on the HighREE Island prospect in 2010. Thirteen holes were drilled, totalling 2,029 m, and 2,422 core samples were taken for analysis (Table 9-1).

HighREE HILLS WEST

The HighREE Hills West Property is located approximately 23 km west of the Foxtrot deposit, on mineral licence 020187M, and contains five prospects: Pesky Hill, Toots Cove, Deadwood, Wolf Call, and Echo Hill (Figure 9-1).

The Pesky Hill prospect is located near St. Lewis Inlet on the southeast Labrador coast (Figure 9-1). In the fall of 2012, Search Minerals completed 38 vertical diamond drill holes at 10 m spacing (26 to 50 m depth, totalling 1,204 m) on three separate showings of mineralized, mafic-rich, amphibole-pyroxene-quartz-titanite and related granitic pegmatites and granites. In addition to drilling, Search Minerals has collected numerous lithogeochemical grab samples and 60 channel samples (totaling 362 m) from 2010 to 2015.

Exploration on the Toots Cove, Deadwood, Wolf Call, and Echo Hill prospects from 2010-2015 included prospecting, collection of lithogeochemical grab samples, and channel sampling. At Toots Cove, 20 channels (112 m) were cut, sampled and samples analyzed. In addition, seven channels (19 m total) from Deadwood, five channels (37 m total) from Wolf Call, and 14 channels (55 m total) from Echo Hill were cut, sampled and samples analyzed (Table 9-1).

HighREE HILLS EAST

The HighREE Hills East Property is located approximately 17 km west of the Foxtrot deposit, on mineral licence 022025M, and contains two prospects: the Piperstock Hill prospect and the Southern Shore prospect (Figure 9-1). Exploration on these prospects from 2010 to 2015 has included prospecting, collection of over 100 lithogeochemical grab samples, and channel sampling (Table 9-1).

LONG POINT PROSPECT

The Long Point prospect is located approximately 5 km south of the Foxtrot deposit (Figure 9-1). The prospect consists of three mineral licences: 022073M, 019576M, and 017332M.

From 2010 to 2015, exploration at the Long Point prospect included the collection of approximately 60 lithogeochemical grab samples and 30 channel samples (38.03 m in total length).

OCEAN VIEW PROSPECT

The Ocean View prospect is located on mineral licence 022098M approximately 20 km south of the Foxtrot deposit (Figure 9-1). From 2010 to 2015, exploration on the prospect included cutting 28 channel samples (123 m in total length) and the collection of 120 lithogeochemical grab samples.

10 DRILLING

Search Minerals commenced a Phase I exploration drill program at Foxtrot Project in Q4 2010. The Phase I drill program consisted of 23 diamond drill holes (DDH) totalling 3,876 m to a depth of 100 m and along two kilometres of strike. A Phase II exploration drill program was completed in Q3 2011 and consisted of 20 DDHs totalling 4,083 m to a depth of 200 m along a 500 m strike. A Phase III exploration drill program was completed in Q1 2012 and consisted of 29 DDHs totalling 10,896 m to a depth of 450 m along a 600 m strike. The drilling area focused on the thicker portion of the pantelleritic mineralization, which is approximately 10 m to 25 m in true width.

Springdale Forest Resources of Springdale, Newfoundland, was awarded the contract to complete the Phase I and Phase III drilling programs and Logan Drilling Group of Stewiacke, Nova Scotia, was awarded the contract to complete the Phase II drill program.

Drill hole collar positions were determined by Search Minerals' senior geological personnel and were located in the field by a Search Minerals geologist. Drill holes were initially plotted using ArcGIS, and collar positions were staked using a hand-held global positioning system (GPS) unit. All drill holes in the Foxtrot Project were surveyed after drilling had been completed to within ±0.60 m GPS positional accuracy, and 0.2° to 1.0° azimuth accuracy. Coordinates were recorded in UTM format according to the NAD83 datum, and elevations were recorded in metres above sea level.

All holes were drilled at an angle to the horizontal; the collar azimuth and dip were planned and checked by a Search Minerals geologist. The drill hole was set with an extended foresight from the drill head, and the azimuth of this line direction was measured with a Brunton or Silva type compass. The drill hole collar dip was set and measured with an inclinometer on the drill rods at the drill head.

No serious deviation problems have been encountered in the drilling to date, with most holes deviating less than 5° to 10° per 100 m from both azimuth and dip. Due to the steeply dipping mineralized zone, this did not affect true thickness calculations.

Sample length ranges from 0.05 m to 2.50 m, with the majority being exactly 1.0 m. The true thickness of the mineralization is a 100 m wide package of felsic and mafic bands.

Table 10-1 summarizes the drilling from all three phases.

Tables 10-2 and 10-3 present significant intervals from drilling Phases I and II for key rare earth metals and key rare earth oxides, respectively. Figure 10-1 displays the diamond drill hole locations from all phases of drilling.

TABLE 10-1 DRILL HOLE SUMMARY
Search Minerals Inc. – Foxtrot Project

Hole_ID	Easting	Northing	RL (m)	Depth (m)	Dip (º)	Azimuth (º)	# of Samples	Assay Range	Work Order Numbers
FT-10-01	580888	5806100	64.5	149	-45.54	190.1	228	455001-455228	A10-8275
FT-10-02	580790	5806121	65.4	149	-45.33	190.1	236	455229-455464	A10-8794/8849
FT-10-03	580799	5806177	64.9	176	-44.90	195.4	289	455464-455752	A10-8849/9404
FT-10-04	580699	5806189	66.4	182	-46.23	197.6	242	455753-456044	A10-9405
FT-10-05	580591	5806219	53.2	224	-45.90	199.7	254	456045-456298	A10-9406/9433
FT-10-06	580570	5806169	57.1	125	-45.00	195.0	148	456299-456438	A10-9613
FT-10-07	580506	5806219	60.0	161	-45.18	197.6	186	456439-456624	A10-9614
FT-10-08	580410	5806247	68.1	137	-44.72	196.3	153	456625-456777	A11-0148/0149
FT-10-09	580340	5806329	68.8	218	-45.62	195.0	253	456778-457030	A11-0149/0208
FT-10-10	580326	5806273	68.3	167	-45.72	197.5	184	457031-457214	A11-0478
FT-10-11	580211	5806291	68.9	164	-42.68	194.7	198	457221-457418	A11-0303
FT-10-12	580119	5806313	69.5	158	-45.49	191.8	215	457419-457633	A11-0471
FT-10-13	580134	5806357	74.8	266	-45.62	190.6	352	457634-457985	A11-0558
FT-10-14	580025	5806349	73.2	161	-43.67	184.9	186	460001-460186	A11-0671
FT-10-15	579941	5806353	73.2	167	-45.09	195.6	180	457986-458165	A11-0670
FT-10-16	579842	5806379	72.0	152	-45.41	189.0	167	460187-460353	A11-0803
FT-10-17	579740	5806375	67.3	176	-44.10	187.2	220	458166-458385	A11-0773
FT-10-18	579644	5806407	71.8	202	-45.59	188.1	264	460354-460617	A11-0910
FT-11-01	579571	5806404.6	71.4	176	-44.752	190.11	215	458386-458600	A11-0778
FT-11-02	579483	5806411	71.6	173	-44.726	190.81	203	460618-460820	A11-0997
FT-11-03	581077	5806016.9	50.4	137	-44.824	191.16	152	458601-458752	A11-0909
FT-11-04	581272	5806004.6	55.9	110	-44.973	195.9	111	460821-460931	A11-0992
FT-11-05	581480	5805961.4	53.2	146	-46.201	196.12	165	458753-458917	A11-0995
FT-11-06	580716	5806251.4	60.8	277	-43.33	193.5	308	505501-505808	A11-4673/4691
FT-11-07	580748	5806176.6	67.2	180	-44.72	195	188	509001-501188	A11-5040/5047
FT-11-08	580628	5806152.9	63.6	127	-42.75	192.08	135	505809-505943	A11-4985/4986
FT-11-09	580647	5806202.9	62.3	181	-45.23	195	187	505944-506130	A11-5047/5048
FT-11-10	580601	5806269.4	57.3	249	-44.48	191.1	263	509189-509451	A11-5284/5370
FT-11-11	580535	5806180.6	54.6	124	-44.53	199.63	123	506131-506253	A11-5371/5446
FT-11-12	580554	5806229.4	58	206.9	-44.14	200.79	227	509452-509678	A11-5446/5448
FT-11-13	580497	5806170.6	59.6	115	-44.08	197.49	119	506254-506372	A11-5467/5468
FT-11-14	580521	5806267.8	61.2	230	-43.7	201.24	231	506373-506603	A11-5472/5473
FT-11-15	580466	5806250.6	63.7	193	-44.66	197.2	207	509679-509885	A11-5625/5627
FT-11-16	580390	5806174.6	64.2	100	-43.78	198.56	109	509886-509994	A11-5811/5829
FT-11-17	580421	5806295.8	68.2	211	-46.4	195.94	235	510125-510359	A11-6033/6037
FT-11-18	580361	5806224	64.2	118	-43.6	190.5	130	509995-510124	A11-5808/5830

Hole_ID	Easting	Northing	RL (m)	Depth (m)	Dip (º)	Azimuth (º)	# of Samples	Assay Range	Work Order Numbers
FT-11-19	580375	5806284.4	68.4	226	-44.69	195.92	242	510680-510921	A11-6671/6472
FT-11-20	580453	5806198.4	61.5	130	-44.36	195.66	141	510922-511062	A11-6645/6648
FT-11-21	580722	5806300.8	51.3	304	-44.25	192.5	320	510360-510679	A11-6325/6548
FT-11-22	580662	5806254.4	52.9	253	-42.72	195	260	511332-511591	A11-6958/6959
FT-11-23	580813	5806230.4	59.4	259	-43.609	195.97	269	511053-511331	A11-6859/6850
FT-11-24	580762	5806229.6	64.3	250	-44.19	196.47	257	511592-511848	A11-6959/6963
FT-11-25	580777	5806285.6	52.7	331	-43.03	198.1	334	506604-506937	A11-6960/6963
FT-11-26	580827	5806272	49.8	302	-44.99	192.7	164	512001-512164	A11-11763/11764
FT-11-27	580880	5806261	45.3	299	-44.91	193.3	141	550001-550141	A11-12119/12120
FT-11-28	580838	5806328	47.0	355	-44.74	195.2	145	553001-553145	A11-12121/12122
FT-11-29	580855	5806390	46.0	413	-45.47	195.9	200	550142-550341	A11-12276
FT-11-30	580881	5806440	43.7	478	-45.63	194.1	222	553146-553367	A11-12490
FT-11-31	580518	5806276	63.0	226	-45.45	195.1	155	550342-550496	A11-12492
FT-11-32	580567	5806286	61.1	247	-46.38	195.5	148	550497-550644	A11-12586
FT-11-33	580886	5806494	37.5	538	-45.64	198.2	240	553368-553607	A11-13023/13035
FT-11-34	580617	5806326	58.6	301	-44.36	195.2	211	550645-550855	A11-12801/12804
FT-11-35	580665	5806316	52.0	302	-44.99	193.6	169	550856-551024	A11-13042/13043
FT-11-36	580744	5806356	51.2	350	-45.68	193.3	143	551025-551167	A11-13227/13228
FT-11-37	580986	5806474	30.7	565	-45.56	200.2	234	553608-553841	A11-13499/13500
FT-11-38	580635	5806383	50.1	360	-46.86	195.1	165	551168-551332	A11-13412/13413
FT-11-39	580647	5806437	50.8	415	-45.57	195.3	164	551333-551496	A11-13821/13822
FT-11-40	580970	5806416	32.6	469	-44.29	195.0	202	553842-554043	A11-13913/13914
FT-11-41	580756	5806402	47.0	421	-45.44	193.7	179	551497-551675	A11-14071/14072
FT-11-42	581076	5806380	29.4	469	-44.69	195.0	238	554044-554281	A11-14424
FT-11-43	580773	5806467	50.1	472	-44.65	195.5	251	551676-551926	A11-14425
FT-11-44A	581080	5806440	31.4	550	-45.65	196.1	217	554282-554498	A11-14794
FT-11-45	580940	5806300	41.0	358	-45.38	196.5	135	551940-552074	A11-14994
FT-11-46	580957	5806354	46.0	410	-46.53	195.2	166	552075-552240	A12-00340
FT-11-47	580787	5806517	40.0	514	-44.10	198.5	197	554499-554695	A12-00412
FT-11-48	580589	5806339	56.9	310	-47.62	193.8	137	552241-552377	A12-00340
FT-12-01	580531	5806343	57.7	299	-43.77	194.1	135	554696-554830	A12-00477
FT-12-02	580904	5806609	30.3	649	-45.81	198.4	378	554831-555208	A12-00799
FT-12-03	580666	5806150	66.1	122	-44.68	194.7	130	552378-552507	A12-00902
FT-12-04	580665	5806150	66.3	104	-45.35	196.0	108	555209-555316	A12-01031
FT-12-05	580496	5806368	60.2	299	-45.48	197.2	127	555317-555443	A12-01032
FT-12-06	580440	5806384	62.4	299	-45.64	196.6	135	555444-555578	A12-01145

TABLE 10-2 SIGNIFICANT INTERVALS, AVERAGES FOR KEY METALS
Search Minerals Inc. – Foxtrot Project

Hole	Length (m)	From (m)	To (m)	Dy (ppm)	Nd (ppm)	Y (ppm)	HREE+Y (%)	TREE+Y (%)
FT-10-04	21.2	123.5	144.7	215	1,639	1,210	0.20	0.99
FT-10-05	11.5	126.4	137.9	217	1,721	1,211	0.20	1.01
FT-10-06	9.9	63	72.9	233	1,795	1,296	0.22	1.09
FT-10-07	12.9	108.3	121.3	203	1,635	1,151	0.19	1.03
FT-10-08	7.6	90.3	97.8	245	1,766	1,312	0.22	1.04
FT-10-11	8.5	96.8	105.3	202	1,756	1,188	0.19	1.09
FT-11-06	21.4	196.9	218.3	221	1,733	1,177	0.20	1.03
FT-11-07	11.5	127.2	138.7	208	1,454	1,141	0.19	0.90
FT-11-08	14.9	60.7	75.6	234	1,647	1,254	0.21	1.02
FT-11-09	25	124.6	149.6	207	1,691	1,149	0.19	1.04
FT-11-10	30.2	181.1	211.3	201	1,507	1,066	0.18	0.92
FT-11-11	18.7	73.6	92.3	230	1,799	1,350	0.22	1.11
FT-11-12	10.3	137	147.3	204	1,729	1,160	0.19	1.06
FT-11-13	24.2	46.3	70.5	212	1,647	1,251	0.20	1.07
FT-11-14	10.8	167.8	178.6	206	1,803	1,222	0.20	1.13
FT-11-16	7.5	21.9	29.4	230	1,921	1,306	0.22	1.17
FT-11-17	10	148	158	228	1,577	1,159	0.20	0.97
FT-11-20	7.1	70.3	77.4	235	1,862	1,330	0.22	1.18
FT-11-21	12	250.7	262.7	240	1,897	1,342	0.22	1.14
FT-11-22	17	179.3	196.3	235	1,786	1,379	0.22	1.11
FT-11-23	15.8	196.6	212.3	212	1,642	1,178	0.20	0.98
FT-11-24	15.1	189.2	204.3	212	1,595	1,141	0.19	0.97
FT-11-25	26.1	243.6	269.6	205	1,526	1,200	0.20	0.95

TABLE 10-3 SIGNIFICANT INTERVALS, AVERAGES FOR KEY OXIDES
Search Minerals Inc. – Foxtrot Project

Hole	Length (m)	From (m)	To (m)	Dy_2O_3 (ppm)	Nd_2O_3 (ppm)	Y_2O_3 (ppm)	HREO+Y (%)	TREO+Y (%)
FT-10-04	21.2	123.5	144.7	248	1,918	1,536	0.24	1.19
FT-10-05	11.5	126.4	137.9	249	2,014	1,538	0.24	1.22
FT-10-06	9.9	63	72.9	268	2,100	1,646	0.26	1.32
FT-10-07	12.9	108.3	121.3	234	1,913	1,461	0.23	1.24
FT-10-08	7.6	90.3	97.8	281	2,066	1,666	0.27	1.25
FT-10-11	8.5	96.8	105.3	232	2,055	1,508	0.24	1.31
FT-11-06	21.4	196.9	218.3	254	2,027	1,495	0.24	1.24
FT-11-07	11.5	127.2	138.7	239	1,701	1,450	0.23	1.08
FT-11-08	14.9	60.7	75.6	269	1,927	1,592	0.26	1.22
FT-11-09	25	124.6	149.6	238	1,978	1,460	0.23	1.25
FT-11-10	30.2	181.1	211.3	231	1,763	1,354	0.22	1.11
FT-11-11	18.7	73.6	92.3	264	2,105	1,714	0.27	1.34
FT-11-12	10.3	137	147.3	235	2,023	1,473	0.23	1.27
FT-11-13	24.2	46.3	70.5	244	1,927	1,589	0.25	1.28
FT-11-14	10.8	167.8	178.6	237	2,110	1,552	0.24	1.36
FT-11-16	7.5	21.9	29.4	265	2,248	1,659	0.26	1.41
FT-11-17	10	148	158	263	1,846	1,471	0.24	1.16
FT-11-20	7.1	70.3	77.4	270	2,179	1,689	0.27	1.42
FT-11-21	12	250.7	262.7	276	2,220	1,704	0.27	1.37
FT-11-22	17	179.3	196.3	270	2,089	1,751	0.27	1.33
FT-11-23	15.8	196.6	212.3	244	1,921	1,496	0.24	1.18
FT-11-24	15.1	189.2	204.3	244	1,866	1,450	0.24	1.17
FT-11-25	26.1	243.6	269.6	236	1,786	1,524	0.24	1.14

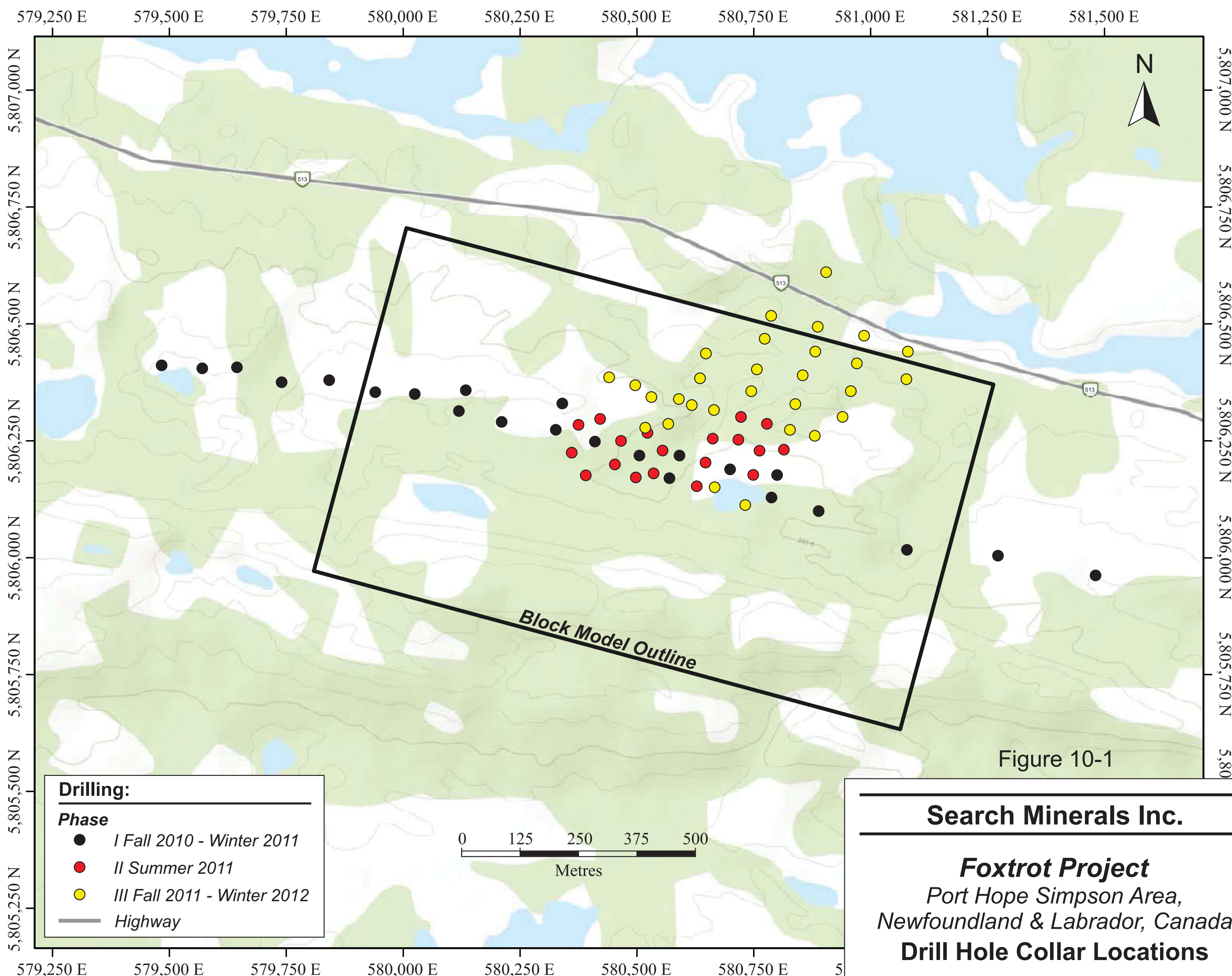


Figure 10-1

Search Minerals Inc.

Foxtrot Project

Port Hope Simpson Area,
Newfoundland & Labrador, Canada

Drill Hole Collar Locations

April 2016

Source: RPA, 2016.

RPA

www.rpacan.com

11 SAMPLE PREPARATION, ANALYSES, AND SECURITY

Two sampling methods have been used at the Foxtrot Project: diamond drilling and channel sampling. No new drilling, however, has occurred on the Project since 2012.

All sample preparation and core logging were carried out at the Search Minerals field house, which is located in Port Hope Simpson, approximately 45 minutes by truck from the Foxtrot Project field area. Drilling, core logging, and sampling operations were supervised by Dr. Randy Miller, P.Geo., VP of Exploration for Search Minerals.

All drilling, logging, and sampling procedures were reviewed by Benchmark Six and RPA during their site visit in 2011 (RPA, 2013). The quality assurance/quality control (QA/QC) protocols, procedures for ensuring the security of drill core and channel samples, integrity of chain-of-custody for samples, and accuracy of laboratory analyses all met acceptable industry practices.

DIAMOND DRILL CORE

Diamond drill core was placed into standard wooden core boxes and stacked at the drill site. Core boxes were transported by pick-up truck from the field area to the field house at least once a day where they were organized onto racks in the core shed. Geologists log the core and mark assay sample intervals with wax crayon. Intervals averaged one metre but were longer or shorter, at the discretion of the geologist, depending on the structural and lithological features present. Drill core was logged manually and the logs were subsequently entered into a digital database by Search Minerals staff. All original paper drill logs are kept on file.

The core was split by technicians according to the marked assay intervals; all splitting was done using a circular saw with a diamond tip blade. One half of the core was placed in a sample bag and sent to the laboratory for chemical analyses and the other half remains in the core box for future reference. For each interval, one sample tag was placed in the sample bag and another sample tag was stapled to the bottom of the core box, under the core. After the core had been split and sampled, the remaining core was placed back into core boxes and kept in the core shed. All stored core boxes are affixed with an aluminum plate indicating the hole ID and the interval contained within. A list was made of all sample numbers and their corresponding hole ID, and from-to depths.

The drill rig used during the 2010 sampling program was a Dura-lite 500 and was operated by Springdale Forest Resources. The 2011 sampling program made use of two different drill rigs: a Longyear Super 38 that was fully enclosed and mounted on skids as well as a Longyear Fly 38 that was not enclosed, also mounted on skids and was suitable to be moved by helicopter. These two drill rigs were operated by Logan Drilling Group. All core drilled during the 2010 and 2011 sampling programs was NQ size.

CHANNEL SAMPLES

Channel samples were taken from mineralized surface outcrop found using visual inspection as well as hand-held spectrometers. The location of channel sampling was partly dictated by the location of surface outcrop. A hand-held GPS unit was used for precise location control. Channel samples, 10 cm deep and 8 cm wide, were cut by gas-powered diamond saw from cleaned outcrops (surface weathering is removed) and placed into channel boxes to be logged and sampled for assay by Search Minerals personnel (Figure 11-1). Six centimetre sections were sent to the assay laboratory and a two centimetre section was stored in channel boxes for reference (Figure 11-2). The channels were cut perpendicular to strike, pieced together, logged and photographed to produce geological and geochemical sections.

Channel samples were logged, cut, and sampled according to the same procedure as the diamond drill core, described above.

FIGURE 11-1 FIELD CHANNEL SAMPLE

FIGURE 11-2 CHANNEL SAMPLE REFERENCE BOX

SAMPLE ANALYSES

Sample bags were transported by Search Minerals staff to Activation Laboratories (Actlabs) in Goose Bay, Labrador, where they were crushed to a minus 10 mesh, riffle split to obtain a representative sample, pulverized to at least 95% passing minus 150 mesh, and then sent to Actlabs Ancaster, Ontario for analysis. Samples were analyzed using a lithium metaborate/tetraborate fusion with subsequent analysis by inductively coupled plasma (ICP) and ICP mass spectroscopy (ICP-MS).

Actlabs is an independent laboratory accredited according to both the ISO 17025 standard for testing and calibration laboratories, and the CAN-P-1579 standard, specific to mineral analysis laboratories. In 2007, Actlabs became accredited to NELAP, an American laboratory accreditation program specifically for the environmental sector.

QUALITY ASSURANCE AND QUALITY CONTROL

ACTLABS INTERNAL QA/QC

The resource estimate included in this report incorporates analytical results from 69 batches that were submitted to Actlabs from November 2010 to August 2011, six batches from 2012 to 2014, and one batch in 2015. With each batch, Actlabs used three types of samples to monitor the accuracy and precision of their results: standards, blanks, and duplicates.

The standards allow the laboratory to monitor the accuracy of their results. There were a total of 22 different standards that were used to test the accuracy of the REE data and no one standard alone covered the complete set of potentially economic elements. Fifteen of these standards monitored Pr, Nd, or Dy, the most important REEs within the Foxtrot Project. RPA reviewed the results of the various certified reference materials (CRM) subsequent to the 2013 PEA Update (RPA, 2013), and all Pr and Nd results fell within ±10% of their certified value and more than 98% of the Dy results were within ±10% of their certified value. While this is generally accepted as a good result, it is recommended that Search Minerals review the internal standards of the laboratories, and batches that do not meet pre-set protocols should be re-assayed.

Blank control samples allow the laboratory to monitor cross contamination between the samples. While contamination can occur during the sample preparation and analysis stages, these blank control samples were limited to monitoring only the analysis stage. It is normal industry practice to reject any batch whose results are more than five times the detection limit. Of the 113 blanks tested, including nine subsequent to the 2012 PEA update, no blank control sample had more than twice the detection limit. In RPA's opinion, cross contamination was not an issue for analyses at the Foxtrot Project.

Duplicates allow the laboratory to monitor precision of its analytical results. As with standards, it is normal industry practice to accept batches if 95% of duplicate samples fall within ±10% of their average. In the 69 batches analyzed in 2010 and 2011, 98.8% of internal duplicate assays for Dy and Nd fell within the ±10% band. Subsequent to the 2013 PEA, 33 duplicate pairs from seven batches were analyzed by the laboratory, and the internal duplicate assay results for Pr, Nd, and Dy were within acceptable limits. All Pr and Nd duplicate assays fell within ±10% of their average, and 97% of Dy internal duplicates fell within ±10% of their average.

In RPA's opinion, the internal QA/QC results demonstrate that the assay data have acceptable accuracy and precision.

RPA recommends that Search Minerals review the laboratory's internal QA/QC results and that batches that do not meet pre-set protocols be re-assayed.

SEARCH MINERALS EXTERNAL QA/QC

In addition to Actlabs' internal QA/QC efforts, the reliability of the analytical data was also monitored by Search Minerals' own external QA/QC program, using reference standards and pulp duplicates. Rather than using CRMs, Search Minerals used material sourced locally for which no certified value had been established by round-robin analyses from multiple laboratories. In this case, the average of all available results was used as the reference value and percent error was calculated.

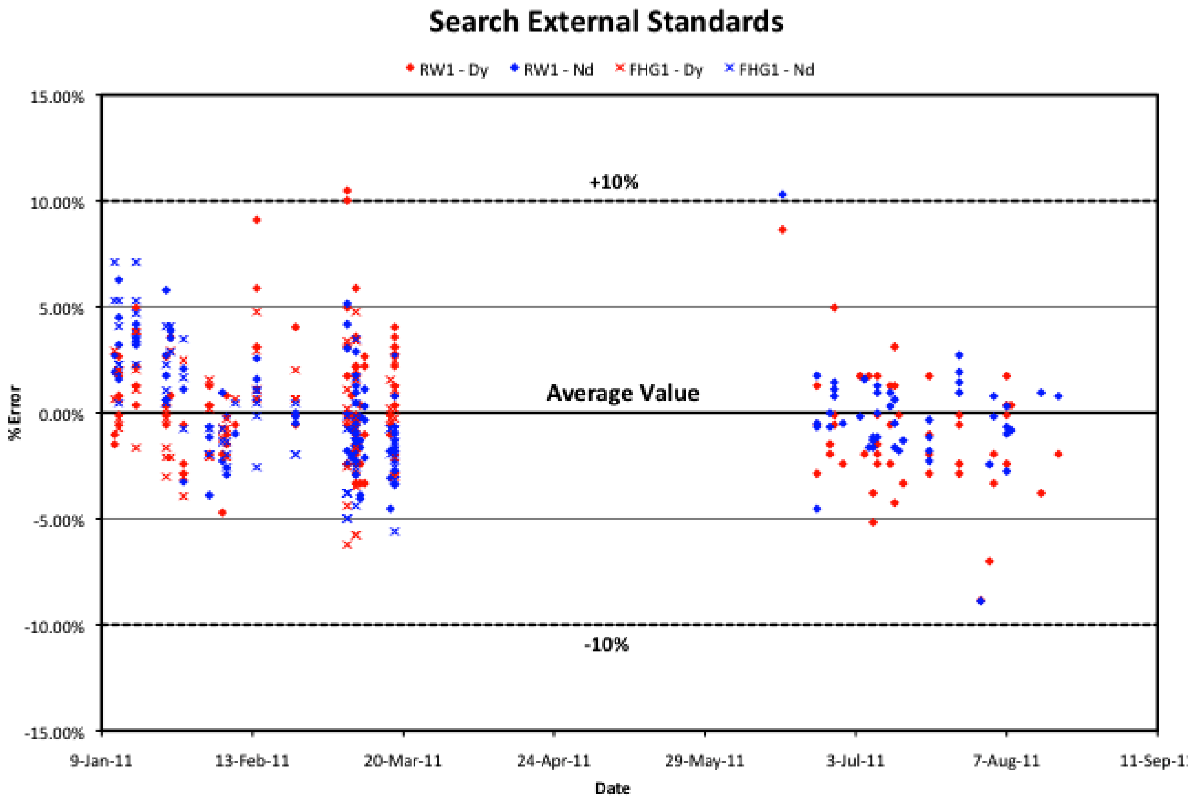
2010 TO 2011: PHASE I AND II

In Phase I and II of work at Foxtrot, Search Minerals used two high grade standards and one low grade standard chosen to effectively act as a blank to monitor possible contamination. The two high grade standards include one from a eudialyte-rich zone in one of Search Minerals' other REE projects in Labrador, a peralkaline complex known as "Red Wine" (RW), and one from a mineralized felsic volcanic gneiss unit found in Fox Harbour (FHG). The third standard, a very low grade standard, is from an anorthosite unit also found in Port Hope Simpson area (FHA).

The material for each standard was delivered to Actlabs in bulk and Actlabs was instructed to crush, pulverize, homogenize, store, and insert pulp reference standards into the sample sequence during sample preparation. Throughout the 2010 drilling program, laboratory staff inserted one pulp reference standard every 50 samples, however, this procedure was changed in 2011 to include at least one standard with every batch to account for smaller batches of less than 50 samples where standards were previously not being included.

The vast majority of results for the RW and FHG standards plot within the ±10% range. The results for FHA, the very low-grade standard, were not within ±10% of the average value but rather ranged from -50% to 150%, which is an acceptable range for a blank control sample. Due to the nature of the sample used, the values for each of the elements were very close to detection limit. Figure 11-3 shows the percent error of Dy and Nd for the high grade RW and FHG standards only.

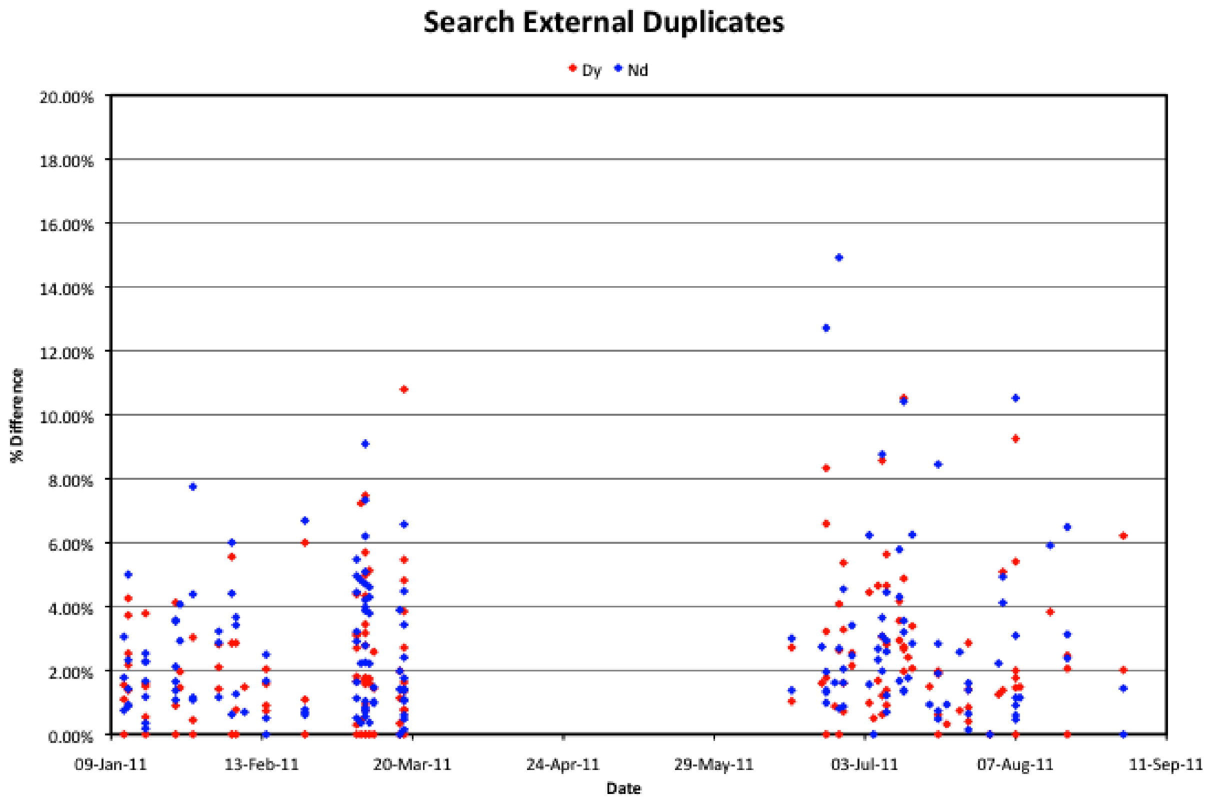
FIGURE 11-3 SELECTED RESULTS FOR SEARCH MINERALS' EXTERNAL QUALITY CONTROL FOR STANDARDS



Search Minerals' implementation of duplicate samples as part of its QA/QC program was similar to that of the standards. Actlabs was instructed to duplicate every 25^{th} sample and report the results as the original sample number appended with a 'B' in the Certificate of Analysis.

In all, there were 167 samples duplicated in the 69 batches. Of these, only six samples, or less than 4%, did not fall within a ±10% band. Figure 11-4 shows the percent difference of Dy and Nd of the sample duplicates.

FIGURE 11-4 SELECTED RESULTS FOR SEARCH MINERALS' EXTERNAL QUALITY CONTROL FOR DUPLICATES



2012: PHASE III QA/QC

The Phase III drilling campaign at Foxtrot used a QA/QC program similar to the one described above for Phases I and II. In addition to the internal QA/QC checks performed by Actlabs, Search Minerals included reference material in most batches. Three batches of reference material were used, and all three were usually submitted together. One essentially functioned as a blank, with very low REE concentrations (Dy<1 ppm, Nd<10 ppm). The other two served as high grade reference material that enabled monitoring of the laboratory's ability to accurately assay samples with strong REE mineralization. One of these had Dy grades of approximately 300 ppm and Nd grades of approximately 2,400 ppm; the other had Dy grades of approximately 700 ppm and Nd grades of approximately 2,000 ppm. Although there was no pre-established reference value for these external reference materials, they do document that the laboratory was able to stay within ±10% of the average grade. RPA notes that the external reference material had Dy and Nd grades that are higher than typical mineralization at Foxtrot, where most of the strong mineralization is 200 ppm to 250 ppm Dy and 1,000 ppm to 2,000 ppm Nd.

The QA/QC program for the Phase III samples also included duplicates inserted as described for Phase I and II, that is, typically one or two in each batch of samples submitted to the laboratory. These duplicates confirm the precision of the laboratory's analytical results. More than 90% of the duplicates produced REE assays within ±10% of the original assay.

2012 TO 2014: CHANNEL SAMPLE QA/QC

Channel samples were collected at Foxtrot in late 2012 and 2014 and were submitted to the laboratory in six batches.

Search Minerals included two different grades of reference material that were submitted in pairs, in two of the six batches. The very low grade reference standard served essentially as a blank sample, and the higher grade reference standard had REE values similar to the highest grades found at Foxtrot. The low grade reference standard had Dy grades of less than 1 ppm and Nd grades of approximately 7 ppm. The high grade reference standard had Dy grades of approximately 300 ppm and Nd grades of approximately 2,400 ppm. These reference standards were sourced from the same material as one of the high grade reference samples used in Phase III.

As with Phase III, no certified value had been established by round-robin analyses from multiple laboratories for the standards and the average of all available results was used as the reference value. RPA reviewed the results, and Dy and Nd assay results for both reference standards were within acceptable limits.

Actlabs was instructed to duplicate every 25th sample and report the results as the original sample number appended with a 'B' in the Certificate of Analysis. Four sets of duplicates were analyzed from four batches. Two batches did not include duplicate sample analyses.

RPA reviewed the QC program results and noted that the reference standard assay results were within appropriate limits and that all Nd and Dy duplicate analyses fell within a ±5% band.

RPA considers the reference standards and duplicate results for the 2012 and 2014 Foxtrot program acceptable.

2015: CHANNEL SAMPLING QA/QC

All channel samples taken in 2015 at Foxtrot were submitted to the laboratory as a single batch. This fifth phase of work at Foxtrot used a QA/QC program similar to the one described for 2012-2014, however, no duplicate pulp samples were submitted for analysis. Search Minerals included two different grades of reference material, but the source of the reference standards was not the same as previous phases of work. The very low grade reference standard served essentially as a blank sample, and the higher grade reference standard included a high grade source of material, with REE values similar to the highest grades found at Foxtrot. The low grade reference standard had Dy grades of less than 0.5 ppm and Nd grades of approximately 3 ppm. The high grade reference standard had Dy grades of approximately 265 ppm and Nd grades of approximately 2,100 ppm, similar to high grade mineralization at Foxtrot. RPA recommends including a reference standard that has a similar grade to typical Foxtrot mineralization.

In total, 14 reference standards were included in the 2015 batch: seven low grade and seven high grade. As with previous phases of work, no certified value had been established by round-robin analyses from multiple laboratories for the reference standards and the average of all available results was used as the reference value from which a percent error was calculated. Figures 11-5 and 11-6 illustrate the analytical results of the reference standards. The results for the high grade reference standard are all within ±5% of the average and although there is some degree of spread in the low grade reference standard results, the grades are near detection limit and the results are within an acceptable range.

FIGURE 11-5 NEODYMIUM RESULTS FOR SEARCH MINERALS' REFERENCE STANDARDS

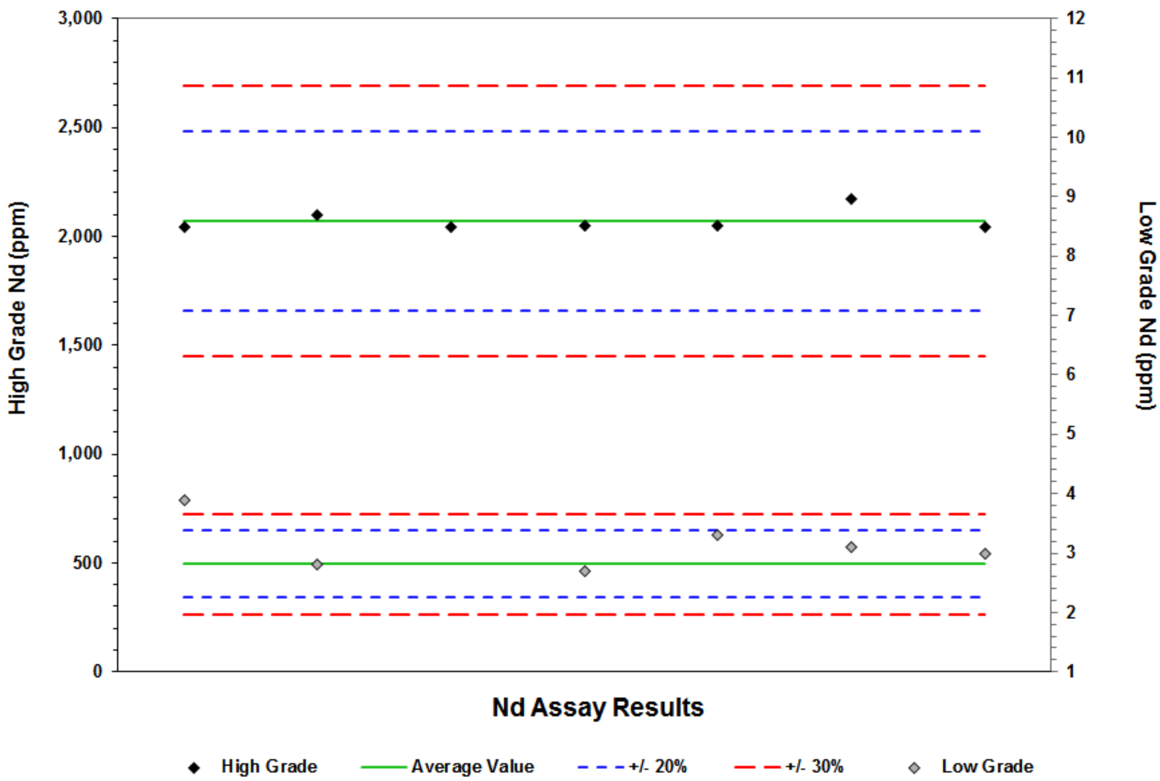
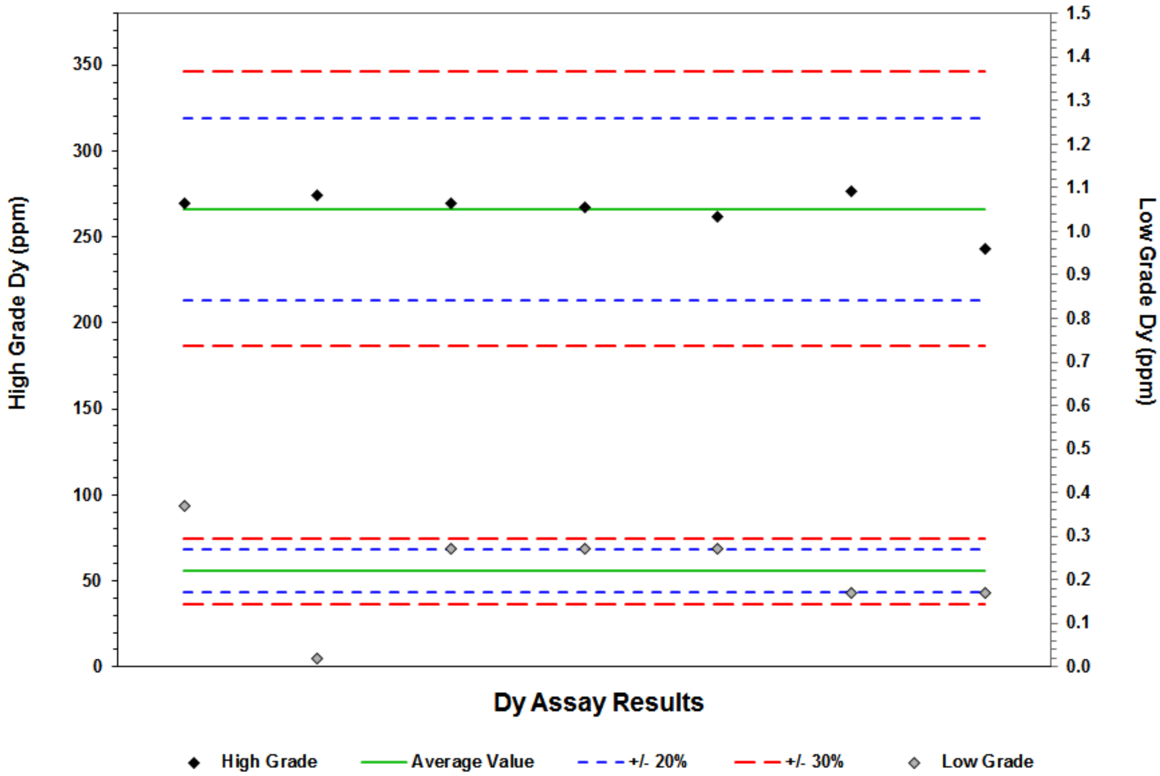


FIGURE 11-6 DYSPROSIUM RESULTS FOR SEARCH MINERALS' REFERENCE STANDARDS



QA/QC SUMMARY

It is RPA's opinion that Search Minerals' QA/QC data for the Phase I through Phase III, and channel sampling programs from 2012 to 2015 are acceptable and demonstrate that the assay data have the accuracy and precision for Mineral Resource estimation.

RPA recommends that:

- For future sampling programs at Foxtrot, Search Minerals work with the analytical laboratory to develop CRM through round robin testing for which the grade has been established prior to its use. Although three difference certified reference standards are recommended, at least one should have grades similar to typical REE mineralization at Foxtrot and another should have approximately the same grade as high grade mineralization. This would help identify any systematic bias or uncertainty in the laboratory results.

- Certified reference standards be included with each batch, and for large batches, at a 1/20 rate of insertion.

- Preparation duplicate samples be included with each batch submitted to the laboratory, and for large batches, at a 1/20 rate of insertion.
- Coarse, hard “blank” samples be incorporated prior to the analytical stream.
- The analytical laboratory’s internal and Search Minerals’ field QC results be reviewed for each sample batch submitted.
- Search Minerals establish what constitutes a QC failure and document appropriate follow-up actions.

SAMPLE SECURITY

Search Minerals employs strict security protocols with the handling of its samples. Core is transported by truck only, both from the drill site to the field house and from the field house to the laboratory in Goose Bay. The core is stored in the core shack, a detached structure with doors and locks, and is organized carefully, facilitating accessibility to all reference core. During logging, cutting, and sampling, drill core is always under the supervision of full-time Search Minerals staff.

12 DATA VERIFICATION

RPA reviewed the resource database that formed the basis for the Mineral Resource estimate presented in this Technical Report. This includes results from the QA/QC program and assay certificates for drill hole and channel samples to a cut-off date of December 31, 2015. In the opinion of RPA, the database is acceptable for Mineral Resource estimation.

SITE VISIT

Katharine Masun, P.Geo., Senior Geologist, RPA, visited the site on August 26 and 27, 2015. The site visit consisted of a complete tour of the premises, including the field office, the core logging shack, the core cutting shack, and the core storage facilities. No logging, cutting, or sampling was occurring on the Project at the time, so the procedures could not be observed first hand.

The property visit included a tour of the Foxtrot Project and the Deepwater Fox prospect. RPA inspected surface mineralization along most of the strike length, including the location of the 2015 channel sampling at Foxtrot and Deepwater Fox. Several old drill hole collars were observed at Foxtrot, which were well marked with drill casing and capped with an aluminum tag marked with the hole ID.

Sampling details for the drilling program at Foxtrot were verified by RPA and Rick Breger of Benchmark Six during a site visit to both the field house and Project site in October 2011. During the visit, logging, cutting of core, and sampling procedures were observed first hand and the site visit included observations of surface mineralization, including the location of the trenching and old drill hole collars, specifically FT-10-04, FT-11-10, FT-11-25, and FT-11-31. Both RPA and Benchmark Six concluded that Search Minerals staff conducted their exploration and drilling activities to a standard that met or exceeded normal industry practices (RPA, 2013).

MANUAL DATABASE VERIFICATION

The review of the resource database included header, survey, lithology (major and minor), assay, and density tables. Database verification was performed using tools provided within the Dassault Systèmes GEOVIA GEMS Version 6.7 software package (GEMS). As well, the assay and density tables were reviewed for outliers.

RPA verified that the drill hole database matched the original Actlabs assay certificates. This included a comparison over 400 results in the resource database to seven digital laboratory certificates of analysis, which were received directly from Actlabs. No inconsistencies were identified.

A visual check of the drill hole GEMS collar elevations and drill hole traces was completed. Although the drill hole collars have been surveyed, the channel sample locations have only been recorded with a hand-held GPS. RPA recommends that Search Minerals survey the channel sample locations.

INDEPENDENT ASSAYS OF DRILL CORE

RPA did not collect samples from drill core or channel samples for independent assay during the 2015 Foxtrot site visit.

In 2011, Rick Breger, Director of Operations for Benchmark Six, on behalf of RPA, collected 28 samples (22 drill core and 6 channel samples) for independent analyses at SGS Minerals Services (SGS), Toronto. REE analyses were performed using lithium metaborate fusion and analyzed via ICP-MS. SGS uses a quality management system that meets, at a minimum, the requirements for both ISO 9001 and ISO 17025. Analyses were performed on the 22 drill core samples to check the accuracy of the REE analyses performed by Actlabs, and all 28 samples were used to determine density. The REE check samples included were chosen according to the distribution of Dy seen on the Project across the three main lithological units, and ranged in Dy grade from 2.3 ppm to 360 ppm. Quality control samples were also collected on two Search Minerals' pulp reference standards.

The agreement between analyses for Dy and Nd was shown to be acceptable, and confirmed the presence of significant REE mineralization in the samples. Samples were collected from the three major lithological units on the Foxtrot Project, and the average bulk density measurements were used for resource estimation (RPA, 2013).

RPA is of the opinion that database verification procedures for the Foxtrot Project comply with industry standards and are adequate for the purposes of Mineral Resource estimation

13 MINERAL PROCESSING AND METALLURGICAL TESTING

GENERAL

Search Minerals has executed two programs of mineralogical study and metallurgical testwork on samples from the Foxtrot Project. The first program was conducted by SGS at its Lakefield facility in 2012 and is reported upon in SGS reports that are summarized in the 2013 PEA Update (RPA, 2013). The second program of work was executed by SGS in 2014 on the same samples as were used in 2012 and is reported upon in SGS reports entitled “An Investigation into Whole Ore Processing for Recovery of REE from the Foxtrot deposit Prepared for Search Minerals Project 13004-002 – Progress Report 1”, dated December 16, 2014 (SGS Progress Report 1); and “An Investigation into Bulk Whole Ore Processing for Recovery of REE from the Foxtrot deposit Prepared for Search Minerals Project 13004-002 – Progress Report 2”, dated January 23, 2015 (SGS Progress Report 2).

Much of the earlier testwork is relevant to the present report and is in part retained in the following sections.

MINERALOGY STUDIES

A metallurgical sample obtained from a Foxtrot Project channel sample was submitted to SGS. The sample was stage crushed to K80 of 150 µm (80% passing 150 µm) and then screened into two size fractions: +38 µm and -38 µm for the mineralogical study, and submitted for QEMSCAN analysis.

The minerals identified in the sample are listed in Table 13-1.

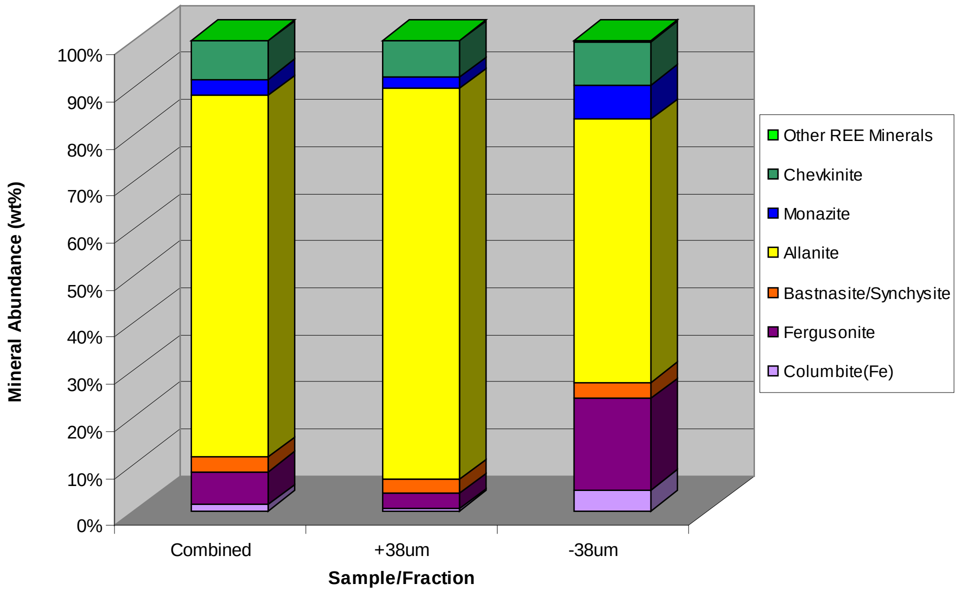
TABLE 13-1 MINERAL LIST AND FORMULAS
Search Minerals Inc. – Foxtrot Project

Mineral	Mineral Formula	Mineral	Mineral Formula
Columbite(Fe)	$(Fe,Mn)(Nb,Ta)_2O_6$	Plagioclase	$(NaSi,CaAl)AlSi_2O_8$
Bastnaesite	$(Ce, La)CO_3F$	K-Feldspar	$KAlSi_3O_8$
Synchysite	$Ca(Ce,La)(CO_3)_2F$	Biotite	$K(Mg,Fe)_3(AlSi_3O_{10})(OH)_2$
Monazite	$(Ce,La,Pr,Nd,Th,Y)PO_4$	Quartz	SiO_2
Chevkinite	$(Ce,La,Ca,Th)_4(Fe^{2+},Mg)(Fe^{2+},Ti,Fe^{3+})$-$(Ti,Fe^{3+})_2(Si_2O_7)_2O_8$	Muscovites/Clays	$KAl_2(AlSi_3O_{10})(OH)_2$
Fergusonite	$(Y,Er,Ce,Fe)NbO_4$	Amphibole/ Pyroxene	$(Ca,Na)(Mg,Fe,Al,Ti)(Si,Al)_2O_6$
Allanite	$(Ca,Ce)_2(Fe^2,Fe^{3+})Al_2O$-$(SiO_4)(Si_2O_7)(OH)$	Carbonates	$CaCO_3$
Zircon	$ZrSiO_4$	Fluorite	CaF_2
Apatite	$(Ca,Ce,Y)_5(PO_4,SiO_4)_3(F,Cl,OH)$	Hematite Ilmenite Magnetite	Fe_2O_3 $FeTiO_3$ Fe_3O_4

MINERAL ABUNDANCE

Figure 13-1 illustrates the normalized mass % of the REE minerals (excluding zircon). It is apparent that allanite is the primary REE phase. The sample is dominated by quartz (35.8%) and K-feldspar (21.0%), moderate amounts of amphibole/pyroxene (13.7%), plagioclase (12.3%), minor Fe-oxides (4.4%), biotite (3.9%) and muscovite/clays (1.6%), and trace amounts of other silicates, carbonates, fluorite, other oxides and sulphides. REE-Zr minerals include mainly allanite (2.6%), zircon (2.5%), chevkinite (0.3%), fergusonite (0.2%), bastnaesite/synchysite (0.1%), monazite (0.1%), and rare columbite. Most of the allanite (2.2%) occurs in the +38 µm, but most of zircon (1.5%) in the -38 µm fraction.

FIGURE 13-1 NORMALIZED MINERAL ABUNDANCE OF REE MINERALS



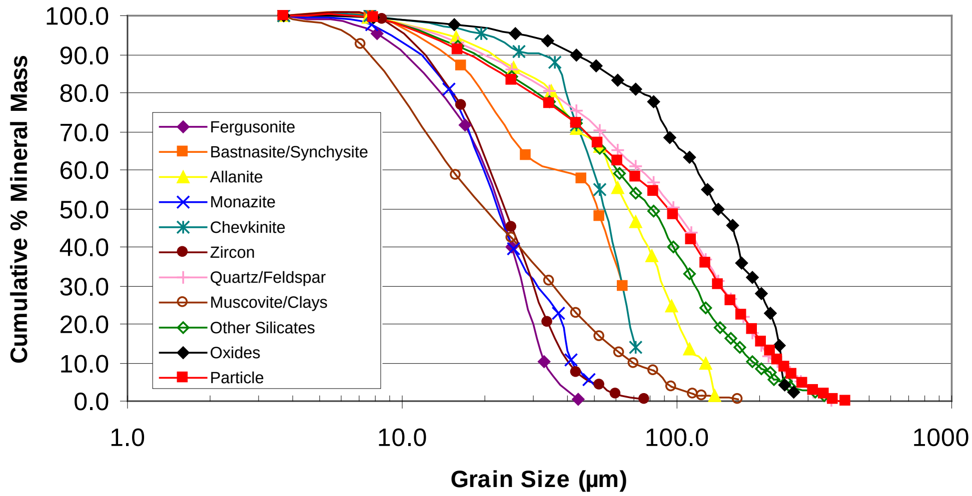
GRAIN SIZE DISTRIBUTION

Figure 13-2 summarizes the D_{50} (50% passing size) from the cumulative grain size distribution of the fergusonite, bastnaesite/synchysite, allanite, monazite, chevkinite, zircon, quartz/feldspars, muscovite, other silicates, oxides and overall particle size distribution (PSD) for the Fox HBR Aug-11 sample. The approximate D_{50} values are as follows:

- fergusonite 22 µm
- bastnaesite/synchysite 51 µm
- allanite 65 µm
- monazite 24 µm
- chevkinite 53 µm
- zircon 24 µm
- quartz/feldspars 98 µm
- muscovite 24 µm
- other silicates 83 µm
- oxides 141 µm
- overall particle 98 µm

The grain size data indicates that it should be possible to liberate the REE minerals from the barren gangue minerals using a moderate grind size.

FIGURE 13-2 CUMULATIVE GRAIN SIZE DISTRIBUTION



MINERAL CHEMISTRY

Electron microprobe analyses (EMPA) were conducted on chevkinite, allanite, fergusonite, bastnaesite/synchysite, zircon, and an undefined Si/Y/Ca REE phase.

- Allanite averages Ce 11.07 wt%, La 5.18 wt% and Nd 3.66 wt%, and minor Dy 0.40 wt%, Pr 0.92 wt%, Sm 0.24 wt%, Th 0.18% and Y 0.30 wt%.
- Fergusonite carries mainly HREE and minor LREE. It averages Y 17.76%, Nb 29.20%, and minor Dy 3.63%, Gd 3.42%, Er 2.17%, Nd 1.76%, Ce 1.47%, Yb 1.27%, Sm 1.16%, La 0.44%, Ho 0.85%, Pr 0.25%, Tb 0.68%, Tm 0.38%, U 0.37 %, and Th 0.61%.
- A Si-Y-Ca phase consists of Y 14.45%, Nd 8.07%, Ce 7.70%, Gd 3.99%, Dy 3.22%, Sm 2.94%, La 2.01%, Pr 1.42%, Yb 1.01% and Tb 0.58%, Tm 0.54%, and Th 0.27%. This phase is tentatively identified as a Y-britholite.
- Bastnaesite/Synchysite consists of, in average, Ce 27.42%, La 15.27%, Nd 10.92%, Pr 3.06%, Sm 1.44%, Gd 0.90%, Tm 0.33%, Dy 0.28%, Tb 0.24%, Yb 0.18%, Th 0.17%, and Y 0.68%.
- Chevkinite consists of Ce 16.74%, La 6.84%, Nd 6.69%, Pr 1.87%, Nb 1.28%, Gd 0.73%, Dy 0.68%, Sm 0.98%, Yb 0.15%, Th 0.56%, and Y 1.72%.
- Although based on a limited number of analyses, there are two populations of zircon grains, with Y-bearing and Y-barren. Y ranges from nil to 0.66% and averages 0.15%.

LIBERATION AND ASSOCIATION

The liberation and association characteristics of allanite, fergusonite, bastnaesite/synchysite, monazite, chevkinite, and zircon were examined.

- Free and liberated allanite account for 66.8%. The main association of allanite is as complex particles (25.8%), and minor middlings with zircon (3.8%) and quartz/feldspars (1.6%), and trace associations (<1%) with other minerals. Free and liberated allanite increases from 59.1% to 86.0% with decreasing size, while complex particles decrease from 33.4% in the +38 µm to 6.7% in the -38 µm fraction.

- Free and liberated fergusonite accounts for 31.4%. The main association of fergusonite is as complex particles (30.8%), followed by middlings with zircon (21.4%), quartz/feldspars (11.4%), and less with allanite (1.6%) and other silicates (1.5%), while other associations are insignificant (<1%). Liberation increases from 12.5% in the +38 µm fraction to 42.6% in the -38 µm fraction. Complex particles decrease from 48.5% to 20.3%, with quartz/feldspars from 26.2% to 2.6%, but those with zircon increase from 8.9% to 28.8%.

BENEFICIATION OF GROUND FOXTROT SAMPLE

SGS studied three beneficiation techniques during the 2012 programs in an attempt to concentrate the REE in the Foxtrot sample.

Gravity concentration of the REE minerals with magnetic separation to remove magnetite recovered 71% of the Ce, 71% of the Nd, and 71% of the Y into a concentrate amounting to 22% of the mass of feed to the test.

In an attempt to improve overall recovery, the gravity tailings were subjected to flotation processing. As expected, the flotation process improved the overall REE recovery, however, the mass of concentrate increased significantly. Specifically, the combined gravity-magnetic separation-flotation flowsheet recovered 83% of the Ce, 83% of the Nd, and 84% of the Y into a concentrate amounting to 35% of the mass of feed to the test.

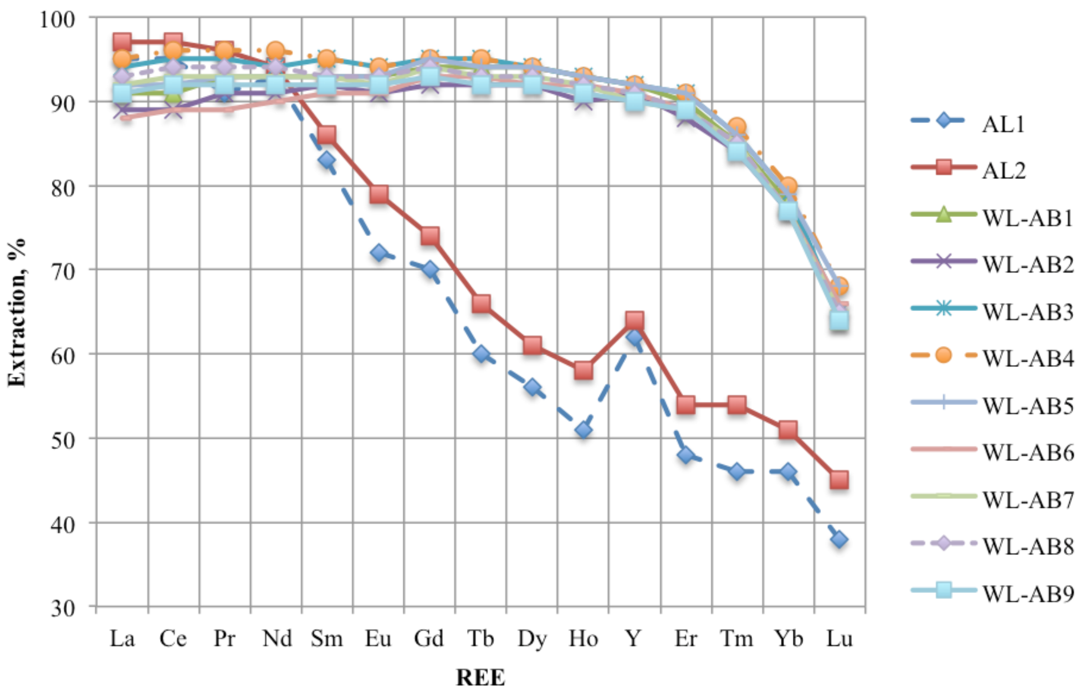
Flotation testing on a head sample produced a concentrate containing 71% of the Ce, 74% of the Nd, and 82% of the Y in a concentrate with a mass of 27% of the feed mass.

HYDROMETALLURGICAL EXTRACTION OF REE FROM FOXTROT CONCENTRATE

LEACHING

The concentrates from the gravity concentration and the combined gravity/flotation tests were subjected to acid leaching (tests AL1 and AL2) or acid baking at 200°C to 250°C followed by water leaching (test WL-AB1 to WL-AB9). The results of the testing are summarized in Figure 13-3.

FIGURE 13-3 EXTRACTION OF REE FOR ACID LEACH AND ACID BAKE – WATER LEACH TESTS



From RPA, 2013

Figure 13-3 shows that direct acid leaching of the concentrate is quite successful for the lower-value La and Ce but becomes progressively less effective with the heavier REE. It was also noted that liquid-solid separation for the acid leach was more difficult than for the higher temperature acid bake process. In contrast, the high temperature acid bake and water leach results produced higher extractions across most of the REE and liquid-solid separation characteristics were better.

It was observed that Zr extraction in all acid leach and acid bake tests was essentially zero. Nb extraction varied from approximately 4% to 18% depending on detailed test conditions. Acid additions were generally approximately 1,000 kg/t of concentrate.

LEACH SOLUTION PURIFICATION AND RECOVERY OF MIXED REE PRODUCT

The leach solution purification involved simple pH adjustment to pH 3.0. At this pH, iron, aluminum, silica, titanium, phosphate, zirconium, niobium, and thorium were removed as a mixed hydroxide waste precipitate.

After impurity precipitation, the solids were filtered and analyzed. The purified solution was then treated with oxalic acid at pH 2.0 to precipitate the REE from solution. The form of the precipitate is as a mixed REE oxalate. The mixed REE oxalate was filtered and washed and analyzed. The results are summarized in Table 13-2 along with the recovery data.

TABLE 13-2 OVERALL RECOVERY OF REE AND OXALATE ASSAY
Search Minerals Inc. – Foxtrot Project

Oxide	Conc. Recovery (%)	Leach Extraction	Impurity Loss	Precip. Efficiency (Oxalate)	Overall Recovery	Oxalate Precipitate Analysis (% or ppm)
La_2O_3	86.21	95.29	0.77	99.96	81.49	9.15
Ce_2O_3	82.98	95.89	0.96	100.00	78.80	21.43
Pr_6O_{11}	86.56	95.79	1.06	99.97	82.01	2.54
Nd_2O_3	83.04	95.64	1.18	99.98	78.47	10.15
Sm_2O_3	84.32	94.70	1.17	99.94	78.88	1.44
Eu_2O_3	83.73	94.28	1.19	99.12	77.31	879
Gd_2O_3	82.65	95.30	1.01	99.95	77.93	13,370
Tb_2O_3	82.38	94.69	1.07	99.66	76.91	2,164
Dy_2O_3	81.36	94.21	1.07	99.90	75.76	12,165
Ho_2O_3	81.59	93.31	1.08	99.8	75.15	23,14
Er_2O_3	81.67	90.83	1.17	99.85	73.21	6,209
Tm_2O_3	81.87	86.80	1.26	98.92	69.41	839
Yb_2O_3	81.73	79.89	1.50	99.90	64.25	4,828
Lu_2O_3	81.75	67.70	1.45	98.81	53.90	567
Y_2O_3	83.71	92.48	1.12	99.99	76.54	64,466
U_3O_8						6
ThO_2						321

Note: Y analysis not available. Y solid analysis entered as estimate using Nd analysis of precipitate as reference

HYDROMETALLURGICAL PROCESSING OF CRUSHED SAMPLE

Although the results of the preliminary beneficiation and hydrometallurgical tests were quite encouraging, it was realized that comminution and beneficiation operating costs would be high because of the remote location of the project and resulting high energy costs. Accordingly, Search Minerals authorized SGS to examine the leaching of crushed whole ore. Initial results, reported in SGS Progress Report 1, were encouraging and led to a continued program of testing reported in SGS Progress Report 2.

SAMPLES

The samples utilized in the crushed ore hydrometallurgical testwork were taken from existing inventory of material used in previous work conducted for Search Minerals (SGS Project 13004-001). The sample was classified as “Fox HBR Aug 11”. Head assays are presented in Table 13-3 under Leaching.

LEACHING

Earlier acid bake tests in a muffle furnace showed that coarse ore leaching was effective. For bulk testing of the process, the ore was crushed to -6 mesh and contacted with sulphuric acid in a cement mixer to facilitate good acid/ore contact. The acid addition was 100 kg/t of whole ore based on work reported in SGS Progress Report 1 resulting in a loosely agglomerated moist material. This material was then fed into a rotary kiln at a rate of approximately 2 kg/h targeting a temperature of 200°C and a retention time of 1.5 hours in the heated zone of the kiln corresponding to a total residence time, including heat up and cooling, of three hours in the kiln tube.

The feed analysis of the material used in the bulk testwork is presented in Table 13-3 along with the analysis of the feed material used in the preliminary coarse leach tests (SGS Progress Report 1).

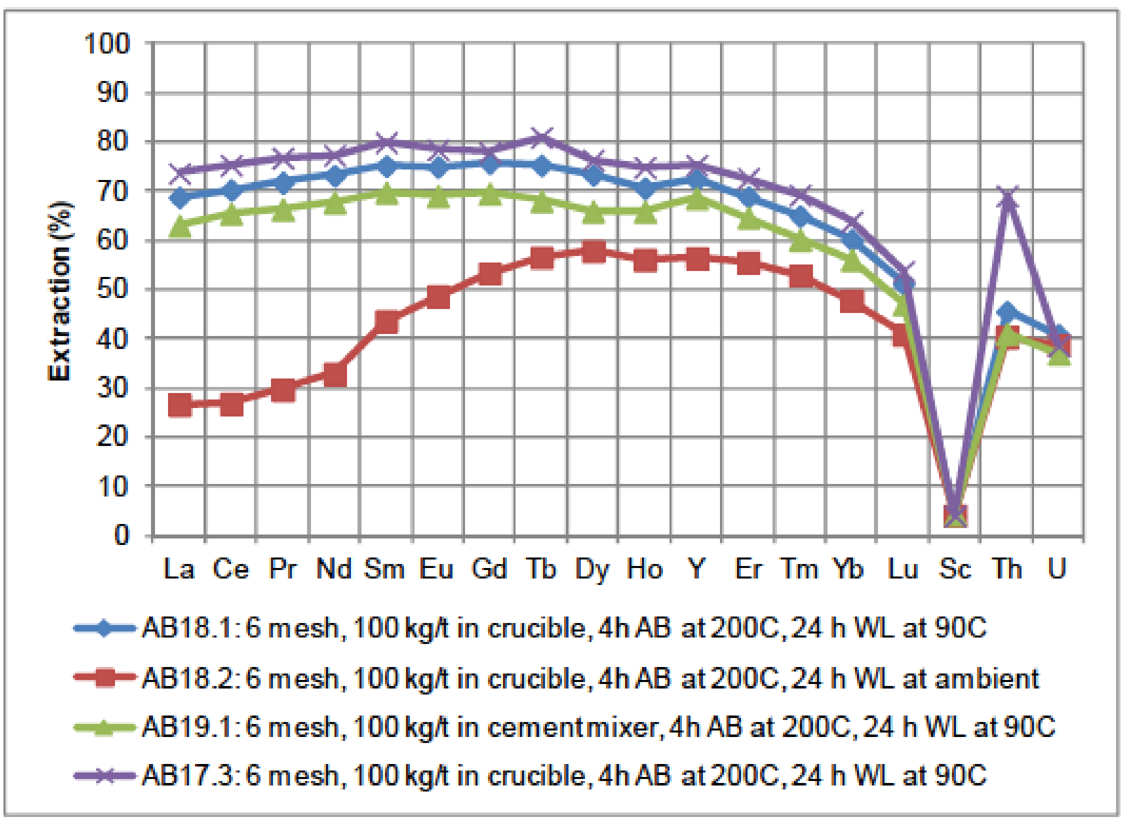
TABLE 13-3 HEAD ASSAY FOR BULK SAMPLES USED IN SGS COARSE LEACH WORK
Search Minerals Inc. – Foxtrot Project

Sample ID	Rare Earth Elements (g/t)																	
	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Y	Er	Tm	Yb	Lu	Sc	Th	U
Bulk Feed	1,570	3,450	420	1,570	288	16	241	38	228	46	1,190	131	18	112	16	<25	115	23
Original	1,720	3,720	437	1,610	297	16	244	37	223	44	1,090	122	17	111	16	<25	109	22

Sample ID	Gangue (%)									
	Si	Al	Fe	Mg	Ca	Na	K	Ti	P	Mn
Bulk Feed	31.40	3.82	7.83	0.10	1.48	2.03	3.19	0.29	0.01	0.25
Original	31.30	3.99	7.83	0.12	1.45	2.13	3.36	0.27	0.01	0.23

The baked ore/acid mixture that discharged from the kiln was observed to be nearly dry and similar in physical handling to gravel. The mixture was subjected to water leaching at 90°C and 10% solids for 24 hours before filtering. The results of the several tests completed are summarized in Figures 13-4 and 13-5.

FIGURE 13-4 LEACH RESULTS FOR INITIAL SMALL-SCALE TESTS REPORTED IN SGS PROGRESS REPORT 2



The data represented in Figure 13-4 highlight the importance of a hot water leach (WL in figure) to ensure high REE extraction.

The results of acid bake tests using a rotary kiln and an acid addition of 100 kg/t are presented in Figure 13-5.

FIGURE 13-5 LEACH RESULTS FOR LARGE-SCALE, KILN-BAKED TESTS REPORTED IN SGS PROGRESS REPORT 2

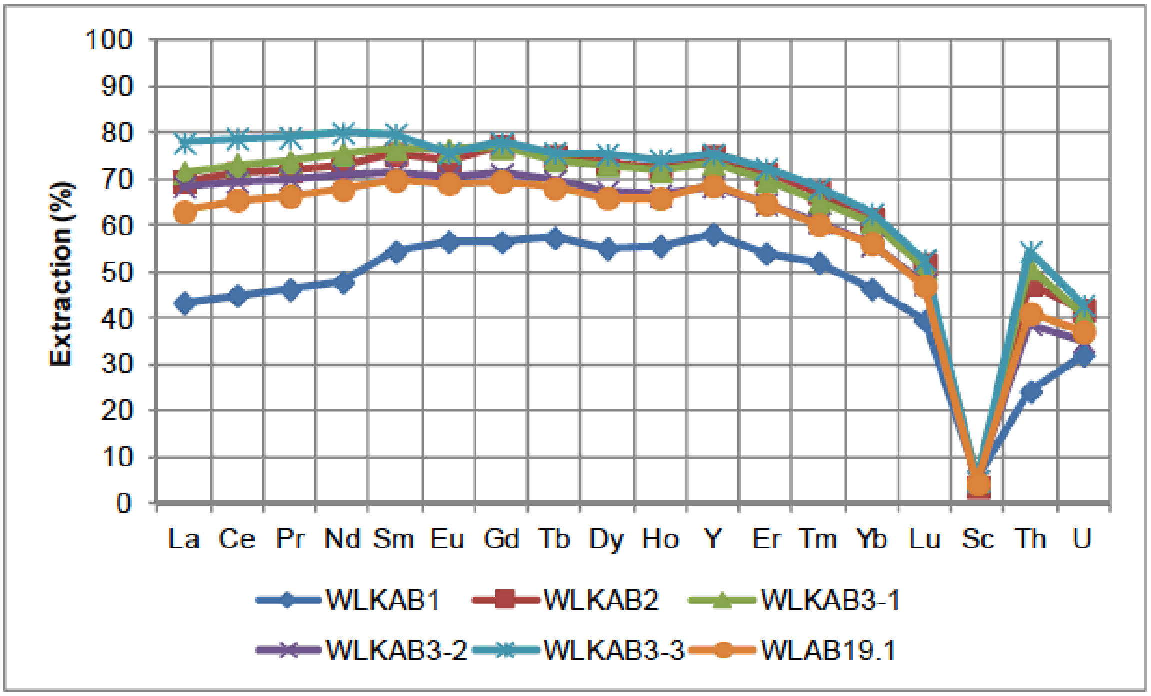


Figure 13-5 shows that with the exception of the first kiln test, WLKAB1, extractions were reasonable and at least as good as a small-scale test (WLAB19.1) that was performed in a muffle furnace. Examination of the data for WLKAB1 showed that the kiln was not operated for long enough to come to equilibrium and, equally important, the internal temperature of the kiln was only 180°C whereas the other tests were at 196°C, 191°C, and 200°C for AB2, AB3, and AB19 respectively.

The data show that very little excess acid remains with the acid baked calcine discharged from the kiln. Specifically, the water leach solutions from the tests under discussion contained less than 3 g/L of free acid.

WATER LEACH SOLUTION PROCESSING

Small-scale exploratory tests were reported on in SGS Progress Report 1. SGS Progress Report 2 records larger scale work that was performed. Acid baked calcine from the kiln runs was combined and bulk leached to generate a pregnant leach solution (PLS) containing approximately 0.9 g/L of REE. The PLS also contained significant amounts of contaminants, i.e., 0.2 g/L Si, 0.3 g/L Al, 0.7 g/L Fe, and 0.7 g/L Ca as well as 6 mg/L of Th and 1 mg/L of U.

SGS conducted an impurity removal step on the bulk PLS using 4.2 kg/m^3 of magnesium carbonate to take the pH to 3.75 and remove impurities by hydrolysis whilst leaving the REE in solution. SGS then used settling and filtration methods to remove the precipitated impurities. The procedure was reasonably successful and removed 34% of the Si, 62% of the Al, 98% of the Fe, 89% of the Th, and 6% of the U. REE losses during the impurity removal test ranged from 1.6% for La to 6.2% for Lu with a fairly linear increase across the REE group.

After removing most of the impurities through pH adjustment with magnesium carbonate, SGS precipitated essentially all of the REE from the low-impurity PLS by raising the pH to 7.25 using 2.3 kg/m^3 of sodium carbonate. The REE precipitation process also precipitated most of the other metal ions remaining in solution including Th and U. The REE carbonate was allowed to settle and then filtered and produced a very wet cake containing 86% moisture. This was dried and used in refining tests described below.

The impure REE carbonate, containing approximately 35% REE as carbonates, was re-dissolved in hydrochloric acid in preparation for the testing of methods for further removing impurities. The re-leach was effective in dissolving essentially all of the REE and the co-precipitated impurities resulting in a 47 g/L REE solution.

Three hydrolysis tests aimed at Th removal were undertaken on samples of the chloride solution produced by leaching the low-impurity carbonate. Two small-scale tests studied the effect of adding phosphate to assist in Th removal from a diluted sample of the chloride-based PLS. One of these tests had no phosphate added and the other had an addition of 41 g phosphoric acid per g of Th. The phosphate addition allowed 99% Th removal at pH 3.0 with very low REE co-precipitation (1% of the Y). In contrast, the non-phosphate test only removed approximately 45% of the Th at the same pH and needed approximately pH 4 for good Th removal at which point 25% of the Y had precipitated.

The third Th removal test was carried out on undiluted chloride PLS from the bulk leach but with the same phosphate addition as used in the small-scale test. The results were poor with very high REE losses at a high Th removal point, e.g., Pr, Nd, and Y losses were 8%, 9%, and 11% respectively. It could be that the higher solution strength dictated the use of additional phosphate or some other change in parameters. Additional tests are clearly needed to better define conditions for Th removal and also other impurities such as U. It is expected that both the primary and secondary Th removal steps can be made more efficient with far lower levels of co-precipitated REE – especially in the secondary precipitation step.

SGS proposes to recycle the secondary impurity removal precipitate back to the acid baking system. This has not yet been tested but seems to be a very reasonable approach and should yield a very high recovery of REE contained in the precipitate since the REE will be present as readily acid-soluble carbonates/hydroxides. Other methods of impurity removal could also be investigated and could lead to lower REE losses to the Th stream and perhaps eliminate the need for recycle back to the acid bake system.

The filtrate from the bulk Th removal test was precipitated with oxalate and the resulting REE oxalate calcined to oxide. A first oxalate precipitation test was done with a low mass of oxalic acid which led to a low Ca calcined product (0.2%) because Ca oxalate was not precipitated but the precipitation of Y and the very light and very heavy REE was low at 83% for La, 90% for Y, and 94% for Lu. This first calcined product was somehow contaminated with an S species leading to almost 3% S in a high-temperature calcined product. It contained approximately 91% TREO.

A second oxalate precipitation was done on the chloride re-leach solution, without a Th precipitation step, and again yielded poor precipitation of the very light and heavy REE and Y but the S contamination was eliminated and the TREO content was reported at 99%.

A REE oxalate precipitation test reported in SGS Progress Report 1 showed REE precipitation efficiency for Ce through to Ho at 100%, Er to Lu at 99%, La at 97% and Y at 98%. SGS concluded that oxalate precipitation should work effectively.

SGS concluded its 2014 test program with a sulphide precipitation test on the filtrate following the bulk impurity removal test aimed at removing Zn, Pb, and other contaminants. The test effectively removed Zn from a level of approximately 10% on a REE basis down to approximately 0.2%, however, REE losses ranged from 5% for La up to 22% for Lu. SGS recommended that more testwork be completed.

SGS PROPOSED FLOWSHEET

Based on its testwork, SGS developed a hydrometallurgical block diagram (Figure 13-6). The diagram does not show the facilities needed for crushing, product handling, and environmental control facilities.

SGS Progress Report 2 offers estimates of the recovery of REE and major impurities as provided in Figure 13-7. It must be noted that Bulk WLKAB, shown in Figure 13-7, was performed on a mixture of kiln calcine that included some sub-optimal material and therefore is biased towards low extraction. The two “Overall” curves represent overall recovery with (w) and without (w/o) recycle of the thorium removal precipitate back to the acid bake system.

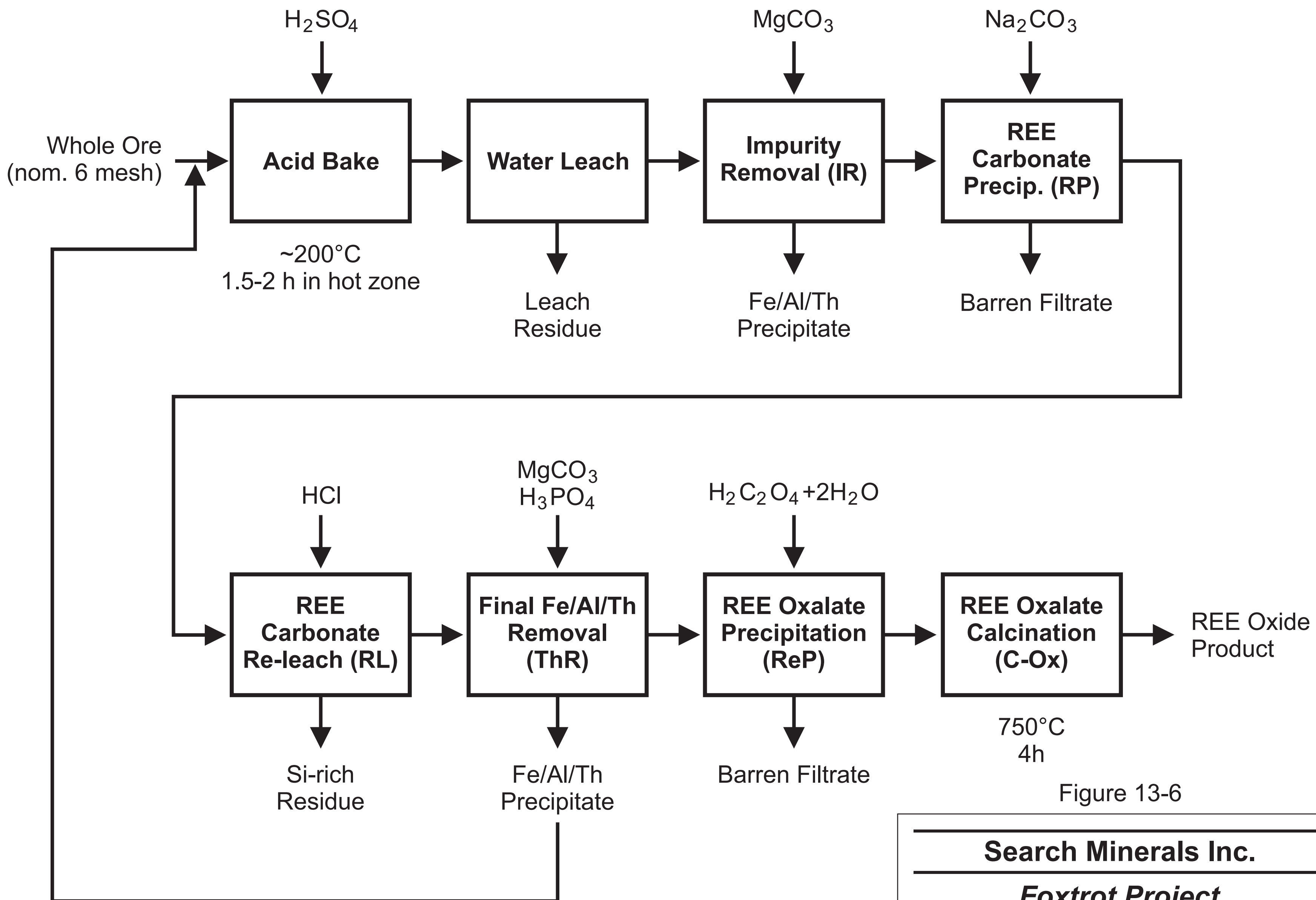


Figure 13-6

Search Minerals Inc.

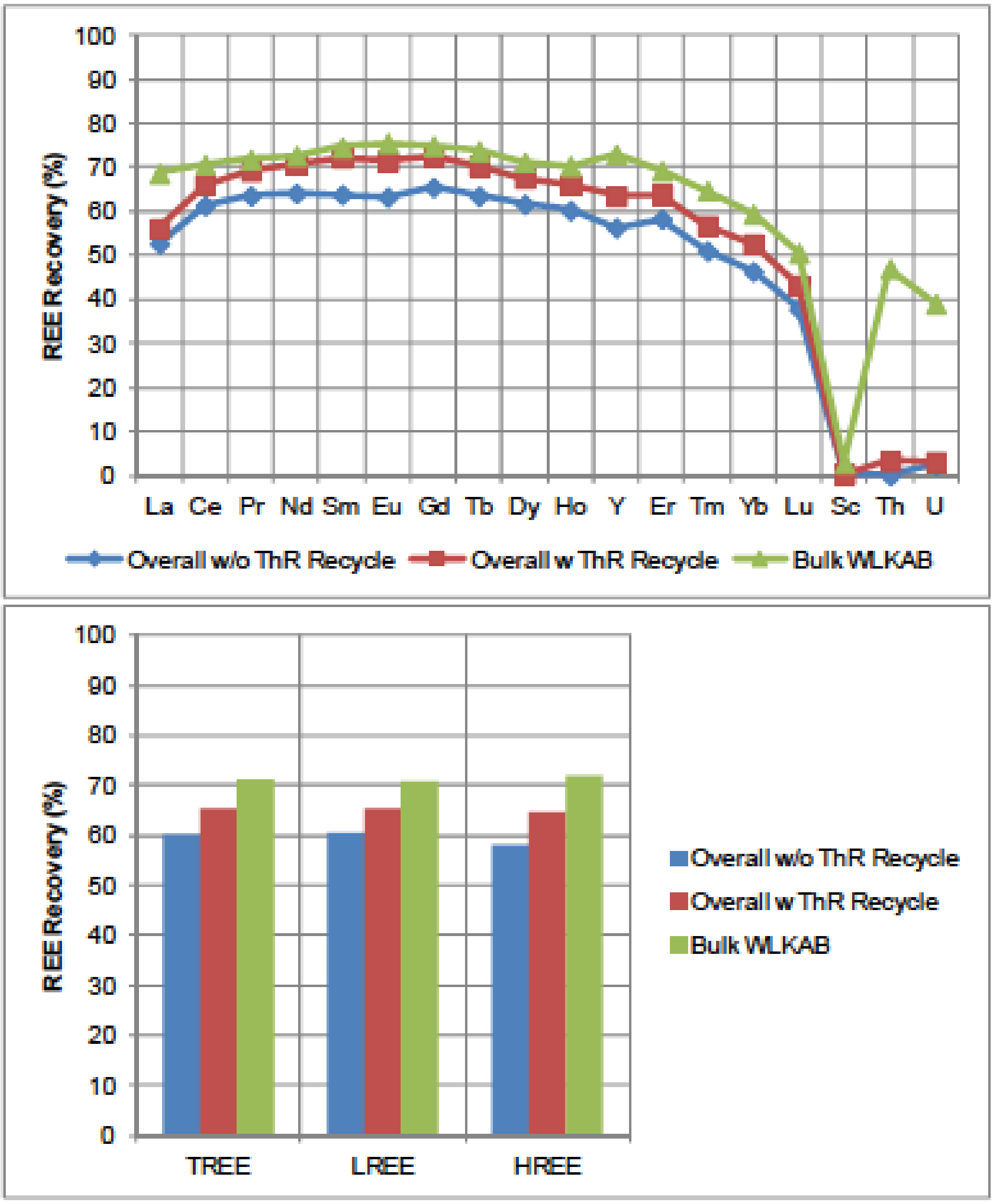
Foxtrot Project

Newfoundland and Labrador, Canada

SGS Proposed Hydrometallurgical Process Block Diagram - Excludes Feed Preparation and Effluent Controls

April 2016

FIGURE 13-7 SGS PROPOSED EXTRACTION VALUES – SOLUBLE LOSSES AND OTHER FACTORS EXCLUDED



SGS suggested an extraction value somewhere between the two Overall recovery values which assumes that some of the REE precipitated in the ThR step is actually recovered.

RPA OPINION

The SGS work is at a preliminary stage with just one sample subjected to testing and a limited number of leach, impurity removal, and product precipitation tests completed. The leach tests were performed on conventionally crushed material. RPA expects that better leach results can be obtained using high pressure grinding rolls (HPGR) on the crushed material. RPA notes that the REE products created in the test work have achieved low levels of Th but have yet to meet the low levels of U and possibly other radionuclide levels (no measurements yet on other radionuclides) required by commercial toll separation plants, and further tests are needed in this area. The proposed process has yet to be demonstrated on a pilot scale. Additionally, RPA notes that there has been no environment-related tests.

There are several questions concerning the appropriate equipment for the various unit operations. The crushing circuit requires testwork to determine the optimum configuration including an examination of the use of HPGR. The optimum equipment for mixing acid and coarse ore requires study as does the method of holding the reacting mass at 200°C for up to two hours. The necessity of rabbling or stirring during the bake process has to be determined. The 24 hour long water leach process will present challenges given the coarse nature of the calcine. It might be better to consider a packed bed with solution recirculation through it.

Despite the reservations and outstanding questions, RPA believes that enough work has been done to prepare a PEA of the process, provided that reasonable allowances and safety factors are applied during process equipment selection, assignment of reagent demand and REE recovery values, and capital and operating costs for the process.

At this early stage of process flowsheet development, RPA is not aware of any processing factors or deleterious elements that could have a significant effect on economic extraction.

The overall extraction values for REE are expected to be as indicated in Table 13-4. The leach extraction data are Si-tie values for a kiln bake test with water leach designated as test WLKAB3-3 in SGS's Progress Report 2. These leach results are similar to those stated in the SNC-Lavalin report dated June 4, 2015 (SNC-Lavalin, 2015), which appears to have used the results from a muffle furnace test WLAB16.3 presented in SGS Progress Report 1. Other acid bake test data yield similar results to those proposed.

The values taken for the loss of REE during the first impurity removal process are those reported by SGS in Progress Report 2, Table 10, for a bulk test. RPA is of the opinion that these losses could be reduced through more testwork, possibly using phosphate addition to better eliminate Th with lower REE losses. RPA has taken the SGS data for recovery at the REE carbonate precipitation stage. RPA has assumed high recovery of REE recycled back to acid leaching with the secondary Th precipitate such that total REE losses after the first Th impurity removal step are 0.75%.

TABLE 13-4 OVERALL REE RECOVERY
Search Minerals Inc. – Foxtrot Project

Oxide	Leach Extraction % Leach Feed	First Stage Impurity Loss % REE leached	REE Recovery at first REE precipitation % REE on solution	Other soluble losses %	Overall Recovery %
La_2O_3	79	1.6	100.0	0.75	77.2
Ce_2O_3	80	2	100.0	0.75	77.8
Pr_6O_{11}	80	2.2	99.9	0.75	77.6
Nd_2O_3	81	2.3	100.0	0.75	78.5
Sm_2O_3	81	2.8	99.8	0.75	78.0
Eu_2O_3	77	2.8	97.8	0.75	72.6
Gd_2O_3	79	2.6	99.9	0.75	76.3
Tb_2O_3	77	3	99.1	0.75	73.5
Dy_2O_3	77	3.4	99.7	0.75	73.6
Ho_2O_3	76	3.4	99.5	0.75	72.5
Er_2O_3	73	3.6	99.6	0.75	69.6
Tm_2O_3	69	4.8	97.0	0.75	63.2
Yb_2O_3	63	6	99.8	0.75	58.7
Lu_2O_3	55	6.2	96.8	0.75	49.6
Y_2O_3	77	2.7	99.9	0.75	74.3

14 MINERAL RESOURCE ESTIMATE

SUMMARY

RPA estimated Mineral Resources for the Foxtrot Project using all drill hole and channel sample data available as of December 31, 2015 (Table 14-1). The previous estimate was current to September 30, 2012 (RPA, 2013). Table 14-1 summarizes the estimated Mineral Resources potentially mineable by open pit and underground methods as of December 31, 2015. Different cut-off grades have been used for open pit and underground resources, expressed as Net Smelter Return (NSR). No Mineral Reserves have been estimated at the Project.

TABLE 14-1 ESTIMATED MINERAL RESOURCES FOR THE FOXTROT PROJECT AS OF DECEMBER 31, 2015
Search Minerals Inc. – Foxtrot Project

Classification	Cut-off $NSR	Tonnage 000s	Pr ppm	Nd ppm	Dy ppm	LREE %	HREE %	TREE %
Open Pit								
Indicated	165	4,129	372	1,393	177	0.69	0.17	0.86
Inferred	165	228	368	1,378	179	0.68	0.17	0.85
Underground								
Indicated	260	3,263	429	1,602	209	0.78	0.19	0.97
Inferred	260	1,730	430	1,602	201	0.80	0.19	0.99
Total Indicated		**7,392**	**397**	**1,485**	**191**	**0.73**	**0.18**	**0.91**
Total Inferred		**1,958**	**423**	**1,576**	**199**	**0.79**	**0.18**	**0.97**

Classification	Cut-off $NSR	Tonnage 000s	Pr_6O_{11} ppm	Nd_2O_3 ppm	Dy_2O_3 ppm	LREO %	HREO %	TREO %
Open Pit								
Indicated	165	4,129	449	1,625	203	0.83	0.20	1.03
Inferred	165	228	445	1,607	206	0.82	0.20	1.02
Underground								
Indicated	260	3,263	518	1,868	240	0.94	0.23	1.17
Inferred	260	1,730	520	1,868	231	0.96	0.23	1.19
Total Indicated		**7,392**	**480**	**1,732**	**219**	**0.88**	**0.21**	**1.09**
Total Inferred		**1,958**	**511**	**1,838**	**228**	**0.94**	**0.22**	**1.17**

Notes:
1. CIM definitions were followed for Mineral Resources.

2. Open Pit Mineral Resources were reported inside the design pit at an NSR cut-off of $165/t. Underground Mineral Resources were reported as material outside the design pit at an NSR cut-off of $260/t.
3. NSR values were assigned to blocks using metal prices and metallurgical recoveries (as shown in their respective sections of this report) for each of the individual elements and accounting for separation and transportation charges and royalties for the mixed REO product.
4. A minimum mining width of approximately 2.0 m was used for both open pit and underground.
5. Heavy Rare Earth Elements (HREE) = Eu+Gd+Tb+Dy+Ho+Er+Tm+Yb+Lu+Y
6. Light Rare Earth Elements (LREE) = La+Ce+Pr+Nd+Sm
7. Total Rare Earth Elements (TREE) = HREE + LREE
8. HREO, LREO refer to oxides of heavy and light rare earth elements respectively, and TREO is the sum of HREO and LREO.
9. The estimate is of Mineral Resources only and, because these do not constitute Mineral Reserves, they do not have demonstrated economic viability.
10. Totals may not add or multiply accurately due to rounding.

RPA is not aware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

RESOURCE DATABASE

RPA was provided with a drill hole database consisting of 119 drill holes and channel samples, totaling 19,399 m, with 93 of the holes/channels (16,107 m) located within the estimated Mineral Resources. Since the 2013 Technical Report and the Mineral Resource estimate, Search Minerals has completed 23 additional surface channels totalling 256 m, of which 22 for 244 m were located within the Foxtrot Mineral Resource. Figure 14-1 shows the drill hole and channels traces in plan, in addition to outlines of the wireframe models and pit shell at surface.

RPA received data from Search Minerals in Microsoft Excel format. Data were amalgamated and parsed as required and imported in GEMS for modelling. Listed below is a summary of records directly related to the resource estimate:

- Holes/Channels: 92
- Surveys: 2,996
- Assays: 12,733
- Composites 1,077
- Lithology: 12,733
- Full zone width composites: 204
- Density measurements: 28

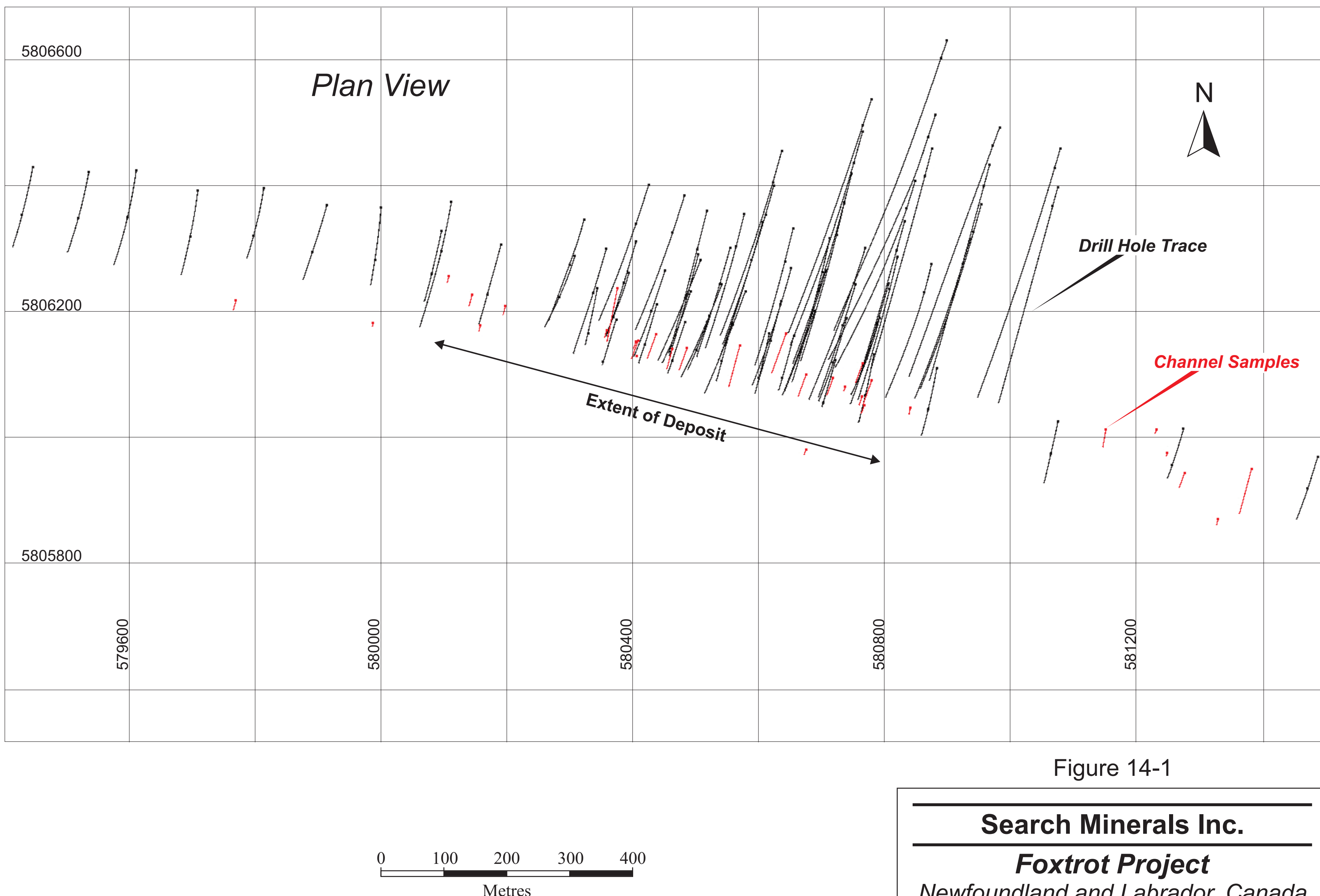


Figure 14-1

Search Minerals Inc.

Foxtrot Project

Newfoundland and Labrador, Canada

Drill Hole and Channel Collar Locations Used in the 2015 Foxtrot Resource Estimate

April 2016

Source: RPA, 2016.

Twenty-four channels were combined into seven composite channels. The original channel names and final composited channel names are summarized in Table 14-2.

TABLE 14-2 COMPOSITED CHANNELS AND ORIGINAL CHANNEL SEGMENTS
Search Minerals Inc. – Foxtrot Project

Composited Channel Name	Number of Channel Segments	Original Channel Names
CCH-1	5	FTC-12-02, FTC-15-01A, FTC-15-01B, FTC-15-01C, FTC-15-01D
CCH-2	2	FTC-11-35, FTC-15-02
CCH-3	5	FTC-15-04A, FTC-11-32, FTC-15-04B, FTC-15-04C, FTC-15-04D
CCH-4	5	FTC-11-13, FTC-15-05A, FTC-15-05B, FTC-15-05C, FTC-15-05D
CCH-5	2	FTC-12-05, FTC-15-06
CCH-6	3	FH-56, FTC-15-07A, FTC-15-07B
CCH-7	2	FTC-12-01, FTC-11-10

Section 12, Data Verification, describes the verification steps undertaken by RPA. In summary, no discrepancies were identified and RPA is of the opinion that the GEMS drill hole database is valid and suitable to estimate Mineral Resources for the Foxtrot Project.

GEOLOGICAL INTERPRETATION AND 3D SOLIDS

Wireframes of the mineralized zones were built to investigate geological and grade continuity and to constrain grade interpolation within the block model.

RPA created northeast-southwest vertical sections spaced at 50 m perpendicular to the strike of the mineralization at an azimuth of 285°, and plan sections spaced at 20 m. Mineralized zones were interpreted on vertical section and snapped to drill holes to generate a set of 3D wobbly polylines on each section. At model extremities, polylines were extrapolated approximately 25 m beyond the last drill section. A minimum number of nodes were used to simplify updates. Polylines were joined together in 3D using tie lines and the continuity was checked using the level plans.

The Foxtrot deposit comprises three mineralized wireframes: Core, Hanging Wall (HW), and Footwall (FW) (Figures 14-2, 14-3, Table 14-3). The wireframes were interpreted using a minimum NSR value of $140/t, and a minimum mining width of 2.0 m. Narrow intercepts were bulked out to achieve a minimum thickness where required. All three wireframes have been modelled as single steeply dipping (70° to 80°) solids, with a strike length of approximately 765 m at an azimuth of approximately 285°. The wireframes have been extended no more than 25 m below the deepest drill hole intercept to a maximum of -395 MASL, and the upper surfaces have been clipped to the topography. A description of each modelled wireframe follows:

- **Core Zone:** A steeply dipping (70° to 80°) single wireframe solid comprised predominantly of mineralized pantellerite, with a strike length of 765 m at an azimuth of approximately 285°. The unit has been modelled to a depth of -395 m, with an average thickness of 15 m, but ranges from 2 m to 25 m. The central portion of the Core Zone reaches a thickness of nearly 30 m, at a depth of approximately -50 MASL. The wireframe model narrows to approximately 10 m to southeast and 5 m to the northwest. The top of the Core Zone wireframe solid has been clipped to topography. The Core Zone is the main zone of mineralization.

- **Hanging Wall Zone:** A thin zone of mineralization located above the Core Zone, the HW Zone is a steeply dipping (70° to 80°) single wireframe solid comprised predominantly of mineralized pantellerite and low Zr-pantellerite, with a strike length of 765 m at an azimuth of approximately 285°. Small lenses of mafic rock locally intermingle with the mineralized pantellerite within the HW Zone. Mafic lenses are typically less than 40 cm to 50 cm in thickness. Approximately five to seven metres of predominantly mafic rock separate the HW Zone from the Core Zone.

- **Footwall Zone:** A thin zone of mineralization located below the Core Zone, the FW Zone is a steeply dipping (70° to 80°) single wireframe solid comprised predominantly of mineralized pantellerite and low Zr-pantellerite, with a strike length of 765 m at an azimuth of approximately 285°. As with the HW Zone, small lenses of mafic rock locally intermingle with the mineralized pantellerite within the FW Zone. Approximately five to nearly 15 m of mafic and non-peralkaline rhyolitic rocks separate the FW Zone from the Core Zone.

TABLE 14-3 ROCK CODES

Search Minerals Inc. – Foxtrot Project

Mineralization	Solid Name	Rock Code	Volume (m^3)	Density (t/m^3)
Core Zone	NSR_CORE/101/final	101	3,450,695	2.71
Hanging Wall Zone	NSR_HW/201/final	201	1,217,632	2.71
Footwall Zone	NSR_FW/202/final	202	890,187	2.71

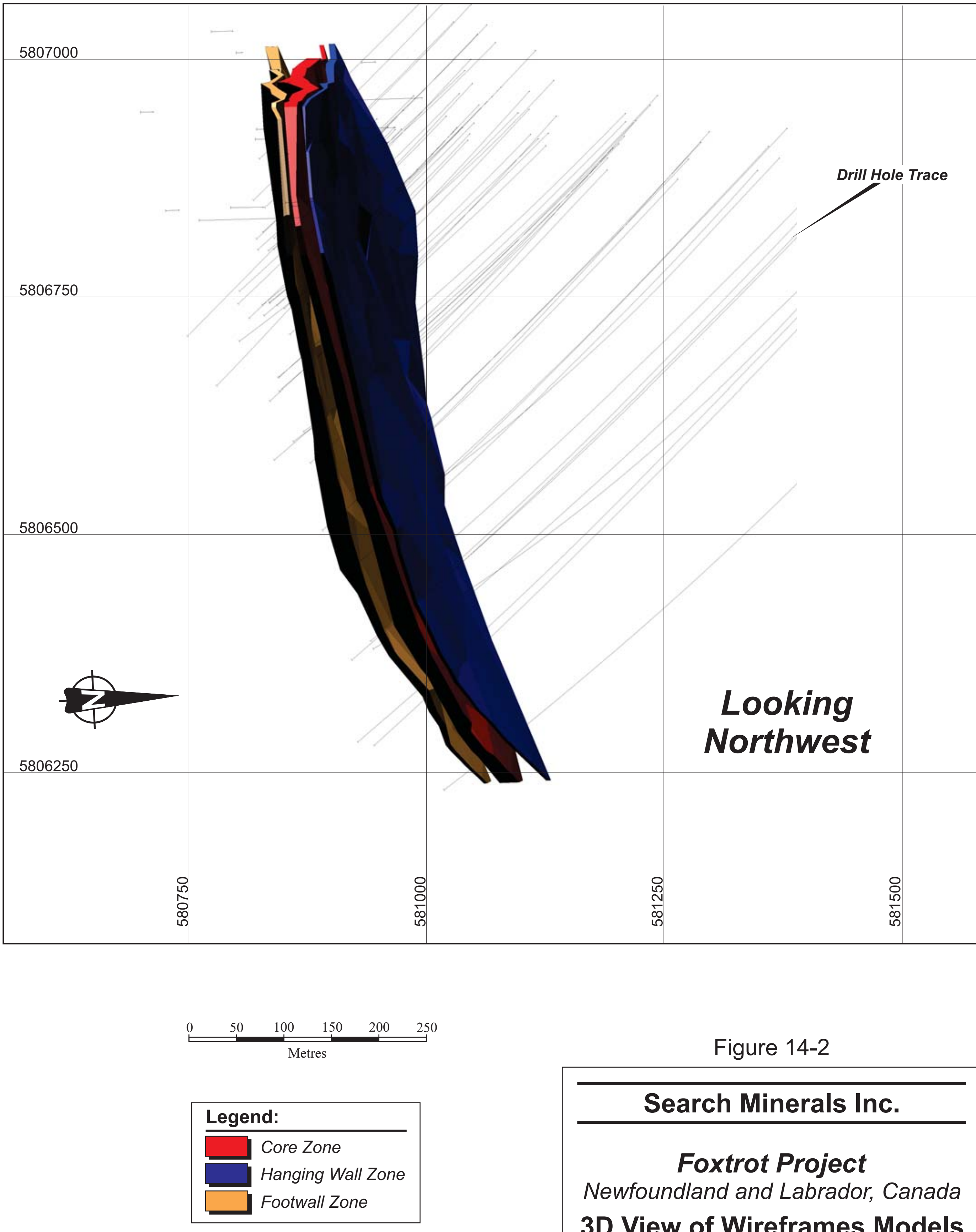


Figure 14-2

Search Minerals Inc.

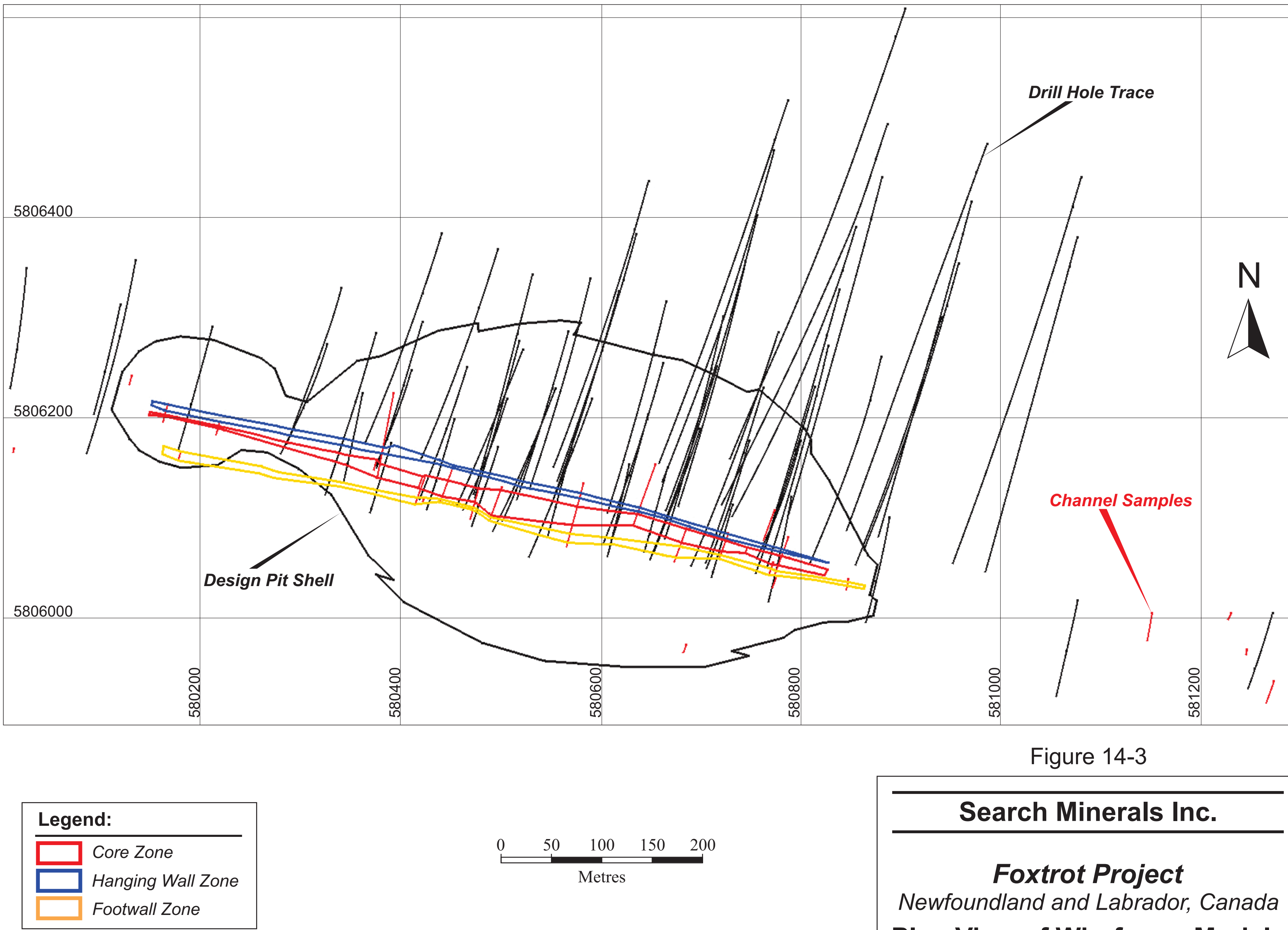
Foxtrot Project

Newfoundland and Labrador, Canada

3D View of Wireframes Models

April 2016

Source: RPA, 2016,



April 2016

Source: RPA, 2016.

Figure 14-3

Search Minerals Inc.

Foxtrot Project

Newfoundland and Labrador, Canada

Plan View of Wireframe Models

www.rpacan.com

All Mineral Resources estimated at Foxtrot are located within the mineralized zone wireframes.

RPA notes that there is additional mineralization above the underground NSR cut-off value of $260/t in assays outside wireframes along the strike of the deposit. It is RPA's opinion that the isolated location and narrow thickness of these intercepts together with wide drill hole spacing precludes the inclusion of the intercepts as Mineral Resources at this time. RPA recommends exploring the extent and continuity of mineralization along strike as well as the mineralization potential down dip with deeper drill holes.

STATISTICAL ANALYSIS

There are 15 elements included in the Foxtrot resource block model:

- La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb and Lu – all of the lanthanoids with the exception of promethium (Pm), which does not occur in nature.
- Yttrium (Y), which is usually classified as a rare earth element.
- Combinations of the 15 REEs: the total rare earth elements (TREE), the light rare earth elements (LREE, including La, Ce, Pr, Nd, and Sm), and the heavy rare earth elements (HREE, including Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, and Y).
- NSR.

Some of the following discussion of statistical analysis focuses on three of these elements: Pr, Dy, and Nd. The elements chosen have the greatest in situ value (grade × metal price) at Foxtrot. Dy is the HREE with the greatest in situ value, and Nd is the LREE with the greatest in situ value.

Assay values located inside the wireframes, or resource assays, were tagged with mineralized zone domain identifiers and exported for statistical analysis. Results assisted in verifying the modeling process. RPA compiled and reviewed the basic statistics for Pr, Dy, and Nd, which are summarized in Table 14-4.

TABLE 14-4 DESCRIPTIVE STATISTICS OF RESOURCE ASSAY VALUES

Search Minerals Inc. – Foxtrot Project

	Length (m)	Pr (ppm)	Dy (ppm)	Nd (ppm)
Core Zone (Rock Code 101)				
No. of Cases	1,525	1,525	1,525	1,525
Minimum	0.04	-	-	-
Maximum	2.90	1,190.00	391.00	3,890.00
Median	0.99	412.00	199.50	1,540.00
Arithmetic Mean	0.83	369.56	175.94	1,375.07
Length Weighted Mean	-	386.10	183.72	1,436.56
Standard Deviation	0.28	168.90	77.33	622.72
Coefficient of Variation	0.34	0.46	0.44	0.45
Hanging Wall Zone (Rock Code 201)				
No. of Cases	388	388	388	388
Minimum	0.02	-	-	-
Maximum	2.95	1,210.00	458.00	4,360.00
Median	0.80	277	141.00	1,070.00
Arithmetic Mean	0.75	295.48	152.32	1,134.80
Length Weighted Mean	-	310.81	159.48	1,191.05
Standard Deviation	0.33	190.00	92.83	724.37
Coefficient of Variation	0.43	0.64	0.61	0.64
Footwall Zone (Rock Code 202)				
No. of Cases	460	460	460	460
Minimum	0.08	-	-	-
Maximum	2.25	754.00	476.00	2,630.00
Median	0.99	282.00	127.00	1,040.00
Arithmetic Mean	0.85	261.26	127.51	965.02
Length Weighted Mean	-	270.96	131.19	1,000.91
Standard Deviation	0.29	146.92	67.89	545.43
Coefficient of Variation	0.34	0.56	0.53	0.57
Total				
No. of Cases	2,373	2,373	2,373	2,373
Minimum	0.02	-	-	-
Maximum	2.95	1,210.00	476.00	4,360.00
Median	0.98	356.00	170.00	1,330.00
Arithmetic Mean	0.82	336.46	162.69	1,256.30
Length Weighted Mean	-	351.84	169.60	1,312.82
Standard Deviation	0.29	174.56	80.69	648.27
Coefficient of Variation	0.36	0.52	0.50	0.52

Figures 14-4 to 14-6 show histograms of Pr, Dy, and Nd for all assays used in the resource estimate. The distributions show three prominent modes that correspond to two main rock types. The lowest mode belongs to samples from the mafic volcanic units. The two high grade modes belong to low-Zr pantellerite, and pantellerite-mafic mixed intervals (lower grade) and pantellerite (higher grade).

FIGURE 14-4 PR RESOURCE ASSAY SAMPLE HISTOGRAM

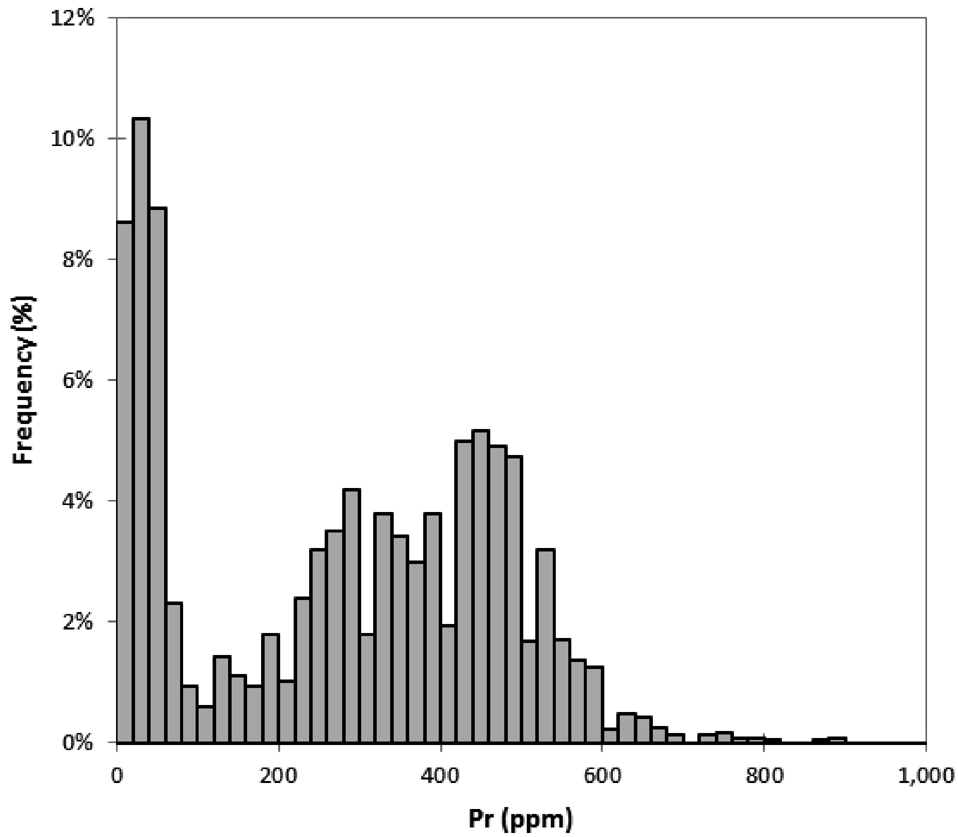


FIGURE 14-5 DY RESOURCE ASSAY SAMPLE HISTOGRAM

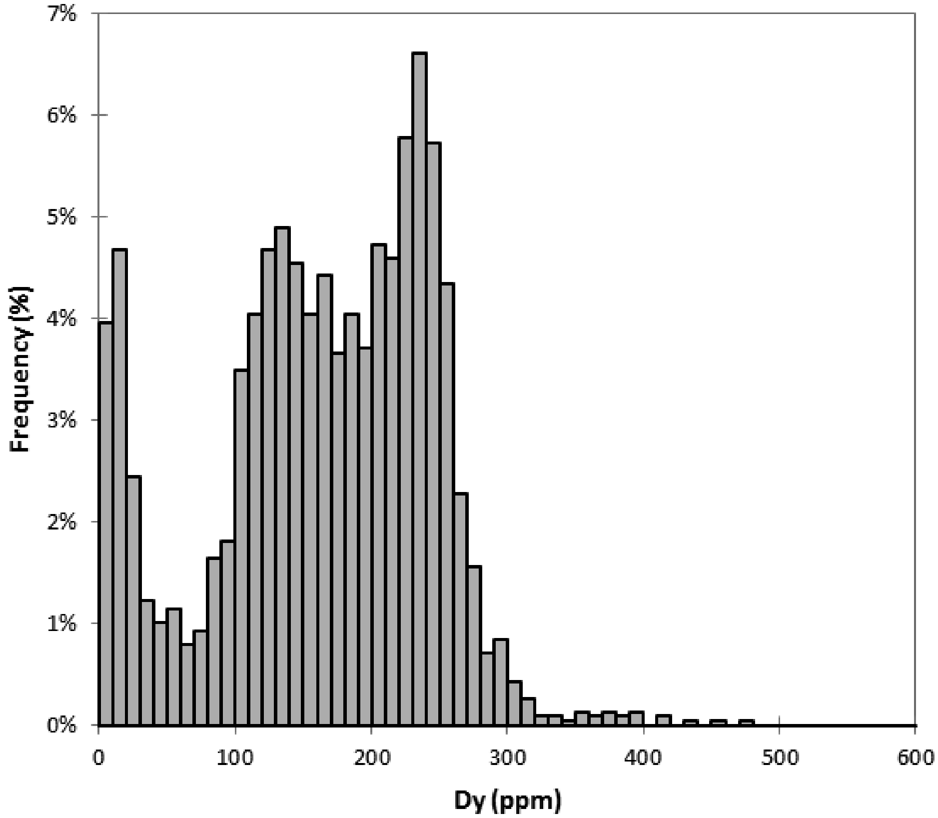


FIGURE 14-6 ND RESOURCE ASSAY SAMPLE HISTOGRAM

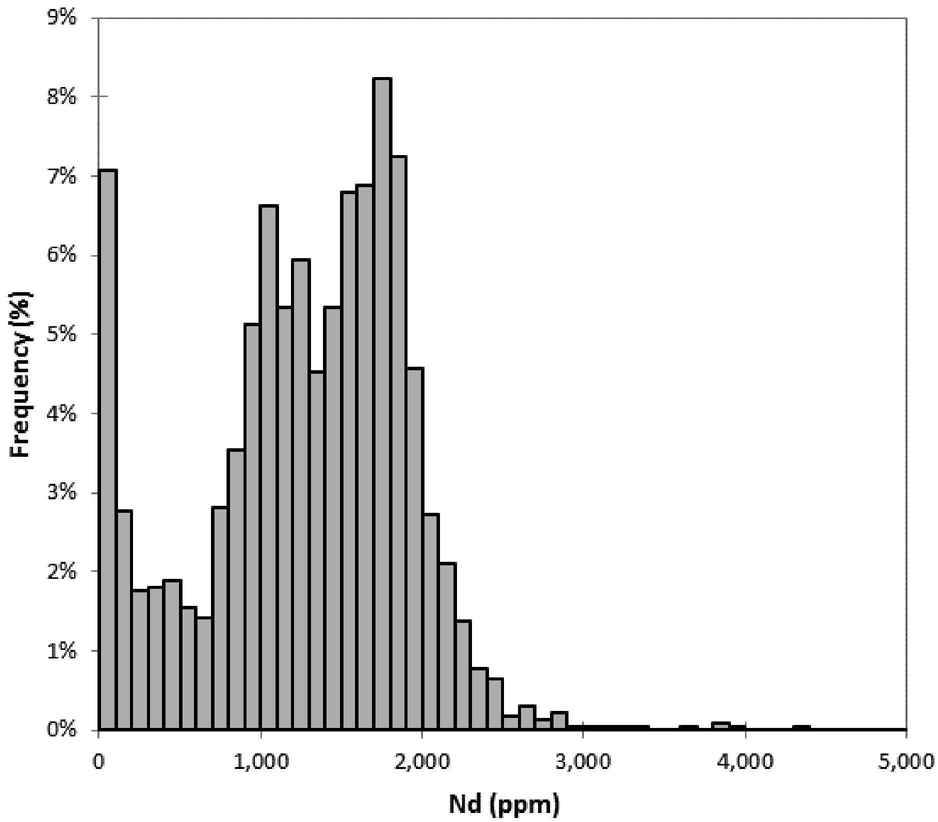


Table 14-5 summarizes the basic statistics for all 15 REEs and LREE, HREE, and TREE for all resource assays within the mineralized wireframe domains.

TABLE 14-5 ALL REE DESCRIPTIVE STATISTICS OF RESOURCE ASSAYS
Search Minerals Inc. – Foxtrot Project

Statistic	No. of Cases	Minimum	Maximum	Median	Arithmetic Mean	Length Weighted Mean	Standard deviation	Coefficient of Variation
Y (ppm)	2,373	-	3,399.00	954.00	894.23	932.81	455.18	0.51
La (ppm)	2,373	-	5,460.00	1,520.00	1,451.64	1,518.46	811.65	0.56
Ce (ppm)	2,373	-	10,800.00	3,120.00	2,947.76	3,082.93	1,551.70	0.53
Pr (ppm)	2,373	-	1,210.00	356.00	336.46	351.84	174.56	0.52
Nd (ppm)	2,373	-	4,360.00	1,330.00	1,256.30	1,312.82	648.27	0.52
Sm (ppm)	2,373	-	681.00	237.00	225.77	235.93	113.93	0.50
Eu (ppm)	2,373	-	33.10	12.00	11.49	11.94	5.42	0.47
Gd (ppm)	2,373	-	519.00	188.00	177.25	185.03	88.20	0.50
Tb (ppm)	2,373	-	80.00	29.30	27.97	29.17	13.85	0.50
Dy (ppm)	2,373	-	476.00	170.00	162.69	169.60	80.69	0.50
Ho (ppm)	2,373	-	99.00	32.50	31.31	32.65	15.58	0.50
Er (ppm)	2,373	-	293.00	92.10	88.53	92.34	44.05	0.50
Tm (ppm)	2,373	-	42.00	13.20	12.73	13.28	6.35	0.50
Yb (ppm)	2,373	-	269.00	80.80	78.70	82.07	39.13	0.50
Lu (ppm)	2,373	-	44.00	12.10	11.72	12.22	5.83	0.50
LREE (ppm)	2,373	-	22,411.00	6,543.00	6,217.89	6,501.96	3,266.01	0.53
HREE (ppm)	2,373	-	4,201.40	1,558.20	1,482.42	1,546.26	741.11	0.50
TREE (ppm)	2,373	-	40,715.00	7,950.30	8,191.92	8,443.15	5,347.75	0.65

CAPPING HIGH GRADE VALUES

RPA investigated the necessity for capping of high grade resource assays. A review of the resource assay histograms, and top decile analysis performed for Nd, Pr, Eu, Dy, Er, Lu, and Tb showed that capping was not necessary. This is confirmed by low coefficients of variations (Table 14-4).

COMPOSITING

Sample lengths range from 0.04 m to 2.95 m within the wireframe models. Approximately 83% of samples were taken at 0.5 m to 1.5 m intervals (Figure 14-7). Less than 1% have lengths greater than 2.0 m. Given these distributions and considering the width of mineralization, RPA chose to composite to 2.0 m lengths. The resource assays were composited starting at the first mineralized wireframe boundary from the collar and resetting at each new wireframe boundary. Composites less than 0.5 m were removed from the database for resource estimation, but used for variography.

FIGURE 14-7 HISTOGRAM OF RESOURCE ASSAY SAMPLE LENGTHS

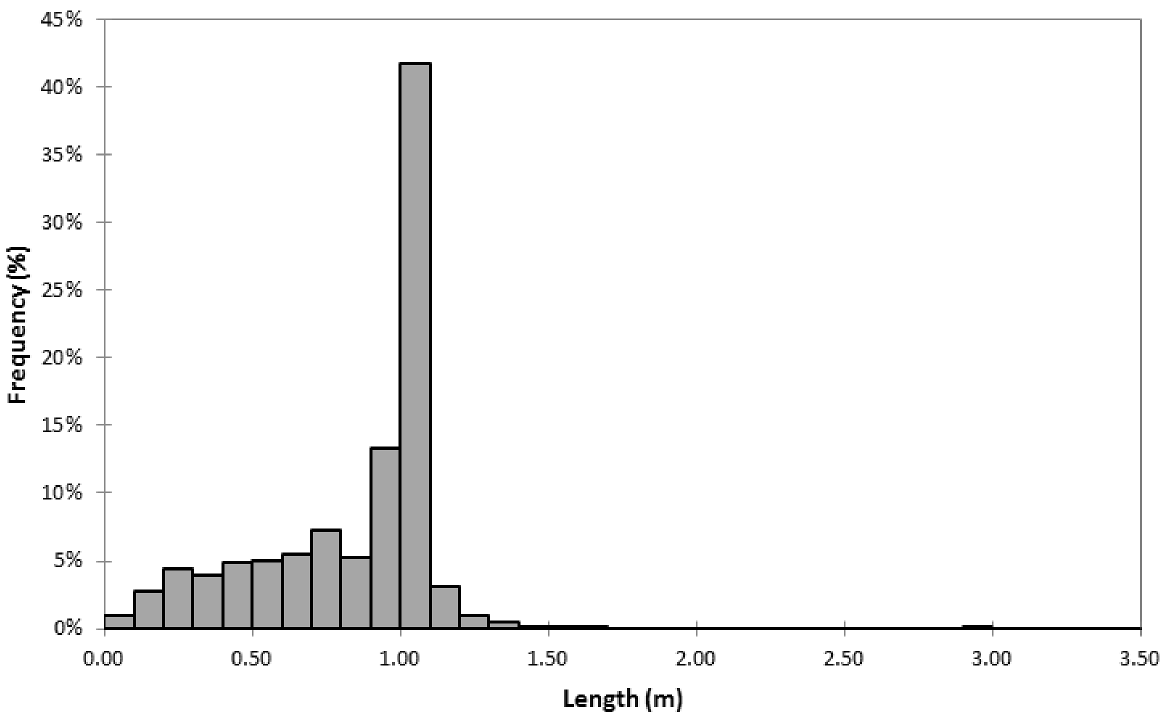


Table 14-6 summarizes the Pr, Dy, and Nd statistics of the composite resource assay values. When compared to Table 14-4, the average grades are nearly the same and the coefficient of variation (CV) values have been reduced.

TABLE 14-6 DESCRIPTIVE STATISTICS OF COMPOSITED RESOURCE ASSAY VALUES

Search Minerals Inc. – Foxtrot Project

	Pr (ppm)	Dy (ppm)	Nd (ppm)
Core Zone (Rock Code 101)			
No. of Cases	667	667	667
Minimum	4	4.76	18.93
Maximum	737.00	327.80	2,837.08
Median	409.00	194.94	1,542.25
Arithmetic Mean	386.07	184.06	1,436.42
Standard Deviation	120.25	55.87	445.07
Coefficient of Variation	0.31	0.30	0.31
Hanging Wall Zone (Rock Code 201)			
No. of Cases	160	160	160
Minimum	-	-	-
Maximum	1,090.00	392.61	3,973.75
Median	298.00	152.97	1,151.91
Arithmetic Mean	308.60	157.89	1,181.80
Standard Deviation	145.34	70.36	548.59
Coefficient of Variation	0.47	0.45	0.46
Footwall Zone (Rock Code 202)			
No. of Cases	215	215	215
Minimum	-	-	-
Maximum	647.00	292.00	2,309.95
Median	284.00	127.16	1,046.12
Arithmetic Mean	273.91	132.47	1,012.18
Standard Deviation	114.35	49.50	426.89
Coefficient of Variation	0.42	0.37	0.42
Total			
No. of Cases	1,042	1,042	1,042
Minimum	-	-	-
Maximum	1,090.00	392.61	3,973.75
Median	357.00	169.79	1,326.64
Arithmetic Mean	351.03	169.40	1,309.79
Standard Deviation	132.12	60.80	491.17
Coefficient of Variation	0.38	0.36	0.37

VARIOGRAPHY AND INTERPOLATION PARAMETERS

Variography was completed by Srivastava in 2012, and demonstrated very strong correlations among all elements, and used a single variogram model for grade interpolation. Variography analysis was completed by RPA on the current database with the GEMS geostatistics module using all available 2.0 m composite samples. Variography confirmed that the direction of maximum continuity is the strike direction (Y) at 285°, with a range of 280 m. In the down-dip direction (X), the range is 140 m, and perpendicular to the strike direction (Z) the range is approximately 10 m.

Variography parameters were used for interpolation of all REE 2.0 m composites by Inverse Distance Cubed (ID^3) for all mineralized zones. The interpolation and search parameters are summarized in Table 14-7.

TABLE 14-7 BLOCK ESTIMATE ESTIMATION PARAMETERS

Search Minerals Inc. – Foxtrot Project

Parameter			All Rare Earth Elements
	Method		ID^3
	Boundary Type		Hard
	Min. No. Comps.	Pass 1	2
		Pass 2	5
	Max. No. Comps.	Pass 1	1
		Pass 2	6
	Max. Comps. Per Drill Hole	Pass 1	3
		Pass 2	-
Search Anisotropy*	**Z**		195°
	Y		75°
	Z		105°
Search Ellipse	Range X (m)	Pass 1	70
		Pass 2	140
	Range Y (m)	Pass 1	140
		Pass 2	280
	Range Z (m)	Pass 1	5
		Pass 2	10

Note (*). Rotation around each axis (positive is counter-clockwise).

A two-pass approach was used to interpolate REE block grades for all domains. Interpolation was restricted by the mineralized wireframe models, which were used as hard boundaries to prevent the use of composite samples outside of the zones to interpolate block grades. The first pass used an X search distance of 70 m, a Y search distance of 140 m, and a Z search distance of 5 m, and was limited to a minimum of two and a maximum of five composites per block, with a limit of two composites used per drill hole. The second pass used an X search distance of 140 m, a Y search distance of 280 m, and a Z search distance of 10 m (i.e., the search distances were doubled), and was limited to a minimum of one and a maximum of six composites per block with no limit to the number of composites used per drill hole. Identical search ellipses were used for all REEs in all three mineralized zones.

NSR CUT-OFF VALUE

The depth and geometry of the interpreted mineralized domains at the Foxtrot deposit make it amenable to open pit methods near surface and to underground mining methods at deeper levels. NSR factors were developed by RPA for the purposes of resource reporting. NSR is the estimated value per tonne of mineralized material after allowance for metallurgical recovery and consideration of terms for third-party separation and refining, including payability and charges. These assumptions are based on the current processing scenario and results from metallurgical test work.

The net revenue of seven payable rare earth elements was calculated and then divided by grade to generate a NSR factor for resource reporting. These NSR factors represent revenue per oxide grade unit (US$/kg Dy_2O_3, for example), and are independent of grade. Key assumptions are summarized in Tables 14-8 and 14-9.

TABLE 14-8 CUT-OFF VALUE ASSUMPTIONS

Search Minerals Inc. – Foxtrot Project

REO	Metal Price (US$/kg)	Recovery (%)	Separation Charges (US$/kg)
Pr_6O_{11}	105.00	77.6	10.00
Nd_2O_3	80.00	78.5	10.00
Eu_2O_3	650.00	72.6	20.00
Tb_4O_7	800.00	73.5	20.00
Dy_2O_3	500.00	73.6	20.00
Er_2O_3	40.00	69.6	20.00
Lu_2O_3	1,200.00	49.6	20.00

Notes:

1. Exchange rate of 0.75:1.00 (US$:C$)
2. Transportation charges of $50.00/t of REO product
3. NSR royalty of 3.0%, with option to buy back 2% for $1 million.

TABLE 14-9 OPERATING COST ASSUMPTIONS BY MINING SCENARIO
Search Minerals Inc. – Foxtrot Project

Area	Unit	OP	UG
OP Mining by Contractor	$/t processed	55.11	
UG Mining by Owner	$/t processed		87.91
Crushing	$/t processed	5.00	5.00
Processing - Concentration	$/t processed	141.35	141.35
G&A	$/t processed	19.52	25.02
Total Operating Costs	**$/t processed**	**220.99**	**259.28**
Reporting Cut-off*****		165.87	259.28
Rounded Reporting Cut-off		165.00	260.00

*OP mining is reported at pit discard cut-off, which excludes mining costs

These NSR factors were applied to assay grades to help interpret the mineralized zone outlines on drill sections, which were used to generate the mineralized zone wireframes. A minimum NSR of $140 was used to select drill hole intercepts. These intercepts were then interpreted on drill sections.

The NSR factors were used to calculate an NSR value ($ per tonne) for each block in the block model, which was compared directly to unit operating costs required to mine that block (Table 14-9). All classified resource blocks located within the mineralized wireframe domains and above the design pit shell with NSR values greater than $165/t were included in the open pit resource estimate. All classified resource blocks located within the mineralized wireframe domains and outside of the design pit shell with NSR values greater than $260/t were included in the underground resource estimate. Resource blocks inside and outside of the pit shell exhibited good continuity within the wireframes.

In RPA's opinion, an NSR of $165/t (rounded) is suitable for an open pit mining scenario, and an NSR of $260/t (rounded) is suitable for an underground mining scenario.

Some of the assumptions above differ slightly from those used in the discounted cash flow model presented later in this report, due to additional information becoming available between the time of resource estimation and the time of PEA completion.

BULK DENSITY

To convert volumes to tonnes, a bulk density factor of 2.71 t/m^3 was assigned to all blocks within the mineralization wireframes. The factor is based on 28 samples collected from the three major rock types within the Foxtrot deposit by RPA and Benchmark Six during the 2011 site visit. Five augen gneiss samples had an average dry bulk density of 2.53 t/m^3, 12 felsic extrusive rock samples had an average dry bulk density of 2.71 t/m^3, and 11 mafic extrusive rock samples had an average dry bulk density of 2.88 t/m^3. Because there is insufficient density test work within the Foxtrot deposit, RPA applied the average dry bulk density of the three rock types, 2.71 t/m^3, which is also the average bulk density of the felsic extrusive rock samples, until more data are generated. This value is slightly lower than the average bulk density of 2.77 t/m^3 used in the 2012 PEA update block model. In RPA's opinion, this is reasonable given that the new mineralized wireframe models incorporated significantly less mafic rock.

BLOCK MODEL

The GEMS block model is made up of 260 columns, 305 rows, and 130 levels for 10,309,000 blocks. The model origin (lower-left corner at highest elevation) is at UTM Grid Zone 21N, NAD83 579,809.22 m E, 5,805,971.66 m N and 125 m elevation. The block model is oriented N75°W and each block is 5 m (x) by 2.5 m (y) by 5 m (z). A percent block model is used to manage blocks partially filled by mineralized rock types, including blocks along the edges of the deposit. A percent model uses the percentage of a mineralized zone contained within each block. The block model contains the following information:

- domain identifiers with mineralized zone;
- estimated grades of all REEs, LREE, HREE, and TREE inside the wireframe models;
- NSR estimates calculated from block grades and related economic and metallurgical assumptions;
- the percentage volume of each block within the mineralization wireframes;
- tonnage factors, in tonnes per cubic metre, specific to each rock type;
- the number of samples within the search ellipse;
- the distance to the closest composite used to interpolate the block grade;
- the number of composites used to interpolate the block grade;
- the number of drill holes used to interpolate the block grade, and
- the resource classification of each block.

CLASSIFICATION

Definitions for resource categories used in this report are consistent with those defined by CIM (2014) and adopted by NI 43-101. In the CIM classification, a Mineral Resource is defined as "a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction." Mineral Resources are classified into Measured, Indicated, and Inferred categories, according to the confidence level in the estimated blocks.

RPA classified the Foxtrot Resource as Indicated and Inferred based on drill hole and surface channel spacing, the reliability of data, and geological confidence in the continuity of grade (Figure 14-8). The overall geological continuity of the Foxtrot deposit is consistent in the plane of the mineralization. The grade continuity is also quite consistent, with moderate to high grades confined to the pantellerite units, and low grade within the mafic rocks. The consistent nature of the mineralization, for both the grade and geological continuity, provides sufficient confidence to allow classification of most of the Mineral Resources as Indicated. Composites located within the wireframes were plotted on an inclined south-looking section in the dip plane of the mineralized wireframes and reviewed for their spatial distribution and spacing. Where RPA deemed that the spacing was insufficient to establish grade and geological continuity with confidence (generally >50 m), the Mineral Resource was classified as Inferred.

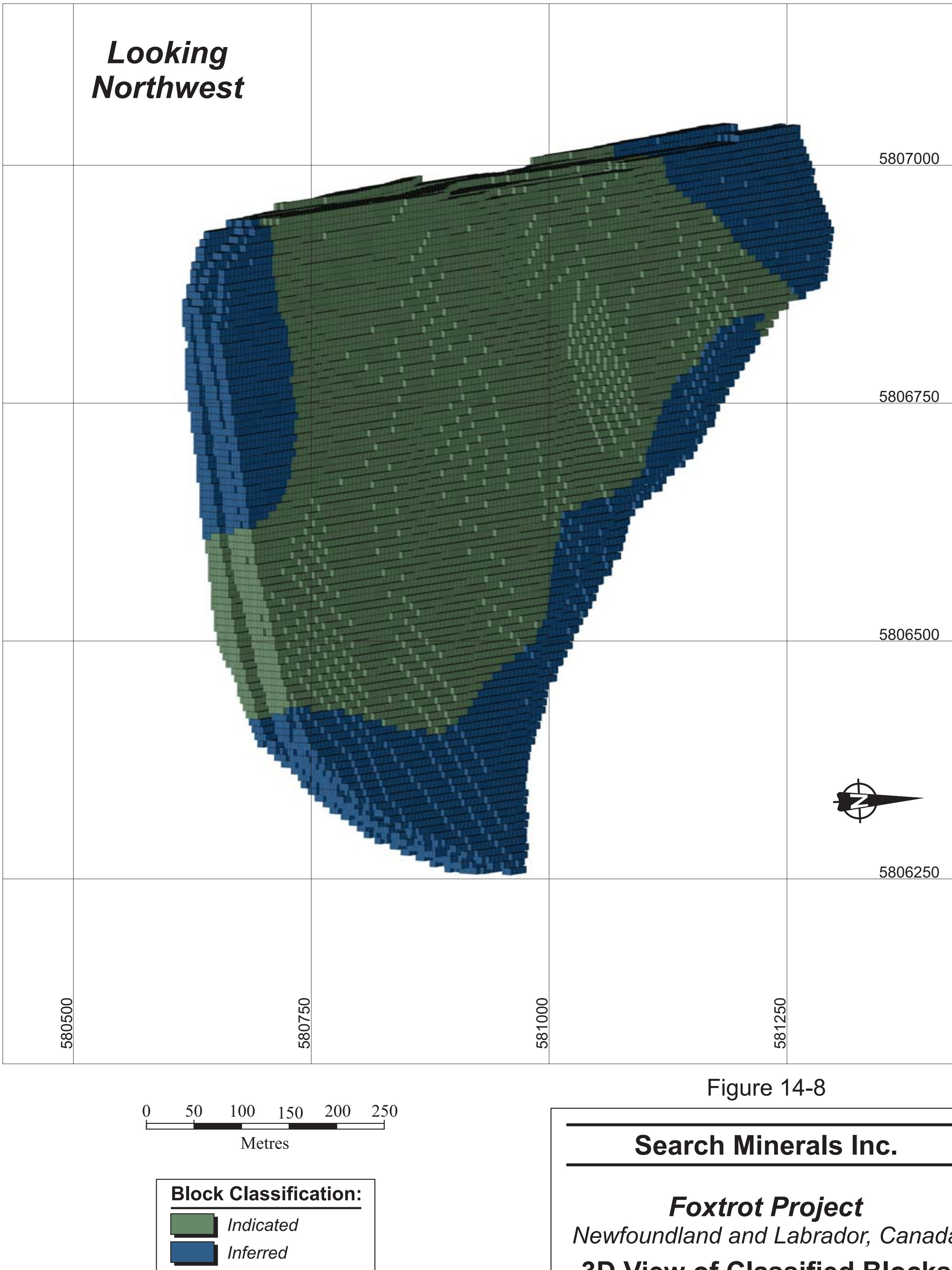


Figure 14-8

Search Minerals Inc.

Foxtrot Project

Newfoundland and Labrador, Canada

3D View of Classified Blocks

April 2016

Source: RPA, 2016.

SUMMARY OF MINERAL RESOURCE ESTIMATE

RPA estimated Mineral Resources for the Foxtrot Project using drill hole and channel sample data available as of December 31, 2015. Table 14-10 summarizes estimated grades of all REEs and REOs in the Foxtrot Mineral Resource potentially mineable by open pit and underground methods as of December 31, 2015. Different NSR cut-off values have been used for potential open pit and underground Mineral Resources. No Mineral Reserves have been estimated at the project.

TABLE 14-10 ESTIMATED MINERAL RESOURCES FOR THE FOXTROT PROJECT AS OF DECEMBER 31, 2015
Search Minerals Inc. – Foxtrot Project

		Indicated			Inferred		
		Open Pit	**Underground**	**Total**	**Open Pit**	**Underground**	**Total**
Tonnage(t)		4,129	3,263	7,392	228	1,730	1,958
Element	**Units**						
Y	ppm	995	1,109	1,045	1,010	1,109	1,097
La	ppm	1,624	1,805	1,704	1,595	1,908	1,871
Ce	ppm	3,269	3,713	3,465	3,228	3,768	3,705
Pr	ppm	372	429	397	368	430	423
Nd	ppm	1,393	1,602	1,485	1,378	1,602	1,576
Sm	ppm	248	292	267	242	289	283
Eu	ppm	13	15	14	12	14	14
Gd	ppm	195	227	209	195	225	221
Tb	ppm	31	36	33	31	35	34
Dy	ppm	177	209	191	179	201	199
Ho	ppm	34	40	37	34	39	38
Er	ppm	96	114	104	93	109	108
Tm	ppm	14	16	15	13	16	15
Yb	ppm	85	100	92	83	96	95
Lu	ppm	13	15	14	12	14	14
LREE	%	0.69	0.78	0.73	0.68	0.80	0.79
HREE	%	0.17	0.19	0.18	0.17	0.19	0.18
TREE	%	0.86	0.97	0.91	0.85	0.99	0.97
Oxide	**Units**						
Y_2O_3	ppm	1,264	1,408	1,327	1,283	1,408	1,394
La_2O_3	ppm	1,904	2,117	1,998	1,871	2,238	2,195
CeO_2	ppm	4,016	4,561	4,257	3,965	4,628	4,551
Pr_6O_{11}	ppm	449	518	480	445	520	511
Nd_2O_3	ppm	1,625	1,868	1,732	1,607	1,868	1,838
Sm_2O_3	ppm	287	338	310	280	335	328

		Indicated			Inferred		
		Open Pit	Underground	Total	Open Pit	Underground	Total
Eu_2O_3	ppm	15	17	16	14	17	16
Gd_2O_3	ppm	224	262	241	225	259	255
Tb_4O_7	ppm	36	42	39	36	41	40
Dy_2O_3	ppm	203	240	219	206	231	228
Ho_2O_3	ppm	39	46	42	39	45	44
Er_2O_3	ppm	109	130	118	107	125	123
Tm_2O_3	ppm	16	19	17	15	18	18
Yb_2O_3	ppm	97	114	104	95	110	108
Lu_2O_3	ppm	14	17	15	14	16	16
LREO	%	0.83	0.94	0.88	0.82	0.96	0.94
HREO	%	0.20	0.23	0.21	0.20	0.23	0.22
TREO	%	1.03	1.17	1.09	1.02	1.19	1.17

Notes:

1. CIM definitions were followed for Mineral Resources.
2. Open Pit Resources were reported inside the design pit at an NSR cut-off of $165/t. Underground Resources were reported as material outside the design pit at an NSR cut-off of $260/t.
3. NSR values were assigned to blocks using metal prices and metallurgical recoveries for each of the individual elements and accounting for separation and transportation charges and royalties for the mixed REO product.
4. A minimum mining width of approximately 2.0 m was used for both open pit and underground.
5. Heavy Rare Earth Elements (HREE) = Eu+Gd+Tb+Dy+Ho+Er+Tm+Yb+Lu+Y
6. Light Rare Earth Elements (LREE) = La+Ce+Pr+Nd+Sm
7. Total Rare Earth Elements (TREE) = sum of HREE and LREE
8. HREO, LREO refer to oxides of heavy and light rare earth elements respectively, and TREO is the sum of HREO and LREO.
9. The estimate is of Mineral Resources only and, because these do not constitute Mineral Reserves, they do not have demonstrated economic viability.
10. Totals may not add or multiply accurately due to rounding.

BLOCK MODEL VALIDATION

RPA carried out a number of block model validation procedures including:

1. Visual comparisons of block NSR, Pr, Nd, Eu, Tb, Dy, Er, and Lu versus composite grades.
2. Statistical comparisons of Dy, Pr, and Nd.
3. Comparison of Dy, Pr, and Nd block and composite grades in blocks containing composites.

Block model grades were visually examined and compared with composite grades in cross section and in elevation plans. RPA found grade continuity to be reasonable, and confirmed that the block grades were reasonably consistent with local drill hole and channel sample assay and composite grades.

Grade statistics for Dy, Pr, and Nd assays, composites, and resource blocks were examined and compared for the mineralized wireframe models as shown in Table 14-11. The comparisons of average grades of length weighted assays, composites, and blocks are reasonable in RPA's opinion.

TABLE 14-11 COMPARISON OF PRAESODYMIUM, DYSPROSIUM, AND NEODYMIUM GRADE STATISTICS FOR ASSAYS, COMPOSITES AND RESOURCE BLOCKS

Search Minerals Inc. – Foxtrot Project

Zone	Assays			2.0 m Composites			Block Model Grades		
	Pr (ppm)	Dy (ppm)	Nd (ppm)	Pr (ppm)	Dy (ppm)	Nd (ppm)	Pr (ppm)	Dy (ppm)	Nd (ppm)
Core (101)									
Number of Cases	1,525	1,525	1,525	667	667	667	68,208	68,208	68,208
Minimum	-	-	-	4	4.76	18.93	35	19	133.57
Maximum	1,190	391.00	3,890.00	737	327.8	2,837.08	731	323.49	2,806.87
Median	412	199.50	1,540.00	409	194.94	1,542.25	395	186.29	1,478.30
Arithmetic Mean	369.56	175.94	1,375.07	386.07	184.06	1,436.42	386.31	183.44	1,436.87
Length Weighted Mean	386.10	183.72	1,436.56	-	-	-	-	-	-
Standard Deviation	168.90	77.33	622.72	120.25	55.87	445.07	90.07	41.69	334.96
Coefficient of Variation	0.46	0.44	0.45	0.31	0.3	0.31	0.23	0.23	0.23
Hanging Wall (201)									
Number of Cases	388	388	388	160	160	160	25,700	25,700	25,700
Minimum	-	-	-	-	-	-	-	-	-
Maximum	1,210	458	4,360.00	1,090	392.61	3,973.75	1,019	378.54	3,715.19
Median	277	141	1,070.00	298	152.97	1,151.91	305	155.37	1,167.00
Arithmetic Mean	295.48	152.32	1,134.80	308.60	157.89	1,181.80	301.94	154.77	1,156.40
Length Weighted Mean	310.81	159.48	1,191.05	-	-	-	-	-	-
Standard Deviation	190.00	92.83	724.37	145.34	70.36	548.59	101.50	52.65	385.92
Coefficient of Variation	0.64	0.61	0.64	0.47	0.45	0.46	0.34	0.34	0.33
Footwall (202)									
Number of Cases	460	460	460	215	215	215	32,105	32,105	32,105
Minimum	-	-	-	-	-	-	-	-	-
Maximum	754	476	2,630.00	647	292	2,309.95	597	291.69	2,307.55
Median	282	127	1,040.00	284	127.16	1,046.12	265	124.37	988.54
Arithmetic Mean	261.26	127.51	965.02	273.91	132.47	1,012.18	246.82	125.99	916.09
Length Weighted Mean	270.96	131.19	1,000.91	-	-	-	-	-	-
Standard Deviation	146.92	67.89	545.43	114.35	49.5	426.89	95.26	39.94	359.74
Coefficient of Variation	0.56	0.53	0.57	0.42	0.37	0.42	0.39	0.32	0.39
All									
Number of Cases	2,373	2,373	2,373	1,042	1,042	1,042	126,013	126,013	126,013
Minimum	-	-	-	-	-	-	-	-	-
Maximum	1,210	476	4,360.00	1,090	392.61	3,973.75	1,019	378.54	3,715.19
Median	356	170	1,330.00	357	169.79	1,326.64	333	163.02	1,254.91
Arithmetic Mean	336.46	162.69	1,256.30	351.03	169.4	1,309.79	333.56	162.96	1,246.99
Length Weighted Mean	351.84	169.6	1,312.82	-	-	-	-	-	-
Standard Deviation	174.56	80.69	648.27	132.12	60.8	491.17	111.49	50.02	416.12
Coefficient of Variation	0.52	0.5	0.52	0.38	0.36	0.37	0.33	0.31	0.33

COMPARISON TO PREVIOUS ESTIMATES

The Mineral Resource estimates for the Foxtrot Project reported in the 2013 PEA Update and in this report are compared in Table 14-12.

TABLE 14-12 MINERAL RESOURCE COMPARISON – 2012 TO 2016
Search Minerals Inc. – Foxtrot Project

Resource	Tonnage 000s	Pr ppm	Nd ppm	Dy ppm	TREE %
September 30, 2012 Resource (Central and Extension Zones)					
Indicated	9,229	384	1,442	189	0.88
Inferred	5,165	330	1,233	176	0.77
December 31, 2015 Resource (All Zones)					
2015 Indicated	7,392	397	1,485	191	0.91
2015 Inferred	1,958	423	1,576	199	0.97
% Difference					
Indicated	-20%	3%	3%	1%	3%
Inferred	-62%	28%	28%	13%	26%

The 2012 Mineral Resource estimate on the Foxtrot Project in the combined Central and Extension Zones in 2012 included 9.2 million tonnes classified as Indicated at an average TREE grade of 0.88% and 5.2 million tonnes classified as Inferred at an average TREE grade of 0.77% (RPA, 2013). The increase in TREE grade and the decrease in tonnage for the Foxtrot mineral resource is partly due to reinterpretation of wireframe models. The use of block cut-off NSR values of $165/t for open pit and $260/t for underground mining methods also contributed to the increase in grade and decrease in tonnage, as does the constraint of a design pit shell for the open pit Mineral Resources.

15 MINERAL RESERVE ESTIMATE

A technical and economic assessment to permit a Mineral Reserve estimate on the Project has not yet been completed.

16 MINING METHODS

INTRODUCTION

In the 2013 PEA Update (RPA, 2013), RPA investigated the selective mining of REE high-grade core (HGC) material, considering the Indicated and Inferred Mineral Resources, and using the same REE prices as the 2012 PEA (RPA, 2012) with a mining rate of 1,500 tpd.

For the current PEA, RPA continued to use the selective mining approach, using an updated REE price set along with a reduced mining rate of 1,000 tpd. The lower mining rate results in lower initial capital costs, and a higher process feed grade. Open pit (OP) and underground (UG) mining options were evaluated with run of mine (ROM) material being processed in a plant located adjacent to the mine site. Infrastructure, road access, power, and room and board facilities requirements, were also considered.

OP mining will be carried out by contractor in six month campaigns, with the flexibility to move more material in a given year where higher waste movements are required. A stockpile of sufficient size (approximately 180,000 t) will be maintained to supply the process during periods where no mining is being carried out.

A simple trade-off study was carried out using Whittle software to determine the optimal pit size to make the transition to UG mining. As the pit deepens, the incremental stripping ratio increases and it becomes more profitable to utilize UG mining methods.

UG mining will be carried out on a year round basis starting in Year 8 as the OP operation comes to a close. Underground operations will be owner operated and all equipment will be purchased by the owner. A transverse longhole mining method will be used for UG mining.

MINING OPERATIONS

OPEN PIT MINING

The OP mining production rate is assumed to be 360,000 tpa, or 2,000 tpd, of REE bearing material over a period of six months per year (May to October). Mining of mineralized material and waste (no pre-stripping of overburden is required, as the deposit is exposed on surface) would be carried out by contractors to keep initial capital as low as possible.

ROM mineralized material will be placed in a stockpile and fed into a crusher using a front-end loader (FEL). All ROM mineralized material will be crushed to 100% passing 15 mm and placed in a feed stockpile adjacent to the process facility.

The contract mining will be carried out using a conventional open pit method consisting of the following activities:

- Drilling performed by conventional production drills.
- Blasting using ANFO (ammonium-nitrate fuel oil) and a down-hole delay initiation system.
- Loading and hauling operations performed with hydraulic shovel, front-end loader, and rigid frame haulage trucks.

The production equipment will be supported by bulldozers, graders, and water trucks. Search Minerals will supervise the overall mining operation with its own employees including mining engineers, geologists, surveyors, and support staff.

UNDERGROUND MINING

The production rate for the underground mine is assumed to be 360,000 tpa, or 1,000 tpd, of REE bearing material and will operate year round. The underground mine will be owner-operated.

The deposit is globally dipping 75° to the north (therefore sub-vertical), and the topography is sloping down from south to north. The underground mining method recommended by RPA is longhole mining with principally transverse accesses from the deposit footwall through to the hanging wall. Mining will start at the topmost level and progress in a top down fashion with each level being completely mined before starting the next level. The main decline will ramp down from the starter pit to the first level of mining.

Cemented rock fill (CRF) will be placed in all stopes. The bottom 10 m of each stope will be filled with CRF having 8% binder content while the remainder of the stope will be filled with 4%

binder content CRF. The rock fill will come from both underground development waste and OP waste.

A pillar of 35 m in height will be left under the bottom of the pit, which can be recovered by drilling upward from the first level of mining at the end of the Life of Mine (LOM).

Mining will incorporate the following activities:

- Lateral development performed with hydraulic jumbos (drilling) and mechanical bolters (ground support).
- Vertical development performed with Alimak (vent raise/second egress, fill raise) and V-30 type drill (slot raises).
- Production drilling carried out with longhole top-hammer drills.
- Blasting using ANFO in development activities, and bulk emulsion (with electronic caps) in production operations.
- Loading and hauling operations performed with load-haul-dump (LHD) units (scooptrams) and underground trucks for waste and REE bearing material up to surface.
- Backfilling of stopes with CRF.

Stationary equipment for underground mining would consist of the following:

- Main fan and propane heating system, and secondary fans for ventilation requirements.
- Air compressor.
- Mine dewatering pumps located underground at the main pumping stations, and at development headings.

GEOTECHNICAL ASSESSMENTS

Pit slope angles were selected based on comparable projects with similar rock characteristics. Pit optimizations were carried out using inter-ramp and overall pit slopes of 54° and 50°, respectively. Industry average geotechnical conditions for the underground mine were assumed relative to stope dimensions, minimum distance of drifts to the stope hanging wall, and ground support.

Design parameters for the waste dumps and the overburden pile were also selected based on industry averages.

Drill core and outcrop inspected during the site visit appear to be competent, however, no geotechnical testing, logging, or analysis has been completed. Geotechnical assumptions require verification and assessment as the Project is advanced.

HYDROLOGICAL ASSESSMENTS

Hydrogeological and hydrological conditions may have an impact on pit design parameters. Capital expenditures and operating costs related to water management were part of the cost estimation process for both mining methods.

The hydrogeological/hydrological conditions should be further assessed as the Project is advanced.

SEISMICITY

Seismicity issues were not considered in conceptual designs at this point in the Project. The seismicity should be assessed and be considered once detailed engineering work begins.

OPEN PIT DESIGN

Pit optimization analyses were run on the Mineral Resource to determine the economics of extraction by OP methods. The parameters used in the pit optimization runs, using Whittle software, are presented in Table 16-1.

NSR factors were calculated using metallurgical recoveries, offsite costs for REE separation, and REE prices, which are discussed in detail under their respective sections in this report. These factors are used in determining a given block's NSR value. All blocks with values above \$140/t (the cost to cover processing and G&A) are considered economic to process by Whittle.

TABLE 16-1 WHITTLE PIT PARAMETERS
Search Minerals Inc. – Foxtrot Project

Parameter	Unit	Input
Pit Slopes	degrees	50
Mining Waste Cost	$/tonne	7.38
Mining Mineralized Material Cost	$/tonne	9.53
Process Cost	$/tonne	125
G&A Cost	$/tonne	15
Mining Extraction	%	100
Mining Dilution	%	5
NSR Factor	$/ppm	Varies per element
Block Size	m	5x2.5x5
Block Size (reblocked)	m	10x5x10

Note: Costs used in the final cashflow vary slightly from costs used in Whittle parameters as more information was made available at the time of the cash flow evaluation.

One of the key objectives of the Project is to be able to create as short a payback period as possible. In order to achieve this goal, an elevated cut-off value was used in order to send higher value material to the process facility. A series of different cut-off grades were evaluated to determine the optimal value. An NSR cut-off value of $250/t was found to produce the best economic results in Whittle. All material between $150/t and $250/t was stockpiled with the potential to use later in the mine plan while material above $250/t was sent to the processing facility.

A mine design was carried out with the objective of minimizing strip ratios early in the mine life to achieve a short payback period. The mine design takes advantage of the shape of the deposit and utilizes “trench” shaped pushbacks to quickly gain access to the orebody. A total of four pushbacks are used to access REE bearing material.

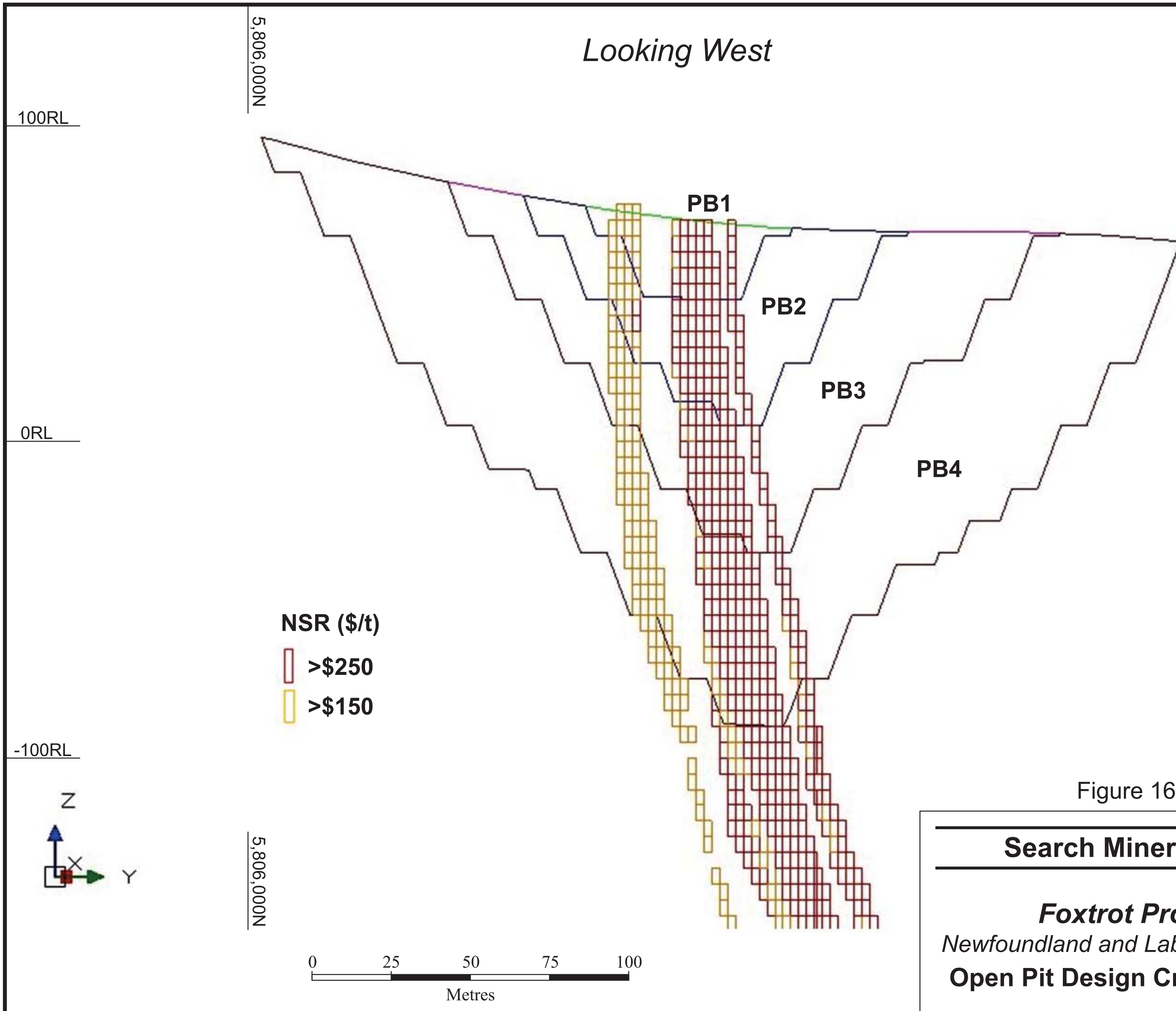
The mine design parameters are presented in Table 16-2.

TABLE 16-2 GENERAL DESIGN CHARACTERISTICS
Search Minerals Inc. – Foxtrot Project

Design Characteristic Description	Units	Value
Ramp Width for 2-lane traffic	m	12
Ramp Width for 1-lane traffic	m	7.5
Maximum Ramp Grade	%	10
Inter-Ramp Angle	degree	54
Overall Slope Angle	degree	50

Design Characteristic Description	Units	Value
Bench Face Angle	degree	70
Single Benching Arrangement	m	5
Quadruple stacked Benches	m	20
Berm Width	m	8
Waste Dump Lift Height	m	20
Waste Dump Face Angle	degree	35
Waste Dump Berm Width	degree	8

A cross section view of the open pit pushbacks is presented in Figure 16-1.



April 2016

Source: RPA, 2016.

Figure 16-1

Search Minerals Inc.

Foxtrot Project

Newfoundland and Labrador, Canada

Open Pit Design Cross Section

RPA

www.rpacan.com

WASTE DUMP AND LOW-GRADE STOCKPILE

A waste dump and a low-grade stockpile were designed to receive all non-process feed materials within the final open pit. As per Figure 16-1, the waste dump and low grade stockpile are located to the east and north of the open pit, respectively. The waste dump has capacity for approximately 24.0 Mt and reaches a maximum height of 80 m. The low grade stockpile has a 1.9 Mt capacity and is built using one 20 m lift. Material with an NSR value lower than $150/t is sent to the waste dump. Material with an NSR value lower than the $250/t elevated cut-off grade and above $150/t is sent to the low grade stockpile with the potential to process in the future. The mine plan in this report does not consider the use of the low grade stockpile.

UNDERGROUND MINE DESIGN

STOPE DESIGN

The underground mining method consists of longhole mining using transverse accesses. Transverse longhole mining allows for greater flexibility with the number of stopes that can be mined at any given time. Industry average geotechnical conditions were integrated in terms of stope dimensions and the stope dimensions used were 25 m along strike by 35 m floor-to-floor, and minimum mining width of five metres.

Stope design was completed using Deswik Stope Optimizer (DSO). DSO uses certain parameters such as minimum stope dimensions, cut-off grade, dip and strike ranges to determine the optimum stope size. Table 16-3 below shows the parameters used to create the stopes.

TABLE 16-3 DSO DESIGN PARAMETERS
Search Minerals Inc. – Foxtrot Project

Parameter	Units	Value
Stope Height	m	35
Strike Length	m	25
Minimum Mining Width	m	5
Maximum Mining Width	m	50
NSR Cut-off Value	$/t	250
Hanging/Footwall Dilution	m	0.75

Although DSO was run at an NSR cut-off value of $250/t, only stopes with NSR values of $280/t and above were retained for the UG mining production schedule.

The results of the DSO run are illustrated in Figure 16-2. The first level of mining is at -70 m RL and the deepest level at -380 m RL.

Mining will progress in a top down manner with stopes from the top level fully mined and filled before mining continues to the lower level.

DEVELOPMENT DESIGN

The underground access portal will be located in the starter pit and all ramps will be driven at a 15% slope. Drawpoints will be driven from haulage drifts in the footwall through to the stopes for mucking. When the stopes are completely mined out and backfilled, transverse accesses will be driven from the same haulage drifts downwards for drilling off the stopes.

A summary of underground lateral and vertical development is presented in Table 16-4.

TABLE 16-4 UG DEVELOPMENT
Search Minerals Inc. – Foxtrot Project

Development Type	Capital Dev Waste (m)	Operating Dev. Waste (m)	Operating Dev Mineralization (m)	Total (m)
Ramp	3,033			3,033
Remuck	140			140
Level Access	210			210
Ventilation Drift	140			140
Sump	35			35
Haulage Drift	1,450			1,450
Drawpoints		975	922	1,897
Drill Access		815	1,077	1,892
Total Lateral Development	**5,008**	**1,790**	**1,999**	**8,798**
Ventilation Raise	365			365

A longitudinal section showing the general concept of the underground mine under the open pit is included in Figure 16-2.

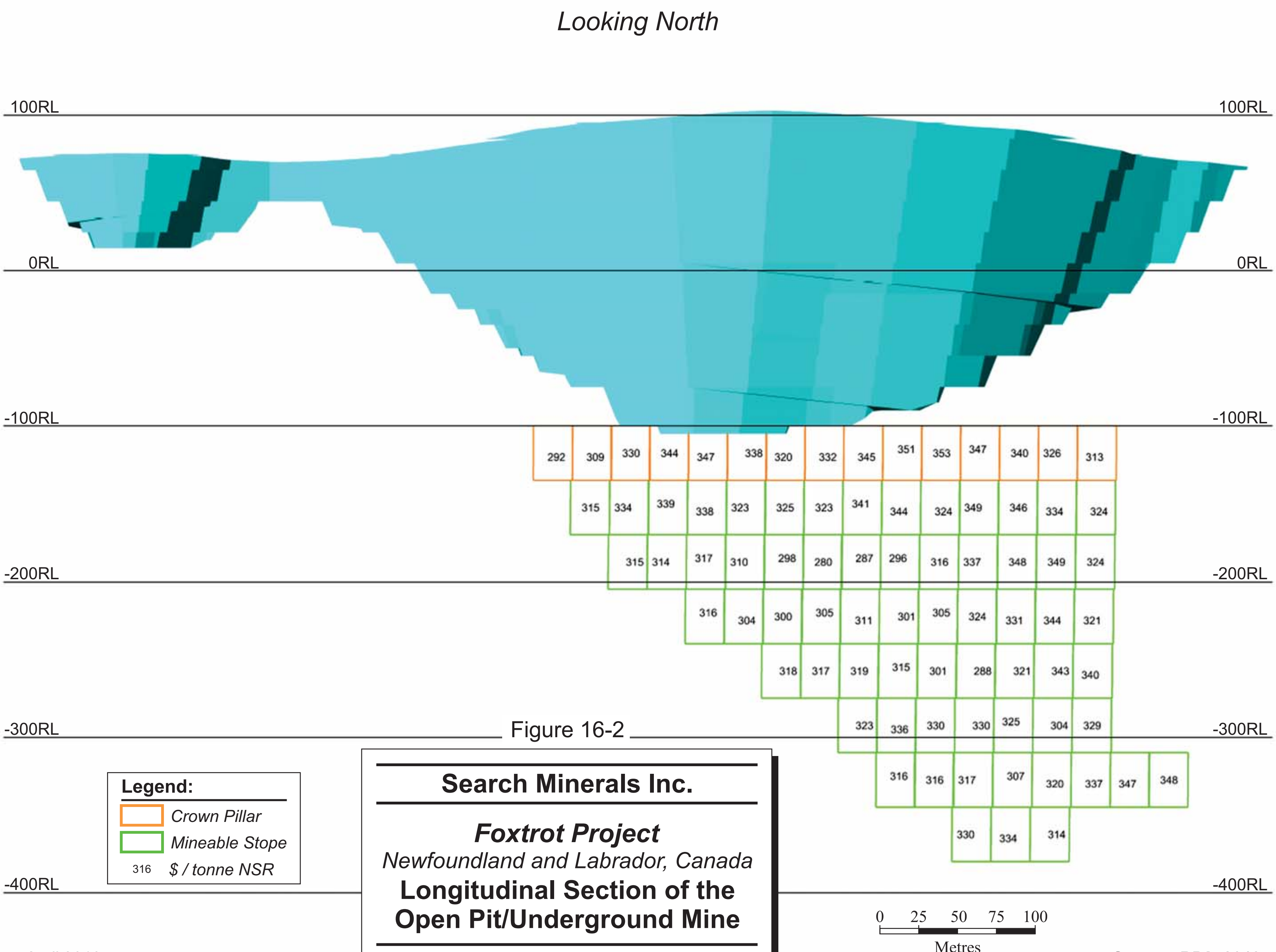


Figure 16-2

Search Minerals Inc.

Foxtrot Project

Newfoundland and Labrador, Canada

Longitudinal Section of the Open Pit/Underground Mine

April 2016

Source: RPA, 2016.

RPA

www.rpacan.com

PRODUCTION SCHEDULE

The OP contract mining will be carried out on one 12-hour shift per day, seven days per week during the months of May to October. The OP operation will maintain a stockpile adequate for processing year-round. The UG owner-operated mining will be carried out on two 12-hour shifts per day, seven days per week, year-round. OP and UG staffing will be on a rotating shift system being carried out by four shift crews.

Production is scheduled to be carried out at a rate of 1,000 tpd for REE bearing material. For the OP, it is assumed that in years where higher stripping ratios occur, the contractor will be able to work for longer than the six month campaign period in order to complete the required material movement and/or the contractor may bring in additional equipment to complete the required task. It is assumed that the additional mobilization/demobilization costs would be offset by the reduced unit operating costs resulting from economies of scale.

In Year 8, there is a transition from the OP to UG. Approximately 68,000 t of REE bearing material will be required from the UG in Year 8 to fill the remaining process capacity.

The production schedule is summarized in Table 16-5.

TABLE 16-5 PRODUCTION SCHEDULE
Search Minerals Inc. – Foxtrot Project

Period	OP (kt)	Stockpile (kt)	Waste (kt)	UG (kt)	Total Mined (kt)	Total Processed (kt)	NSR ($/t)
Year 1	361	321	2,174	-	2,856	361	336
Year 2	360	259	2,549	-	3,169	360	341
Year 3	360	229	5,521	-	6,110	360	350
Year 4	360	224	1,662	-	2,245	360	350
Year 5	361	264	9,087	-	9,711	361	352
Year 6	360	288	2,092	-	2,740	360	346
Year 7	360	177	678	-	1,215	360	362
Year 8	292	91	214	68	666	360	369
Year 9	-	-	-	360	360	360	371
Year 10	-	-	-	360	360	360	353
Year 11	-	-	-	360	360	360	344
Year 12	-	-	-	360	360	360	353
Year 13	-	-	-	360	360	360	356
Year 14	-	-	-	170	170	170	370
Total/Avg.	**2,813**	**1,853**	**23,977**	**2,037**	**30,680**	**4,850**	**353**

MINE EQUIPMENT

The contractor mine equipment fleet for the OP operation, listed in Table 16-6, was selected based on comparison to operations of similar size and using InfoMine USA Inc (Infomine). The actual equipment fleet used by the contractor will differ from the list below.

TABLE 16-6 OPEN PIT CONTRACTOR MINING FLEET
Search Minerals Inc. – Foxtrot Project

Type	Quantity
Backhoe Hydraulic Shovel 4 m^3	1
Backhoe Hydraulic Shovel 2 m^3	1
Front End Loader 4 m^3	1
Haul Trucks 35 t	6
Rotary Drill 15-20 cm	2
Dozer 305 kW	2
Grader 140 kW	1
Anfo Truck	1
Explosive Truck (cap)	1
Water Truck	1
Service Truck (for maintenance)	1
Lube/Fuel Truck	1
Pickup Truck (1)	8
Bus (for people transportation) (1)	1
Light Plants 8 kW	4

Notes: (1) Bus and pickups to be purchased by the owner.

The owner-operated mine equipment fleet for the UG operation, listed in Table 16-7, was selected based on comparison to operations of similar size and in-house database.

TABLE 16-7 UNDERGROUND OWNER MINING FLEET
Search Minerals Inc. – Foxtrot Project

Type	Quantity
2 Boom Jumbo	2
6 yd LHD	2
32t Haul Truck	3
Rock Bolter	2
Flat Deck Truck w. Crane	2
Personnel Carrier	4
Scissor Lift	1
Grader	1
LH Drill	2
Lube Truck	1
ANFO Loader Truck	1

MINE INFRASTRUCTURE AND SERVICES

This section is dedicated to infrastructure directly associated with mine operations. For all other general infrastructure located at surface, see Section 18 (Project Infrastructure).

OPEN PIT

MATERIAL HANDLING

The mineralized material and waste will be hauled out of the pit with the off-highway equipment fleet listed previously. The material deemed as waste rock will be transported to the waste dump or to the low-grade stockpile, located west of the open pit. The REE bearing material (process feed) will be delivered to the ROM stockpile adjacent to the plant. Crushing (to -15mm) will be performed prior to feeding the process plant.

DEWATERING

A pumping network will also be installed to pump water run-off from the open pit (three 50 kW pumps).

Pumped water from all sources will be directed through the water treatment system comprised of settling/polishing ponds prior to its release into the environment.

EXPLOSIVES AND DETONATORS

Detonators and explosives will be stored in approved explosives magazines. The explosives and detonators magazines will be located to the west of the dry stack residue pad, and far enough from buildings and working areas. The selected site is shown in the Infrastructure Layout in Figure 18-1.

Suppliers will deliver explosives and detonators directly into dedicated magazines for storage until use.

UNDERGROUND MINE

MATERIAL HANDLING

The mucking, loading, and hauling operations out of the underground mine, for both REE bearing material and waste, will be done with the underground mobile equipment listed previously. From stopes or development faces, the REE bearing material and waste will be loaded with LHDs into underground trucks at dedicated loading set-ups, as at the intersections of haulage and access drifts on each level for REE bearing material, and will then travel via lateral drifts and the main ramp up to surface into the process feed stockpile or on the waste dump at surface.

Once in production, waste rock from UG development will proceed directly into stopes with underground trucks and/or LHDs as CRF; otherwise, waste rock will be temporarily stored underground until its use as backfill or hauled at the surface waste dump as required.

REE bearing material from UG will then follow the same path as for the OP that is to the primary crusher or the process feed stockpile nearby. UG development waste disposed of in the waste dump at surface will then proceed into underground stopes as cemented rockfill. The UG-issued waste will account for approximately half of the needs; the remaining will come from OP-issued waste already stored at surface.

BACKFILL

All stopes will be filled using CRF. The bottom 10 m of the stopes will be filled with CRF having 8% binder content while the rest will be filled with CRF having 4% binder content.

Waste rock from UG mining operations will be used for CRF. Waste rock from OP operations will also be trucked to stopes if needed.

The slurry backfill plant located on surface will be used to prepare the cement binder mixture. A borehole and secondary piping within the underground mine will permit distribution of the cement binder mixture.

VENTILATION

The main ventilation system is located at surface beside the ventilation raise. The ventilation network will be in positive pressure. The fresh air requirement was established based on the average of two methods of calculation: the cumulative volume associated with each underground piece of equipment and the daily tonnage throughput. Therefore, two 350 hp fans are required and will have a combined capacity of 450,000 cfm at 9.5 in. of water pressure. A variable drive motor will be used to adjust the rate of the air flow to suit the ventilation needs during the various phases of the Project. A 45 MBtu heating system (propane) will be installed as part of the ventilation system. A mercaptan system will be installed in the main ventilation system (intake fresh air) for emergency warning.

A 2.8 m x 2.8 m Alimak raise will connect at each production level down to the bottom of the UG mine. This ventilation raise, equipped with a manway, will be required to start production work, because it will also serve as a second emergency egress.

The fresh air will circulate via the raise (intake). The levels will be supplied with fresh air from the vent raise through secondary ventilation. The main ramp will be used as exhaust network.

Prior to the main ventilation system being ready, an appropriate temporary ventilation system will be installed at the entrance of the ramp to meet the development work requirements (two 125 hp fans with a 7 MBtu heating system for 72,000 cfm pushed through a 60 in. diameter metallic rigid vent duct).

POWER DISTRIBUTION

The underground main power will be at 4.16 kV, 3 phases, 60 Hz. Primary electric power will be distributed underground via the main ramp and from boreholes. This approach is advisable because of the long distances to cover. It will also make the electric power distribution network more stable and less sensitive to power failures.

As required, portable substations on skids will be used to transform the 4,160 V to 600 V for local use before permanent substations will be strategically located within the UG mine. From there, the reticulation network to end-uses will be resistor-grounded for more safety.

Switching devices will be installed on the main network to share the load between feeders to match power needs. Feeders for mobile mining equipment will be equipped with ground fault protection.

INDUSTRIAL WATER SUPPLY

For underground industrial water requirements, water will be sourced from the water treatment system at surface. A groundwater supply exploration program will be conducted at relevant locations, in order to determine whether or not water wells could meet the water requirements.

A submersible pump will be installed in the collecting pond and the line up to the portal will be heat traced. Should an underground water source be encountered while mining, then a recovery program would be considered to decrease pumping requirement. Industrial water will be distributed to the entire underground network by gravity via piping.

Water tanks with automatic level control will be located and installed where needed in the underground mine to control the water pressure.

DEWATERING

Two main water pumping stations will be installed underground at Levels 6 and 12 to keep the mine dry. The pumping stations will be fitted with identical pumps resulting in a flexible network, and be made of portable modules on skid equipped with enough 100 hp pumps to meet pressure and flow rate requirements. The design capacity of 350 US gpm will be sufficient to pump-out the combined underground industrial water consumption and underground water infiltration, with pumping on a 12 hour daily basis.

The pumps were selected to handle turbid water containing up to 5% solids, eliminating the need for settling systems at the pumping stations. Sumps will be located in the level accesses and linked by drainage holes with one another.

The pumped water will be directed through the water treatment system at surface prior its release into the environment.

COMPRESSED AIR

A compressor for the UG operation will be located in a dedicated building annexed to the processing plant. Screw type compressors and an air receiver to regulate the pressure and absorb consumption surge will be the components of the air compressing system.

Compressed air will be brought underground through pipes via the main ramp. Underground levels will be serviced by smaller compressed air pipes.

A second mercaptan system (in addition to the one at the fresh air intake raise) will be installed in the mine compressed air system for emergency warning.

EXPLOSIVES AND DETONATORS

During the underground pre-production period, the OP mine explosives magazines located at surface will be used as UG explosives storage facilities, one for explosives and one for detonators. Later on, permanent storage magazines will be built underground.

Suppliers will deliver explosives and detonators to the mine portal where they will be immediately transferred into the UG mine service truck. Explosives and detonators will then be immediately hauled underground for storage until use.

FUEL AND MAINTENANCE SERVICES

The garage, for which details are provided in Section 18, will be located at surface and a team will provide emergency service and day-to-day maintenance work directly on the job sites. Most of the underground equipment will fuel at surface.

COMMUNICATION AND AUTOMATION

The main communication system will combine the use of data networking (Ethernet for computer and automation network), voice (portable radio) and video (IP camera).

For emergency phone service, a separate cable will be installed from the foreman's office at surface to the refuge stations underground.

REFUGE STATIONS

The refuge stations will be located on level accesses to ensure the safety of the personnel and to accommodate lunch breaks. Two portable refuge stations will be used throughout the mine and will be moved accordingly as mining progresses.

UNDERGROUND STORAGE

To optimize costs, remuck bays will be converted into storage areas for miscellaneous items at convenient time.

17 RECOVERY METHODS

OVERVIEW OF RECOVERY METHODS

In the 2013 PEA Update, the proposed process included crushing, grinding, gravity recovery, magnetic separation, flotation, acid baking, water leaching, solution purification and REE precipitation to recover a mixed REE product.

Following the testwork of 2014 and issuance of SGS reports in December 2014 and January 2015, Search Minerals retained SNC-Lavalin to review the SGS reports on testwork and complete a scoping study of the revised process. The process comprises crushing to –6 mesh, acid baking, water leaching, solution purification, REE precipitation as an intermediate carbonate, purification of the intermediate product and precipitation of REE as an oxalate to be calcined to oxide. The primary objective of the SNC-Lavalin study was to develop preliminary capital and operating cost estimates for the proposed processing facility. The key operating criterion provided by Search Minerals was a base case throughput rate of 500 tpd of ROM ore, although with factored estimates for other throughputs.

The SNC-Lavalin report was issued on June 4, 2015 (SNC-Lavalin, 2015). A simplified flowsheet from the report is reproduced below as Figure 17-1 and the process sections are briefly described below.

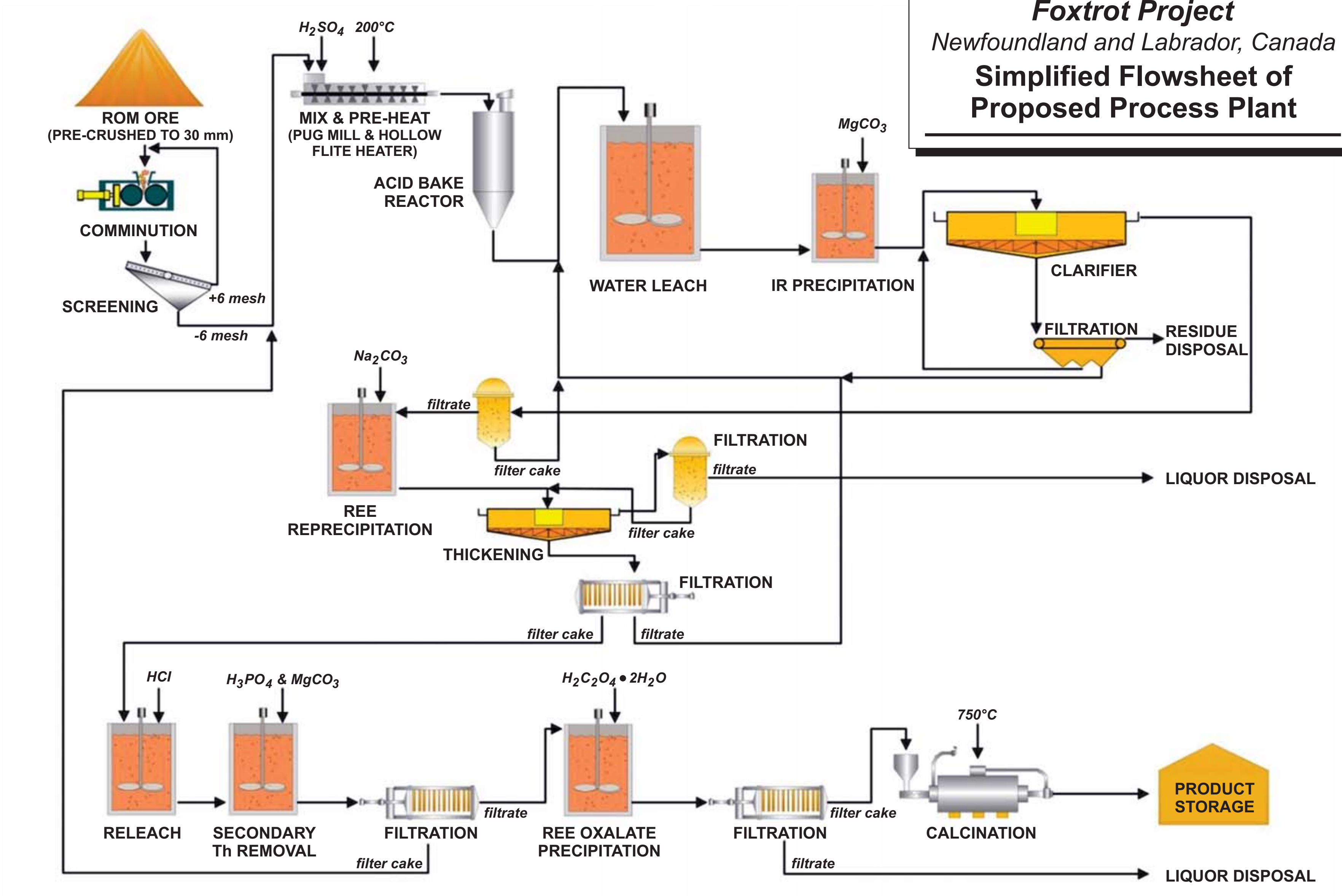
Figure 17-1

Search Minerals Inc.

Foxtrot Project

Newfoundland and Labrador, Canada

Simplified Flowsheet of Proposed Process Plant



April 2016

Source: Search Minerals Inc., 2015.

SUMMARY DESCRIPTION OF PROCESS PLANT

CRUSHING

In the operation originally proposed by SNC-Lavalin, coarse ore was crushed by a contract mining company to -30 mm and delivered to a coarse ore stockpile at the process plant. Ore is crushed to -3.45 mm by HPGR operated in closed circuit with a vibrating screen. A dry dust collecting system is used to control dust. RPA has allowed for a contract-crushed ore size of -15 mm to ensure effective operation of the proposed HPGR.

ACID MIXING AND BAKING

To convert the rare earths to soluble sulphates, the crushed ore is intimately mixed with 100 kg/t of concentrated sulphuric acid in a pug mixer, then heated to 200°C using a Holo-Flite preheater, and held at that temperature for 90 minutes in a refractory lined bin. The hot acidic gases evolved from the Holo-Flite and refractory lined bin are collected and scrubbed in a caustic scrubber.

WATER LEACHING, PRIMARY IMPURITY REMOVAL, AND CRUDE RARE EARTH PRECIPITATION

The acid baked ore is discharged from the refractory lined bin and agitated with water at 90ºC for 24 h to dissolve the rare earth sulphates. After leaching, magnesium carbonate is added to the slurry to increase the pH to 3.85 and precipitate impurities such as iron and thorium. The resulting slurry of leach residue solids and impurity precipitate is thickened and the underflow filtered to separate the PLS from the waste solids. The filter cake is washed and sent to a lined dry stack residue pad located 2.5 km from the processing facility according to the SNC-Lavalin design. The capital and operating cost for the dry stack residue pad have been included in the SNC-Lavalin cost estimates.

The PLS is clarified and sent to rare earth precipitation where a solution of soda ash (Na_2CO_3) is used to precipitate REE carbonates. The precipitated solids are thickened and two thirds of the thickener underflow are recycled as seed to the precipitation process. The remaining one third is filtered and washed on a pressure diaphragm filter. The thickener overflow is clarified to capture any residual REE then disposed to sea via a 2.5 km pipeline. At a processing rate of 500 tpd, SNC-Lavalin has estimated an effluent flow of 70 m^3/h containing approximately 41 g/L of dissolved salts – essentially magnesium and sodium sulphates with minor chlorides.

REE RE-LEACHING, SECONDARY IMPURITY REMOVAL, AND REE PRECIPITATION

The partially purified REE carbonate filter cake is batch re-dissolved with concentrated HCl and further processed to obtain additional impurity removal then precipitated as a final product. The HCl re-leach is done to selectively dissolve REE and leave some impurities in a residue.

After HCl re-dissolution and before the REE are re-precipitated, residual thorium is removed by adding a small quantity of H_3PO_4 then sufficient $MgCO_3$ slurry to achieve a solution pH of 3.8. As the pH is raised to this level over the two hour precipitation time, the majority of the Fe, Al, and Th impurities are precipitated onto the re-leach residue. The resultant slurry is filtered through a pre-coated pressure diaphragm filter. The solids are washed, air dried, and dumped into a transportable hopper for return to the Acid Bake pug mixer. This ensures that any co-precipitated REE are recovered with the primary impurity removal process providing the escape route for the impurities.

The filtrate from the secondary impurity step is treated with oxalic acid to preferentially precipitate the REE as oxalates. The precipitated solids are filtered and two thirds of the solids used as seed for the next batch and the remaining third washed and air dried on the pressure diaphragm filter and dumped into a hopper ahead of calcination.

The filtrate is collected and further neutralized with an $MgCO_3$ slurry to precipitate residual REE and non-precipitated impurities. It is then filtered and the filter cake is used to neutralize the free acid in the HCl re-leach solution. The filtrate joins the thickener overflow stream in the crude REE precipitation circuit and is disposed to sea via a 2.5 km pipeline.

CALCINATION AND PACKAGING

The precipitated REE oxalate is calcined to decompose it to a bulk REE oxide then packaged in preparation for shipping to the markets or to a separation plant. In the process, a calcination hopper containing oxalate filter cake is placed into a 450 kW oven, heated to 750°C, held at temperature for four hours, and then allowed to cool.

When the hopper is cool, it is removed from the oven, hoisted into a packaging system and used to give a metered and measured feed into 1 m^3 bulk bags. The product is sampled during the filling process. Once the bag is filled, it is closed and taken by forklift to a shipping container at the loading dock.

RARE EARTH SEPARATION OPTIONS

GENERAL

The REE recovery operation described above will produce a mixed REE calcine with a REE distribution similar to that for the ore as indicated earlier in this section. However, the consumers of the REE (the manufacturers of magnets, phosphors, catalysts, optical glass, etc.) require separated products with purities generally ranging from 99% to as high as 99.9999%.

In this report, RPA has assumed that a mixed REE product will be produced at the mine site and either A) sold at a discount to published prices for separated REE or B) separated for Search Minerals by a toll processor at a cost corresponding to the same discount. RPA has assumed that the discount from the published price for the REO, or the toll processing charges, will be US$10/kg REO for the LREE and US$20/kg REO for the HREE.

Instead of selling a mixed REE product or accepting toll charges, Search Minerals has the option of building its own separation plant and thereby avoiding the discount/toll processing charges but incurring capital and operating costs for its own facility. This option might be considered in future studies.

Germane to this possibility is the fact that there are a few variants of the conventional solvent extraction (SX) separation plants. Additionally, there is a significant amount of research and development in the REE separation field and improved SX-based processes could be available. Furthermore, several workers are investigating radically different, non-SX, REE separation options. This section briefly reviews the options for REE separation.

CURRENT SOLVENT EXTRACTION SYSTEMS

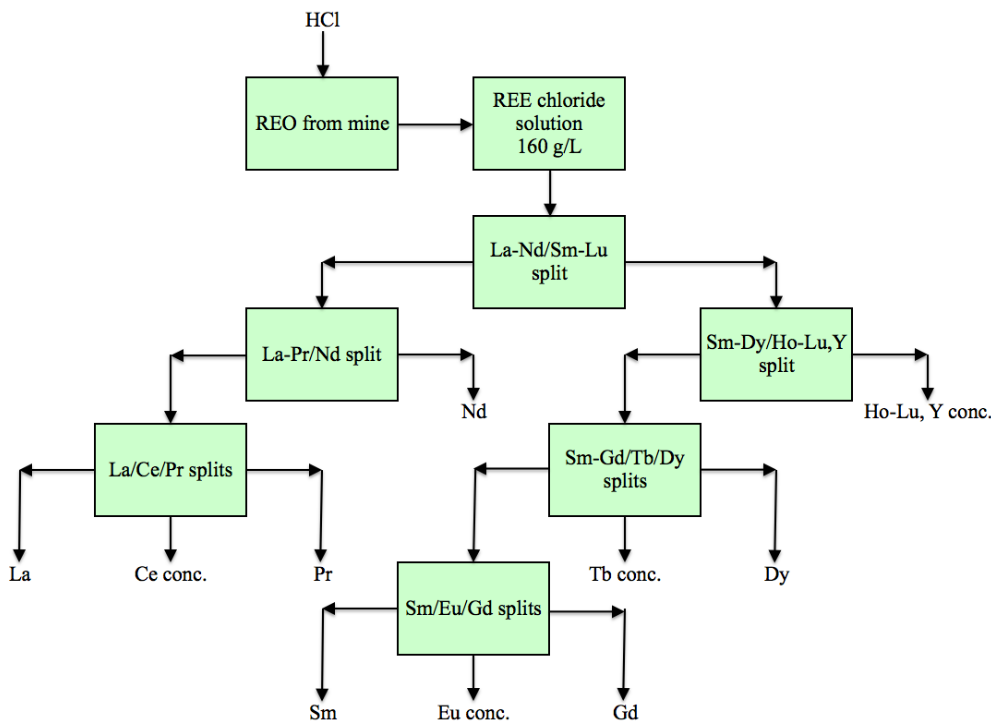
At the time of writing, all operating REE separation plants are using SX and generally from a chloride-based aqueous phase. There are approximately one hundred REE separation plants in China and these are predominantly using a cation exchange phosphonic acid – H(EH)EHP – as the extractant. This reagent is variously marketed as P507, PC88A and IonQuest 801 and typically used at 50% v/v concentration in kerosene. Although P507 dominates as the extractant, certain sections of Chinese separation plants use other extractants or extractant mixtures for special tasks. The Japanese and Vietnamese separation plants are also based on P507.

Solvay's La Rochelle separation plant in France processes REE originating from its own operations but also undertakes toll processing. The La Rochelle plant uses a nitrate-based aqueous phase and a solvation extraction system using tri-n-butyl phosphate (TBP) for separating the LREE. TBP is not very suitable for separating the HREE and Solvay is using at least one other solvent extractant, probably a quaternary amine such as Aliquat 336, for the HREE. Molycorp's Silmet plant in Estonia, which was originally designed and constructed by the Soviets for processing a LREE loparite concentrate from the Kola Peninsula in Russia, also uses TBP.

Regardless of the SX system, the separation factors between adjacent rare earths are generally small meaning that many sequential separations are required to obtain a high purity product from a mixture of rare earths. If all fifteen REE are separated to high purity products (>99.9% pure), the separation plant might contain 1,500 or more mixer-settler units arranged in several circuits. Each circuit would accept a feed solution containing mixed REE and yield two or three outlet streams containing partially or fully refined individual REE. These circuits would be cascaded with partially separated streams directed to other circuits for separation.

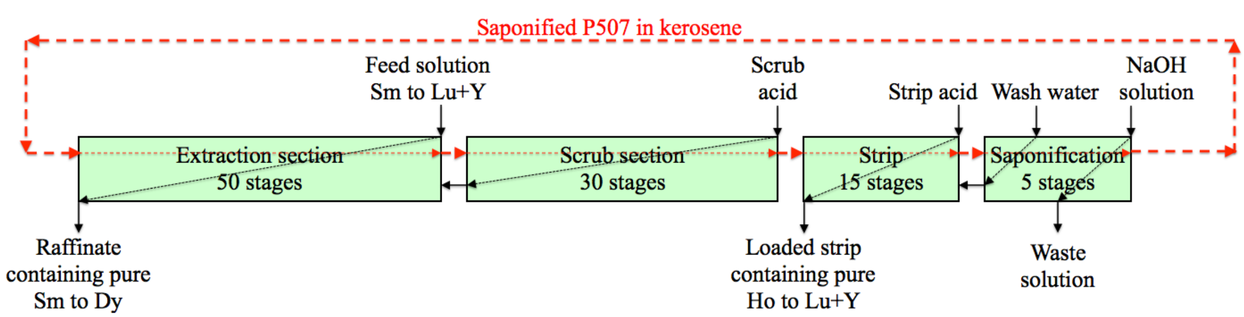
A simplified block diagram for a separation plant producing separated LREE, Sm, Eu, Gd, Tb and Dy, and a bulk concentrate of the heavier REE is provided in Figure 17-2.

FIGURE 17-2 BLOCK DIAGRAM FOR TYPICAL REE SEPARATION PLANT



A single separation circuit, for example for the separation of the Sm-Dy group from the heavier REE (Ho-Lu including Y), might contain 50 extraction stages, 30 scrub stages, 15 strip stages and 5 stages for water washing and saponification for a grand total of 100 mixer-settlers. An example of a single separation circuit is shown in Figure 17-3.

FIGURE 17-3 DETAILS OF A SINGLE SEPARATION CIRCUIT – DY/HO SPLIT USED AS AN EXAMPLE



Separation plants using an extractant such as P507 use HCl to dissolve the incoming oxide feed and to scrub and strip the REE from the loaded solvent. NaOH is used to regulate pH. As a result, the effluent from such a separation plant is a NaCl brine solution. A conventional

P507 separation plant uses approximately 3 t of HCl (100% basis), approximately 2.5 t of NaOH (100% basis) plant, and up to 20 t of water – much of it for washing product – to fully separate one tonne of mixed REO.

The Chinese have pioneered new plant configurations such as “Hyperlinking” that reduce the reagent consumption by at least 30% (Liao, Wu, Cheng, Wang, Liu, Zhang and Yan, 2013). This process has been widely adopted in China and is mandated as a means of reducing environmental issues.

An alternative means of reducing new reagent demand is to operate a chloralkali plant on the brine waste stream to regenerate HCl and NaOH. This is what Molycorp attempted to do at its refurbished Mountain Pass plant but it appears that preparation of suitable brine from the SX raffinates and other source streams was very problematic. The entire Mountain Pass operation is now on “Care and Maintenance” status because of issues with the chloralkali plant and other areas of the operation.

The plants using TBP-nitrate systems consume relatively small amounts of HNO_3 and NH_3 and generate an ammonium nitrate solution as the effluent. After decontamination to eliminate solvents and unwanted metals, this material can be sold as a fertilizer.

Within China, there is a great deal of development activity aimed at better modelling and optimizing separation circuits, improving separation factors through different reagents, reducing the environmental impact and operating costs through Hyperlinking, on-line analysis, and other strategies. It should be noted that Chinese law limits the export of detailed know-how and technology concerning advanced REE separation plants.

SOLVENT EXTRACTION ALTERNATIVES

There are several alternatives in the field of SX-based separation that are under development and will be described here. Without exception, these new SX systems are in their infancy and will require at least another year of development. Any system showing promise will require at least another year of further testwork and small-scale semi-continuous demonstration, and another year of larger scale pilot plant demonstration before a full-scale plant could be contemplated.

The alternatives under development can be broadly divided into Equipment and Chemistry developments.

EQUIPMENT

Conventional mixer-settlers disperse the solvent in the aqueous (or vice versa) in a mixer so mass transfer takes place and the phases come close to reaching equilibrium. The emulsion is then passed into a settler where the lighter solvent (bulk density typically approximately 0.85 t/m^3) floats to the top of the settler and the heavier aqueous (bulk density 1.05 t/m^3) settles to the bottom. The degree of agitation in the mixer, which largely fixes droplet size, and the holding time are selected to allow the two phases to equilibrate and yet avoid very fine droplet dispersions so that substantially complete separation of the phases can be achieved in a reasonably small settler. The typical design for a REE separation mixer settler includes a mixer residence time of five minutes and a settler sized for a combined phase specific flow of 3 m/h. For a 5,000 tpa REO separation plant, the REO feed solution flow rate would only be approximately 4 m^3/h. The first bank of mixer settlers (SX1) would have mixers with volumes of approximately 2 m^3 and the settler would have an area of approximately 7 m^2 – tiny equipment compared to that in a typical U or Cu SX plant

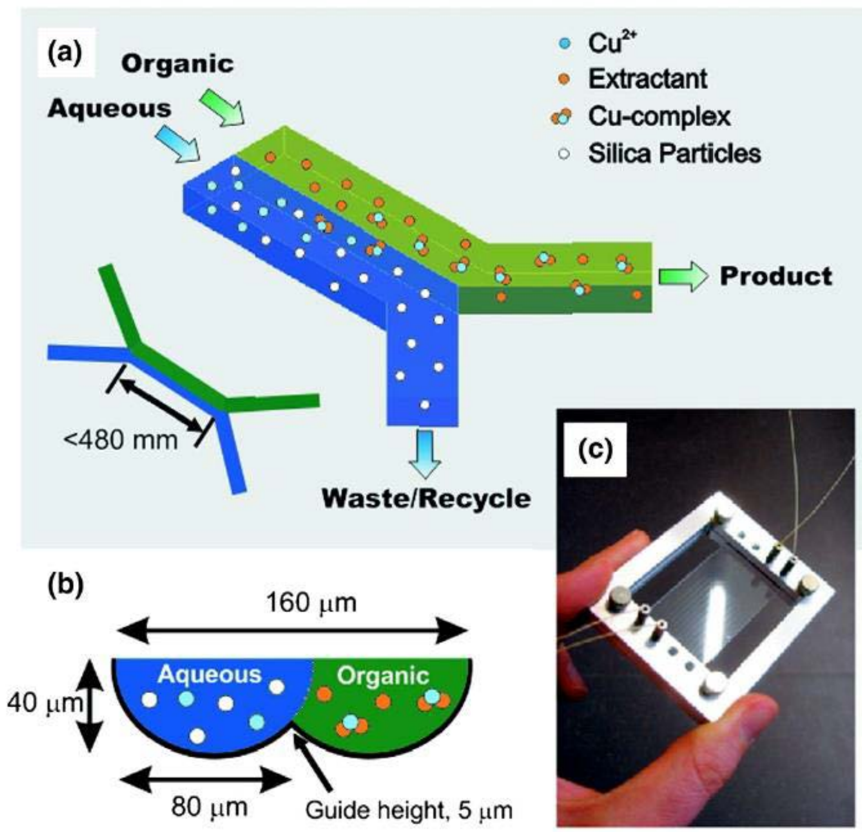
Centrifugal contactors have been developed in China (Zhang, Xu, and Li, 2012). These units include an agitation section followed by a centrifugal settler operating at approximately 500 G and so allowing much faster separation of the phases. Because of the compactness of the centrifugal settler, solvent and REE inventories are claimed to be approximately 5% of those for a conventional mixer-settler plant. Higher stage efficiencies are claimed leading to an 18% reduction in cell count. The Zhang paper also notes lower solvent losses and a 50% reduction in building area due to the use of centrifugal contactors. The authors state that the time for a circuit to get to equilibrium after start-up or a flow change is much less than equivalent data for a mixer-settler plant.

Micro-fluidic contactors use micro-channel devices to contact aqueous and solvent so that transfer of the species of interest occurs without the dispersion of the phases. The micro-channels are typically approximately 100 µm wide by 40 µm deep and perhaps 100 mm long between the “Y” injection and separation points.

There are several variations on the basic micro-channel them. The two phases can flow co-current or counter-current. In co-current flow, the two phases can each occupy their own part of the channel or one phase can be injected into the other in the form of slugs. The micro-channel can have a certain area coated to make it hydrophobic it can also have a guide to keep the phases separate. Some micro-channel work has been done with three phases, and other experiments have been done in which a membrane has divided the length of the channel into two parts.

The most advanced work appears to have been done with co-current extraction as illustrated in Figure 17-4 (from Priest, Zhou, Sedev, Ralston, Aota, Mawatari, and Kitamori, 2011).

FIGURE 17-4 CO-CURRENT SYSTEM FOR METAL EXTRACTION



Obviously the capacity of a single micro-channel device is low – typically around 1 mL/h of a given phase. The way in which these devices could be made practical is through the same sort of technology that has been used for microchip manufacture or ink-jet printing. Thousands of parallel micro-channels would be etched into a suitable substrate to obtain practical volumetric feed rates.

Membrane supported SX is, like micro-fluidics, another method of contacting an organic and an aqueous without phase dispersion. The method has been investigated over many years with relevant literature going at least as far back as 1960. Several articles on the subject refer to REE extraction but there is nothing specific on REE separations – although that is a next logical step.

Numerous groups are developing membrane supported SX technologies and applications. In the REE field, Oak Ridge National Laboratory in the USA, working under contract to the Critical Materials Institute (CMI), has developed a membrane-supported process for the recovery of magnet materials. The intention is to do SX loading and stripping in a single device with an immobilized solvent. U.S. Rare Earths, Inc. has entered into agreements with the Oak Ridge National Laboratory allowing the company to use the membrane SX technology for the recycling of REE from electronic waste, and to use the technology for the extraction of specific elements from mining materials.

CHEMISTRY

Several groups are investigating alternative SX chemistry systems aimed at improving separation factors (β), alternative stripping methods, and using alternative diluents such as ionic liquids that might be safer and possibly offer increased β values.

Improved separation factors (β) would lead to separation plants requiring fewer stages to attain a certain product purity and recovery. Amongst other groups, the Changchun Institute of Applied Chemistry is working in this field and reports on several solvents giving enhanced β (Li, 2013). For example, with P507, the β for Tm-Er separation is approximately 3.6 but this increases to 5.5 when an alcohol is added to the solvent. This improvement would roughly half the cells needed for Tm-Er separation.

Precipitative stripping is a process in which the species loaded on a solvent is stripped and simultaneously precipitated. The process has been used in the REE-Th industry since the 1960s (Goode, 2012) and there are numerous papers describing precipitative stripping of REE, Ni, Fe, and Th. The several papers concerning REE stripping include the use of oxalic acid to precipitate oxalates, sodium sulphate to form insoluble double sulphates, and reductive stripping of Ce(iv) using H_2O_2 to precipitate insoluble CeF_3 as nanoparticles (Li, 2012)

The potential advantages of a precipitative strip in a REE separation circuit include a reduction of the number of stages needed. Typically, a P507 circuit using a dilute acid for solvent stripping needs 6 to 10 stages to effect the strip. With a precipitative stripping system, using, for example, oxalic acid or an oxalate, a single stage would likely be sufficient. This might lead to a 15% reduction in the total mixer settler count and corresponding reduction in capital cost.

Despite the potential saving in stage numbers, the impact on plant design and costs is complex and precipitative stripping may not be cost effective. The mixer settler needed for three phases (solvent, aqueous, and precipitate) is more complex than a simple mixer settler. The literature suggests that contact time could be 30 minutes, which is far higher than the 4 minutes mixing time needed for simple stripping (Lee, 1991).

Rare Element Resources has explored the use of a precipitative stripping process for Ce(IV)+Th loaded solvent and claims that this represents a significant improvement on traditional SX (Rare Element Resources, 2015).

Ionic liquids (IL) are organic salts that are liquid at ambient temperatures. They may have metal extraction properties of their own but more generally are being studied as an alternative to kerosene-like solvents as the carrier for extractants such as P507, quaternary ammonium extractants, and the like. These systems are claimed to offer safer and more economical operations because the solvents are less volatile and non-flammable, and higher distribution ratios are possible. However, the β values reported for the IL systems (e.g., Larsson, 2015) are not very different to those for P507 or other solvent types. Furthermore, the unit cost of ionic liquids is high at $50/kg or thereabouts often reported. In contrast, kerosene-like solvents cost approximately $1/kg.

“Rapid” SX is being pilot plant tested by Process Research ORTECH Inc. at its laboratory in Mississauga, Ontario. The process is being developed by Innovation Metals Corp. (IMC), which is participating “in a new $1.2M rare-earth supply-chain development program, led by Technology Metals Research, LLC (TMR) and funded by the US Army Research Laboratory (ARL), part of the US Department of Defense (DOD)” (Innovation Metals, 2014). IMC notes that “*Rapid SX utilizes the time-proven chemistry of SX, in a set of proprietary columns filled with a simple contact medium*” and that “*the patent-pending Rapid SX approach reduces the number of SX separation stages by over 90% leading to a significant reduction in plant footprint and associated capital expenditures. The process also leads to dramatic reductions in* *operating costs and time to process completion, when compared to conventional SX*" (Innovation Metals, 2016).

NON-SX SEPARATION PROCESSES

Molecular Recognition Technology (MRT) – this technology, similar to ion exchange but far more selective, is deployed in industry for the refining of PGM. However, the separation of the individual REE appears more difficult and will, presumably, require extensive development and demonstration of a series of ligands specific to the REE that are to be separated. A Canadian mining company, Ucore, has acquired the rights to MRT technology and anyone interested in its use will need to negotiate with Ucore (Ucore, 2016)

Free Flow Electrophoresis (FFE) – this technology works on the mL/h-scale but needs to be scaled up to the m^3/h-scale to be practical. This might be done by using a very large number of small devices or by engineering larger-scale units. In either case, the roughly million to one scale-up will be a difficult challenge. The process is being investigated by Geomega Resources Inc. (Geomega, 2016)

Ion Exchange (IX) – this method was extensively used for REE separation some 50 to 60 years ago. Recent promising work in this field is the effort by K-Technologies, Inc. (K-Tech) evident in a 1989 patent. Over the last year, a US mining company, Texas Rare Earth Resources Corp. has entered into agreements with K-Tech to develop, presumably, the 1989 IX process. Details of the present status of this development are not available, however, a significant amount of effort will be required to demonstrate the process and especially to develop and demonstrate the peripheral plant required for reagent recovery and recycle.

Other methods – electrolytic separation, chloride volatilization, fractional crystallization and precipitation, selective reduction, magnetic separation of precipitates, and other processes have been or are being investigated and there is extensive literature covering each one of these options.

PLANT-RELATED INFRASTRUCTURE

ASSAY LABORATORY

SNC-Lavalin has allowed for a laboratory equipped to handle grade control and metallurgical assays. The laboratory is equipped with equipment for sample preparation, screening, ore digestion, and analysis. The primary means of analysis is by inductively couple plasma – optical emission spectroscopy (ICP-OES) and ICP-MS.

REAGENTS AND PLANT UTILITIES

The project is provided with various reagent handling and utility systems as described below.

Sulphuric acid (93%) is delivered in 10,000 DWT shipments and unloaded to insulated acid storage tanks at the port. A small storage tank at the processing facility is filled as required by pumping through an insulated and electrically traced pipeline from the port. The acid from this tank is dosed directly into the process.

HCl acid (33%) is delivered in 20 t rubber lined steel isotainers which are transported as needed on trucks to the process plant and unloaded into two storage tanks at the processing facility.

Smaller scale liquid reagents are received and stored in cube-tainers or the like, and stored inside until they are needed.

Solid reagents are stored undercover, but outside the building and are brought inside prior to reagent preparation for thawing (if required). Bulk bags are transferred by forklift to the appropriate mixing tank, lowered onto a bag breaker above the tank and mixed to the appropriate concentration. Solution is then transferred to the corresponding dosing tank. It is expected that approximately 40 to 50 bags per day will need to be processed in this manner.

Two air compressors and an air dryer are provided to supply instrument air that is distributed throughout the processing facilities.

The process building is heated by a diesel fired boiler providing the heat for circulation of hot water to the ventilation air intakes. This boiler also provides LP steam for use in the process.

The boiler package includes water de-mineralization, boiler feed water treatment and condensate return systems.

Standard fuel tankers are used to move diesel fuel from the port to the onsite process fuel tanks from where it is delivered to the process heating units and a steam generator.

PROCESS PLANT CONSUMABLES

ENERGY

SNC-Lavalin has estimated that a 500 tpd plant will consume 18,592 MWh/a of energy and present an energy demand of 3.3 MW. To a first approximation, these figures will be doubled at a processing rate of 1,000 tpd.

WATER

SNC-Lavalin has estimated that a 500 tpd process plant will consume 928,226 m^3/a of raw water and 2,190 m^3/a of potable water. To a first approximation, these figures will be doubled at a processing rate of 1,000 tpd.

PROCESS CONSUMABLES

SNC-Lavalin has estimated the consumable levels indicated in Table 17-1 for a processing rate of 500 tpd. These annual figures will be doubled at a processing rate of 1,000 tpd.

TABLE 17-1 ANNUAL DEMAND FOR MAJOR CONSUMABLE AT 500 TPD PROCESSING RATE
Search Minerals Inc. – Foxtrot Project

Cost Centre	Annual Usage (tpa)	Unit Cost (inc. freight) ($US/t)	Annual Cost (US$000)	% of Reagents and Consumables (%)
Sulphuric Acid	18,250	80	1,500	13.0
Magnesium Carbonate	10,200	220	2,200	20.0
Filter Aid	270	240	60	0.6
Flocculant	2	2,640	10	0.1
Sodium Carbonate	4,600	315	1,400	13.0
Hydrochloric Acid	9,800	255	2,500	23.0
Phosphoric Acid	210	940	200	2.0
Sodium Hydroxide	60	880	50	0.5
Oxalic Acid	2,000	940	1,900	17.0
Hydrogen Peroxide	Allowance		100	1.0

Cost Centre	Annual Usage (tpa)	Unit Cost (inc. freight) ($US/t)	Annual Cost (US$000)	% of Reagents and Consumables (%)
Diesel (per litre)	1,140,000	1	700	6.0
Product Shipping	1,470	40	60	0.5
Process Plant Consumables			400	4.0

18 PROJECT INFRASTRUCTURE

POWER SUPPLY

The town of St. Lewis is supplied power by way of a diesel generator. Search Minerals has been in discussions with Nalcor Energy (Nalcor), the local energy supplier to provide power. Currently, there is not sufficient installed capacity to meet the needs of the Project. There is interest on behalf of Nalcor to increase the capacity to be able to supply the project with power at favourable rates. An 11 km powerline will be required to bring the power from St. Lewis to the mine and process site.

FUEL STORAGE

Fuel storage and distribution for the open pit will be supplied by the OP contractor. Fuel storage and distribution for the UG operation will be supplied by the owner.

WATER SUPPLY

It is anticipated that raw water for process plant use will be sourced mainly from a natural pond located approximately two kilometres from the mine site on the other side of Highway 513. The main objective will be to maximize the amount of reused water for processing and use fresh water only when necessary.

Water for fire hydrants will be supplied from a polishing pond located adjacent to the dry stack residue pad. Six fire hydrants will be connected by a 200 mm diameter HDPE pipe and will be used to provide fire protection around the mine site.

ROADS

The site is located 500 m to the south of Highway 513 which provides access to the small community of St. Lewis. It is not anticipated that the 10 km road going to St. Lewis will require significant upgrades.

A 500 m access road will be constructed to connect the site with Highway 513. There are an additional 2.5 km of internal roads that will require construction. It is expected that roads will be constructed to a 10 m width and will use crushed material from site.

BUILDINGS

The following buildings are the major buildings located near the process site, with the exception of the accommodation camp which will be located in St. Lewis. All buildings will be steel frame metal clad construction-type with a concrete slab base. It is assumed that the foundations will be built on the bed rock with a minimum amount of filling material needed.

- Administration, community relations, and services office
- Process and concentrate loading/shipping installation
- Truck Shop and Warehouse
- Main security gate house
- Accommodation camp

ADMINISTRATION AND SERVICES OFFICE

The administration and services office building will accommodate mine management, administration, engineering/geology department, first aid room, training, and meeting rooms, and a mine dry room. The building will be two storeys and completed in modules. Costs include the complete supply and installation of building foundations, mechanical equipment, and electrical equipment.

TRUCK SHOP AND WAREHOUSE

The garage will include a wash bay, three mechanical bays, and a welding shop. One other shop adjacent to the garage and the main warehouse will be added for welders, carpenters, pump and accessories maintenance, and for electrical and instrumentation workers. There will be two levels in the warehouse with maintenance on the lower floor and parts storage and a dining room on the upper floor. In the electrical equipment maintenance area, a second floor will be occupied by maintenance foreman offices.

ACCOMMODATION CAMP - OPERATIONS

An accommodation camp will be constructed in St. Lewis to house the permanent mining and process workforce and OP contractors. It is expected that this camp will have a total capacity of approximately 80 people. There will be sleeping rooms, a kitchen/dining facility, clinic, laundry, and basic recreation facilities.

The Project will seek local employment to the extent possible. Search Minerals intends to investigate accommodation alternatives to an on-site mining camp, to the benefit of the local communities.

ACCOMMODATION CAMP - CONSTRUCTION

Temporary accommodation for the construction phase will be located adjacent to the permanent camp site. The temporary camp will be removed upon completion of construction.

OTHER SITE INFRASTRUCTURE

Communications services for the Project will include voice, data/internet communications via satellite, and satellite cable services for television entertainment.

WASTE ROCK DUMP AND LOW GRADE STOCKPILE

The waste pile and low grade stockpile will be located adjacent to the open pit and will have, respectively, a maximum capacity of approximately 24.0 Mt and maximum height of 80 m and a 1.9 Mt capacity and maximum height of 20 m.

PROCESS RESIDUE

The residue will be stored as a moist, neutralized, filter cake of – 3.3 mm material in a dry stack residue pad (DSRP). The DSRP concept is based on the transport of residue filter cake to a lined, dry stack residue pad by dump truck. Residue would be periodically levelled by bulldozer.

PORT

The infrastructure facilities at the port at St. Lewis will require upgrades, including the construction of a cold shed and REE precipitate storage facility. Sea containers, concentrate, and consumables delivered to port are assumed to be handled by the mine personnel.

AIRPORT

Aircraft will be based on Dash 8 Series 300, Q400 or other type of aircraft having a capacity of at least 55 passengers, and needing a minimum airstrip length of 1.3 km to 1.6 km. The majority of staff arriving by air will arrive at the Goose Bay/Happy Valley airport and buses will take them further to site. There is an allowance for senior management to utilize the St. Lewis airstrip using smaller planes. The current landing runway at St. Lewis harbour is 700 m in length.

Figure 18-1 shows the mine and process facility infrastructure and Figure 18-2 shows the overall infrastructure at Foxtrot.

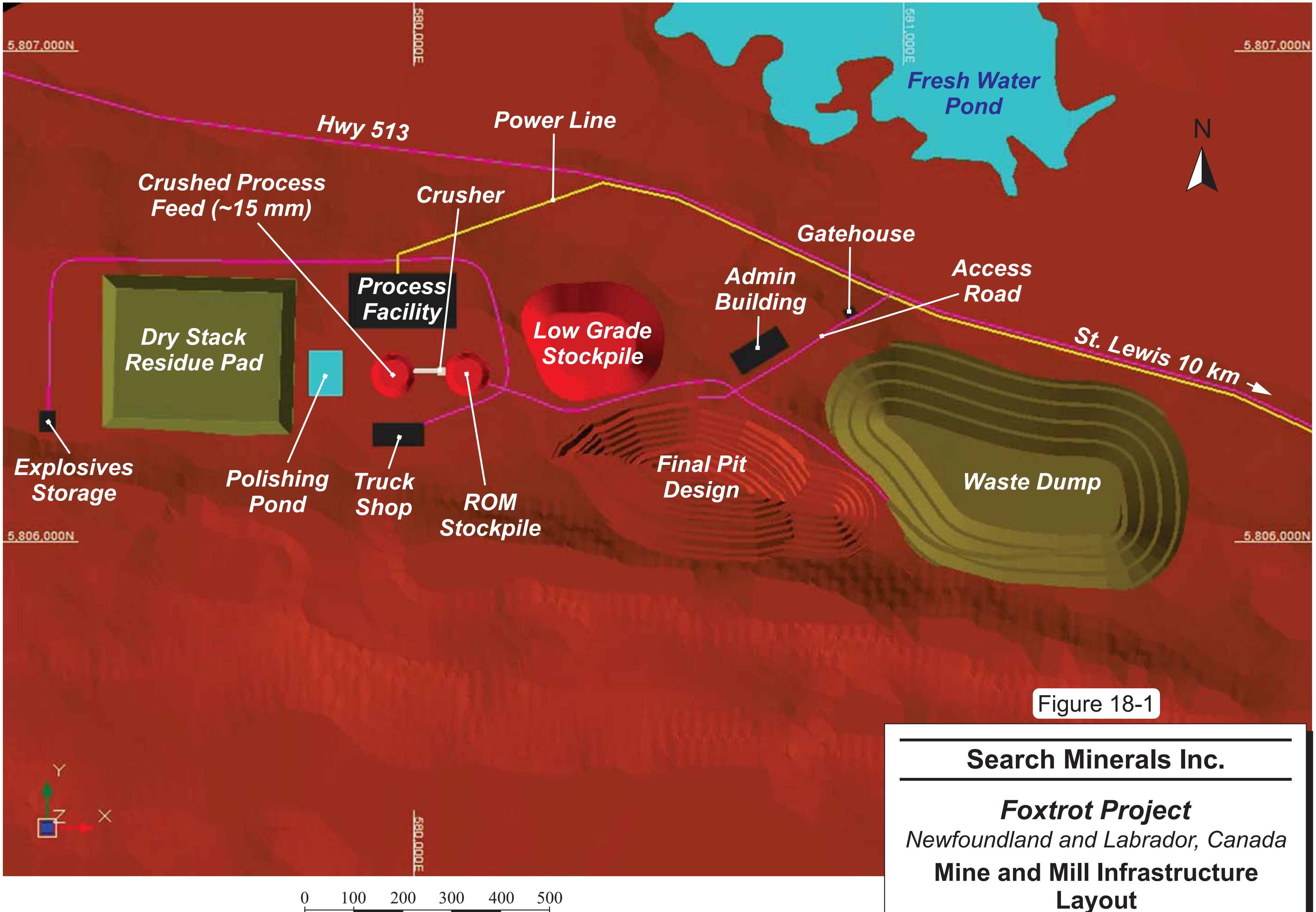


Figure 18-1

Search Minerals Inc.

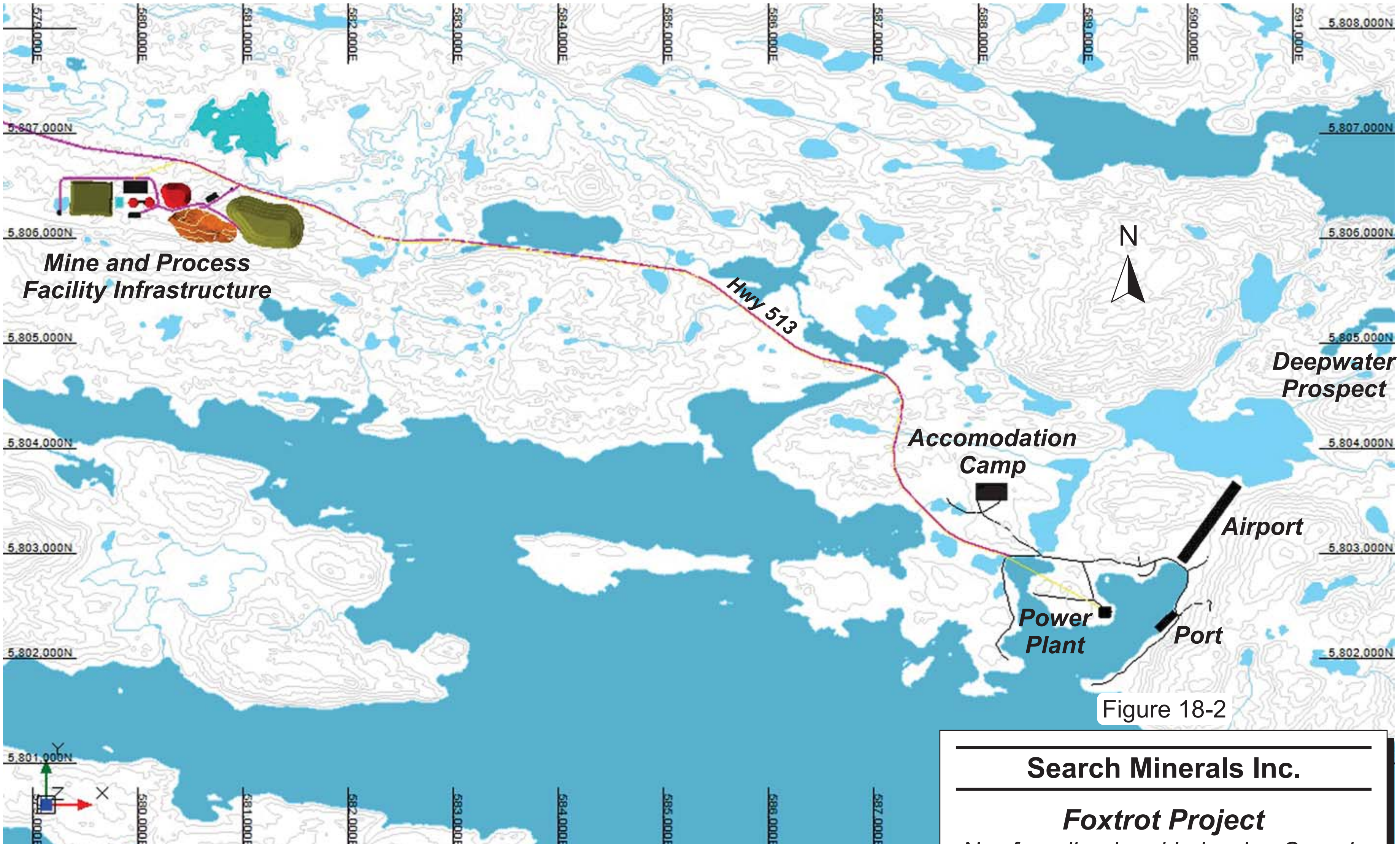
Foxtrot Project

Newfoundland and Labrador, Canada

Mine and Mill Infrastructure Layout

April 2016

Source: RPA, 2016.



0 500 1000 1500 2000

Metres

Figure 18-2

Search Minerals Inc.

Foxtrot Project

Newfoundland and Labrador, Canada

Overall Foxtrot Infrastructure Layout

April 2016

Source: RPA, 2016.

RPA

www.rpacan.com

19 MARKET STUDIES AND CONTRACTS

RARE EARTH ELEMENTS

RPA collected historical price information, supply/demand analysis, and long term forecasts for REO. The sources of price information include the websites of Metal-Pages and Asian Metal, and analyst reports by Asian Metal, TD (Toronto Dominion) Newcrest Inc., and CIBC (Canadian Imperial Bank of Commerce).

RARE EARTH SUPPLY

Rare earth elements are found in more than 200 minerals, of which approximately a third contain significant concentrations. Only a few, however, have potential commercial interest. Historically, the most important source minerals, for most LREE, were carbonates (bastnaesite) and phosphates (apatite, monazite, and xenotime). The most important sources for HREE were ionic clays and xenotime. More recently, oxides and silicate minerals (zircon, allanite, eudialyte, kainosite, fergusonite) have become more important exploration and development targets, especially for HREE.

The main geological environments for REE minerals are:

- Carbonatites – bastnaesite (Bayan Obo, Inner Mongolia; Mountain Pass, California; Kola Peninsula, Russia; Sichuan, China; Mt. Weld, Australia; Bear Lodge, Wyoming)
- Monazite and xenotime-bearing placers and paleo-placers (west coast of Australia; east coast of India)
- Ion absorption clays (Longnan, Jiangxi, China)
- Peralkaline eudialyte-bearing intrusions – eudialyte, bastnaesite, alllanite, zircon, parasite, fergusonite (Kola Peninsula, Russia; Dubbo, Australia; Illimausuaq, Greenland; Norra Karr, Sweden; Kipawa, Canada; Nechalacho, Canada; Red Wine, Canada)
- Peralkaline granites – monazite, kainosite, allanite, synchysite, bastnaesite (Bokan Mountain, Alaska; Strange Lake; Canada)
- Felsic volcanic/subvolcanic rocks – bastnaesite, allanite, zircon, monazite (Foxtrot, Canada; Brockman Range, Australia; Round Top Mountain, Texas; Dubbo, Australia)

Currently, the most important sources of REEs are the Bayan Obo iron - rare earth deposits (LREE) near Baotou, Inner Mongolia, the bastnaesite deposits (LREE) in Sichuan, China and the ionic clay deposits (HREE) in southern China. China is the dominant source of all REOs, accounting for approximately 97% of world production in 2009. LREEs are primarily produced in northern China (Inner Mongolia) and southwestern China (Sichuan). The HREEs are primarily produced in southern China (Jiangxi and Guangdong), from ionic clays.

There are distinct differences in the elemental composition of various rare earth sources, as illustrated in Table 19-1.

TABLE 19-1 DISTRIBUTION OF RARE EARTH ELEMENTS BY SOURCE – CHINA
Search Minerals Inc. – Foxtrot Project

Source	Baotou, Inner Mongolia	Sichuan	Guangdong	Longnan, Jiangxi	Mountain Pass, Ca	Mt. Weld, W. Australia[1]
Ore Type	Bastnaesite Concentrate	Bastnaesite Concentrate	High-Eu clay	High-Y clay	Bastnaesite	Monazite
TREO in Concentrate[2]	50%	50%	92%	95%		
Element						
La	23	29.2	30.4	2.1	33.2	25.5
Ce	50.1	50.3	1.9	0.2	49.1	46.74
Pr	5	4.6	6.6	0.8	4.34	5.32
Nd	18	13	24.4	4.5	12	18.5
Sm	1.6	1.5	5.2	5	0.789	2.27
Eu	0.2	0.2	0.7	0.1	0.118	0.44
Gd	0.8	0.5	4.8	7.2	0.166	1
Tb	0.3	0	0.6	1	0.0159	0.07
Dy	0	0.2	3.6	7.2	0.0312	0.12
Er	0	0	1.8	4	0.0035	0.1
Y	0.2	0.5	20	62	0.0913	trace
Ho-Tm-Yb-Lu	0.8	0	0	5.9	0.0067	trace
Total TREO	**100**	**100**	**100**	**100**	**99.9**	**100**

Source: Neo-Materials International, Harben, Lynas Corp.

Notes:
1. Central Zone pit assays for La, Ce, Pr, Nd, Sm, Dy, Eu, and Tb
2. TREO contents of China clays represent the relative amounts in concentrate produced from the clay deposits

Total latent demand projections for REO outside China (Rest of World (ROW)) range from 46,000 t to 52,000 t annually, between 2015 and 2020, as illustrated in Table 19-2. The Foxtrot Project will produce an average TREE of approximately 5% of the ROW demand. It should be noted that several REE from Foxtrot will not be separated and purified to a marketable product (Ce, La, Sm, Ho, Y, and Tm)

TABLE 19-2 LATENT DEMAND PROJECTIONS FOR REO OUTSIDE CHINA (TONNES)
Search Minerals Inc. – Foxtrot Project

	2015	2016	2017	2018	2019	2020	Foxtrot @ 1,000TPA	% ROW demand
La	14,473	14,790	15,114	15,445	15,784	16,129	**496**	3.1%
Ce	7,026	7,180	7,337	7,498	7,662	7,830	**997**	12.7%
Pr	3,596	3,704	3,815	3,929	4,046	4,167	**114**	2.7%
Nd	10,612	10,929	11,256	11,593	11,939	12,297	**429**	3.5%
Sm	1,956	1,999	2,043	2,087	2,133	2,180	**76**	3.5%
Eu	132	135	137	140	144	147	**4**	2.4%
Gd	1,243	1,283	1,324	1,366	1,410	1,455	**58**	4.0%
Tb	94	96	98	101	103	105	**9**	8.4%
Dy	775	785	794	803	813	823	**51**	6.2%
Ho	99	102	104	106	108	111	**10**	8.8%
Er	624	647	671	696	721	748	**26**	3.5%
Tm	114	116	119	121	124	127	**6**	4.6%
Yb	398	406	415	424	434	443	**20**	4.4%
Lu	105	109	112	116	119	123	**2**	2.0%
Y	4,830	4,936	5,044	5,155	5,268	5,383	**287**	5.3%
TOTAL	**46,077**	**47,217**	**48,383**	**49,580**	**50,808**	**52,068**	**2,586**	**5.0%**

Source: Stormcrow "Industry Report Rare Earths, August 11, 2014

As described by Asian Metal, the international rare earths market has grown at an unprecedented rate since China cut export quotas by approximately 40% in 2011. China's overwhelming control (Table 19-3) on the REE supply chain, from upstream mining to downstream processing and end-user products, is likely to remain intact on all but a few materials through 2016. Further price increases are expected with continued decreases in export availability from major Chinese suppliers and a surge in domestic Chinese demand.

TABLE 19-3 REE RESERVES AND PRODUCTION BY COUNTRY (TONNES)
Search Minerals Inc. – Foxtrot Project

Country	2014 Production[e]	2015 Production[e]	Reserves
United States	5,400	4,100	1,800,000
Australia[1]	8,000	10,000	3,200,000
Brazil	—	—	22,000,000
China[2]	105,000	105,000	55,000,000
India	NA[3]	NA[3]	3,100,000
Malaysia	240	200	30,000
Russia	2,500	2,500	([4])
Thailand[5]	2,100	2,000	NA
Other countries	NA	NA	41,000,000
World total (rounded)	**123,000**	**124,000**	**130,000,000**

Notes:
All figures estimated by U.S. Geological Survey, Mineral Commodity Summaries, January 2016
e Estimated.
NA Not available.
— Zero.
1 For Australia, Joint Ore Reserves Committee-compliant reserves were approximately 2.2 million tonnes.
2 Production quota does not include undocumented production.
3 Significant quantities are contained in stockpiled monazite tailings, but quantitative data are not available.
4 Included with "Other countries."
5 Based on imports to China.

RARE EARTH PRICING

The market for rare earth products is small and public information on price forecasts and sales terms are difficult to obtain. Current prices are tracked by sources such as Asian Metal and Metal-Pages, based on transactions and currently average approximately $13/kg of REO (net of separation charges).

Rare earth prices used in the current PEA average $33/kg of REO (net of separation charges), based on forecasts that are in line with other recent studies on REE projects such as Tasman Metals Ltd. (Norra Karr), Hastings Rare Metals Ltd. (Yangibana), Alkane Resources (Dubbo), and Greenland Minerals and Energy Ltd (Kvanefjeld).

A small number of REE producers outside of China are likely to be in operation by the time the Foxtrot Project is developed. This is expected to saturate the market for some LREO such as lanthanum and cerium, however, demand for high-value HREO (such as dysprosium) is expected to grow, and supply is expected to remain in deficit. Revenue for the Foxtrot Project is dominated by Nd (39%), Dy (29%), Pr (14%), and Tb (8%), elements that are projected to remain in supply deficit.

The prices used in the cash flow, in Section 22, are described in Table 19-4. The prices were applied as a constant throughout the LOM schedule.

TABLE 19-4 FOXTROT PRICE INDEX VERSUS INDUSTRY
Search Minerals Inc. – Foxtrot Project

REO	Unit	2013 Foxtrot PEA	Market Prices January 2016	Hastings Yagibana April 2016	Alkane Dubbo July 2015*	Tasman Norra Kärr-January 2015	Greenland Kvanefjeld FS Sept 2014	2016 Foxtrot PEA
CeO_2	USD/kg	5.00	1.80	-	2.00	5.00	5.00	**3.00**
La_2O_3	USD/kg	10.00	5.25	-	2.00	7.00	6.50	**6.00**
Nd_2O_3	USD/kg	75.00	41.60	103.69	60.00	80.00	85.00	**80.00**
Pr_6O_{11}	USD/kg	75.00	50.07	92.55	80.00	115.00	95.00	**105.00**
Sm_2O_3	USD/kg	9.00	2.06	3.85	3.00	8.00	5.50	**5.00**
Eu_2O_3	USD/kg	500.00	96.95	420.49	300.00	700.00	635.00	**650.00**
Gd_2O_3	USD/kg	30.00	11.60	49.57	20.00	40.00	54.00	**30.00**
Y_2O_3	USD/kg	20.00	4.21	-	15.00	25.00	30.00	**20.00**
Yb_2O_3	USD/kg	50.00	-	-	30.00	-	62.50	**30.00**
Dy_2O_3	USD/kg	750.00	215.02	480.97	350.00	575.00	550.00	**500.00**
Er_2O_3	USD/kg	40.00	30.25	-	40.00	-	150.00	**40.00**
Ho_2O_3	USD/kg	-	-	-	40.00	-	50.00	**-**
Lu_2O_3	USD/kg	-	-	-	990.00	900.00	610.00	**1,200.00**
Tb_4O_7	USD/kg	1,500.00	392.60	-	650.00	950.00	720.00	**800.00**
Tm_2O_3	USD/kg	-	-	-	-	-	800.00	**-**

*Forecast for 2020

MARKETING CONCLUSIONS

RPA considers the REO prices proposed for the 2016 Foxtrot PEA in Table 19-4 to be appropriate for a PEA-level study, however, RPA notes that the recent market volatility introduces considerably more uncertainty than a comparable base or precious metals project. The prices used in the PEA are significantly higher than the market spot prices in January 2016.

CONTRACTS

No contracts relevant to the PEA have been established by Search Minerals. Search Minerals has not hedged, nor committed any of its production pursuant to an off-take agreement.

20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

ENVIRONMENTAL STUDIES

ENVIRONMENTAL BASELINE STUDY

It is expected that a Newfoundland and Labrador Environmental Impact Statement (EIS) and a Federal Comprehensive Study will be required for the Foxtrot Project. An Environmental Baseline Study (EBS) will be completed to support these environmental assessments.

To date, no EBSs have been conducted at the Foxtrot Property. An EBS is necessary to understand the specific interactions between the project and the natural environment and to design the project to avoid or minimize potential adverse effects. The EBS would also support the preparation of a registration document for the project and an EIS in the event that it is required by the province (detailed below). An EBS is typically conducted over a minimum of 12 continuous months to provide coverage of all four seasons. Studies may continue beyond this12-month period as may be justified by the occurrence of abnormal seasonal conditions. In cases where the EBS may focus on specific information gaps the study period may be shorter than 12 months. The EBS scope is typically developed in consultation with the local and regional resource management and regulatory agencies in order to ensure agency concerns can be addressed with the study results. The initial EBS report is typically completed within 14 to 16 months of the start of the field program and the Environmental Impact Assessment (EIA) is typically based upon this initial EBS report.

The following environmental baseline studies are likely required:

- Sound monitoring;
- Air quality;
- Historic and heritage sites;
- Fish and fish habitat baseline;
- Traditional land use (trap-lines etc.)
- Rare plant analysis;
- Migratory Birds
- Ecological land classifications (ELC) including wildlife assemblages and wetlands; and
- Song birds.

Determination of Harmful Alteration, Disruption, or Destruction of Fish Habitat (HADD) and socio-economic baseline studies will also be undertaken.

PROJECT PROCESS AND PERMITTING

Mining projects in the Province of Newfoundland and Labrador are subject to Environmental Assessment (EA) under the Newfoundland and Labrador Environmental Protection Act. They can also be subject to an EA under the Canadian Environmental Assessment Act (CEAA) if an approval is required from a federal agency. All provincial and federal EA processes are public. These processes are discussed below:

PROVINCIAL PROCESS

The EA process is initiated with a formal registration of the Project, submitted in a prescribed format, to the Newfoundland and Labrador Department of Environment and Conservation. The registration is made available to the public and to government agencies for review. Within 45 days of receiving a registration, the Minister will issue a decision on the proposed project. All decisions are announced in the Environmental Assessment Bulletin. There are three possible decisions:

- An Environmental Preview Report (EPR) is required;
- An EIS is required; or
- No further EA is required.

ENVIRONMENTAL PREVIEW REPORT

An EPR is ordered by the Minister when additional information is required to determine the potential for a project to result in significant adverse environmental effects. The project proponent is responsible to prepare a project-specific EPR, in response to government-issued guidelines. The EPR is available for public and government review. At the completion of the review period, the Minister decides if the EPR is sufficient. If not, the proponent is required to revise and/or amend it. Upon a determination of sufficiency, the Minister will release the project, conditionally release the project, or call for an EIS.

ENVIRONMENTAL IMPACT STATEMENT

An EIS is required in cases where potential exists for a project to cause significant adverse environmental effects. The project proponent is responsible to prepare a project-specific EIS and associated component studies in response to government issued guidelines. Field work is typically required for the completion of an EIS. The component studies and EIS are available for public and government review. At the completion of the review period, the Minister decides if the component studies and/or EIS are sufficient. If not, the proponent is required to revise and/or amend the document. Upon a determination of sufficiency, Cabinet will release the project, conditionally release the project, or not release the project. Once the project is released from the EA process and prior to project construction, the proponent can proceed to obtain the necessary permits and authorizations. A release from the provincial process is valid for three years.

PERMITTING

Permits must be obtained for drilling, trenching, and water use. Activities that only require notification include geology, prospecting, ground geophysics, and all forms of geochemistry and line cutting. Applications for permits and notifications are submitted to the Government of Newfoundland and Labrador, Department of Natural Resources (NL DNR), Mines Branch, Mineral Lands Division.

Proponents should follow the *Environmental Guidelines for Construction and Mineral Exploration Companies* (DNR, 2011) provided by the NL DNR. The *Guidebook to Exploration, Development, and Mining in Newfoundland and Labrador* (GNL, 2010) also provides useful guidance on the regulatory process.

WATER QUALITY MANAGEMENT

Although no water balance has been completed for the Project, the discharge of effluents is probable. Discharges may originate from several sources, including open pit dewatering, groundwater seepage, precipitation, and general site run-off, including run-off from ore, waste rock, and overburden stockpiles; and periodic releases of water from the dry stack residue pad. As such a water treatment plant will likely be required to manage the quality of water being discharged into the environment.

The control and management of water resources in Newfoundland and Labrador is legislated by the Water Resources Act, although related development activities cannot be permitted or undertaken without first obtaining authorization from the Province under the Environmental Protection Act.

SURFACE WATER

Licences under the Water Resources Act will be required prior to release of any effluent. Effluents discharged to surface water from mining activities must, at minimum, comply with Sections 3, 19.1, and 20 of the Metal Mining Effluent Regulations (MMER) (Table 20-1). Site specific effluent quality criteria may be imposed as a condition of any approval in the event that compliance with the MMER does not provide adequate protection of receiving water quality. Effluent treatment is expected to be required to meet effluent quality limits for total suspended solids (TSS), ammonia, and potentially for management of metal concentrations. Specific treatment requirements will be developed in subsequent Project planning phases.

TABLE 20-1 METAL MINING EFFLUENT REGULATIONS, SOR/2002-222 – AUTHORIZED LIMITS OF DELETERIOUS SUBSTANCES
Search Minerals Inc. – Foxtrot Project

Deleterious Substance	Maximum Authorized Monthly Mean Concentration	Maximum Authorized Concentration in a Composite Sample	Maximum Authorized Concentration in a Grab Sample
Arsenic	0.50 mg/L	0.75 mg/L	1.00 mg/L
Copper	0.30 mg/L	0.45 mg/L	0.60 mg/L
Cyanide	1.00 mg/L	1.50 mg/L	2.00 mg/L
Lead	0.20 mg/L	0.30 mg/L	0.40 mg/L
Nickel	0.50 mg/L	0.75 mg/L	1.00 mg/L
Zinc	0.50 mg/L	0.75 mg/L	1.00 mg/L
Total Suspended Solids	15.00 mg/L	22.50 mg/L	30.00 mg/L
Radium 226	0.37 Bq/L	0.74 Bq/L	1.11 Bq/L

Source: Department of Justice 2011

Notes:
1. All concentrations are total values.
2. Cyanide only required for mines using cyanide in the metallurgical process.
3. Current version as posted between April 3, 2009 and April 15, 2009. SOR/2006-239, s. 25.

Monitoring of any liquid discharge from the Project to receiving waters will be required as part of any provincial environmental permit or approval. The basic monitoring requirements are those detailed in the MMER, which require routine monitoring of deleterious substances and effluent volume. Periodic effluent characterization also is required, which includes the deleterious substances and analyses of alkalinity, hardness, aluminum, cadmium, iron, mercury, molybdenum, ammonia, nitrate, major anion, and cation species, and Project-specific contaminants of concern (COC). The MMER also require periodic receiving water quality monitoring, and environmental effects monitoring.

Neither the process water requirement for the process facility nor the water source has been determined at this time, however, water usage from any natural surface water body will need to be licensed under the *Water Resources A*ct.

GROUNDWATER

Hydrogeological conditions in the vicinity of the open pit need to be studied in order to estimate the potential for groundwater seepage into the pit, to design the necessary water diversion and water management works, and to assess how the Project interactions with groundwater may affect nearby surface water bodies. Any dewatering will be required to be licensed under the *Water Resources A*ct.

OTHER PERMITS

Mining Lease

A mining lease must be obtained under the provincial *Mineral Act* for exclusive rights to develop, extract, remove, deal with, sell, mortgage, or otherwise dispose of all the unalienated materials, or those specified in the lease, in, on, or under the land described in the lease (GNL, 2010). Surface rights that include the entire footprint of the mine and related infrastructure must also be obtained under the *Mineral Act.*

Process Facility Licence

A process facility licence is required for operation of a process facility in conjunction with a mining operation, as per Section 5 of the *Mining Act*. Process facility licences are issued by the NL DNR to the holder of a mining lease (GNL, 2010), and a process facility may not be operated without first obtaining a licence.

Fuel Storage and Handling

Fuel storage and handling in Newfoundland and Labrador is regulated by *The Storage and Handling of Gasoline & Associated Products Regulations*, and a Certificate of Approval for a fuel storage system must be obtained from the Department of Government Services and Lands. Registration is required for all underground and above ground storage facilities for the storage and handling of fuel and associated products.

Explosives

Explosives must be stored at least 22.86 m from any road and 30.48 m from an occupied building. Explosives in excess of 68.04 kg can be kept only on premises which have been licensed under *The Explosives Act* (Canada). All transportation of explosives must conform to *The Fire Commissioners Act* and *The Explosives Act* (Canada). Permits related to explosives are often held by the explosives supplier in circumstances where the onsite storage facilities are owned and operated by the supplier.

FEDERAL PROCESS

ENVIRONMENTAL ASSESSMENT

Any requirement for a federal environmental assessment would be conducted in accordance with the Draft Canada-Newfoundland and Labrador Agreement on Environmental Assessment Cooperation (2005). The Provincial government and Canadian Environmental Assessment (CEA) Agency will advise proponents at the earliest opportunity about the potential for a cooperative environmental assessment of a proposed project.

CANADIAN ENVIRONMENTAL ASSESSMENT ACT

The project registration document will be circulated to the CEA Agency and to federal authorities such as Environment Canada, Health Canada, Fisheries and Oceans Canada, Natural Resources Canada, and Transport Canada. The federal agencies will determine if a federal environmental assessment is necessary. A federal environmental assessment is typically triggered when a federal authority determines it must provide a licence, permit, or an approval that enables a project to be carried out (e.g., authorization under the federal *Fisheries Act*).

If a federal agency determines that it must issue a permit or approval for the Project, the federal agency would then determine the level of environmental assessment to be applied to the Project. The level of environmental assessment that is necessary for a mining operation in the presence of a CEAA trigger is determined by a number of factors which are outlined in the *Comprehensive Study List Regulations* under CEAA. The basic level of assessment is the screening level. The next level is the comprehensive study, which is typically applied to larger and more complex projects. In general, a metal mine with a planned production rate of 3,000 tpd or greater is subject to a comprehensive study.

The proposed Project is considered a natural resource development which triggers involvement of the Major Project Management Office (MPMO) to provide overarching project management for a federal environmental assessment if required. The MPMO is administered by Natural Resources Canada, whose role is to provide guidance to project proponents and other stakeholders, coordinate project agreements and timelines between federal departments and agencies, and to track and monitor the progression of major resource projects through the federal regulatory review process.

FISHERIES ACT

Fisheries and Oceans Canada (DFO) is responsible for protecting fish and fish habitat in Canada. Under section 35(1) of the federal *Fisheries Act*, works that result in the harmful alteration, disruption or destruction (HADD) of fish habitat must be authorized in advance by DFO, (DFO 2002). If a DFO Authorization is required, it can take anywhere from one month to several years to obtain an Authorization, depending on the type of approval required, the complexity of the project, and any associated field studies. Other Project activities (e.g., construction of crossing structures [culverts] through fish habitat, any work in or about a fish-bearing watercourse that may disturb, alter, or destroy fish habitat) will require an Authorization under the Fisheries Act if they result in a HADD. Habitat compensation is an option for achieving no net loss when residual impacts on habitat productive capacity are deemed harmful after relocation, redesign, or mitigation options have been implemented. Habitat compensation involves replacing the lost habitat with newly created habitat or improving the productive capacity of some other natural habitat. Depending on the nature and scope of the compensatory works, habitat compensation may require (but is not limited to) five years of post-construction monitoring (DFO 2002).

PROVINCIAL AUTHORIZATIONS

Following release from the multi-jurisdictional EA process, the Project will require a number of approvals, permits, and authorizations prior to Project initiation. In addition, throughout Project construction and operation, Search Minerals will also be required to comply with any other terms and conditions associated with the release issued by the regulatory jurisdictions. Preliminary lists of permits, approvals, and authorizations that may be required for the Project are presented in Table 20-2. Permits and authorizations will also be required from affected municipalities.

TABLE 20-2 PROVINCIAL AUTHORIZATIONS
Search Minerals Inc. – Foxtrot Project

Permit, Approval or Authorization Activity	Issuing Agency
• Release from Environment Assessment Process	DOEC – Environmental Assessment Division
• Permit to Occupy Crown Land	DOEC – Crown Lands Division
• Permit to Construct a Non-Domestic Well • Water Resources Real-Time Monitoring • Certificate of Environmental Approval to Alter a Body of Water • Culvert Installation • Fording • Stream Modification or Diversion • Other works within 15 metres of a body of water (site drainage, dewater pits, settling ponds)	DOEC – Water Resources Management Division
• Certificate of Approval for Construction and Operation • Certificate of Approval for Generators • Industrial Processing Works • Approval of MMER Emergency Response Plan • Approval of Waste Management Plan • Approval of Environmental Contingency Plan (Emergency Spill Response) • Approval of Environmental Protection Plan	DOEC – Pollution Prevention Division
• Permit to Control Nuisance Animals	DOEC – Wildlife Division
• Pesticide Operators License	DOEC – Pesticides Control Section
• Blasters Safety Certificate • Magazine License • Approval for Storage and Handling Gasoline and Associated Products • Temporary Fuel Cache • Fuel Tank Registration • Approval for Used Oil Storage Tank System (Oil/Water Separator) • Fire, Life and Safety Program • Certificate of Approval for a Waste Management System	Government Service Centre (GSC)
• Approval of Development Plan, Closure Plan, and Financial Security • Mining Lease • Surface Rights Lease • Quarry Development Permit	Department of Natural Resources (DNR) – Mineral Lands Division
• Operating Permit to Carry out an Industrial Operation During Forest Fire Season on Crown Land • Permit to Cut Crown Timber • Permit to Burn	DNR – Forest Resources
• Storing, handling, and transportation of dangerous goods	Department of Transportation and Works

SOCIAL OR COMMUNITY REQUIREMENTS

COMMUNITY AND ABORIGINAL ENGAGEMENT

The implementation of an effective community and Aboriginal engagement program is fundamental to the successful environmental permitting of mining projects. The purpose of this program is to ensure that all potentially affected persons, businesses, and communities have a full understanding of the Project and an opportunity to share information with respect to concerns regarding potential effects, and so the proponent has an opportunity to explain how these concerns are addressed in the Project design and operations. This program typically begins in the early stages of project planning and continues through the life of the Project.

Search Minerals has initiated a community and Aboriginal consultation process. On August 27, 2012, Search Minerals announced that a Mining Exploration Activities Agreement was signed with the NunatuKavut Community Council (NCC), the political representative body of the Inuit of South-Central Labrador. Key elements in the agreement address environmental protocols and protection for matters of historic values. The agreement highlights hiring and business opportunities for NunatuKavut members and surrounding communities, and Search Minerals' commitment to make an annual payment to the NCC. Search Minerals also reports that it has held meetings with local community councils in St. Lewis, Port Hope Simpson, and Mary's Harbour, and made presentations to local groups in Goose Bay and Port Hope Simpson.

MINE CLOSURE REQUIREMENTS

REGULATORY REQUIREMENTS

The Rehabilitation and Closure Plan (RCP) is a provincial requirement of the Mining Act, Chapter M-15.1, Sections (8), (9), and (10). Under the Mining Act, the "Rehabilitation and Closure Plan" is defined as a plan which describes the process of rehabilitation of a project at any stage up to and including closure. Rehabilitation is defined as measures taken to restore the property as close as is reasonably possible to its former use or condition or to an alternate use or condition that is considered appropriate and acceptable by the NL DNR.

REHABILITATION AND CLOSURE PLAN SUBMISSION AND REVIEW

A formal RCP is required to obtain approval for project development under the Mining Act. This plan is required to be submitted with or immediately following the submission of the

Project Development Plan and provides the basis for the establishment of the financial assurance for the project. The Mining Act requirements will only be reviewed by NL DNR following release of the project from Environmental Assessment and the review and approval process can typically take four months to one year.

The RCP is directly linked to mine development and operation over the LOM and therefore must be considered a “live” document. It is common practice in the industry to review and revise the RCP throughout the development and operational stages of the project. The process of reviewing and updating the RCP commonly occurs on a five year cycle after the start of operations, however, the review cycle is typically established on a site by site basis. The final review of the RCP generally occurs once the mine closure schedule is known (typically 12 months or more before end of mining). This final review forms a Closure Plan which defines in detail the actions necessary to achieve the RCP objectives and requirements. The Closure Plan utilizes the actual site conditions and knowledge of the operation of the site and can therefore provide specific reference to activities and goals.

DESIGN AND IMPLEMENTATION

OBJECTIVES OF THE REHABILITATION AND CLOSURE PLAN

There are three stages of rehabilitation activity that occur over the LOM:

1. Progressive rehabilitation
2. Closure rehabilitation
3. Post closure monitoring and treatment

Progressive rehabilitation is considered to include rehabilitation completed, where possible or practical, throughout the mine operation stage, prior to closure. This would include activities that would contribute to the rehabilitation effort that would otherwise be completed upon cessation of mining operations (closure rehabilitation). Closure rehabilitation would include the measures, remaining after progressive rehabilitation activities, required to fully restore or reclaim the property as close as reasonably possible to its former condition or to an approved alternate condition. This would include demolition and removal of site infrastructure, vegetation, and all other activities required to achieve the requirements and goals detailed in the Program.

Upon completion of the closure rehabilitation activities, a period of "post-closure monitoring" is required to ensure that the rehabilitation activities have been successful in achieving the prescribed goals. At this stage of rehabilitation, some treatment requirements may continue until the natural baseline conditions are restored and these conditions would then persist without need for additional treatment. Once it can be demonstrated that practical rehabilitation of the site has been successful, the site should be closed-out or released by the Regulatory authority and the land relinquished to the Owner or the Crown.

The overall objectives proposed for the Project site should include:

- Restoration of the health and fertility of the land to a self-sustaining, natural state
- Provision of an agreeable habitat for wildlife (including fish) in a balanced and maintenance free ecosystem
- Creation of a landscape which is visually acceptable and compatible with surrounding terrain
- Mitigation and control to within acceptable levels, the potential sources of pollution, fire risk, and public liability
- Outline and undertake the studies and/or planning to be completed during the operations period to allow for detailed closure planning to proceed without delay at the cessation of mining
- Provide a safe environment for long term public access

The natural and existing characteristics of the site which provide the basis for the RCP design include physical stability and chemical stability.

PHYSICAL STABILITY

The RCP must address the physical stability aspect of the mine site components which remain after operations have ceased. In the case of the Foxtrot Project, these components will likely include the open pit, waste dumps, dry stack residue pad, containment dams, overflow channels, and construction features associated with buildings and site infrastructure. The RCP must consider the deterioration of site components over the long term, by perpetual forces such as precipitation, wind, chemical weathering, and seismic events.

CHEMICAL STABILITY

It is necessary to ensure long-term chemical stability of the rehabilitated mine site. Design of the RCP must contain appropriate methods to ensure that on-site water, drainage, and surface run-off from the site meet acceptable water quality standards.

NATURAL AESTHETIC REQUIREMENTS

Visual impact of the mine site is an important consideration in terms of its existing non-compatibility with the surrounding landscape. The RCP will ultimately result in the removal and/or capping, and vegetation of the majority of the physical features and structures associated with operations.

VEGETATION AND WILDLIFE

RCP design must ensure that vegetation will be self-sustaining over the long term by being compatible with on-site soil and local climatic conditions. Establishment of vegetation should facilitate the natural recovery of the area for use by local wildlife.

The RCP should ensure that disturbed areas of the site requiring rehabilitation, such as roadways, building foundation areas, storage pads and storage area bases, are suitably prepared either by scarification to loosen the soil, and/or loosened and covered with a cap of local till prior to vegetation. Concrete structures and foundations will be removed or buried under a suitable cover of till to permit vegetation growth.

Vegetation will be established through proper site preparation and encouragement of natural vegetation or planting. The selected method will depend upon location of the disturbed area, anticipated time for natural succession and the requirement for immediate erosion and sedimentation control through provision of a vegetation cover. In all cases, the primary objective of vegetation is to stabilize the soil against erosional forces of both wind and water, and provide a naturally sustainable surface cover.

WATER MANAGEMENT

The RCP will consider water management issues related to:

- Control and mitigation of drainage issues from surface waste materials

- The long term fate of discharges of process water from the processing facility, drainage from the mine, sanitary sewage, and other wastewater from the site infrastructure following closure of the mine
- Control and mitigation of discharge water from the dry stack residue pad following closure of the mine
- Site drainage and surface run-off for the mine site to control erosion, sedimentation, and the degradation of adjacent water courses.

The overall objective of the water management within the RCP is to minimize any impact on the water resources on site and in the surrounding area. Integrated water management, including monitoring of surface and groundwater resources, will be used to ensure that water quality is maintained within guideline levels without creating the requirement for long term water treatment.

LONG TERM LAND USE

The RCP must consider long term land use for the mine site that is sustainable and compatible with local and regional topography, soil, and climatic conditions.

Other land use options, such as agricultural and commercial/industrial are not considered viable at this time. However, natural vegetation of the site is expected to permit managed forestry activity and recreational activity to resume.

Final closure planning would be based on the current Canadian Council of Ministers of the Environment (CCME) soil quality guidelines to industrial classification.

While RPA has not completed a RCP for the Project, an allowance of $14 million has been input into the PEA cash flow. This estimate is based on comparison to similar projects.

21 CAPITAL AND OPERATING COSTS

CAPITAL COST ESTIMATES

SUMMARY

The mine, process, and site infrastructure costs are summarized in Table 21-1.

TABLE 21-1 CAPITAL COST SUMMARY
Search Minerals Inc. – Foxtrot Project

Area	Capital ($M)
OP and Surface Infrastructure	19.5
Processing	72.0
Indirects/Owners	28.1
Contingency	32.6
Total Initial Capital	**152.2**
Sustaining Capital	8.8
Underground Capital	56.7
Reclamation and Closure	14.0
Total Capital Cost	**231.7**

The initial capital cost and the sustaining capital costs are $152.2 million and $79.5 million, respectively. The total capital cost, including initial and sustaining, considered for the purpose of the economic analysis is $231.7 million.

The underground mine capital cost required totals $56.7 million and is considered to be a sustaining capital cost as it occurs after production has begun and to be funded by the open pit operations,

Capital costs for the process facility design were estimated by SNC-Lavalin for a 500 tpd operation. RPA has scaled the costs to a 1,000 tpd operation.

All other capital costs were estimated using cost models, unit prices, suppliers' budget quotes, preliminary designs, general industry knowledge and experience, and other information from recent similar projects.

Contingencies were applied by area, averaging 27% of direct and indirect capital costs.

SURFACE INFRASTRUCTURE AND OPEN PIT

Surface infrastructure and OP costs include general site preparation, construction of on-site roads, buildings construction, equipment and furniture, power distribution, and fire protection. Surface infrastructure and open pit capital costs are shown in Table 21-2.

TABLE 21-2 SURFACE INFRASTRUCTURE AND OPEN PIT CAPITAL
Search Minerals Inc. – Foxtrot Project

Cost Area	Initial Capital ($M)
Harbour (Port Lewis rehabilitation)	1.0
Surface Site Preparation (civil works)	1.5
Open Pit, Waste Dump, Stockpile Preparation, Ditches and Dewatering	3.0
Access Road Construction	0.4
Administration and Dry Building	2.3
Garage, Shops, Warehouses and Cold Shed	3.0
Room, Cafeteria and Gym	4.0
Electrical Distribution (Surface)	0.1
Back-up Generators	0.1
Power Line	3.2
Pick-up truck (for people transportation)	0.4
Bus (for people transportation)	0.1
Miscellaneous	0.5
Total	**19.5**

Sustaining capital is calculated at 2% of total initial capital during the OP operation and 1% after the completion of open pit, resulting in annual expenditures of $0.4 M from Year 1 to Year 8 and $0.2 M thereafter.

UNDERGROUND MINING

UG mining capital costs include capital development, mobile equipment, and stationary mine equipment. The overall capital cost estimate includes direct costs, indirect costs, and contingency.

Estimates for equipment costs, as well as development unit costs, were based on internal databases for recent underground operations of a similar scale. Mining capital costs are summarized in Table 21-3.

TABLE 21-3 MINING CAPITAL COST
Search Minerals Inc. – Foxtrot Project

Cost Area	Total Capital ($M)
Capital Development	13.1
U/G Mobile Equipment	12.9
Stationary Mine Equipment	12.0
Total Direct UG Capital	37.9
Indirect Costs	8.2
Contingency	10.5
Total Underground Capital	**56.7**

Initial capital for UG is approximately $33.8 million, expended over Year 7 and Year 8, after which approximately $0.8 million is spent annually in UG sustaining capital.

PROCESSING FACILITY

Total capital for the process facility is estimated to be $126.8 million, comprising $72.0 million in direct capital costs, $28.1 million in indirect capital costs, and $26.8 million in contingency as shown in Table 21-4. This estimate includes equipment, materials, electrical, and construction.

TABLE 21-4 PROCESSING FACILITY CAPITAL COST
Search Minerals Inc. – Foxtrot Project

Cost Area	Initial Capital ($M)
Directs	
Earthworks	3.7
Civil/Concrete	8.8
Structural	5.2
Architectural	4.7
Mechanical	31.9
Piping	6.6
Electrical	7.7
Control & Instrumentation	3.4
Sub-total	**72.0**
Indirects	
Construction Facilities and Services	2.9
Vendor Assistance during Construction	0.4
First Fills	4.9

Cost Area	Initial Capital ($M)
Commissioning Spares	0.9
EPCM Costs	13.0
Owner's Costs	6.0
Sub-total	**28.1**
Contingency	26.8
Total	**126.8**

Note: Numbers may not add up due to rounding

Sustaining capital is estimated at 0.5% of total initial capital resulting in annual expenditures of $0.4 million for a total of $4.7 million over the LOM.

CLOSURE AND RECLAMATION

A cost allowance of $14 million was made for closure and reclamation of the dry stack residue pad and mine site. It was assumed that equipment sales would pay for buildings demolition.

EXCLUSIONS

The following is excluded from the capital costs estimate:

- Project financing and interest charges
- Escalation during the Project
- Permits, fees and process royalties
- Pre-feasibility and Feasibility studies
- Environmental and social impact studies
- Any additional civil, concrete work due to the adverse soil condition and location
- Sales taxes
- Import duties and custom fees
- Cost of geotechnical and geomechanical investigations
- Cost of hydrogeology investigations
- Rock mechanics study
- Metallurgical testwork
- Exploration drilling
- Costs of fluctuations in currency exchanges
- Project application and approval expenses.
- Working capital

OPERATING COST ESTIMATES

SUMMARY

Mine life average operating unit costs for the Project are shown in Table 21-5. Details on individual operating costs are provided further below.

TABLE 21-5 UNIT OPERATING COSTS SUMMARY
Search Minerals Inc. – Foxtrot Project

Area	Unit	OP	UG
OP Mining by Contractor	$/t processed	55.11	-
UG Mining by Owner	$/t processed	-	87.91
Crushing	$/t processed	5.00	5.00
Processing - Concentration	$/t processed	141.35	141.35
G&A	$/t processed	19.52	25.02
Total Operating Costs	**$/t processed**	**220.99**	**259.28**

Note: OP mining by contractor based on $5.50/t moved and $4.50/t moved for ore and waste, respectively.

MINING

Mine operating costs were estimated using cost models, unit prices, suppliers' budget quotes, general knowledge and experience, preliminary designs, and other information from recent similar projects.

PROCESSING FACILITY

Process operating costs are estimated at $141.35 per tonne processed and is presented in Table 21-6.

TABLE 21-6 BREAKDOWN OF PROCESS OPERATING COST
Search Minerals Inc. – Foxtrot Project

Cost Centre	Cost (M$/y)	Cost ($/t)
Reagents and Consumables	29.7	82.54
Utilities and Infrastructure	9.6	26.77
Labour	6.9	19.05
General Expenses	0.6	1.66
Maintenance Materials	1.9	5.21
Contract Services	0.9	2.49
Sustaining Capital	0.8	2.26
Reagent Transport - Port to Process Facility	0.5	1.37
Operating Cost	**50.9**	**141.35**

GENERAL AND ADMINISTRATION COSTS

G&A comprise the cost of administration services and staff, as well as management, human resources for engineering, geology, environment, and construction. Also included are the room and board costs and the fly-in/fly-out traveling fees for out of town employees. The remaining costs are for material and supplies, some consultants, insurance and taxes, and communications. G&A has been estimated at $7 million annually during OP operations and $9 million annually during UG operations (based on 360,000 tpa) as presented in Table 21-7.

TABLE 21-7 BREAKDOWN OF G&A OPERATING COST
Search Minerals Inc. – Foxtrot Project

Cost Centre	OP Operation[1] Cost (M$/y)	UG Operation[2] Cost ($/t)
G&A Labour	2.1	2.4
Catering and Camp Operations	1.3	1.4
Personnel Transportation	1.4	3.0
Insurance	0.4	0.6
Equipment Maintenance and Fuel	0.7	0.7
Security	0.2	0.2
Miscellaneous	0.9	0.6
Total	**7.0**	**9.0**

Notes: 1. Year 1 to Year 8
2. Year 9 to Year 14

MANPOWER

Manpower estimates are based on typical manpower requirements for OP and UG operations for similar sized operations. Manpower estimates at peak requirements for the various units are shown in Table 21-8. Total manpower requirement is approximately 139 people during the OP operation and 222 for the UG mining operation.

OP contractors are not included in Table 21-8. It is expected that the OP contractor will operate with a total of 68 operators, utilizing a 7 days-on, 7 days-off schedule (34 per shift).

TABLE 21-8 MANPOWER SUMMARY
Search Minerals Inc. – Foxtrot Project

Area	OP	UG
Mine	33	112
G&A	51	55
Processing	55	55
Total	**139**	**222**

Notes:
1. Including manpower for the accommodation camp services.

22 ECONOMIC ANALYSIS

The economic analysis contained in this report is based, in part, on Inferred Resources, and is preliminary in nature. Inferred Resources are considered too geologically speculative to have mining and economic considerations applied to them and to be categorized as Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. There is no certainty that the reserves development, production, and economic forecasts on which this PEA is based will be realized.

The Project economic evaluation is based on operating and capital costs as discussed in Section 21. The Project evaluation work includes an economic summary, discounted cash flow analysis, as well as capital and operating costs estimates. RPA considers the PEA cost estimates to have an estimation accuracy of +35% to -15%.

The economic analysis shows that, at an average NSR value of $353/t, the project yields a pre-tax Net Present Value (NPV) at a 10% discount rate of $93 million, and an after-tax NPV of $48 million at the same discount rate. Total pre-tax and after-tax undiscounted cash flow is $327 million and $226 million, respectively.

The initial capital cost is $152 million, and total LOM capital is approximately $232 million, including approximately $43 million in contingency capital (includes $11 million in UG contingency over Year 7 and Year 8). The average operating cost over the life of the project is approximately $238 per tonne processed.

The Foxtrot Project will process 360,000 t annually at full production, at an average grade of 0.98% TREE, and produce an average of 3.3 million kilograms of TREO per year.

Over the LOM, the pre-tax and after-tax Internal Rate of Return (IRR) is 22.2% and 16.7%, respectively, with an after-tax payback period of approximately 4.4 years.

ECONOMIC CRITERIA

REVENUE

- 1,000 tonnes per day processing rate.
- Mass-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)
- 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.
- Revenue is assumed to be realized at the time of production.
- Average NSR value is $353/t.

COSTS

- Pre-production period: two years.
- Mine life: 14 years.
- LOM production plan as summarized in Table 16-5.
- Mine life capital consists of $152 million initial capital,
$ 79 million sustaining, UG mining, and closure capital,
$232 million total capital.
- Average operating cost over the mine life is $238/t processed.

TAXATION

- Federal tax rate of 15%.
- Provincial tax rate of 14%.
- All capital assumed to be depreciable on a units-of-production basis.
- A $19.2 million carry forward tax credit for previous expenditures by Search Minerals has been applied.

RPA

TABLE 22-1 CASH FLOW SUMMARY
Search Minerals Inc. - Foxtrot Project

	Input	Units	Total/Avg.	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
OP Mining																				
Mined Mill Feed		tonnes	2,812,650			360,739	359,754	359,754	359,754	360,739	359,754	359,754	292,404	-	-	-	-	-	-	-
Ore Grade																				
Yttrium		ppm	1,135			1,095	1,110	1,142	1,144	1,132	1,107	1,158	1,201	-	-	-	-	-	-	-
Lanthanum		ppm	1,837			1,843	1,781	1,826	1,812	1,810	1,803	1,899	1,946	-	-	-	-	-	-	-
Cerium		ppm	3,704			3,705	3,600	3,686	3,665	3,661	3,675	3,825	3,845	-	-	-	-	-	-	-
Praesodymium		ppm	423			419	410	418	419	420	415	438	448	-	-	-	-	-	-	-
Neodymium		ppm	1,586			1,546	1,523	1,574	1,575	1,596	1,579	1,647	1,658	-	-	-	-	-	-	-
Samarium		ppm	282			276	274	282	281	282	276	292	297	-	-	-	-	-	-	-
Europium		ppm	14			14	14	14	14	14	14	15	15	-	-	-	-	-	-	-
Gadolinium		ppm	222			215	217	226	223	221	215	229	234	-	-	-	-	-	-	-
Terbium		ppm	35			34	34	35	35	35	35	36	37	-	-	-	-	-	-	-
Dysprosium		ppm	203			196	199	204	203	203	198	207	216	-	-	-	-	-	-	-
Holmium		ppm	39			37	38	39	39	39	38	39	40	-	-	-	-	-	-	-
Erbium		ppm	109			105	107	110	111	109	106	110	113	-	-	-	-	-	-	-
Thulium		ppm	35			34	34	35	35	35	35	36	37	-	-	-	-	-	-	-
Ytterbium		ppm	97			93	95	98	99	96	95	97	101	-	-	-	-	-	-	-
Lutetium		ppm	14			14	14	14	15	14	14	15	15	-	-	-	-	-	-	-
Mined Waste		tonnes	23,977,415			2,174,059	2,549,448	5,520,755	1,661,850	9,086,869	2,091,980	677,960	214,494	-	-	-	-	-	-	-
Total Material Moved		tonnes	26,790,065			2,534,798	2,909,201	5,880,509	2,021,604	9,447,608	2,451,734	1,037,713	506,897	-	-	-	-	-	-	-
Waste to Ore ratio		---	8.52			6.03	7.09	15.35	4.62	25.19	5.82	1.88	0.73	-	-	-	-	-	-	-
UG Mining																				
Mined Mill Feed		tonnes	2,037,205			-	-	-	-	-	-	-	67,596	360,000	360,000	360,000	360,000	360,000	169,608	-
Yttrium		ppm	1,124			-	-	-	-	-	-	-	1,124	1,168	1,114	1,092	1,118	1,104	1,180	-
Lanthanum		ppm	1,940			-	-	-	-	-	-	-	2,176	1,993	1,951	1,897	1,908	1,948	1,854	-
Cerium		ppm	3,810			-	-	-	-	-	-	-	4,100	3,943	3,788	3,692	3,740	3,828	3,824	-
Praesodymium		ppm	436			-	-	-	-	-	-	-	458	448	436	427	430	436	435	-
Neodymium		ppm	1,612			-	-	-	-	-	-	-	1,706	1,660	1,613	1,574	1,580	1,602	1,644	-
Samarium		ppm	293			-	-	-	-	-	-	-	303	300	290	284	291	293	300	-
Europium		ppm	15			-	-	-	-	-	-	-	15	15	14	14	15	15	15	-
Gadolinium		ppm	226			-	-	-	-	-	-	-	223	231	217	221	225	228	241	-
Terbium		ppm	35			-	-	-	-	-	-	-	34	36	34	34	35	35	38	-
Dysprosium		ppm	206			-	-	-	-	-	-	-	201	217	202	193	205	206	218	-
Holmium		ppm	40			-	-	-	-	-	-	-	39	42	39	37	40	40	43	-
Erbium		ppm	112			-	-	-	-	-	-	-	111	117	108	106	112	112	121	-
Thulium		ppm	16			-	-	-	-	-	-	-	16	17	16	15	16	16	18	-
Ytterbium		ppm	99			-	-	-	-	-	-	-	96	103	95	94	99	98	108	-
Lutetium		ppm	15			-	-	-	-	-	-	-	14	15	14	14	15	15	16	-
			-																	
Processing																				
Feed to Mill		'000 tonnes	4,850	-	-	361	360	360	360	361	360	360	360	360	360	360	360	360	170	-
		tpd				1,002	999	999	999	1,002	999	999	1,000	1,000	1,059	1,059	1,059	1,059	499	-
Head Grade																				
Yttrium		ppm	1,130			1,095	1,110	1,142	1,144	1,132	1,107	1,158	1,187	1,168	1,114	1,092	1,118	1,104	1,180	-
Lanthanum		ppm	1,880			1,843	1,781	1,826	1,812	1,810	1,803	1,899	1,989	1,993	1,951	1,897	1,908	1,948	1,854	-
Cerium		ppm	3,749			3,705	3,600	3,686	3,665	3,661	3,675	3,825	3,893	3,943	3,788	3,692	3,740	3,828	3,824	-
Praesodymium		ppm	428			419	410	418	419	420	415	438	450	448	436	427	430	436	435	-
Neodymium		ppm	1,597			1,546	1,523	1,574	1,575	1,596	1,579	1,647	1,667	1,660	1,613	1,574	1,580	1,602	1,644	-
Samarium		ppm	287			276	274	282	281	282	276	292	298	300	290	284	291	293	300	-
Europium		ppm	14			14	14	14	14	14	14	15	15	15	14	14	15	15	15	-
Gadolinium		ppm	224			215	217	226	223	221	215	229	232	231	217	221	225	228	241	-
Terbium		ppm	35			34	34	35	35	35	35	36	37	36	34	34	35	35	38	-
Dysprosium		ppm	204			196	199	204	203	203	198	207	213	217	202	193	205	206	218	-
Holmium		ppm	39			37	38	39	39	39	38	39	40	42	39	37	40	40	43	-
Erbium		ppm	110			105	107	110	111	109	106	110	113	117	108	106	112	112	121	-
Thulium		ppm	27			34	34	35	35	35	35	36	33	17	16	15	16	16	18	-
Ytterbium		ppm	97			93	95	98	99	96	95	97	100	103	95	94	99	98	108	-
Lutetium		ppm	14			14	14	14	15	14	14	15	15	15	14	14	15	15	16	-
LREE Grade		ppm	7,941			7,788	7,588	7,786	7,752	7,769	7,748	8,100	8,297	8,344	8,078	7,874	7,948	8,106	8,057	-
HREE Grade		ppm	1,896			1,836	1,863	1,917	1,919	1,899	1,856	1,942	1,985	1,962	1,853	1,819	1,881	1,869	1,997	-
Total REE Grade		ppm	9,837			9,624	9,451	9,704	9,671	9,668	9,603	10,042	10,282	10,306	9,931	9,693	9,829	9,975	10,054	-
Yttrium	74.3%	%	74.3%			74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%	74.3%
Lanthanum	77.2%	%	77.2%			77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%
Cerium	77.8%	%	77.8%			77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%	77.8%
Praesodymium	77.6%	%	77.6%			77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%	77.6%
Neodymium	78.5%	%	78.5%			78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%	78.5%
Samarium	78.0%	%	78.0%			78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%
Europium	72.6%	%	72.6%			72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%
Gadolinium	76.3%	%	76.3%			76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%	76.3%
Terbium	73.5%	%	73.5%			73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%	73.5%
Dysprosium	73.6%	%	73.6%			73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%
Holmium	72.5%	%	72.5%			72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%	72.5%
Erbium	69.6%	%	69.6%			69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%	69.6%
Thulium	63.2%	%	63.2%			63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%
Ytterbium	58.7%	%	58.7%			58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%
Lutetium	49.6%	%	49.6%			49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%
			71.5%																	
			76.8%																	
Material Recovered REEs																				
290.86 Yttrium		kg	4,072,027			293,353	296,511	305,087	305,846	303,324	295,847	309,501	317,420	312,284	297,835	292,133	299,113	295,143	148,630	-
502.60 Lanthanum		kg	7,036,431			512,955	494,300	506,910	502,942	503,847	500,323	526,960	552,522	553,502	541,907	526,796	529,864	540,937	242,666	-
1,010.52 Cerium		kg	14,147,237			1,039,865	1,007,709	1,031,835	1,026,013	1,027,619	1,028,677	1,070,793	1,090,403	1,104,432	1,060,999	1,034,289	1,047,554	1,072,312	504,736	-
115.09 Praesodymium		kg	1,611,271			117,134	114,363	116,541	116,805	117,619	115,905	122,252	125,543	125,078	121,863	119,353	119,965	121,676	57,173	-
434.49 Neodymium		kg	6,082,875			438,067	430,466	444,696	445,160	452,191	446,176	465,315	471,364	469,384	456,198	444,918	446,875	453,087	218,978	-
77.41 Samarium		kg	1,083,769			77,672	76,906	79,232	78,821	79,259	77,472	81,837	83,775	84,330	81,337	79,652	81,637	82,186	39,654	-
3.63 Europium		kg	50,772			3,631	3,645	3,765	3,721	3,741	3,626	3,819	3,904	3,935	3,759	3,739	3,816	3,822	1,850	-
59.14 Gadolinium		kg	827,989			59,272	59,625	61,993	61,186	60,922	58,996	62,860	63,680	63,375	59,656	60,590	61,861	62,756	31,218	-
8.94 Terbium		kg	125,122			8,911	9,031	9,297	9,283	9,353	9,169	9,599	9,683	9,633	8,945	8,914	9,250	9,330	4,724	-
52.03 Dysprosium		kg	728,462			52,050	52,696	53,966	53,829	53,882	52,378	54,890	56,465	57,594	53,612	51,121	54,347	54,469	27,162	-
9.84 Holmium		kg	137,725			9,776	9,960	10,158	10,169	10,107	9,821	10,146	10,469	11,006	10,173	9,695	10,432	10,555	5,257	-
26.54 Erbium		kg	371,609			26,415	26,863	27,578	27,734	27,266	26,591	27,538	28,277	29,384	27,016	26,423	28,154	28,085	14,283	-
5.95 Thulium		kg	83,326			7,671	7,774	8,003	7,991	8,051	7,893	8,264	7,569	3,878	3,546	3,435	3,713	3,658	1,881	-
19.80 Ytterbium		kg	277,163			19,583	20,071	20,697	20,927	20,336	19,972	20,462	21,168	21,744	19,971	19,783	20,996	20,719	10,733	-
2.48 Lutetium		kg	34,725			2,445	2,473	2,533	2,598	2,539	2,505	2,586	2,681	2,743	2,518	2,487	2,655	2,616	1,346	-
Total Material Recovered		kg	36,670,503	-	-	2,668,799	2,612,393	2,682,294	2,673,025	2,680,057	2,655,351	2,776,823	2,844,925	2,852,301	2,749,335	2,683,327	2,720,232	2,761,352	1,310,291	-
Revenue																				
Payable REOs																				
Yttrium		kg	5,171,224			372,540	376,551	387,442	388,405	385,203	375,707	393,047	403,104	396,582	378,232	370,991	379,855	374,814	188,751	-
Lanthanum		kg	8,252,135			601,579	579,702	594,490	589,836	590,898	586,766	618,005	647,983	649,132	635,534	617,812	621,410	634,396	284,593	-
Cerium		kg	17,378,093			1,277,343	1,237,843	1,267,479	1,260,327	1,262,300	1,263,600	1,315,334	1,339,423	1,356,655	1,303,303	1,270,493	1,286,788	1,317,200	620,005	-
Praesodymium		kg	1,946,683			141,517	138,169	140,800	141,120	142,103	140,033	147,700	151,677	151,114	147,231	144,198	144,938	147,005	69,075	-
Neodymium		kg	7,094,963			510,954	502,089	518,686	519,227	527,428	520,412	542,736	549,792	547,481	532,102	518,945	521,227	528,473	255,412	-
Samarium		kg	1,256,750			90,069	89,180	91,879	91,401	91,910	89,838	94,899	97,146	97,790	94,320	92,365	94,667	95,304	45,983	-
Europium		kg	58,790			4,204	4,221	4,360	4,309	4,332	4,198	4,422	4,521	4,556	4,352	4,329	4,419	4,426	2,142	-
Gadolinium		kg	954,355			68,318	68,725	71,455	70,524	70,220	68,000	72,453	73,399	73,047	68,760	69,837	71,302	72,334	35,982	-
Terbium		kg	147,166			10,481	10,622	10,935	10,918	11,001	10,784	11,291	11,389	11,330	10,521	10,485	10,880	10,973	5,556	-

	Input	Units	Total/Avg.	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Dysprosium		kg	836,046			59,737	60,478	61,936	61,779	61,840	60,114	62,997	64,804	66,100	61,530	58,671	62,373	62,514	31,173	-
Holmium		kg	157,765			11,199	11,409	11,637	11,649	11,578	11,250	11,622	11,993	12,608	11,653	11,105	11,951	12,090	6,022	-
Erbium		kg	424,928			30,206	30,717	31,535	31,714	31,179	30,407	31,489	32,335	33,600	30,892	30,215	32,193	32,114	16,332	-
Thulium		kg	95,163			8,761	8,879	9,140	9,126	9,195	9,014	9,438	8,644	4,429	4,050	3,923	4,240	4,177	2,148	-
Ytterbium		kg	315,603			22,299	22,855	23,568	23,829	23,157	22,742	23,300	24,103	24,760	22,741	22,527	23,908	23,593	12,222	-
Lutetium		kg	39,488			2,780	2,812	2,881	2,954	2,887	2,849	2,941	3,049	3,119	2,863	2,828	3,019	2,975	1,531	-
Total Payable Material		kg	44,129,153			3,211,986	3,144,252	3,228,223	3,217,120	3,225,229	3,195,713	3,341,674	3,423,361	3,432,303	3,308,084	3,228,724	3,273,170	3,322,389	1,576,926	-
		t	44,129			3,212	3,144	3,228	3,217	3,225	3,196	3,342	3,423	3,432	3,308	3,229	3,273	3,322	1,577	-
Market Prices																				
Y_2O_3		US$/kg	$ 20.00			20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
La_2O_3		US$/kg	$ 6.00			6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
CeO_2		US$/kg	$ 3.00			3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Pr_6O_{11}		US$/kg	$ 105.00			105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
Nd_2O_3		US$/kg	$ 80.00			80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Sm_2O_3		US$/kg	$ 5.00			5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Eu_2O_3		US$/kg	$ 650.00			650	650	650	650	650	650	650	650	650	650	650	650	650	650	650
Gd_2O_3		US$/kg	$ 30.00			30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Tb_4O_7		US$/kg	$ 800.00			800	800	800	800	800	800	800	800	800	800	800	800	800	800	800
Dy_2O_3		US$/kg	$ 500.00			500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Ho_2O_3		US$/kg	$ -			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Er_2O_3		US$/kg	$ 40.00			40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Tm_2O_3		US$/kg	$ -			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yb_2O_3		US$/kg	$ 30.00			30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Lu_2O_3		US$/kg	$ 1,200.00			1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Gross Revenue																				
H Yttrium		US$ 000s	$ -			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L Lanthanum		US$ 000s	$ -			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L Cerium		US$ 000s	$ -			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L Praesodymium	$ 272,536	US$ 000s	$ 204,402			14,859	14,508	14,784	14,818	14,921	14,703	15,509	15,926	15,867	15,459	15,141	15,219	15,436	7,253	-
L Neodymium	$ 756,796	US$ 000s	$ 567,597			40,876	40,167	41,495	41,538	42,194	41,633	43,419	43,983	43,799	42,568	41,516	41,698	42,278	20,433	-
L Samarium	$ -	US$ 000s	$ -			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H Europium	$ 50,951	US$ 000s	$ 38,214			2,733	2,743	2,834	2,801	2,816	2,729	2,874	2,939	2,962	2,829	2,814	2,872	2,877	1,392	-
H Gadolinium	$ 38,174	US$ 000s	$ 28,631			2,050	2,062	2,144	2,116	2,107	2,040	2,174	2,202	2,191	2,063	2,095	2,139	2,170	1,079	-
H Terbium	$ 156,977	US$ 000s	$ 117,732			8,385	8,498	8,748	8,735	8,801	8,627	9,033	9,111	9,064	8,417	8,388	8,704	8,779	4,445	-
H Dysprosium	$ 557,364	US$ 000s	$ 418,023			29,869	30,239	30,968	30,889	30,920	30,057	31,498	32,402	33,050	30,765	29,336	31,186	31,257	15,587	-
H Holmium	$ -	US$ 000s	$ -			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H Erbium	$ 22,663	US$ 000s	$ 16,997			1,208	1,229	1,261	1,269	1,247	1,216	1,260	1,293	1,344	1,236	1,209	1,288	1,285	653	-
H Thulium	$ -	US$ 000s	$ -			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H Ytterbium	$ 12,624	US$ 000s	$ 9,468			669	686	707	715	695	682	699	723	743	682	676	717	708	367	-
H Lutetium	$ 63,181	US$ 000s	$ 47,386			3,336	3,374	3,457	3,545	3,464	3,419	3,529	3,658	3,743	3,436	3,393	3,623	3,570	1,837	-
Total Gross Revenue		US$ 000s	$ 1,448,449			103,984	103,506	106,399	106,424	107,164	105,107	109,994	112,238	112,763	107,455	104,567	107,446	108,358	53,046	-
Exchange Rate	1.33	$C/$US	1.33			1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Gross Revenue		C$'000s	$ 1,931,266			138,645	138,007	141,865	141,899	142,885	140,142	146,659	149,650	150,350	143,273	139,422	143,261	144,478	70,728	-
Offsite Costs (accounted for above)	US$																			
LREE Separation	$10.00	C$'000s	$ 120,555			8,700	8,537	8,793	8,805	8,927	8,806	9,206	9,353	9,315	9,058	8,842	8,882	9,006	4,326	-
HREE Separation	$20.00	C$'000s	$ 74,037			5,281	5,345	5,511	5,494	5,456	5,309	5,570	5,696	5,774	5,378	5,304	5,549	5,571	2,798	-
Product Transportation ($/t)	$50.00	C$'000s	$ 2,206			161	157	161	161	161	160	167	171	172	165	161	164	166	79	-
Total		**C$'000s**	**$ 196,798**			**14,141**	**14,039**	**14,466**	**14,460**	**14,545**	**14,275**	**14,943**	**15,220**	**15,260**	**14,601**	**14,307**	**14,595**	**14,744**	**7,204**	**-**
NSR Royalty	3% 1%	C$'000s	21,313			3,386	1,380	1,419	1,419	1,429	1,401	1,467	1,497	1,504	1,433	1,394	1,433	1,445	707	-
Net Revenue		**C$'000s**	**$ 1,713,155**			**121,118**	**122,588**	**125,980**	**126,021**	**126,912**	**124,466**	**130,249**	**132,934**	**133,587**	**127,239**	**123,721**	**127,233**	**128,289**	**62,817**	**-**
NSR		C$/t	$ 353.24			336	341	350	350	352	346	362	369	371	353	344	353	356	370	-
TREO Net Revenue Basket Price		C$/kg	$ 32.63			23	24	24	24	24	24	24	24	24	23	23	24	23	24	-
Operating Costs	C$																			
OP Mining by Contractor (Ore)	$ 5.50	C$/t mined	$ 5.50			5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
OP Mining by Contractor (Waste)	$ 4.50	C$/t mined	$ 4.50			4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
OP Owners Mine Labour		C$/t processed				10.97	11.00	11.00	11.00	10.97	11.00	11.00	13.53							
UG Mining by owner	$ 87.91	C$/t mined	$ 87.91			-	-	-	-	-	-	-	331.65	77.55	76.05	76.96	77.17	76.98	107.16	-
Total Mining		C$/t processed	$ 68.89			43.59	48.39	85.55	37.28	129.82	42.66	24.98	80.41	77.55	76.05	76.96	77.17	76.98	107.16	-
Crushing	$ 5.00	C$/t processed	$ 5.00			5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Processing - Concentration	$ 141.35	C$/t processed	$ 141.35			141.35	141.35	141.35	141.35	141.35	141.35	141.35	141.35	141.35	141.35	141.35	141.35	141.35	141.35	141.35
G&A (OP followed by UG)	$ 22.73	C$/t processed	$ 22.73			19.47	19.52	19.52	19.52	19.47	19.52	19.52	19.51	25.02	25.02	25.02	25.02	25.02	53.11	-
Total Operating Costs		**C$/t processed**	**$ 237.97**			**209.41**	**214.26**	**251.43**	**203.16**	**295.64**	**208.54**	**190.85**	**246.27**	**248.93**	**247.42**	**248.33**	**248.54**	**248.36**	**306.62**	**146.35**
Mining - Open Pit		C$ '000s	$ 155,016			15,723	17,407	30,778	13,413	46,831	15,349	8,986	6,529	-	-	-	-	-	-	-
Mining - Underground		C$ '000s	$ 179,093			-	-	-	-	-	-	-	22,418	27,919	27,378	27,707	27,781	27,714	18,175	-
Crushing		C$ '000s	$ 24,249			1,804	1,799	1,799	1,799	1,804	1,799	1,799	1,800	1,800	1,800	1,800	1,800	1,800	848	-
Processing - Concentration		C$ '000s	$ 685,524			50,990	50,851	50,851	50,851	50,990	50,851	50,851	50,886	50,886	50,886	50,886	50,886	50,886	23,974	-
G&A	$ 7,024	C$ '000s	$ 110,240			7,024	7,024	7,024	7,024	7,024	7,024	7,024	7,024	9,008	9,008	9,008	9,008	9,008	9,008	-
Total Operating Costs		**C$ '000s**	**$ 1,154,122**			**75,541**	**77,081**	**90,452**	**73,087**	**106,649**	**75,022**	**68,659**	**88,658**	**89,613**	**89,072**	**89,400**	**89,474**	**89,408**	**52,005**	**-**
Operating Margin		**C$ '000s**	**$ 559,032**			**45,577**	**45,508**	**35,528**	**52,934**	**20,263**	**49,444**	**61,590**	**44,276**	**43,974**	**38,167**	**34,321**	**37,759**	**38,881**	**10,812**	**-**
Capital Cost																				
OP & Surface Infrastructure		C$ '000s	$ 19,525	5,858	13,668															
Processing		C$ '000s	$ 72,005	28,802	43,203															
Indirects/Owners	39%	C$ '000s	$ 28,054	8,416	19,638															
Contingency	27%	C$ '000s	$ 32,652	9,795	22,856	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Initial Capital		**C$ '000s**	**$ 152,235**	**52,871**	**99,364**															
Sustaining Capital		C$ '000s	$ 8,782	-	-	751	751	751	751	751	751	751	751	555	555	555	555	555	-	-
Underground Capital		C$ '000s	$ 56,692									41,056	11,520	778	1,071	979	569	718	-	-
Reclamation and Closure		C$ '000s	$ 14,000																	14,000
Total Capital Cost		**C$ '000s**	**$ 231,710**	**52,871**	**99,364**	**751**	**751**	**751**	**751**	**751**	**751**	**41,807**	**12,271**	**1,333**	**1,626**	**1,534**	**1,123**	**1,273**	**-**	**14,000**
Pre-Tax Cash Flow																				
Undiscounted Pre-Tax Cash Flow		**C$ '000s**	**$ 327,323**	**(52,871)**	**(99,364)**	**44,826**	**44,757**	**34,778**	**52,183**	**19,512**	**48,693**	**19,782**	**32,005**	**42,641**	**36,541**	**32,786**	**36,635**	**37,608**	**10,812**	**(14,000)**
Cumulative				(52,871)	(152,235)	(107,410)	(62,653)	(27,876)	24,307	43,819	92,512	112,294	144,299	186,940	223,481	256,268	292,903	330,511	341,323	327,323
Taxes from Proforma	31%	**C$ '000s**	**$ 101,767**	-	-	3,969	9,294	6,514	11,188	2,370	10,225	13,325	8,556	8,438	6,964	5,967	6,786	6,937	1,236	-
After-Tax Cashflow		**C$ '000s**	**$ 225,555**	(52,871)	(99,364)	40,856	35,462	28,264	40,995	17,141	38,467	6,458	23,450	34,203	29,577	26,820	29,849	30,671	9,576	(14,000)
Cumulative After-Tax Cashflow		**C$ '000s**		(52,871)	(152,235)	(111,379)	(75,917)	(47,653)	(6,657)	10,484	48,951	55,409	78,859	113,062	142,639	169,459	199,308	229,979	239,555	225,555
Project Economics																				
Pre-Tax NPV	5.0%	C$ '000s	$ 178,581																	
Pre-Tax NPV	8.0%	C$ '000s	$ 121,859																	
Pre-Tax NPV	10.0%	C$ '000s	$ 92,890																	
After-Tax NPV	5.0%	C$ '000s	$ 112,301																	
After-Tax NPV	8.0%	C$ '000s	$ 69,421																	
After-Tax NPV	10.0%	C$ '000s	$ 47,643																	
Pre-Tax IRR		%	22.2%																	
After-Tax IRR		%	16.7%																	
Pre-Tax Payback Period		Years	3.5																	

SENSITIVITY ANALYSIS

Project risks can be identified in both economic and non-economic terms. Key economic risks were examined by running cash flow sensitivities on:

- Head Grade
- Recovery
- NSR
- Exchange Rate
- Operating Cost
- Capital Cost

The REE price sensitivity is based on results using a rare earth oxide base case price forecast, which equates to an NSR value of $353/t. Current REO prices equate to an NSR value of approximately $140/t for comparison.

The results of the sensitivity analysis are presented in Table 22-2 and Figure 22-1.

TABLE 22-2 SENSITIVITY ANALYSIS
Search Minerals Inc. – Foxtrot Project

Sensitivity	TREE Head Grade (%)	NPV at 10% ($000)
0.80	0.79	(60,737)
0.90	0.89	17
1.00	**0.98**	**47,643**
1.10	1.08	102,927
1.20	1.18	158,211

Sensitivity	TREE Recovery (%)	NPV at 10% ($000)
0.80	57	(60,737)
0.90	64	17
1.00	**72**	**47,643**
1.10	79	102,927
1.20	86	158,211

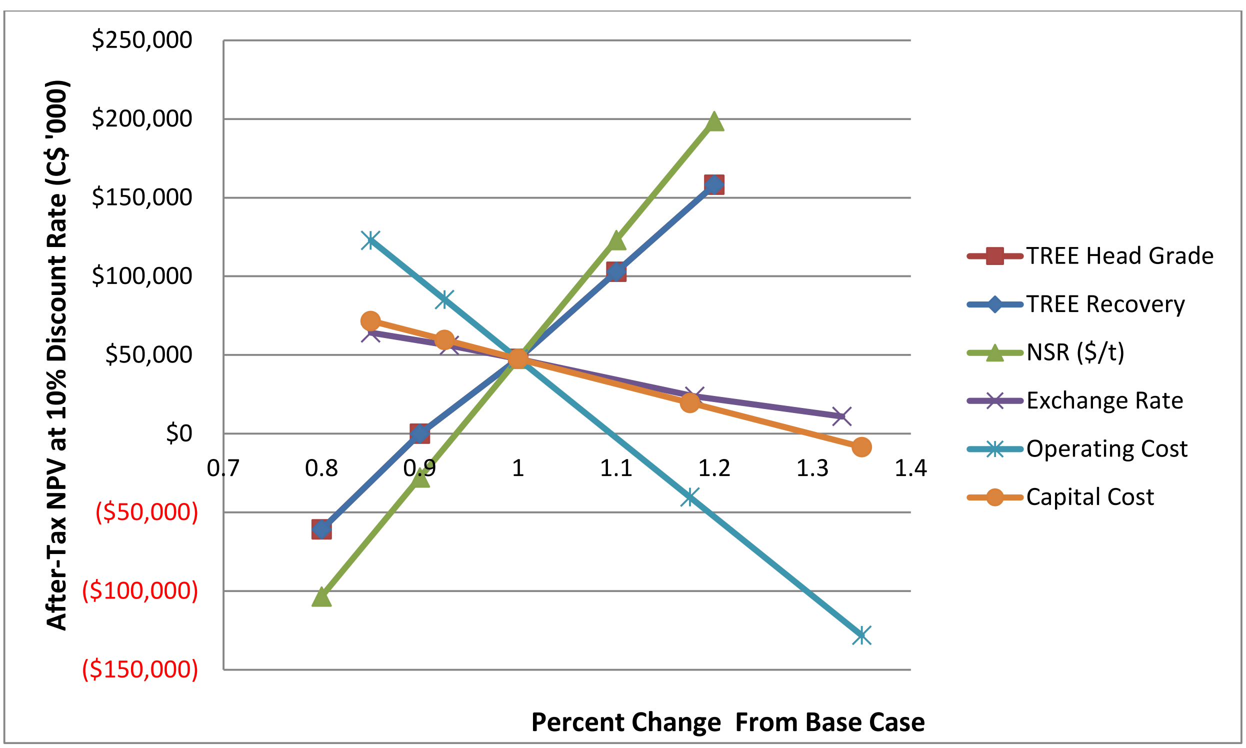
Sensitivity	NSR ($/t)	NPV at 10% ($000)
0.80	283	(103,328)
0.90	318	(27,843)
1.00	**353**	**47,643**
1.10	389	123,128
1.20	424	198,614

Sensitivity	Exchange Rate (US$/C$)	NPV at 10% ($000)
0.85	0.64	64,140
0.93	0.70	56,126
1.00	**0.75**	**47,643**
1.18	0.89	23,838
1.34	1.00	11,041

Sensitivity	Operating Cost ($000)	NPV at 10% ($000)
0.85	981,004	122,915
0.93	1,067,563	85,279
1.00	**1,154,122**	**47,643**
1.18	1,356,094	(40,175)
1.35	1,558,065	(127,993)

Sensitivity	Capital Cost ($000)	NPV at 10% ($000)
0.85	196,953	71,665
0.93	214,331	59,654
1.00	**231,710**	**47,643**
1.18	272,259	19,617
1.35	312,808	(8,409)

FIGURE 22-1 AFTER-TAX NPV SENSITIVITY ANALYSIS



23 ADJACENT PROPERTIES

This section is not applicable.

24 OTHER RELEVANT DATA AND INFORMATION

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.

25 INTERPRETATION AND CONCLUSIONS

The PEA is based on an updated Mineral Resource estimate as of December 31, 2015 and evaluates a combined open pit and underground mining approach along with processing of 1,000 tpd by crushing, acid baking, water leaching, and precipitation producing a mixed rare earth concentrate. The new process eliminates several steps included in the previous PEA, including fine grinding, flotation, and gravity and magnetic separation.

The PEA indicates that positive economic results can be obtained for the Foxtrot Project and that further advancement of the Project is merited.

The LOM plan for the Project indicates that 4.9 Mt, at an average grade of 0.98% TREE, could be mined over a 14 year period, including open pit mining for the first eight years and underground mining thereafter. Production is projected to total 36,700 t of Total Rare Earth Oxides (TREO) in a mixed rare earth precipitate.

Specific conclusions by area are as follows:

GEOLOGY AND MINERAL RESOURCE CONCLUSIONS

A significant deposit of REE mineralization has been delineated at the Foxtrot Project which consists of three steeply dipping mineralized zones: a thicker, predominantly pantellerite core, and a hanging wall and footwall zone consisting mainly of bands of pantellerite and low Zr-pantellerite. Statistical analysis of the resource assays shows that there is a bimodal distribution of REEs within the Foxtrot deposit, with higher grade generally corresponding to pantellerite bands and moderate grades corresponding to low Zr-pantellerite, and mixed pantellerite-mafic intervals.

The mineralization is steeply dipping (70° to 80°), with a strike length of approximately 765 m at an azimuth of 285°. The understanding of the Project geology and mineralization, together with the procedures for drilling, sampling, collection of data, assaying, and QA/QC carried out by Search Minerals have produced a drill hole database that is acceptable for Mineral Resource estimation, in the opinion of RPA. Results from 119 drill holes and channels to December 31, 2015 have been used by RPA to estimate Mineral Resources.

The Mineral Resource estimate uses different cut-off grades for potential open pit and underground resources, expressed as NSR values. RPA considers that open pit material with NSR values greater than $165/t and underground material with NSR values greater than $260/t meet the requirement of the CIM (2014) that Mineral Resources have reasonable prospects for eventual economic extraction.

Combined open pit and underground Indicated Mineral Resources are estimated to total 7.39 Mt at 0.91% TREE (or 1.09% TREO), and combined open pit and underground Inferred Mineral Resources are estimated to total 1.96 Mt at 0.97% TREE (or 1.17% TREO). The level of confidence in the data is not high enough to classify any resource as Measured. Definitions for resource categories used in this report are consistent with those defined by CIM (2014) and adopted by NI 43-101.

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.

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, pantellerite mineralization has not been mapped at surface to the east and west along strike. Drilling indicates that the area immediately east (down plunge) of the current wireframe solids shows good potential to extend the Foxtrot resource.

MINING

For the current PEA, RPA investigated the potential for a smaller open pit/underground mining scenario with lower throughput, lower initial capital costs, and higher grade process feed. Operating costs for open pit and underground methods were evaluated using a process feed rate of 1,000 tpd of REE-bearing material on a stand-alone basis. The break-even stripping ratio, beyond which the underground mining would produce more favourable economic results, was estimated. The depth of the open pit reaches approximately 160 m after which, based on the incremental stripping ratio, it becomes more economic to mine using underground methods.

RPA notes that this trade-off result is specific to the relative costs between the two methods, estimated for a production rate of 1,000 tpd.

A bench-by-bench production schedule was developed for the open pit over an eight year period. In Year 8, underground development commences in order to supply process feed in time for the closing of the open pit. The underground production schedule is based on longhole mining, following a top down sequence. The total LOM is fourteen years.

There is good potential to extend the mine life, through addition of resources at depth, exploration of other high-grade prospects in the area, or by processing the low-grade stockpile accumulated under the current LOM plan.

PROCESSING AND METALLURGY

The processing rate, processing methods, and REO production rate differ significantly from those presented in the earlier PEA. As stated above, the mining rate and processing rate considered in this study are 1,000 tpd of mineralized material.

Earlier metallurgical testwork examined various beneficiation techniques to concentrate the REE in the Foxtrot sample followed by hydrometallurgical processes to recover a mixed REE oxide. Although results were promising, Search Minerals elected to investigate an alternative and much-simplified flowsheet. The flowsheet, which has been investigated by SGS Minerals Services Lakefield, involves coarse crushing the mineralized material to - 3.3 mm followed by acid baking with 100 kg/t of concentrated sulphuric acid at 200°C, water leaching, various impurity removal steps, REE precipitation and calcination to an oxide suitable for marketing and separation.

The SGS work is at a preliminary stage with just one sample subjected to testing and a limited number of leach, impurity removal, and product precipitation tests completed. The leach tests were performed on conventionally crushed material. RPA expects that better leach results can be obtained using HPGR on the crushed material. RPA notes that the REE products created in the test work have achieved low levels of Th but have yet to meet the low levels of U, and possibly other radionuclide levels (no measurements yet on other radionuclides) required by commercial toll separation plants and further tests are needed in this area. The proposed process has yet to be demonstrated on a pilot scale. Additionally, RPA notes that there has been no environment-related tests.

Overall recoveries are indicated to be approximately 78% for LREE, and 50% to 76% for heavy rare earths (HREE) with the following specific recoveries (in order of contribution to total value): Nd – 79%, Dy – 74%, Pr – 78%, and Tb – 74%.

RPA believes that enough work has been done to prepare a PEA of the process, provided that reasonable allowances and safety factors are applied during process equipment selection, assignment of reagent demand and REE recovery values, and capital and operating costs for the process.

At this early stage of process flowsheet development, RPA is not aware of any processing factors or deleterious elements that could have a significant effect on economic extraction.

RPA has assumed that a mixed REE product will be produced at the mine site and either sold at a discount to published prices for separated REE or separated for Search Minerals by a toll processor at a cost corresponding to the same discount. RPA has assumed that the discount from the published price for the REO, or the toll processing charges, will be US$10/kg REO for the LREE and US$20/kg REO for the HREE.

There is a significant amount of research and development in the REE separation field and improved SX-based processes could be available. Furthermore, several workers are investigating radically different, non-SX, REE separation options.

ENVIRONMENT

The Project is at an early stage and therefore Search Minerals has not yet begun environmental baseline work. RPA does not anticipate any fatal flaws regarding environmental issues with the Project as proposed. The process for permitting and developing an open pit/underground mine in Labrador is expected to be manageable.

Search Minerals has initiated community and Aboriginal consultation programs and has signed a Mining Exploration Activities Agreement with the NunatuKavut Community Council (NCC).

MARKETS

Rare earth prices were based on independent, long-term forecasts, which are approximately double current prices.

RPA considers these rare earth prices to be appropriate for a PEA-level study, however, RPA notes that rare earth market volatility and lack of transparency introduce considerably more uncertainty in revenue than a comparable base or precious metals project.

CAPITAL AND OPERATING COSTS

The initial capital cost is approximately $152 million, including approximately $33 million in contingency capital. The average operating cost over the life of the Project is approximately $238 per tonne processed.

26 RECOMMENDATIONS

RPA recommends that Search Minerals continue collecting data to support the feasibility and licensing processes, and proceed with further studies. The purpose of this work should be a prefeasibility study suitable for use in making an investment decision.

Specific recommendations by area are as follows:

GEOLOGY AND MINERAL RESOURCES

- Continue diamond drilling on the Foxtrot deposit to define the physical limits of the deposit. Further drilling should be completed to follow the high grade mineralization at depth down plunge below 400 m towards the east of the Foxtrot mineralized zones. Infill drilling should be carried out at the periphery of wireframes, to bring the confidence level of the resource to Indicated. Other targets within the area are worthy of further exploration.

- Survey all surface channels.

- Resume the regular submission of blank material with regular drill core and surface channel samples.

- Include coarse rejects and selected half core samples in a check assay sampling protocol.

- Incorporate duplicate samples (field, pulp, and coarse reject material) into the Foxtrot Project QA/QC protocol for drill programs.

- Work with an assay laboratory to develop certified reference materials with REE grades similar to those found at the Foxtrot Project.

- Implement a QA monitoring system used to detect failed batches, and in turn, identify sample batches for reanalysis.

- Establish a comprehensive program for bulk density determinations both within the mineralization and in the host rock of the Foxtrot deposit in order to develop a density model. For this purpose, existing half core or channel samples can be used.

- Continue exploration of high-grade Foxtrot-like prospects, including Deepwater Fox.

MINING

- Carry out geotechnical investigations and analysis for use in determining pit slopes and underground stope sizing.

- Carry out hydrological investigations and analysis for use in determining dewatering needs for pit.

- Seismicity issues were not considered in conceptual designs at this point in the Project. The seismicity should be assessed and considered once detailed engineering work begins.

MINERAL PROCESSING AND METALLURGICAL TESTWORK

- The mafic and felsic material are inter-mixed on a fine scale. With the felsic material carrying the mineralization, it would be useful to have some test work done on ore sorting possibilities, such as optical or X-ray sorting, and DMS processes.

- The testwork performed to date is adequate for a PEA, however, extensive additional work, including, eventually, large-scale pilot plant work, is needed to confirm design parameters, recovery values, and generally progress of the Project.

- Additional tests are needed to better define conditions for removal of Th and other impurities such as U.

- Instead of selling a mixed REE product or accepting toll charges, Search Minerals has the option of building its own separation plant and thereby avoiding the discount/toll processing charges but incurring capital and operating costs for its own facility. This option might be considered in future studies.

ENVIRONMENTAL CONSIDERATIONS

- Begin a program of environmental baseline study work and carry out all necessary data collection and studies to support an Environmental Impact Assessment.

- Continue with community and Aboriginal consultations regarding plans for the Project.

BUDGET

The proposed budget for Project advancement is shown in Table 26-1.

TABLE 26-1 BUDGET FOR PROJECT ADVANCEMENT
Search Minerals Inc. – Foxtrot Project

Item	Cost ($000)
Diamond drilling (35,000 m @ $180/m)	6,300
Mineral Resource Update	100
Geotechnical Investigation	300
Hydrological Investigation	200
Metallurgical Testwork	2,000
Environmental Studies	1,000
Community Consultation	200
Prefeasibility Study	500
Total	**10,600**

27 REFERENCES

Canadian Institute of Mining, Metallurgy and Petroleum (CIM), 2014: CIM Definition Standards for Mineral Resources and Mineral Reserves, Prepared by CIM Standing Committee on Reserve Definitions, Adopted by CIM Council, May 10, 2014.

Dreisinger, D. B., Clucas, J.D, Verbaan N., Grammatikopoulos T., Aghamirian, M., Forstner, C., 2012: The Processing of REE's from Search Minerals Foxtrot Resource, COM 2012.

Eade, K.E., 1962: Geology, Battle Harbour-Cartwright, Coast of Labrador, Newfoundland. Geological Survey of Canada, Map 22 1962. [LAB/0030].

Geomega, 2014: Separation of REE and Impurities from Commercial Mixed Concentrate. Retrieved from http://ressourcesgeomega.ca/separation-ree-impurities-commercial-mixed-concentrate/

Gower, C.F., Neuland, S., Newman, M., and Smyth, J., 1987: Geology of the Port Hope-Simpson map region, Grenville Province, eastern Labrador. *In* Current Research. Newfoundland Department of Mines, Mineral Development Division, Report 87-1, pp. 183-199.

Gower, C.F., van Nostrand, T., and Smyth, J., 1988: Geology of the St. Lewis River map region, Grenville Province, Eastern Labrador. *In* Current Research. Newfoundland Department of Mines, Mineral Development Division, Report 88-1, pp. 59-73.

Gower, C.F., 2007: Protolith recognition of metamorphosed volcanic/volcaniclastic rocks, with special reference to the Grenville Province in southeast Labrador. *In* Current Research. Newfoundland and Labrador Department of Natural Resources, Geological Survey, Report 07-1, pp. 11-23.

Gower, C.F., 2010: Geology of the St. Lewis River area (NTS sheets 03D/04 and 05; 13A/01, 02, 07 and 08), southeastern Labrador. Geological Survey, Mines Branch, Department of Natural Resources, Government of Newfoundland and Labrador, Map 2010-24, Open File LAB/1566.

Gower, C.F., 2012: The Grenville Province of southeast Labrador and adjacent Quebec. Geological Association of Canada – Mineralogical Association of Canada, Joint Annual Meeting, St. John's, Field Trip Guidebook – B6, 140 p.

Gower, C.F., Neuland, S., Newman, M., and Smyth, J., 1987: Geology of the Port Hope-Simpson map region, Grenville Province, eastern Labrador. In Current Research. Newfoundland Department of Mines, Mineral Development Division, Report 87-1, pp.183-199.

Gower, C.F., van Nostrand, T., and Smyth, J., 1988: Geology of the St. Lewis River map region, Grenville Province, eastern Labrador. In Current Research. Newfoundland Department of Mines, Mineral Development Division, Report 88-1, pp. 59-73.

Haley, J.T., 2014: 1.3 Ga bimodal volcanism in southeastern Labrador: Fox Harbour. Unpublished M.Sc. thesis, Memorial University of Newfoundland, St. John's, Canada, 204 p.

Hanmer, S., Scott, D.J. 1990: Structural observations in the Gilbert River Belt, Grenville Province, southeastern Labrador. *In* Current Research, Part C. Geologic Survey of Canada, Paper 90-1C, pp. 1-11.

Innovation Metals Inc., 2016: Innovation Metals Corp. Announces Successful Testing of Proprietary Low-Cost Rapid Solvent Extraction Process. Press release downloaded from http://www.prnewswire.com/news-releases/innovation-metals-corp-announces-successful-testing-of-proprietary-low-cost-rapid-solvent-extraction-process-300221531.html

Lee, J., and Doyle, F.M., 1991: Precipitation of yttrium oxalate from di-2-ethylhexyl phosphoric acid solution. In Rare Earths, Resources, Science, Technology and Applications. Eds Bautista, R.G. & Jackson, N. The Minerals, Metals & Materials Society.

Liao, C.S., Wu, S., Cheng, F.X., Wang, S.L., Liu, Y., Zhang, B., and Yan, C.H., 2013: Clean separation technologies of rare earth resources in China. *J. Rare Earths, 31*(4), pp. 331–336.

Meyer, J.R. and Dean, P.L.: 1988: Industrial minerals and follow-up of lake- and stream-sediment geochemical anomalies in Labrador. *In* Current Research. Newfoundland Department of Mines, Mineral Development Division, Report 88-1, pp. 247-259. [NFLD/1701].

Miller, R.R., 1987: The relationship between Mann-type Nb-Be mineralization and felsic peralkaline intrusives, Letitia Lake Project, Labrador. Newfoundland and Labrador Department of Mines and Energy, Mineral Development Division, Report 87-1, pp. 83-91.

Miller, R.R., 1988: Yttrium (Y) and other rare metals (Be, Nb, REE, Ta, Zr) in Labrador. Newfoundland and Labrador Department of Mines and Energy, Mineral Development Division, Report 88-1, pp. 229-245.

Miller, R.R., 1993: Rare-metal mineralization in the Nuiklavik volcanic rocks of the Flowers River Igneous Suite. Newfoundland and Labrador Department of Mines and Energy, Mineral Development Division, Report 89-1, pp. 363-371.

Miller, R.R., 1996: Structural and textural evolution of the Strange Lake peralkaline rare-element (NYF) granitic pegmatite, Quebec-Labrador. Canadian Mineralogist 34, pp. 349-371.

Miller, R.R., Heaman, L.M. and Birkett, T.C., 1996: U-Pb zircon age of the Strange Lake peralkaline complex: implications for Mesoproterozoic peralkaline magmatism in north-central Labrador. Precambrian Research, 81, pp. 67-82.

Mineral Commodities of Newfoundland & Labrador – Rare-Earth Elements (Including Y, Zr, Nb, Be), Geological Survey Mineral Commodities Series No. 6, Geological Survey of Newfoundland & Labrador, Complied by A. Kerr and H. Rafuse, 2011.

Priest, C., Zhou, J.F., Sedev, R., Ralston, J., Aota, A., Mawatari, K., and Kitamori, T., 2011: Microfluidic extraction of copper from particle-laden solutions. International Journal of Mineral Processing 98 (2011), pp. 168-173.

Prout, S., 2012: The Mineralogical Characterisation of THREE Variability Sample from the Port Hope Simpson REE Prospects in SE Labrador, SGS Project 13004-001, MI5013-JAN11 – Project Report.

RPA, 2012: Search Minerals Inc. Technical report on the Foxtrot Project in Labrador, Newfoundland and Labrador, Canada. NI 43-101 Report prepared by Srivastava, R.M., Gauthier, J., Cox, J.J., and Krutzelmann, H. June 15, 2012 (filed on SEDAR July 9, 2012).

RPA, 2013: Search Minerals Inc. Technical report on the Foxtrot Project in Labrador, Newfoundland and Labrador Canada. NI 43-101 Report prepared by Srivastava, R.M., Gauthier, J., Cox, J.J., and Krutzelmann, H. May 9, 2013 (filed on SEDAR June 13, 2013).

SGS Minerals Services, 2014: An Investigation into: Whole Ore Processing for Recovery of REE from the Foxtrot Deposit, Project 13004-002 – Progress Report 1, December 16, 2014.

SGS Minerals Services, 2015: An Investigation into: Bulk Whole Ore Processing for Recovery of REE from the Foxtrot Deposit, Project 13004-002 – Progress Report 2, January 23, 2015.

SNC-Lavalin, 2015: Foxtrot REE Project Conceptual Study, Document 140262-0000-49ER-0001, Rev 00, June 4, 2015.

Tomicki, T., 2015: Foxtrot REE Project, Conceptual Study, Mining and Metallurgy, prepared by SNC Lavalin, Document No:140262-0000-49ER-0001, June 2015.

Ucore, 2016: Ucore Commissions SuperLig®-One Pilot Plant and Accepts Initial Feedstock. Press release retrieved from http://ucore.com/ucore-commissions-superlig-one-pilot-plant-and-accepts-initial-feedstock

Zhang, C.X., Xu, T., and Li, D., 2013: Centrifugal extraction machine and application of the equipment in extraction of rare earths. In Rare Earths 2012; Goode, J.R., Moldoveanu, G., & Rayat, M.S. (Eds.) Proceedings of the 51st Conference of Metallurgists, Niagara Falls, Ontario.

28 DATE AND SIGNATURE PAGE

This report titled "Technical Report on the Foxtrot Project, Newfoundland and Labrador, Canada" and dated April 28, 2016, was prepared and signed by the following authors:

(Signed and Sealed) "*Ian C. Weir*"

Dated at Toronto, ON
April 28, 2016

Ian C. Weir, P.Eng.
Senior Mining Engineer

(Signed and Sealed) "*Katharine M. Masun*"

Dated at Toronto, ON
April 28, 2016

Katharine M. Masun, P.Geo.
Senior Geologist

(Signed and Sealed) "*John R. Goode*"

Dated at Toronto, ON
April 28, 2016

John R. Goode, P.Eng.
Associate Principal Metallurgist

29 CERTIFICATE OF QUALIFIED PERSON

IAN WEIR

I, Ian Weir, P.Eng., as an author of this report entitled "Technical Report on the Foxtrot Project, Newfoundland and Labrador, Canada" prepared for Search Minerals Inc. and dated April 28, 2016, do hereby certify that:

1. I am a Senior Mining Engineer with Roscoe Postle Associates Inc. of Suite 501, 55 University Ave Toronto, ON, M5J 2H7.

2. I am a graduate of Queen's University, Kingston, Ontario, in 2004 with a B.A.Sc. degree in Mining Engineering.

3. I am registered as a Professional Engineer in the Province of Ontario (Reg.# 100143218) and in Newfoundland and Labrador (Reg#08230). I have worked as a mining engineer for a total of six years since my graduation. My relevant experience for the purpose of the Technical Report is:
   - Project evaluation, mine planning, and financial analysis for NI 43-101 reporting.
   - Supervision of mine development at a copper mine in Chile from the pre-stripping phase to a fully operational mine.
   - Mining engineer at gold and copper open pit projects in Chile and USA.

4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

5. I visited the Foxtrot Project on August 26, 2015.

6. I am responsible for preparation of Sections 2, 15, 16, and 18 to 24 and parts of Sections 1, 25, 26, and 27 of the Technical Report.

7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.

8. I have had no prior involvement with the property that is the subject of the Technical Report.

9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

10. As of the date of this Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated 28th day of April, 2016

(Signed and Sealed) "*Ian C. Weir*"

Ian Weir, P.Eng.

KATHARINE M. MASUN

I, Katharine M. Masun, P.Geo., as an author of this report entitled "Technical Report on the Foxtrot Project, Newfoundland and Labrador, Canada" prepared for Search Minerals Inc. and dated April 28, 2016, do hereby certify that:

1. I am a Senior Geologist with Roscoe Postle Associates Inc. of Suite 501, 55 University Ave Toronto, ON, M5J 2H7.

2. I am a graduate of Lakehead University, Thunder Bay, Ontario, Canada, in 1997 with an Honours Bachelor of Science degree in Geology and in 1999 with a Master of Science degree in Geology. I am also a graduate Ryerson University in Toronto, Ontario, Canada, in 2010 with a Master of Spatial Analysis.

3. I am registered as a Professional Geologist in the Province of Ontario (Reg. #1583) and in the province of Newfoundland and Labrador (Reg. #08261). I have worked as a geologist for a total of 17 years since my graduation. My relevant experience for the purpose of the Technical Report is:
   - Review and report as a professional geologist on many mining and exploration projects around the world for due diligence and regulatory requirements
   - Project Geologist on numerous field and drilling programs in North America, South America, Asia, and Australia
   - Experience with Gemcom block modelling

4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

5. I visited the Foxtrot Project on August 26, 2015.

6. I am responsible for Sections 3 to 12, 14 and parts of Sections 1, 25, 26, and 27 of the Technical Report.

7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.

8. I have had no prior involvement with the property that is the subject of the Technical Report.

9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

10. As of the date of this Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated 28th day of April, 2016

(Signed and Sealed) "*Katharine M. Masun*"

Katharine M. Masun, M.Sc., MSA, P.Geo.

JOHN R. GOODE

I, John R. Goode, P.Eng., as an author of this report entitled "Technical Report on the Foxtrot Project, Newfoundland and Labrador, Canada" prepared for Search Minerals Inc. and dated April 28, 2016, do hereby certify that:

1. I am an independent metallurgical engineer, the principal of J.R. Goode and Associates, a citizen of Canada, and resident at Suite 1010, 65 Spring Garden Avenue, Toronto, Ontario, Canada, M2N 6H9.

2. I graduated in 1963 with the Honours Degree of B.Sc.(Engineering) in Metallurgy from the Royal School of Mines, Imperial College, London University, UK.

3. I am a member in good standing of both the Professional Engineers and Geoscientists Newfoundland & Labrador and Professional Engineers Ontario; a Fellow of both the Canadian Institute of Mining, Metallurgy and Petroleum and the Australasian Institute of Mining and Metallurgy; a member of the Society for Mining, Metallurgy, and Exploration, the Geological Association of Canada, and the Prospectors and Developers Association of Canada. I have been practicing my profession as a metallurgist for 52 years covering a wide variety of roles, locations, and commodities.

4. I have read the definition of "Qualified Persons" set out in NI 43-101 and as a result of my education, experience, and registration I am a Qualified Person as defined in NI 43-101.

5. I have not visited the Foxtrot Project site.

6. I am responsible for Sections 13 and 17 and parts of Sections 1, 18, 25, 26, and 27 of this Technical Report.

7. I have had no prior involvement with the property that is the subject of the Technical Report.

8. I am independent of the issuer applying all of the tests in section 1.4 of NI 43-101.

9. I have read National Instrument 43-101 and Form 42-101F1, and this Technical Report has been prepared in compliance with that instrument and form.

10. As of the date of this Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated 28th day of April, 2016

(Signed and Sealed) "*John R. Goode*"

John R. Goode, P.Eng.