ANNUAL INFORMATION FORM

TITANIUM CORPORATION INC.

In respect of the financial year ended
August 31, 2004

JANUARY 18, 2005

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GENERAL INFORMATION

Documents Incorporated by Reference

The audited financial statements of Titanium Corporation Inc. (the "Corporation") and the Management's Discussion and Analysis for its most recently completed financial year ended August 31, 2004 are incorporated by reference in, and form part of, this Annual Information Form. They are available electronically under the Corporation's documents (with a filing date of December 21, 2004) at www.sedar.com.

Currency References Contained in this Document

All references in this Annual Information Form to "$" or "dollars" are references to Canadian dollars unless otherwise specified.

Information Obtained from Public Sources

Certain information contained in this Annual Information Form has been derived from publicly available information obtained from third party sources. The Corporation has not verified the accuracy or completeness of any information contained in such publicly available information. In addition, the Corporation has not determined if there has been any omission by any such third party to disclose any facts, information or events which may have occurred prior to or subsequent to the date as of which any such information contained in such publicly available information has been furnished or which may affect the significance or accuracy of any information contained in any such information and relied upon herein.

Special Note Regarding Forward-Looking Statements

Certain statements contained in or incorporated by reference into this Annual Information Form constitute forward-looking statements. The words "may", "would", "could", "will", "intend", "plan", "anticipate", "believe", "estimate", "expect" and similar expressions are intended to identify forward-looking statements. Such statements reflect the current views of the Corporation and its management with respect to future events and are subject to certain risks, uncertainties and assumptions. Many factors could cause the Corporation's actual results, performance or achievements that may be expressed or implied by such forward-looking statements to vary from those described herein should one or more of these risks or uncertainties materialize. The Corporation does not intend, and does not assume any obligation, to update these forward-looking statements.

GLOSSARY OF TERMS

The terms set forth below have the meanings set out opposite them for the purpose of this Annual Information Form.

Alluvial Deposits	Sediments such as sand or gravel transported and deposited by water.
Altered Ilmenite	Ilmenite ($FeO.TiO_2$) with some or all of the contained Ferrous Oxide oxidised to Ferric Oxide, leaving various iron oxides and Titanium Dioxide.
Anatase	A certain crystallographic form of Titanium Dioxide, with SG of 3.9.
beneficiation	Upgrading or increasing the content of a mineral (i.e. ilmenite) in the concentrate product
Bitumen	Generally, any of various flammable mixtures of hydrocarbons and other substances, occurring naturally or obtained by distillation from coal or petroleum, that are a component of asphalt and tar and are used for surfacing roads and for waterproofing, or upgrading to synthetic crude oil. Also the name given to the particular hydrocarbon which is contained in the Athabasca Oil Sands.
Bitumen Froth	Mixture of Bitumen, water, clay and oleophilic minerals (including the Heavy Minerals containing Titanium and Zircon) which floats to the top of the settling vessels after the freshly mined oil sands are subjected to hot water and caustic and vigorously agitated.
Calcine	To heat (a substance) to a high temperature but below the melting or fusion point, causing loss of moisture, reduction or oxidation, and the decomposition of carbonates and other compounds
Caustic (Soda)	NaOH or sodium hydroxide dissolved in water. A strongly basic polar ionic solvent used to leach certain soluable minerals and clean Bitumen off oil sands.
Centrifuge Plant	Part of the processing operation of Syncrude Canada Ltd. where the Bitumen Froth is centrifuged to remove the solids, water, and clay which are then sent to the tailings pond. Also called the Froth Treatment Plant.
Coke	Solid reductant produced from the distillation of crude oil or the devolatilisation of coal. Used as a source of carbon reductant in metallurgical operations such as the chloride process.
Chloride Process	Industrial process for transforming (especially titanium-bearing) oxide minerals in a medium of hot chlorine gas and coke, to form Titanium Tetrachloride("tickle"), used in the manufacture of Titanium Dioxide pigments and titanium metal.
Deposit	A mineralized body which has been delineated and found to contain sufficient mineral grade and commercial value to justify further exploration or development work. A deposit does not become a reserve until certain legal, technical and economic factors have been addressed and resolved.
Dry Mill	Plant where dry separation processes are employed for the separation of valuable heavy minerals.
Estuarine Deposits	Alluvial Deposits which originated in an estuary.
feedstock	Raw material supplied to a processing plant.
Foundry	An establishment where metal is melted and poured into moulds. The moulds themselves must not melt at the molten metal temperature. Highly thermally resistant materials such as Zircon are used to line these moulds.
Froth Treatment Plant	See "Centrifuge Plant".

Gangue Minerals	Worthless rock or other minerals in which valuable minerals are found or are associated with.
Garnet	A family of minerals conforming to a specific chemical composition containing silicate. They are very hard and used as an abrasive or sand blasting medium. SG varies between 3.4 and 4.3.
Gravity Spiral Concentrator	A vertically oriented multi-cycle helical sluice, at the top of which a sand slurry is introduced. Separates solids in the slurry based on their SG using centrifugal force and hydrodynamic transport.
Heavy Minerals	Minerals found in sands having SG of not less than 2.8, including Zircon, the titanium-bearing minerals Rutile, Anatase, Ilmenite, and Leucoxene, as well as Garnets, Tourmalines, Kyanite, Siderite, Pyrite, Magnetite, and others.
Ilmenite	Iron Titanium Trioxide ($FeTiO_3$ or $FeO.TiO_2$). SG of 4.7. The TiO_2 content varies between 46% to 65%.
Kyanite	Aluminium Silicate ($KAlSi_3O_8$). SG of 3.5.
Leucoxene	The limiting case of Altered Ilmenite wherein the Ferrous Oxide has been weathered out in varying degrees and converted to Ferric Oxide. SG varies between 3.6 – 4.3. The TiO2 content varies between 70 and 85%.
Magnetite	Ferrous Oxide (Fe_3O_4). Ferromagnetic with SG of 5.2.
Mineral Suite	The make-up or assemblage of the various minerals present in an ore body or process stream.
Oleophilic	Attracted to oil by virtue of their surface chemical properties.
Pionjar	A portable, gasoline powered drill suitable for coring soft material like soil and sand. Used for the deeper sampling program on the Shubenacadie.
ppm	Parts per million
Pyrite	Iron Sulphide (FeS_2)or "Fool's Gold". SG of 5.1.
Quartz	Silicon Dioxide (SiO_2) or Silica. SG of 2.6.
Refractory	Material that has a high melting point, such as Zircon.
Rutile	A certain crystallographic form of Titanium Dioxide, with SG of 4.2. The TiO2 content is typically 95% .
SG	Specific gravity.
Siderite	Iron Carbonate ($FeCO_3$). SG of 3.9.
Silicates	Silicon Dioxide (Quartz) and other minerals largely consisting of silicon and oxygen, often erroneously used to refer to those minerals with SG less than 2.8.
Slimes	Valueless undersize material (or fines) in a sand mixture, both mineral and organic, including clay.
Tailings	Valueless detritus material from a separation or concentration process.
THM	Total Heavy Mineral fraction by mass, as derived from a heavy liquid separation test procedure.
TiO_2	Titanium Dioxide. White pigment obtained from chemical processing of natural minerals such as ilmenite, leucoxene and rutile.
TiO_2 Units	Amount of Titanium Dioxide contained in a mineral assemblage, used for making direct comparison of the valuable fraction of different ores or mixtures.

Titanium Dioxide	White powder used as pigment for its high covering power, durability and stability in ultra-violet light and opacity in coatings, plastics, and paper.
Ton	Short Ton or U.S. Ton. Equals 2000 lbs. or 907.4 kg. (Not to be confused with Long Ton or 2240 lbs).
Tonne	Metric Tonne or long ton. Equals 1000 kg or 2204 lbs.
Tourmaline	A family of iron-silicate minerals of little or no value and SG of 2.9 to 3.2.
trash minerals	Minerals having no commercial value, such as pyrite, kyanite, quartz and siderite.
TPH	Tonnes per hour.
Vibracore	A portable coring machine which utilizes high-frequency, low-amplitude vibrations to work a tube into liquefied sedimentary strata such as a river bed or sand bar. Used for the shallow bulk sampling work on the Shubenacadie.
Wet Plant	Plant where wet gravity separation processes are employed for the concentration of heavy minerals.
Zircon	Zirconium Silicate (ZrO_2. SiO_2). SG of 4.7.

THE CORPORATION

Titanium Corporation Inc. (the "Corporation") was formed by articles of amalgamation under the *Business Corporations Act* (Ontario) on July 24, 2001 pursuant to the amalgamation of Titanium Corporation of Canada Limited ("TCCL") and NAR Resources Ltd. ("NAR"). All references to the Corporation in this Annual Information Form include references to TCCL and NAR unless the context otherwise requires.

The Corporation maintains its principal and registered offices at Suite 1903, 200 King Street West, Toronto, Ontario M5H 3T4.

GENERAL DEVELOPMENT OF THE BUSINESS

The Corporation's mission is to become the first titanium and zircon sand producer in Canada. The Corporation has entered into an exclusivity agreement with Syncrude Canada Ltd. ("Syncrude") and a major U.S. titanium dioxide pigment producer to jointly explore and develop the potential for extracting and producing titanium-bearing minerals and zircon from Syncrude's centrifuge plant tailing stream in Alberta, Canada. The Corporation also controls approximately 102 square kilometres of a titanium and zircon bearing mineral sand deposit located on the Shubenacadie River and Cobequid Bay area of Nova Scotia, Canada.

The Oil Sands Project

On June 4, 2003, the Corporation entered into a two-year exclusivity agreement dated as of May 16, 2003 (the "Exclusivity Agreement") with Syncrude, of Fort McMurray, Alberta, and a major U.S. titanium dioxide pigment producer ("PigmentCo") to jointly explore and develop the potential for extracting and producing titanium-bearing minerals and zircon from the tailings discharge of Syncrude's centrifuge plant (the "Oil Sands Project"). Under the exclusivity agreement, Syncrude agrees not to engage in various activities for the purpose of any business or undertaking for the removal of Heavy Minerals from the Oil Sands Project for the duration of the agreement, except in conjunction with the Corporation and PigmentCo, and to supply samples containing Heavy Minerals. The Exclusivity Agreement does not restrict the Corporation's ability to seek to develop business relationships with other oil sand producers.

The occurrence of Heavy Minerals in the oil sands of Alberta has been known for many years and has been well documented. A 1996 study by the Alberta Chamber of Resources, the so-called Mineral Development Agreement Study, shows that although the Heavy Minerals vary greatly in their concentrations, they occur in virtually every geological horizon within the Athabasca oil sands deposit. The Corporation became interested in the Heavy Mineral potential of the oil sands in 1999 after reviewing research papers published by Syncrude. In 2000, the Corporation signed a confidentiality agreement with Syncrude, started collecting tailings samples, and began basic research and development work on processing technologies which could be used on the oil sands. Over the past three years, the Corporation has developed and refined a separation process for the recovery of Heavy Minerals from oil sand tailings by merging conventional mineral sand beneficiation technology with conventional oil sand technology.

The Corporation's beneficiation process involves first removing the residual hydrocarbons, clay and gangue minerals from these tailings and then separating and concentrating the valuable Heavy Minerals into marketable products suitable for sale to manufacturers of titanium dioxide pigments, titanium metal and zircon-based products. The Corporation has filed for patent protection and has pending patent applications in Canada and the United States for the proprietary process.

To date, the Corporation has processed at its Halifax research and development facility over fifty, 45-gallon (Imperial) drums of solids taken from Syncrude's centrifuge plant discharge. The pilot plant located in Regina, Saskatchewan has also processed more than 250 tonnes of tailings obtained from a box cut on the beach close to the tailings pipe discharge at Syncrude's Plant 6 processing facility, yielding some 3000 tonnes of tailings. The amount of total Heavy Minerals contained as part of the solids average between 25-30%. Approximately 70% of this total Heavy Mineral fraction is comprised of valuable minerals. Independent mineralogical assessments and chemical analysis have been carried out by several qualified laboratories to confirm these findings, including the Mineral Engineering Centre, Dalhousie University, Nova Scotia; Saskatchewan Research Council, Saskatoon, Saskatchewan; Geochempet Services, Maleny, Australia; and UltraTrace (Pty) Ltd., Perth, Australia.

The products the Corporation is able to produce by its separation process at the bench scale and pilot plant level are as follows:

1. "HiTi", a blend of the titanium-bearing minerals leucoxene, rutile and anatase, where the minerals average greater than 80% TiO_2 content.

2. Ilmenite, a titanium-bearing mineral that typically averages 40% to 60% TiO_2 content. Since the ilmenite from the oil sands is heavily altered, it is high grade and averages more than 60% TiO_2 content.

3. Zircon, a mineral that typically averages 66% to 67% zirconium dioxide content.

Having demonstrated the separation process technology at the bench scale level, the next phase involved a scale-up to production at the pilot plant level. The Corporation has designed, engineered and built a pilot plant at the Saskatchewan Research Council's facility located in the Regina Research Park (part of the Saskatchewan Opportunities Corporation). The pilot plant has a design capacity of 4 TPH of centrifuge plant tailings solids and consists of a Wet Plant and a Dry Mill. The objective is to further refine the Corporation's proprietary process and expand towards commercial-scale throughput capability. The pilot plant was commissioned during April and May 2004. The engineering has been jointly carried out by Stantec Consulting of Regina, Saskatchewan and R.J. Robbins & Associates of Brisbane, Australia, with construction management by Dominion Construction of Regina.

Upon completion and definition of the processes**,** products qualities and operating costs at the pilot plant, and negotiation of commercial terms with Syncrude and PigmentCo, the Corporation will commission an independent feasibility study of the process to support design engineering, site selection and financing arrangements for a 500 TPH commercial scale facility located in Fort McMurray, Alberta. The processing complex will include a Wet Plant for the removal of bitumen and slimes and the gravity concentration of Heavy Minerals. The Heavy Mineral concentrate will be transported to the Dry Mill for drying and further separation into the valuable products (HiTi, ilmenite, and zircon) using various stages of magnetic and electrostatic separators. Waste or trash minerals from the processing complex will be returned to Syncrude's existing tailings pond.

The Nova Scotia Project

The Nova Scotia Mineral Sands Project (the "Nova Scotia Project") is located in western Nova Scotia near the community of Truro. The property is located in the Shubenacadie River tidal estuary and Cobequid Bay at the eastern end of the Minas Basin at the headwaters of the Bay of Fundy. Exploration activity is focused on a group of 629 mining claims grouped in 12 contiguous exploration licenses aggregating 101.3 square kilometres.

The Corporation commenced exploration for mineral sand deposits in Nova Scotia marine environments in the fall of 1997. Subsequent to the early exploration efforts, the Corporation focused its activity in the vicinity of Cobequid Bay and the Shubenacadie river basin. Upon confirmation of reported titanium mineral occurrences, grounds were staked and further investigated. Initial sample analysis results proved to be encouraging and the Corporation proceeded with an extensive field campaign and metallurgical test program.

A report prepared by Brian Stratford and Associates of Orange Park, Florida in February 2001 estimated the Nova Scotia Project to contain a]probable reserve of approximately 331 million tonnes with an average grade of 1.94% Heavy Mineral content.

Between December 2001 and February 2002, the Corporation engineered and built a state-of-the-art, bench-scale mineral sands research and development facility in the Mineral Engineering Centre of Dalhousie University at Halifax, Nova Scotia to research heavy-mineral sand extraction and concentration. Total capital expenditures for this facility, including more recent equipment acquisitions, were approximately $1 million.

In August 2003, the Corporation acquired new exploration licences in Cobequid Bay which increased the total area of its property from approximately 72 to 101.3 square kilometres.

In June and July 2004, the Corporation explored the area of the new exploration lic enses with 55 Pionjar percussion drilling method. Continuity of Heavy Mineral sand mineralization was confirmed, but distribution was erratic. The titanium and zirconium constituents were also found to be lower than in the Shubenacadie River.

BUSINESS OF THE CORPORATION

The Titanium Industry

Titanium was first discovered in 1791 and is now known to be the ninth most common element in the earth's crust although it is seldom found in high concentrations. Deposits originate from magma from which the highly resistant titanium minerals are liberated by natural erosion and concentrated along ancient and present-day shorelines. Most mineral sands deposits mined today were formed during the Quaternary Period (i.e. over the past 1.8 million years). The primary commercially-relevant minerals in these sands are the titanium-bearing rutile, leucoxene and ilmenite, in addition to zircon, garnet and magnetite.

The majority of the world's titanium feedstock today originates from alluvial sand deposits located in Australia, South Africa and the United States. Titanium mineral deposits are frequently accumulated along beach, river or deltaic banks as a result of tidal, wave or water flow and wind action that serves to concentrate the heavy titanium-bearing minerals. Key minerals are removed from these sand deposits using a variety of techniques which exploit their high specific gravity, as well as separation techniques which differentiate the minerals based on their magnetic and electrostatic properties. The leading suppliers of the feedstock to produce titanium dioxide pigments are Iluka Resources of Australia, South African based Richards Bay Minerals, Ticor and Rio Tinto's QIT in Canada.

Titanium-bearing minerals are converted into titanium dioxide using either a chloride (chlorine gas) or sulphate (sulphuric acid) process. Five companies, one of which is PigmentCo, purchase titanium-bearing mineral feedstocks that account for approximately 73% of the 2003 global titanium dioxide pigment production.

Titanium dioxide has a high refractive index and, in powder form, is one of the whitest substances on earth. Titanium dioxide pigment is prized for its chemical stability, brightness, non-toxicity and ultraviolet resistance, while titanium metal is known for its extremely high strength to weight ratio and fatigue and oxidization resistance. The unique properties of titanium dioxide give colours a richness unmatched by any other pigment, making it the basic critical ingredient in a wide range of industrial and consumer products including paints, plastics, cosmetics, sunscreens and even candy. The physical properties of the metal make it a key material for use in airframe and jet engine parts, spacecraft and missiles, in addition to high-end sports equipment and prosthetic joints.

Titanium Market Supply/Demand

The bulk of the demand for titanium-bearing mineral feedstock is for the production of pigments. Approximately 60% goes into paint, 20% into plastics, 13% into paper products and the remaining 7% mainly into metal production. Global demand for feedstock amounts to over 5 million tonnes annually with titanium dioxide pigment production currently at over 4 million tonnes annually. North America accounts for 1.7 million tonnes or 38% of global demand and western Europe accounts for 1.4 million tonnes or 31% of demand. According to industry estimates, the titanium feedstock and associated products are a US$2 billion a year market. According to industry estimates, total annual sales for the titanium dioxide industry and titanium metal markets are approximately US$8 billion.

Over the last 25 years, demand has grown by about 3% per year and, according to industry estimates, this level of growth is expected to continue to be driven by expanding uses in numerous end markets from architectural paints to aerospace to plastic bottling. Titanium demand is tied to macroeconomic factors and, accordingly, tracks global gross domestic product, avoiding the deep cyclical price volatility of many industrial commodities.

There is a scarcity of quality titanium resources worldwide. Production from Western Australia has been the standard of quality for the last 35 years. However, grades and quantity of these reserves are diminishing and not being replaced. These reserves are being replaced by lower grade and more challenging deposits in politically and economically less stable regions, such as Africa, India, and southeast Asia.

According to industry estimates, titanium feedstock supply from existing and approved new operations were anticipated to be 4.9 million tonnes annually (TiO_2 units) through 2003 of which 3 million tonnes (TiO_2 units) were to come from chloride-grade feedstock. According to industry estimates, chloride grade ilmenite (of which there is an abundance in the oil sands) is expected to remain in small surplus through 2005 (less than 100,000 tonnes annually). However, if no new projects with chloride grade ilmenite are brought online, a significant shortfall is expected to occur. Quantities of naturally occurring HiTi (rutile and leucoxene) have been spiralling downward for many years and, with the exception of the Oil Sands Project, a proposed project in Australia and a deposit in Sierra Leone, there is no known readily available large supply.

The Zircon Industry

Zircon is a valuable mineral with uses in the ceramic, foundry, refractory, television glass and jewellery industries. Zircon is prized for its thermal stability and reflective properties. In the worldwide zircon market for 2003, ceramics accounts for approximately 51% of total zircon consumption followed by foundry (approximately 15% of consumption), refractory (approximately 15% of consumption), TV glass (approximately 8% of consumption), zirconia & chemicals (approximately 9% of consumption) and others (approximately 2% of consumption) Zircon is only produced as a co-product to some of the same mineral-bearing sands where titanium is found and Australia accounts for roughly 75% of the world production of zircon. Major global producers of zircon include Iluka and Ticor, Richards Bay Minerals and Namakwa Sands (Anglo American PLC).

Demand currently outstrips supply for zircon and the market is expected to remain tight over the foreseeable future driven primarily by heavy processing demand from the rapidly growing Chinese ceramic and TV glass industries. According to industry estimates, in 2004, the supply of zircon increased by 3.8% in 2003. This coupled with the virtually static supply of zircon resulted in an undersupplied market in 2003, representing a deficit of approximately 48,000 tonnes, equivalent to 4.4% of total supply. According to industry estimates, new zircon projects would be required to meet the expected demand between the years 2003-2008, and to offset the declining production from some of the more mature zircon operations. None of the proposed large-scale titanium-bearing mineral operations are rich in zircon, with the exception of the Oil Sands Project.

As a result of the tight supply versus demand, the price of zircon has increased from $299 per tonne in 2002 to approximately $395 per tonne in 2003 and approximately $500 per tonne as of August 2004. Further price increases through the 2005 period or longer are expected as a result of the growing imbalance between supply and demand.

The Oil Sands Project

On June 4, 2003, the Corporation entered into a two-year exclusivity agreement dated as of May 16, 2003 (the "Exclusivity Agreement") with Syncrude, of Fort McMurray, Alberta, and a major U.S. titanium dioxide pigment producer ("PigmentCo") to jointly explore and develop the potential for extracting and producing titanium-bearing minerals and zircon from the tailings discharge of Syncrude's centrifuge plant (the "Oil Sands Project"). Under the exclusivity agreement, Syncrude agrees not to engage in various activities for the purpose of any business or undertaking for the removal of Heavy Minerals from the Oil Sands Project for the duration of the agreement, except in conjunction with the Corporation and PigmentCo, and to supply samples containing Heavy Minerals. The Exclusivity Agreement does not restrict the Corporation's ability to seek to develop business relationships with other oil sand producers.

The presence of Heavy Minerals in the Athabasca oil sands has been documented in a number of reports. In March 1996, the so-called Mineral Development Agreement Study (the "MDA Study") undertaken by the Alberta Chamber of Resources to summarize the potential for the development of Heavy Minerals from the oil sands was published. Prior to the MDA Study, the reports available in the public domain were generally exploratory in nature.

The MDA Study confirmed that titanium-bearing minerals and zircon are found throughout the oil sands formation. While there are variances in grade in each of the horizons, the open pit operators blend material from each of these horizons delivering a relatively consistent feed to their respective bitumen recovery operations.

The Corporation became interested in the Heavy Mineral potential of the oil sands in 1999 after reviewing research papers published by Syncrude. In 2000, the Corporation signed a confidentiality agreement with Syncrude, started collecting tailings samples, and began basic research and development work on processing technologies which could be used on the oil sands. Over the past three years, the Corporation has developed and refined a proprietary separation process for the recovery of Heavy Minerals from oil sand tailings by merging conventional mineral sand beneficiation technology with conventional oil sand technology.

Syncrude

Syncrude is the world's largest producer of crude oil from oil sands and the largest single-source oil producer in Canada, currently supplying 13% of Canada's petroleum requirements. Syncrude operates a large open-pit oil sand mine, utilities plant, bitumen extraction plant and upgrading facility that processes bitumen and produces value-added synthetic light, sweet crude oil for domestic consumption and export. Syncrude currently produces about 250,000 barrels of its so-called Syncrude Sweet Blend ("SSB") per day from its Mildred Lake site near Fort McMurray in northern Alberta. Syncrude has publicly announced an expansion program which will increase total daily production by 2005 to 350,000 barrels daily of SSB.

The Syncrude mine, extraction plant, and upgrader run 24 hours per day, seven days per week. Mining is effected using truck-and-shovel operations to dig up the oil sands after the muskeg and other overburden have been removed and set aside for future remediation of the mine site. Enormous diesel-electric cable shovels load 300- to 400-tonne heavy haulers, which transport the material to the bitumen recovery plant. There, sodium hydroxide (caustic), steam and hot water are added as the material is processed to remove the coarse solids (primary tailing solids) using giant tumblers and settling vessels. The bitumen, oleophilic minerals (which include the Heavy Minerals in which the Corporation is interested) and some water, float to the surface to form a froth, which is skimmed from the settling vessels and diluted with naphtha (a simple light hydrocarbon liquid somewhat similar to gasoline) to reduce its viscosity. The diluted froth is then sent to the centrifuge plant, passed through a series of inclined-plate settlers and centrifuged, or simply centrifuged, to remove the remaining solids and clays (along with some water and residual hydrocarbons), which are then slurry-piped to the tailings plant for disposal. This is the secondary tailings stream, discharged at a nearly constant 70°C, which is comprised of (on average) 80% water, 4% clay, 4% bitumen and 12% solids. The solids contain 20% to 30% Heavy Minerals, and will become the head feed for the Corporation's process. The bitumen from the centrifuge plant is sent to the naphtha recovery unit, and on to the upgrader where SSB is produced.

Relationship with PigmentCo

PigmentCo has significant experience in the testing, establishment and operation of industrial manufacturing processes including specifically the operation of an ilmenite mine and processing facility as well as titanium dioxide pigment and other manufacturing facilities. The Corporation has agreed to keep the name of PigmentCo confidential at its request. The obligation of the Corporation to deal exclusively with PigmentCo expired on November 6, 2004. The Corporation is free to negotiate with other pigment producers or zircon manufacturers as well as PigmentCo. To date, PigmentCo remains a party to the Syncrude 3-way agreement in that the Corporation has not exercised the replacement of PigmentCo pursuant to the terms of the 3-way agreement. If the Corporation and PigmentCo fail to enter into a definitive joint venture agreement, PigmentCo has agreed that it will withdraw from all other agreements to which it and the Corporation are parties at no cost to the Corporation.

The Exclusivity Agreement

The Exclusivity Agreement provides that Titanium and PigmentCo (collectively referred to therein and herein as the "Operators") and Syncrude, as the supply source and tailings facility provider, agree, among other things, that:

(a) the Operators will undertake the research, testing and development of the Corporation's separation process and the commercial application thereof to materials obtained from Syncrude's oil sands facilities in accordance with a prescribed research and development plan; and

(b) the Operators and Syncrude will negotiate with each other in good faith with respect to the creation of a commercialization agreement providing for, among other matters:

  (i) either the establishment and operation of a pilot facility at or near Syncrude's oil sand facilities or the operation of a pilot facility by the Operators or by an acceptable third party, in either case sufficient in size to demonstrate the technical and commercial efficacy of the Corporation's separation process; and

  (ii) upon successful completion of (i) above, the establishment and operation of a facility sufficient in size to produce, through the application of the Corporation's separation process, commercial quantities of Heavy Minerals.

Under the Exclusivity Agreement, Syncrude agrees that it will not, except as permitted thereby, contact, solicit, have discussions with, enter into agreements with or acquire any interest in an enterprise for the purpose of any business or undertaking for the removal of Heavy Minerals from the Oil Sands Project during the term of the Exclusivity Agreement. Syncrude also agrees to supply the Operators with reasonable quantities of samples containing Heavy Minerals. The Exclusivity Agreement contains additional provisions governing the rights of the Operators to pursue commercial arrangements with other tar sands operators, subject to certain rights of first refusal in favour of Syncrude. It also provides that if the exclusivity agreement between the Corporation and PigmentCo is terminated, the Corporation may, within a reasonable period of time, substitute an alternative operator reasonably acceptable to Syncrude and at least as financially strong as PigmentCo. If the Corporation fails to substitute an alternative operator reasonably acceptable to Syncrude, Syncrude may terminate the Exclusivity Agreement. Unless terminated earlier for cause in certain circumstances or extended, the Exclusivity Agreement is scheduled to terminate on June 4, 2005.

The Beneficiation Process

The first phase of the Corporation's beneficiation process, known as the "Wet Plant" subjects the wet sand to a cleaning step to remove residual hydrocarbons, clays, organics and fine and oversize sand grains. Once cleaned, the sand is passed through gravity concentration equipment which separates sand based on specific gravity. The purpose is to upgrade the total Heavy Mineral concentrate in the sand from its starting point in the Syncrude tailings stream of greater than 30% to as high a percentage as possible while achieving reasonable recovery rates. This phase of the process consistently produces an 80 - 85% total Heavy Mineral concentrate.

The second phase of processing, known as the "Dry Mill," begins with drying the wet Heavy Mineral concentrate and then subjecting it to various stages of electrostatic and magnetic separation. An ilmenite product is produced by taking advantage of the conductive and magnetic properties of the mineral. A HiTi product is produced by taking advantage of the conductive and non-magnetic properties of the minerals. A zircon product is produced by taking advantage of the non-conductive and non-magnetic properties of this mineral, as well as its high specific gravity.

Titanium and Zircon Products

The products the Corporation has been able to produce by its separation process at the bench scale level and pilot plant level are as follows:

1. "HiTi", a blend of the titanium-bearing minerals leucoxene, rutile and anatase, where the minerals average greater than 80% TiO_2 content.

2. Ilmenite, a titanium-bearing mineral that typically averages 40% to 60% titanium dioxide. Since the ilmenite from the oil sands is heavily altered, it is high grade and averages more than 60% TiO_2 content.

3. Zircon, a mineral that typically averages 66% to 67% zirconium dioxide content.

Mineralogy

To date, the Corporation has processed at its Halifax research and development facility over fifty 45-gallon (Imperial) drums of solids taken from Syncrude's centrifuge plant discharge. The amount of total Heavy Minerals contained as part of the solids average in excess of 30%. Approximately 70% of this total Heavy Mineral fraction is comprised of valuable Heavy Minerals (zircon, rutile, anatase, ilmenite, leucoxene, garnet and magnetite). Independent mineralogical assessments and chemical analyses have been carried out by several qualified laboratories to confirm these findings, including the Mineral Engineering Centre, Dalhousie University, Nova Scotia; Saskatchewan Research Council, Saskatoon, Saskatchewan; Geochempet Services, Maleny, Australia; and UltraTrace (Pty) Ltd, Perth, Australia.

The following table sets forth the assay results measuring the total Heavy Mineral content of the ten initial 45-gallon drums of sand solids which were taken from the tailings pond nearest the froth treatment tailings pipe discharge of Syncrude's Plant 6 processing facility.

Barrel No	% Heavy Minerals
S2000	34.74
S2001	32.65
S2002	29.05
S2003	28.78
S2004/2005**	45.42
S2006	19.22
S2007	21.14
S2008	23.26
S2009	24.16
Approximate Weighted Average	30.38

**barrels were combined for processing purposes

The following table sets forth the assay results measuring the total Heavy Mineral content of the second ten 45-gallon drums of sand tailings produced by Syncrude's processing facility.

Barrel No	% Heavy Minerals
S2010	41.9
S2011	45.5
S2012	42.5

S2013	41.5
S2014	18.6
S2015	41.7
S2016	43.7
S2017	36.6
S2018	34.2
S2019	45.3
Weighted Average	39.15

The results from the remaining samples taken from Syncrude's centrifuge plant discharge were consistent with the first 20 samples.

A sample of the typical Heavy Mineral concentrates produced on laboratory scale was submitted to Geochempet Services, Australia for mineralogical analysis. The following table sets forth the mineral contents of the sample.

Mineral	**Grade (%)**
Rutile	2.3
Anatase	1.6
Leucoxene	30.7
Ilmenite	25.3
Zircon	6.3
Magnetite	0.4
Garnet	3.0
Pyrite	4.9
Siderite	3.3
Kyanite	7.5
Tourmaline	13.2
Other	1.5
Total	100

The oil sands have more impurities (or trash minerals) and on average have a slightly finer grain size than typical beach mineral sand deposits. There is also a larger than normal variance in the size of the Heavy Minerals sands. These factors present additional challenges to the efficient processing of the Heavy Mineral concentrate. The critical steps required to create marketable-grade titanium dioxide and zircon from the oil sands include creating a Heavy Mineral concentrate from the tailings, removal of the remaining 3-5% bitumen from the concentrate as well as the removal of pyrite from the concentrate To date, the Corporation has made good progress in all of these areas using conventional approaches. Earlier efforts by other parties, in which researchers generally calcined and/or floated the Heavy Mineral concentrate in order to remove bitumen, pyrite, carbonates and silica, have been proven complex, expensive and, more importantly, ineffective.

Pilot Plant Progress

Having demonstrated the separation process technology at the bench scale level, the next phase involved a scale-up to production at the pilot plant level. The Corporation has designed, engineered and built a pilot plant at the Saskatchewan Research Council's facility located in the Regina Research Park (part of the Saskatchewan Opportunities Corporation). The pilot plant has a design capacity capable of processing 4 TPH of centrifuge plant tailings solids. The objective is to further refine the Corporation's process and expand towards commercial-scale throughput capability. The engineering has been jointly carried out by

Stantec Consulting of Regina, Saskatchewan and R.J. Robbins & Associates of Brisbane, Australia, with construction management by Dominion Construction of Regina.

The pilot plant was officially opened on May 26, 2004, also indicating the start of hot commissioning, or the introduction of tailings material to the beneficiation process for the first time.

On August 11, 2004, the Corporation announced the successful commissioning of the Wet Plant Operation at its Regina Pilot Plant. The result of commissioning the Wet Mill has been the production of heavy mineral concentrate in form satisfactory to be used to commission Titanium Corporation's Dry Mill, which is the final process stage allowing the Corporation to successfully recover titanium-bearing minerals and zircon from Syncrude Canada's Plant 6 tailings pond in quantities suitable for industry evaluation.

The composition of typical Heavy Mineral Concentrate produced from the Wet Plant as set out in the assay analysis completed by *Kumba Resources, South Africa* are summarized as follows:

Mineral	**(%)**
Ilmenite	7.2
Pseudo-rutile	17.4
Rutile / Leucoxene (HiTi minerals)	5.9
Total Fe-Ti Oxides + Pyrite + Quartz (Composites)	9.1
Zircon	21.0
Gangue (Monazite, Pyrite, Chromite, Others)	39.4
Total:	100.0

Mineralogical Analysis by Kumba Resources, South Africa.

On September 15, 2004, it was announced the the Dry Mill was successfully commissioned and the first TiO_2-bearing products were produced, validating the Corporation’s process technology for recovering TiO_2-bearing minerals and zircon from Syncrude Canada’s Plant 6 tailings.

The following X-ray fluorescence (XRF) analysis conducted by Ultra Trace (Pty) Ltd. of Australia confirmed the chemical analysis of the titanium bearing minerals recovered from the Pilot Plant as follows:

Product	**TiO_2 (%)**	**Fe_2O_3 (%)**	**MgO (%)**	**MnO (%)**	**ZrO_2 (%)**	**P_2O_5 (%)**	**U (ppm)**	**Th (ppm)**	**V_2O_5 (%)**	**Nb_2O_5 (%)**	**CaO (%)**	**K_2O (%)**
Ilmenite	64.40	26.14	0.56	0.83	0.16	0.23	30	35	0.22	0.16	0.18	0.06
HiTi	83.90	1.83	0.07	0.03	0.20	0.16	45	95	0.20	0.30	0.09	0.22

XRF analysis by Ultra Trace (Pty) Ltd, Australia.

On November 30, 2004, it was announced by the Corporation that the first bulk zircon products were produced by the Pilot Plant from the minerals recovered from Syncrude Canada’s Plant 6 tailings. The chemical analysis by Ultra Trace from Australia confirmed that the majority of the bulk zircon products can be classified as prime grade zircon which must fall within the following specifications:

$ZrO_2 + HfO_2$:	>66.0%
Fe_2O_3:	<0.10%
TiO_2:	<0.15%
Al_2O_3:	<0.25%
U + Th:	<500 ppm

Current Developments and Plans

Upon completion of the definition of the process, products qualities and operating costs at the pilot plant, and negotiation of commercial terms with Syncrude and PigmentCo, the Corporation will commission an independent feasibility study of the process to support design engineering, site selection and financing arrangements for a 500 TPH commercial scale facility located in Fort McMurray, Alberta. The processing facility will consist of a Wet Plant, for removal of bitumen and slimes and gravity concentration of the Heavy Minerals. The Heavy Mineral concentrate will be transferred to the Dry Mill for drying and further separation into the valuable products (HiTi, ilmenite, and zircon) using electrostatic and magnetic separators. Waste or trash minerals from the processing complex will be returned to Syncrude's existing tailings pond.

The Nova Scotia Project

Except as otherwise noted under the heading "Subsequent Developments" below, the following technical information regarding the Nova Scotia Project is based on, and in some cases has been excerpted from, a report by Brian W. Stratford and Associates ("Stratford") of Orange Park, Florida dated February 21, 2001 entitled "*Preliminary Independent Technical Valuation of the Nova Scotia Mineral Sands Project*" (the "Stratford Report") prepared in accordance with the requirements of National Instrument 43-101 – Standards of Disclosure for Minerals Projects ("NI 43-101") of the Canadian securities regulators. The authors of the report were Brian Stratford and Joel Warner of Stratford. Both authors are "qualified persons" under NI 43-101. The Stratford Report has been filed on SEDAR and can be reviewed at www.sedar.com. Information in this section subsequent to the date of the Stratford Report was supplied by Alexander Y. Po, P.Geo who is a qualified person under NI 43-101. The authors of the Stratford Report have reviewed the contents of this section relating to the information excerpted from the Stratford Report and Mr. Po has also reviewed the contents of this section.

Property Description and Location

The Nova Scotia Mineral Sands Project is located in central Nova Scotia near the community of Truro which is 7.5 kilometres to the east of the property. The property is located along the Hants/Colchester county line starting at roughly two kilometres south of Admiral Rock and follows the Shubenacadie River northward to the eastern reaches of Cobequid Bay (in close proximity to Lower Truro).

The Corporation currently holds 629 exploration claims distributed in 12 contiguous exploration licenses covering 101.3 square kilometres. The exploration licenses are registered with the Nova Scotia Department of Natural Resources ("NSDNR") and recorded in the NSDNR Mineral Registry Office in Halifax. The exploration licenses were issued on various dates between September 1997 and August 2003. Aggregate annual assessment work expenditures of $125,800 are required to keep the exploration licenses in good standing. The Corporation has aggregate remaining assessment work credits of $678,709 for exploration work expenditures incurred on the original 8 exploration licenses (429 claims). These credits are available to maintain the particular exploration licenses on which the work was done. On August 5, 2003 4 additional contiguous exploration licenses covering 200 claims were obtained. These new exploration licenses will require aggregate annual assessment work expenditures of $40,000 to keep in good standing. All of the required applications for annual renewals of Exploration Licenses were filed by November 15, 2004 with the Nova Scotia Department of Natural Resources.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Nova Scotia Project is accessed from Halifax International Airport by travelling 30 kilometres north along the Trans Canada Highway to Route 215 and then north for 25 kilometres. This leads to the town of Maitland where the services of an inflatable boat operator can be retained in order to reach the sandbar deposits. The deposit consists of sandbars exposed during low tide in the intertidal portion of the Shubenacadie River and Cobequid Bay.

Winters are relatively mild and the summers are short and cool. Along the Nova Scotia coastal environment, mean daily temperatures rise above the freezing point in approximately the second week of March. Because of frequent fogs and the cooling influence of ocean waters, the mean daily temperature in July stays below 15°C and in January temperatures stay above –5°C. Like most Atlantic Provinces, Nova Scotia generally receives high total precipitation, between 1200 and 1400 millimetres annually. Only about 15% of this precipitation falls as snow due to the mild winter temperatures.

There is a well-developed infrastructure in the area surrounding the Nova Scotia Project. All-season roads circumnavigate the property, high-voltage power lines traverse the area, there is an abundant source of water for product processing, a sufficient local workforce located nearby and a natural gas pipeline located 6 kilometres from the Nova Scotia Project. The Canadian National rail line is located 7 kilometres from the Nova Scotia Project. There is also a deep-water port at Halifax, which is 80 kilometres from the Nova Scotia Project.

The deposit itself is situated in the intertidal zone of the Shubenacadie River and Cobequid Bay. Given the extremely high natural suspended sediment load of the river and the bay, it is unlikely that there will be any measurable change in sediment loading as a result of any exploration or mining activity in either the Shubenacadie River or the Cobequid Bay. Sandbars physiography in the bay and river are ephemeral, changing in configuration, elevation and even mineralogical composition depending upon intensity of tides, river run-off and wave action due to climatic/weather condition.

Regional Geology

The Shubenacadie River drains the Windsor lowlands from Grand Lake northward to Cobequid Bay. The Cobequid Bay is part of the Minas Basin, which is the headwater of the Bay of Fundy, a branch of the Gulf of Maine. The Gulf of Maine was the result of the Appalachian orogeny 286-360 million years ago as rift boundaries at the beginning of the opening of the present day Atlantic Ocean. Sediment infilling began during the Triassic Period more than 200 million years ago. Unconformably overlying the Triassic units are basaltic lava followed by dominantly clastic sediments of the Jurassic period. The entire sequence was subjected to folding, uplifts, and tilting south westward. Some Cretaceous sediments directly overlie the Triassic and Carboniferous rock units.

The greater part of the Bay of Fundy’s coastline consists of erosion prone sand stones and conglomerates resulting in the formation of sandy estuaries and some isolated finer grained deposits in protected embayments.

Project Geology

The mineral sand deposit of interest is located in the intertidal zone of the Shubenacadie River and Cobequid Bay. The deposit consists of moderately well sorted, marine and terrestrially derived sediments. The marine sediments of the deposit have four possible sources: fluvial discharge, coastal erosion, bottom erosion and/or open-sea contributions. Sediments derived from the four noted sources are subject to a dynamic redistribution and sorting caused by tide cycles, long shore currents, seasonal precipitation and fluvial hydraulic movement.

The intertidal distribution of sediments is closely related to the shoreline configuration and its exposure to current and wave action. There are two types of shorelines flanking the deposit: cliff shorelines, with or without an intertidal zone, and salt marsh shorelines, with an extensive intertidal zone.

Cliffs cut in Triassic bedrock and/or Pleistocene deposits surround the perimeter of Cobequid Bay. At the base of these cliffs, wave action and water current cut the rock platform that extends across the intertidal zone. The bedrock platform is either exposed or covered by a veneer of gravel and/or sand. The intertidal platform in front of the cliffs experiences only small amounts of erosion and reworking during normal tidal conditions. During storms and exceptionally high tides, both the intertidal platform and cliff faces undergo extensive erosion, scouring and reworking by the currents and wave action. Although the suspended sediment load concentrations are high (+500 ppm) in the bay and river, thick deposits of mud are unusual except for some accumulation in sheltered areas, such as embayments. The grain size increases toward the seaward edge of mudflats due to increased exposure to current and wave action that prevents or limits mud accumulation. Coarsening of sediments is more prevalent in the estuaries of the Salmon and Shubenacadie rivers. In this area the mudflats in the upper part of the tidal zone grade into a mix of interbedded sand and mud. The mixed flats then grade into broader sand flats with ripples and a few large scale bedforms. Heavy Mineral concentrations are visible along the ridges of ripple marks forming broad strand deposits.

The sediments of the subtidal and intertidal foreshores in Cobequid Bay are volumetrically the most extensive. The bottom sediments are mostly sand. Continuous seismic profiles indicate that the sediment accumulation can be as much as 25 metres (82 feet), underlain by glacial deposits or bedrock . The central part of the bay is almost completely filled with sand. This sand forms subtidal and intertidal sandbars oriented in an elongated configuration with the long axis parallel to the dominant direction of the tidal currents.

The Nova Scotia Project has the three significant and essential elements common to other sand deposits with proven economic value: an original provenance or original source region; a concentrating mechanism; and preservation of the accumulated Heavy Minerals.

Exploration Information

Since the deposit has a distinct surface expression of exposed sandbars at low tide, aerial photography was used to establish ground control for base maps and a drill hole grid system. Mapping scale of 1:5000 was chosen to achieve an accuracy of +1/-1 meter. Survey triangulation of known ground stations was done for horizontal and vertical control. Spot elevations were taken on areas of exposed sandbars and referenced to mean sea level.

A drill hole pattern was established using a 100-metre-centre grid system along the sandbars in the river. When necessary, 50 metres spacing was adopted in some sandbar peripheries for in-fill holes. The broad offshore sandbars in Cobequid Bay were drilled on 300 metre spacing to cover the extensive deposit within the given time and tidal constraints. The grid was based on the global positioning coordinate system with the lines running north-south and east-west.

Between the months of May and September 1999, 395 vibracore drill holes were completed with aggregate meterage of 1,217 metres cored in the sandbars exposed during low tide along the Shubenacadie River and in Cobequid Bay. The average depth penetration was 3.08 metres and the maximum depth obtained was about 4.5 metres depending on the nature of material encountered. A three-ton bulk sample was also collected for test work done by Lakefield Research Ltd.

Canadian Seabed Research Ltd. ("CSR") conducted a seismic geophysical survey between May 17 and May 25, 2000 using a high-resolution seismic reflection system, sidescan sonar system and sub-bottom profiler. The survey was conducted to evaluate sand horizons in the marine sediment sequences of Cobequid Bay and the Shubenacadie River. It also identified the interface between the sediment and bedrock sequences. It successfully indicated that sediment thickness (along the track line) may be as much as 18 metres in some places. Sediment thickness measurements were generally interpreted to the uppermost sedimentary package. However, their acoustic character was not sufficient to confirm and separate the different sediment type. As a result, sediment thickness values from this high resolution seismic program are interpretative and need to be empirically tested.

A 64 drill hole program with aggregate meterage of 441 metres (1,410 feet) was conducted in October-November 2000. These deeper holes were drilled under a service contract with Sonic Soil Sampling (Ontario) Inc., and under the guidance of CSR. The main purpose of this phase was to ground truth the seismic survey interpretation done by CSR and test the vertical continuity of the titanium bearing sand deposit. Maximum drill hole penetration obtained was 13.72 metres while the minimum depth was 3.3 metres. The type of sediment encountered again controlled the depth of penetration. Samples were processed using the same protocol applied to the vibracore program.

Security of Samples

Sample handling and processing was conducted exclusively by independent contractors. Sample logging and preparation was conducted at the secure facilities of Maritime Diamond Drilling in Hilden, Nova Scotia. Once samples were logged, they were placed in "tamper proof' sealed plastic bags and numbered for immediate delivery to the testing facilities of The Mineral Engineering Centre of Dalhousie University, Halifax for analysis.

Probable Reserve Calculations

Based upon the exploration drilling conducted as of November 2000, the Stratford Report calculated a probable reserve estimate of 330,941,945 metric tonnes with an average grade of 1.936% Heavy Mineral content (using 0.9% cut-off grade).

Mineralogy

Mineralogical work done in 1998 at Outokumpu Technology Inc.- Physical Separation Division, SGS Lakefield Research and Technical University of Nova Scotia, coupled with electron microprobe work done at The Atlantic Coal Institute, indicated some variability in the mix of mineral suites depending on location of samples along the sandbars of the Shubenacadie River.

Based on the above mineralogical and microprobe results and personal analysis performed by Stratford as verification for the report, Stratford used an approximate average mineral suite content of the anticipated black concentrate product for the Stratford Report as follows:

Mineral	Percentage
Rutile	14.0%
Leucoxene	11.9%
Ilmenite	11.7%
Zircon	1.2%
Garnet	3.1%
Magnetite	30.1%
Other mixed silicates	28.0%

Preliminary beneficiation studies carried out at independent laboratories in Canada, the U.S. and Australia indicated that spiral concentration of the raw feed could yield a crude Heavy Mineral concentrate. A more extensive program of test work to improve recoveries and the quality of the Heavy Mineral concentrate was recommended. The feed material has a typical size distribution (40 x 200 mesh 98% by weight) similar to that of many other Heavy Mineral sands deposits.

Additional beneficiation of the rougher concentrate produced on the spiral concentrator test at Dalhousie University was evaluated at Carpco Inc. in Florida and at MD Mineral Technologies ("MD") in Australia. The work at MD consisted of an initial gravity separation, shaking table followed by low intensity magnetic separation, electrostatic separation, induced roll magnetic separation and ilmenite roasting. The ilmenite concentrate produced ranged from 32% TiO_2 to 61% TiO_2. The zircon fraction showed analyses ranging from 56.5% ZrO_2 to 60.8% ZrO_2, with relatively low levels of iron, alumina, and TiO_2.

The test work conducted at the Carpco facility initially concentrated on particle size and quantitative microprobe analysis of the Heavy Minerals. The data indicated that the Heavy Mineral suite consisted of a significant portion (greater than 65%) of complex aggregates of titanium-bearing and silicate minerals. Microprobe analysis indicated the presence of intergrowths in a portion of the titanium bearing minerals, but also pure and liberated rutile, leucoxene, and ilmenite.

Subsequent Developments

The Corporation determined to start the metallurgical investigation to generate data that will closely approach actual mining operations. The investigation of metallurgical properties of specific sandbars is necessary to generate data that can be used in mining operations such as draw control for blending tonnages to maintain uniform feed for the mill. It is also essential that this information be known to take advantage of any economic market conditions that may impact on future mining rate decisions.

Accordingly, in May 2002, the Corporation shifted the focus from its geologists to its metallurgical team. From May 12, 2002 to July 10, 2002, a bulk sampling campaign was launched using the vibracore drill and trenching to collect metallurgical samples from different specific sandbars. Twelve sandbars were sampled by extracting one tonne of material from each.

Concurrent with the metallurgical sampling program, in-fill drilling was conducted to reduce drill spacing of the original 64 deeper holes to help validate the estimates done by Stratford in the Stratford Report. Expansion step-out drilling was also conducted to further trace continuity of the titanium bearing Heavy Minerals. An additional 98 holes were drilled to achieve this goal. To date, the bulk of the deposit in the Stratford Report has been delineated with 162 deep holes aggregating 1147.69 metres of cored samples.

This series of studies will culminate in producing a flow sheet for the entire deposit that will accept feed of pre-determined blend. The objective is to produce various mineral concentrates that will meet the specifications ordered by pigment manufacturers and other end users.

In September 2002, the initial results of the metallurgical study showed that the Shubenacadie River deposit of Heavy Mineral grade at depth of 3 metres to be higher than the overall deposit average of 1.94% estimated in the Stratford Report. The average values for the 12 sandbars ranged from a low of 1.21% THM to a high of 5.81% THM, with nine of the 12 sandbars being above 2.95% THM.

In November 2002, the Corporation started preliminary engineering studies of different dredging operations. Due to the unique hydrological condition of the project, special emphasis is given to the selection of dredge platform for mobility, stability and capacity.

In August 2003, the Corporation was granted four additional Exploration Licenses located in the western part of Cobequid Bay increasing the total landholding to approximately 101.3 square kilometers.

In June and July 2004, the ground covered by the additional Exploration Licenses was explored with 55 Pionjar percussion drill holes for an aggregate 340 metres core drilled.

Due to the shift in the metallurgical investigation priority, the testing facility in Halifax was mainly devoted to the Oil Sands Project for the better part of 2002-2003 and the first quarter of 2004. The facility and manpower is too limited to accommodate simultaneous treatment of material from both the Oil Sands Project and the Nova Scotia project. Consequently, the Nova Scotia samples are awaiting additional mineral characterization studies and bench scale processing until completion of the Oil Sands Project. Metallurgical testing of the Shubenacadie deposit is currently held in abeyance until the completion of the Oil Sands Project studies. With the operation of the Pilot Plant in Regina to process Syncrude's tailings, no further work on the Nova Scotia project is contemplated at this time.

Environmental Study

In July 1999, the Corporation commissioned a Base Line Environmental Assessment Study for the project conducted by D. Scarrat & Associates (Environmental Consultants) and ADI Limited under the independent supervision of Martec Limited of Halifax, Nova Scotia.

The study concluded the following:

1. *Effects on sediment loading:* Given the extremely high suspended sediment load of the waters in the river and bay, it seemed unlikely that there will be any measurable change in sediment loading as a result of exploratory mining of the sand bars in either river or bay.

2. *Effects on aquatic biota:* The effect on the biota of the river and estuary will similarly be undetectable. The area disturbed by the operation at any one time will be an insignificant part of the whole. The effects on migratory fish are not expected to be significant, although it is possible that a few may be entrained within any hydraulic pumping system that might be employed. Most fish will simply pass by the dredge carried either by the flood or ebb tide.

3. *Effects on bird species (especially eagles):* The effects will also likely be minimal. Existing traffic on the river appears not to disturb the birds provided occupied nests are not approached too closely. Disturbance of eagles during the over-wintering phase can be avoided by careful scheduling of activities, and may in fact be an academic question since winter mining activities are constrained (i.e. winter shut down of operation due to ice condition).

4. *Effects on ecotourism:* No significant conflict is expected between the operation of tourist and recreational traffic. The dredge to be used in the river will occupy only a small part of the cross section of the river at any point, and this should be easily negotiated by passing zodiacs or kayaks.

As well, unlike many other types of mining operations, there will not be any smokestack emitting greenhouse gas. No chemical additives will be used in treating the minerals unlike other conventional base metal or even coal mining operations. The treatment of the minerals is exclusively based on exploiting their natural characteristics such as magnetism, high specific gravity and electro conductivity.

A more in-depth survey will be done at such time as the Corporation is in a position to apply for mining permits.

Summary

The Stratford Report estimates the probable reserves of the Nova Scotia Project to be approximately 331 million tonnes. With further drilling, this reserve may be significantly increased. Further metallurgical testing and advanced engineering, however, will be required before a feasibility study is done.

As of August 2004, the following exploration statistics stand:

Number of Deep (Pionjar) Holes Drilled: 217	Total Core Drilled: 1487.69
Number of Shallow (Vibracore) Holes Drilled: 395	Total Core Drilled: 1217

The deposit is unique because it is an active marine setting. This provides advantages and disadvantages not found in many land bound Heavy Mineral deposits. First, it facilitates flexibility in terms of dredging, as a dredge on this deposit would have the ability to move freely to and from high-grade areas within the deposit without costly ground preparations (i.e., creating artificial ponds.) Second, there will be no overburden stripping, storing, and remediation. Third, the deposit has no serious sliming problem since it is constantly being washed by tidal waters.

The base line environmental study indicates that any mining operation in the area will have minimum impact if not undetectable effect on the biota ecosystem. The Corporation believes that any adverse effect on the riparian community will also be minimal and can be resolved by negotiation.

Intellectual Property

The Corporation has filed patent applications in Canada (under serial number 2,426,113) and in the United States (under serial number 10/417,272) with respect to its proprietary processing technology for recovering heaving minerals (e.g., titanium bearing minerals and zircon) from oil sand tailings. Both patent applications are pending and in good standing.

Personnel

The Corporation currently has twelve full-time employees or contractors, who spend more than half of their time on behalf of the Corporation. The Corporation has sought to hire employees and contractors with expertise in oil sands, mineral sands or plant design engineering.

Risk Factors

Oil Sands Project

The Corporation has bench-tested and has successfully operated a commercial size demonstration plant demonstrating the processes for cleaning and extracting the appropriate concentrates from the Syncrude tailings. Unforeseen difficulties with scale-up to commercial scale, including commercially viable recovery rates, unexpected electrical utility costs, natural gas costs, labour cost or shortages, engineering cost and related industrial process risks could negatively impact the viability of the project. There are some market acceptance challenges with the relative fine particle size and minor chemical impurities of the products the Corporation produces. There are risks to the outcome of the project which depend on the Corporation's ability to deal with these issues in a cost-effective and safe manner, without adding chemicals to the tailings pond which are not already there.

The oil sands have more impurities and on average have a slightly finer grain size than typical beach mineral sand deposits. There is also a larger than normal variance in the size of the Heavy Minerals. These factors present additional challenges to the efficient processing of the Heavy Mineral concentrate. The critical steps required to create marketable-grade titanium dioxide and zircon from the oil sands include creating a Heavy Mineral concentrate from the tailings, removal of the remaining 3-5% bitumen from the concentrate and removal of pyrite from the concentrate. The Corporation has made good progress in all of these areas using conventional approaches; earlier efforts by other parties have been proven complex, expensive and, more importantly, ineffective. The is no assurance that the Corporation will overcome such challenges on a commercial scale.

The Corporation has necessarily relied on the MDA Study and Syncrude's own data to establish the extent and consistency of the tailings supply. The Corporation intends utilize daily samples taken by Syncrude from the Plant 6 tailings pipe to further verify the Heavy Mineral content of such samples. This involves more risk than the typical situation where a company can control its own source of supply.

Syncrude could slow its expansion plans or reduce production at the oil sands, or even stop production altogether due to softening of world oil prices, economic downturn, terrorist act, or industrial accident. Such slowdown, reduction or stoppage could greatly affect the viability of the Oil Sands Project.

The Corporation has filed patent applications in the United States and Canada with respect to its proprietary processing technology for recovering Heavy Minerals. There can be no assurance that such patent applications will be allowed or that, if issued, the patents will not be challenged by any third parties, or that the patents of others will not have an adverse effect on the ability of the Corporation to commercially exploit its technology. Furthermore, there can be no assurance that others will not independently develop similar technology, duplicate the Corporation's products or design around the patented technology developed by the Corporation. In addition, the Corporation could incur substantial costs in defending itself in suits brought against it in respect of such patents or in suits in which the Corporation attempts to enforce its own patents against other parties.

The Corporation may not be able to negotiate fair commercial arrangements with Syncrude and/or PigmentCo notwithstanding their obligations under the Exclusivity Agreement to negotiate in good faith, and, in such event, the Corporation may not be able to secure new customers and/or new suppliers of tailings.

Technological developments could render titanium dioxide obsolete as a pigment thereby substantially reducing the demand for titanium dioxide. Similarly, global demand for zircon could be diminished in the face of alternatives for its current consumers.

Nova Scotia Project

The principal risk relating to the Nova Scotia Project at it current stage is the challenge of engineering a barge/dredging system capable of maintaining anchor in a high marine energy environment.

The business of exploring for and exploiting mineral deposits involves a high degree of risk. Few properties that are explored ultimately reach the stage of commercial exploitation. Fires, power outages, labour disruptions, flooding and other natural disasters and the inability to obtain suitable or adequate machinery, equipment or labour are other risks involved in the conduct of exploration programs. The Corporation has relied, and may continue to rely, upon consultants and others for expertise. Substantial expenditures are required to establish mineral reserves through drilling, to develop extraction processes and to develop the processing facilities and infrastructure at any site chosen for commercial exploitation. Although substantial benefits may be derived from the discovery of a major mineral deposit, no assurance can be given that minerals will be discovered in sufficient quantities to justify commercial operations or that funds required for development can be obtained on a timely basis. The economics of producing Heavy Minerals from mineral properties are affected by many factors including the cost of operations, variations of the grade of minerals in the soil, fluctuations in the price of the resulting Heavy Minerals, fluctuations in exchange rates, costs of development, infrastructure and processing equipment and such other factors as government regulations, including regulations relating to royalties and environmental protection. In addition, the grade of mineralization ultimately produced may differ from that indicated by drilling and/or sampling results and such differences could be material. Depending on the price of the Heavy Mineral end-products or other minerals produced, the Corporation may determine that it is impractical to commence or continue commercial production.

The mineral reserve estimate of the Nova Scotia Project included in this Annual Information Form is an estimate only and no assurance can be given that any particular level of recovery of Heavy Minerals from the Nova Scotia Project will in fact be realized. In addition, the grade of mineralization ultimately produced from the Nova Scotia Project may differ from that indicated by exploration results and such differences could be material. There can be no assurance that minerals recovered in small scale laboratory tests will be duplicated in large scale tests under on-site conditions or in production scale operations.

Other Risks

Financing Risks

The Corporation has limited financial resources, has no source of operating cash flow and has no assurance that additional funding will be available to enable it to carry out additional work on its projects. The Corporation will require additional financing from external sources to meet its capital requirements. Although the Corporation has been successful in the past in obtaining financing through the sale of equity securities, there can be no assurance that it will be able to obtain adequate financing in the future or that the terms of such financing will be favourable. Failure to obtain additional financing could result in delay or indefinite postponement of the Corporation's projects.

Environmental and other Regulatory Requirements

The Corporation's activities are subject to environmental regulations promulgated by government agencies from time to time. Environmental legislation generally provides for restrictions and prohibitions on spills, releases or emissions of various substances produced in association with certain operations, such as seepage from tailings disposal areas, which would result in environmental pollution. A breach of such legislation may result in the imposition of fines and penalties. In addition, certain types of operations require the submissions and approval of environmental impact assessments. Environmental legislation is evolving in a manner that is creating stricter standards, and enforcement, fines and penalties for non-compliance are more stringent. Environmental assessments of proposed projects carry a heightened degree of responsibility for issuers and directors, officers and employees. The cost of compliance with changes in governmental regulations has a potential to reduce the profitability of operations. The Corporation's current activities require permits from various governmental authorities and such activities are and will be governed by laws and regulations on exploration, development, extraction, production, taxes, labour standards, occupational health, waste disposal, toxic substances, land use, environmental protection, safety and other matters. There can be no assurance that all permits which the Corporation may require for exploration, construction of facilities and conduct of operations will be obtainable on reasonable terms or on a timely basis, or that such laws and regulations would not have an adverse effect on any project that the Corporation may undertake. The Corporation believes that it is in substantial compliance with all material laws and regulations which currently apply to its activities. Failure to comply with applicable laws, regulations, and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions. Amendments to current laws, regulations and permits governing the Corporation's activities could have a material adverse impact on the Corporation and cause increases in capital expenditures or production costs or reduction in levels of production at producing properties or require abandonment or delays in development of mineral properties.

Mineral Prices

There is no assurance that, even if commercial quantities of Heavy Minerals can be produced from the Corporation's projects, a profitable market may exist for the sale of same. Factors beyond the Corporation's control may affect the marketability of the Heavy Minerals produced.

Uninsured Risks

There are risks against which the Corporation cannot insure or against which it may determine not to insure. The potential costs which could be associated with any liabilities not covered by insurance or in excess of insurance coverage could reduce or eliminate any future profitability and result in increasing costs and a decline in the value of the Corporation's securities.

Competition

The Corporation competes with international companies that have substantially greater financial and technical resources to support their business activities as well as for the recruitment and retention of qualified employees.

Share Price Fluctuations

In recent years, the securities markets in Canada have experienced a high level of price and volume volatility. The market price of securities of many companies, particularly those considered development stage companies, have experienced wide fluctuations in price which would have not necessarily been related to their operating performance, underlying asset values or prospects.

Dividends

All of the Corporation's available funds will be invested to finance the growth of its business and, accordingly, investors cannot expect to receive a dividend on the Common Shares in the foreseeable future.

Dependence on Outside Parties

The Corporation has relied upon consultants, engineers and other third parties and intends to continue relying on these parties for expertise. If the work of such parties is deficient or negligent or is not completed in a timely manner, it could have a material adverse effect on the Corporation.

MANAGEMENT'S DISCUSSION AND ANALYSIS AND SELECTED FINANCIAL INFORMATION

The Management's Discussion and Analysis for the Corporation's most recently completed financial year ended August 31, 2004 and the selected financial information contained therein are incorporated by reference in, and form part of, this Annual Information Form. They are available electronically under the Corporation's documents (with a filing date of December 21, 2004) at www.sedar.com. To obtain copies of the Management's Discussion and Analysis, please contact the Corporation in writing at 200 King Street West, Suite 1903, P.O. 35, Toronto, Ontario, M5H 3T4.

MARKET FOR SECURITIES

The common shares of the Corporation (the "Common Shares") are listed and posted for trading on the TSX Venture Exchange (the "TSXV") and trade under the stock symbol "TIC".

DIRECTORS AND EXECUTIVE OFFICERS

The following table sets forth the name, municipality of residence, position(s) held with the Corporation and principal occupation within the previous five years of each of the current directors and executive officers of the Corporation as at the date of this Annual Information Form:

Name and Municipality of Residence	Position(s) held with the Corporation	Principal Occupation for the past five years	Director Since

Name and Municipality of Residence	Position(s) held with the Corporation	Principal Occupation for the past five years	Director Since
George D. Elliott [2] Toronto, Ontario	Chairman, President and Chief Executive Officer and Director	April 2000 – present: Officer of the Corporation; 1998 – December 2003: Senior counsel at Gowling Lafleur Henderson LLP (law firm); December 1998 – present: Executive Vice President, MCAP Financial Corporation (commercial and construction mortgage lending and servicing)	March 2000
Ronald Arnold [1][2][3] Sudbury, Ontario	Director	President and co-owner, Dalron Construction Limited (residential and commercial construction)	March 2000
John Ryall [1][2][3] Toronto, Ontario	Director	Retired December 31, 2002 from practice as a Chartered Accountant and business advisor Prior to December 31, 2002 – Partner for 26 years with Grant Thornton LLP and its predecessors	February 2004
Arthur H. Ditto [2] Wickenburg, Arizona	Director	Retired April 2002 – January, 2003: Vice Chairman, Kinross Gold Corporation (gold mining company); 1993 – April 2002: President and, prior to 1996, Chief Operating Officer, Kinross Gold Corporation	January 2003
D. Stephen Rankin [2][3] Halifax, Nova Scotia	Director	Chairman, Seagull Pewter and Silversmiths Ltd. (manufacturing and sale of pewter products)	February 2002
William Welsh [1][2] Toronto, Ontario	Director	President, Megaloid Laboratories Ltd. (chemical trader and distributor)	March 2000
John Zaozirny Calgary, Alberta	Director	Counsel, McCarthy Tetrault.	March 2004
George Duguay Thornhill, Ontario	Corporate Secretary	President of G. Duguay Services Inc.; Partner of Duguay & Ringler Corporate Services (corporate secretarial and accounting services)	–
John Oxenford Edmonton, Alberta	Senior Vice President, Oil Sands Operations	January 2004: Officer of the Corporation 1980 – January 2004: Senior Technical Advisor, Syncrude	–

Name and Municipality of Residence	Position(s) held with the Corporation	Principal Occupation for the past five years	Director Since
Niel Erasmus, Regina, Saskatchewan	Vice President, Production Technology and Pilot Plant General Manager	March 2004: Officer of the Corporation January 2001 – February 2004: Contracts manager, Fer-Min-Ore (Pty) Ltd (process equipment and plant supply company) 1997 – December 2000: Lead process engineer, Iscor Heavy Minerals project.	–
Bradley Kipp, Mississauga, Ontario	Chief Financial Officer	Managing Director, Weldon Capital Corporation since 2001. CFO and Director of African Copper Plc (AIM: ACU) since September 2004. President and CFO Atikwa Minerals Corporation (TSXV: ATK) since 2001. Vice President Finance Summit Resource Management Limited since 1997. Vice President and Director of Deloitte & Touch Corporate Finance Canada Limited from 1999 to 2000. CFO of MineGem Inc. 1996 to 2003. CFO of One Signature Financial 2003 to Sept. 2004.	–

(1) Member of the Audit Committee.
(2) Member of the Corporate Governance Committee.
(3) Member of the Compensation Committee.

Each director of the Corporation holds office until the close of next annual meeting of shareholders of the Corporation or until his successor is duly elected or appointed.

As at the date of this Annual Information Form, the directors and executive officers of the Corporation, as a group, beneficially owned, directly or indirectly, or exercised control or direction over, 1,814,126 Common Shares, representing approximately 4.4% of the issued and outstanding Common Shares.

ADDITIONAL INFORMATION

The Corporation will provide to any person, upon request to the Secretary of the Corporation one copy of any documents referred to in (i), (ii) and (iii) below, provided that the Corporation may require the payment of a reasonable charge if the request is made by a person who is not a security holder of the Corporation:

(i) one copy of this Annual Information Form, together with one copy of any document, or the pertinent pages of any document, incorporated by reference in this Annual Information Form;

(ii) one copy of the comparative financial statements of the Corporation for its most recently completed financial year for which financial statements have been filed together with the accompanying report of the auditor and one copy of the most recent interim financial statements of the Corporation that have been filed, if any, for any period after the end of most recently completed financial year; and

(iii) one copy of the information circular of the Corporation in respect of its most recent annual meeting of shareholders that involved the election of directors or one copy of any annual filing prepared instead of that information circular, as appropriate.

Additional information, including information about the directors and officers and their remuneration and indebtedness, principal holders of the Corporation's securities, options to purchase securities and interests of insiders in material transactions, if applicable, is contained in the management information circular of the Corporation in respect of its most recent annual shareholders meeting that involved the election of directors. Additional financial information is provided in the Corporation's comparative financial statements and its Management's Discussion and Analysis for its most recently completed financial year. A copy of such documents may be obtained upon request from the Secretary of the Corporation.

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