#### ORBITE ALUMINAE INC.

# Management's Discussion and Analysis - For the quarter and six months ended June 30, 2014

This Management's Discussion and Analysis ("MD&A") is current to July 29, 2014 and is management's assessment of the operations and the financial results together with the future prospects of Orbite Aluminae Inc. ("Orbite" or the "Corporation"). This MD&A is intended to supplement and complement the Corporation's condensed consolidated interim financial statements and accompanying notes for the quarter and six months ended June 30, 2014. The Corporation's condensed consolidated interim financial statements were approved and authorized for issuance by Orbite's Audit Committee and Board of Directors, and have been prepared in accordance with accounting policies consistent with the International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

This discussion contains forward-looking statements that are not historical in nature and involves risks and uncertainties. Forward-looking statements are not guarantees as to Orbite's future results as there are inherent difficulties in predicting future results. These forward-looking statements include, but are not limited to, statements regarding expectations of the Corporation as to the market price of alumina and other metals, strategic plans, future commercial production, production targets, timetables, mining operating expenses, capital expenditures, and mineral reserve and resource estimates. Forward-looking statements involve known and unknown risks and uncertainties and accordingly, actual results and future events could differ materially from those anticipated in such statements. Factors that could cause future results or events to differ materially from current expectations expressed or implied by the forward-looking statements include, but are not limited to, fluctuations in the market price of metals, mining industry risks, uncertainty as to calculation of mineral reserves and resources, risks related to hedging strategies, risks of delays in construction, operating cost risks, requirements of additional financing, increases in tax or royalty rates or adoption of new interpretations related thereto, and other risks described in this MD&A under "Risks and Uncertainties" and in the Corporation's other documents filed from time to time with Canadian securities regulatory authorities. Although the Corporation is of the opinion that these forward-looking statements are based on reasonable assumptions, those assumptions may prove to be incorrect. Accordingly, readers should not place undue reliance on forward-looking statements. The Corporation disclaims any obligation to update or revise these forward-looking statements, except as required by applicable law.

The use of "we", "us", "our", the "Corporation" or "Orbite", means Orbite Aluminae Inc. The Corporation's continuous disclosure materials, including annual and quarterly MD&As, annual and quarterly financial statements, annual reports, AIFs, management proxy circulars, and various press releases issued by the Corporation are available on or through its website, or at www.sedar.com. All figures are in Canadian dollars unless stated otherwise. Any references to tonnes are to metric tonnes. Additional information relevant to the Corporation's activities can be found on its website at www.orbitealuminae.com.

#### **Scientific and Technical Information**

Unless otherwise indicated, scientific or technical information in this document relating to mineral reserves or mineral resources is based on information prepared by employees or consultants of Orbite, in each case under the supervision of, or has been reviewed and approved by Marc Filion, Eng., Ph.D., MBA., As of the date of this MD&A, Mr. Filion owns 200,000 options to purchase Class A shares of the Corporation.

Mr. Filion is a "Qualified Person" ("QP") as defined in National Instrument 43-101 – *Standards of Disclosure of Mineral Projects* ("**NI 43-101**"). A "Qualified Person" could be summarized as an individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these, has experience relevant to the subject matter of the mineral project, and is a member in good standing of a professional association.

# **CORPORATE STRUCTURE**

Orbite Aluminae Inc. (the "Corporation" or "Orbite") was incorporated on June 17, 1983 under the *Canada Business Corporations Act*. On October 11, 2011, the Corporation amended its articles to change its name to "Orbite Aluminae Inc." (formerly known as Exploration Orbite V.S.P.A. Inc.). Its share capital is comprised of one Class of common shares, i.e. the Class A shares (the "Common Shares" or the "Class A Shares"), which are the only shares that are currently issued and outstanding.

The Corporation's head and registered office is located at 6505 Trans-Canada Highway, Suite 610, in Montréal, Québec, H4T 1S3. The Corporation also has a place of business in the industrial park of Cap-Chat, at 80 Louis Landry Street, Cap-Chat, Québec, G0J 1E0 where it owns a 5,900 m<sup>2</sup> high-purity alumina plant (the "**HPA Plant**"). The Corporation also operates a Technology Development Center located in the City of Laval, Québec, at 500 Cartier Blvd West.

The Corporation's only subsidiary, 8238375 Canada Inc., was incorporated on June 29, 2012 under the *Canada Business Corporations Act* and is a wholly-owned subsidiary of the Corporation. The entity is non-operating and has no assets.

#### **DESCRIPTION OF THE BUSINESS**

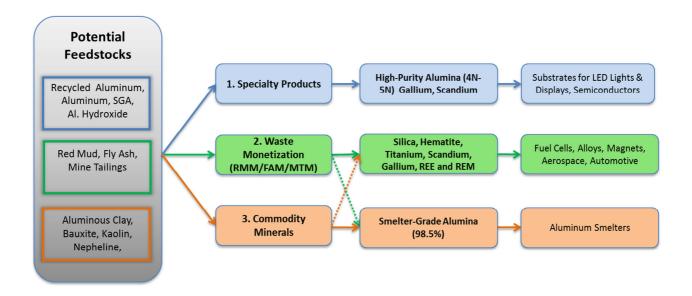
Orbite Aluminae Inc. is a Canadian clean technology based mineral-processing and resource development company. The Common Shares of the Corporation are traded on the Toronto Stock Exchange under the symbol "ORT" and on the OTCQX International over-the-counter exchange under the symbol "EORBF". The Corporation also issued debentures convertible into Common Shares which are listed on the Toronto Stock Exchange under the symbols ORT.DB and ORT.DB.A.

The Corporation has developed proprietary processes and technologies, which are expected to enable the environmentally sustainable and cost-effective production of high value products such as high-purity alumina ("HPA"), silica, hematite, magnesium oxide, titanium oxide, smelter-grade alumina ("SGA"), as well as rare earth ("REO") and rare metal ("RMO") oxides, from a variety of potential feedstocks that could include red mud, fly-ash, aluminous clays, mine tailings, bauxite, and kaolin clay.

The Corporation believes its proprietary technology has certain significant advantages over existing technologies in terms of sustainability and cost-effectiveness. For detailed information on Orbite's technology, we refer the reader to our comprehensive disclosure provided in our Annual Information Form and our Management's Discussion and Analysis for the year ended December 31, 2013.

The Corporation's proprietary processes and technologies differ from the rest of the industry in that they allow the extraction of all valuable products from a feedstock, with only inert residue remaining. They are either patented or patent pending, and the Corporation's intellectual property portfolio contains 16 intellectual property families, with the Corporation owning 100% of the intellectual property rights to 11 patents and 72 pending patent applications in 10 different countries through the international Patent Cooperation Treaty (PCT) process.

Management is presently transforming Orbite from a technology development company into an operating entity commercializing its technologies. In order to achieve this transition, the Corporation's has focussed its commercialization plan around the following priorities:



Production of Specialty Products will commence with the Corporation's HPA facility, scheduled to enter commercial production in Q1, 2015. Once completed, the HPA facility will also serve as an industrial scale demonstration facility for Orbite's Waste Monetization (Red Mud, Fly Ash, and Mine Tailings) and Commodity Minerals technologies for the achievement of its mid and long-term goals.

#### **GENERAL DEVELOPMENTS OF THE CORPORATION**

The following is a description of the general developments of the Corporation for the quarter ended June 30, 2014.

- On May 12, 2014, Orbite announced the nomination of Mr. Claude Lamoureux as Chairman of the Board
  of Directors of the Corporation and the appointment of Mr. Glenn Kelly, the Corporation's President and
  CEO, as a member of the Board.
- On May 12, 2014, Orbite ended ongoing discussions and terminated its memorandum of understanding with Rusal UC pertaining to its Smelter Grade Alumina project.
- On May 27, 2014, Orbite announced the completion of a private placement offering with Ressources Québec ("RQ"), a subsidiary of Investissement Québec. As part of the financing, Ressources Québec purchased 35,714,286 units of the Corporation at a price of \$0.28 per unit, each unit being comprised of one class A share and one half (1/2) of one class A share purchase warrant. Each full warrant entitles RQ to purchase one class A share of the Corporation at a price of \$0.33 for 36 months from the date of closing.
- On June 19, 2014, at the Annual and Special Meeting of Shareholders the shareholders ratified and approved several proposals including the continuation of the revised Shareholders Rights Plan and the Corporation's name change to "ORBITE TECHNOLOGIES INC. / TECHNOLOGIES ORBITE INC." The new name is expected to become effective in mid-September.

The following is a description of the general developments of the Corporation subsequent to the quarter ended June 30, 2014:

• On July 11, 2014, Orbite announced an investment of \$10,000,000 in the form of convertible debentures and

warrants pursuant to the exercise of the Series X Subscription Rights (the "Subscription Rights"). Under the placement, Crede purchased units consisting of \$10,000,000 principal amount of convertible unsecured debentures (the "Debentures") and 13,000,000 warrants (the "Warrants"). The Debentures will mature five years from issuance, namely July 11, 2019 and will bear interest at a rate of 7.5% per annum (the "Interest"). Each Debenture will be convertible, at the option of the holder, at any time prior to the maturity date, into class A shares ("Shares") at a conversion price of \$0.50 per Share (the "Conversion Price"), representing the 5 day VWAP at time of the conditional exercise of the Series X subscription rights. Upon conversion, the holder shall also be entitled to Shares equal to the additional interest such holder would have received if it had held the Debenture until maturity divided by the market price of the Shares prior to the date of conversion (the "Make-Whole Amount"), in addition to accrued and unpaid Interest, in cash or in Shares at the Corporation's discretion. Each Warrant entitles the holder to purchase one Share for a period of 3 years from its issuance at a price of \$0.60 per share.

On July 15, 2014, the Corporation received an initial payment of \$6 million from tax authorities in
consideration of investment tax credits on the equipment purchased for manufacturing and processing in
the Gaspé region. The payment relates to the 2012 financial year, and the Corporation expects
subsequent payments to follow. The amount will be deposited in a segregated account and serve as
security for the convertible debentures issued in December 2012.

#### **SPECIALTY PRODUCTS**

#### High Purity Alumina

High-purity alumina is used primarily to manufacture industrial sapphire substrates used in electronics. These sapphires are widely used in LED lighting applications, in LED displays, and in plasma display panels such as those found in handheld devices, cellular phones, laptops, and televisions.

Orbite is currently in the process of finalizing the construction of a three tonnes per day HPA production facility in Cap-Chat, in the Gaspé Peninsula of the Province of Québec. On March 8, 2012, the Corporation ceased operations of its alumina pilot plant and commenced a first phase of construction, in June 2012, with the intention to convert the 2,600 m² facility into a full-scale 5,900 m² high-purity alumina production plant, designed to produce alumina at 99.99% ("4N") and greater purities. Engineering design for the second phase of construction is being completed and construction will commence in August, 2014. Commercial operations are expected to commence in January 2015. Production is anticipated to reach three tonnes per day in Q1 2015. Even though the plant is not currently operational commercially, it is operated on an intermittent basis in order to produce samples for customer qualification.

# HPA Market Overview

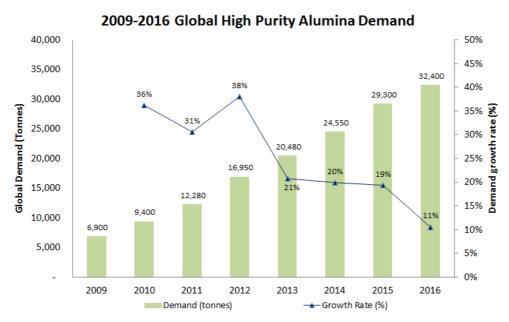
High-purity alumina (HPA) is a small but high-value segment of the global alumina market. HPA is defined as having a purity level of at least 99.9% (3N) but more typically of 99.99% (4N) up to purities of 99.999% (6N).

HPA has various applications across a broad range of industries:

• By 2015, approximately 60% of HPA is expected to be used to manufacture sapphire single-crystal applications, primarily as substrates for LED lighting and displays as well as display covers for personal electronics. In the latter category, the previously announced construction of the Apple sapphire production plant in Mesa, AZ that is leased to and operated by GT Advanced Technologies could be, once at capacity, the single largest consumer of HPA which would significantly increase the demand over the coming years. Other personal electronic device manufacturers may also follow the trend set by Apple

- and adopt sapphire covers and components which could also create a significant additional increase in HPA demand.
- Semiconductors (e.g. for tablets, personal computers, and smart phones among others), LED phosphors
  (e.g. plasma televisions), lithium-ion batteries (LIB), fluorescent and high intensity discharge (HID) lamps
  ceramics for industrial, military or medical applications as well as specialized and advanced filtration are
  other potential applications for HPA.
- LIB are used in multiple applications including portable electronics, electric vehicles and high capacity energy storage. The market for LIB will be driven by growth in the Electric Vehicle (EV) and Plug-in Hybrid Electric Vehicles (PHEV). Both are in their infancy and represent a small portion of the total passenger vehicle market. Amongst the various separator technologies to improve LIB safety and longevity, ceramic coated separators appear to be emerging as the most promising as they prevent the positive and negative electrodes from electrically contacting each other while allowing rapid ionic transport to complete the circuit for the passage of current in the LIB. The increase in sales of EV and PHEV over the coming years and consumer adoption rate could significantly increase the demand for HPA in coated separators for LIB over the years to come.

The size of the HPA market in 2014 is estimated at approximately 25,000 tonnes and is expected to grow at a compounded annual growth rate of 25% through the next years according the graph below.



Source: 2012 Deep Research Report on Global and China High Purity Alumina Industry, QY Research

While 4N (99.99%) alumina is mostly used for standard commercial applications, 4N5 (99.995%) and 5N (99.999%) offer the higher quality and performance required in high-tech applications and therefore often are priced higher. Prices are very difficult to estimate due to the fragmented nature of the market and as supply contracts are typically negotiated under non-disclosure agreements. The price of HPA at any given purity level also depends on the impurity profile (such as the content of silica, iron, etc.), the product type (powder, block, cake, seed, pellets, ball, ingot), and the product characteristics (particle size, density, etc.). Other factors include the size of the order, timing and size of deliveries, reliability of the supply, and differences in bargaining power between the buyer and seller. HPA prices have decreased significantly from peak levels in 2010/2011, based primarily on increased supply from many emerging small producers in China.

Most HPA supply is from China, Japan, Korea and Taiwan. The Corporation is a new entrant and is expected to become an important non-Asian supplier of HPA once its HPA plant achieves commercial production. Other recent new entrants include a new joint venture between Posco M-Tech and KC Corporation (a Korean based alumina producer), which was announced in early 2013 and could begin production in 2015 or later.

The Corporation has been in direct contact with approximately 100 potential HPA users in various fields of application and geography. It has collected technical specifications and commercial information on HPA currently used by these potential customers, as well as on development grades of HPA in order to advance the qualification process of its HPA with these potential customers. Representative samples for the Cap-Chat plant will be shipped to prospective customers as they become available.

The following table is a partial compilation of known HPA producers and estimates of their potential production. These estimates are for comparative purposes only and should not be construed as official guidance. The Corporation estimates current HPA prices range from US \$15/kg to US \$25/kg for 4N HPA, US\$20/kg to US \$30/kg for 4N5 and greater than US\$30/kg for 5N+.

Country	6	HPA Production			Purity	Don't start		
Country	Company	2014	(tonnes) 2015	2016	Capability	Product Types	Regional Focus	
Japan/Korea	Sumitomo Chemical	3,020	3,800	4,400	4N5	Various	Korea, Global	
S. Africa/N. Am	Sasol	1,800	2,000	2,000	5N	Powder, Pellet	USA, Europe	
Russia	RHT	160	240	300	4N7	Powder	Korea, Russia, Japan, China, Europe	
Korea	HMR	100	180	200	5N	Block, Pellet, Powder	Japan, Korea	
France	BAIKOWSKI	1,200	1,600	1,800	4N5	Block, Powder	USA, Europe, Japan, Korea	
China	Donghu	100	150	200	5N	Powder, Cake, Ingot, Seed	Korea	
Japan	Nippon Light Metal	1,100	1,200	1,200	4N5	Block, Pellet, Powder	Japan, Global	
China	Hebei Pengda	3,000	3,600	4,000	5N	Block, Discs	China, Global	
Korea	Posco / KC Corp	250	750	1,500	5N	N/A	Korea, Russia, China	
China	Xuancheng Jing rui	1,200	1,600	1,800	5N	Block, Powder	N/A	
China	Dalian Rall	600	800	1,000	5N	Block, Powder	China	
China	Dalian Luming	300	300	400	N/A	N/A	N/A	
China	UNION	200	300	300	5N	5N	Korea, Japan	
China	Shandong Aluminum Industry	360	400	400	≥4N	N/A	N/A	
China	Zhengzhou Institute	300	400	400	4N	Powder	N/A	
China	Yifeng New Materials	300	360	400	≥4N	Granule	N/A	
China	Zichuan Pheonix	300	360	400	4N	Powder	N/A	
China	Kunming Institute of Precious Metals	200	240	300	N/A	Granule	N/A	
China	Huantuo Group	800	1,000	1,000	N/A	Granule	N/A	
China	Xinfumeng	2,500	3,200	3,800	4N8	Powder	China, Russia, Europe, North America	
China	Honghe Chemical	300	300	400	5N	Powder, Block	N/A	
China	XinMeiYu	300	400	450	5N	Powder, Pellet, Crystal, Granule	Mainly Korea	
China	WenShiKe	200	300	400	N/A	Granule	N/A	
China	HFCT	200	200	240	5N5	Block, Pellet, Powder	China, Japan, USA, Global	
China	SINOMATERIAL RisingTech	160	220	270	5N	Powder, Block	Taiwan, Korea, Russia, China, Global	
China	Ecomis	190	250	310	N/A	Powder, Pellet	Mainly Taiwan	
China	Zhengsen Chemical	80	120	150	5N	Block, Pellet, Powder	China, Global	
China	Crown New Material	600	800	1,000	N/A	N/A	N/A	
	Other	7,940	9,270	10,600				
	Total	27,760	34,340	39,620				

Source: QYResearch - Deep Research Report on Global and China High Purity Alumina Industry, 2014, 2012 and 2011, Orbite Aluminae Inc.

During the 2nd quarter of 2014, Orbite continued the development of its HPA project with its engineering partners Seneca for detailed engineering, Groupe Alphard for project management and procurement, with Outotec for the supply of its calcination system and with CMI for the supply of the acid recovery system for the production of high purity alumina.

At its Technology Development Center ("TDC") in Laval, Québec, the Corporation performed additional pilot trials on HPA synthesis and purification steps to optimize product quality, production yields as well as operating costs. We also pursued equipment testing to define operating parameters to customize our product for specific applications.

At the Cap-Chat HPA facility, the Corporation ran a production campaign for the production of aluminum hexahydrate crystals (precursor of High Purity Alumina) to confirm optimum design conditions at industrial scale, as well as to produce high quality feed material for processing into customer samples for their supplier qualification processes. All results are positive and in line with expectations from the TDC work and engineering calculations.

The Corporation also performed additional calcination trials at Outotec's pilot center in Germany to confirm benefits of process development carried out at the Corporation's TDC and to provide supplier data in order to develop advanced process control logic for the Cap-Chat calcination system.

Outotec's manufacturing of the calcination system (decomposer, calciner and cooler) is progressing according to schedule. On July 14, 2014, Orbite announced that the calcinator equipment ordered from Outotec in Germany had arrived in Québec. The shipment, representing approximately 50% of the total investment in the calcination system, includes a combination of refractory and solids handling devices, as well as monitoring and control instrumentation. Also expected to arrive at the plant from Outotec's facility in Burlington, Ontario, are pre-shaped refractory bricks. Progress on fabrication of the vessels for the calcination system at Outotec's Burlington facility is progressing according to schedule, with all progress and quality inspection reports being positive. The various components of the calcination system will be shipped to the Cap-Chat facility in accordance with the construction schedule.

On the engineering front, Seneca is finalizing the detailed engineering, integrating the findings of the HAZOP (hazard and operability review), as well as the latest information from the equipment suppliers.

The Corporation is advancing equipment procurement with different suppliers. It also initiated the tender process for the construction portion, refractory installation & curing, as well as for vessel fabrication. The contract for erecting the plant's structural features was awarded, and Orbite expects to award the other major construction and fabrication contracts shortly.

With input from its various partners (engineering, equipment suppliers and construction companies), the Corporation is optimizing the construction sequence and schedule. The site is presently being prepared for the arrival of construction equipment and crews, and construction is anticipated to commence in early August, following the Québec construction holiday (July 19<sup>th</sup> thru August 3<sup>rd</sup>).

Until the extraction unit is converted to Orbite's chloride-based technology, the feedstock for the alumina purification unit will be sourced from commercially available products such as smelter-grade alumina, aluminum hydroxide or aluminum from recycled products. All these products are readily available and will not impact operating costs or product quality. The Corporation expects it will produce HPA grade product in line with market needs and identical to HPA quality from raw ores. As of the date of this report, material with purities ranging from 99.9% (3N) to over 99.993% (4N3) has been produced to satisfy customer requests for

samples. Although all material produced has a potential commercial value, purities below 99.99% (4N) are not presently the target market for the Corporation's HPA plant.

Orbite is constantly reviewing the timelines related to its projects. All material changes, once properly quantified using our best estimates, will be communicated to investors in a timely manner. It is important to remember that our estimates are forward looking statements and are based on information available at the time and/or the Corporation management's good-faith beliefs with respect to future events and are subject to known or unknown risks, uncertainties, assumptions and other unpredictable factors, many of which are beyond the Corporation's control. These and other risks are disclosed in the section entitled "Risk Factors" and otherwise referenced in all our public disclosures.

No independent assessment, preliminary economic evaluation, feasibility or pre-feasibility study has been completed in connection with the construction, design and operation of the HPA plant. The Corporation recognizes and understands the risks this entails and urges investors to consider the same. There can be no assurance that the HPA plant will operate successfully or economically, that the estimated capital costs will be sufficient to achieve the design capacity or the product purities and characteristics, or that the plant will provide a return on investment or become profitable.

# Capital Costs - HPA Plant

On June 6, 2013, the Corporation announced it had commissioned and received two independent capital cost and timeline estimates (the "Independent Estimates") for completing the HPA Plant, including the installation of a new calcination system. The Independent Estimates were prepared by two independent Québec based engineering firms. The Independent Estimates were subsequently reviewed and analyzed by Orbite management and engineers. Orbite management compared both estimates, took the higher of the two, and added costs, contingencies, spare parts and equipment that was outside the scope of the studies. The Independent Estimates were also compared to a third estimate prepared by the general contractor.

Based on the Independent Estimates, the Corporation announced a revised external capital cost estimate for its HPA Plant, before RITC (Refundable Investment Tax Credit), of \$105.9 million (or \$75.9 million net of RITC), representing an increase of \$20.9 million to the previous estimate. An additional expense of \$300,000 was incurred by the Corporation subsequent to the June 6, 2013 report as a consequence of delayed invoices from previously completed work.

On October 24, 2013, the Corporation announced an updated construction plan and budget for its HPA Plant. The HPA Plant is comprised of two major sections, the alumina extraction unit and the alumina purification unit. The extraction unit allows for the recovery of alumina from raw ores such as clay and is presently designed and based upon the Corporation's initial hydroxide-based process design. The Corporation subsequently developed a chloride-based extraction process, which is the technology platform for the production of smelter grade alumina (SGA) from clay as well as for the treatment of industrial wastes, such as Red Mud, Fly Ash and Mine Tailings, and the production of other by-products such as hematite, magnesium oxides and silica including rare earth and rare metal oxides. The chloride-based process is also more cost effective than the hydroxide based process. Although the HPA Plant was initially designed and built with an extraction unit based upon the hydroxide process, the Corporation has opted to utilize the chloride based process. Consequently, the Corporation will not be completing the extraction unit of its plant based on the hydroxy-based process, but does intend, in a later phase, to add the extraction unit based on the chloride process. Accordingly, the Corporation will first focus on the purification and calcination process in order to accelerate the time needed to achieve commercial production. The next step, which is anticipated for 2015, will be the conversion of the extraction unit using the chloride process.

As a result, the projected total external capital costs required to complete the construction of the HPA Plant, exclusive of the extraction unit, were revised from an original estimate of \$31,010,000 to \$28,345,000, as follows:

	Revised Estimate (in thousands)	Original Estimate
	,	(in thousands)
Engineering and Project Management	\$2,076	\$2,540
Material and Equipment, including Calcination System	\$16,015 <sup>(1)</sup>	\$15,090
Labour	\$4,818	\$6,660
Contingencies	\$3,436	\$4,220
Critical Spare Parts & Specialty Tools	\$2,000	\$2,500
Total	\$28,345	\$31,010

Note: (1) increase in equipment cost reflects firm detailed bid received for calcinator and changes in foreign exchange rates since June 2013.

The updated capital cost estimate provided above represents the investment required to achieve a production capacity of 3 tonnes per day. As at June 30, 2014, the Corporation had incurred external capital costs of \$9.96 million from the aforementioned revised estimate.

The phased development plan for the HPA Plant is as follows;

#### • Phase 1- 3 tpd of HPA

Commercial Operations to start in January 2015 and 3 tpd expected to be achieved in Q1 2015.

# • Phase 2a – 5 tpd of HPA

Cost estimate and preliminary engineering expected to be completed in the third quarter of 2014, with a decision to proceed with plant expansion to be taken during the fourth quarter of 2014.

# • Phase 2b – Conversion of the Alumina Extraction Unit to the Chloride-based Technology

Orbite plans to commence the preliminary engineering for the conversion of the extraction plant to the chloride technology by the end of 2014. Conversion to Orbite's chloride technology along with the addition of a scandium and gallium extraction unit is expected to commence in 2015, with completion tentatively expected for the first quarter of 2016. The chloride-based extraction process is the technology platform for the production of smelter grade alumina (SGA), the treatment and monetization of industrial wastes, such as Red Mud, Fly Ash and Mine Tailings, and the production of other by-products, such as hematite, magnesium oxides and silica including rare earth and rare metal products.

Once all phases are complete, the Corporation expects that its Cap-Chat facility will have the flexibility to use a variety of feed stocks, such as commercially available products (smelter-grade alumina, aluminum hydroxide or aluminum from recycled products), aluminous clay from the Corporation's Grande-Vallée deposit, and red mud residue or fly ash, to produce HPA or SGA (for customer testing) and other by-products, such as hematite, magnesium oxides, silica and rare earth and rare metal oxides. Thus, in addition to becoming a commercial HPA production facility, the Cap-Chat plant will also serve as a commercial scale demonstration facility for Orbite's SGA, Red Mud Monetization (RMM) and Fly Ash Monetization (FAM) technologies.

#### **WASTE MONETIZATION**

#### Red Mud

Red mud is generated as a by-product of alumina production using the industry-standard Bayer process. Red mud contains alumina, silica, iron, rare metals and other valuable elements, but with no viable means to remediate or extract value from this waste. Red mud is typically stockpiled in open-air tailings ponds, although in some cases it has been disposed of in the ocean, and represents a long-term environmental liability for the entire aluminum industry. According to the International Aluminum Institute ("IAI"), there are over 100 existing alumina refineries in the world and approximately 30 closed sites totaling an estimated global stockpile of over 3 billion tonnes of red mud including sites in Europe, Asia, North and South America. Over 120 million additional tonnes are produced annually, with less than 5% being re-utilized. The Corporation's HPA facility, scheduled to commence commercial production in Q1 2015 will, once converted to the chloride based process, serve as an industrial scale technology demonstration facility for Orbite's waste monetization initiatives, including red mud and fly ash. The subsequent step will be the scale-up to an industrial prototype, with a capacity to consume 100,000 to 200,000 tonnes per annum of feedstock. Following successful completion of this prototype, the Corporation intends to build a full-scale plant with a capacity to consume 500,000 to 1,000,000 tonnes of feedstock per annum. The Corporation should then be in a position to begin licensing its technology on a global scale. Such plants would process third-party stockpiles of red mud, producing alumina and other high-value products, returning only a small inert residue to the stockpile of less than 10% of the original volume.

Memorandum of Agreement with Veolia Environmental Services

On February 4, 2013, Orbite announced it had signed an exclusive worldwide collaborative agreement (the "MOA") with Veolia Environmental Services ("Veolia") for the remediation of red mud. Veolia is a global, integrated operator of waste management services that is active across all segments (solid, liquid, non-hazardous and hazardous waste) and intends to build red mud monetization ("RMM") plants around the world under a technology license from Orbite.

The Corporation and Veolia are actively working on achieving specific milestones in 2014 that include selecting the first demonstration plant site or sites, ownership and funding structure of the first demonstration scale RMM plant, completing detailed engineering and establishing a construction timetable and project plan. At this time, the Corporation and Veolia have short-listed potential RMM plant sites and are advancing discussions with different stakeholders.

The MOA and ongoing discussions with Veolia do not involve or have any impact on the HPA plant.

# Fly Ash

According to the International Energy Agency, coal is used to generate 41% of the world's electricity and is a significant source of thermal heat for industrial processes. Fly ash is one of the waste by-products generated from the burning of coal in coal-fired power plants. The largest producing regions of fly ash waste are China, India, USA, European Union, Africa, the Middle East and Russia.

According to the International Energy Association ("IEA") Clean Coal Centre, there are 7,000 coal-fired power units worldwide, spread over 2,300 sites, of which about 620 are located in China. It is estimated that 40-50% of the coal combustion by-products are re-used primarily in low-value applications, such as additives to concrete production - where such an industry exists nearby - and in embankments or other structural fills, with the remaining being sent to stockpiles. Fly ash contains alumina, silica, iron, rare metals and other valuable elements, but no viable remediation technology has previously existed.

The Corporation estimates that between 495 million and 650 million tonnes of fly ash are produced annually, a figure that could increase by 50% by 2030 as the World Coal Institute estimates that coal usage will increase by that much thru then.

The Corporation's HPA facility, scheduled to begin commercial production in Q1 2015 will, once converted to the chloride based process, serve as an industrial scale technology demonstration facility for Orbite's waste monetization projects, including red mud and fly ash. The Corporation should then be in a position to propose constructing Fly Ash Monetization plants (the "FAM Plant") based on its chloride based technology, with first an industrial scale prototype (100,000-200,000 tonne per annum feedstock consumption capacity), and a full-scale plant subsequently. Such plants would process third-party stockpiles of fly ash, producing alumina and other high-value products.

#### Agreements

At this time, the Corporation is pursuing discussions but has not entered into any agreements related to fly ash remediation.

#### **COMMODITY MINERALS**

#### Smelter Grade Alumina - Overview

The Corporation has proposed constructing and operating a smelter-grade alumina ("SGA") production plant (the "SGA Plant") processing aluminous clay mined from the Corporation's Grande-Vallée deposit, which is situated in the Gaspé Peninsula of the Province of Québec. The basic engineering design of the SGA Plant, based on the Corporation's proprietary processes, has been completed and the plant design follows the parameters of the Preliminary Economic Assessment ("PEA") Technical Report dated May 30, 2012, prepared in accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101").

# Preliminary Economic Assessment (PEA)

The PEA estimated that the Grande-Vallée deposit contains an Indicated Mineral Resource of 1.04 billion tonnes of aluminous clay grading 23.37% Al<sub>2</sub>O<sub>3</sub>, 52.62% SiO<sub>2</sub>, 8.42% Fe<sub>2</sub>O<sub>3</sub>, 1.64% MgO, and 6.90% as mixed oxides, as well as 563 ppm in REE+RM. The effective date of this mineral resource estimate is November 23, 2011. The PEA estimated that an SGA plant processing 2.5 million tonnes per year of aluminous clay from the Grande-Vallée deposit, could achieve an annual production of 540,000 tonnes of smelter-grade alumina and other by-products, including 189,298 tonnes of hematite, 1.2M tonnes of silica, and approximately 48 tonnes scandium oxide, 76 tonnes gallium oxide, and 851 tonnes of heavy and light rare earth oxides. The alumina was determined to be the primary product whereas the production of silica, hematite, magnesium, mixed oxides, REE and RM should be considered as by-products. The capital costs were estimated at \$500 million and the annual operating costs at \$113 million. As per NI 43-101, a Preliminary Feasibility Study or a Feasibility Study is required to demonstrate the economic merit of Mineral Resources and their conversion to Mineral Reserves. At the time of this document, no such study has been completed and therefore the Grande-Vallée deposit currently has no Mineral Reserves.

The PEA economic conclusions were originally calculated using August 2011 market prices. Since then, the market prices of alumina, rare earth oxides and rare metal oxides have decreased significantly (in some cases, over 50%), and as such the conclusions of the PEA under Scenario 1 (alumina and hematite) and Scenario 2 (alumina and all by-products) are not representative of the current financial viability of the Corporation's SGA project. We urge readers to review the "Sensitivity Analysis" sections provided in the Preliminary Economic Assessment, including Tables 22-5 and 22-6, which provided adjusted financial

conclusions for Scenario 2 reflecting different assumptions for market prices, including a "Low-Case" which reflected the market prices effective as at November 23, 2011. The following table provides a comparison of the estimated revenues and NPV between the Low-Case, High Case scenarios and the market prices in effect on July 10, 2014, for Scenario 2 using a 10% discount rate (pre-tax):

Case	Alumina Price (\$/tonne)	Hematite Price (\$/tonne)	Silica Price (\$/tonne)	Magnesium Oxide Price (\$/tonne)	REO/RMO Average Basket Price (\$/kg)	Alumina Revenues (Million \$)	REO/RMO Revenues (Million \$) (2)	Total Annual Revenues (Million \$)	Annual Gross Margin (Million \$)	Capex (Million \$)	IRR	Payback (Years)	NPV @ 10% (Million \$)
High-Case	\$425	\$200	\$25	\$400	\$479	\$230	\$393	\$702	\$572	\$500	114%	0.9	\$4,782
Low-Case	\$325	\$125	\$10	\$292	\$168	\$176	\$138	\$358	\$237	\$500	48%	2.1	\$1,690
July 10, 2014 (1)	\$333	\$113	\$30	\$510	\$143	\$180	\$117	\$370	\$249	\$500	50%	2.0	\$1.800

#### Notes:

(1) Prices extracted from the following sources:

Alumina: Three-month London Metal Exchange contract prices as of July 10, 2014 is \$1,950.00/tonne X 17.1% = \$333.45. Hematite. The conservative price is based on selling the entire production for iron ore production (steel manufacturing), not taking into account any volume sold for the production of magnets or other specialty applications that do command much higher prices. The current iron ore price is \$100.56/tonne - 62% Fe (www.indexmundi.com-last available). Our Fe<sub>2</sub>O<sub>3</sub> is 99.5% pure and therefore does contain 69.55% of Fe. \$100.56 X 69.55% / 62% = \$112.81, which was used in the NPV calculation. Silica. The recent silica prices show an average of \$30 per tonne (www.indmin.com), which was used in the NPV calculation. Magnesium and other oxides. Regarding "MgO and other oxides", the MgO price used was \$510/tonne, while \$5/tonne was used for the "other oxides". Current MgO price is found on (www.indmin.com). An average price of \$510/tonne is given for the latest transactions on calcined MgO - 94% & 96% purity - and therefore was used to update the results. Other oxide (Ca, K, Na) price estimate was left at \$5/tonne.

Rare earths and rare metals RE/RM. Current prices were extracted from the "Metal Page" website (www.metal-pages.com). Regarding Scandium oxide, the conservative price of \$1,500/kg was used.

(2) In the PEA base case (High-Case), the following rare earths and rare metals prices per kg were used for the NPV calculations: Ga (as metal) = \$900,  $Sc_2O_3$  = \$3,095,  $Y_2O_3$  = \$180,  $La_2O_3$  = \$143,  $CeO_2$  = \$150,  $Pr_5O_{11}$  = \$275,  $Nd_2O_3$  = \$400,  $Sm_2O_3$  = \$129,  $Eu_2O_3$  = \$650,  $Gd_2O_3$  = \$203,  $Tb_2O_3$  = \$4,332,  $Dy_2O_3$  = \$600. For July 10, 2014, the following average prices per kg (FOB China) were extracted from Metal Pages web site (www.metal-pages.com): Ga (as metal) = \$235,  $Y_2O_3$  = \$14.25,  $La_2O_3$  = \$5.65,  $CeO_2$  = \$5.15,  $Pr_5O_{11}$  = \$123.00,  $Nd_2O_3$  = \$62.00,  $Sm_2O_3$  = \$8.00,  $Eu_2O_3$  = \$760.00,  $Gd_2O_3$  = \$46.50,  $Tb_2O_3$  = \$655.00,  $Dy_2O_3$  = \$365.00. A conservative price of \$1,500 per kg was used for the  $Sc_2O_3$ .

# Feasibility Study for first SGA Plant

During 2013, the Corporation was primarily focused on raising financing required for the completion of its HPA facility. Following the completion of its HPA facility, which will serve as an industrial-scale technology demonstration facility, the Corporation intends to begin negotiations with potential partners, including Glencore, regarding the establishment of a joint-venture for its SGA initiative, with such negotiations including discussions on raising the required funding. Discussions are expected to include the establishment of corporate and project milestones, project funding requirements and the completion of a NI 43-101 compliant Feasibility Study Technical Report (the "Feasibility Study"), subject to securing sufficient funding for the study. Timing of the Feasibility Study will be established upon the establishment of a joint venture with a partner.

The Feasibility Study is expected to be based on the parameters of the PEA with aluminous clay expected to be mined from the Corporation's Grande-Vallée deposit. Several SGA plant sites are being considered and final selection could depend, in part, on the selection of a joint-venture partner(s). Permitting for the Grande-Vallée mine site and the SGA plant is expected to move ahead in parallel to the Feasibility Study. A project development timeline will be established as part of the Feasibility Study.

Orbite estimates the costs related to the completion of the Feasibility Study at approximately \$30 million, of which approximately \$11.6 million has been incurred as of the date of this MD&A, and costs related to the completion of the detailed engineering at approximately \$43 million, of which none have been incurred as of the date of this MD&A. These costs estimates are subject to ongoing internal assessments and could be revised at any time as the project progresses.

#### Offtake Agreement with Glencore International AG

On June 17, 2013, Orbite concluded a binding offtake agreement with Glencore International AG, a subsidiary of Glencore Xstrata plc, for the purchase of 100% of the smelter-grade alumina from the Corporation's proposed SGA plant in Québec for an initial term of 10 years from the commencement of commercial production. The Agreement also foresees that Orbite and Glencore will undertake negotiations relating to Glencore's potential financial participation in the ownership and operation of the Corporation's proposed SGA plant in Québec. The Parties have not set any timetable for the commencement or conclusion of these negotiations. The offtake and ongoing discussions with Glencore do not involve or have any impact on the HPA plant.

#### Memorandum of Understanding with NALCO

On June 27, 2012, the Corporation announced the signing of a non-binding Memorandum of Understanding ("MOU") with National Aluminum Corporation Limited ("Nalco") Asia's largest integrated aluminum complex, pursuant to which Orbite's technology would be evaluated on Nalco's ores, namely Gibbsite, Boehmite and also on Nalco's red mud residue left after alumina has been extracted from bauxite using the Bayer process. Orbite has let this agreement expire but continues ongoing discussions with Nalco to evaluate a potential collaboration. The expiration of the MOU with Nalco and further discussions with them do not involve or have any impact on the HPA plant.

# RIMOUSKI/MATANE CLAIMS SAGUENAY RIMOUSKI BAIE-COMEAU GASPÉ CAP-CHAT PLANT AND CLAIMS MONTREAL DESCHAMBAULT BÉCANCOUR PROJECT FORDECT AND CLAIMS ALUMBRUM SMELTER CITY

# MINERAL EXPLORATION PROPERTIES

# Québec

Orbite owns 100% of mineral claims totaling approximately 34 km<sup>2</sup> as well as one mining lease at a site near Grande-Vallée, Québec. This is the site of the Grande-Vallée aluminous clay deposit, with a 1.04 billion tonnes Indicated Mineral Resource. For more information, see our Annual Information Form dated March 17, 2014 for the year ended December 31, 2013, specifically the section entitled "Description of the Grande-Vallée Mineral Property".

#### Nova Scotia

On November 14, 2012, the Corporation announced it had entered into an agreement with a private company and its shareholders, pursuant to which the Corporation was granted an exclusive option for a period of three years (the "Option Agreement") to acquire a 100% undivided interest in the mineral claims and exploration rights of the Chaswood kaolin clay and sand property located in Halifax County, Nova Scotia, Canada (the "Chaswood Property").

The Chaswood Property consists of 163 claims encompassing 2,608 hectares (approximately 26.1 km2) in central Nova Scotia and is accessible by a network of paved highways and all-weather secondary roads. The property is strategically located near a natural gas pipeline and in proximity to the Port of Halifax, a major commercial port that could enable national and international shipments from a nearby potential SGA plant.

In order to acquire a 100% undivided interest in the Chaswood Property, Orbite made a payment of \$150,000 upon signing of the Option Agreement, and is required to: (1) incur aggregate exploration expenditures on the property of \$1 million by December 31, 2013 including costs related to NI 43-101 technical report, (2) deliver a NI 43-101 technical report by December 31, 2014, and if Orbite decides to exercise its option, (3) issue 2.4 million Class A Shares to the vendor, by January 1, 2016, released in tranches of 10% every six months following the date of issuance. As of the date hereof, Orbite has not incurred the entirety of the exploration expenditures which were to be incurred in 2013 on the property (see (1) above), and therefore, has not fulfilled one of the conditions required pursuant to the Option Agreement. Negotiations with the owner of the claims to resolve the issue are ongoing, and no significant concerns are expected.

#### **DIVIDEND POLICY**

The Corporation's policy is to retain earnings, if any, for the financing of future growth and development of its business. As a result, the Corporation has not paid dividends in the past three (3) years and does not intend to pay dividends in the foreseeable future.

# **DISCLOSURE OF OUTSTANDING SECURITIES AS OF JULY 29, 2014**

The Corporation is authorized to issue an unlimited number of Class A Shares. The holders of Class A Shares are entitled to receive notice of and to attend all meetings of the shareholders of the Corporation. Each Class A Share carries one vote. The holders of Class A Shares have the right to receive dividends if, as and when declared by the Board of Directors of the Corporation. In the event of the liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary, or any other distribution of its assets among its shareholders for the purpose of winding-up its affairs, the holders of Class A Shares of the Corporation are entitled to receive the remaining property and assets of the Corporation on a pro rata basis.

The Corporation has a common share purchase option plan (the "Option Plan") for its directors, officers, consultants and employees. The maximum number of shares available under the Option Plan is 10% of the outstanding Class A shares at the end of the period. Options granted under the Option Plan have a maximum ten-year term with vesting period at the discretion of the Board of Directors. Prior to October 2011, options had a five-year term. Options are granted at a minimum exercise price equal to volume weighted average price of the Class A Shares on the TSX stock exchange for the five trading days prior to the grant of the options.

As of July 29, 2014, the Corporation had 301,570,396 Class A Shares issued and outstanding. The Corporation also had 47,672,193 Share Purchase Warrants exercisable at a weighted average price of \$0.46 and expiring between December 2014 and July 2017. The Corporation also had 16,872,500 Common Share Purchase Options at a weighted average price of \$1.04. The Corporation could issue a further 7,142,857 Common Shares if the 2012 Convertible Debentures, and 15,358,750 Common Shares if the 2013 and July 2014 Convertible Debentures were fully converted at the option of the holder.

Outstanding Class A Shares	301,570,396
Share purchase warrants	47,672,913
Share options	16,872,500
Convertible debentures (2012)	7,142,857
Convertible debentures (2013)	1,358,750 <sub>(1)</sub>
Convertible debentures (2014)	14,000,000 <sub>(2)</sub>
Fully Diluted	388,617,416

<sup>(1)</sup> Assuming a conversion price of \$0.40.

On March 11, 2014, the Corporation issued the series X and Y subscription rights to Crede Capital Group, LLC ("Crede"), a US based institutional investor. On July 11, 2014, Crede exercised its series X for an aggregate total amount of \$10 million. Once exercisable, the series Y subscription rights will require Crede to purchase up to \$30 million of additional debentures of the Corporation, subject to regulatory and shareholder approval. Terms and conditions for the series Y subscription rights and the related debentures are summarized in the Corporation's amended and restated prospectus dated December 6, 2013.

<sup>(2)</sup> Assuming a conversion price of \$0.50.

# **FINANCIAL CONDITION**

Condens	ed Consolidated Interim Statements of Financial Position			
(Unaudite				
(0.1000.10	~~)			
			June 30,	December 31
			2014	2013
Assets				
Current a		Φ.	0.004.005 (	0.000.400
	Cash and cash equivalents	\$	8,661,605	
	Short-term investments		373,912	370,023
	Sales taxes and other receivables		790,128 1,935,743	302,138
	Current income and mining taxes recoverable		1,935,743	1,996,543
	Investment tax credits and other		2 502 425	1 202 400
	governmental assistance receivable		3,503,435	1,393,408
	Inventory		92,468 393,206	76,786
	Prepaid expenses and others  Total current assets		15,750,497	939,853 14,988,190
	Total current assets		15,750,497	14,966,190
Non-curre	ent assets:			
Titori ouric	The doctor.			
	Investment tax credits receivable		25,656,591	25,656,591
	Property, plant and equipment		70,122,684	64,886,054
	Patents		1,107,842	853,062
	Exploration and evaluation assets		17,053,316	17,361,519
	Total non-current assets		113,940,433	108,757,226
Total ass	ets	\$	129,690,930	123,745,416
Liabilities				
0	-L-10a1			
Current li		\$	4 004 044 (	4 705 500
	Accounts payable and accrued liabilities	Ф	4,234,244 \$ 4,874	
	Long-term debt		4,874	164,778
	Provisions		-	239,310
	Derivative financial instrument  Total current liabilities		362,000 4,601,118	5,169,651
	rotal current nabilities		4,001,110	5, 169,651
Non-curre	ent liabilities:			
l voir ouric	Convertible debentures liability		20,843,137	31,386,180
	Long-term debt		4,478,417	2,478,506
	Deferred income and mining tax liabilities		2,372,460	2,433,260
	Derivative financial instrument		352,808	3,510
	Total non-current liabilities		28,046,822	36,301,456
				22,001,700
Equity				
' '	Share capital and warrants		161,183,760	138,150,913
	Contributed surplus		14,421,544	13,876,689
	Deficit		(78,562,314)	(69,753,293)
	Total equity attributable to equity holders of the Corporation		97,042,990	82,274,309
				, , , , , , , , , , , , , , , , , , , ,
Total liab	ilities and equity	\$	129,690,930	123,745,416

#### Cash and short-term investments

Cash and short-term investments decreased by \$1,243,945 during the first six months of 2014, compared to December 31, 2013. The decrease was mainly due to the continued investment in the construction of the HPA plant, research and development, general administration and HPA plant operating expenses. The decrease was partially offset by the \$3.8 million financial contribution received from Canada Economic Development and \$10 million equity funding from Ressources Québec, a subsidiary of Investissement Québec.

#### Sales taxes and other receivables

Sales taxes and other receivables increased by \$487,990 during the first six months of 2014, compared to December 31, 2013. The increase of sales taxes (GST, QST and HST) receivable from the Federal and Provincial governments is primarily due to a higher volume of purchases compared to the fourth quarter of 2013.

#### Prepaid expenses and deposits

Prepaid expenses and others decreased by \$546,647 during the first six months of 2014, compared to December 31, 2013. The decrease is mainly due to the fair value variation of the embedded derivative on the 2013 debentures and the expensing of the prepaid insurance.

#### Investment tax credits

Investment tax credits classified as current increased by \$2,110,027 during the first six months of 2014, compared to December 31, 2013 as a result of the recognition of the 2014 accrued investment tax credits receivable on the equipment purchased for manufacturing and processing in the Gaspé region.

Investment tax credits classified as non-current relate to the 2012 and 2013 fiscal year, are pledged as security for the \$25 million convertible debentures issued in December 2012. The funds the Corporation will receive upon reimbursement of the 2012 and 2013 investment tax credits, will be deposited in a segregated account and serve as security for the convertible debenture. These funds will be released to the Corporation according to the terms of the trust indenture agreement.

# Property, plant, and equipment

Property, plant, and equipment ("PP&E") increased by \$5,236,630 during the first six months of 2014 compared to December 31, 2013. The net increase results from an increase of \$9,608,118 before investment tax credits, in the investment in PP&E attributable mainly to the HPA plant, partially offset by \$4,191,822 in government grants and refundable investment tax credits on equipment purchases for the HPA plant and the recording of depreciation during the period.

# Patents

Patents increased by \$254,780 during the first six months of 2014, compared to December 31, 2013. The increase is principally due to the costs resulting from the filing of 19 national entry phases in various countries and the filing of 3 new provisional patents.

#### Accounts payable, accrued liabilities

Accounts payable and accrued liabilities decreased by \$531,319 during the first six months of 2014, compared to December 31, 2013, mainly due to the increase in the accounts payable turnover ratio during the six month period compared to December 31, 2013.

#### Derivative financial instrument

The Corporation has a derivative financial instrument, recognized on the Statement of Financial Position, representing the estimated fair value of the convertible debentures holders' conversion option (refer to note 13 of the condensed consolidated interim financial statements for a description of the convertible debt, the embedded derivatives and their accounting treatment). The derivative, which meets the definition of a financial liability for accounting purposes, is recognized at its estimated fair value, and changes in fair value are recognized in comprehensive loss in the period the change occurs. The derivative will expire upon the maturity of the convertible debentures, or earlier if the conversion right is exercised by the holders. There is no future cash-payment associated with the recognized liability. The fair value of the derivative may change significantly from period to period due to the underlying change in the share price. If the conversion option is not exercised prior to maturity, the derivative's fair value will be zero when it expires. During the first six months of 2014, the derivative financial instrument liability increased by \$349,298 compared to December 31, 2013 mainly due to the expected volatility rate variation. Also, \$362,000 was recognized under current embedded derivative financial instrument for the series X and Y subscription rights to Crede Capital Group.

#### Long-term debt and convertible debentures

Long-term debt (including short-term portion) and convertible debentures increased by \$1,840,007, and decreased by \$10,543,043 respectively during the first six months of 2014, as compared to December 31, 2013. The decrease in convertible debentures results mainly from the exercise of the debenture conversion option by some of the 2013 debenture holders. The increase in long term-debt is principally due to the receipt of the \$3.8 million financial contribution by Canada Economic Development, recorded at amortized cost.

#### Share capital and warrants

Share capital and warrants increased by \$23,032,847, mainly due to the issuance of common shares as a result of the conversion option by some of the 2013 debenture holders during the first six months of 2014, and the \$10 million equity funding from Ressources Québec.

# Contributed surplus

Contributed surplus increased by \$544,855 during the first six months of 2014, compared to December 31, 2013, due to the recognition of share-based payments, partially offset by the exercise of stock options.

#### **RESULTS OF OPERATIONS**

Condensed Consolidated Interim Statements of Comprehensive Loss (unaudited)								
		Three mor	nths	ended June 30,		Six mor	nths	ended June 30,
		2014		2013		2014		2013
Expenses								
Research and development charges, net o investment tax credits and other	f							
governmental assistance	\$	471,655	\$	538,286	\$	875,829	\$	844,808
General and administrative charges		1,879,208		3,587,770		4,023,810		5,666,963
HPA plant operations		972,345		887,536		1,837,688		1,374,501
Other income		245,578		(47,604)		245,578		(77,900)
Loss before net finance income (expense) and								
income and mining taxes		(3,568,786)		(4,965,988)		(6,982,905)		(7,808,372)
Net finance income (expense)		(716,669)		1,597,949		(1,713,717)		3,953,605
Loss before income and mining taxes		(4,285,455)		(3,368,039)		(8,696,622)		(3,854,767)
Income and mining taxes								
Current		60,800		(19,840)		60,800		(90,550)
Deferred		(60,800)		45,090		(60,800)		140,040
		-		25,250		-		49,490
Net loss and comprehensive loss	\$	(4,285,455)	\$	(3,393,289)	\$	(8,696,622)	\$	(3,904,257)
Basic and diluted net loss per share	\$	(0.02)	\$	(0.02)	\$	(0.03)	\$	(0.02)
Weighted average number of shares outstandin		265,904,695		184,189,629		253,298,475		184,177,745

#### Revenues

The Corporation is a development stage company and has no revenues.

#### Research and development charges

Research and development charges are generally comprised of personnel related expenses (salaries and social benefits), share-based payments, consultant expenses and material costs for Orbite's Technology Development Center in Laval. These charges are presented net of government research and development investment tax credits and other government assistance of \$21,221 and \$44,675 for the three and six months ended June 30, 2014, and \$25,474 and \$43,096 for the same periods in 2013. Research and development charges decreased by \$66,631 in the quarter compared to same quarter in 2013, due to a decrease in salaries, external lab analysis, and consulting fees, partially offset by an increase in lab consumables. Research and development charges increased by \$31,021 during the first six months.

# General and administrative charges

General and administration charges consist mostly of personnel related costs (salaries and social benefits), share-based payment expenses, consulting, accounting, business development, legal, and investor relation costs relating to head office activities. General and administrative costs decreased by \$1,708,562 during the quarter compared to the same period in 2013. General and administrative costs decreased by \$1,643,153 during the six months ended June 30, 2014 compared to the same period in 2013. The decrease was attributable mainly to a decrease in share-based payments, salaries, professional fees, as well as a general reduction in expenses resulting from the cost reduction program in place since mid 2013.

#### HPA plant operations

HPA plant operations include administration, operating and maintenance costs for the HPA plant in Cap-Chat since the pilot plant activities ceased at the end of the second quarter of 2012. Costs incurred at the HPA plant that directly relate to the installation of the equipment and the commissioning of the plant, and meet the IFRS criteria for capitalization, are capitalized in property, plant and equipment (PP&E). HPA plant operation expenses increased by \$84,809 during the quarter ended June 30, 2014, and increased by \$463,187 during the six months ended June 30, 2014, as compared to the same period in 2013, due to an increase in operating and maintenance activities, as HPA related costs in the first quarter of 2013 were mostly capitalized.

# Other expense (income)

Other expense (income) increased by \$293,182 and \$323,478 during the quarter and the six months ended June 30, 2014, as compared to the same periods in 2013, due mainly to the payments to compensate purchasers of flow-through securities issued in December 2012 for adverse tax consequences incurred, as the Corporation did not meet the spending requirement related to qualifying Canadian mineral exploration expenses.

#### Share-based payments

The Corporation has a common share purchase option plan (the "Option Plan") for its directors, officers and employees. Share-based payments, which are non-cash in nature, decreased by \$559,714 and \$418,991 during the quarter and the six months ended June 30, 2014 compared to the same period in 2013. The decrease is mainly due to the lower fair value of the options granted in 2014, compared to 2013, reflecting the lower share value to calculate the fair value, despite the increase in the number of options granted period over period.

The following table details where the share-based payments have been recognized in the statements of comprehensive loss.

	Three months ended June 30,			Six mor	Six months		
	2014		2013		2014		2013
Research and development	\$ 30,235	\$	48,877	\$	83,525	\$	95,539
General and administration	304,232		790,812		1,020,947		1,294,141
HPA plant operations	7,904		19,487		23,813		37,424
Recognized in comprehensive loss	342,371		859,176		1,128,285		1,427,104
Capitalized in property, plant and equipment	-		42,909		55,357		175,529
	\$ 342,371	\$	902,085	\$	1,183,642	\$	1,602,633

# Finance income

Finance income consisting primarily of interest income, which decreased by \$12,532 and \$46,883 during the quarter and the six months ended June 30, 2014, as compared to the same periods in 2013, due to the lower average level of cash, cash equivalents, and short-term investments held by the Corporation.

# Other financial gains (losses)

The Corporation recognized a loss of \$708,057 and \$1,694,244 during the quarter and the six months ended June 30, 2014, compared to a gain of \$1,564,709 and \$3,918,478 for the same periods of 2013. The loss is mainly due to the mark to market adjustment relating to the 2013 convertible debentures, and the changes in fair value of derivative financial instruments.

#### **CASH FLOWS**

Condensed Consolidated Interim Statements o	f Cash F	lows Data			
(unaudited)		Three months	ended June 30,	Six months	ended June 30,
		2014	2013	2014	2013
Cash flows					
Operations	\$	(3,262,993) \$	(4,116,841) \$	(5,909,860) \$	(6,385,508)
Working capital items		(1,813,521)	(174,614)	(2,241,256)	3,521,650
Interest received		13,105	37,981	36,678	95,979
Interest paid		(500, 183)	(500,229)	(1,000,377)	(1,000,498)
Operating activities	\$	(5,563,592) \$	(4,753,703)	(9,114,815)	(3,768,377)
Financing activities		10,571,566	(20,789)	14,490,393	(23,784)
Investing activities		(1,282,004)	(6,692,196)	(6,623,412)	(27,979,831)
Net change in cash and cash equivalents		3,725,970	(11,466,688)	(1,247,834)	(31,771,992)
Cash and cash equivalents, beginning of period		4,935,635	19,882,480	9,909,439	40,187,784
Cash and cash equivalents, end of period	\$	8,661,605 \$	8,415,792 \$	8,661,605 \$	8,415,792

# Cash Flows from Operating Activities

Cash flows used in operating activities increased by \$809,889 during the quarter ended June 30, 2014, compared to the same period in 2013. Cash flows used for operations decreased by \$853,848 during the second quarter, compared to Q2 2013, while cash flows used for non-cash working capital items, mainly accounts payable, increased by \$1,638,907 during the second quarter ended June 30, 2014, as compared to 2013. Cash flows used in operating activities increased by \$5,346,438 for the six months ended June 30, 2014, compared to the same period in 2013. Cash flows used for operations decreased by \$475,648 during the six months ended June 30, 2014, compared to the same period in 2013. During the six month period ending June 30, 2014, cash flows used for non-cash working capital items amounted to \$2,241,256, mainly to cover the accounts payable, whereas during the six months ended June 30, 2013, the Corporation received cash from non-cash working capital items to the amount of 3,521,650, of which \$3,491,245 were sales taxes receivable.

#### Cash Flows from Financing Activities

Cash flows from financing activities increased by \$10,592,355 during the quarter ended June 30, 2014, compared to the same period in 2013, and increased by \$14,514,177 during the first six months, compared to the same period in the prior year. This increase is mainly due to the financial contribution received from Canada Economic Development during the first quarter, as well as the equity funding by Ressources Québec during the quarter ended June 30, 2014.

# Cash Flows used in Investing Activities

Cash flows used in investing activities decreased by \$5,410,192 during the quarter ended June 30, 2014, compared to the same period in 2013, and decreased by \$21,356,419 during the first six months compared to the same period in 2013. The decrease is mainly due to a reduction in investments in the HPA plant construction and in exploration and evaluation assets.

#### LIQUIDITY AND CAPITAL RESOURCES

The Corporation is a development stage company that has not generated any revenues or significant cash flows from its operations. The Corporation's source of funding has primarily been from the sale of equity and debt securities, and to a lesser extent, earning interest income, which is highly dependent on the cash balances and prevailing interest rates. The Corporation has limited financial resources, has no recurring revenues and continues to rely on the issuance of shares, debt or other sources of financing to fund its overhead, HPA plant construction, commissioning and ongoing operations and to advance its development-stage projects. As at June 30, 2014, the Corporation had an aggregate cash and short-term investments balance of \$9,035,517 and positive working capital (current assets less current liabilities) of \$11,149,379. Following the exercise of series X on July 11, 2014, the Corporation had on a pro-forma basis, a cash and short-term investments balance of \$19,035,517 and positive working capital (current assets less current liabilities) of \$21,149,379.

# Repayable financial contribution from Canada Economic Development

On January 30, 2014, Orbite announced it was granted a \$4 million non-interest bearing repayable financial contribution from Canada Economic Development for Québec regions to be used for the purchase and installation of the alumina calcinator, a key element in Orbite's high purity alumina production facility. In March 2014, the Corporation received \$3,800,000 and the remaining \$200,000 will be received during 2015. The contribution is interest free, repayable in 10 consecutive equal semi-annual installments starting 24 months following completion of the HPA Facility. The loan was discounted at a rate of 14.5% and was initially recorded at \$1,811,070, reflecting its fair value given its non-interest bearing nature. The difference between the proceeds received and the carrying amount of \$1,988,930 is considered a grant and credited to property, plant and equipment. The loan will be accreted from its initial carrying amount to \$3,800,000 over its life. In 2010 and 2011, the Corporation received unsecured loans totalling \$800,000 from CED, whose maturity has been deferred to April 1<sup>st</sup>, 2016. The loan is secured by a first ranking movable hypothec against the Corporation's movable assets located on the premises of the Corporation's high purity alumina production facility in Cap-Chat, Québec, until such time as the calcination equipment is installed and functional, at which time such loan will be secured exclusively by such calcination equipment.

# Equity investment from Investissement Québec

On May 27, 2014, the Corporation completed a private placement with Ressources Québec (RQ), a subsidiary of Investissement Québec, which resulted in the issuance of 35,714,286 units at a price of \$ 0.28 per unit. Each unit was comprised of one Class A share and one half (1/2) of one Class A share purchase warrant. Each full warrant entitles RQ to purchase one Class A share of the Corporation at a price of \$ 0.33 for 36 months from the date of closing.

# Convertible debentures

On July 11, 2014 Orbite announced that Crede Capital Group, LLC ("Crede") had completed an investment of \$10,000,000 in the form of convertible debentures and warrants pursuant to the exercise of the Series X Subscription Rights (the "Subscription Rights"), as issued on March 11, 2014.

Under the placement, Crede purchased units of the Corporation consisting of \$10,000,000 principal amount of convertible unsecured debentures (the "Debentures") and 13,000,000 warrants (the "Warrants") of the Corporation. The Debentures will mature five years from issuance, namely July 11, 2019 and will bear interest at a rate of 7.5% per annum (the "Interest"). Each Debenture is convertible, at the option of the holder, at any time prior to the maturity date, into class A shares of the Corporation ("Shares") at a conversion price of \$0.50 per Share (the "Conversion Price"), representing the 5 day VWAP at time of the conditional exercise of the

Series X subscription rights. Upon conversion, the holder shall also be entitled to Shares equal to the additional interest such holder would have received if it had held the Debenture until maturity divided by the market price of the Shares prior to the date of conversion (the "Make-Whole Amount"), in addition to accrued and unpaid Interest, in cash or in Shares at the Corporation's discretion. Each Warrant entitles the holder to purchase one Share for a period of three years from its issuance at a price of \$0.60 per share (equivalent to the Conversion Price plus a 20% premium).

In connection with the placement, the regulatory authorities required certain changes to the initial terms of the Subscription Rights, namely that the maximum number of Shares issuable upon conversion of the Debentures on account of the principal amount and the Make-Whole Amount not exceed the principal amount of the Debentures converted, divided by the Conversion Price less 25%. The parties further agreed that the Make-Whole Amount would not be reduced by 1% for each 1% that the current market price of the Shares at the time of conversion exceeds the Conversion Price and that the number of Warrants would correspond to 65% of the number of Shares into which the principal amount of Debentures is convertible.

In connection with the placement, the Corporation paid a fee of 6% of the amount of the investment and issued 1,200,000 finder warrants to Euro Pacific Canada Inc. and Roth Capital LLC. Each finder warrant entitles the holder to purchase one Share for a price of \$0.60 per share for a period of two years and is nontransferable.

Following the exercise of the series X subscription rights, the series Y subscription rights issued on March 10, 2014 remain outstanding. Such series Y subscription rights provide for the future subscription of \$30 million in additional units having identical terms to those of the Units issued in 2013 (see note 7 of the December 31, 2013 Annual Financial Statements), with the exception that the conversion price shall be based on the 5 day volume weighted average price ("VWAP") of the Corporation's shares on the last trading day prior to the date on which the subscription rights in respect of which the units are issued first become exercisable, and the Warrants granted shall be equivalent to 45% of the number of Common Shares into which the Debentures are convertible, exercisable at a 20% premium over such conversion price.

The obligations of the investor under the Series Y subscription rights are subject to several conditions, including obtaining certain regulatory approvals, including TSX approval, and approval of the Corporation's shareholders.

# **Contingencies**

The Corporation may be subject to various contingent liabilities that occur in the normal course of its operations. The Corporation is not aware of any pending or threatened proceedings, which could potentially have a material adverse effect on the consolidated financial condition or future results of the Corporation.

# Commitments

As at June 30, 2014, the total purchase commitment for capital expenditures at the HPA project relating to equipment amounted to approximately \$6,106,000.

#### OFF BALANCE SHEET ARRANGEMENTS

The Corporation has no off-balance sheet arrangements.

# TRANSACTIONS WITH RELATED PARTIES

During the quarter and six months ended June 30, 2014, the Corporation incurred \$62,501 and \$130,043 respectively (quarter and six months ended June 30, 2013 - \$545,000 and \$617,000) in professional fees from a law firm where a Board member is an equity partner. These transactions took place in the normal

course of operations and were measured at the exchange amount, which is the amount established and accepted by the parties.

#### SUMMARY OF QUARTERLY RESULTS

The following table sets out selected quarterly financial information for each of the last eight quarters.

Quarter ended	Net loss and comprehensive loss (\$)	Net loss per share (\$)
June 30, 2014	(4,285,455)	(0.02)
March 31, 2014	(4,411,167)	(0.02)
December 31, 2013	(9,031,007) (1)	(0.05)
September 30, 2013	(2,102,728)	(0.01)
June 30, 2013	(3,393,289)	(0.02)
March 31, 2013	(510,968)	-
December 31, 2012	(2,992,585)	(0.02)
September 30, 2012	(3,989,175)	(0.02)

<sup>(1)</sup> Includes \$1,667,000 indemnification penalty on the flow-through shares, \$3,367,000 in transaction costs, \$535,000 disassembly and handling costs of certain equipment and 1,982,000 FV variation on the 2013 convertible debentures.

During the quarter ended September 30, 2012, the Corporation recorded an impairment of \$2,295,000 on certain components of the pilot plant equipment, which had a significant impact on the comprehensive loss for that period.

For the quarters ended on December 31, 2012, March 31, 2013 and June 30, 2013, the net loss was impacted favorably due to the recognition of the change in fair value of the embedded derivative relating to the convertible debentures. During the quarter ended September 30, 2013, the net loss decreased mainly due a reduction in share-based payment expense, and a general reduction in expenses and consulting fees which were partially offset by an increase in expenditures relating to financing initiatives and employee salaries and benefit expenses. The net loss increase in the fourth quarter ending December 31, 2013 is primarily the result of the FV variation of the 2013 debentures, the financing fees involved in the new debenture transaction as well as the indemnification payment on the flow through shares issued in December 2012.

The net loss decrease in the first quarter of 2014 was a result of the absence of some non-recurring costs such as financing fees involved in the new debenture transaction and the indemnification penalty on the flow through shares experienced during the fourth quarter of 2013. The net loss decrease in the second quarter of 2014 results from a decrease in financing fees and general and administrative charges.

# **RISKS AND UNCERTAINTIES**

In the course of its business and affairs, the Corporation faces, amongst others, the following risk factors:

#### **Risks Associated With Our Business**

We will need to raise capital to continue our growth.

Orbite is a development-stage company, has multiple projects each with different funding requirements, has limited financial resources, and has no recurring cash flows from its operations. We will require additional funding in the future. If we cannot obtain capital through financings or otherwise, our ability to execute our

development plans and achieve profitable operational levels will be greatly limited. Historically, we have funded our operations through the issuance of equity and short-term debt financing arrangements. We may not be able to obtain additional financing on favourable terms, if at all. Our future cash flows and the availability of financing will be subject to a number of variables, including demand for HPA and SGA as well as other by-products. Further, debt financing could lead to a diversion of cash flow to satisfy debt-servicing obligations and create restrictions on business operations. If we were unable to raise additional funds, it would have a material adverse effect upon our operations.

Our investment in the HPA plant is, among other things, based on the assumption that material portions of the investment will be refunded by the Government of Québec by way of refundable tax credits. There can be no assurance that these tax credits will be available and, if available, that same will be refunded by the Government of Québec in a timely manner. The unavailability of the tax credits or any delay in obtaining a refund of the tax credits could have a material adverse effect on the Corporation.

We may be subject to cost overruns, delays, labor shortages, labor unrest and other construction risks

The completion of construction and commissioning of our HPA Plant, the completion of our contemplated SGA feasibility study and the building and operation of the SGA Plant will require substantial engineering, construction and operating expertise and execution. Cost estimates for these projects have increased over initial estimates. Potential cost overruns and completion delays are significant risks in projects of this nature due to many factors, including, without limitation, weather and seasonal factors affecting construction projects generally; delays in obtaining, or conditions imposed by, regulatory approvals; design errors; non-performance by third party contractors; increases in material or labour costs; construction performance falling below expected levels of output or efficiency; breakdown or failure of equipment or processes; contractor or operator errors; labour disputes, disruptions or declines in productivity; inability to attract sufficient numbers of qualified workers; changes in project scope; violation of permit requirements; and major incidents and/or catastrophic events such as fires, explosions, earthquakes or storms. There can be no assurance that these projects will be successfully completed within estimates, on schedule, or at all.

The Corporation is dependent on a single principal asset

Orbite's principal asset is its HPA Plant which is currently being commissioned and optimized and has not yet begun production on a commercial scale as contemplated by Orbite and described herein. Any adverse development affecting the HPA Plant would materially adversely affect Orbite's financial condition, results of operations, prospects and its ability to continue as a going concern.

We may be unable to retain key employees, management personnel or other employees

The loss of any of our key management personnel would have an adverse impact on our future development and could impair our ability to succeed. Our performance is substantially dependent upon the expertise of key management personnel and our ability to continue to hire and retain such personnel. Efficient production of HPA and SGA using modern techniques and equipment requires skilled technicians and engineers. Our ability to attract, hire and train the necessary number of such personnel could have an adverse impact on our labour costs and ability to reach planned production levels.

If our competitors misappropriate unpatented proprietary know-how and our trade secrets, it may have a material adverse effect on our business.

The loss of or inability to enforce our patents, intellectual property and other proprietary know-how, and trade secrets (collectively our "Intellectual Property") could adversely affect our business. We depend heavily on our Intellectual Property and the design expertise of our employees. If any of our competitor's copies or otherwise gains access to our Intellectual Property or develops similar technologies or processes

independently, we would not be able to compete as effectively. The measures we take to protect our Intellectual Property and design expertise may not be adequate to prevent their unauthorized use. Further, the laws of foreign countries may provide inadequate protection of such Intellectual Property rights. We may need to bring legal claims to enforce or protect such Intellectual Property rights. Any litigation, whether successful or unsuccessful, could result in substantial costs and diversions of resources. In addition, notwithstanding the rights we have secured in our Intellectual Property, other persons may bring claims against us that we have infringed on their intellectual property rights or claims that our Intellectual Property right interests are not valid. Any claims against us, with or without merit, could be time consuming and costly to defend or litigate and, therefore, could have an adverse effect on our business.

#### New Markets

The success of our business will depend, in part, on the establishment of new markets by us or third parties for alumina and rare earth products that may be in low demand. Although rare earth products are used in critical existing and emerging technologies, such as hybrid and electric vehicles, wind power turbines and LED lighting, the success of our business depends on creating new markets and successfully commercializing rare earth products in existing and emerging markets. Any unexpected costs or delays in the commercialization of any of the foregoing products and applications could have a material adverse effect on our financial condition and results of operations.

# Alumina, rare earth and metal oxide prices and PEA disclosure

Our revenues, if any, are expected to be in large part derived from the extraction and sale of alumina and rare earth and metal oxide by-products such as gallium and scandium. Alumina and rare earth and metal oxides prices are volatile, have historically fluctuated widely and are affected by numerous factors beyond our control, including: international, economic and political trends; expectations of inflation; currency exchange fluctuations; interest rates; global or regional consumptive patterns; speculative activities; and increased worldwide production levels due to new extraction developments and improved extraction and production methods. The development of new alumina refineries and aluminum smelters, and increased production by new or existing alumina and aluminum producers may create oversupply or overcapacity, which could reduce future prices of alumina, alumina-based chemicals and aluminum, thereby adversely affecting Orbite's prospects and financial position. Moreover, demand for alumina, alumina-based chemicals and aluminum, has been supported by the industrialization and urbanization of China and other developing countries. A decline in the rate of economic growth of these developing countries or in other parts of the world, or a reduction in demand for these products, could adversely affect Orbite's future financial performance. These factors may affect the price of alumina and rare earth and metal oxides, and, therefore, the economic viability of any of our current or future exploration projects cannot accurately be predicted. Future significant price declines in the market value of alumina and rare earth and metal oxides could cause continued development of, and eventually commercial production (if any) from, the Grande-Vallée property to be rendered uneconomic. Depending on the price of alumina and rare earth and metal oxides, we could be forced to discontinue exploration or development activities and may lose our interest in, or may be forced to sell, the Grande-Vallée property. There is no assurance that even if commercial quantities of alumina and rare earth and metal oxides and other base and precious metals are produced, a profitable market will exist for them.

Preliminary economic assessment of the viability of the Corporation's proposed SGA production plant supposes the availability of natural gas as the reference energy source. Natural gas is not currently readily available in the mining site vicinity. Consequently, should natural gas or an alternative source of energy which pricing is competitive to natural gas not be available, the SGA Plant project contemplated to be based in the Grande-Vallée region could be materially and adversely impacted and compromised.

#### Capital Cost Estimates

Any capital and operating cost estimates made in respect of our current and future production facilities, including our HPA and our projected SGA production facilities, and mines may not prove to be accurate. Production of alumina and rare earths and metal oxides by-products is a capital-intensive business. Our plans for our HPA and projected SGA production facilities require significant capital expenditures. Capital and operating costs are estimated based on the interpretation of geological data, preliminary studies, preliminary economic assessments, anticipated climatic conditions and a number of other factors. Any of the following events could affect the accuracy of such estimates: unanticipated changes in grade and tonnage of ore to be mined and processed; incorrect data on which engineering assumptions are made; efficiency of our proprietary process, availability of fossil fuels at market prices, delay in construction schedules; unanticipated transportation costs; accuracy of major equipment and construction cost estimates; labour negotiations; changes in government regulation (including regulations regarding prices, cost of consumables, royalties, duties, taxes, permitting and restrictions on production quotas on exportation of minerals); and title claims.

#### **Production**

Our proprietary alumina and by-products extraction processes are novel, untested on a commercial scale and the results may be uncertain and subject to significant variations. There can be no assurance that our proprietary processes will be efficient or commercially viable or that any such alumina or by-products production which is attempted will be profitable.

# Exploration and Mining Risks

Mineral exploration is highly speculative and involves a high degree of risk, which evens a combination of careful evaluation, experience and knowledge may not be able to avoid. Most exploration efforts are not successful in that they do not result in the discovery of mineralization of sufficient quantity or quality to be profitably mined. There is no assurance that ores will be discovered by the Corporation in quantities sufficient to warrant mining operations. There is also no assurance that the mining properties of the Corporation will be brought into commercial production. These risk factors include market fluctuations, the proximity and production capacity of mining facilities and processing equipment, possible claims of native peoples and government regulations, including regulations relating to prices, royalties, allowable production, import and export of minerals, environmental protection and the protection of agricultural territory. The effect of these factors cannot be accurately predicted. In addition, the mining of minerals involves numerous hazards, including but not limited to, variations in grade, deposit size, density and other geological problems, hydrological conditions, metallurgical and other processing problems, mechanical equipment performance problems, the unavailability of materials and equipment including fuel, labor force disruptions, unanticipated transportation costs, unanticipated regulatory changes, unanticipated or significant changes in the costs of supplies and adverse weather conditions.

The Corporation has not completed a comprehensive feasibility study and there can be no assurance that the development of the Corporation's mineral project into a commercially viable mine and the commercialization of the Corporation's alumina (and other material) extraction process into a commercially viable business opportunity, will be successful.

# Environmental and Other Regulatory Requirements

All phases of mining and exploration operations are subject to government regulation including regulations pertaining to environmental protection. Environmental legislation is becoming stricter, with increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and

heightened responsibility for companies and their officers, directors and employees. There can be no assurance that possible future changes in environmental regulation, mining laws including increased governmental royalty requirements will not adversely affect the Corporation's operations. As well, environmental hazards may exist on a property in which the Corporation holds an interest, that were caused by previous or existing owners or operators of the properties and of which the Corporation is not aware at present. Operations at the Corporation's mines are subject to strict environmental and other regulatory requirements, including requirements relating to the production, handling and disposal of hazardous materials, pollution controls, health and safety and the protection of wildlife. The Corporation may be required to incur substantial capital expenditures in order to comply with these requirements. Any failure to comply with the requirements could result in substantial fines, delays in production, or the withdrawal of the Corporation's mining licenses.

Government approvals and permits are required to be maintained in connection with the Corporation's mining and exploration activities. Although the Corporation currently has all the required permits for its operations as currently conducted, there is no assurance that delays will not occur in connection with obtaining all necessary renewals of such permits for the existing operations or additional permits for any possible future changes to the Corporation's operations, including any proposed capital improvement programs. 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. Parties engaged in mining operations may be required to compensate those suffering loss or damage by reason of the mining activities and may be liable for civil or criminal fines or penalties imposed for violations of applicable laws or regulations. Amendments to current laws, regulations and permitting requirements, or more stringent application of existing laws, may have a material adverse impact on the Corporation resulting in increased capital expenditures or production costs, reduced levels of production at producing properties or abandonment or delays in development of properties.

#### Mineral Resource Estimates

The Corporation's reported mineral resources are only estimates. No assurance can be given that the estimated mineral resources will be recovered or that they will be recovered at the rates estimated. Mineral resources estimates are based on limited sampling, and, consequently, are uncertain because the samples may not be representative. Mineral resource estimates may require revision (either up or down) based on actual production experience. Market fluctuations in the price of metals, as well as increased production costs or reduced recovery rates, may render certain mineral resources uneconomic and may ultimately result in a restatement of estimated resources and/or reserves. Moreover, short-term operating factors relating to the mineral resources may adversely affect the Corporation's financial results in any particular accounting period.

#### Title to Properties

Although the Corporation has taken reasonable measures to ensure proper title to its properties, there is no guarantee that title to any of its properties will not be challenged or impugned. Third parties may have valid claims underlying portions of the Corporation's interests.

# **Industry Conditions**

Mineral resource exploration and development involves a high degree of risk that even a combination of careful assessment, experience and know-how cannot eliminate. Few properties that undergo prospecting ever generate a producing mine. Substantial sums may be required to establish reserves, develop metallurgical processes and build mining and processing facilities at a given site. The Corporation's growth depends on the implementation of our mining plan and the commissioning of our HPA production facility at

Cap-Chat, Québec. In addition, the Corporation will be adversely affected if it does not successfully implement new technologies and scale its proprietary process to commercial levels. There can be no assurance that the exploration and development programs planned by the Corporation will result in a profitable mining operation. The economic life of a mineral deposit depends on a number of factors, some of which relate to the particular characteristics of the deposit, particularly its size, grade and proximity to infrastructure, as well as the cyclical nature of metal prices and government regulations, including those regarding prices, royalties, production limits, importation and exportation of minerals, and environmental protection. The impact of such factors cannot be precisely assessed, but may prevent the Corporation from providing an adequate return on investment.

# Competition

The global aluminum and alumina markets are dominated by a small number of large vertically integrated companies, including Rio Tinto Alcan, Alcoa, Chalco, RUSAL, Hydro Aluminium, Alumina Limited and BHP Billiton. These companies dominate on a global scale the mining of bauxite, the refining of alumina and the production and sale of aluminum. In addition, there are a number of smaller companies with projects to mine, refine and sell alumina. There are also several small and large companies active in the refining, production and sale of rare earths and other metals of the nature expected to be produced as by-products of our contemplated operations. The Corporation also competes with such companies and other natural resource companies in the acquisition, exploration, financing and development of new properties and projects. Many of these companies are more experienced, larger and better capitalized than the Corporation. In particular, such companies may be less vulnerable to volatility in the alumina market. The competitive position of the Corporation depends upon its ability to obtain sufficient funding and to explore, acquire and develop new and existing mineral-resource properties or projects in a successful and economic manner. Some of the factors which allow producers to remain competitive in the market over the long term are the quality and size of an ore body, cost of production and operation generally, and proximity to market. The Corporation also competes with other mining companies for skilled geologists and other technical personnel. In addition, the market for alumina and are earth and metal oxide by-products is limited and the Corporation will compete with other mining companies for customers. An increase in the global supply of these products and predatory pricing by our competitors could materially adversely affect our operating or financial results.

# Permits and Licenses

The operations of the Corporation require licenses and permits from various governmental authorities. There can be no assurance that the Corporation will be able to obtain all necessary licenses and permits that may be required to carry out further exploration, development and mining operations at its projects, or that the conditions of such are affordable.

# Absence of feasibility studies

No pre-feasibility study or feasibility study pursuant to the requirements of NI 43-101 has been completed to date by the Corporation. As such, the information provided herein does not constitute a "preliminary feasibility study", a "pre-feasibility study" or a "feasibility study" within the meaning of NI 43-101. In addition, no independent preliminary economic assessment has been completed in connection with the construction, design and operation of HPA Plant. There are no assurances that the HPA Plant and the contemplated SGA Plant projects will be completed as expected or that the estimated capital costs will be sufficient to achieve the design capacity or the product purities and characteristics, or that the respective plants will provide a return on investment or be profitable.

# Access to Raw Materials and Inputs for Production

Production of alumina and rare earth and metal oxide by-products depends upon access to power, water, raw

materials and other inputs. The viability of the Corporation's SGA production facility will depend upon the availability of natural gas or comparable fossil fuels. Instability in natural gas and electrical supply and outages could delay production and of increase the cost of our operations. Volatility in the price of raw materials used in the production of alumina and other rare earth minerals, disruptions in transportation services due to labour disputes or adverse weather, decrease in available water supply may have a material adverse effect on our financial condition or results of operations.

#### Joint Ventures

The Corporation intends to participate in joint ventures and strategic alliances. There can be no assurance that the Corporation will be able to find suitable partners and/or enter into joint venture agreements under suitable terms. Moreover, whether or not the Corporation holds majority interests or maintains operational control in such arrangements, its partners may have economic or business goals that are inconsistent with or opposed to those of the Corporation; exercise veto rights so as to block actions that the Corporation believes are in its best interests, take actions contrary to the Corporation's policies or objectives, be unable or unwilling to fulfill their obligations under the joint venture, strategic alliance or other agreement. There can be no assurance that its joint ventures will be beneficial to the Corporation, whether due to the above described risks, unfavourable global economic conditions, increases in construction costs, currency fluctuations, political risks or other factors.

#### Development Goals and Time Frames

The Corporation sets goals for and makes public statements regarding timing of the accomplishment of objectives material to its success, such as the commencement and completion of commercial production of its HPA Plant, discussions regarding strategic partnerships, and the timing of the release of its SGA feasibility study. The actual timing of these events can vary dramatically due to factors such as delays or failures in Orbite's contemplated financings, the uncertainties inherent in the environmental and mining regulatory approval process, and delays in achieving production or marketing milestones necessary to commercialize its products. There can be no assurance that the Corporation will be able to adhere to its current schedule for production and sale of HPA, SGA or any other product. If Orbite fails to achieve one or more of these milestones as planned, it could have a material adverse effect on the business carried on by the Corporation.

#### Changes to Royalty Regime

Crown royalties are determined by government regulation and are generally calculated as a percentage of the value of the gross production. The rate of royalties payable generally depends in part on prescribed reference prices, geographical location, field discovery date, method of recovery, and the type or quality of the ore produced. There can be no assurance that the Government of Québec, the Government of Canada or any other government having jurisdiction over the Corporation will not adopt a new royalty regime or modify the methodology of royalty calculations which could increase the royalties paid by the Corporation. An increase in royalty could reduce the Corporation's earnings and/or it could make capital expenditures by the Corporation uneconomic.

# Our business is subject to risks that may not be covered by insurance

The exploration for and the production of aluminum clay and the refining, storage, transportation and marketing of alumina and by-products involve many risks. These risks include equipment failures and other accidents, weather conditions, natural disasters and changes to the regulatory environment, any of which could result in personal injury or damage or destruction to the site, equipment, the refinery and the environment as well as the interruption of operations. The impact of these risks upon the Corporation is increased because of its dependence on a limited number of projects. The Corporation is insured against some, but not all, potential risks appropriate to its stage of development; however there can be no assurance that such insurance will be adequate to cover any losses or exposure to liability. As the HPA Plant continues

to develop toward commercial operation, the Corporation will have to acquire additional insurance coverage. There can be no assurance that the Corporation will be able to acquire adequate insurance coverage for the future increases in construction and operational activities contemplated by the Corporation. The Corporation may also become subject to liability for pollution or other hazards against which it cannot insure or against which it may elect not to insure because of high premium costs or other reasons. The Corporation may also become subject to liabilities which exceed policy limits. In such circumstances, the Corporation may be required to incur significant costs that could have a material adverse effect upon its performance, results of operations and economic viability.

#### Litigation

The Corporation may become involved in, named as a party to, or the subject of, various legal proceedings, as well as contract disputes, regulatory proceedings, tax proceedings and legal actions relating to property damage, property taxes, land rights, and the environment, title claims, land tenure disputes, environmental claims, and occupational health and safety claims. The outcome with respect to future proceedings cannot be predicted with certainty and may be determined adversely to the Corporation and as a result, could have a material adverse effect on the Corporation's assets, liabilities, business, financial condition and results of operations. Even if the Corporation prevails in any such legal proceedings, the proceedings could be costly and time-consuming and would divert the attention of management and key personnel from the Corporation's business operations, which could adversely affect the Corporation's financial condition and results of operations.

#### Risks Related To Our Common Shares

The trading price of our Common Shares has and may continue to fluctuate significantly and shareholders may have difficulty reselling their Common Shares.

During the last 12 months, our Common Shares have traded as low as \$0.19 and as high as \$0.75 on the TSX. Our Common Shares are also listed on the OTCQX, an over-the-counter trading facility. In addition to volatility associated with over-the-counter securities in general, the market price of our Common Shares could decline due to the impact of any of the following factors:

- changes in the demand for alumina, aluminum or rare earths and metal oxides;
- disappointing results from our marketing and sales efforts;
- failure to meet our revenue or profit goals or operating budget;
- decline in demand for our Common Shares;
- downward revisions in securities analysts' estimates or changes in general market conditions;
- lack of funding generated for operations;
- delays in the construction of our projected SGA and other facilities and increased costs related to our HPA and projected SGA production facilities;
- short selling, manipulation of our Common shares and prohibited trades;
- unfounded rumours and collusion;
- under performance or other performance related issues affecting our HPA production facility;
- · investor perception of our industry or our business prospects; and
- general economic trends.

In addition, stock markets have experienced extreme price and volume fluctuations and the market prices of

securities have been highly volatile. These fluctuations are often unrelated to operating performance and may adversely affect the market price of our Common Shares.

Additional issuances of equity securities may result in dilution to our existing shareholders

Our Articles of Incorporation authorize the issuance of an unlimited number of Class A Shares. Our board of directors has the authority to issue additional Common Shares to provide additional financing in the future and the issuance of any such Common Shares may result in a reduction of the book value (on a per share basis) or market price of the outstanding Common Shares. If we do issue any such additional Common Shares, such issuance also will cause a reduction in the proportionate ownership and voting power of all other shareholders. Further, any such issuances could result in a change of control.

Our Common Shares are classified as a "penny stock" under SEC Rules, which limits the market for our Common Shares.

Because our Common Shares are not traded on the NASDAQ National Market or the NASDAQ Capital Market, and because the market price of the Common Shares is less than \$5 per share, our Common Shares are classified as a "penny stock". SEC Rule 15g-9 under the U.S. Securities Exchange Act of 1934 imposes additional sales practice requirements on broker-dealers that recommend the purchase or sale of penny stocks to persons other than those who qualify as an "established customer" or an "accredited investor". This includes the requirement that a broker-dealer must make a determination that investments in penny stocks are suitable for the customer and must make special disclosures to the customers concerning the risk of penny stocks. Many broker-dealers decline to participate in penny stock transactions because of the extra requirements imposed on penny stock transactions. Application of the penny stock rules to our Common Shares reduces the market liquidity of our Common Shares, which in turn affects the ability of holders of our Common Shares to resell the Common Shares they purchase, and they may not be able to resell at prices at or above the prices they paid.

We are a Canadian company and most of our directors and officers are Canadian citizens and/or residents, which could make it difficult for investors to enforce judgments against them or us in the United States.

We are a company incorporated under the laws of Canada and most of our directors and officers reside in Canada. Therefore, it may be difficult for investors to enforce any judgments obtained against us or any of our directors or officers within the United States. All or a substantial portion of such persons' assets may be located outside the United States. As a result, it may be difficult for investors to effect service of process on us or our directors or officers, or enforce any judgments obtained against us or our officers or directors within the United States, including judgments predicated upon the civil liability provisions of the securities laws of the United States or any state thereof. Consequently, you may be effectively prevented from pursuing remedies under U.S. federal securities laws against them or us. In addition, investors may not be able to commence an action in a Canadian court predicated upon the civil liability provisions of the securities laws of the United States. There may be doubt as to the enforceability, in original actions in Canadian courts, of liability based upon the U.S. federal securities laws and as to the enforceability in Canadian courts of judgments of U.S. courts obtained in actions based upon the civil liability provisions of the U.S. federal securities laws. Therefore, it may not be possible to enforce those actions against us or any of our directors or officers.

A decline in the price of our Common Shares could affect our ability to raise further working capital and adversely impact our operations.

A decline in the price of our Common Shares could result in a reduction in the liquidity of our Common Shares and a reduction in our ability to raise additional capital for our operations. Because our operations to date have been principally financed through the sale of equity securities, a decline in the price of our Common Shares could have an adverse effect upon our liquidity and our continued operations. A reduction in our ability to raise equity capital in the future would have a material adverse effect upon our business plan and

operations, including our ability to continue our current operations. If our Common Share price declines, we may not be able to raise additional capital or generate funds from operations sufficient to meet our obligations.

#### Listing of our Common Shares

The listing of our Common Shares on the TSX is conditional upon our ability to maintain the applicable continued listing requirements of the TSX. The TSX may consider the delisting of our Common Shares if, in its opinion, it appears the Corporation is in serious financial difficulty or if there is significant doubt regarding its ability to continue as a going concern. In such circumstances, the TSX may place Orbite under a delisting review that could lead to the delisting of its Common Shares from the TSX. If our Common Shares are delisted from the TSX, they may be eligible for listing on a substitute exchange. In the event that Orbite is not able to maintain a listing for the Common Shares on the TSX or a substitute exchange, it may be extremely difficult or impossible for shareholders to sell their Common Shares in Canada. Moreover, if Orbite is delisted from the TSX, but obtains a substitute listing for the Common Shares, the Common Shares may have less liquidity and more price volatility than experienced on the TSX. Shareholders may not be able to sell their Common Shares on any such substitute exchange in the quantities, at the times, or at the prices that could potentially be available on a more liquid trading market. As a result of these factors, if the Common Shares are delisted from the TSX, the price of the Common Shares may decline and the Corporation's ability to obtain financing in the future could be materially impaired.

#### **CRITICAL ACCOUNTING ESTIMATES**

The preparation of the financial statements in conformity with IFRS requires management to make judgements, estimates, and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income, and expenses. Management's best estimates concerning the future are based on the facts and circumstances available at the time estimates are made. Management uses historical experience, general economic conditions and trends, as well as assumptions regarding probable future outcome as the basis for determining estimates. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future period affected. There have been no changes in the significant judgements and estimates made by the management.

# CHANGES IN ACCOUNTING POLICIES INCLUDING INITIAL ADOPTION

The Condensed consolidated interim financial have been prepared in accordance with accounting policies which are consistent with those of the previous financial year, except for the adoption of IAS 32, Financial Instruments: Presentation, which has been adopted prospectively as of January 1, 2014.

The application guidance on offsetting a financial asset and a financial liability has been modified. These amendments are effective for annual periods beginning on or after 1 January, 2014 and must be applied retrospectively. The effect of the adoption of the amendments does not have an impact on the consolidated interim financial statements.

New standards and interpretations not yet adopted

Certain new standards, interpretations, and amendments to existing standards have been published and are mandatory for the Corporation's accounting periods beginning on or after January 1, 2015. The Corporation has not early adopted these standards. Those which are considered to be relevant to the Corporation's operations are as follows:

IFRS 9, Financial instruments ("IFRS 9")

For a description of this new standard, refer to note 3 of the 2013 interim consolidated financial statements.

# DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING

Disclosure controls and procedures ("Disclosure Controls") are procedures designed to provide reasonable assurance that all relevant information required to be disclosed in documents filed with securities regulatory authorities is recorded, processed, summarized and reported on a timely basis, and is accumulated and communicated to management, including its CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure. Management, including the CEO and the CFO, does not expect that the Corporation's Disclosure Controls will prevent or detect all error and all fraud. The inherent limitations in all control systems are such that they can provide only reasonable, not absolute, assurance that all control issues and instances of fraud or error, if any, within the Corporation have been detected.

Multilateral Instrument 52-109 ("MI 52-109"), "Certification of Disclosure in Issuers' Annual and Interim Filings", issued by the Canadian Securities Administrators ("CSA") requiring CEOs and CFOs to certify that they are responsible for establishing and maintaining Disclosure Controls for the issuer, that Disclosure Controls have been designed to provide reasonable assurance that material information relating to the issuer is made known to them, that they have evaluated the effectiveness of the issuer's Disclosure Controls, and that their conclusions about the effectiveness of those Disclosure Controls at the end of the period covered by the relevant annual filings have been disclosed by the issuer.

MI 52-109 also requires the CEO and CFO to certify that they are responsible for establishing and maintaining internal controls over financial reporting ("ICFR"), as defined by the CSA, that the ICFR have been designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with IFRS, and that the Corporation has disclosed any changes in its ICFR during its most recent interim period that has materially been affected, or is reasonably likely to materially affect, its financial reporting. There have been no significant changes to the ICFR that have occurred during the quarter ended June 30, 2014 which materially affected or are reasonably likely to materially affect, the Corporation's ICFR.

As discussed above, the inherent limitations in all control systems are such that they can provide only reasonable, not absolute, assurance that all control issues and instances of fraud or error, if any, have been detected. Therefore, no matter how well designed, ICFR has inherent limitations and can provide only reasonable assurance with respect to financial statement preparation and may not prevent and detect all misstatements.

As at June 30, 2014, Orbite's CEO and CFO have designed Disclosure Controls, or caused it to be designed under their supervision, to provide reasonable assurance that material information relating to the Corporation is made known to them by others during the period and information required to be disclosed by the Corporation in its interim filings or other reports filed by it under securities legislation is recorded and reported with the time periods specified in securities legislation. The CEO and CFO also designed ICFR, or caused it to be designed under their supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS.

Orbite continues to review and document its Disclosure Controls and ICFR, and may from time to time make changes aimed at enhancing their effectiveness and to ensure that systems evolve with the business.