



**Frontier Lithium Inc.**

**Management Discussion & Analysis**

**For the First Quarter Ending June 30, 2016**

This Management Discussion & Analysis ("MD&A"), for Frontier Lithium ("Frontier" or the "Company"), is prepared with an effective date of August 30, 2016 unless otherwise indicated and should be viewed in conjunction with the Company's financial statements. Other continuous disclosure documents, including the Company's press releases and other quarterly and annual reports are available through its filings with the securities regulatory authorities in Canada at [www.sedar.com](http://www.sedar.com) ("SEDAR") and are also available on the Company's website [www.frontierlithium.com](http://www.frontierlithium.com).

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## 1. GLOSSARY OF TECHNICAL INFORMATION

The estimated mineral reserves and mineral resources discussed herein have been calculated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (“**CIM**”) – Definitions Adopted by CIM Council on December 11, 2005 (the “**CIM Standards**”) which were adopted by the Canadian Securities Administrators’ National Instrument 43-101 Standards of Disclosure for Mineral Projects (“**NI 43-101**”). The following definitions are reproduced from the CIM Standards:

The term “**mineral reserves**” means the economically mineable part of a measured or indicated mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A mineral reserve includes allowances for dilution and losses that may occur when the material is mined. A “**proven mineral reserve**” is the economically mineable part of a measured mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified. A “**probable mineral reserve**” is the economically mineable part of an indicated mineral resource, and in some circumstances a measured mineral resource, demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

The term “**mineral resources**” means a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the earth’s crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge. A “**measured mineral resource**” is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity. An “**indicated mineral resource**” is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and test information gathered through appropriate techniques from location such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed. An “**inferred mineral resource**” is that part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

The following technical terms may be used in this MD&A, and may appear capitalized or in lower case, without any difference in meaning:

**Adamellite:** Quartz monzonite. A medium to coarse-grained plutonic rock containing major plagioclase, orthoclase, and quartz, with minor biotite, hornblende, and accessory apatite, zircon, and opaque oxides.

**Advance royalty** - A form of royalty where the payment is made before the start of commercial production.

**Albite** – A plagioclase sodium feldspar.

**Alkalic** - Containing either sodium or potassium.

**Alteration** - Any change in the mineral composition of a rock that is brought about by physical or chemical means.

**Amblygonite-** A natural Frontieruorophosphate of aluminum and lithium having the approximate formula,

$2\text{LiF}\cdot\text{Al}_2\text{O}_3\cdot\text{P}_2\text{O}_5$ . It should contain 10.1% Lithia, but actual samples average 8.2% due to partial replacement of the Lithia by soda and potash, partial alteration of the mineral to nonlithium minerals and the presence of impurities. It is the least expensive source of alumina-phosphate and is the highest Lithia containing lithium minerals. It produces opacity in glass dinnerware. Its usage is restricted due to its relatively limited availability.

**Amphibolite grade metamorphism-** A metamorphic facies assemblage of minerals formed at moderate to high pressures between 450 and 700°C during regional metamorphism.

**Andesite** – Igneous rock of intermediate composition.

**Ankerite** - An iron rich carbonate mineral.

**Anomalous rare earth elements (Pakeagama)-** Lithium (Li), Rubidium (Rb), Cesium, Beryllium (Be), Tantalum (Ta), columbium (Cb), Niobium (Nb), Tin (Sn), Gallium (Ga), Germanium (Ge), Hafnium (Hf).

**Anomaly** - Geochemical and/or geophysical data, which deviates from the norm.

**Aplite-** A light-coloured igneous rock characterized by a fine-grained saccharoidal (i.e., aplitic) texture. Aplites may range in composition from granitic to gabbroic, but the term aplite with no modifier is generally understood to mean granitic aplite, consisting essentially of quartz, potassium feldspar, and acid plagioclase. The term, from a Greek word meaning simple, was in use before 1823.

**Archean** - Oldest rocks of the Precambrian Era, older than about 2.5 billion years.

**Argillaceous-** Pertaining to, largely composed of, or containing clay-size particles or clay minerals, such as an argillaceous ore in which the gangue is mainly clay; esp. said of a sediment (such as marl) or a sedimentary rock (such as shale) containing an appreciable amount of clay.

**Argillite-** A compact rock, derived either from mudstone (claystone or siltstone), or shale, that has undergone a somewhat higher degree of induration than mudstone or shale but is less clearly laminated and without its fissility, and that lacks the cleavage distinctive of slate.

**Assay** - An analysis to determine the presence, absence or quantity of one or more chemical components.

**Au** – Chemical symbol for the element gold.

**Basalt** – Common dark and fine grained extrusive mafic volcanic rock.

**Base Metal** - A metal, such as copper, lead, nickel, zinc or cobalt.

**Belt** - A specific elongate area defined by unique geologic characteristics.

**Beryl-** A hexagonal mineral,  $\text{Be}_3\text{Al}_2\text{Si}_6\text{O}_{18}$ ; green, blue-green, and other pale tints; in granite pegmatites, mica schists, and an accessory mineral in felsic igneous rocks; the chief source of beryllium. Transparent and coloured gem varieties include emerald, aquamarine,morganite, heliodor, golden beryl, bixbite, and vorobievite.

**Breccia** - Rock fragmented into angular components surrounded by a mass of finer grained material.

**Bronzite** – An orthorhombic mineral (pyroxene) consisting of a ferriferous variety of Enstatite and often having a lustre like that of bronze.

**Carbonate** - Mineral calcium carbonate ( $\text{CaCO}_3$ ) and often a rock composed principally thereof.

**Chalcopyrite** – Copper iron sulphide ( $\text{CuFeS}_2$ ).

**Chlorite** - A green platy iron-magnesium rich metamorphic mineral.

**Claim (Mineral)** – The area that confers mineral exploration/exploitation rights to the registered holder under the laws of the governing jurisdiction.

**Clinopyroxene** – Pyroxenes that crystallize in the monoclinic system and are commonly greenish in colour.

**Collar** - The top of a drill hole.

**Columbite, Tantalite, Niobite-** A natural oxide of niobium, tantalum, ferrous oxide, and manganese found in granites and pegmatite [ $(\text{Fe},\text{Mn})(\text{Nb},\text{Ta})_2\text{O}_6$ ]. Some tin or tungsten may be present in the mineral. Iron black to brownish black in colour; streak, dark red to black; luster, submetallic; Moh's hardness, 6; specific gravity, 5.2 to 7.9, See also: tantalite.

**Columbium (CB)-** Also called niobium (Nb). A shiny, white, soft, and ductile metallic element. Symbol, Nb (niobium) or Cb (columbium). The name niobium was adopted by the International Union of Pure and Applied Chemistry. Many chemical societies and government organizations refer to it as niobium, but most metallurgists, metals societies, and commercial producers still refer to the metal as columbium. Found in niobite (or columbite), niobite-tantalite, pyrochlore, and euxenite. Used as an alloying agent in carbon and alloy steels, in nonferrous metals, and in superconductive magnets.

**Conglomerate** - A sedimentary rock composed of rounded to subrounded transported fragments greater than 2 millimetres (pebbles, cobbles, boulders) cemented into a solid mass.

**Dacitic** – Igneous rock intermediate in compositions between andesite and rhyolite.

**Diamond Drilling/Drill Hole** - A method of obtaining a cylindrical core of rock by drilling with a diamond impregnated bit.

**Diabase** - A common basic igneous rock usually occurring in dykes or sills.

**Diopside** – A calcium-magnesium silicate (clinopyroxene),  $\text{CaMg}(\text{Si}_2\text{O}_6)$ , that is coloured white to light-green. The colour deepens with the addition of iron. Moh's hardness: 5 to 6; specific gravity: 3.2 to 3.3. It is found in regionally metamorphic rocks.

**Dip** - The angle at which a stratum is inclined from the horizontal.

**Dyke** - A tabular body of igneous rock cross cutting the host strata at a high angle.

**Epithermal** - A hydrothermal deposit formed close to surface at low temperature and pressure.

**Elbaite**- A trigonal mineral,  $3[\text{Na}(\text{Li},\text{Al})_3\text{Al}_6(\text{OH},\text{F})_4(\text{BO}_3)_3\text{Si}_6\text{O}_{18}]$ ; tourmaline group; occurs in triangular and hexagonal prisms; varicolored; commonly zoned, pyroelectric and piezoelectric; in granites and granite pegmatites; and used as a gemstone (pink rubellite, blue indicolite, green verdolite, colourless achroite, zoned pink-white-green watermelon tourmaline).

**Enstatite** – A pyroxene mineral,  $\text{MgO} \cdot \text{SiO}_2$ . Its colour is yellowish- or greenish – grey.

**Fault** - A fracture in a rock along which there has been relative movement between the two sides either vertically or horizontally.

**Fe** - Chemical symbol for the element iron.

**Feldspar** - A group of common aluminosilicate minerals.

**Felsic** - Igneous rock composed principally of feldspars and quartz.

**Ferriferous** – A synonym for ferruginous (iron bearing).

**Fertile** - As in fertile granite. For example, a parental rock that gives rise to rare metal pegmatite.

**Frontieruvial/Frontieruvialite** - Sedimentary material found in river beds.

**Fold** - Bend in strata or any planar structure.

**Foliation** - Parallel orientation of platy minerals or mineral banding in rocks.

**Footwall** - The wall or rock on the underside of a vein or structure.

**Formation** - A body of rock identified by lithological characteristics and stratigraphic position.

**Fracture** - A break in the rock, the opening of which allows the entry of mineral-bearing solutions.

**Fuchsite** - Mica with a characteristic (emerald) green colour arising from the presence of chrome or vanadium.

**Gabbro** – A fine to coarse grained, dark coloured crystalline igneous intrusive rock composed mainly of calcic plagioclase, clinopyroxene and sometimes olivine.

**Gabbro-Norite** – An igneous rock that is made up mainly of clinopyroxene and orthopyroxene and can contain upwards of 1/3 feldspar.

**Geochemistry/Geochemical** - Study of variation of chemical elements in rocks or soil.

**Geology/Geological** – Study of the Earth's history and life, mainly as recorded in rocks.

**Geophysics/Geophysical** - Study of the Earth by quantitative physical methods, either by surveys conducted on the ground, in the air (by fixed wing aircraft or helicopter) or in a borehole or drillhole.

**Gold** – A heavy, soft, ductile, malleable precious metal used in jewelry, dentistry, electronics and as an investment.

**Grams per tonne (g/t)** – A unit of measurement commonly used to quantify the concentration of precious metals.

**Granoblastic**: Pertaining to a homeoblastic type of texture in a nonschistose metamorphic rock upon which recrystallization formed essentially equidimensional crystals with normally well sutured boundaries.

**Granophyre**- An irregular microscopic intergrowth of quartz and alkali feldspar.

**Granophyric**- Of or pertaining to granophyres.

**Greenstone belt** - Area underlain by metamorphosed volcanic and sedimentary rocks, usually in a continental shield.

**Greywacke** - Grey sandstone consisting of poorly sorted grains of quartz, feldspar and rock fragments in a clay matrix.

**Hangingwall** - The wall or rock on the upper side of a vein or structure.

**Hectare** - A square of 100 metres on each side.

**Hematite** - Black to reddish brown, non-magnetic iron oxide ( $\text{Fe}_2\text{O}_3$ ).

**Holmquistite**- An orthorhombic mineral,  $\text{Li}_2(\text{Fe},\text{Mg})_3\text{Al}_2\text{Si}_8\text{O}_{22}(\text{OH})_2$ ; amphibole group, with  $\text{Mg}/(\text{Mg}+\text{Fe}^{2+}) = 0.1$  to 0.89; in granite pegmatites. A bluish-black silicate of lithium, magnesium, iron and aluminum with fluorine and hydroxyl. A lithium-bearing variety of glaucophane (or amphibole). Monoclinic,

prismatic.

**Holocrystalline** – Rocks consisting entirely of crystalline minerals and no glass. The minerals may or may not have crystal boundaries, and the rocks may be granular or porphyritic.

**Horizon** - A defined layer within a stratigraphic sequence, having unique characteristics distinguishing it from the rest of the sequence.

**Igneous** - A classification of rocks formed from the solidification from a molten state.

**Ilvaite**- An orthorhombic and monoclinic mineral,  $\text{CaFe}_2\text{FeSi}_2\text{O}_7\text{O}(\text{OH})$ ; in prisms with vertically striated faces; compact, massive, or fibrous; in some magnetite orebodies, in zinc and copper ores, in contact deposits in dolomitic limestone, and in sodalite syenite near Julianehaab, Greenland.

**Infill drilling** - Any method of drilling intervals between existing holes, used to provide greater geological detail and to help establish resource/reserve estimates.

**Intrusive/Intrusions** - An igneous rock that invades older rocks.

**Iron formation (banded)** - Chemically precipitated rock consisting of repeated thin layers of chert (silica) and iron oxides commonly magnetite and/or hematite.

**Ironstone** - A sedimentary rock containing a substantial proportion of iron.

**IP/Induced polarization** - Method of ground geophysical surveying employing an electrical current to determine indications of mineralization through the measurement of resistivity and chargeability.

**JV/Joint venture** - business arrangement usually between companies that defines each parties vested interest in an asset.

**Komatiite** - A volcanic rock containing a high concentration of magnesium and generally a low concentration of silica.

**Lepidolite, lithia mica**- A Frontieruorosilicate of potassium, lithium and aluminum,  $\text{K}^2\text{Li}^3\text{Al}^2(\text{AlSi}^3\text{O}^{10})^2(\text{O},\text{OH},\text{F})_4$ ; monoclinic; colour, pink, lilac and grayish-white; luster, pearly; perfect micaceous cleavage; comparatively rare mineral found in pegmatite dykes. Usually associated with other lithium-bearing minerals such as pink and green tourmaline, amblygonite and spodumene. Used as a source of lithium and in heat-resistant glass.

**Mafic** - An igneous rock composed chiefly of dark iron and manganese silicate minerals.

**Magnetic Survey** - A geophysical survey conducted on the Earth's surface that measures variations in the Earth's magnetic field caused by variations in rock type or geological structures.

**Magnetite** - Black, magnetic iron ore, an iron oxide ( $\text{Fe}_3\text{O}_4$ ).

**Mapping** – The art and science of recording geological observations on a map.

**Massive** - Solid (without fractures) wide (thick) rock unit.

**Melanocratic** – Sixty to 100% of the (igneous) rock is made up of dark minerals.

**Metamorphism/Metamorphic/Meta** - A process whereby the composition of rock is modified by heat and pressure/A class of rock affected by metamorphism.

**Mg** - Chemical symbol for the element magnesium.

**Mineralization** - The concentration of metals and their chemical compounds in a body of rock.

**Mineral Indicators for Rare Earths:** blue Frontieruorapatite, deep green elbite, high rubidium in feldspar, presence of pollucite, efficient zonal process, see anomalous elements.

**Molybdenite** - Molybdenum sulphide ( $\text{MoS}_2$ )

**Mudstone** – A fine grained sedimentary rock originally composed of clay and mud.

**Mylonite**- A hard, compact rock with a banded or streaky structure produced by extreme granulation in both strike-slip and thrust fault zones.

**Niobium**- see columbium.

**NSR** - Net Smelter Royalty – Royalty based on the actual gold sale price received less the cost of refining

**Ore** - Rock containing mineral(s) or metals that can be economically extracted to produce a profit.

**Orogen/Orogeny** – Deformation of a belt of rocks through folding and faulting, in many places accompanied by metamorphic and intrusive rocks that form mountains/the process of mountain building.

**Orthopyroxene** – Pyroxenes that crystallize in the orthorhombic system and are commonly brownish in colour.

**Outcrop** - An exposure of bedrock at the surface.

**Pelite**- A sediment or sedimentary rock composed of the finest detritus (clay- or mud-size particles); e.g., a mudstone, or a calcareous sediment composed of clay and minute particles of quartz. The term is equivalent to the Latin-derived term lutite.

**Pelitic**- Pertaining to or characteristic of pelite; especially said of a sedimentary rock composed of clay, such as a pelitic tuff representing a consolidated volcanic ash consisting of clay-size particles.



**Peraluminous-** Said of igneous rocks in which the molecular proportion of alumina exceeds that of soda, potash, and lime combined.

**Peridotite** – A general term for essentially non-feldspathic plutonic rocks consisting of olivine, with or without other mafic minerals. The other mafic minerals maybe amphiboles, pyroxenes or, less likely, micas. Minerals of the spinel group may be present.

**Petalite-** A monoclinic mineral,  $\text{LiAlSi}_4\text{O}_{10}$ ; perfect cleavage; vitreous; resembles spodumene; a source of lithium salts; in granite pegmatites.

**Pillowed** - Volcanic rock texture that formed from the bulbous cooling of magma when cooled quickly in water.

**Plunge** - The vertical angle an ore body makes between the horizontal plane and the direction along which it extends, longitudinally to depth.

**Pluton** - Body of rock exposed after solidification at great depth.

**Pollucite-** An isometric mineral,  $(\text{Cs}, \text{Na})_2\text{Al}_2\text{Si}_4\text{O}_{12} \cdot \text{H}_2\text{O}$ ; zeolite group; forms a series with analcime; colourless; occurs in granite pegmatites; a source of cesium and a minor gemstone.

**ppb** – Concentration in parts per billion.

**ppm** – Concentration in parts per million.

**Porphyry** - A rock consisting of larger crystals embedded in a more compact finer grained groundmass.

**Prospecting** – The art and science of searching for mineral deposits.

**Proterozoic** - The youngest part of the Precambrian from 2450 - 570 million years ago.

**Pyrite** - Iron sulphide mineral ( $\text{FeS}_2$ ).

**Pyroxene** – A calcium/sodium ferromagnesium silicate.

**Pyroxenite** – A coarse-granited, holocrystalline rock consisting mainly of pyroxenes. Accessories may include biotite, hornblende and olivine.

**Pyrrhotite** – A slightly to moderately magnetic sulphide or iron that is often associated with the nickel sulphide, pentlandite. The mineral can contain nickel, and the elevated values for nickel in the gabbros of Tib Lake may be indicative of this. Nickel is a potential indicator element, along with copper, for Pt/Pd mineralization. The determination of distribution patterns for nickel and copper, especially, maybe a key to locating Pt/Pd mineralization.

**Quartz** - A mineral composed of silicon dioxide.

**Rare Earth Elements; Rare Earths-** A group of rare metals very similar to one another and to aluminum in many properties. Thorium is very closely associated in nature with this group, and the source of thorium salts is monazite.

**Rare Earth Metals** - A group of widely distributed metals comprising Scandium (At. No. 21), Yttrium (At. No. 39), and 15 elements of atomic numbers 57 to 71, inclusive. They have the same arrangement of the two external shells of electrons in their atoms and resemble one another very closely in chemical and physical properties, being thus most difficult to separate from each other. It is to this, rather than their actual rarity in nature, that they so described. The metals are divided into three groups (cerium, terbium and yttrium) based upon the methods used to separate them from their ores.

**Rare Earths** - A series of widely distributed but relatively scarce minerals, principally oxides of the rare earth metals.

**Rhyolite** – Igneous rock of felsic (silica rich) composition.

**Rubellite-** A pink gem variety of elbaite.

**Sausseritization** - The replacement of (plagioclase in particular) in basalts and gabbros by a fine-grained aggregate of zoisite, epidote, calcite, sericite and zeolite. The iron-magnesium minerals may be chloritized during the process.

**Sandstone** – A sedimentary rock composed mainly of sand-sized quartz and/or feldspar.

**Schist** – Rocks of medium-grade metamorphism with well developed lamellar minerals.

**Sediment** - Solid material that has settled down from a state of suspension in a liquid; may be transported and deposited by wind, water or ice, chemically precipitated from solution, or secreted by organisms, forms in layers in loose unconsolidated form.

**Sedimentary** - Pertaining to or containing sediment or formed by its deposition.

**Sericite** - Generally light coloured iron, magnesium and sodium rich mica.

**Shear** - A planar zone of deformed rock caused by the movement of the rock.

**Siliceous** - A rock rich in silica.

**Sill** - A tabular body of igneous rock conforming to the strata it invades.

**Siltstone** – A sedimentary rock with an intermediate grain size finer than sandstone with a higher clay



fraction.

**Soil Sampling** - Systematic collection of soil samples from a series of different locations in order to study the distribution of its geochemical composition.

**Specific gravity** - The density of a substance relative to the density of water.

**Splay** – Branch of a fault.

**Spodumene**- A monoclinic mineral,  $\text{LiAlSi}_2\text{O}_6$ ; pyroxene group; prismatic cleavage; in granite pegmatites in crystals up to scores of meters long (called logs); a source of lithium; may be of gem quality (lavender kunzite, green hiddenite). Formerly called triphane.

**Stockwork** – A local higher density of veins/stringers at numerous orientations

**Strike** - Direction or trend of a geologic structure.

**Stringer** - A very small vein or irregular filament of mineral(s) cutting a rock mass, occurs independently or as a branch of a larger vein.

**Structure/Structural** - Pertaining to geological structure such as folds, faults, etc.

**Sulphide/Sulphidation** - A group of minerals in which one or more metals are found in combination with sulphur/rock that has been sulphidized.

**Syenite** - An felsic intrusive igneous rock composed chiefly of the mineral orthoclase.

**Tantalite**- A mineral series ferrotantalite-manganotantalite; unless specified it refers to ferrotantalite, an orthorhombic mineral,  $\text{FeTa}_2\text{O}_6$ ; black; in pegmatites; the main source of tantalum.

**Tantalum (Ta):** A rather brittle, lustrous, hard, heavy, grey metallic element. Symbol Ta. Occurs principally in the mineral columbite-tantalite,  $(\text{Fe,Mn})(\text{Nb,Ta})_2\text{O}_6$ . Widely used to fabricate chemical process equipment, nuclear reactors, and aircraft and missile parts. Used to make electrolytic capacitors, vacuum furnace parts, and surgical appliances.

**Tonalite** - A coarse-grained igneous rock, quartz-mica diorite. Two varieties are distinguished: soda tonalite, with albite in excess of anorthite, and lime tonalite, with anorthite in excess of albite. Compare to ademetallite. They are biotitic at Pakeagama

**Tholeiite** – Mafic volcanic rock with higher silica and lower sodium, potassium and magnesium content.

**Tourmaline** - Any member of the trigonal mineral group,  $\text{XY}_3\text{Z}_6(\text{BO}_3)_3\text{Si}_6\text{O}_{18}(\text{OH,F})_4$  where X is Na partially replaced by Ca, K, Mg, or a vacancy, Y is Mg,  $\text{Fe}^{2+}$ , Li, or Al, and Z is Al and  $\text{Fe}^{3+}$ ; forms prisms of three, six, or nine sides; commonly vertically striated; vari-coloured; an accessory in granite pegmatites, felsic igneous rocks, and metamorphic rocks. Transparent and flawless crystals may be cut for gems.

**Tuff/Pyroclastics** - A rock formed of compacted volcanic fragments.

**Turbidite** - Submarine landslide along a continental slope containing large masses of sediment.

**Ultramafic** – A dark coloured igneous rock with a low silica content and characterized by mafic minerals, such as olivine, amphibole and pyroxene.

**Unconformity** - A surface of erosion that separates younger rocks from older rocks.

**Uralitization** – The process whereby primary pyroxene → uralite, which is a fibrous or acicular variety of hornblende.

**Vein** - A thin sheet-like intrusion into a fissure or crack, commonly bearing quartz /a small vein or cluster of veins.

**Volcanic** - Descriptive of rocks originating from volcanic activity.

**Volcano-sedimentary** - A mix of rocks formed by volcanic and sedimentary processes.

## 2. FORWARD-LOOKING/SAFE HARBOUR STATEMENT AND FAIR DISCLOSURE STATEMENT

This MD&A may contain certain forward looking statements concerning the future performance of the business of Frontier Lithium Inc. (“Frontier”) or the (“Company”), its operations and its financial performance and condition, as well as management’s objectives, strategies, beliefs and intentions. These forward-looking statements are based on information currently available to the Company and the Company provides no assurance that actual results will meet management’s expectations. Forward-looking statements include estimates and statements that describe the Company’s future plans, objectives or goals, its ability to access capital, the speculative nature of mineral exploration and development, fluctuating commodity prices, competitive risks and reliance on key personnel, and include words to the effect that the Company or management expects a stated condition or result to occur. This list is not exhaustive of the factors that may affect any of the Company’s forward-looking statements. Statements relating to estimates of reserves and resources are also forward-looking statements as they involve risks and assumptions, including but not limited to assumptions with respect to future commodity

prices and production economics, that the reserves and resources described exist in the quantities and grades estimated and are capable of economic extraction. Forward-looking statements may be identified by such terms as “believes”, “anticipates”, “expects”, “estimates”, “may”, “could”, “would”, “will”, or “plan”. All forward-looking information is inherently uncertain and subject to risks, uncertainties, and a variety of assumptions to address future events and conditions. These and other factors should be considered carefully and readers should not place undue reliance on the Company’s forward-looking statements. The Company does not undertake to update any forward-looking statement that may be made from time to time by the Company or on its behalf, except in accordance with applicable securities laws.

### 3. HISTORICAL RESOURCE ESTIMATES

Frontier’s projects could include properties with historical resource estimates which are not compliant with National Instrument 43-101 (“NI 43-101”). These estimates are sourced from various government and company archives which provide information on the geology and extent of the mineralization. A “qualified person” has not done sufficient work to classify the historical estimate as a current mineral resource or mineral reserve. Frontier is not treating historical estimates as current mineral resources or mineral reserves as defined by NI 43-101 and historical estimates should not be relied upon.

### 4. INTRODUCTION

Frontier is a “reporting issuer” in the Canadian provinces of Ontario, Alberta and British Columbia. The Company’s common shares trade on the TSX Venture Exchange (“TSX.V”) under the symbol Frontier.

Frontier is a specialized mining exploration company actively engaged in the acquisition, exploration and development of hard rock, high grade, rare metal resource properties. Frontier maintains a particular focus on the elements lithium, tantalum, rubidium, and cesium by its expertise and experience exploring for LCT (lithium/cesium/tantalum) classified pegmatites.

Currently, Frontier is actively exploring its 100% owned and optioned PAK Lithium Project containing the Pakeagama Lake pegmatite in northwestern Ontario, Canada. Frontier’s goal is to advance its properties into development and production.

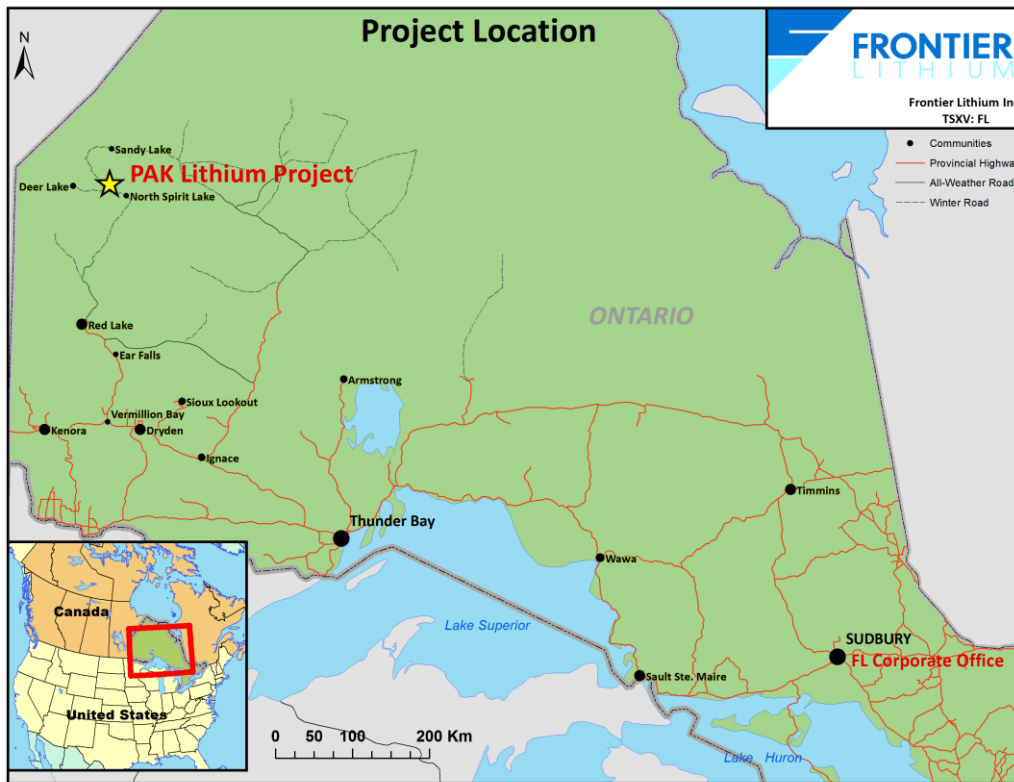
The Company’s shares are listed on the TSX Venture Exchange under the symbol Frontier and the head office is located in Val Caron, 18 kilometers north of Sudbury, Ontario.

The following management discussion and analysis should be read in conjunction with the Corporation’s audited annual financial statements for the year ended March 31, 2015 which comply with International Financial Reporting Standards (“IFRS”). All amounts are expressed in Canadian dollars unless otherwise stated.

Additional information regarding the Company can be found on SEDAR at [www.sedar.com](http://www.sedar.com). The Corporation’s web site is [www.Frontierlithium.com](http://www.Frontierlithium.com).

### 5. ASSET OVERVIEW

In 1999, Frontier acquired 100% interest, and now owns the Pakeagama Lake property that comprises the core property for the Company’s PAK Lithium Project near Red Lake, northwestern Ontario. In 2011, Frontier made a strategic decision to begin advancement of the project and entered into an agreement to expand the project area with two private individuals to acquire 3 mining claims collectively called the PAK Southeast Property. In 2012-2015, Frontier expanded the project to the northwest and southeast of the exposed Pakeagama pegmatite by staking. Overall the PAK Lithium Project consists of six (6) 100% owned and/or optioned properties encompassing 6,672 hectares (16,487 acres).



**Figure I: Frontier's Exploration Project**

In addition to the PAK Lithium Project, Frontier owns the Tib Lake PGM Property, located in northwestern Ontario, and is currently under option by North American Palladium Ltd. (TSX: PDL, NYSE Amex: PAL). Frontier also maintains a net smelter royalty (NSR) on the West Cedartree Gold Property whereby Chalice Gold Mines (ASX: CHN, TSX: CXN) is actively exploring.

**6. PAK LITHIUM PROJECT**

In January of 1999, the Ontario Geological Survey (OGS) published an article on a new discovery with potential for economic lithium, tantalum, rubidium and cesium mineralization at Pakeagama Lake, located about 160km north of Red Lake in northwestern Ontario ([Figure I](#)).

In late March of 1999, Frontier entered into an option agreement to earn a 100% interest in the property. The area in the vicinity of Pakeagama Lake was mapped by Dr. Denver Stone of the OGS in the early 1990's. He identified a series of fertile granites and took a number of samples from the Pakeagama Lake pegmatite which contained highly anomalous lithium, tantalum and cesium values. Based on this initial field work, Dr. Fred Breaks of the OGS conducted three weeks of detailed mapping and sampling in 1998. Dr. Breaks identified a strongly zoned, complex petalite subtype pegmatite. The combination of size, accessibility and the presence of both geochemical indicators and rare metal ore minerals, provide the project with high potential for economic rare metal mineralization.

In 2011 Frontier entered into an agreement with two private individuals to acquire 3 mining claims (each 16 unit claims) collectively called the Pakeagama South-East Property. The property optioned covers the strong potential of a south to east extension of the Pakeagama rare metal pegmatite. In late 2011, Frontier commenced the field work for a Mobile Metal Ion (MMI) geochemical survey, including an initial orientation line over the Pakeagama Lake pegmatite on the PAK Lake, and PAK South-East Properties.

In 2012, Frontier expanded the PAK Lithium Project to the north-west of the exposed pegmatite by

staking. The company also completed analysis of the MMI geochemical survey sample collection conducted in 2011 on the project. In late 2012, Frontier conducted a Phase I, 91 Channel Sample program in order to confirm historical results and to add additional channel samples while further sampling by distinct geologic zones. Under Frontier's QA/QC procedures, sample blanks, along with tantalum, lithium, rubidium and cesium standard samples were routinely inserted into the sample stream.

In early 2013, Frontier disseminated high-grade results from the Phase I Channel Sample program up to 4.74% Li<sub>2</sub>O over 15 meters, 192 ppm Ta<sub>2</sub>O<sub>5</sub> over 14 meters, and 0.53% Rb<sub>2</sub>O over 14 meters in three distinct pegmatite zones. In addition, the Company expanded its land position to a total of 3,584 hectares (8,856 acres) and commenced a Phase I, 6 hole-diamond drill program totally 1,000m. The Phase I drill program highlights include diamond drill hole (DDH) PL-13-01 intersected 154.05 metre (m) wide mineralized drill-intercept in pegmatite averaging 1.22% Li<sub>2</sub>O, 111 ppm Ta<sub>2</sub>O<sub>5</sub>, and 0.41% Rb<sub>2</sub>O from 38.50m to 192.55m, PL-13-003 intersected 4.22% Li<sub>2</sub>O over 18 metres (m) from 36 to 54m; DDH PL-13-05 includes a 19.10m wide high-grade tantalum zone averaging 236 ppm Ta<sub>2</sub>O<sub>5</sub> from 125 to 144.1m. The Pakeagama Lake pegmatite, after drilling Phase I, has a 265m strike length with an estimated width varying from 45 to 125m assuming sub-vertical orientation of the pegmatite body; The pegmatite remains open in all directions (WNW, ESE and at depth), and; The rare cesium mineral pollucite commonly occurs as rounded-blebs and small masses ranging in size from 10 to 30mm within the pegmatite's central intermediate zone.

In late 2013, Frontier disseminated a Canadian National Instrument (NI) 43-101 maiden mineral resource estimate for the pegmatite. The inferred resource of 6.89 million tonnes of 1.86% Li<sub>2</sub>O Eq. The pegmatite uniquely hosts 1.17 million tonnes grading 3.44% Li<sub>2</sub>O in a technical/ceramic grade lithium zone (UIZ) with low inherent iron content. The resource remained open to depth and along strike to the northwest and southeast.

An 8-hole, 1,500m Phase II diamond drill program was completed in late March 2014. The drill program confirmed the deposit to a depth of approximately 220m from surface, and increased the strike length from 265m to 400. Mineralization remains open to depth and along strike to the northwest and southeast.

In 2014, Frontier also announced the appointment of Ernie J. Marcotte (P.Eng, FCIM) to the board of Directors. Mr. Marcotte has over 40 years of experience in the mining industry involving metallurgical and mining operations, environmental control, mineral processing, research and development, design engineering, plant commissioning and corporate management.

In 2014, Frontier completed an electron microprobe study with Queen's University of Kingston, Ontario. The study indicated that the spodumene in the lithium zones at the Pakeagama Lake pegmatite contain low inherent iron. The monetary value of low-iron (Fe) spodumene is greater than the more common, higher iron spodumene as the former is desired for high quality technical grade ore or concentrates used in the manufacture of specialty glass products such as stove tops, ceramics and heat-proof cookware.

In January 2015, Frontier announced an upgraded NI 43-101 Resource Estimate for the PAK Lithium Project. The study established an Indicated mineral resource of 2.45 million tonnes grading at 1.81% Li<sub>2</sub>O equivalent(eq.), including 1.78 million tonnes grading 2.40% Li<sub>2</sub>O eq. in technical grade lithium zones with a low inherent iron spodumene and an Inferred mineral resource of 5.91 million tonnes grading at 2.01% Li<sub>2</sub>O equivalent(eq.), including 5.57 million tonnes grading 2.11% Li<sub>2</sub>O eq. in technical grade lithium zones with a low inherent iron spodumene.

In the same month Frontier announced the commencement of a Phase III diamond drill program as a follow-up to the Resource Estimate. The Phase III Drill Program was designed to infill the current resource on the property and consisted of approximately 1,500m in 9 holes targeting the Pakeagama Lake pegmatite. The objective of the program was to upgrade the Indicated mineral resource of the 2.45 million tonnes grading at 1.81% Li<sub>2</sub>O equivalent (eq.), to a Measured category, and (2) to possibly upgrade the Inferred mineral resource of 5.91 million tonnes grading at 2.01% Li<sub>2</sub>O eq. to a Measured and Indicated category. The program consolidated the inferred and indicated Resource and forecasted to expand the tonnage.

Based on a successful Phase III drill program a Phase IV commenced on the project at the end of August 2015. The success of the drill program was twofold. The first accomplishment was vertical drill hole PL-023-15 was terminated after intersecting 95.45m of 1.98% Li<sub>2</sub>O 155 m below surface substantiating the hypothesized southeasterly plunge of the deposit. DDH PL-024-15 intersected 40 m of pegmatite averaging 2.59% Li<sub>2</sub>O from 264 to 304m, thereby extending the strike length of the deposit. In addition to drilling, stripping and in-fill channel sampling of the Upper Intermediate Zone (UIZ) was conducted along strike to the north-west of the 300 tonne bulk sample site (see March 23, 2015 news release at [www.frontierlithium.com](http://www.frontierlithium.com) ) to better define the geometry and grade at surface. The channel sampling increased the confidence level of the high-grade lithium zone's surficial exposure whereby Channels 23, 24 and 25 combined had a composite grade of 4.41% Li<sub>2</sub>O representing a 28 metre section across the UIZ.

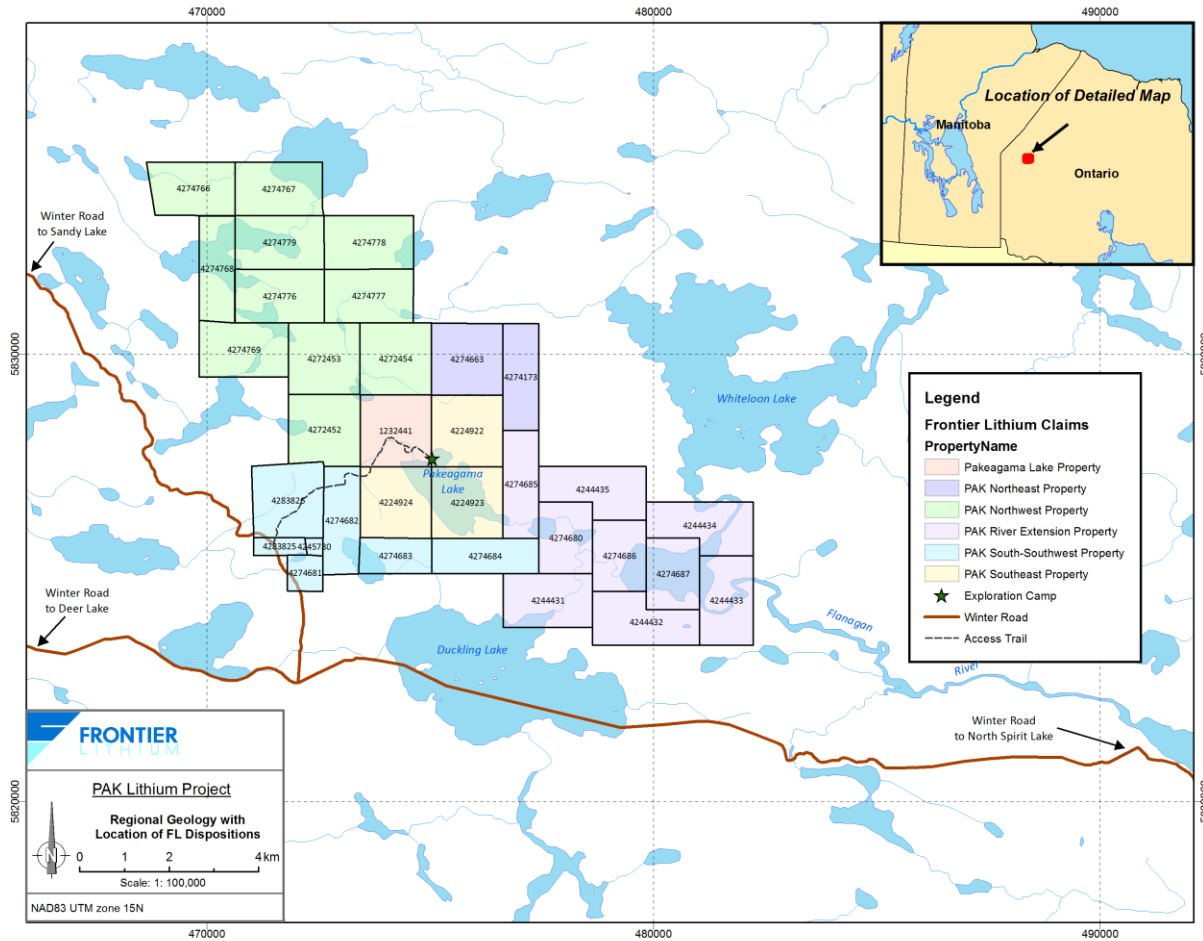
March 4, 2016, Frontier announced an upgraded NI 43-101 Resource Estimate for the PAK Lithium Project whereby it was with the following highlights:

- ▶ Measured and Indicated mineral resource of 7.89 million tonnes grading at 1.73% Li<sub>2</sub>O equivalent (eq.), including 6.87 million tonnes grading 1.96% Li<sub>2</sub>O eq. in high quality technical grade lithium zones with a low inherent iron spodumene;
- ▶ Inferred mineral resource of 295,600 tonnes grading at 1.35% Li<sub>2</sub>O (eq.), including 228,700 tonnes grading 1.69% Li<sub>2</sub>O eq. in technical grade lithium zones with a low inherent iron spodumene;
- ▶ A 206% change increase in measured and indicated Li<sub>2</sub>O eq. contained tonnes from the 2015 Resource Estimate;
- ▶ The Pakeagama Lake pegmatite has a 500m strike length with an estimated true width varying from 10 to 125m with a sub-vertical orientation of the pegmatite, and;
- ▶ Resource remains open to depth and along strike to the northwest and southeast.
- ▶ Based on exploration costs, the PAK deposit exhibits a low Measured and Indicated lithium acquisition cost at \$21.66/contained Li<sub>2</sub>O eq. tonne for exploration.

### 6.1 Project Description and Location

The PAK Lithium Project is located 160 kilometres north of Red Lake, Ontario in the Red Lake Mining Division. The Project is composed of 417 units for a total of 6,672 hectares (16,486 acres) as can be seen in [Figure II](#). The Pakeagama pegmatite is located on the Pakeagama Lake Property and is owned 100% by the company, and it is subject to a 2.5% net smelter return, with Frontier maintaining the option to purchase partial royalties. All other properties except the PAK Southeast Property are 100% owned by Frontier. The Southeast Property is currently 100% optioned by Frontier.





**Figure I: Project Claims**

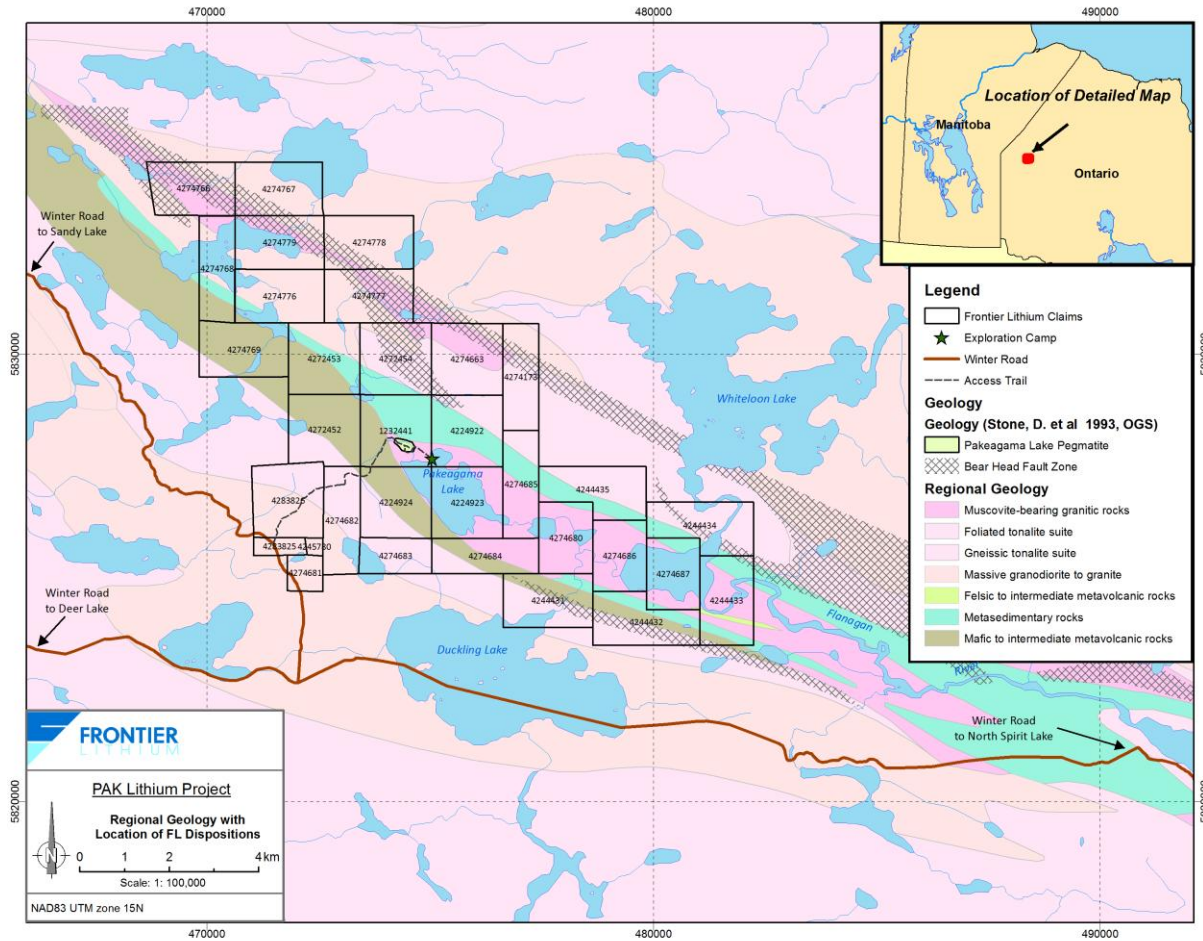
An elongate, approximately 2.5 by 15 kilometre, Pakeagama Lake peraluminous granite and mica pluton that trends northwest-southeast was emplaced immediately adjacent to and parallel to the Sachigo-Berns River Sub-provincial boundary of the Superior Province of the Canadian Shield. It was emplaced along the unconformable contact between metasedimentary rocks and metavolcanic/metasedimentary rocks of Achaean age. The north-western portion of the granite is present in the south-eastern quadrant of claim KRL1232441 (Pakeagama Lake Property). The granite is defined as fertile granite; the granite is a potential source of the rare metal elements found in the Pakeagama Lake Pegmatite.

The economically important Pakeagama pegmatite is located within the boundaries of claim KRL 1232441 at the northwest end of the Pakeagama Lake Granite. The pegmatite is a highly evolved, complex-type, petalite subtype pegmatite with highly anomalous to economically significant values of tantalum, cesium, rubidium and lithium (F.Breaks, A.Tindle, and S.Smith, 1999a). The pegmatite is divided into three distinct zones: the upper intermediate zone (UIZ), the central intermediate zone (CIZ), and the lower intermediate zone (LIZ). Metasedimentary rocks in unconformable contact with metavolcanic/metasedimentary rocks underlie all other parts of the claim KRL1232441.

### 6.2 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The project is located in the Pakeagama Lake township, Red Lake Mining district of north-western Ontario. The National Topographic System map sheet reference is 53C/11, and the Pakeagama Pegmatite is approximately centred at 52°36'N latitude and 93°23'W longitude ([Figure III](#)).





**Figure II: Project Regional Geology**

One hundred and sixty kilometer Fronteroat plane access is available from Red Lake to the west side of Pakeagama Lake where there is a summer camp site on a point of land. Red Lake is located one hundred and seventy kilometres north of Vermillion Bay on Highway 105. Vermillion Bay is situated on the Trans Canada Highway (Hwy. 17) between the centres of Dryden and Kenora. Pakeagama Lake is located in a relatively isolated area of north-western Ontario. A winter road passes adjacent to the PAK Lithium Project claim group, whereby a winter camp site is located. Wasaya Airways services the nearby First Nation communities of Deer Lake (40 km) and North Spirit Lake (30 km).

The Pakeagama Lake area lies at the northern boundary of the Lac Seul Upland ecoregion and the southern boundary of the Hayes River Upland ecoregion of the Boreal Shield. The region is classified as having a subhumid mid-boreal ecoclimate (Ecological Stratification Working Group, 1998). The Pakeagama Lake area lies between four data stations which are located at Island Lake (Manitoba), Red Lake (Ontario), Pickle Lake (Ontario), and Big Trout Lake (Ontario) for which extensive climatic records are available from Environment Canada. The average mean annual temperature is  $-0.9^{\circ}\text{C}$ . The average daily temperature in summer is from  $8.9^{\circ}\text{C}$  to  $19.2^{\circ}\text{C}$  while in winter the average range is from  $-20.3^{\circ}\text{C}$  to  $-11.6^{\circ}\text{C}$ . Average yearly precipitation for the area is 655 mm. The dominant vegetation is coniferous forest. The area has seen a forest fire in approximately 1995 and deadfall inhibits easy foot travel. Another forest fire burned a portion of the Pakeagama Lake claim in 2008, including the area around the Pakeagama pegmatite. Higher elevations are covered by stands of jack pine up to 20 feet high while swampy areas are dominated by black spruce. Upland areas are covered with discontinuous deposits acid, sandy tills while thin lacustrine clay deposits may cap the tills in low-lying areas. Wildlife includes wolf, lynx, moose, black bear, red squirrel, snowshoe hare, beaver, mink, fisher, marten, and ermine. The

area lies north of the Government of Ontario's "Lands for Life" and "Living Legacy" programs of conservation and wilderness preservation. The claim contains a series of ridges with the extensive development of cliff faces that parallel the general regional strike of the geology. The ridges are separated by relatively Frontierat, muskeg terrain. Infrastructure is absent except for the winter road, which is located adjacent to the claim group.

### 6.3 History

The first geological reconnaissance mapping of the region was undertaken by A. P. Low of the Geological Survey of Canada in 1886. Additional geological surveys were carried out by G. V. Douglas (1925) and M. E. Hurst (1928) of the Ontario Department of Mines. Most of the exploration activity in the region centred on the Favourable and Setting Net Lakes area located 25 to 40 km to the northwest of the property. Prospecting by K. C. Murray in 1927 identified gold-bearing mineralization in the Favourable Lake area. The gold property was developed as the Berens River Mine and produced 4,451 kg Au, 160,926 kg Ag, 2,770 t Pb and 815,147 kg Zn from 508,665 tons of ore between 1939 and 1948 (Stone, 1998). Subsequent exploration by Golsil Mines Limited, Zahavy Mines Limited, Getty Mines Limited and Noramco Mines Ltd. was carried out until the early 1990's. The "Wynne" gold showing is located on the northern shore of Pakeagama Lake. However, there are no records of any assessment work having been filed from the vicinity of Pakeagama Lake. The Pakeagama Lake area was covered by an airborne reconnaissance gamma-ray spectrometer survey in 1977 as part of a regional coverage program (OGS-GSC, 1979). The survey was Frontierown at a 400-ft elevation with 5-km line spacing and a 2.2 km station interval. No significant radiometric anomalies were detected in the immediate vicinity of Pakeagama Lake. Geological mapping of portions of the region was carried out by Ayres (1970, 1972a). He noted spodumene in a pegmatite dike and holmquistite within granitic rocks near Setting Net Lake (25 km WNW of Pakeagama Lake). A grab sample from the pegmatite dike returned 0.52% Li (Ayres, 1972b). Recent mapping of the region was carried out by D. Stone of the Ontario Geological Survey in 1990 (Stone et al, 1993, Stone, 1998). Tourmaline-rich samples taken from the vicinity of Pakeagama Lake returned anomalous Li, Cs, Ta and Be during this work. Detailed follow-up work was carried out by Breaks et al (1999a) in the vicinity of Pakeagama Lake. Five rare metal mineral occurrences were detected over a 35 km segment of the Bear Head Fault Zone. However, the Pakeagama Lake pegmatite occurrence became the predominant focus of detailed work. G. Anthony mapped the pegmatite and adjacent rocks during 1999. Check assays of samples collected by the Ontario Geological Survey were also completed. Frontier completed a program of line cutting, ground geophysics, prospecting, rock saw channel sampling and overburden removal on claim 1232441 (16 claim units), between May 12 and July 25, 2001 (not NI 43-101 compliant). A study performed by Dr. R. Ken Germundson, P.Geo determined that the tantalum oxide values for samples collected for Frontier were about two thirds as great as the Ontario Geological Survey samples. There was a close agreement between the three sets of data for the average content of cesium, although no rare metal standards were inserted into any of the government, or Frontier sample stream.

### 6.4 Geological Setting

#### i. Regional Geology

The Pakeagama pegmatite, which contains rare metals, is located in Frontier's claim 1232441 (Pakeagama Lake Property). Bands of iron formation are present within both of the sequences of metamorphic rocks that are present in the project. As can be seen in [Figure III](#), the project is located adjacent to the boundary between the Berens River and Sachigo Subprovinces of the Archean-age Superior Province of the Canadian Shield. These subprovinces comprise a series of relatively isolated volcano-sedimentary (greenstone) belts surrounded by extensive granitic and gneissic suites of rock. They are separated by the Bearhead Lake Fault Zone.

Two of the greenstone belts that are located along the contact between the two sub provinces are: the Favourable Lake greenstone belt located towards the northwest, and the North Spirit Lake greenstone belt located towards the southeast of the property. The belts are connected through the Pakeagama Lake area by the Bearhead Fault. The main assemblages of volcanic and sedimentary rocks that are identified

in each belt are, in part, correlated between the two belts. The assemblages of the Favourable Lake and North Spirit Lake areas are predominantly in greenschist facies of metamorphism. However, a transition to amphibolite facies in the greenstone belts occurs as the Bear Head Fault Zone is approached. Amphibolite facies is the predominant metamorphic grade in the Pakeagama Lake vicinity.

The Bear Head Fault is the dominant structural feature in the region and has been traced for over 140 km from NW-SE. The fault is composed of a several hundred metre thick zone of mylonite. The presence of cataclastites, tension gashes unfilled by vuggy quartz-epidote-adularia and potassic alteration indicate that brittle deformation has been superimposed on the mylonites. A dextral transcurrent dislocation of the Bear Head Fault has been interpreted from microstructures. The regional gneissosity trends NW-SE and generally are steeply dipping inward towards the core of the volcano-sedimentary assemblage in the vicinity of Pakeagama Lake. The Bear Head Fault Zone is the locus for a peraluminous suite of granitic plutons. Five major plutons of the two-mica granites (fertile granites) are documented over the 140-kilometre strike length of the fault. Fertile granites are interpreted to be the parental rocks that give rise to rare metal pegmatites.

## ii. Property Geology

The exposed pegmatite on the project has been classified into three main lithological domains. The northeast third of the Pakeagama Lake claim block is dominantly of metasedimentary origin and composed of pelitic sediments, iron formation and conglomerate. The southwest third is comprised dominantly of mafic metavolcanic and related metasedimentary rocks. The Pakeagama Lake pluton dominates the southeastern portion and appears to pinch out in the south-central part of the property. The geology of the area of claim KRL 1232441 is presented in Map P. 3224 (Whiteloan Lake) of the Ontario Geological Survey (Stone and Fitzsimon, 1993). The property is underlain by the north-western extension of the North Spirit Lake greenstone belt. The greenstone rocks, which are approximately 2 kilometres wide in the vicinity of the property, are bounded to the north by biotitic tonalities and granites of the Whiteloan Lake Batholith (Sachigo Subprovince of the Superior Province of the Canadian shield) and to the south by gneissic granodiorites and granites of the Bearhead Lake Batholith (Berens River Subprovince of the Superior Province).

## iii. Pakeagama Lake Pegmatite Mineralization

### ▶ Upper Intermediate Zone (UIZ)

The Upper Intermediate Zone (“UIZ”) represents the lithium zone within the pegmatite and is dominated by “SQUI” (Spodumene + Quartz Intergrowth), a term used to describe an isochemical replacement of primary petalite by oriented spodumene + quartz (London, 1984), with lesser grey K-feldspar and primary white spodumene in quartz (Figure 7.5). Phosphate minerals such as montebrasite (Breaks et al., 1999) and apatite, and lithian mica are common accessory minerals. The SQUI texture appears to “overprint” the primary coarse K-feldspar and mica and therefore formed at a later stage of pegmatite crystallization.

### ▶ Central Intermediate Zone (CIZ)

The Central Intermediate Zone (“CIZ”) is located in structurally higher portions of the pegmatite and represents the tantalum and rubidium zone of the pegmatite. The CIZ is in contact with both the Upper Intermediate Zone (UIZ) and Upper Wall Zone, and persists to the southeast edge of the outcrop where it is believed the pegmatite continues under the till cover. To the southeast, the CIZ is intersected by channels CH-1 and CH-7 where it consists of similarly sized fragments of randomly oriented coarse K-feldspar (crystals up to 1 meter in diameter) + mica + quartz. Micas appear to alter primary K-feldspar, and can be pervasive in zones. Blue apatite prisms up to 1 cm wide and several cm’s long accompany the mica-rich zones. In the adjoining area to the northeast of CH-7, the K-feldspars are more or less completely replaced with lithian mica + quartz. In this area veinlets and patches of lepidolite are common. Channel 1 (CH-1) contains the highest tantalum grades found to date in the exposed pegmatite, which persist in the subsurface in drill holes PL13-001 and -006, in addition to high rubidium and elevated cesium grades. To the northwest, channels CH-8 and CH19 intersect the central portion of the exposed CIZ where it consists of predominantly grey K-feldspar with minor lithian mica + quartz alteration. Drill

holes PL13-004 and -003 confirm the extension of the CIZ into the subsurface in this area, where it features notable cm-scale blebs of the rare cesium mineral pollucite, and high Ta and Rb grades. Figure 7.6 shows an outcrop and photomicrograph of the CIZ.

▶ **Lower Intermediate Zone (LIZ)**

The Lower Intermediate Zone (LIZ) comprises the bulk of the exposed pegmatite and is considered an intermediate stage zone with significant lithium, tantalum and rubidium. The zone comprises predominantly K-feldspar, Na-feldspar, SQUI and lithian muscovite (Figure 7.7). Pollucite also occurs in an intersection of LIZ in drill hole PL13-005. The zone has undergone both ductile and brittle deformation at the apparently structurally lowest portions of the pegmatite. Ductile deformation is manifested as a banded appearance on surface, where seams of oriented mica provide a planar fabric.

▶ **Wall Zones**

The Wall Zones (upper and lower) of complex LCT type pegmatites are generally characterized by the occurrence of brick-red K-feldspar (perthite) and simple mineralogy (Cerny, 2005, Cerny and Vanstone 1996). The zone mineralogy is simple, but the brick-red colouration of the K-feldspar is more common in the portion of the pegmatite in close proximity to the metasediments. The same colouration does generally not occur where the pegmatite is in contact with the granite. In this latter case, the sections of Wall Zone display a light to medium grey K-feldspar. It is assumed the inherent iron levels of the Pakeagama Lake granite, unlike the metasediments, were not sufficient to generate the K-feldspar colour change in the adjoining pegmatite.

The Upper Wall Zone found in the southwest portion of the pegmatite exposure, is in contact with the lithium rich UIZ and is composed of quartz with lesser pale- red coloured K-feldspar, minor phosphates and accessory beryl and lithian mica. The exposure of this zone is limited.

The Lower Wall Zone is mineralogically similar to the Upper Wall Zone. A common feature of the footwall Wall Zone in the more complex LCT-type pegmatites is the presence of bands of sodic aplite (“footwall aplite”). These sodic bands are generally not common in the Upper Wall Zone. The Pakeagama Lake pegmatite is somewhat more complex as bands of what appears to be pre- existing banded sodic aplites are found throughout the pegmatite. The contact with the LIZ is gradational and is defined by the general absence of SQUI within the wall zones and the change in colour of the K-feldspars from pale-red to the light grey commonly found throughout the pegmatite. Like the LIZ, this zone has undergone deformation.

**6.5 Geological Target: Rare Metal Target (Tanco Mine)**

The word ‘pegmatite’ stems from Homeric Greek meaning ‘to make stout or rigid by binding together’. The crystallization of fertile granites yields a fractionated residual magma which is enriched in lithium, rubidium, cesium, thallium, tantalum, hafnium, gallium, germanium, boron, fluorine and phosphorus relative to that contained in the fertile granite. This fractionated residual magma is expelled out from the fertile granite source into the surrounding metasedimentary and metavolcanic rocks where it cools and consolidates to form a group of pegmatite bodies.

The pegmatite group derived from the fertile granite parent shows a progressive fractionation trend and chemical changes with distance from the fertile granite source. “There have been many models invoked on the study of rare-element pegmatites, but regardless of which is used the pegmatite-forming process is dynamic and highly process-dependent, involving a rather delicate thermal and chemical balance” (Jahns 1953) to explain the many complex textural and mineralogical features of pegmatites. The most fractionated batches of pegmatite are the most mobile (enriched in boron, water, fluorine, phosphorus, lithium, rubidium, cesium, tantalum and beryllium) and tend to migrate the furthest from the fertile granite parent. The most fractionated of these pegmatites are the complex type pegmatites which include the spodumene, petalite, lepidolite, and amblygonite subtypes. Individual pegmatites are generally small and range from several metres long and 1 metre thick to economically interesting bodies hundreds of metres long and tens of metres thick.

The internal structure of pegmatites varies from homogenous to zoned. Zoning or the lack of it provides the starting point for internal anatomy. Zoning is largely what distinguishes pegmatites from other ordinary plutonic igneous rocks. It is manifested by variations in the spatial distribution of grain size, mineral



assemblage, crystal habit, or rock fabric. Zoned pegmatites may have up to nine different units with variable textures and mineral modes (Cerny, 1991b, Cerny et al, 1996). The most evolved zonation patterns are encountered in highly fractionated intrusions with complex rare metal mineralization (i.e. Tanco).

The most striking geochemical anomalies of the Tanco body are its high Cesium and Phosphorus contents, the hallmark of a pelitic metasedimentary source, and high tantalum.

## 6.6 Exploration Programs

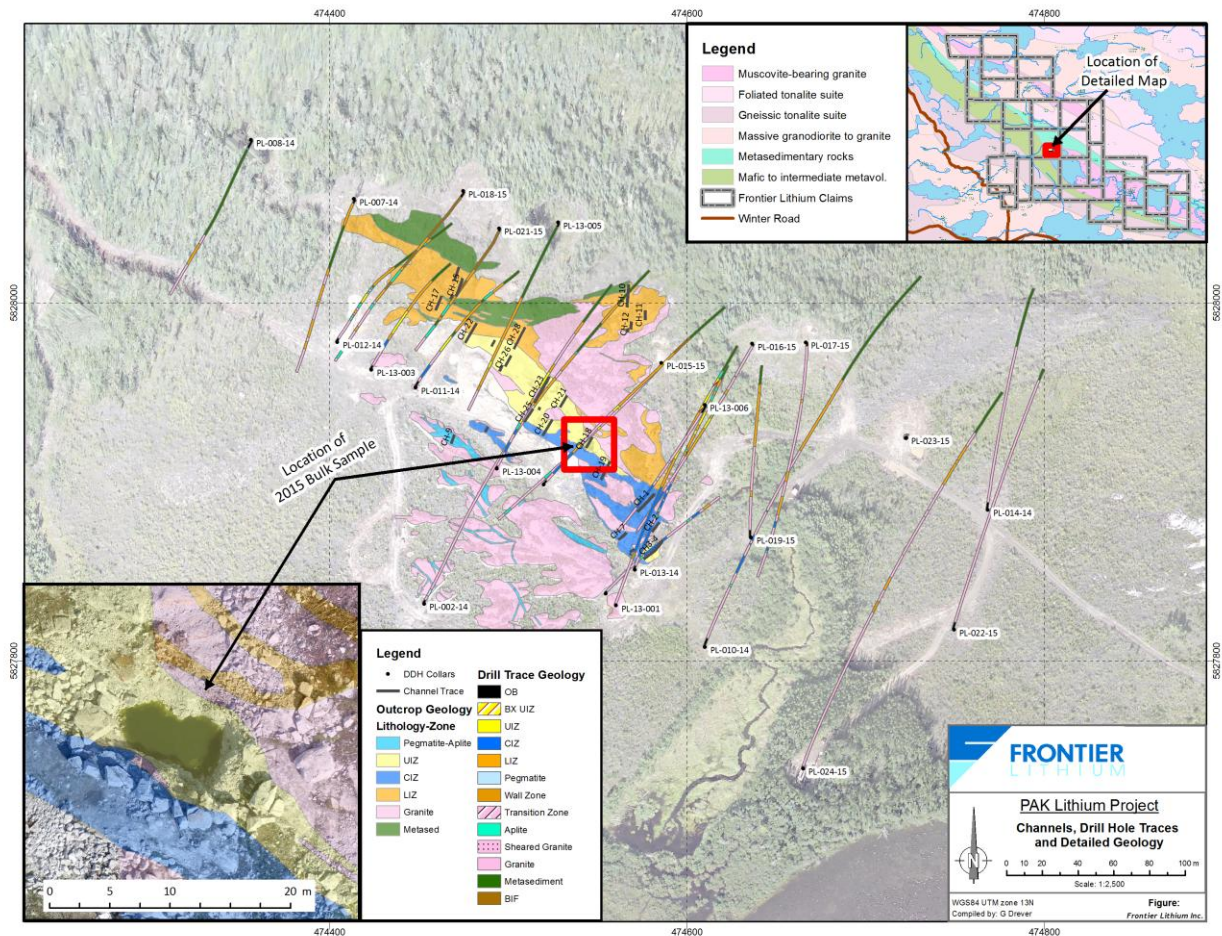
### i. Past Exploration

In 1998 and 1999 Dr. Fred Breaks of the Ontario Geological Survey and Dr. Andy Tindle studied the Pakeagama Pegmatite. Approximately 2186 analyses have been conducted to establish that the Pakeagama Rare Metals Pegmatite is potentially a world-class pegmatite suggesting the presence of a Tanco type mineralizing system. The Pakeagama Lake pegmatite has a width which varies from 30 to 125 metres and a strike length of at least 260 metres (open in both directions) which may extend another 300 metres to a historical 700 g/t tantalum oxide occurrence in an aplite dyke. In Summary of Field Work 1999, OGS Open File Report 6000 dated November, 1999, Dr. Breaks et al conclude: “The detailed documentation of a variety of tantalum-rich minerals coupled with the presence of pollucite (main cesium ore mineral) renders the Pakeagama Lake pegmatite and adjoining area one of the best exploration targets for tantalum and cesium in Northwestern Ontario”.

### ii. Recent Exploration

In June 2011, Frontier conducted an MMI orientation soil survey over the exposed Pakeagama Lake pegmatite. The results of the survey identified 15 elements that had a definitive response to the pegmatite, and specifically established a characteristic cesium, lithium, and rubidium soil MMI response. It also allowed the Company to define the best soil sample depth range for future MMI surveys on the property. Later in 2011, the Company performed a detailed reconnaissance MMI soil survey of the Pakeagama Lake, and PAK South-East claims. The regional survey returned very encouraging MMI results. Specifically, elevated cesium, lithium and rubidium MMI values are concentrated both to the northwest and southeast directions within the property and coincident with the assumed orientation of the Pakeagama Lake pegmatite. The MMI geochemical signatures are of similar amplitudes to that of the orientation survey over the Pakeagama Lake pegmatite itself. The objective of the MMI geochemical program is to test a cost effective geochemical survey tool for further definition of the Pakeagama Lake rare metal pegmatite, or other similar pegmatites in central Canada.

In September 2012, Frontier conducted a Channel Sample Program on the Pakeagama Lake pegmatite. The 91 sample program was conducted in order to confirm historical results and to add additional samples while further sampling by distinct geologic zones (UIZ, LIZ, and CIZ). The program identified high grade lithium, tantalum, and rubidium up to 4.74% Li<sub>2</sub>O over 15 metres in three distinct pegmatite zones, and 14 metres of 192ppm Ta<sub>2</sub>O<sub>5</sub>, including 270ppm over 6 metres, and 0.53% Rb<sub>2</sub>O in one of these zones ([Figure IV](#)).



**Figure IV: Channel Samples, Drill Holes, and Detailed Geology**

On March 1, 2013, Frontier announced the commencement of a Phase I, 6-hole diamond drill program as a follow-up and focus on drill targets derived from the high grade mineralization encountered in the UIZ, LIZ, and CIZ zones sample with the 2012 Channel Sample Program. The objectives of the program were (1) to determine the orientation, thickness and zonation of the pegmatite, and (2) to refine the mineralogical characterization of these zones by better establishing their lithium, tantalum, cesium and rubidium potential.

The Phase I drill program ([Figure IV](#)) highlights include diamond drill hole (DDH) PL-13-01 intersected 154.05 metre (m) wide mineralized drill-intercept in pegmatite averaging 1.22% Li<sub>2</sub>O, 111 ppm Ta<sub>2</sub>O<sub>5</sub>, and 0.41% Rb<sub>2</sub>O from 38.50m to 192.55m, PL-13-003 intersected 4.22% Li<sub>2</sub>O over 18 metres (m) from 36 to 54m; DDH PL-13-05 includes a 19.10m wide high-grade tantalum zone averaging 236 ppm Ta<sub>2</sub>O<sub>5</sub> from 125 to 144.1m. The Pakeagama Lake pegmatite, after drilling Phase I, has a 250m strike length with an estimated width varying from 45 to 125m assuming sub-vertical orientation of the pegmatite body; The pegmatite remains open in all directions (WNW, ESE and at depth), and; The rare cesium mineral pollucite commonly occurs as rounded-blebs and small masses ranging in size from 10 to 30mm within the pegmatite's central intermediate zone.

An 8-hole, 1,500m Phase II diamond drill program was completed in late March 2014. The objectives of the program were (1) to upgrade a portion of the resource to an indicated level, specifically some of the 1.17 million tonnes grading 3.44% Li<sub>2</sub>O in the low-iron, technical/ceramic grade lithium zone (UIZ) , and (2) to expand the resource which currently has a 265m strike length with an width varying from 45 to 125m.



### Highlights:

- ▶ Infill of High Grade
  - Diamond Drill Hole (DDH) PL-011-14 intersected 1.68% Li<sub>2</sub>O over 104 metre (m) from 9.1m to 104.75 m;
  - DDH PL-011-14 includes a 12.8 m wide high-grade lithium zone (Upper Intermediate [UIZ]) averaging 4.01% Li<sub>2</sub>O from 35 to 47.8 m;
- ▶ Depth Extension
  - Diamond Drill Hole (DDH) PL-013-14 intersected 1.16% Li<sub>2</sub>O over 202 metre (m) from 15m to 217.45 m;
  - DDH PL-013-14 includes a 18 m wide high-grade lithium zones (Upper Intermediate [UIZ] and Lower Intermediate [LIZ]) averaging 3.10% Li<sub>2</sub>O from 164 to 182 m;
  - DDH PL-013-14 was drilled below DDH PL-001-13 (see press Aug. 1, 2013) and confirms the deposit to a depth of approximately 220m from surface;
- ▶ Strike Extension
  - Diamond Drill Hole (DDH) PL-010-14 intersected 2.01% Li<sub>2</sub>O over 60.70 metre (m) from 168.3m to 229 m;
  - DDH PL-010-14 includes a 22 m wide lithium zone (Lower Intermediate [LIZ]) averaging 2.46% Li<sub>2</sub>O from 171 to 193 m;
  - DDH PL-010-14 and DDH PL-008-14 increases the deposits strike length from 265m to 400m; and

In February 2015 the Company commenced a Phase III Diamond Drill Program as a follow-up to the NI 43-101 mineral resource estimate and was designed to infill the current resource on the project. The drill program consisted of 1,641m in eight holes targeting the Pakeagama Lake pegmatite.

### Highlights:

- ▶ Infill of High Grade
  - Diamond Drill Hole (DDH) PL-020-15 intersected 2.02% Li<sub>2</sub>O over 66.05metre (m) from 79.50m to 145.55m;
  - DDH PL-020-15 includes a 5.85m wide lithium zone (Upper Intermediate Zone or UIZ) averaging 4.15% Li<sub>2</sub>O from 80.05m to 85.90m; and
  - DDH PL-016-15 intersected 2.64% Li<sub>2</sub>O over 70.4 metre (m) from 77.45m to 147.85m including an Upper Intermediate Zone (UIZ) of 3.68% Li<sub>2</sub>O over 15.45m from 96.0 to 111.45m,
  - DDH PL-019-15 scissored from the south and 30m to the east of PL-016-15, intersected 2.25% Li<sub>2</sub>O over 70.55m from 103.15 to 173.70m including an 11.0m wide lithium-enriched zone averaging 3.03% Li<sub>2</sub>O from 123.0 to 134.0m,
  - Mineralization remains open to depth and along strike to the northwest and southeast.
  - Drill results suggest mineralization is plunging to the south-east and possibly present beneath hole PL-022-15 (100m east of known mineralization).

Based on a successful Phase III drill program a Phase IV commenced on the project at the end of August 2015. The success of the drill program was twofold. The first accomplishment was vertical drill hole PL-023-15 was terminated after intersecting 95.45m of 1.98% Li<sub>2</sub>O 155 m below surface substantiating the hypothesized southeasterly plunge of the deposit. DDH PL-024-15 intersected 40 m of pegmatite averaging 2.59% Li<sub>2</sub>O from 264 to 304m, thereby extending the strike length of the deposit. In addition to drilling, stripping and in-fill channel sampling of the Upper Intermediate Zone (UIZ) was conducted along strike to the north-west of the 300 tonne bulk sample site (see March 23, 2015 news release at [www.frontierlithium.com](http://www.frontierlithium.com) ) to better define the geometry and grade at surface. The channel sampling increased the confidence level of the high-grade lithium zone's surficial exposure whereby Channels 23, 24 and 25 combined had a composite grade of 4.41% Li<sub>2</sub>O representing a 28 metre section across the

UIZ.

## 6.7 Upgraded NI. 43-101 Resource Estimate

On January 28, 2015 the Company released its second resource estimate for the Pakeagama Lake pegmatite. This resource is based on surface work and all four phases of drilling results.

### Highlights:

- ▶ Measured and Indicated mineral resource of 7.89 million tonnes grading at 1.73% Li<sub>2</sub>O equivalent (eq.), including 6.87 million tonnes grading 1.96% Li<sub>2</sub>O eq. in high quality technical grade lithium zones with a low inherent iron spodumene;
- ▶ Inferred mineral resource of 295,600 tonnes grading at 1.35% Li<sub>2</sub>O (eq.), including 228,700 tonnes grading 1.69% Li<sub>2</sub>O eq. in technical grade lithium zones with a low inherent iron spodumene;
- ▶ A 206% change increase in measured and indicated Li<sub>2</sub>O eq. contained tonnes from the 2015 Resource Estimate;
- ▶ The Pakeagama Lake pegmatite has a 500m strike length with an estimated true width varying from 10 to 125m with a sub-vertical orientation of the pegmatite, and;
- ▶ Resource remains open to depth and along strike to the northwest and southeast.
- ▶ Based on exploration costs, the PAK deposit exhibits a low Measured and Indicated lithium acquisition cost at \$21.66/contained Li<sub>2</sub>O eq. tonne for exploration.

“We are extremely pleased with the results of our upgraded resource estimate since there are definitely analogous features to the high grade, multi-element, and large tonnage of the prolific Tanco pegmatite in southeastern Manitoba<sup>(1)</sup>,” commented Trevor R. Walker, President of HLM. “With the deposit exposed at surface, this report also confirms with confidence that the Pakeagama Lake pegmatite’s lithium mineralization is wide, high grade, continuous and consistent, persisting at depth, and with tantalum and possibly rubidium and cesium byproducts. Furthermore, we are happy to report that development work, including metallurgical and environmental baseline studies have been underway for the preparation of pre-feasibility to be conducted in 2016.”

**Table I: Measured and Indicated Mineral Resource Estimate – PAK Lithium Project (Pakeagama Lake pegmatite deposit)**

Cut-off	Resource Category	Commodity	Geologic Zone	Tonnes (x 1,000)	Li <sub>2</sub> O (%)	Ta <sub>2</sub> O <sub>5</sub> (ppm)	Cs <sub>2</sub> O (%)	Rb <sub>2</sub> O <sup>(5)</sup> (%)	Contained Li <sub>2</sub> O (t)	Contained Ta <sub>2</sub> O <sub>5</sub> (t)	Li <sub>2</sub> O Eq. (%) <sup>(2)</sup>
0.4 Li <sub>2</sub> O Eq.	MEASURED + INDICATED	Lithium	Upper Intermediate Zone (UIZ) <sup>(4)</sup>	638.1	3.58	63	0.04	0.17	22,856	40	3.67
		Lithium	Lower Intermediate Zone (LIZ)	6,209.3	1.63	107	0.04	0.29	101,496	662	1.79
		Lithium	<b>Total Lithium Zones</b>	<b>6,847.4</b>	<b>1.82</b>	<b>103</b>	<b>0.04</b>	<b>0.28</b>	<b>124,352</b>	<b>821</b>	<b>1.96</b>
		Tantalum/Rubidium	Central Intermediate Zone (CIZ)	1,039.7	n/a	114	0.07	0.57	n/a	119	n/a
		Lithium/Tantalum/Rubidium	<b>Bulk Pegmatite Measured Resource</b>	<b>7,887.1</b>	<b>1.58</b>	<b>104</b>	<b>0.04</b>	<b>0.31</b>	<b>124,352</b>	<b>821</b>	<b>1.73</b>
Cut-off	Resource Category	Commodity	Geologic Zone	Tonnes (x 1,000)	Li <sub>2</sub> O (%)	Ta <sub>2</sub> O <sub>5</sub> (ppm)	Cs <sub>2</sub> O (%)	Rb <sub>2</sub> O <sup>(5)</sup> (%)	Contained Li <sub>2</sub> O (t)	Contained Ta <sub>2</sub> O <sub>5</sub> (t)	Li <sub>2</sub> O Eq. (%) <sup>(2)</sup>

0.4 Li <sub>2</sub> O Eq.	INFERRED	Lithium	Upper Intermediate Zone (UIZ) <sup>(4)</sup>	1.8	2.61	67	0.06	0.18	47	0	2.70
		Lithium	Lower Intermediate Zone (LIZ)	226.9	1.54	98	0.05	0.30	3,505	22	1.69
		<b>Lithium</b>	<b>Total Lithium Zones</b>	<b>228.7</b>	<b>1.55</b>	<b>98</b>	<b>0.05</b>	<b>0.30</b>	<b>3,552</b>	<b>22</b>	<b>1.69</b>
		Tantalum/Rubidium	Central Intermediate Zone (CIZ)	66.9	n/a	119	0.07	0.54	n/a <sup>(3)</sup>	8	n/a
		<b>Lithium/Tantalum/Rubidium</b>	<b>Bulk Pegmatite Inferred Resource</b>	<b>295.6</b>	<b>1.20</b>	<b>103</b>	<b>0.06</b>	<b>0.36</b>	<b>3,552</b>	<b>30</b>	<b>1.35</b>

- (1) The original size of the Tanco pegmatite was 57,427,342 tonnes with a maximum thickness of 100m (Stilling, A., Cerny, P., and Vanstone, P.; [2006], The Tanco Pegmatite at Bernic Lake, Manitoba, , XVI. Zonal and Bulk Compositions and Their Petrogenetic Significance. *The Canadian Mineralogist*; Vol. 44 pp. 599-623). The UIZ, CIZ and LIZ units at the Pakeagama Lake Pegmatite have striking similarities in mineralogy and chemical composition to those at the Tanco deposit. The bulk chemical composition for Li<sub>2</sub>O and Ta<sub>2</sub>O<sub>5</sub> was 0.74% and 366ppm, respectively at Tanco. The Tanco Mine is located in southeastern Manitoba and was a lithium mineral concentrate producer from 1986 until operations were suspended in 2009. Tanco was also a tantalum mineral concentrate producer until March 2013 when operation of this circuit ceased.
- (2) Li<sub>2</sub>O equivalent was determined based on lithium and tantalum grades, prices (\$400 per tonne of 6% spodumene concentrate and \$150 per kg of 30% tantalite concentrate) and their respective recovery ratio (78.5% recovery for lithium and a 50% recovery for tantalum from bulk pegmatite). No credit was included for rubidium, cesium or any of the other elements contained for the purpose of this report.
- (3) Li<sub>2</sub>O content in the CIZ is predominantly associated with lithian micas and without metallurgical testing not deemed recoverable, therefore, not included in the Li<sub>2</sub>O contained and subsequently the Li<sub>2</sub>O equivalent calculation for the purpose of this report.
- (4) The UIZ and LIZ are technical/ceramic-grade lithium zones (high-grade lithium with low inherent iron (<0.1% Fe<sub>2</sub>O<sub>3</sub> from whole rock analysis). The iron content of spodumene contained within the LIZ increases as the contact with iron-rich metasedimentary country rocks are approached, but it has been noted that a concentration below 0.1% wt.% Fe<sub>2</sub>O<sub>3</sub> is maintained to within about 10 meters of the pegmatite-metasediment contact.
- (5) Without further metallurgical testing it is unknown if the Rb<sub>2</sub>O is recoverable from the Lithium zones (UIZ, LIZ). For the purpose of this report, Rb<sub>2</sub>O credit has not been considered in any of the zones.
- (6A) Calculation is based on 4,693m of drilling in 24 holes to an average depth of 150m vertical in the deposit, 294m of production drilling for 68 blast holes for the 300 tonne UIZ bulk sample in 2015, and 22 channels covering 191m at surface.
- (6B) Mineral Resources are not Mineral Reserves having no demonstrated economic viability. Results are presented undiluted and in situ.
- (6C) Indicated and Inferred Resources were evaluated from drill hole and channel sample results using a block model approach (inverse distance squared interpolation) with Geovia/ Surpac software.
- (6D) Calculations used metric units (meters, tonnes and ppm). Results were rounded to reflect their estimated nature. Tonnes are rounded to 100,000 except Ta<sub>2</sub>O<sub>5</sub> contained that are rounded to the nearest tonne. Grades reported in percent were rounded to two decimals while grades reported in part per million (ppm) were rounded to the closest integer.

## 7. WEST CEDARTREE GOLD PROJECT (WCGP)

### 7.1 Sale of WCGP

On January 15, 2013 Frontier announced the signing of a definitive agreement with Coventry Resources Limited (TSX.V: CYY, ASX: CYY) (“Coventry”) who owns the Cameron Gold deposit, located 12km away from the West Cedartree Gold Project, as well as their Rainy River Project located 80km away. Under terms of the agreement, Frontier received total consideration at the time which was valued at approximately \$1.22 million, allocated as follows (all currency amounts in Canadian dollars, unless otherwise indicated):

- \$100,000 in cash, on execution of the binding Heads of Agreement;
- \$400,000 in cash, on execution of a Definitive Sale and Purchase Agreement (the “Agreement”),
- 1.935 million Coventry shares, representing 2.8% of the outstanding shares of Coventry, (on execution of the Agreement) with a value of approximately \$716,000. Coventry shares closed on the TSX.V at CAD\$.37 on January 11, 2013); and,
- A 2.5% net smelter return (“NSR”) royalty on the West Cedartree Claim Block, representing 20%

of the West Cedartree Gold Project's total area, including the newly discovered Robertson Prospect. The NSR does not have a buy-back clause, however should Frontier seek to sell the royalty, Coventry will maintain the first right of refusal.

On April 28<sup>th</sup>, 2014 Coventry (TSX VENTURE:CYY)(ASX:CYY) and Chalice Gold Mines Limited (TSX: CXN)(ASX:CHN) advised on 1 November that Chalice would issue 46 million shares under a Plan of Arrangement to acquire a 100% interest in Coventry's subsidiary companies holding the Cameron Gold Project, the West Cedartree assets, the Rainy River Project and the Ardeen Gold Project. Following satisfaction of the remaining conditions precedent contained within the Arrangement Agreement, Chalice issued 46 million Shares on the record date the 4<sup>th</sup> of February, 2014. The Shares were issued via a Return of Capital to shareholders of Coventry on a pro rata basis using a ratio of 0.5054346 Chalice Shares for every single Coventry share held. As a result Frontier has 1,935,010 Coventry shares, and 978,021 Chalice shares.

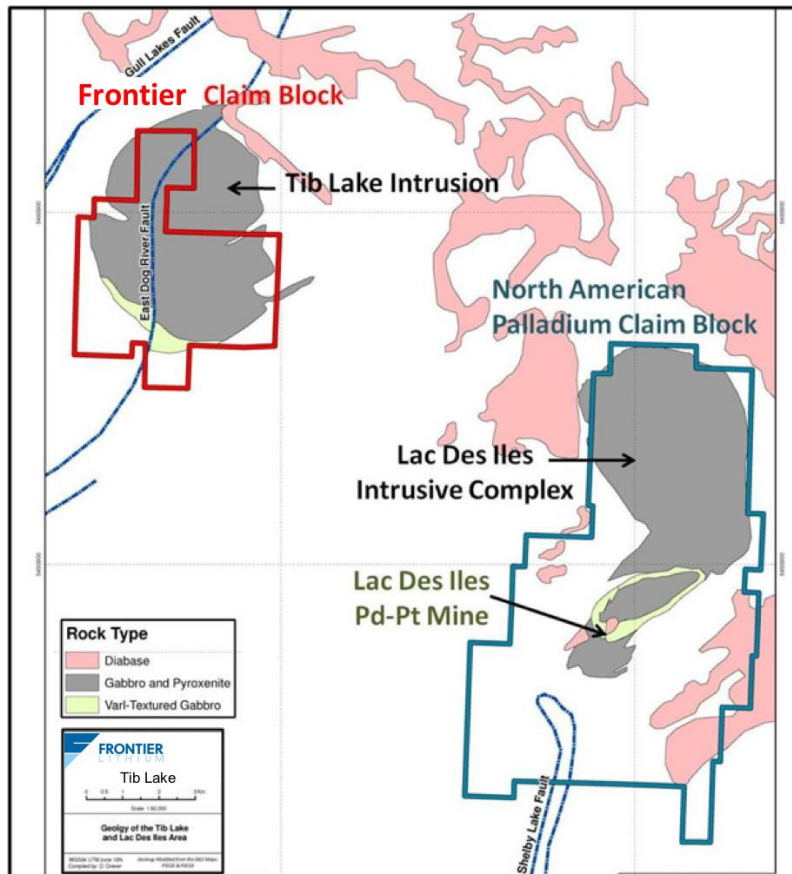
## **8. TIB LAKE PGE PROJECT**

### **8.1 Definitive agreement on option to purchase Tib Lake PGE Project with North American Palladium**

A definitive agreement was reached with North American Palladium Ltd. (TSX: PDL, NYSE Amex: PAL) for the option to purchase the Tib Lake PGE Property on May 8, 2013. The agreement provides NAP with an option to earn a 100% interest in the 2,464-hectare Tib Lake PGE property from Frontier after making staged payments totaling CAD\$450,000 to Frontier and incurring exploration expenditures of CAD\$1.6 million over five years. Upon completion of the earn-in, the property will have a residual 2.5% net smelter return royalty (NSR) in favour of a third party or Frontier (depending on the claim). Frontier will also retain the right to buy back 1% of the third party NSR for CAD\$1 million and to purchase the remaining 1.5% of the third party NSR on such terms and conditions that the two parties may agree on. On claim areas where Frontier is a royalty holder, NAP will have the right to purchase 1% of the NSR for CAD\$1 million.

### **8.2 Tib Lake PGM Property Details**

The 2,496 hectare Tib Lake PGM property (2.5% NSR) is located just 15km from North America Palladium's 15,000 tonne per day mill at Lac des Iles Mine ("LDI"). The property covers 100% of the highly prospective Lower Zone of the Tib gabbro, the largest exploration target for platinum group metals ("PGM's") in the vicinity of the LDI mine.



**Figure III: Basic Geology of the Tib Lake and Lac Des Iles Intrusions**

Four PGM occurrences have been documented in the Lower Zone: the Jewelweed, the Road, the West Shore and the Kuhner. The Kuhner Occurrence is the main site of previous exploration. Previous drilling intersected core lengths of: 18.5m grading 1.58 g/mt PGM's (Pt-Pd-Au), 22.0m of 1.46 g/mt PGM's and 14.5m grading 1.12 g/mt PGM's.

The exploration potential of the Tib Lake PGM Project evolves from a synthesis formed from the generalized PGM ore deposit model, comparative observations of the geology of the Lac Des Iles mine vicinity and the Tib Lake gabbro, and previous exploration conducted on Frontier's Tib Lake PGM project. Over the past Nine Months NAP has increased its land position in the LDI region through the acquisition and option agreements of several high-potential PGE properties, all of which are located less than 30 kilometres from the LDI mill and whereby Tib Lake sits at the top of that list through both its size and proximity. NAP believes that Tib Lake relates to the same magmatic event that produced the LDI complex and its world-class palladium resources. Frontier believes that the knowledge gained by NAP from two decades of exploration and mining at LDI will be applied to the Tib Lake intrusion, and based on their insatiable requirement of feed for their underutilized 15,000 tonne-per-day mill Frontier is poised for potential upside. NAP has recently released "An aggressive surface exploration program involving trenching, mapping, prospecting and geochemical surveys was initiated at the beginning of July. The discovery of new PGE resources stemming from a sustained investment into PGE greenfields exploration remains a strategic priority for NAP."

## 9. EXPLORATION STANDARDS

Frontier conducts exploration activities in accordance with "Exploration Best Practices Guidelines" established by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) and conforms to NI 43-101 standards. Frontier Lithium's exploration programs have been managed by Qualified Persons as defined by NI 43-101.

## 10. EXPLORATION ACTIVITIES AFFECTING THE BALANCE SHEET

### 10.1 Results of Operations for the three months ended June 30, 2016

The Company's net loss for the 3-month period (the "Current Period") was \$449,770 or \$0.004 per share as compared with a loss of \$23,967 or \$0.001 per share for the same period in fiscal 2016 (the "Comparative Period").

As a result of expenditures on the Company's rare metal properties the company has incurred exploration costs of \$266,838 which is comparable to the costs from the same period of the previous year.

## 11. FINANCING ACTIVITIES

Ongoing exploration was funded by financing in the capital markets. During the 3-month period, the following transactions took place to further exploration on the PAK Lithium Project:

Description	Dollar Value (\$)	# of Shares
Warrants exercised	2,552,431	459,591
Shares for Debt	1,916,254	536,551
Private Placements	0	0
Options exercised	1,448,000	398,731

## 12. CAPITAL STOCK

Frontier had 124,918,625 shares outstanding at June 30, 2016.

## 13. LIQUIDITY AND WORKING CAPITAL

Current assets of the Company were \$1,634,131 at June 30, 2015, and increased to \$1,924,881 at March 31, 2016. As a result, the company has a stronger liquidity position.

Total assets of the Company were \$5,605,850 at March 31, 2016 and increased to 6,116,193 at June 30, 2016. The increase is primarily attributable to an increase in the company's cash position and the company's investment in its PAK Lithium Project for the year.

Net working capital has been a major improvement for the company. It totaled 1,058,543 as at March 31, 2016 and has increased to \$1,683,651 at June 30 2016. Current liabilities decreased from \$575,588 at March 31, 2016 to \$241,230 as at June 30, 2016.

The Company's current rate of cash consumption, excluding expenditures on work programs or cost associated with financings is approximately \$50,000 per month.

All of the Company's properties are 100% owned with minimal holding costs. The final Phase VI of the option agreement for the PAK Southeast Property was completed December 8, 2015 (Q3). The company paid cash of CAD \$35,000 and issued 100,000 common shares of the company to finalize that agreement.

Future cash generation will be supplied by the raising of monies through the capital markets.

## 14. OFF-BALANCE SHEET ARRANGEMENTS

At June 30, 2016 the Company had no off-balance sheet arrangements.

## 15. ASSET-BACKED COMMERCIAL PAPER

At June 30, 2016 the Company had no exposure to asset-backed commercial paper.

## 16. RELATED PARTY TRANSACTIONS

During the three months ended June 30, 2016 and 2015 the Company incurred the following



expenditures with companies controlled by a director of the company and a company controlled by an officer of the company:

Description	June 30, 2016	June 30 2015
Office rental (paid to companies controlled by corporate director)	\$ 2,250	\$ 2,250
Investment in exploration and evaluation assets (paid to company controlled by corporate director)	-	47,562
Investment in exploration and evaluation assets (paid to company controlled by corporate director)	24,900	27,400
Consulting (paid to a corporate officer)	62,500	-

The transactions above are in the normal course of operation and are measured at the exchange amount which is the amount of consideration established and agreed to by the related parties.

During the period, the company issued 1,916,254 shares to settle \$459,901 of debt owing to two related parties.

Included in accounts payable is \$65,683 owing to one corporation controlled by a director of the company, \$10,956 owing to a company controlled by a corporate officer for fees concerning exploration and evaluation work.

## 17. OUTLOOK

Frontier will continue to focus and advance exploration and development objectives on the PAK Lithium Project.

With the TSX Venture Index experiencing negative returns year to date, the lengthy Eurozone debt crisis, Southeast Asian growth slowing, and lower commodity prices, the raising of capital is still proving extremely difficult for exploration companies. Management believes that such an environment instigates asset and/or corporate consolidation, especially for small cap companies. Frontier's past divestiture actions with the Tib Lake and West Cedartree assets have been within response of current corporate debt, capital market stresses and the above mentioned industry trend of consolidation. Streamlining the asset base through divestiture has reduced working capital requirements, and also providing a re-branding of the company in the rare-metal (industrial mineral category of lithium in particular) of exploration/mining. More specifically, Frontier remains focused on its strategy of supplying a wide range of rare metal products used in "green technology" applications. Spodumene (PAK Lithium Project's lithium mineral) helps the specialty glass and ceramics sector achieve efficiencies that reduce consumption of fossil fuels, energy costs and greenhouse gas emissions. Further "green" uses would be lithium compounds required for the electrification of transportation and other energy storage applications

Expenditures on the PAK Lithium Project have not ceased and exploration costs have increased since 2012. It has been during these difficult times that Frontier has had the opportunity to have drill availability and low pricing for diamond drill programs since 2013. In addition, the company's updated resource estimate, coupled with positive results have positioned Frontier to become one of the rare junior exploration companies able to finance.

The PAK deposit is one of the highest grade lithium mineral resources in North America which has a

current Measured and Indicated Resource of 7.89 million tonnes of 1.73% Li<sub>2</sub>O equivalent (eq.) and Inferred Resource of 295,600 tonnes of 1.35% Li<sub>2</sub>O eq. which has a technical/ceramic grade spodumene with low inherent iron (below 0.1% Fe<sub>2</sub>O<sub>3</sub>). The deposit has adjacent zones that are enriched in tantalum and rubidium. HLM is also evaluating the phased co-production of tantalum and mica-product concentrates once lithium mineral production has been commercialized.

The deposit now has a known 500m strike length with an estimated true width varying from 10m to 125m with a sub-vertical orientation. The resource remains open to depth and along strike to the northwest and southeast.

The monetary value of low-iron (Fe) spodumene is greater than the more common, higher iron spodumene as the former is desired for high quality technical grade ore or concentrates used in the manufacture of specialty glass/ceramic products such as stove tops, ceramics and heat-proof cookware. Furthermore, a low Fe spodumene is also well suited to potentially produce a high-yielding chemical-grade lithium concentrate which is used to produce lithium chemicals which form the basis for manufacture of, among other applications, lithium-ion batteries for laptop computers, mobile phones, electric bicycles and electric/hybrid vehicles.

The PAK Lithium Project's Pakeagama Lake pegmatite is an LCT (lithium-cesium-tantalum) deposit model which may have a by-product potential of tantalum, and possibly rubidium and cesium. A high grade lithium rich pegmatite with by-products can reduce risk and future operating costs as was seen with the former lithium producing Tanco LCT deposit in southeastern Manitoba.

#### INVESTMENT HIGHLIGHTS OF LITHIUM

- ▶ Base-Case demand is driven primarily by lithium-ion batteries and is forecast to grow by 7.5% per year through 2025.
- ▶ Supply from high grade hard rock pegmatites is filling the increased market supply as a means of diversification from the brines of South America as they have seen little growth since 2006.
- ▶ North American supply has been a key exploration target to reduce transportation costs of concentrates/compounds as Australia now accounts from 40% of hard rock mined lithium output (controlled by China).
- ▶ Future end-users are being educated to recognize and understand the impacts of their consumption. This fact, in conjunction with the North American desire to reduce CO<sub>2</sub> emissions and become less oil dependent create the foundation for the pursuit of the electrification of transportation. As the current electric and hybrid sales in the United States are a mere 0.5% of total vehicle sales, the future looks bright for lithium.

#### INVESTMENT HIGHLIGHTS OF TANTALUM

- ▶ Critical Metal, the European Union (EU) has recently declared tantalum a critical element.
- ▶ Average yearly growth rate has been 8% to 12% in demand since about 1995.
- ▶ Restrictions on product from conflict regions, estimated in 2009 about 50% of the tantalum supply was from the Democratic Republic of Congo (DRC) and Rwanda, two zones now classified as conflict regions.
- ▶ Conflict minerals law in the U.S. aims at restricting the trade of conflict minerals, and many technology companies, like Apple Inc. are taking initiatives to comply with the law. The restrictions regarding conflict minerals are likely to improve tantalum trading conditions and keep prices at sustainable levels for conflict-free tantalum miners.
- ▶ North America producer Tanco mine located in Central Canada shut down tantalum production in March 2013 due to a depleted ore reserve. Currently, there are no tantalum producers in North America.

### 18. RISKS AND UNCERTAINTIES

Frontier's may be exposed to risks of varying degrees of significance which could affect its ability to achieve its strategic objectives. The main objective of the Company's risk management processes is to ensure that the risks are properly identified and that the capital base is adequate in relation to those risks.

Risks include metal price fluctuations and the low success rate for the discovery of new deposits. Industry competition and lack of funding may also limit opportunities. Future political, regulatory and environmental changes could affect any aspect of the Company's business including property title, taxation, aboriginal issues and environmental protection. More detail of the principal risks to which the Company is exposed to are described below:

**i. Credit Risk**

Credit risk is the risk of loss associated with a counter party's inability to fulfil its payment obligations. The Company's credit risk is primarily attributable to cash and cash equivalents and accounts receivable. Cash and cash equivalents consists of cash on hand deposited with reputable financial institutions which is closely monitored by management. Accounts receivable includes HST receivable and is subject to CRA's assessment prior to receipt. Management believes credit risk with respect to cash and cash equivalents and accounts receivable is low.

**ii. Liquidity Risk**

The company has no history of profitable operations and its present business is at an early stage. As such, the Company is subject to many risks common to such enterprises, including under-capitalization, cash shortages and limitations with respect to personnel, financial and other resources and the lack of revenues. There is no assurance that the Company will be successful in achieving a return on shareholders' investment and the likelihood of success must be considered in light of its early stage of operations.

The Company has no source of operating cash flow and no assurance that additional funding will be available to it for further exploration and development of its projects when required. Although the Company has been successful in the past in obtaining financing through the sale of equity securities or joint ventures, there can be no assurance that the Company will be able to obtain adequate financing in the future or that the terms of such financing will be favorable. Failure to obtain such additional financing could result in the delay or indefinite postponement of further exploration and development of its properties. However, the Company ensures that there is sufficient cash and other short-term assets readily convertible into cash in order to meet its liabilities when they come due. The Company's cash is held in business accounts with a Canadian bank. Management believes that liquidity risk is low.

**iii. Asset Exploration Risk**

The Company's Property interests are located in remote, undeveloped areas and the availability of infrastructure such as surface access, skilled labour, fuel and power at an economic cost, cannot be assured. These are integral requirements for exploration, development and production facilities on mineral properties. Power may need to be generated on site.

Resource acquisition, exploration, development, and operation, is a highly speculative business that involves significant risks, which even a combination of careful evaluation, experience and knowledge may not eliminate. While the discovery of previous metals and other minerals may result in substantial rewards, few properties that are explored are ultimately developed into producing mines. Major expenses may be required to locate and establish economically viable mineral deposits, to develop metallurgical processes and to construct mining and processing facilities at a particular site. It is impossible to ensure that the acquisition, exploration or development programs planned by the Company will result in a profitable commercial mining operation. The potential for any project to eventually become an economically viable operation depends on numerous factors including: the quantity and quality of the minerals discovered if any, the proximity to infrastructure, metal and mineral prices (which vary considerably over time) and government regulations. The exact effect these factors can have on any given exploration property cannot accurately be predicted but the effect can be materially adverse.

The mineral industry is intensely competitive in all its phases. The Company competes with many other mineral exploration companies who have greater financial resources and technical capacity.

**iv. Commodity Price Risk**

The market price of previous metals and other minerals is volatile and cannot be controlled. The current

and expected future spot prices have a significant impact on the market sentiment for investment in exploration companies and may impact the Company's ability to raise equity financing for its ongoing working capital requirements.

**v. Interest Rate Risk**

The Company's cash is held in business accounts with nominal interest rates. Management considers interest rate risk to be low. The Company's loans bear interest at a variable interest rate. Interest on these loans could change due to changes in the market interest rate.

**vi. Currency Risk**

Currency risk is the risk that the value of a financial instrument will fluctuate due to changes in foreign exchange rates. The Company retains a US Bank Account with a nominal balance. Management considers currency risk to be low.

**vii. Sensitivity Analysis**

Based on management's knowledge and experience of the financial markets, the Company believes that a 10% movement in interest rates and foreign exchange rates that may reasonably be expected to occur over the next twelve month period will not have a significant impact on the Company.

**viii. Management Risk**

The Company is very dependent upon the personal efforts and commitment of its existing management. To the extent that managements' services would be unavailable for any reason, a disruption to the operations of the Company could result, and other persons would be required to manage and operate the Company.

The Company's directors and officers serve as directors or officers, or may be associated with other reporting companies or have significant shareholdings in other public companies. To the extent that such other companies may participate in business or asset acquisitions, dispositions, or ventures in which the Company may participate, the directors and officers of the Company may have a conflict of interest in negotiating and concluding terms respecting the transaction.

**19. ADDITIONAL DISCLOSURE FOR VENTURE ISSUERS WITHOUT SIGNIFICANT REVENUE**

Additional disclosure concerning Frontier's general and administrative expenses and mineral property costs is provided in the Company's audited statement of loss contained in its audited financial statements for the nine months ended December 31, 2014.

**20. EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES**

Management is responsible for establishing and maintaining a system of controls and procedures over the public disclosure of financial and non-financial information regarding the Company. Such controls and procedures are designed to provide reasonable assurance that all relevant information is gathered and reported on a timely basis to senior management, including the President, Chief Executive Officer (CEO) and acting Chief Financial Officer (CFO) so that appropriate decisions can be made regarding public disclosure.

The system of disclosure controls and procedures includes, but is not limited to, the Company's Disclosure Policy and Code of Business Ethics, the effective functioning of Disclosure and Audit Committees, procedures in place to systematically identify matters warranting consideration of disclosure by the Disclosure Committee and verification processes for individual financial and non-financial metrics and information contained in annual and interim filings, including financial statements, MD&A filings and other documents and external communications.

As required by CSA Multilateral Instrument 52-109, Certification of Disclosure in Issuer's Annual and Interim Filings, an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures was conducted, under supervision of Management, including the President, CEO and acting CFO. The evaluation included documentation review, enquiries and other procedures considered

by management to be appropriate in the circumstances.

Based on that evaluation, the President, CEO and acting CFO have concluded that the design and operation of the system of disclosure controls and procedures was effective for the First Quarter ended June 30, 2016. The President, CEO and acting CFO are also required, under Multilateral Instrument 52-109, to file certifications of the interim filings. Copies of these certifications may be found on SEDAR at [www.sedar.com](http://www.sedar.com).

**Frontier LITHIUM INC.**

Henry J. Kloepper  
CEO

August 30, 2016