



Annual Information Form
For the Year Ended 31 December 2010

Dated as of 31 March 2011

Annual Information Form

	Page
1. TABLE OF CONTENTS	
2. PRELIMINARY INFORMATION	1
2.1 Financial Statements	1
2.2 Disclosure Regarding Forward-Looking Statements	1
3. CORPORATE STRUCTURE	2
3.1 Overview	2
3.2 Intercorporate Relationships	2
4. GENERAL DEVELOPMENT OF THE BUSINESS	3
4.1 Background	3
4.2 Black Economic Empowerment	3
4.3 Distribution of Non-REE Subsidiaries	4
5. DESCRIPTION OF THE BUSINESS	4
5.1 General	4
5.2 The Zandkopsdrift Project	5
5.3 Risk Factors	14
6. SELECTED CONSOLIDATED FINANCIAL INFORMATION	22
6.1 Annual Information	22
6.2 Dividends	22
6.3 Foreign Accounting Principles	22
7. DESCRIPTION OF CAPITAL STRUCTURE & MARKET FOR SECURITIES	22
7.1 Capital Structure	22
7.2 Constraints	23
7.3 Rating	23
8. MARKET FOR SECURITIES	23
8.1 Trading Price and Volume	23
8.2 Prior Sales	23
9. DIRECTORS AND OFFICERS	24
9.1 Name, Occupation and Security Holding	24
9.2 Cease Trade Orders, Bankruptcies, Penalties or Sanctions	24
9.3 Conflicts of Interest	25
10. AUDIT COMMITTEE	25
10.1 Audit Committee Charter	25
10.2 Composition of the Audit Committee	25
10.3 Pre-Approval Policies and Procedures	26
10.4 Group External Auditor Service Fees	26
11. LEGAL PROCEEDINGS	26
12. INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS	26
13. TRANSFER AGENT AND REGISTRAR	26
14. MATERIAL CONTRACTS	27
15. INTERESTS OF EXPERTS	27
16. ADDITIONAL DISCLOSURES	27
SCHEDULE A – Audit Committee Mandate	28

2. PRELIMINARY INFORMATION

In this Annual Information Form (the "AIF"), Frontier Rare Earths Limited is referred to as "Frontier" or the "Company". All information contained herein is as at 31 December 2010 and in US\$, unless otherwise stated.

2.1 Financial Statements

This AIF should be read in conjunction with the Company's financial statements and management's discussion and analysis for the 12 months ended 31 December 2010. The financial statements and management's discussion and analysis are available on the Company's website at www.frontierrareearths.com and under the Company's profile on the SEDAR website at www.sedar.com.

All financial statements are prepared in accordance with International Financial Reporting Standards.

2.2 Disclosure Regarding Forward-Looking Statements

Certain of the statements that are not historical facts contained in this AIF (and the other disclosure documentation of the Company such as its annual and quarterly reporting to shareholders) are forward-looking statements that involve risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in the forward-looking statements.

Such forward looking statements include, among other things, statements regarding targets, estimates and/or assumptions in respect of reserves and/or resources, and are or may be based on assumptions and/or estimates related to future economic, market and other conditions. Factors that could cause actual results, developments or events to differ materially from those anticipated include, among others, the factors described or referred to under "Description of the Business - Risk Factors" herein and include unanticipated and/or unusual events. Most of such factors are beyond Frontier's ability to control or predict.

This AIF contains forward-looking statements which may not be based on historical fact. Such statements reflect the Company's current views with respect to future events and are subject to risks and uncertainties and are necessarily based upon a number of estimates and assumptions that, while considered reasonable by the Company, are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results, performance or achievements to be materially different from any future results, performance, or achievements that may be expressed or implied by such forward-looking statements, including, among others:

- the Company's strategy, growth, development and acquisition opportunities, return on existing assets, operational excellence and financial management;
- the Company's expectations regarding its revenue, expenses and operations;
- the Company's anticipated cash needs and its estimates regarding its capital and operating expenditures, capital requirements, needs for additional financing and the Company's ability to raise additional capital;
- the Company's estimates of future cash flows, financial condition and operating performances of the Company and its subsidiaries;
- the estimation of mineral resources and the realization of mineral reserves based on mineral resource estimates and estimated future development, if any, and possible variations of ore grade or recovery rates;
- the Company's competitive position and its expectations regarding competition from other producers globally;
- the Company's ability to maintain customer and supplier relationships;
- anticipated trends and challenges in the Company's business and the markets in which it operates, including with respect to potential new rare earth projects, supply outlook and growth opportunities;
- limitations of insurance coverage;
- the future price of and future demand for rare earth elements;
- the Company's use of net proceeds of the Initial Public Offering;
- the Company's anticipated dividend policy;
- economic and financial conditions;
- interest rates and foreign exchange rates;
- performance of counterparties in fulfilling their obligations;
- government regulation of mining operations, accidents, environmental risks, exploration risks, reclamation and rehabilitation expenses;
- title disputes or claims including Black Economic Empowerment initiatives; and
- the timing and possible outcome of pending regulatory and permitting matters.

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended.

Readers can identify many of these statements by looking for words such as "believe", "expects", "will", "intends", "projects", "anticipates", "estimates", "continues" or similar words or the negative thereof.

There can be no assurance that the plans, intentions or expectations upon which these forward-looking statements are based will occur. Such information is included, among other places, in this AIF under the headings "Description of the Business - Risk Factors".

Annual Information Form (continued)

2. PRELIMINARY INFORMATION (continued)

2.2 Disclosure Regarding Forward-Looking Statements (continued)

The forward-looking statements contained herein are made as of the date of this AIF and are expressly qualified in their entirety by this cautionary statement. Readers should not place undue reliance on the forward-looking statements, which reflect management's plans, estimates, projections and views only as of the date hereof. The Company undertakes no obligation to publicly revise these forward-looking statements to reflect subsequent events or circumstances, except as required by applicable law.

Actual results may differ materially from those anticipated. Readers are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein. Frontier disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise, except as required by applicable law.

3. CORPORATE STRUCTURE

3.1 Overview

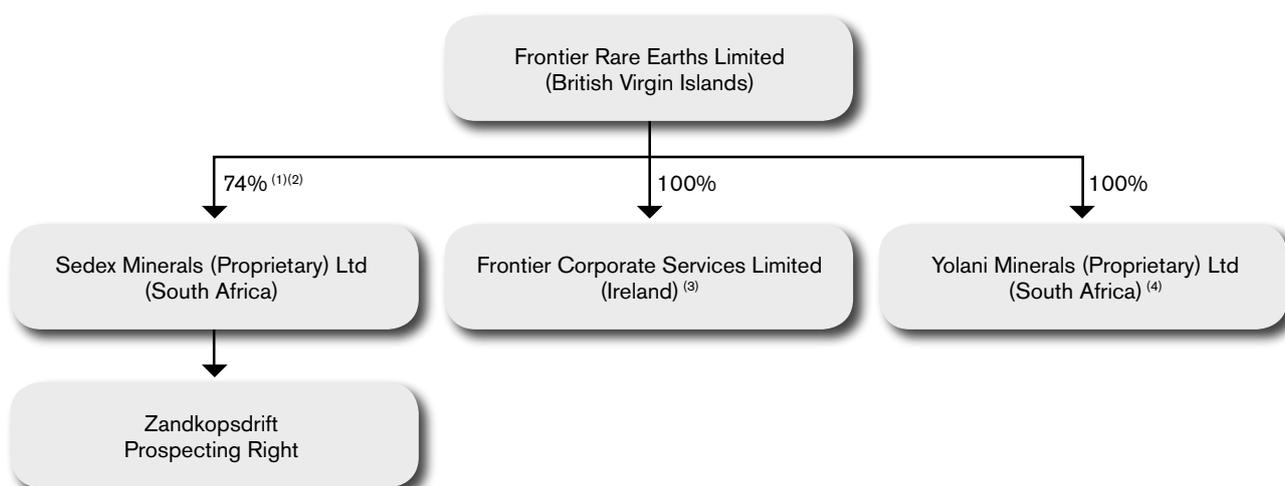
Frontier Rare Earths Limited was incorporated under the name of Frontier Minerals Limited as an international business company by a Certificate of Incorporation issued pursuant to the International Business Companies Act (British Virgin Islands) on 20 December 2002 and has been automatically re-registered as a BVI Business Company under the BVI Business Companies Act 2004 (as amended) (the "BVI Act"). On 14 June 2010, Frontier Minerals Limited filed a Change of Name Notice to change its name to Frontier Rare Earths Limited. On 22 September 2010, the Company filed an amendment to the Memorandum and Articles of Association of the Company (the "Company Articles") to increase the share capital and remove private company restrictions. On 5 November 2010, the board of Directors of the Company (the "Board") approved further amendments to the Company Articles to allow for the transfer of the Company's place of central administration to Luxembourg and to include additional shareholder protections.

The registered office of the Company is PO Box 3483, Road Town, Tortola, British Virgin Islands and the Company has its principal business office at 9 Allée Scheffer, L-2520 Luxembourg, Luxembourg.

The Company is incorporated, continued or otherwise organized under the laws of a foreign jurisdiction and resides outside of Canada. Although the Company has appointed Blakes Extra-Provincial Services Inc. as its agent for service of process in Canada, it may not be possible for investors to enforce judgments obtained in Canada against the Company.

3.2 Intercorporate Relationships

Set out below is the corporate structure of Frontier and its material subsidiaries. Frontier controls, directly or indirectly, the percentage of the voting shares of all of the entities presented in the chart below.



Notes:

(1) In addition to Frontier's direct interest in the Zandkopsdrift Project (as defined in section 4.1 herein) through its 74% shareholding in Sedex Minerals (Proprietary) Ltd, Frontier shall also be entitled to, in consideration for Frontier's funding of the BEE Shareholders' (as defined in section 4.2 herein) share of Sedex Minerals (Proprietary) Ltd's expenditure on the Zandkopsdrift Project up to bankable feasibility stage, a payment from certain BEE Shareholders following the completion of the bankable feasibility study equal to 21% of the then valuation of the Zandkopsdrift Project. This gives Frontier an effective 95% interest in the Zandkopsdrift Project until such payment has been received.

(2) In accordance with South African Black Economic Empowerment legislation, the Company has introduced Black Economic Empowerment partners to each of its projects. The 26% held by Black Economic Empowerment partners is split between Martin Van Zyl (5%) and the Namaqualand Empowerment Trust (21%).

(3) Frontier Corporate Services Limited provides advisory and related services exclusively to Frontier and its subsidiaries through a management services agreement.

(4) Yolani Minerals (Proprietary) Ltd. provides technical, management and related services to Frontier's subsidiaries in South Africa.

4. GENERAL DEVELOPMENT OF THE BUSINESS

4.1 Background

Frontier Rare Earths Limited was incorporated in 2002 with the objective of developing a portfolio of mineral exploration projects in South Africa. The Company's Directors, senior executives and consultants collectively have several decades of experience in the South African exploration and mining sector, particularly in the Namaqualand region, and this experience has been instrumental to the Company in being able to identify, secure and advance its exploration portfolio. Namaqualand is one of the longest established mining regions in South Africa, with a continuous history of mining ranging back over 150 years, and is considered by the Company to be a highly prospective area for, among other things, rare earths, base metals and uranium.

The Company's operational activities commenced in 2005 after several areas of exploration interest were identified in Namaqualand with potential for rare earths, base metals and uranium mineralization. Prospecting right applications were submitted for these areas. At the time, the Company had identified that rare earth elements in particular were likely to experience significantly increased and sustained demand driven by, among other things, the rapid emergence of "green technologies" and developments in the energy efficiency, automotive, digital technology, consumer electronics and other high-tech sectors. Furthermore, the reliance of Western economies on China for substantially all of its rare earth supplies, particularly heavy rare earths, had also created a compelling market opportunity for companies such as Frontier to identify and develop new, stable, Western sources of long-term rare earth supply.

Following the grant to the Company of the first prospecting rights in 2006, the Company commenced its exploration activities. A review of the Company's exploration activities and results was carried out in 2009, following which it was decided that the Company would focus exclusively on rare earths, specifically the Zandkopsdrift rare earth element project (the "Zandkopsdrift Project"), and that all non-rare earth projects would be divested by way of a dividend distribution of the entities which held such projects (the 'Spin-Out Subsidiaries' (See 4.3 below)) to Frontier's shareholders at the time. The assets that are in the process of being divested are relatively early-stage exploration projects targeting uranium and base metals. Following the completion of the distribution of the Spin-Out Subsidiaries, Frontier's principal asset will be the Zandkopsdrift Project.

The Zandkopsdrift Prospecting Right

Sedex Minerals (Proprietary) Ltd. ("Sedex"), a 74% owned subsidiary of the Company, was granted prospecting right 869/2007PR (the "Prospecting Right") by the South African Department of Mineral Resources ("DMR") on 5 September 2007. The Prospecting Right covers a total area of 58,862ha in the south western part of the Northern Cape Province of the Republic of South Africa and covers the Zandkopsdrift carbonatite complex. The Prospecting Right was granted to Sedex for an initial five year period and can be renewed for a further period of up to three years. The Prospecting Right remains in good standing and the five year expenditure commitment has already been fully satisfied. A mining right application can be made at any time up to the expiry of the Prospecting Right and a mining right can be granted for up to 30 years, with further renewals of up to 30 years each.

New Prospecting Right Application

In May 2010, Frontier submitted a prospecting right application covering rare earths (and certain other minerals) in the name of Victor Minerals (Pty) Ltd. ("Victor"). Victor is a 74% subsidiary of Frontier with the balance of 26% held by the Namaqualand Empowerment Trust (the "Trust") on the same effective commercial and other terms as are in place for Sedex. The prospecting right application submitted by Victor covers an area of approximately 75,000ha elsewhere in the Namaqualand region of the Northern Cape Province of the Republic of South Africa. This application has been accepted and remains under consideration by the DMR. If the application is successful and a prospecting right is granted, Victor will be required to incur exploration expenditure of approximately \$830,000 over a five-year period. Victor has no other assets or liabilities and is not currently considered to be material to the Company.

Initial Public Offering (the "Offering") and Funding

In November 2010 the Company successfully completed an Offering on the Toronto Stock Exchange. The gross proceeds of the Offering were CAD\$61.9m including the proceeds of the greenshoe. At the time of the Offering, shareholder and related party loans totalling CAD\$2.9m were also converted into equity leaving the Company debt free. Following the Offering the Company has sufficient funds to complete its two year work program on Zandkopsdrift to bring the deposit to prefeasibility and, subject to the results of the prefeasibility being positive, to a definitive feasibility study.

4.2 Black Economic Empowerment

In accordance with the relevant South African Black Economic Empowerment ("BEE") legislation, 26% of Sedex is held by BEE shareholders namely, the Trust (21%), a broad-based community trust established by the Company for the benefit of historically disadvantaged South Africans ("HDSAs") principally in the Namaqualand region of the Northern and Western Cape Provinces of South Africa, and Martin Van Zyl (5%) (the "BEE Shareholders"). The Company's BEE arrangements in Sedex satisfy the legislative requirement for 26% BEE participation by 2014.

The commercial arrangements between the Company and its BEE Shareholders are governed by a shareholders' agreement dated 22 February 2007, as amended 19 March 2010, among the Company, Yolani Minerals (Proprietary) Ltd. ("Yolani"), Mr. Van Zyl, the Trust and Sedex (the "Shareholders Agreement"). The Shareholders Agreement establishes those provisions typically included in agreements of this nature including, among other things, management, funding, pre-emption, transfer and dispute resolution.

Annual Information Form (continued)

4. GENERAL DEVELOPMENT OF THE BUSINESS (continued)

4.2 Black Economic Empowerment (continued)

The Shareholders Agreement provides that Mr. Van Zyl shall not be required to make any contribution to the capital or operating costs of Sedex until the completion of a bankable feasibility study on any asset or project of Sedex and after which he will be required to provide a pro rata share of the future capital and operating costs of Sedex in regard to such asset or project. The Shareholders Agreement also provides that the Trust will not be required to make any contribution to the capital or operating costs of Sedex until the completion of a bankable feasibility study on any asset or project of Sedex and after which the Trust will be required to provide its pro rata share of capital and operating costs for Sedex, in regard to such asset or project. In addition, upon the earlier of the completion of a bankable feasibility study for any project or asset of Sedex or Sedex producing positive operating cash flows resulting in funds being available for the declaration of dividends by Sedex, each such asset or project will be valued in accordance with standard international valuation practice. Within 30 days of the valuation being completed, the Trust will be required to pay to Frontier an amount equivalent to 21% of the valuation. It is anticipated that Frontier may provide vendor finance to the Trust, on terms to be agreed, to facilitate all or part of such payment to Frontier.

4.3 Distribution of Non-REE Subsidiaries

In June 2010, the Company began the process of spinning out its holdings in the following entities by way of a dividend distribution to the Company's then existing shareholders: HJC Minerals (Proprietary) Ltd, Bushmanland Minerals (Proprietary) Ltd, Namaqualand Minerals (Proprietary) Ltd, JPL Minerals (Proprietary) Ltd and GEO Minerals (Proprietary) Ltd (together, the "Spin-Out Subsidiaries"). The distribution of these holdings by way of an in specie dividend distribution has been approved by the Board and the Company's then existing shareholders. The shareholders who are the recipients of the distribution of the Spin-Out Subsidiaries have indemnified the Company against all losses, claims, actions, liabilities, judgments, demands, proceedings, investigations, damages, costs, charges and expenses which may arise in relation to the Company's activities in relation to such distribution.

Applications for the formal approval of this distribution by the DMR are being finalised. The accounts for the Spin-Out Subsidiaries have been consolidated into Frontier's accounts, although a liability reflecting the pending distribution has also been included therein. The total fair value of the Spin-Out Subsidiaries was approximately \$35,000 and the distribution of these holdings is not considered to have any material impact on Frontier's business or financial position. If for any reason the requisite DMR approval is not received to give effect to the distribution(s), which is not expected, the maximum potential liability to Frontier would be approximately \$190,000, which represents the combined committed future expenditure on the prospecting rights held by the Spin-Out Subsidiaries over the life of such prospecting rights. Failure to undertake any committed exploration expenditure would lead to the loss of the relevant prospecting permit(s).

5. DESCRIPTION OF THE BUSINESS

5.1 General

The Company is a British Virgin Islands incorporated, Toronto Stock Exchange listed, junior mineral exploration and development company with a primary focus on rare earth elements ("REE") in Southern Africa. The Company presently owns one rare earth project in South Africa, Zandkopsdrift, which has a substantial NI 43-101 compliant resource. The Company is currently focused on completion of a preliminary economic assessment and prefeasibility study for the Zandkopsdrift project by the end of 2011 and, subject to a positive conclusion, to initiate the preparation of a definitive feasibility study on Zandkopsdrift.

In addition to advancing the Zandkopsdrift Project the Company's existing permit areas have additional exploration potential which is being evaluated and additional prospecting rights in respect of other areas of interest for REE in the region have also been applied for.

The Company currently employs 35 people directly and has retained a number of external consultants and contractors working on various aspects of the project. Consulting companies providing services include SGS Minerals Services, MSA Group, Geoserve Exploration Drilling (Pty) Ltd., GeoAfrica Prospecting Services and Terratec Geophysical Services Namibia.

Following the Offering the Company is fully funded for the work program on Zandkopsdrift for at least the next two years. However, in the event that the work program is successful and a definitive feasibility study is completed, it is likely that the Company will require additional equity funding to advance the project through to production.

Should the Company successfully bring the Zandkopsdrift project into production, the market dynamics within the rare earth industry are currently very favourable. There is a shortage of supply of rare earths which is expected to support high prices in the short to medium term. Furthermore, the Zandkopsdrift Project has various advantages which should allow for lower capital and operating costs including proximity to infrastructure, a relatively high grade resource and a relatively high percentage of high value, scarcer rare earth elements.

5. DESCRIPTION OF THE BUSINESS (continued)

5.2 Zandkopsdrift

5.2.1 Project Description and Location

The Zandkopsdrift Project consists of a single prospecting right (number 869/2007PR) covering all minerals, including REE, but excluding diamonds, kaolin and heavy minerals issued by the DMR (the "Prospecting Right"). The Prospecting Right covers a total area of 58,862ha and is located in the south western part of the Northern Cape Province along the boundary with the Western Cape Province. The Zandkopsdrift Project is located approximately 450km north of Cape Town, approximately 130km from Springbok, the regional capital, with the nearest town of Garies located approximately 25km to the northeast. The Zandkopsdrift carbonatite complex is located at the north-eastern end of the area covered by the Prospecting Right.

Sedex, a 74% owned subsidiary of Frontier, was awarded the Prospecting Right by the DMR on 5 September 2007, for an initial period of five years. Sedex has the right to renew the Prospecting Right for an additional three years, subject to compliance with the requirements for renewal as set out in the South African Mineral and Petroleum Resources Development Act 28 of 2002 (the "MPRDA").

Sedex's minimum five year exploration expenditure commitment for the Prospecting Right has already been satisfied.

Sedex has complied with the BEE equity ownership requirements as laid down by the Mining Charter, as published under the provisions of Section 100(2)(a) of the MPRDA (the "Mining Charter"), and MPRDA through the Shareholders Agreement with HDSAs and entities that together hold the remaining 26% of the issued share capital of Sedex. In addition to its 74% shareholding in Sedex, Frontier will retain an additional 21% economic interest in the Zandkopsdrift Project until payment is received by Frontier from certain of the BEE Shareholders according to the terms of the Shareholder Agreement.

5.2.2 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Zandkopsdrift Project is situated in a region known as Namaqualand on the west coast of South Africa. Namaqualand is one of the longest established mining regions in South Africa and as such, there is good availability of mining and engineering expertise, skilled labour and support services in the region. Access to the Zandkopsdrift Project is excellent, with the site being served by several maintained all weather gravel roads which connect to Garies, located approximately 25km northeast of the Zandkopsdrift Project and Bitterfontein 30km to the southeast. The town of Garies is located approximately 450km north of Cape Town and is reached by the tarred National Highway (N7) that connects Cape Town and Namibia.

The nearest railhead is located at Bitterfontein approximately 30km from the Zandkopsdrift Project area. The rail line connects to Cape Town and to the Sishen-Saldanha bulk iron ore railway line that terminates at the port of Saldanha Bay, which is the deepest port in South Africa. In addition to handling the bulk of South Africa's iron ore exports, Saldanha Bay is the location of a smelter that processes ilmenite from Exarro's nearby Namakwa Sands heavy mineral sands mining operation and of an Arcelor-Mittal steel mill. The closest airport to the Zandkopsdrift Project is located at Springbok, approximately 110km north of Garies.

The Namaqualand region has a semi-arid climate. The region normally receives about 113mm of rain per year with most falling in the winter months (May to September). Average midday temperatures for the area range from 18.4°C in July to 29.5°C in February.

Electricity generation and reticulation is handled by Eskom, the South African electricity generation and distribution authority. The nearest high voltage (400kV) line is located at the Juno substation near Vredendal, approximately 100km to the south of the Zandkopsdrift Project. NamPower has plans to develop the 800MW Kudu Combined Cycle Gas Turbine power station at Oranjemund which is expected to feed the Namibian and South African power grids. This would result in the construction of a 400kV line that would pass through or very close to the Zandkopsdrift Project, although the date of development is not yet known. South Africa's only nuclear power station (which is also the only nuclear power station in Africa) is located at Koeberg, approximately 200km south of Saldanha Bay. Koeberg has two large turbine generators with a combined rating of 1800MW. Radioactive waste from Koeberg is disposed of and stored at the Vaalputs Radioactive Waste Disposal facility which is located approximately 100km south of Springbok and approximately 100km from the Zandkopsdrift Project area.

Telecommunication infrastructure in the area is generally good and is comprised of landlines serving the local community and cellular/digital telephone coverage in many parts of the Zandkopsdrift Project area including the area where the Zandkopsdrift carbonatite is located.

The project area is dominated by recent and surficial sand dunes that cover most of the western parts of the Prospecting Right area. Elevation in the area varies from 100 metres above mean sea level in the west to a maximum height of 302 metres above mean sea level at Rondawelkop in the northern parts of the Prospecting Right. The westerly flowing Groen and Swartdoring Rivers dissect the northern parts of the Prospecting Right area. The Zandkopsdrift carbonatite complex is located as an outcropping isolated hill (Swartkop) that rises approximately 40m from the surrounding plain.

Annual Information Form (continued)

5. DESCRIPTION OF THE BUSINESS (continued)

5.2 Zandkopsdrift (continued)

5.2.3 Exploration History

The Zandkopsdrift carbonatite has been subject to several geological, mineralogical and metallurgical investigations by academics as well as various exploration companies over the past 40 years. The carbonatite was initially investigated for its manganese potential in the 1950s, followed by phosphate and niobium in the 1970s and finally for its rare earth potential in the 1980s. The majority of the work at Zandkopsdrift was carried out by Anglo American during two phases of detailed exploration over a total period of six years.

Following previous reports of manganese occurrences and coupled with a regional aerial photographic targeting exercise, Anglo American acquired the prospecting rights over Zandkopsdrift for the purposes of evaluating the phosphate potential of the property and completed ground radiometric and geochemical surveys that culminated in a small drilling programme during the early 1970s. Metallurgical test work on the phosphates (including gravity separation, magnetic separation and flotation) were also completed by Anglo American, who subsequently withdrew from the project in 1975.

In 1977 Phelps Dodge carried out a short mineralogical investigation on the phosphate potential of the Zandkopsdrift area, which included a surface sampling programme and a single diamond drill hole. Phelps Dodge elected not to continue its work after consideration of the results and the exploration rights were allowed to lapse. In 1985, Anglo American re-acquired the mineral rights over Zandkopsdrift, this time following a change of focus to examine the project's rare earth potential. Following the identification of elevated lanthanum and cerium grades by ground scintillometer, magnetic and induced polarity/resistivity surveys, rock chip sampling and geological surveys between 1986 and 1988, Anglo American undertook several drilling programmes comprising a total of six percussion and 92 shallow "wagon" drill holes, aimed at delineating the REE resources.

This work programme was followed up with a 31 hole (totalling 2,522m) reverse circulation ("RC") and limited diamond drilling ("DD") programme in 1988. Elevated lanthanum and cerium grades were intersected in most drill holes, with elevated grades being noted in the upper, more weathered portions of the carbonatite complex. Due to the analytical method used by Anglo American at the time (X-Ray fluorescence), a majority of the assay results reported only the light rare earth elements ("LREE"), lanthanum and cerium with the entire suite of rare earth elements only being assayed on a limited number of holes using ICP-OES.

Material drawn from the various drilling campaigns was used by Anglo American to determine the deposit's metallurgical and mineralogical characteristics. Despite some encouraging results from its test programme, Anglo American decided to withdraw from the project in late 1988. No further work was carried out over the project area until Frontier commenced work, having secured the Prospecting Right in 2007.

Frontier has acquired all of the core, pulps, samples, data and results from the exploration work programmes undertaken by Anglo American.

5.2.4 Geological Setting

The Zandkopsdrift Project is located within the southern parts of the tectonostratigraphic Bushmanland Terrane of the Proterozoic age Namaqua - Natal Province. The Namaqua - Natal Province forms an arcuate belt along the southern and western margins of the Archaean age Kaapvaal craton. To the west, the Bushmanland Terrane rocks are overprinted by thermal deformation effects related to the Pan African age (500Ma) Gariep Orogeny and overlain by younger Vanrhynsdorp and Karoo Group sediments to the south. In the extreme southern parts, the Bushmanland Terrane is intruded by the Cretaceous age Koegel Fontein Complex, of which the Zandkopsdrift carbonatite is thought to be part.

The Koegel Fontein Complex, a Cretaceous age alkaline complex, comprises a variety of alkali granites, syenites as well as intrusives of a carbonatitic affinity, such as found at Zandkopsdrift. The Koegel Fontein Complex can be considered as an equivalent to other similar Cretaceous alkaline complexes of Damaraland in Namibia (e.g. Brandberg, Messum, Okonjeje and Grosse Spitzkoppe).

The Prospecting Right covers a large area of the northern margins of the Koegel Fontein Complex and underlying Bushmanland granite-gneiss terrane which, to a large extent, is covered by surficial Quaternary sands and unconsolidated sediments. The Zandkopsdrift carbonatite is exposed as a well defined outcropping hill extending 40m above the surrounding plain at the north eastern end of the Prospecting Right.

Drilling and limited outcrop mapping indicate the intrusion to be dominated by carbonatite breccias, glimmerites and calcio-carbonatites. It is extensively altered and, at surface, all outcrops can be noted to be intensely replaced and altered through surficial weathering. The most visible aspect of supergene alteration is the pervasive presence of secondary manganese, limonite and illite. The manganiferous gossans contain an unusual suite of minerals such as churchite, goyazite-gorcexite, pyrochlore and carbonate-apatite. Rare earth element mineralisation, radioactivity and anomalous zinc, niobium and phosphorus are associated with the complex.

The carbonatite complex appears to be dominated by hypabyssal carbonatite facies, but much of this is clearly overprinted by possible metasomatic alteration. It is important to note that this part of South Africa has deep soil profiles: this as a result of past palaeo-climatic weathering events and therefore extensive supergene alteration and mineralogical replacement has also occurred at Zandkopsdrift.

Resolution of the carbonatite's detailed geology and relative timing of the various mineralised phases forms an integral part of the current and planned exploration activities at Zandkopsdrift. The other unexplored parts of the Prospecting Right remain prospective for the location of additional similar intrusive/carbonatite complexes, and this will require the input of advanced geochemical and geophysical techniques in order to "look through" the veneer of surficial Quaternary age sedimentary cover that blankets a majority of the Prospecting Right to the west.

5. DESCRIPTION OF THE BUSINESS (continued)

5.2 Zandkopsdrift (continued)

5.2.5 Mineralisation

Field mapping, petrographical and mineralogical work has determined that supergene alteration has modified the elemental composition and mineralogy of the original carbonatite lithologies at Zandkopsdrift. These studies show that the majority of REE bearing minerals comprise of late stage, probably supergene, monazite and gorceixite, although a number of other minerals such as cheralite and crandallite occur. To date the minerals have been identified as fine grained and often having intergrown textures.

Orientation of mineralisation at Zandkopsdrift has not yet been accurately determined due to the current limited understanding of the geometry and nature of the carbonatite intrusion. However, due to the typical style and nature of carbonatite intrusive events, all lithological contacts are assumed to be vertical. Although this may be the case at Zandkopsdrift, an extended period of deep weathering and a component of supergene enrichment has resulted in a broad horizontal REE grade distribution across the carbonatite intrusive with higher grades being associated with deeply weathered (and in some cases supergene enriched) zones that extend up to 80m in depth. These varied weathering profiles are assumed to be controlled by the mineralogy and grain size, as well as overprinting by later stage structures or faults which would have been responsible for the introduction of oxidising or weathering fronts into deeper parts of the carbonatite. This type of upgrading of REE demands a specialized weathering process or processes and only a small number of REE deposits are known, of which Zandkopsdrift is one, in which this type of significant enrichment has occurred.

In conclusion, the main REE bearing minerals identified are monazite and gorceixite, and the proposed metallurgical studies will focus on the extraction, beneficiation and processing of these minerals that generally occur within the upper, near surface, deeply weathered parts of the Zandkopsdrift carbonatite.

5.2.6 Exploration and Evaluation

Since acquiring the Prospecting Right at Zandkopsdrift, Frontier's exploration and evaluation activities have principally comprised of:

- Data compilation and re-interpretation of Anglo American data;
- Regional and high resolution ground magnetic and radiometric surveys;
- Petrographical studies and mineralogical analysis;
- Validation drilling, pulp audit and re-assay programme;
- REE sampling and analyses;
- Mineral processing and metallurgical testing review by SGS;
- Diamond drilling for detailed metallurgical studies;
- Reverse circulation drilling for sampling and ore body delineation; and
- Completion of a Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") compliant resource estimate.

Data Compilation and Re-interpretation of Anglo American Data:

In March 2008, Frontier contracted Mr. GL Palmer (a former Anglo American project geologist at Zandkopsdrift) to carry out a review of all historical data generated by Anglo American. Mr. Palmer based his work on Anglo American drilling and assay data generated from the 31 RC and two DD holes completed in 1988. The results of Palmer's work were effective in assisting Frontier in delineating areas for carrying out validation drilling. In November 2008, J. Wilson & Associates CC was appointed to provide a preliminary economic assessment of the Zandkopsdrift carbonatite. This work utilized all of the historical Anglo American data in order to define preliminary grade distribution and generation of pit optimisation models. Mineralisation was modelled to a maximum depth of 130m below surface and a stripping ratio of 0.10 to 1 was estimated.

In February 2009, the Japan Oil, Gas and Metals National Corporation ("JOGMEC") completed a site visit to the Zandkopsdrift Project taking surface and diamond core samples for the purposes of carrying out full REE analyses as well as additional mineralogical studies and subsequently prepared and delivered a report on the same, dated 19 August 2009 (the "JOGMEC Report").

The conclusions of the JOGMEC Report were that the broad lithological sequence at Zandkopsdrift (from surface) intersected by drill holes was that of a typical weathered profile of a carbonatite and that the mineralised zone corresponded well with that of the lithologically distinct and deeply weathered iron-manganese wad and crandallite rich zone identified at Zandkopsdrift.

Frontier commissioned MSA to produce a National Instrument 43-101 ("NI 43-101") compliant Technical Report and resource estimate for the Zandkopsdrift Project. The first stage of this work involved the capturing and validation all of Anglo American's hardcopy geological, drilling and sample data and integration into a custom designed relational exploration database as well as incorporation into ArcGIS, a geographical information system. Similar databases were also designed by MSA to house Frontier's validation drilling and pulp re-assay data. In order to validate the Anglo American drilling and sampling data acquired by Frontier and in preparation for the completion of the Technical Report, MSA recommended, among other things, that Frontier undertake a validation drilling and pulp re-sampling programme.

Based on the outcome of the validation and pulp audit exercise, Frontier commissioned Hayes Drilling of Springbok, South Africa to complete a 13 hole validation RC drilling programme. All aspects of the validation drilling programme were managed by MSA. In addition, MSA also completed an audit of all of Anglo American's historical pulps.

The exploration work completed to date by Frontier has been effective in confirming and validating the historic work carried out by Anglo American in the 1980s. Results from the validation drilling also confirmed the integrity of the Anglo American datasets, as well as existing pulp samples, and this data has been used to calculate the NI 43-101 compliant resource estimates contained in this summary.

Annual Information Form (continued)

5. DESCRIPTION OF THE BUSINESS (continued)

5.2 Zandkopsdrift (continued)

5.2.6 Exploration and Evaluation (continued)

Regional and High Resolution Ground Magnetic and Radiometric Surveys:

Due to the poor exposure of the entire carbonatite complex, Frontier completed a ground magnetic and radiometric survey in order to delineate the carbonatite's dimensions. The surveys were carried out using a G5 Proton Magnetometer and RadEye PRD scintillometer respectively on 100m spaced lines with readings being taken every 10m. Results from the surveys were effective in delineating the main pipe and some of the peripheral pipes. Follow-up pitting by Frontier over suspected satellite pipes was successful in identifying several fine grained peloidal fragmental carbonatite breccias. This, coupled with the presence of a known REE enriched (4.5% lanthanum and 7.2% cerium) carbonatite plug (Klipheuvel) located 6km to the southwest of Zandkopsdrift carbonatite, indicates that these satellite plugs present additional targets in their own right, for either higher grade deposits or heavy rare earth element ("HREE") – enriched deposits.

Petrographical Studies and Mineralogical Analysis:

Additional mineralogical and petrographical work was completed over selected samples from Zandkopsdrift by Mr. Pete Siegfried. Samples were selected from diamond drillcore and submitted for mineralogical evaluation using x-ray diffraction (Geological Survey of Namibia) and transmitted light petrography. These studies confirmed the identification of the ubiquitous presence of late stage, hydrothermal REE bearing mineral gorceixite, as well as secondary supergene monazite and crandallite. These conclusions suggest that Zandkopsdrift has undergone significant late stage, hydrothermal alteration with a large supergene overprint.

5.2.7 Validation Drilling, Pulp Audit and Re-Assay Programme

Previous drilling programmes at Zandkopsdrift have been completed by Anglo American and Phelps Dodge at varying scales and intensities. Although the drilling method is known in each case, sampling methodology and quality assurance and quality control ("QA/QC") data were not available.

In order to produce a NI 43-101 compliant resource estimate over Zandkopsdrift, Frontier undertook a validation exercise of Anglo American's assay database, pulps and drill hole data in November and December 2009. This exercise had the following key objectives:

- Audit all existing Anglo American drilling pulps and samples to assess integrity for re-assay for the full REE suite by inductively coupled plasma – mass spectrometry ("ICP-MS"). This process also identified specific drill holes where Anglo American's pulp and chip samples had lost sample integrity (i.e. damaged and lost samples) and therefore had to be re-drilled.
- Validate the results of the Anglo American historical drilling through the twinning of at least 10% of Anglo American's holes in order to confirm lithology and grade distribution as well as to establish confidence in the Anglo American database and drilling and sampling methods.
- Re-assay all audited and existing Anglo American pulps for the full REE suite using ICP-MS.

In late 2009, Frontier completed a total of 13 RC holes (for a total of 1,005m) over the Zandkopsdrift carbonatite. Frontier focused its drilling and validation efforts over areas based on results derived from Anglo American's work, with an additional five holes being drilled to provide samples for assay (due to Anglo American's original pulps not being available or suitable). All validation holes and re-drill holes were located within 5m of the Anglo American collars which are well preserved.

Frontier engaged MSA to carry out all logging, sampling and management of the drilling programme. Drilling was carried out by Hayes Drilling and all holes (including all historical drill hole collars) were surveyed by a professional surveyor using a Differential GPS. A high resolution digital elevation model was also completed for the purposes of NI 43-101 compliant resource estimation, along with downhole gamma density and magnetic susceptibility logging over all holes, including two historical holes. Magnetic susceptibility and total count scintillometer readings were taken over every sample interval (1m) and captured by the geologists on site. Each hole was logged using Anglo American's original lithological logging codes and descriptions in order to compare lithologies between holes for the purposes of the validation exercise.

Validation Conclusions

The drilling completed by Frontier was successful in validating Anglo American's original drilling and sampling programme and confirmed the presence and enrichment of REE mineralisation within highly weathered phase(s) of the Zandkopsdrift carbonatite.

5.2.8 REE Sampling and Analyses

Frontier completed two sampling programmes over Zandkopsdrift:

- sampling of historical Anglo American pulps; and
- sampling of RC cuttings from the 2009 validation drilling programme.

Following the completion of a pulp and sample audit, all of the historical Anglo American pulps required homogenisation and splitting. As the Anglo American pulps had been stored in their containers for several years and were transported from the Anglo American laboratories in Johannesburg to Kimberley for storage and then onto Springbok when acquired by Frontier, the possibility existed that some segregation within the sample pulps had taken place.

5. DESCRIPTION OF THE BUSINESS (continued)

5.2 Zandkopsdrift (continued)

5.2.8 REE Sampling and Analyses (continued)

The samples were homogenised using a modified "cone and quarter" method. Using this method, samples were poured from the container onto two overlapping sheets of glossy paper in a zigzag fashion across the join of the overlapping sheets. The top sheet, containing approximately half the sample was then lifted and turned 180° and the sample poured on top of the sample contained on the lower sheet. This exercise was repeated and the sample poured back into the original container.

Fifteen grams of the sample material was then weighed and placed in a small zip-lock plastic bag. The bag was labelled using a permanent marker, with a ticket number from a book of printed tickets (containing two tear-off numbered segments and a numbered stub with place to make notes) and one ticket was torn off and placed in the bag. The Anglo American sample number was written on the stub of the ticket. The bag was then rolled up, zip-locked and taped closed using sellotape and placed in a sample box ready for shipment to the analytical laboratory. From every tenth sample a duplicate was prepared. If there was insufficient sample left, the next sample containing sufficient material was duplicated. The entire process was implemented and supervised by Frontier geologists.

MSA and Frontier geological staff and assistants were present during the drilling of all RC holes and were responsible for taking of samples for assay. One metre samples were taken from RC drilling. Samples were collected from the cyclone into a large plastic bag and then weighed on a scale and the weight noted by the geologist or geological assistant. This was followed by repeated splitting of the sample using a riffle splitter until a representative sample of approximately 2kg to 2.5kg was taken for analysis at the laboratory. A small sample was taken from the bag and placed in a chip tray for visual inspection and logging by the geologist who also took magnetic susceptibility and total gamma readings from every metre. Major water intersections encountered by drilling were also captured by the geologist on site. The riffle splitter was cleaned with compressed air and a rubber mallet after every sample to diminish contamination. The cyclone was blown out with compressed air after every rod drilled.

Wet or damp samples were split utilising the "cone and quarter" method until a representative sample was obtained. The sample was placed on a clean plastic sheet, formed into a cone and split into four using a plastic covered edge. Opposite quarters were then composited again and coned or split accordingly until the representative sample was obtained and then bagged. All drill samples for the Zandkopsdrift Project were sealed in plastic sample bags at the drill site and delivered directly to Frontier personnel in Springbok, where samples were checked and sorted into batches. They were then sent by road to the preparation facility at Scientific Services Laboratories in Cape Town for further processing.

Frontier contracted Terratec Geophysical Surveys Namibia to complete a downhole density survey over Frontier's validation holes in order to obtain accurate density and magnetic susceptibility measurements for the purposes of NI 43-101 compliant resource estimation. A total of 15 holes were surveyed (all of the validation holes plus two of the historical holes) for a total of 1,088m surveyed.

Activation Laboratories Limited in Ancaster, Ontario, Canada was selected as the primary laboratory for the analysis of the Zandkopsdrift samples, and the method used was lithium metaborate/tetraborate fusion of 0.2g of sample followed by ICP-MS analysis. Intertek-Genalysis Laboratory Services in Maddington, Western Australia, was selected as the referee laboratory.

Mineral Processing and Metallurgical Testing Review by SGS:

A series of metallurgical tests and mineralogical analyses were undertaken on Zandkopsdrift by Anglo American and others. SGS undertook a review of the data from this work with the objective of establishing whether the Zandkopsdrift orebody was likely to be amenable to the application of conventional REE extraction technologies. SGS concluded as follows:

- the available mineralogy reports indicate that there appears to be considerable potential for upgrading by flotation of a majority of the REE containing minerals;
- results from hydrometallurgical treatment of samples from the Zandkopsdrift orebody demonstrate that a number of leaching options gave very good levels of recovery, with in excess of 90% of REE recovered to solution which suggests that the REE bearing minerals at Zandkopsdrift are likely amenable to conventional extractive processes; and
- preliminary test results indicate the amenability of the Zandkopsdrift orebody to both acid and caustic cracking and as such the development of a flowsheet for further recovery of either mixed or individual rare earth compounds would likely follow established industrial routes for rare earth recovery.

5.2.9 Security of Samples

All drilling and pulp samples were kept under supervision of Frontier staff at the exploration base until dispatch. Samples were sent to Frontier's storage facility in Springbok for checking by senior Frontier staff and then road freighted to Scientific Services Laboratory in Cape Town for preparation. Once a batch of between 250 and 500 samples was prepared, the boxes containing the samples were taped shut and the whole parcel wrapped in bubble wrap. The samples were then shipped to the primary or referee laboratory, as appropriate, using Corporate Couriers based in Cape Town. Corporate Couriers would advise Frontier when the batch of samples had been delivered at their destination laboratory. The destination laboratory would confirm receipt of the samples by email.

MSA considers that there was little opportunity for sample tampering by an outside agent.

Annual Information Form (continued)

5. DESCRIPTION OF THE BUSINESS (continued)

5.2 Zandkopsdrift (continued)

5.2.10 Mineral Resource Estimates

The Zandkopsdrift resource estimation exercise was based on the borehole data as supplied by Frontier, and was generated from a database compiled and validated by MSA from the Frontier validation drilling programme as well as from re-assays of the pulps from Anglo American's historical work acquired by Frontier. An internal MSA audit procedure and itemised checklist was utilised for the assessment of data quality and integrity. The input database consisted of drill hole sample data including collar, lithology, sampling and assay data. The database included lithological data, assays for all REE, a selection of major element oxides and downhole survey data for some boreholes.

In total the 2010 input database contains 2,522m from Anglo American surface boreholes. This comprised 276.33m in diamond cored boreholes and 2,246m in RC boreholes. In addition, there are 1,005m of RC drilling in 13 boreholes from the 2009 Frontier drilling programme, giving a total of 3,527m of drilling. There is a total of 1,958m assayed for individual REE analyses in the resource estimation input drilling database.

Datamine® Studio 2 and Studio 3 software was used for three-dimensional geological modelling and resource estimation. Snowden Supervisor software was used for the geostatistics and univariate statistical analysis.

The modelled mineralised envelope was generated from the outline of the main carbonatite body, further constrained by a polygon joining the outer ring of borehole collars, expanded by 50m, being half the average borehole spacing. Lithologies within the cylindrical body were not modelled as, at present, there is no defined preferential host to the mineralisation. As no significant variation was observed in the relative distribution of the individual rare earth oxides (or "REO") across the assay database, a total rare earth oxides (or "TREO") grade-only approach was adopted for the purposes of this resource estimation exercise.

A wire frame was created for the cylinder of the main carbonatite body, later cut by the ground surface generated from the surveyed topography and from borehole collars. Ordinary Kriging was selected as the grade estimation method for this resource estimation exercise.

A minimum of three and a maximum of five samples were utilised for an estimate. No restrictions were placed on the minimum number of drill holes since this could have resulted in creating estimates between drill holes but not at the drill hole itself, in areas of lower drill hole density. Missing estimations of density data were assigned a specific gravity of 2.3, which is the average of the results from the holes that were surveyed. Parent cell estimation was applied to the sub-cell.

Considering the intricate wireframe truncations on the data and in some areas, sparse drilling data and uneven drill hole spacing from twinned holes, it is considered that the Zandkopsdrift estimates are appropriate and confirm a current, moderate level of suitability of the grade estimation parameters used, befitting indicated and inferred status. The grade estimation, based on all drill hole data is low, or conservative by approximately 7.2%, which represents only a marginal estimation bias. The inferred category blocks are under-estimated relating to areas of sparser borehole coverage.

Those resources within a 50% multiple of the variographic range (the search radius for samples) are classified as indicated and the remainder classified as inferred. No geological loss factors were applied for the resources, which are expected to be open-castable.

Mineral Resource Estimates

The following NI 43-101 compliant resource estimate has been declared for Zandkopsdrift:

Table 3: Zandkopsdrift indicated resources ⁽¹⁾

TREO Cut-Off %	Mt	TREO grade %	Contained TREO '000 t
1.0	22.92	2.32	532

Table 4: Zandkopsdrift inferred resources ⁽¹⁾

TREO Cut-Off %	Mt	TREO grade %	Contained TREO '000t
1.0	20.81	1.99	415

Notes:

(1) The mineral resource classifications that have been applied are in accordance with CIM Definition Standards. The mineral resource estimates reflect 100% of the estimated resources at Zandkopsdrift. Frontier's 74% owned subsidiary, Sedex, has complied with the BEE equity ownership requirements as laid down by the Mining Charter and MPRDA through shareholder agreements with HDSA individuals and entities that together hold the remaining 26% of the issued share capital of Sedex. In addition to Frontier's direct interest in the Zandkopsdrift Project, through its 74% shareholding in Sedex, Frontier shall also be entitled to, in consideration for Frontier's funding of the BEE Shareholders' share of Sedex's expenditure on the Zandkopsdrift Project up to bankable feasibility stage, a payment from certain of the BEE Shareholders following the completion of the bankable feasibility study equal to 21% of the then valuation of the Zandkopsdrift Project.

5. DESCRIPTION OF THE BUSINESS (continued)

5.2 Zandkopsdrift (continued)

5.2.10 Mineral Resource Estimates (continued)

In summary, there are approximately 22.92Mt containing 532,000t of TREO at an average grade of 2.32% at Zandkopsdrift in the indicated resource category and an additional 20.81Mt containing 415,000t of TREO in the inferred resource category applying a 1% TREO cut-off. A cut-off grade of 1% has been selected on the basis of initial capital and operating cost studies, and this forms the basis for the current resource estimate.

It is important to note that there are a series of higher grade zones within the overall resource estimate at Zandkopsdrift that are considered to be of sufficient size to be exploited as discrete units within the deposit. Three zones have been identified and are referred to as A Zone, B Zone and C Zone in Tables 5 and 6 below and are defined by cut-off grades of 1.5%, 2.5% and 3.5% TREO, respectively. The B Zone is contained within the A Zone and the C Zone contained within the B Zone. These zones will be the primary focus of further work on Zandkopsdrift.

Table 5: Indicated mineral resources – A, B and C Zones

Zone	TREO Cut-Off %	Mt	TREO grade %	Contained TREO '000t
A	1.5	16.55	2.74	453
B	2.5	7.83	3.67	287
C	3.5	3.23	4.57	148

Table 6: Inferred mineral resources – A, B and C Zones

Zone	TREO Cut-Off %	Mt	TREO grade %	Contained TREO '000t
A	1.5	12.89	2.48	319
B	2.5	4.52	3.61	163
C	3.5	1.54	4.72	73

Some of the notable high grade intercepts encountered at Zandkopsdrift are tabulated and shown in Table 7.

Table 7: Significant intercepts

Drill hole	Intersection (m)	Average TREO %
ZKR36	0-58	4.3
ZKR08	26-33	5.8
ZKR13V	19-42	5.4
ZKR28V	3-17	3.6
ZKR12	22-46	5.6
ZKR15	46-56	4.5
And	76-86	4.1
ZKD38	0-19	4.4
And	43-49	11.4
Including	44-45	18.9
ZKR27V	52-55	4.8
And	90-108 ⁽¹⁾	3.3
ZKR33V	7-65	4.0
ZKR07	15-35	4.1
ZKR26	35-51	3.5
ZKR16	35-49	3.2

Note:

(1) Hole terminated in mineralization.

Annual Information Form (continued)

5. DESCRIPTION OF THE BUSINESS (continued)

5.2 Zandkopsdrift (continued)

5.2.10 Mineral Resource Estimates (continued)

Rare Earth Oxide Distribution

Table 8 shows the proportion of each individual REO in the borehole database.

Table 8: Relative distribution of REO by weight in the borehole database

REE	REO	%
Lanthanum	La ₂ O ₃	25.36
Cerium	Ce ₂ O ₃	44.20
Praseodymium	Pr ₂ O ₃	4.55
Neodymium	Nd ₂ O ₃	15.74
Samarium	Sm ₂ O ₃	2.31
Europium	Eu ₂ O ₃	0.59
Gadolinium	Gd ₂ O ₃	1.44
Terbium	Tb ₂ O ₃	0.17
Dysprosium	Dy ₂ O ₃	0.77
Holmium	Ho ₂ O ₃	0.13
Erbium	Er ₂ O ₃	0.32
Thulium	Tm ₂ O ₃	0.04
Ytterbium	Yb ₂ O ₃	0.23
Lutetium	Lu ₂ O ₃	0.03
Yttrium	Y ₂ O ₃	4.12
TOTAL		100.00

It should be noted that the proportion of the highest value heavy rare earth elements, namely europium, terbium and dysprosium, are contained at elevated levels at Zandkopsdrift by comparison to a number of other similar deposits being evaluated globally. It is also noteworthy that both the thorium and uranium content of the Zandkopsdrift resource are relatively low, at grades of between 215ppm and 235ppm and 60ppm to 70ppm respectively.

Block Modelling and Grade Continuity

There is moderate to good continuity of higher-grade blocks within the resource with up to 60m of vertical continuity, from surface, of blocks above 3% TREO in the northern arm of the mineralised body, as well as up to 80m in the eastern lobe of the deposit, also from surface. These features are best suited to further analysis using dedicated open-pit optimisation software such as Whittle 4X.

The following conclusions were drawn from the mineral resource estimation exercise:

- the mineralisation at Zandkopsdrift resembles a series of stacked, irregular layers;
- the currently delineated resources at Zandkopsdrift are the result of a purely grade-continuity, or grade shell approach;
- additional drilling data will assist improved variography analysis; and
- it is important to determine the controls on the mineralisation in order to improve the confidence level of resource classification.

5.2.11 Mining Operations

Should the Zandkopsdrift project reach production it is anticipated that the mine will be a low cost open-pit operation. The stated objective is to develop a mine and separation facility capable of producing 20,000 tonnes of separated rare earth oxides per annum. Initial estimates of capital expenditure, operating expenditure and mine life are expected to become available in Q3/Q4 2011 following the completion of scoping and prefeasibility studies.

5. DESCRIPTION OF THE BUSINESS (continued)

5.2 Zandkopsdrift (continued)

5.2.12 Exploration and Development

The Company is undertaking further resource definition drilling in parallel with detailed metallurgical test work on Zandkopsdrift along with exploration in other parts of the area covered by the Prospecting Right including the 30 satellite intrusives/plugs already identified. It is important that the exploration process follows a phased approach, is results-driven and is designed to add value. Continued application of industry best practice procedures, as has been the case for the work carried out to date, through a documented standard procedures manual is essential, to ensure that all work is executed correctly and is fully auditable.

The following 24 month (2011-2012) phased work programme is recommended to fully and further define and evaluate the economic potential of the Zandkopsdrift Project and would principally involve:

Phase 1

- Completion of bench scale metallurgical test work in tandem with continued infill drilling to optimise concentrate grades and to further characterise optimal REE recoveries at Zandkopsdrift. The results of this work should be sufficient to allow a scoping study to be undertaken on the project.
- Infill drilling to upgrade the material to higher confidence mineral resource categories, as well as step out drilling to potentially expand the existing mineral resource base. In addition, a program of deeper/stratigraphic drilling is planned to identify and test depth extensions of the ore body to allow for potential future mine optimisation studies and planning.
- A Lidar survey is planned covering an area of 7980 ha.
- A helicopter borne magnetic and radiometric survey will be carried out over the entire Prospecting Right area.
- Baseline environmental impact studies, social impact studies, geotechnical studies and geohydrological studies.
- The above work will allow for a preliminary economic assessment and a pre-feasibility study to be completed.

Phase 2

Although the commencement of Phase 2 is partly contingent on receiving positive results from Phase 1, some work is expected to be undertaken in parallel. In summary the Phase 2 work programme would principally involve:

- Additional infill drilling for resource estimation/metallurgical studies as required based on the results from Phase 1.
- Phase 2 metallurgical test work including development test work, flow sheet evaluation and selection and pilot plant testing. Bulk sampling of various ore horizons may be required to optimise engineering and metallurgical flow sheet design.

Based on a positive outcome from the Phase 2 work programme, Frontier will be in a position to complete a definitive feasibility study over the Zandkopsdrift Project in order to assess the full techno-economic, social and environmental aspects of exploiting the deposit.

Other Exploration

- Sampling, evaluation and preliminary drill testing of target satellite plugs and pipes identified to date at Zandkopsdrift.
- Initiation of regional exploration to target additional carbonatite intrusives within the existing Prospecting Right and to include areas proximal to the Koegel Fontein alkaline complex.
- Initiation of sustainable development initiatives including energy and water conservation, carbon balance (cost), emission control, clean technology applications, etc.
- Drill testing of identified targets within existing satellite pipes and plugs as well as from exploration carried out elsewhere in the Prospecting Right area.

5.2.13 Drilling Work 2011

Diamond Drilling for Detailed Metallurgical Studies: Detailed metallurgical work will be carried out to determine a flowsheet for extracting REE from the ore. Four sites on Zandkopsdrift have been selected for metallurgical test work and three PQ3 diamond holes have been drilled at each site. At the end of February ten holes had been completed for 732 metres. Core selected from each site will be shortly submitted to SGS Minerals Services in Canada for metallurgical testing.

Reverse Circulation Drilling for Sampling and Ore Body Delineation: Drilling using a reverse circulation percussion rig has commenced on Zandkopsdrift. The purpose of this drilling is to collect samples for ICP-MS analysis as well as to delineate the extent of the carbonatite body. At the end of February 2011 nine holes had been completed for 755 meters.

A more detailed drilling update on the Zandkopsdrift project will be issued shortly.

Annual Information Form (continued)

5. DESCRIPTION OF THE BUSINESS (continued)

5.3 Risk Factors

5.3.1 Risks relating to the Company's Exploration and Development Activities

- a) The exploration for and development of mineral deposits is and will be subject to inherent operational risks and hazards:

The exploration for, and development of, mineral deposits involves significant risks which even a combination of careful evaluation, experience and knowledge may not eliminate. Mineral exploration and development are highly speculative and few properties that are explored are ultimately placed into commercial production. The investment involves a high degree of risk and should only be considered by those persons who can afford a total loss of their investment. Locating mineral deposits depends on a number of factors, not the least of which is the technical skill of the exploration personnel involved. While the discovery of a mineral deposit may result in substantial rewards, few properties which are explored are ultimately developed into producing mines. Major expenses may be required to locate and establish additional mineral reserves, to develop metallurgical processes and to construct mining and processing facilities at a particular site. Whether a mineral deposit will be commercially viable depends on a number of factors, some of which are: the particular attributes of the deposit, such as size, grade and proximity to infrastructure; rare earth prices which are highly cyclical; and government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of minerals and environmental protection. The exact effect of these factors, most of which are outside of the Company's control, cannot be accurately predicted, but the combination of these factors may result in Frontier not receiving an adequate return on invested capital.

Mining operations, such as those potentially proposed at the Zandkopsdrift Project, generally involve a high degree of risk. Such operations are subject to all of the hazards and risks normally encountered in the exploration for, and the development and production of minerals, including unusual and unexpected geologic formations, seismic activity, rock bursts, cave-ins, flooding and other conditions involved in the drilling and removal of material, any of which could result in damage to, or destruction of, mines and other producing facilities, damage to life or property, environmental damage and possible legal liability. Mining and treatment operations are subject to hazards such as equipment failure, changes in mineral characteristics such as rock hardness and mineralogy which may impact production and recovery rates. Mining, processing, development and exploration activities depend, to one degree or another, on adequate infrastructure. Reliable roads, bridges, power sources and water supply are important determinants, which affect capital and operating costs. An adequate water supply for operations would be required in order to place the Zandkopsdrift Project into production. Unusual or infrequent weather phenomena, sabotage, government or other interference in the maintenance or provision of such supply or related infrastructure could adversely affect the Company's operations and financial condition.

Although Frontier's activities are primarily directed towards the development of mineral deposits at the Zandkopsdrift Project, Frontier continues to explore other areas with rare earth element potential. There is no certainty that the expenditures made by Frontier towards the search and evaluation of mineral deposits will result in discoveries of commercial quantities of rare earth elements or any other minerals.

- b) The development of any of Frontier's mineral projects into commercially viable mines cannot be assured:

The Zandkopsdrift Project has no operating history upon which to base estimates of future commercial viability. Recovery levels for mineral deposits are based upon metallurgical testing of samples taken from drill samples. Numerous factors may affect the recoverability of mineral deposits from any given rock and tests of such samples may not be representative of recoveries to be obtained from the entire deposit. The Company's overall metallurgical recoveries may not be adequate for the Zandkopsdrift deposit to be viable.

In addition, estimates of mineral resources and mineral reserves are, to a large extent, based upon the interpretation of geological data obtained from drill holes, assays and other exploration techniques and feasibility studies. This information is used to calculate estimates of the capital cost and operating costs based upon anticipated tonnage and grades to be mined and processed, the configuration of the mineral resource, expected recovery rates, comparable facility and equipment operating costs, anticipated climatic conditions and other factors. As a result, it is possible that the actual capital cost, operating costs and economic returns of any proposed mine may differ from those estimated and such differences could have a material adverse effect on the Company's business, financial condition, results of operations and prospects. There can be no assurance that the Company will be able to complete development of its mineral projects, or any of them, at all or on time or on budget due to, among other things (and in addition to those factors described above) changes in the economics of the mineral projects, delays in receiving required consents, permits and licenses and rights (including mining rights), access to infrastructure, the delivery and installation of plant and equipment and cost overruns, or that the current personnel, systems, procedures and controls will be adequate to support Frontier's operations. Should any of these events occur, it would have a material adverse effect on Frontier's business, financial condition, results of operations and prospecting.

5. DESCRIPTION OF THE BUSINESS (continued)

5.3 Risk Factors (continued)

5.3.1 Risks relating to the Company's Exploration and Development Activities (continued)

- c) Frontier's resource estimates are based on interpretation and assumptions and the Company's projects may yield less mineral production under actual conditions than is currently estimated:

There is a degree of uncertainty to the calculation of mineral resources and corresponding grades being mined or dedicated to future production. Until mineral resources are actually mined and processed, the quantity of mineral resource grades must be considered as estimates only. In addition, the quantity of mineral resources may vary depending on, among other things, rare earth prices. Any material change in quantity of mineral resources, grade or stripping ratio may affect the economic viability of the Zandkopsdrift Project. In addition, there can be no assurance that recoveries in small scale metallurgical laboratory tests will be duplicated in larger scale tests under on-site conditions or during production.

The data for mineral resources contained in this document are estimates only and no assurance can be given that the anticipated tonnages and grades will be achieved, that any particular levels of recovery will be realized or that mineral resources identified could be mined or processed profitably. Such estimation is a subjective process, and the accuracy of any mineral resource estimate is a function of the quantity and quality of available data and of the assumptions made and judgments used in engineering and geological interpretation. The Company and the qualified persons have carefully prepared and verified the mineral resource figures and believe the methods of estimating mineral resources have been verified by mining experience. All mineral resource estimates have been prepared in accordance with NI 43-101. However, such figures are estimates, and no assurance can be given that the indicated level of mineral will be produced. Mineral resources that are not mineral reserves do not have demonstrated economic viability. There are numerous uncertainties inherent in estimating mineral resources, including many factors beyond the Company's control. Mining and metallurgy are an inexact science and accordingly there always remains an element of risk that a mine may not prove to be commercially viable. In addition, fluctuations in the price of rare earths may render mineral resources containing lower grades of mineralization uneconomic. Market price fluctuations for rare earths may render the present mineral resources unprofitable for periods of time.

Fluctuation in the prices of REE, results of drilling, metallurgical testing and production and the evaluation of mine plans subsequent to the date of any estimate may require revisions of such estimates. Any material reductions in estimates of mineral resources, or of Frontier's ability to extract these mineral resources, could have a material adverse effect on Frontier's results of operations and financial condition.

- d) There is uncertainty relating to inferred mineral resources and there is no assurance inferred mineral resources will be upgraded to resources with sufficient geological continuity.

There is a risk that inferred mineral resources cannot be converted into mineral reserves as the ability to assess geological continuity is not sufficient to demonstrate economic viability. Due to the uncertainty which may attach to inferred mineral resources, there is no assurance that inferred mineral resources will be upgraded to resources with sufficient geological continuity to constitute proven and probable mineral reserves as a result of continued exploration.

- e) Extraction of minerals from identified mineral deposits may not be economically viable.

The economic viability of a mineral deposit, including at any current project in which Frontier has or may have an interest, is dependent upon a number of factors, not all of which are within the control of Frontier. These include deposit attributes such as size, grade and proximity to infrastructure, structural complexity including faulting and potholing, government regulation and the grant of any mining right(s), the prevailing price for such minerals, prevailing currency exchange rates, land tenure and titles, availability of capital and other factors. The complete effect of these factors, either alone or in combination, cannot be entirely predicted, and consequently there can be no assurance that any of Frontier's projects will be brought into commercial development.

- f) The Company is dependent on the Zandkopsdrift Project and data previously generated by exploration work carried out by other parties.

The Zandkopsdrift Project presently accounts for all of Frontier's mineral resources and the potential for the future generation of revenue. Any adverse development affecting the progress of the Zandkopsdrift Project such as, but not limited to, the ability of Frontier to hire and retain suitable personnel and contractors, raise additional capital and secure supply agreements on commercially suitable terms may have a material adverse effect on Frontier's financial performance, results of operations and business outlook for the Company. See "— Risks Specific to South Africa".

In preparing the Technical Report, the Authors undertook a validation exercise on data previously generated by exploration work carried out by other parties. There is no guarantee that data generated by prior exploration work is 100% reliable and discrepancies in such data not discovered by the Company may exist. Such errors and/or discrepancies, if they exist, could impact on the accuracy of the Technical Report.

Annual Information Form (continued)

5. DESCRIPTION OF THE BUSINESS (continued)

5.3 Risk Factors (continued)

5.3.1 Risks relating to the Company's Exploration and Development Activities (continued)

- g) Fluctuations in demand for, and prices of, rare earths and rare earth products cannot be accurately predicted and could significantly affect Frontier's potential profitability.

As Frontier's sole source of revenue will be the sale of rare earths in separated and/or mixed form, changes in demand for, and the market price of, REE and products could significantly affect the Company's potential future profitability. The value and price of Frontier's issued and outstanding ordinary shares (the "Shares") and Frontier's financial results may be significantly adversely affected by declines in the prices of rare earths. Although rare earth prices have trended upward in recent years, they can fluctuate widely particularly due to a number of factors including there being no transparent, two-way market or spot price for rare earths, the small number of rare earth suppliers and the fact that approximately 97% of global supply currently comes from Chinese production sources. The price of rare earths will be influenced by numerous factors beyond the control of the Company. The level of interest rates, the rate of inflation, global and regional consumption patterns, the world supply of and demand for rare earths, their intermediate and end product uses, market behaviour of current rare earth supply sources and the instability of exchange rates can all cause significant fluctuations in rare earth prices. Such external economic factors are in turn influenced by changes in international investment patterns, monetary systems and political developments particularly in China. The effect of these factors cannot be accurately predicted. The price of rare earths and mineral commodities more generally has fluctuated widely in recent years and future price declines could cause commercial production to be uneconomic, thereby having a material adverse effect on the Company's business and financial condition and the value and price of the Shares. The profitability or otherwise of the potential development of Company's mineral properties will also be heavily dependent on the costs of consumables, particularly fuel, energy, chemical reagents and other products which may be required to be used in future exploration, development and treatment operations.

As a result of the global economic crisis, rare earth product prices declined by approximately 50% during 2008 and through the third quarter of 2009. Although rare earth prices have recovered, a prolonged or significant economic contraction worldwide could put further downward pressure on market prices of rare earth minerals and products. Protracted periods of low prices for rare earth minerals and products could significantly reduce revenues and the availability of required development funds in the future. This could impair asset values and reduce the Company's rare earth resources.

Demand for REE may be impacted by demand for downstream products incorporating rare earths, including hybrid and electric vehicles, wind power equipment and other clean technology products, as well as demand in the general automotive and electronic industries. Lack of growth in these markets may adversely affect the demand for the Company's rare earth resources.

In contrast, extended periods of high commodity prices may create economic dislocations that may be destabilizing to rare earth minerals supply and demand and ultimately to the broader markets. Periods of high rare earth mineral market prices generally are beneficial to our financial performance. However, strong rare earth mineral prices also create economic pressure to identify or create alternate technologies that ultimately could depress future long-term demand for rare earth minerals and products, and at the same time may incentivize development of otherwise marginal rare earth mining properties.

- h) An increase in the global supply of rare earths, dumping and predatory pricing by Frontier's competitors may materially adversely affect the Company's profitability.

The pricing and demand for Frontier's anticipated production of rare earth products is affected by a number of factors beyond Frontier's control, including growth of economic development and the global supply and demand for rare earth oxide products. According to Roskill, China accounted for approximately 97% of global rare earth oxide production in 2008. The historic and forecast increases in rare earth projects may accelerate the development of new sources of supply and the increased competition may lead suppliers and market participants to engage in predatory pricing behaviour. Any increase in the amount of rare earth products exported from other nations and increased competition may result in price reductions, reduced margins and loss of potential market share, any of which could materially adversely affect Frontier's potential profitability. As a result of these factors, Frontier may not be able to compete effectively against current and future competitors.

5.3.2 General Risks Relating to the Company

- a) The Company has limited operating history, and is not sufficiently funded to complete the construction of a REE processing plant. Failure to obtain additional financing when needed would have a material adverse effect on the Company's business. The Company has a limited history of operations and is in the early stage of its corporate development. As such, the Company is subject to many risks typical of such enterprises, including a lack of revenue. There is no assurance that the Company will be successful in achieving a return on shareholders' investment and the likelihood of success must be considered in light of its relatively early stage of operations. While the Company has been successful in raising financing to date and has successfully listed on the Toronto Stock Exchange, there can be no assurance that it will be able to do so in the future or that the terms of such financing, if available, would be favourable and not involve substantial dilution to existing shareholders. The Company has earned no revenue since commencing operations, has no source of operating cash flow and there is no assurance that additional funding will be available to it for development and construction of the Company's properties even if the Company's exploration programme is successful. Furthermore, additional financing will be required to continue the development of Zandkopsdrift. Failure to obtain such additional financing when needed could result in delay or indefinite postponement of further exploration and development of the Company's properties and would have a material adverse effect on the Company's business, financial condition and prospects.

5. DESCRIPTION OF THE BUSINESS (continued)

5.3 Risk Factors (continued)

5.3.2 General Risks Relating to the Company (continued)

- b) The Company has no assurance in relation to prospecting rights.

Although Frontier has exercised due diligence with respect to determining that its prospecting rights are valid and in good standing, there is no guarantee that the prospecting rights will not be challenged or impugned, which, if successful, could impair development and/or operations or limit Frontier's ability to enforce its rights with respect to the relevant projects.

- c) Changes to licensing and permit requirements may affect the Company's operations.

Many of the mineral rights, interests and agreements of Frontier are subject to government approvals, licenses and permits. Frontier believes it holds all necessary licenses and permits under applicable laws and regulations to explore and develop its properties and believes that it is presently complying in all material respects with the terms of such license and permits. However, such licenses and permits are subject to change in various circumstances. The granting, renewal and continued effectiveness of such approvals, licenses and permits are, as a practical matter, subject to the discretion of the applicable governments or governmental officials. No assurance can be given that Frontier will be successful in maintaining any or all of the various approvals, agreements, licenses and permits in full force and effect without modification or revocation. To the extent such approvals are required and not obtained, Frontier may be curtailed or prohibited from continuing or proceeding with planned exploration or development of mineral properties.

- d) The Company may require additional financing.

Frontier may be required to service future indebtedness. In addition, if it is required to service such indebtedness, there can be no assurance that such financing will be available to Frontier or, if it is, that it will be offered on acceptable terms. If additional financing is raised through the issuance of equity or convertible debt securities of Frontier, the interests of shareholders in the net assets of Frontier may be diluted. Any failure of Frontier to obtain the required financing on acceptable terms could have a material adverse effect on Frontier's financial condition, results of operations and liquidity and require Frontier to cancel or postpone planned capital investments.

- e) The Company does not intend to pay dividends in the foreseeable future.

Frontier anticipates that for the foreseeable future it will retain future earnings and other cash resources for the operation and development of its business. Payment of any future dividends will be at the discretion of the Board after taking into account many factors, including Frontier's earnings, operating results, financial condition, current and anticipated cash needs, and restrictions in financing agreements.

- f) The Company faces strong competition in the acquisition of properties and critical resources, and the recruitment and retention of suitable personnel.

The mining industry is competitive in all of its phases and significant and increasing competition exists for mineral acquisition opportunities throughout the world. As a result of this competition, Frontier faces strong competition from other mining companies in connection with the acquisition of properties producing, or capable of producing, REEs. Much of this competition is from larger, better established mining companies with greater financial resources, operational experience and technical capabilities than Frontier. As a result of this competition, Frontier may be unable to maintain or acquire rights to explore additional attractive REE projects on terms it considers acceptable. Accordingly, there can be no assurance that Frontier will acquire any interest in additional operations that would yield reserves or result in commercial mining operations. If Frontier is not able to acquire such interests, this could have an adverse impact on future cash flows, earnings, results of operations and financial condition.

In addition, the mining industry has been impacted by increased worldwide demand for critical resources such as input commodities, drilling and other equipment and skilled labour, and these shortages may cause unanticipated cost increases and delays in delivery times, thereby impacting operating costs, capital expenditures and production schedules. There is very limited availability of suitable personnel with sufficient, direct experience of rare earth exploration, development, mining or production.

The rare earths mining and processing markets are capital intensive and competitive. Chinese competitors in particular may have greater financial resources, as well as other strategic advantages to maintain, improve and possibly expand their facilities. Additionally, the Chinese producers have historically been able to produce at relatively low costs due to domestic economic factors and operational conditions which places them at a considerable advantage to Frontier.

- g) Current global financial conditions can negatively affect the Company's ability to obtain financing.

Financial markets globally have been subject to increased volatility and numerous financial institutions have either gone into bankruptcy or have had to be rescued by governmental authorities. Access to financing has been negatively impacted by liquidity crises throughout the world. These factors may impact the ability of Frontier to raise equity capital, obtain loans and other credit facilities in the future and, if obtained, on terms favourable to Frontier. If these increased levels of volatility and market turmoil continue, Frontier may not be able to secure appropriate debt or equity financing, any of which could affect the trading price of Frontier's securities in an adverse manner.

Annual Information Form (continued)

5. DESCRIPTION OF THE BUSINESS (continued)

5.3 Risk Factors (continued)

5.3.2 General Risks Relating to the Company (continued)

- h) Frontier cannot maintain insurance against all potential risks.

Frontier's business is subject to a number of risks and hazards generally, including adverse environmental conditions, industrial accidents, labour disputes, unusual or unexpected geological conditions, ground or slope failures, cave-ins, changes in the regulatory environment and natural phenomena such as inclement weather conditions, floods and earthquakes. Such occurrences could result in damage to mineral properties or production facilities, personal injury or death, environmental damage to Frontier's properties or the properties of others, delays in development or mining, monetary losses and possible legal liability.

Although Frontier maintains insurance to protect against certain risks in such amounts as it considers reasonable, its insurance will not cover all the potential risks associated with its operations. Frontier may also be unable to maintain insurance to cover these risks at economically feasible premiums. Insurance coverage may not continue to be available or may not be adequate to cover any resulting liability. Moreover, insurance against risks such as environmental pollution or other hazards as a result of exploration and production is not generally available to Frontier or to other companies in the mining industry on acceptable terms. Frontier might also become subject to liability for pollution or other hazards which may not be insured against or which Frontier may elect not to insure against because of premium costs or other reasons. Losses from these events may cause Frontier to incur significant costs that could have a material adverse effect upon its financial performance, results of operations and business outlook of the Company.

- i) The Company's operation faces inherent environmental risks and changes in environmental regulations may negatively impact the Company's operations.

All phases of Frontier's operations are subject to environmental laws and regulations in the jurisdiction in which Frontier operates, including laws regulating the removal of natural resources from the ground and the discharge of materials into the environment. These regulations mandate, among other things, the maintenance of air and water quality standards and land reclamation. They also set forth limitations on the generation, transportation, storage and disposal of solid and hazardous waste. Environmental legislation is evolving in a manner which will require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, Directors and employees. There is no assurance that future changes in environmental regulation, if any, will not adversely affect Frontier's operations.

Potential production of rare earth products will involve the use of various chemicals and the production of by products, including those which are designated as toxic or hazardous substances. Frontier may need to address contamination at its properties, and this may subject Frontier to liability for the investigation and remediation of contamination, as well as for claims seeking to recover for related property damage, personal injury or damage to natural resources.

- j) Currency fluctuations may adversely affect the Company's financial position and operating results.

Frontier's revenue from operating activities are expected to be received principally in United States dollars, while the majority of its operating expenses are expected to be incurred in South African Rand and other foreign currencies. From time to time Frontier will borrow funds and will incur capital expenditures that are denominated in foreign currency. Accordingly, foreign currency fluctuations may adversely affect Frontier's financial position and operating results.

- k) Enforcement of judgements or bringing actions against the Company, its Directors, and officers may not be possible.

The majority of Frontier's Directors reside outside of Canada. Substantially all of the assets of these persons and of the Company are located outside of Canada. It may not be possible for investors to effect service of process within Canada upon the Directors, officers and experts of Frontier. It may also not be possible to enforce against Frontier, certain of its Directors and officers, and certain experts named herein, judgments obtained in Canadian courts predicated upon the civil liability provisions of applicable securities laws in Canada. A final and conclusive monetary judgment for a definite sum obtained against the Company in the courts in Canada would be treated by the courts of the British Virgin Islands as a cause of action in itself and sued upon as a debt at common law so that no retrial of the issues would be necessary provide that:

- (i) the courts had jurisdiction in the matter and the Company either submitted to such jurisdiction or was resident or carrying on business within such jurisdiction and was duly served with process;
- (ii) the judgment given by the courts was not in respect of penalties, taxes, fines or similar fiscal or revenue obligations;
- (iii) the judgment was not procured by fraud;
- (iv) recognition or enforcement of the judgement in the British Virgin Islands would not be contrary to public policy; and
- (v) the proceedings pursuant to which judgment was obtained were not contrary to natural justice.

- l) The Company may experience difficulty attracting and retaining qualified personnel.

Frontier's ability to manage its operations, exploration and development activities, and hence its success, depends in large part on its ability to retain current personnel and attract and retain new personnel, including management, technical workers and an unskilled workforce. Frontier's ability to recruit and assimilate new personnel will be critical to its performance. Frontier will be required to recruit additional personnel and to train, motivate and manage its employees. In addition, Frontier depends on a relatively small number of key management and technical personnel, the loss of any of whom could have an adverse effect on Frontier. Frontier currently does not have key person insurance for these individuals. The international mining industry is very active and Frontier is likely to face increased competition for personnel in all disciplines and areas of operation. There is no assurance that Frontier will be able to attract and retain personnel to staff the exploration, development and operating teams.

5. DESCRIPTION OF THE BUSINESS (continued)

5.3 Risk Factors (continued)

5.3.2 General Risks Relating to the Company (continued)

- m) Directors and officers may be subject to conflicts of interests.

Certain Directors and officers of the Company are or may become associated with other natural resource companies which may give rise to conflicts of interest. Directors who have a material interest in any person who is a party to a material contract or a proposed material contract with the Company are required, subject to certain exceptions, to disclose that interest and generally abstain from voting on any resolution to approve the contract. In addition, the Directors and the officers are required to act honestly and in good faith with a view to the best interests of the Company. Some of the Directors and officers of the Company have either other full-time employment or other business or time restrictions placed on them and accordingly, the Company will not be the only business enterprise of these Directors and officers.

5.3.3 Risks Specific to South Africa

- a) The Company's exploration activities are in South Africa and are subject to the risks of political and economic instability associated with that country.

The Company will conduct exploration and development activities in South Africa which has, from time to time, experienced economic or political instability. The Company may be materially adversely affected by risks associated with conducting exploration and mining activities in South Africa, including political instability and violence; war and civil disturbance; acts of terrorism; expropriation or nationalization; inequitable treatment of non-domiciled companies; changing fiscal regimes; fluctuations in currency exchange rates or exchange control policies; high rates of inflation; underdeveloped industrial and economic infrastructure; and unenforceability of contractual rights.

- b) Government regulations may have an adverse effect on Frontier's exploration and development activities and potential future mining operations.

Frontier's exploration and future development, mining and processing activities are subject to various laws, royalties and taxes, export licenses, labour standards and occupational health, mine safety, toxic substances, land use, water use, land claims of local people and other matters. Although Frontier's mining and exploration activities are currently carried out in accordance with all applicable rules and regulations, no assurance can be given that new rules and regulations will not be enacted or that existing rules and regulations will not be applied in a manner which could limit or curtail production or development or otherwise have a materially adverse effect on Frontier's financial condition and results of operations.

Amendments to current laws and regulations governing operations or more stringent implementation thereof could have a substantial adverse impact on Frontier and cause increases in exploration expenses, capital expenditures or production costs or reduction in levels of production at producing properties or require abandonment or delays in development of new mining properties.

Government regulations may have an adverse effect on Frontier's exploration activities, development projects and future mining operations. Prospecting in South Africa is regulated by the MPRDA. Frontier's exploration activities, development projects and future mining operations are subject to the MPRDA and the MHS Act. Every application for a mining right must demonstrate that:

- the mineral can be mined optimally in accordance with the mining work programme;
- the applicant has access to financial resources and has the technical ability to conduct the proposed mining operation optimally;
- the financing plan is compatible with the intended mining operation and the duration thereof;
- the mining will not result in unacceptable pollution, ecological degradation or damage to the environment;
- the applicant has provided financially and otherwise for the prescribed social and labour plan;
- the applicant has the ability to comply with the relevant provisions of the MHS Act;
- the applicant is not in contravention of any provision of the MPRDA; and
- the granting of such right will further the objects of substantially and meaningfully expanding opportunities for historically disadvantaged persons, including women, to enter the mineral and petroleum industries and to benefit from the exploitation of the nation's mineral and petroleum resources and promote employment and advance the social and economic welfare of all South Africans in accordance with the Mining Charter and the prescribed social and labour plan.

The obtaining of prospecting and mining rights or licenses can be complex and time consuming and Frontier cannot assure whether any necessary rights and licenses will be obtainable on acceptable terms, in a timely manner or at all. It is not possible to guarantee compliance with BEE legislation required under the MPRDA or the Mining Charter as described elsewhere in this prospectus. The costs and delays associated with obtaining necessary permits and complying with the permits and applicable laws and regulations could stop, delay or restrict Frontier from proceeding with exploration activities or with development of future mining operations. Any failure to comply with applicable laws and regulations or permits, even if inadvertent, could result in interruptions or restriction of exploration activities, development of mining operations, or fines, penalties or other liabilities, or prevent the grant of or result in the revocation of prospecting and/or mining rights already granted. Frontier will be obliged to continue with on-going obligations in relation to its continued exploration and development activities. The Company will have to comply with the requirements set out in its prospecting right work programme and environmental management programme; failure to do so may result in suspension or cancellation of its prospecting right by the Minister of Minerals and Energy.

In the event of prospecting operations revealing an economically exploitable resource, the holder of the prospecting right has an exclusive right to apply for and be granted a mining right in respect of the mineral and prospecting area in question, subject to an application in terms of the MPRDA and compliance with the MPRDA. The application for a prospecting permit and a mining right is a detailed and time consuming process. Title to, and the area of, prospecting and mining rights may be disputed or challenged. The occurrence of these various factors and uncertainties cannot be accurately predicted and could have an effect on the Company's business, financial conditions and results of operations.

Annual Information Form (continued)

5. DESCRIPTION OF THE BUSINESS (continued)

5.3 Risk Factors (continued)

5.3.3 Risks Specific to South Africa (continued)

- c) Failure to comply with BEE requirements could jeopardize Frontier's ability to obtain and retain mining and prospecting rights.

Although Sedex currently complies with the Mining Charter and the BEE participation requirements, no assurance can be given that Sedex will be able to meet the objectives of and maintain compliance with any revisions of the Mining Charter and BEE participation requirements going forward. Any failure by Sedex to satisfy the relevant BEE requirements could jeopardize the Zandkopsdrift Project and impede Frontier's ability to acquire, develop or maintain any additional mining rights or properties. There is also no guarantee that the interests of Frontier will be wholly aligned with the interests of its direct or indirect BEE Shareholders. Any misalignment of such interests could create uncertainty for Frontier or impede Frontier's ability to comply with BEE requirements and/or continue its development initiatives in South Africa. Furthermore, in a recent amendment to the Mining Charter, regarding the stated aims of the MPRDA and the requirement for 26% HDSAs ownership in mining companies by 2014, the DMR confirmed that a failure by a mining company to comply with the HDSAs ownership requirements as set out in the MPRDA and the Mining Charter entitles the Minister of the DMR to revoke those mining rights.

- d) The condition of South Africa's power supply may negatively affect the Company's operations.

The cost of power in South Africa is amongst the lowest in the world and the majority of the electricity is generated from coal. In early 2008 and continued sporadically in 2009, power outages beset South Africa largely as a result of the country's strong economic growth, rapid industrialisation and mass electrification programme, and caused disruption in business activities. In 2008 coal fed power stations ran low on fuel and several power-generating facilities were down for maintenance. No new power-generating facilities are expected to start up in South Africa until 2013. The South African government has obtained a loan from the International Monetary Fund for the construction of the Medupi power station in the Lephalale municipality. The first unit is scheduled to be commissioned in 2013. Eskom, the State energy company, plans to double total generating capacity to 80,000MW over the next two decades with nuclear power making up approximately 50% of that amount.

While the supply of power from Eskom has increased over the last 18 months, aided by the slower economic growth in South Africa and the curtailment of production by high-demand users such as smelter operations, there can be no assurance that the Zandkopsdrift Project and the Company's other South African projects will not be negatively impacted by the power supply situation on either an operating or cost basis in the future.

- e) Frontier is subject to exchange control regulations that may affect the Company's ability to borrow funds and guarantee obligations of the Company's subsidiaries.

South African law provides for exchange control regulations which restrict the export of capital by residents from the common monetary area, which includes South Africa. These regulations apply to transactions involving South African residents, including both natural persons and legal entities. These regulations also affect Frontier's ability to borrow funds from non-South African sources for use in South Africa and to repay these borrowings from South Africa and, in some cases, its ability to guarantee the obligations of subsidiaries with regard to these borrowings. Although the government has expressed an intention to gradually relax exchange control regulations with a view to ultimately eliminating exchange controls, there is no certainty that exchange control regulations will be reduced or eliminated.

- f) Labour instability may negatively impact Frontier's operations.

Workers at various South African mining operations have been demanding, through their unions, higher compensation as a result of increased revenues in the mining sector being driven by heightened mineral prices. Strikes have been threatened during some negotiations with unions. Any such labour instability could potentially negatively impact the Company's development and production plans.

5.3.4 Risks Related to the Securities of the Company

- a) There is no assurance that public market for Shares or Warrants will be maintained.

An active and liquid market for the Shares or the issued and outstanding warrants (the "Warrants") may not be maintained. If an active public market is not maintained, the trading price of the Shares or the Warrants may decline and the liquidity of investors' Shares and/or Warrants may be limited.

5. DESCRIPTION OF THE BUSINESS (continued)

5.3 Risk Factors (continued)

5.3.4 Risks Related to the Securities of the Company (continued)

- b) The market price for Shares and/or Warrants may be volatile and subject to wide fluctuations.

The market price for Shares and/or Warrants may be volatile and subject to wide fluctuations in response to numerous factors, many of which are beyond Frontier's control, including the following: actual or anticipated fluctuations in Frontier's quarterly results of operations; recommendations by securities research analysts; changes in the economic performance or market valuations of other rare earth companies; addition or departure of Frontier's executive officers and other key personnel; sales or perceived potential sales of additional Shares or Warrants; significant acquisitions or business combinations, strategic partnerships, joint ventures or capital commitments by or involving Frontier or its competitors; operating and share price performance of other companies that investors deem comparable to Frontier; and news reports relating to trends, concerns, technological or competitive developments, regulatory changes and other related issues in the REE or related industries.

Financial markets have recently experienced significant price and volume fluctuations that have particularly affected the market prices of equity securities of companies and that have often been unrelated to the operating performance, underlying asset values or prospects of such companies. Accordingly, the market price of the Shares or Warrants may decline even if Frontier's operating results, underlying asset values or prospects have not changed. Additionally, these factors, as well as other related factors, may cause decreases in asset values that are deemed to be other than temporary, which may result in impairment losses. There can be no assurance that continuing fluctuations in price and volume will not occur. If such increased levels of volatility and market turmoil continue, Frontier's operations could be adversely impacted and the trading price of the Shares and/or Warrants may be adversely affected.

- c) The Company's Principal Shareholders hold approximately 76% of the current issued and outstanding Shares.

As of the date hereof, Kensington Nominees Limited, Lambeth Nominees Limited, Westminster Nominees Limited and Blenheim Management Services Limited (together the "Principal Shareholders") own an aggregate of 67,690,000 Shares, representing approximately 75.58% of the current issued and outstanding Shares.

- d) Future sales of Shares by existing shareholders may decrease the trading price of Shares.

Sales of a large number of Shares in the public markets, or the potential for such sales, could decrease the trading price of the Shares and could impair Frontier's ability to raise capital through future sales of Shares.

- e) Issuance of additional securities can result in the dilution of the Shares.

The Company may in the future grant to some or all of its Directors, key employees and consultants options ("Options") to purchase Shares at exercise prices equal to market prices at times when the public market is depressed. To the extent that significant numbers of such Options are granted and exercised, the interests of then existing shareholders of the Company will be subject to additional dilution. Further, any additional issuance of equity securities following the closing of the Offering could dilute the interests of existing shareholders and could substantially decrease the trading price of the Shares. The Company may issue equity securities in the future for a number of reasons, including to finance its operations and business strategy (including in connection with acquisitions, strategic collaborations or other transactions), to adjust the ratio of any future debt to equity and to satisfy the Company's obligations upon the exercise of outstanding Warrants or Options or for other reasons. Sales of a substantial number of Shares or other equity-related securities in the public market (or the perception that such sales may occur) could depress the market price of the Shares and impair the Company's ability to raise capital through the sale of additional equity securities. The Company cannot predict the effect that future sales of the Shares or other equity-related securities would have on the market price of the Shares.

The Board may issue additional shares, without any vote or action by Frontier's shareholders. If Frontier were to issue any additional shares, the percentage ownership of existing shareholders may be reduced and diluted. In addition, the Board may determine the price, rights, preferences, privileges and restrictions, including voting, dividend and conversion rights, of each series of Frontier's shares and determine to whom they shall be issued. There are currently no preference shares outstanding and Frontier has no present plans to issue any preference shares. However, the rights of the holders of any series of preference shares that may be issued in the future may be senior to the rights of holders of the Shares, which could preclude holders of the Shares from receiving dividends, proceeds of a liquidation or other benefits. The issuance of preference shares, while providing desirable flexibility in connection with possible acquisitions and other corporate purposes, could make it more difficult for a third party to acquire control of Frontier, for example, by discouraging an unsolicited acquisition proposal or a proxy contest, the effect of which may be to deprive the Frontier's shareholders of a control premium that might otherwise be realized in connection with an acquisition of the Frontier.

Annual Information Form (continued)

6. SELECTED CONSOLIDATED FINANCIAL INFORMATION

6.1 Annual Information

Set out below is summary key financial data

	2010 \$'000	2009 \$'000	2008 \$'000
Total revenue	2	162	216
Income/(loss) from operations	(2,968)	(223)	(54)
Net income or (loss)	(2,874)	(232)	(108)
Total assets	61,195	1,802	866
Total long term financial liabilities	-	1,725	795
Cash dividends	-	-	-

As the Company's main asset, the Zandkopsdrift Project, is at an evaluation stage there were no operational revenues in 2010. Revenues relate to gains on disposal of certain assets and, in prior years, revenue relates to "day one gains" recording the value to the Company from interest free loans provided by shareholders calculated using the effective interest rate method.

The loss from operations of \$2,968,000 (2009: \$223,000 loss, 2008: \$54,000 loss) during the year consists, inter alia, of general operating expenses of \$1,016,000 (2009: \$596,000, 2008: \$18,000), employee and Directors costs, including the un-capitalized portion of the value of options awarded to Directors and key management of \$1,069,000 (2009: \$37,000, 2008: \$16,000), and an expense of \$1,940,000 (2009: Nil, 2008: Nil) recorded in the accounts in respect of loans that converted into equity at a discount to the initial public offering price. These expenses have been partially offset by foreign exchange gains of \$1,059,000 (2009: \$254,000, 2008: (\$233,000)).

Total assets increased significantly in 2010 following the Offering of the Company on the Toronto Stock Exchange in November 2010. The Company raised a gross total of \$61,045,000. The increase in total assets in 2009 resulted from investment by the Company of loans raised from shareholders in to the Zandkopsdrift Project.

Total assets consisted, inter alia, of cash and cash equivalents of \$57,049,000 (2009: \$11,000, 2008: \$7,000) and intangible mining assets of \$3,361,000 (2009: \$1,510,000, 2008: \$704,000).

Long term financial liabilities at 31 December 2010 were nil following the conversion of all outstanding debt to equity at the time of the Offering (2009: \$1,725,000, 2008: \$795,000).

6.2 Dividends

The Company has not paid any cash dividends on its common shares and does not intend to declare any in the foreseeable future. Payment of any future cash dividends will be at the discretion of the Company's Board of Directors following consideration of the Company's operational performance and cash needs.

In May 2010 the Board approved the in specie distribution to the Company's shareholders at the time of certain subsidiaries which hold non-REE interests. As these subsidiaries hold various South African prospecting rights granted by the DMR, the distribution of the shares is subject to South African government approval. These assets remain included in the accounts pending such approval.

6.3 Foreign Accounting Principles

The Company accounts are prepared on an International Financial Reporting Standards ("IFRS") basis. There would be no material difference to the accounts if they were presented using Canadian Generally Accepted Accounting Principles.

7. DESCRIPTION OF CAPITAL STRUCTURE & MARKET FOR SECURITIES

7.1 Capital Structure

Under the terms of its Offering the Company issued a total of 18,132,700 new ordinary shares. In addition, various loans converted to new ordinary shares at the time of the Offering resulting in a further 1,430,081 new ordinary shares being issued. As a result the number of shares in issue in the Company has increased from 70,000,000 to 89,562,781.

Ordinary Shares entitle the holder to one vote per ordinary share held at shareholder meetings of the Company. Ordinary shares are entitled to dividends if declared and are entitled to share in the proceeds of a winding up of the Company.

The Offering was structured as a unit offering at a price of CAD\$3.40 per unit. Each Unit consisted of one ordinary share and one half warrant (priced at CAD\$4.60 and exercisable for 24 months following the Offering). Pursuant to the Offering the Company issued 10,863,791 warrants. The total number of warrants in issue is 10,863,791.

7. DESCRIPTION OF CAPITAL STRUCTURE & MARKET FOR SECURITIES (continued)**7.1 Capital Structure** (continued)

Warrants do not entitle a holder to a vote at a shareholder meeting and do not have dividend entitlements or any rights on a wind up. Warrant holders may choose to exercise their right to buy one ordinary share for each warrant held at any time up to the expiry of the warrant on 17 November 2012. Any warrant holders who wish to exercise the warrants should contact the Transfer Agent at the address set out in "Transfer Agent and Registrar" below.

The Company has also issued a total of 4,862,184 options to various employees and Directors and a further 1,087,962 options to the Offering underwriters giving a total of 5,950,146 options outstanding. Employee and Directors options are typically have a seven year life and an exercise price of between \$2.00 and CAD\$3.29 per share. The underwriters' options have a life of two years and an exercise price of CAD\$3.29.

The underwriters also received 608,925 options on warrants as part of their compensation related to the Offering.

7.2 Constraints

There are no constraints on the ownership of the securities of the Company.

7.3 Rating

There have been no ratings on the Company received from any external rating agency.

8. MARKET FOR SECURITIES**8.1 Market for Securities**

The Company's shares and warrants trade on the Toronto Stock Exchange under the symbols FRO and FRO.wt respectively. Trading in the Company's shares commenced on 17 November 2010. High and low closing prices and average daily volumes for each of the securities is set out in the table below.

	Ordinary Shares (CAD\$)			Warrants (CAD\$)		
	High	Low	Volume	High	Low	Volume
November	3.40	3.05	507,800	0.52	0.35	71,040
December	3.75	2.80	145,100	0.48	0.43	76,551
January	3.70	2.67	84,800	0.80	0.51	27,195
February	3.50	2.67	133,300	0.73	0.43	10,693

Options to purchase ordinary shares are held by certain employees and the underwriters of the Offering. These are not tradable securities and no prices are available.

8.2 Prior Sales

In advance of the Offering, the Company issued a convertible loan note which converted, along with then existing shareholder and related party loans, into equity at the time of the Offering. These loans, totalling CAD\$2,910,000 converted into 1,430,000 units ("Units"), each Unit consisting of one ordinary share and one half warrant as described in section 7.1, at a price of CAD\$2.04.

The Company also issued the following options to purchase ordinary shares to Directors, employees and the underwriters of the Offering:

- 1,092,823 options at a price of \$2.00 vesting immediately, granted on 20 September 2010 and exercisable up to 19 September 2017;
- 874,258 options at a price of \$2.00 vesting over 2 years, granted on 20 September 2010 and exercisable up to 19 September 2017;
- 1,087,962 options at a price of CAD\$3.29 vesting immediately, granted on 17 November 2010 and exercisable up to 17 November 2012;
- 2,895,103 options at a price of CAD\$3.29 vesting over 2 years, granted on 17 November 2010 and exercisable up to 16 November 2017.

Annual Information Form (continued)

9. DIRECTORS AND OFFICERS

9.1 Name, Occupation and Security Holding

Name, State and Country of Residence	Position within the Company	Principal Occupation for the preceding 5 years	Date Directorship commenced ⁽³⁾	Common Shares Owned or Controlled
James Kenny Dublin Ireland	CEO	CEO of Frontier Rare Earths Limited, prior thereto Chairman of Frontier CF Limited, Director of Firestone Diamonds plc and CEO of Frontier Advisers Limited	24 February 2010	2,152,527
Philip Kenny London UK	Non-Executive Chairman ⁽¹⁾⁽²⁾	CEO of Firestone Diamonds plc (Diamond mining company)	9 January 2007	210,000
Paul McGuinness Dublin Ireland	CFO	CFO of Frontier Rare Earths Limited, prior thereto a Director of Frontier CF Limited and Managing Director of MG Capital Limited	27 September 2010	-
Anu Dhir Ontario Canada	Non-Executive ⁽¹⁾	Managing Director of Miniqs (Consulting company), Non-exec Director of Anooraq Resources Corporation and Compass Asset Management	17 November 2010	98,069
Crispin Sonn Capetown South Africa	Non-Executive ⁽²⁾⁽¹⁾	Executive Director of Old Mutual South Africa (Insurance and banking)	17 November 2010	24,569
Eamonn Grennan Sligo Ireland	Non-Executive ⁽²⁾	Lecturer at The Sligo Institute of Technology and Independent Consultant Geologist	17 November 2010	-

(1) Member of the Audit Committee

(2) Member of the Remuneration Committee

(3) Each of the Directors will hold office until the next annual general meeting

9.2 Cease Trade Orders, Bankruptcies, Penalties or Sanctions

None of the Company's Directors or executive officers is, as at the date of this AIF, or has been within the ten years before the date of this AIF, a Director, chief executive officer or chief financial officer of any company (including Frontier) that was subject to one of the following orders, that was in effect for a period of more than 30 consecutive days:

- a) a cease trade order, an order similar to a cease trade order or an order that denied the company access to any exemption under securities legislation that was issued while the Director, chief executive officer or chief financial officer was acting in the capacity as Director, chief executive officer or chief financial officer; or
- b) a cease trade order, an order similar to a cease trade order or an order that denied the company access to any exemption under securities legislation that was issued after the Director or executive officer ceased to be a Director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as Director, chief executive officer or chief financial officer.

Other than as disclosed in this prospectus, none of the Company's Directors or executive officers, or shareholders holding a sufficient number of our securities to affect materially control of Frontier:

- a) is, as at the date of this prospectus, or has been within the ten years before the date of this AIF, a Director or executive officer of any company (including Frontier) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
- b) has, within the ten years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the Director, executive officer or the shareholder; or
- c) has been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority or has been subject to any other penalties or sanctions imposed by a court or a regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

9. DIRECTORS AND OFFICERS (continued)**9.2 Cease Trade Orders, Bankruptcies, Penalties or Sanctions** (continued)

Mr. James Kenny is a former non-executive Director of Axeon Holdings plc ("Axeon"), a UK company involved in the manufacture of batteries. Axeon was listed on the AIM market of the London Stock Exchange. In April 2009, following the technical breach by Axeon of a net debt: EBITDA covenant on certain loans, Axeon was placed into 'pre-pack' administration from where it was acquired by the lender with no loss to creditors. Mr. Kenny resigned from the board of Axeon when its AIM listing was terminated and was not the subject of any criticism, censure or negative commentary by the London Stock Exchange, the administrator, the shareholders or any other party in relation to this matter.

9.3 Conflicts of Interest

To the best of the Company's knowledge, and other than as disclosed in this AIF, there are no known existing or potential conflicts of interest between the Company and any Directors or officers of the Company, except that certain of the Directors and officers serve as Directors or officers of other public companies and therefore it is possible that a conflict may arise between their duties as a Director of the Company and their duties as a Director or officer of such companies.

10. AUDIT COMMITTEE**10.1 Audit Committee Charter**

The main responsibilities of the Audit Committee are set out in its charter, which is included at Schedule "A" to this AIF. The text of the Audit Committee Charter is also available on SEDAR at www.sedar.com.

10.2 Composition of the Audit Committee

The Audit Committee is comprised of three Directors of the Company, Anu Dhir (Chair), Crispin Sonn and Philip Kenny, all of whom are financially literate for purposes of National Instrument 52-110 – Audit Committees ("National Instrument 52-110") of the Canadian Securities Administrators.

The Company is relying on s. 3.2(2) of NI 52-110 which provides a one-year exemption to the requirement to have a fully independent Audit Committee if a majority of the committee members are independent. Ms. Dhir and Mr. Sonn are both "independent directors" within the meaning of NI 58-201. Mr. Kenny is not "independent" due to a material relationship with the Company.

Relevant Education and Experience

The education and experience of each Audit Committee member that is relevant to the performance of his responsibilities as an Audit Committee member is as follows:

Anu Dhir

Anu Dhir holds a Bachelor of Arts degree from the University of Toronto and a law degree (Juris Doctor) from Quinnipiac University, Connecticut, United States. Ms. Dhir has extensive experience in international business, operations and legal affairs in private equity and publicly-held companies in the mining, oil and gas and technology sectors. From January 2006 to October 2009, Ms. Dhir served as Vice President, Corporate Development and Company Secretary at Katanga Mining Limited, a TSX-listed company, and is currently Managing Director of Miniqs Limited, a private group primarily interested in resource projects that have the capability to grow into major producing operations. Ms. Dhir is a non-executive Director of Anooraq Resources Corporation, a South African platinum group metals producer listed on the TSX, NYSE Amex Equities and the Johannesburg Stock Exchange and also serves as a non-executive Director of Compass Asset Management headquartered in Almaty, Kazakhstan.

Crispin Sonn

Crispin Sonn has a Bachelor of Arts from the University of Cape Town and an Honours degree in Business and Administration from the University of Stellenbosch. Since 2003, Mr. Sonn has held various positions at Old Mutual South Africa, a subsidiary of Old Mutual plc, the London listed and largest integrated financial services company in South Africa. Currently, Mr. Sonn is an executive Director of Old Mutual South Africa with responsibility for corporate affairs, marketing and communications, and is Chairman of the Old Mutual Foundation, the philanthropic arm of the Old Mutual group. Mr. Sonn was the founding Chairman of FoodBank South Africa, a founding member of the FoodBank Foundation and also currently acts as a non-executive Director of CapeSpan (Pty) Ltd, the largest fresh produce sourcing and distribution company in South Africa, and the life insurance company Old Mutual Kotak-Mahindra, a joint venture in India. Mr. Sonn is a member of the Board of Advisers for the Graduate School of Business at the University of Cape Town and served on the Council of the University of Cape Town for eight years.

Philip Kenny

Philip Kenny is a graduate in mechanical engineering from University College, Dublin and holds postgraduate qualifications in engineering from Trinity College, Dublin and a Master of Business Administration in finance from Boston College, Massachusetts. He has over 25 years of experience in the mining and oil and gas sectors in Southern Africa, Europe and the United States. Since 1998, Mr. Kenny has been the Chief Executive Officer of Firestone Diamonds plc, an emerging junior diamond mining and exploration company focused on South Africa and listed on the AIM market of the London Stock Exchange. Firestone Diamonds plc is the only listed diamond company outside of the majors to have discovered, developed and brought into production a kimberlite diamond mine.

Annual Information Form (continued)

10. AUDIT COMMITTEE (continued)

10.3 Pre-Approval Policies and Procedures

The Audit Committee shall approve in advance any retainer or other fee of the external auditors to perform any non-audit service to the Company that it deems advisable in accordance with applicable securities law and exchange requirements and Board-approved policies and procedures. The Audit Committee may delegate pre-approval authority to a member(s) of the Audit Committee. The decisions of any member of the Audit Committee to whom this authority has been delegated must be presented to the full Audit Committee at its next scheduled Audit Committee meeting.

10.4 Group External Auditor Service Fees

For the financial years ended 31 December 2010 and 2009, the Company's external auditors, Grant Thornton Limited, charged the following aggregate fees to the Company:

Services	2010 US\$	2009 US\$
Audit Fees	41,000	11,000
Non-Audit Fees	75,000	-
Tax Fees	-	-

11. LEGAL PROCEEDINGS

There are no material legal proceedings of which the Company is aware and there are no proceeding contemplated.

There have been no penalties or sanctions imposed against the Company by a court and the Company has not entered into any settlements before a court relating to securities legislation or any other matter.

12. INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than as disclosed herein, no Director or executive officer of the Company and no person or company that beneficially owns, or controls or directs, directly or indirectly, more than 10% of Frontier's outstanding Shares, nor any associate or affiliate of any such Director, executive officer or 10% holder, has had any material interest, directly or indirectly, in any transaction with Frontier within the three most recently completed financial years or during the current financial year that has materially affected or is reasonably expected to materially affect Frontier.

In advance of the Offering in November 2010, certain Directors, officers and shareholders and affiliates of certain Directors, officers and shareholders subscribed for interest-free convertible loan notes which provided for their mandatory conversion into equity at the time of the Offering. At the Offering, such loans, totalling CAD\$2,170,000, converted into 1,064,000 Units at a price of CAD\$2.04 per Unit. For more information, see section 8.2 (Prior Sales).

13. TRANSFER AGENT AND REGISTRAR

The Company's transfer agent and registrar is Computershare Investor Services Inc. Its principal offices are located at:

100 University Avenue,
8th Floor,
Toronto,
ON M5J 2Y1,
Canada.

14. MATERIAL CONTRACTS

The following are the only material contracts, other than those contracts entered into in the ordinary course of business, which the Company has entered into during the year:

- Underwriting Agreement, dated 8 November 2010, among the Company and the Underwriters
- Warrant Indenture, dated 17 November 2010 among the Company and the Warrant Agent;
- Management services agreement dated 17 November 2010, among the Company and Frontier Corporate Services Limited;
- Shareholders Agreement, dated 22 February 2007, as amended 19 March 2010, among the Company, Yolani, Mr. Van Zyl, the Trust and Sedex; and
- Cession agreement relating to the spin-out of the Company's holdings in the Spin-Out Subsidiaries, dated 9 September 2010, among Blenheim Trust Company Limited, Blenheim Management Services Limited, Kensington Nominees Limited, Lambeth Nominees Limited, Westminster Nominees Limited, Frontier Mining Limited and the Company.

There are no other material contracts, other than contracts in the ordinary course of business as at 31 December 2010.

15. INTERESTS OF EXPERTS

The Technical Report on the Zandkopsdrift Project filed by the Company on SEDAR on 8 November 2010 provides an independent technical review of exploration and evaluation of the Zandkopsdrift Project and an estimate of the mineral resources. Mike Hall, Pete Siegfried, Mike Venter and James Brown are responsible for the Technical Report. Mike Hall and Pete Siegfried of MSA and James Brown of SGS are "qualified persons" as such term is defined in NI 43-101, and together with Mike Venter, are "independent" as such term is defined in NI 43-101.

SGS Minerals Services, Canada has prepared a report on the metallurgical and mineralogical studies previously carried out at Zandkopsdrift, extracts of which were included in the Technical Report.

The Company's consolidated financial statements for the financial year ended 31 December 2010 have been audited by Grant Thornton Limited, an independent registered public accounting firm.

As of the date of this AIF, the partners, employees and consultants of Grant Thornton Limited as a group, the partners, employees and consultants of MSA as a group and the partners, employees and consultants of SGS as a group do not beneficially own, directly or indirectly, any of the outstanding securities of Frontier.

16. ADDITIONAL DISCLOSURES

Additional information relating to the Company may be found on SEDAR at www.sedar.com.

Shareholders may contact the Company by email at IR@frontierrareearths.com in order to obtain, without charge, copies of the financial statements, MD&A and this AIF.

Additional information including Directors' and officers' remuneration and indebtedness, and principal holders of securities, securities authorized for issuance under equity compensation plans and interests of insiders in material transactions, is contained in the Company's information circular for its upcoming annual general meeting.

Additional financial information is provided in the Company's comparative financial statements and MD&A for the financial year ended 31 December 2010.

SCHEDULE A – Audit Committee

FRONTIER RARE EARTHS LIMITED AUDIT COMMITTEE MANDATE

As of 1 November 2010

1. Introduction

The Audit Committee (the “Committee” or the “Audit Committee”) of Frontier Rare Earths Limited (the “Company”) is a committee of the Board of Directors (the “Board”). The Committee shall monitor the accounting and financial reporting practices of the Company, the audits of the Company’s financial statements and exercise the responsibilities and duties set out in this Mandate.

2. Membership

2.1 Number of Members

The Committee shall be composed of at least three members of the Board.

2.2 Independence of Members

Each member of the Committee must be independent, subject to limited exceptions set out in the Canadian Securities Administrators’ National Instrument 52-110 – Audit Committees, as may be amended from time to time (“NI 52-110”). The meaning of “independence” shall have the meaning given to it in NI 52-110.

2.3 Chair

At the time of the annual appointment of the members of the Audit Committee, the Board shall appoint a chair of the Audit Committee (the “Chair”). The Chair shall be a member of the Audit Committee, preside over all Audit Committee meetings, coordinate the Audit Committee’s compliance with this Mandate, work with the management of the Company (“Management”) to develop the Audit Committee’s annual work-plan and provide reports and recommendations of the Audit Committee to the Board as appropriate.

2.4 Technical Expertise and Financial Literacy of Members

At the time of his or her appointment to the Committee, each member of the Committee shall be “financially literate”, subject to such exemptions that may be available under NI 52-110. An individual is “financially literate” if he or she has the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company’s financial statements.

2.5 Term of Members

The members of the Committee shall be appointed annually by the Board. Each member of the Committee shall serve at the pleasure of the Board until the member resigns, is removed, or ceases to be a member of the Board. Unless a Chair is elected by the Board, the members of the Committee may designate a Chair by majority vote of the full Committee membership. Members may be re-appointed by the Board.

3. Meetings

3.1 Number of Meetings

The Committee may meet as many times per year as necessary to carry out its responsibilities.

3.2 Quorum

No business may be transacted by the Committee at a meeting unless a quorum of the Committee is present. A majority of members of the Committee shall constitute a quorum.

3.3 Calling of Meetings

The Chair, any member of the Audit Committee, the external auditors of the Company (the “External Auditors”), the Chairman of the Board, the Chief Executive Officer or the Chief Financial Officer may call a meeting of the Audit Committee by notifying the Company’s Corporate Secretary who will notify the members of the Audit Committee. Notice of a meeting of the Audit Committee shall be given not less than five days prior to the scheduled date of the meeting. The Chair shall chair all Audit Committee meetings that he or she attends, and in the absence of the Chair, the members of the Audit Committee present may appoint a chair from their number for a meeting.

3.4 Minutes; Reporting to the Board

The Committee shall maintain minutes or other records of meetings and activities of the Committee in sufficient detail to convey the substance of all discussions held. Upon approval of the minutes by the Committee, the minutes shall be circulated to the members of the Board. However, the Chair may report orally to the Board on any matter in his or her view requiring the immediate attention of the Board.

3. Meetings (continued)

3.5 Attendance of Non-Members

The External Auditors may be requested to attend and/or be heard at Audit Committee meetings. In addition, the Committee may invite to a meeting any officers or employees of the Company, legal counsel, advisors and other persons whose attendance it considers necessary or desirable in order to carry out its responsibilities.

3.6 Meetings without Management

The Committee shall hold unscheduled or regularly scheduled meetings, or portions of meetings, at which Management is not present, as it deems necessary.

3.7 Procedure

The procedures for holding, conducting and adjourning meetings of the Committee shall be the same as those applicable to meetings of the Board.

3.8 Access to Management and Auditors

The Committee shall have unrestricted access to Management and employees and the books and records of the Company and the External Auditors.

3.9 Outside Advisors

The Audit Committee has the authority to set the pay and compensation of any advisors employed by the Audit Committee.

4. Duties And Responsibilities

The Committee shall have the functions and responsibilities set out below as well as any other functions that are specifically delegated to the Committee by the Board and that the Board is authorized to delegate by applicable laws and regulations. In addition to these functions and responsibilities, the Committee shall perform the duties required of an audit committee by any exchange upon which securities of the Company are traded, or any governmental or regulatory body exercising authority over the Company, as are in effect from time to time (collectively, the "Applicable Requirements").

4.1 Financial Reports

(a) General

The Audit Committee is responsible for overseeing the Company's financial statements and financial disclosures. Management is responsible for the preparation, presentation and integrity of the Company's financial statements and financial disclosures and for the appropriateness of the accounting principles and the reporting policies used by the Company. The External Auditors are responsible for auditing the Company's annual consolidated financial statements and for reviewing the Company's unaudited interim financial statements as required.

(b) Review of Annual Financial Reports

The Audit Committee shall review the annual consolidated audited financial statements of the Company and its subsidiaries (the "Group"), the External Auditors' report thereon and the related management discussion and analysis of the Group's financial condition and results of operation ("MD&A"). After completing its review, if advisable, the Audit Committee shall approve and recommend for Board approval the annual financial statements and the related MD&A.

(c) Review of Interim Financial Reports

The Audit Committee shall review the interim consolidated financial statements of the Group and the related MD&A. After completing its review, if advisable, the Audit Committee shall approve and recommend for Board approval the interim financial statements and the related MD&A.

SCHEDULE A – Audit Committee (continued)

4. Duties And Responsibilities (continued)

4.1 Financial Reports (continued)

(d) Review Considerations

In conducting its review of the annual financial statements or the interim financial statements, the Audit Committee may, inter alia, as it deems appropriate:

- (i) meet with Management and the External Auditors to discuss the financial statements and MD&A;
- (ii) review the disclosures in the financial statements;
- (iii) review the audit report or review report prepared by the External Auditors;
- (iv) discuss with Management, the External Auditors and legal counsel any litigation claim or other contingency that could have a material effect on the financial statements;
- (v) review the accounting policies followed and critical accounting and other significant estimates and judgements underlying the financial statements as presented by Management;
- (vi) review any material effects of regulatory accounting initiatives or off-balance sheet structures on the financial statements as presented by Management, including requirements relating to complex or unusual transactions, significant changes to accounting principles and alternative treatments under applicable accounting standards;
- (vii) review any material changes in accounting policies and any significant changes in accounting practices and their impact on the financial statements as presented by Management;
- (viii) review Management's report on the effectiveness of internal controls over financial reporting;
- (ix) review the factors identified by Management as factors that may affect future financial results;
- (x) review results of the Company's Whistleblower Policy; and
- (xi) review any other matters, related to the financial statements, that are brought forward by the External Auditors, Management, or which are required to be communicated to the Audit Committee under accounting policies, auditing standards or Applicable Requirements.

(e) Approval of other Financial Disclosures

The Audit Committee shall review and, if advisable, approve or recommend for Board approval financial disclosure in a prospectus or other securities offering document of the Company, press releases disclosing, or substantially based upon, the annual or quarterly financial results of the Company and any other material financial disclosure, including financial guidance provided to analysts, rating agencies or otherwise publicly disseminated.

4.2 External Auditors

(a) General

The Audit Committee shall be responsible for oversight and evaluation of the work of the External Auditors, including the External Auditors' work in preparing or issuing an audit report, performing other audit, review or attest services or any other related work.

(b) Nomination and Compensation

The Audit Committee shall review and, if advisable, select and recommend for Board approval the External Auditors to be nominated and the compensation of such External Auditors. The Audit Committee shall have ultimate authority to approve all audit engagement terms and fees, including the External Auditors' audit plan.

(c) Resolution of Disagreements

The Audit Committee shall resolve any disagreements between Management and the External Auditors as to financial reporting matters brought to its attention.

(d) Discussions with External Auditors

At least annually, the Audit Committee shall discuss with the External Auditors such matters as are required by applicable auditing standards to be discussed by the External Auditors with the Audit Committee.

(e) Audit Plan

At least annually, the Audit Committee shall review a summary of the External Auditors' proposed annual audit plan. The Audit Committee shall consider and review with the External Auditors any material changes to the scope of the plan.

(f) Review Reports

The Audit Committee shall review any reports prepared by the External Auditors in respect of financial statements of the Company.

(g) Independence of External Auditors

The Audit Committee shall review, discuss and report to the Board on an annual basis all significant relationships the External Auditors have with the Company to determine their independence.

4. Duties And Responsibilities (continued)

4.2 External Auditors (continued)

(h) Requirement for Pre-Approval of Non-Audit Services

The Audit Committee shall approve in advance any retainer or other fee of the External Auditors to perform any non-audit service to the Company or the Group that it deems advisable in accordance with Applicable Requirements and Board-approved policies and procedures. The Audit Committee may delegate pre-approval authority to a member of the Audit Committee. The decisions of any member of the Audit Committee to whom this authority has been delegated must be presented to the full Audit Committee at its next scheduled Audit Committee meeting.

(i) Approval of Hiring Policies

The Audit Committee shall review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the present and former External Auditors.

(j) Auditor Recommendations

The Audit Committee shall review with the External Auditors and management significant findings during the audit and the extent to which changes or improvements in financial or accounting practices or internal controls may be necessary.

(k) Financial Executives

The Committee shall review and discuss with Management the appointment of key financial executives and recommend qualified candidates to the Board, as requested and appropriate.

4.3 Compliance with Legal and Regulatory Requirements

The Audit Committee shall review reports from the Company's Corporate Secretary and other Management members on legal or compliance matters that may have a material impact on the Company, the effectiveness of the Company's compliance policies and any material communications received from regulators. The Audit Committee shall review Management's evaluation of and representations relating to compliance with specific applicable law and guidance, and Management's plans to remediate any deficiencies identified.

4.4 Audit Committee Hotline / Whistleblower Procedures

The Audit Committee shall establish procedures for (a) the receipt, retention, and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters; and (b) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters (the "Whistleblower Policy"). Any such complaints or concerns that are received shall be reviewed by the Audit Committee and, if the Audit Committee determines that the matter requires further investigation, it will direct the Chair of the Audit Committee to engage outside advisors, as necessary or appropriate, to investigate the matter and will work with Management and legal counsel to reach a satisfactory conclusion.

4.5 Audit Committee Disclosure

The Audit Committee shall prepare, review and approve any Audit Committee disclosures required by Applicable Requirements in the Company's disclosure documents.

4.6 Delegation

The Audit Committee may, to the extent permissible by Applicable Requirements, designate a sub-committee to review any matter within this Mandate as the Audit Committee deems appropriate.

5. No Rights Created

This Mandate is a statement of broad policies and is intended as a component of the flexible governance framework within which the Audit Committee functions. While it should be interpreted in the context of all applicable laws, regulations and listing requirements, as well as in the context of the Company's Memorandum and Articles of Association, it is not intended to establish any legally binding obligations.

Notes

FRONTIER 
RARE EARTHS