



## **ANNUAL INFORMATION FORM**

**FOR THE FISCAL YEAR ENDED  
DECEMBER 31, 2018**

**DATED AS OF MARCH 28, 2019**

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## GENERAL MATTERS

The information contained in this Annual Information Form, unless otherwise indicated, is given as of December 31, 2018. More current information may be available on our public website at [www.osiskogr.com](http://www.osiskogr.com), on SEDAR at [www.sedar.com](http://www.sedar.com) and on EDGAR at [www.sec.gov](http://www.sec.gov). In addition, we generally maintain supporting materials on our website which may assist in reviewing (but are not to be considered part of) this Annual Information Form.

All capitalized terms used in this Annual Information Form and not defined herein have the meaning ascribed in the “Glossary of Terms” or elsewhere in this Annual Information Form.

Unless otherwise noted or the context otherwise indicates, the term “Osisko” refers to Osisko Gold Royalties Ltd and its subsidiaries.

For reporting purposes, Osisko presents its financial statements in Canadian dollars and in conformity with IFRS.

Unless otherwise indicated herein, references to “\$”, “C\$” or “Canadian dollars” are to Canadian dollars, and references to “US\$” or “U.S. dollars” are to United States dollars. See “Exchange Rate Data”. See also “Cautionary Statement Regarding Forward-Looking Statements”.

## CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained in this Annual Information Form may be deemed “forward looking information” and “forward-looking statements” within the meaning of applicable Canadian Securities Laws and the *United States Private Securities Litigation Reform Act of 1995* (collectively, the “**forward-looking statements**”). All statements in this Annual Information Form, other than statements of historical fact, that address future events, developments or performance that Osisko expects to occur including management’s expectations regarding Osisko’s growth, results of operations, estimated future revenues, requirements for additional capital, mineral reserve and mineral resource estimates, production estimates, production costs and revenue, future demand for and prices of commodities, business prospects and opportunities are forward-looking statements. In addition, statements (including data in tables) relating to mineral reserves and mineral resources and gold equivalent ounces are forward-looking statements, as they involve implied assessment, based on certain estimates and assumptions, and no assurance can be given that the estimates will be realized. Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by the words “expects”, “plans”, “anticipates”, “believes”, “intends”, “estimates”, “projects”, “potential”, “scheduled” and similar expressions or variations (including negative variations), or that events or conditions “will”, “would”, “may”, “could” or “should” occur including, without limitation, the performance of the assets of Osisko, and the growth of and the benefits deriving from its portfolio of investments. Although Osisko believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements involve known and unknown risks, uncertainties and other factors and are not guarantees of future performance and actual results may accordingly differ materially from those in forward-looking statements. Factors that could cause the actual results to differ materially from those in forward-looking statements include, without limitation: fluctuations in the prices of the commodities that drive royalties, streams or other interests held by Osisko; fluctuations in the value of the Canadian dollar relative to the U.S. dollar; regulatory changes in national and local government, including permitting and licensing regimes and taxation policies; whether or not Osisko is determined to have “passive foreign investment company” status (“**PFIC**”) as defined in Section 1297 of the *United States Internal Revenue Code of 1986*, as amended; potential changes in Canadian tax treatment of offshore streams; regulations and political or economic developments in any of the countries where properties in which Osisko holds royalties, streams or other interests are located or through which they are held; risks related to the operators of the properties in which Osisko holds royalties, streams or other interests; influence of macroeconomic developments; business opportunities that become available to, or are pursued by Osisko; continued availability of capital and financing and general economic, market or business conditions; litigation; title, permit or license disputes related to interests on any of the properties

in which Osisko holds royalties, streams or other interests; development, permitting, infrastructure, operating or technical difficulties on any of the properties in which Osisko holds royalties, stream or other interests; rate and timing of production differences from resource estimates or production forecasts by operators of properties in which Osisko holds royalties, streams or other interests; risks and hazards associated with the business of exploring, development and mining on any of the properties in which Osisko holds royalties, streams or other interests, including, but not limited to unusual or unexpected geological and metallurgical conditions, slope failures or cave-ins, flooding and other natural disasters or civil unrest or other uninsured risks. The forward-looking statements contained in this Annual Information Form are based upon assumptions management believes to be reasonable, including, without limitation: the ongoing operation by the operators of the properties in which Osisko holds royalties, streams or other interests by the operators of such properties in a manner consistent with past practice; the accuracy of public statements and disclosures made by the operators of such underlying properties; the absence of material adverse change in the market price of the commodities that underlie the asset portfolio; Osisko's ongoing income and assets relating to determination of its PFIC status; no material changes to existing tax treatment; no adverse development in respect of any significant property in which Osisko holds royalties, streams or other interests; the accuracy of publicly disclosed expectations for the development of underlying properties that are not yet in production; and the absence of any other factors that could cause actions, events or results to differ from those anticipated, estimated or intended.

Although Osisko has attempted to identify important factors that could cause actual plans, actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause plans, actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual plans, results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

Certain of the forward-looking statements and other information contained herein concerning the mining industry and Osisko's general expectations concerning the mining industry are based on estimates prepared by Osisko using data from publicly available industry sources as well as from market research and industry analysis and on assumptions based on data and knowledge of this industry which Osisko believes to be reasonable. However, although generally indicative of relative market positions, market shares and performance characteristics, this data is inherently imprecise. While Osisko is not aware of any misstatement regarding any industry data presented herein, the mining industry involves risks and uncertainties that are subject to change based on various factors.

The readers are cautioned not to place undue reliance on forward-looking statements. Osisko undertakes no obligation to update any of the forward-looking statements in this Annual Information Form, except as required by law. Unless otherwise indicated, these statements are made as of the date of this Annual Information Form.

#### **CAUTIONARY NOTE TO U.S. INVESTORS REGARDING PREPARATION OF FINANCIAL INFORMATION**

As a Canadian company, Osisko prepares its financial statements in accordance with IFRS. Consequently, all of the financial statements and financial information of Osisko is prepared in accordance with IFRS, which are materially different than financial statements and financial information prepared in accordance with U.S. generally accepted accounting principles.

## **CAUTIONARY NOTE TO U.S. INVESTORS REGARDING THE USE OF MINERAL RESERVE AND MINERAL RESOURCE ESTIMATES**

Osisko is subject to the reporting requirements of the applicable Canadian securities laws, and as a result reports its mineral resources and the mineral reserves and mineral resources of the projects it has an interest in according to Canadian standards. Canadian reporting requirements for disclosure of mineral properties are governed by NI 43-101. The definitions of NI 43-101 are adopted from those given by the CIM. U.S. reporting requirements are currently governed by Guide 7. This Annual Information Form includes estimates of mineral reserves and mineral resources reported in accordance with NI 43-101. These reporting standards have similar goals in terms of conveying an appropriate level of confidence in the disclosures being reported, but embody different approaches and definitions. For example, under Guide 7, mineralization may not be classified as a “reserve” unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. Consequently, the definitions of “Proven Mineral Reserves” and “Probable Mineral Reserves” under CIM standards differ in certain respects from the standards of Guide 7. Osisko also reports estimates of “mineral resources” in accordance with NI 43-101. While the terms “Mineral Resource,” “Measured Mineral Resource,” “Indicated Mineral Resource” and “Inferred Mineral Resource” are recognized by NI 43-101, they are not defined terms under Guide 7 and, generally, U.S. companies reporting pursuant to Guide 7 are not permitted to report estimates of mineral resources of any category in documents filed with the SEC. As such, certain information contained in this Annual Information Form concerning descriptions of mineralization and estimates of mineral reserves and mineral resources under Canadian standards is not comparable to similar information made public by United States companies subject to the reporting and disclosure requirements of the SEC pursuant to Guide 7. Readers are cautioned not to assume that all or any part of Measured Mineral Resources or Indicated Mineral Resources will ever be converted into Mineral Reserves. Readers are also cautioned not to assume that all or any part of an Inferred Mineral Resource exists, or is economically or legally mineable. Further, an “Inferred Mineral Resource” has a great amount of uncertainty as to its existence and as to its economic and legal feasibility, and a reader cannot assume that all or any part of an Inferred Mineral Resource will ever be upgraded to a higher category. Under Canadian rules, estimates of Inferred Mineral Resources may not form the basis of feasibility or other economic studies.

## **CAUTIONARY STATEMENT REGARDING THIRD PARTY INFORMATION**

The disclosure in this Annual Information Form relating to the properties in which Osisko holds royalties, streams or other interests and the operations on such properties is based on information publicly disclosed by the owners or operators of these properties and information or data available in the public domain as at March 28, 2019 (except where stated otherwise), and none of this information or data has been independently verified by Osisko. As a holder of royalties, streams and other interests, Osisko generally has limited, if any, access to the properties included in or relating to its asset portfolio. Therefore, in preparing disclosure pertaining to the properties in which Osisko holds royalties, streams or other interests and the operations on such properties, Osisko is dependent on information publicly disclosed by the owners or operators of these properties and information or data available in the public domain and generally has limited or no ability to independently verify such information or data. Although Osisko has no knowledge that such information or data is incomplete or inaccurate, there can be no assurance that such third party information or data is complete or accurate. Additionally, some information or data publicly reported by the owners or operators may relate to a larger property than the area covered by the royalties, streams or other interests of Osisko. Sometimes, the royalties, streams or other interests of Osisko cover less than 100% and sometimes only a portion of the publicly reported mineral reserves, mineral resources or production of a property.

## **NON-IFRS FINANCIAL PERFORMANCE MEASURES**

Osisko has included certain non-IFRS measures including “Adjusted Earnings” and “Adjusted Earnings per basic share” (which have no standard definition under IFRS) to supplement its consolidated financial statements, which are presented in accordance with IFRS.

Osisko believes that these measures, together with measures determined in accordance with IFRS, provide investors with an improved ability to evaluate the underlying performance of Osisko. Non-IFRS measures do not have any standardized meaning prescribed under IFRS, and, therefore, they may not be comparable to similar measures employed by other companies. The data is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS.

For information regarding the non-IFRS financial measures used by Osisko, see “Non-IFRS Financial Performance Measures” in Osisko’s MD&A for the year ended December 31, 2018, which section is incorporated by reference herein. The financial statements and MD&As of Osisko are available on SEDAR at [www.sedar.com](http://www.sedar.com).

### EXCHANGE RATE DATA

The following table sets forth the high and low exchange rates for one U.S. dollar expressed in Canadian dollars for each period indicated, the average of the exchange rates for each period indicated and the exchange rate at the end of each such period, based upon the exchange rates provided by the Bank of Canada:

	Year Ended December 31		
	2018	2017	2016
	(\$C)	(\$C)	(C\$)
High	1.3642	1.3743	1.4589
Low	1.2288	1.2128	1.2544
Average rate for period	1.2957	1.2986	1.3248
Rate at end of period	1.3642	1.2545	1.3427

On March 27, 2019, the exchange rate for one U.S. dollar expressed in Canadian dollars as reported by the Bank of Canada, was 1.3414.

## GLOSSARY OF TERMS

In this Annual Information Form, the following capitalized words and terms shall have the following meanings:

**“2016 Underwriters”** means BMO Nesbitt Burns Inc., RBC Dominion Securities Inc., National Bank Financial Inc., Macquarie Capital Markets Canada Ltd., CIBC World Markets Inc., Haywood Securities Inc., Scotia Capital Inc., TD Securities Inc., Cormark Securities Inc., Dundee Securities Ltd. and Paradigm Capital Inc.

**“2016 Underwriting Agreement”** means the underwriting agreement dated February 11, 2016 between the 2016 Underwriters and Osisko.

**“2016 Units”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2016 - \$173 Million Bought Deal Public Offering”.

**“2016 Warrant Indenture”** means the warrant indenture dated February 26, 2016 between Osisko and CST Trust Company as warrant agent pursuant to which the common share purchase warrants underlying the 2016 Units were created and issued and by which they are governed.

**“2017 Credit Agreement”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2017 - Increase of Credit Facility to \$350 Million”.

**“2017 Underwriters”** means National Bank Financial Inc., BMO Nesbitt Burns Inc. and Desjardins Securities Inc., Macquarie Capital Markets Canada Ltd., RBC Dominion Securities Inc., CIBC World Markets Inc., Scotia Capital Inc., TD Securities Inc., Canaccord Genuity Corp., Cormark Securities Inc., Haywood Securities Inc., Paradigm Capital Inc. and Raymond James Ltd.

**“2017 Underwriting Agreement”** means the underwriting agreement dated October 20, 2017 between the 2017 Underwriters and Osisko.

**“affiliate”** has the meaning ascribed in the *Securities Act* (Québec), unless stated otherwise.

**“Ag”** is the chemical symbol for silver.

**“Agnico”** means Agnico Eagle Mines Limited.

**“Agnico-Yamana Arrangement”** means the arrangement transaction that closed on June 16, 2014 pursuant to which (a) Agnico and Yamana jointly acquired all of the common shares of Osisko Mining Corporation (now Canadian Malartic Corporation), (b) Osisko acquired the OMC Assets and (c) each of the former holders of Osisko Mining Corporation received in exchange for each OMC Share so held (i) \$2.09 in cash; (ii) 0.07264 of an Agnico common share; (iii) 0.26471 of a Yamana common share; and (iv) 0.1 of an Osisko Share on a post-consolidation basis.

**“Amended Renard Streaming Agreement”** has the meaning ascribed under the heading “Description of Business - Cornerstone Assets - Renard Stream (Stornoway Diamond Corporation)”.

**“Aquila”** means Aquila Resources Inc.

**“Aquila Private Placement”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2017 - Acquisition of a Gold Stream on Aquila Resources Inc.’s Back Forty Project in Michigan, USA”.

**“Arizona Mining”** means Arizona Mining Inc.

**“associate”** has the meaning ascribed in the *Securities Act* (Québec), unless stated otherwise.

**“Au”** is the chemical symbol for gold.

**“Back Forty CoC Provision”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2017 - Acquisition of a Gold Stream on Aquila Resources Inc.’s Back Forty Project in Michigan, USA”.

**“Back Forty Deposit”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2017 - Acquisition of a Gold Stream on Aquila Resources Inc.’s Back Forty Project in Michigan, USA”.

**“Back Forty Fourth Deposit”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2017 - Acquisition of a Gold Stream on Aquila Resources Inc.’s Back Forty Project in Michigan, USA”.

**“Back Forty Project”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2017 - Acquisition of a Gold Stream on Aquila Resources Inc.’s Back Forty Project in Michigan, USA”.

**“Back Forty Tail Stream”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2017 - Acquisition of a Gold Stream on Aquila Resources Inc.’s Back Forty Project in Michigan, USA”.

**“Back Forty Threshold Stream”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2017 - Acquisition of a Gold Stream on Aquila Resources Inc.’s Back Forty Project in Michigan, USA”.

**“BAPE”** means the *Bureau des Audiences Publiques sur l’Environnement*.

**“Barkerville”** means Barkerville Gold Mines Ltd.

**“Barkerville Amended Agreement”** has the meaning ascribed under the heading “Description of Business - Main Strategic Investments - Barkerville Gold Mines Ltd.”.

**“Barkerville Royalty Option”** has the meaning ascribed under the heading “Description of Business - Main Strategic Investments - Barkerville Gold Mines Ltd.”.

**“Barkerville Royalty Transaction”** has the meaning ascribed under the heading “Description of Business - Main Strategic Investments - Barkerville Gold Mines Ltd.”.

**“Barrick”** means Barrick Gold Corporation.

**“BHS”** means blasthole shrinkage.

**“breccia”** means a coarse-grained rock in which angular fragments of one mineral (or composite of minerals or rock) are surrounded and held together by a mass of fine-grained minerals and in this case originating from explosive igneous processes.

**“Brucejack Stream”** means OBL’s interest in the 4.0% gold and silver stream on the Brucejack gold mine located in British Columbia, Canada, which was fully repurchased by Pretium Exploration on December 19, 2018 for proceeds of US\$118.5 million (\$159.4 million).

**“Brucejack Stream Agreement”** means the gold and silver purchase and sale agreement dated September 15, 2015 among Orion Stream II and BTO, as purchasers, Pretium Resources and Pretium Exploration, as sellers, Orion Stream II, as purchaser’s agent and Orion Co-Investments II (ED) Limited, as collateral agent.

**“Canadian Malartic Corporation”** means Canadian Malartic Corporation (formerly Osisko Mining Corporation).

**“Canadian Malartic Properties”** means the properties that are subject to the Canadian Malartic Royalty.



**“Canadian Malartic Report”** has the meaning ascribed under “Schedule B - Technical Information Underlying the Canadian Malartic Properties”.

**“Canadian Malartic Royalty”** has the meaning ascribed under the heading “Material Mineral Projects - The Canadian Malartic Royalty”.

**“Canadian Malartic Royalty Agreement”** means the amended and restated net smelter return royalty agreement dated June 16, 2014 between Osisko and Canadian Malartic GP.

**“carats”** means a unit of weight in the gemstone trade where 1 carat = 0.2 grams.

**“Cariboo Property”** means the Cariboo gold project held by Barkerville and located in British Columbia, Canada.

**“Caterpillar”** means Caterpillar Financial Services Limited.

**“CBCA”** means the *Canada Business Corporations Act* and the regulations made thereunder.

**“CDPQ”** means Caisse de dépôt et placement du Québec.

**“CEAA”** means the Canadian Environmental Assessment Agency.

**“Chantrell”** means Chantrell Ventures Corp.

**“CIM”** means the Canadian Institute of Mining, Metallurgy and Petroleum.

**“CNM”** means the Cree Nation of Mistissini.

**“country rock”** means the rock that surrounds or is entrained within an ore deposit but which generally has no commercial value, also referred to as wall rock.

**“core”** means a long cylindrical piece of rock, commonly between 25 and 100 mm (1 to 4 inches) in diameter, brought to surface by diamond drilling.

**“cpht”** means carats per hundred tonnes. Weight of diamonds in 100 tonnes of rock.

**“CRA”** means the Canada Revenue Agency.

**“CRB”** means country rock breccia.

**“Cree Parties”** means the CNM, the Grand Council of the Crees (Eeyou Istchee) and the Cree Regional Authority.

**“cts”** means carats.

**“Cu”** is the chemical symbol for copper.

**“Dalradian”** means Dalradian Resources Inc.

**“Debentures”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2017 - Closing of a \$300 million financing of Debentures”.

**“Declaration of Partnership”** means the Declaration of Partnership executed by Stornoway in July 2012, with the communities of Chibougamau and Chapais in the James Bay Region of Québec.

**“development”** means the preparation of a mineral deposit for commercial production including installations of plant and machinery and the construction of all related facilities.

**“diamond”** means the hardest known mineral and composed of pure carbon. Low quality diamonds are used to make bits for diamond drilling in rock or other industrial applications. Higher quality diamonds are used in the manufacture of jewellery and in scientific applications.

**“diamond drilling” (core drilling)** means a hollow drill bit impregnated with synthetic diamonds attached to the end of a series of drill rods. The rods and bits are rotated rapidly and forced downward into the rock. The result is a cylinder of rock (called core) that is recovered from inside the drill rods. Diamond drills are the most common type of exploration drill used in Canada.

**“Diaquem”** means Diaquem Inc.

**“diatrema”** means breccia-filled volcanic pipe formed by a gaseous explosion.

**“Dividend Reinvestment Plan”** means Osisko’s dividend reinvestment plan.

**“DMS”** means dense medium separation. DMS is used to establish whether kimberlitic rock samples contain a population of commercial size diamonds. It is a process whereby a fluid media is used to ‘float’ off undesirable minerals with a low specific gravity (density) and to ‘sink’ or concentrate minerals with a higher specific gravity. The density of the fluid media can be varied to change the density of the minerals that are retained/discarded.

**“DTC”** means Diamond Trading Company.

**“Earn-In Agreement”** has the meaning ascribed under the heading “Description of Business – Exploration and Evaluation Activities”.

**“Earn-In Properties”** has the meaning ascribed under the heading “Description of Business – Exploration and Evaluation Activities”.

**“Eagle Project”** has the meaning ascribed under the heading “Description of Business - Main Strategic Investments - Victoria Gold Corp”.

**“Eagle Royalty Purchase”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2018 - Acquisition of a gold royalty on Victoria Gold Corp.’s Eagle Gold Project in Canada”.

**“EDGAR”** means the Electronic Data Gathering, Analysis and Retrieval system.

**“Éléonore Mine”** means Goldcorp’s gold mine located in Eeyou Istchee/James Bay, in Northern Québec.

**“Éléonore Property”** means the properties that are subject to the Éléonore Royalty.

**“Éléonore Report”** has the meaning ascribed under “Schedule C - Technical Information Underlying the Éléonore Mine”.

**“Éléonore Royalty”** has the meaning ascribed under the heading “Material Mineral Projects - The Éléonore Royalty”.

**“Éléonore Royalty Agreement”** means the royalty agreement dated March 31, 2006 and amended on May 12, 2014, between Goldcorp, VGM (now Les Mines Opinaca Ltée, a wholly-owned subsidiary of Goldcorp) and Virginia.

**“ESIA”** means the environmental and social Impact assessment filed by the Stornoway on December 28, 2011 for the Renard Diamond Mine.

**“exploration”** means the prospecting, mapping, sampling, remote sensing, geophysical surveying, diamond drilling and other work involved in the searching for ore bodies.

**“Falco”** means Falco Resources Ltd.

**“Falco Debenture”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2018 - Silver Stream with Falco Resources Ltd. in respect of the Horne 5 Project in Rouyn-Noranda, Québec”.

**“Falco Loans”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2018 - Extension of Maturity Date of Senior Note and Senior Loan with Falco Resources Ltd.”.

**“Falco Shares”** means the common shares in the capital of Falco.

**“Falco Senior Loan”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2018 - Extension of Maturity Date of Senior Note and Senior Loan with Falco Resources Ltd.”.

**“Falco Silver Stream”** has the meaning ascribed under the heading “Description of Business - Main Strategic Investments - Falco Resources Ltd.”.

**“Falco Senior Note”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2018 - Extension of Maturity Date of Senior Note and Senior Loan with Falco Resources Ltd.”.

**“FCDC”** means FCDC Sales and Marketing Inc., a wholly-owned subsidiary of SDCI.

**“Fonds FTQ”** means Fonds de solidarité des travailleurs du Québec (F.T.Q.).

**“forward-looking statements”** has the meaning ascribed under the heading “Cautionary Statement Regarding Forward-Looking Statements”.

**“Foxtrot Property”** means, collectively, the property comprised of 650 claims (33,629.95 ha) in four blocks (one large contiguous landholding of 630 claims plus three smaller blocks), mining lease BM 1021 and a surface lease number 1303 10 000 (199.85 ha).

**“GCC”** means the Grand Council of the Cree of Québec.

**“GDP”** means gross domestic product.

**“geological model”** means drill hole data combined with surface and subsurface geological information to develop an accurate 3-D model describing the shape, size and orientation of the mineralization or mineralized body.

**“geophysical survey”** means a scientific method that measures the physical properties of rock formations. Common properties investigated include magnetism, density and electrical conductivity.

**“GEOs”** means gold equivalent ounces.

**“Goldcorp”** means Goldcorp Inc.

**“grease table”** means a method of diamond extraction whereby a disaggregated rock sample is run down a gently sloping table covered in a specialized grease. Because diamonds are hydrophobic (water repellent), any diamonds present in the sample will adhere to the grease.

**“GRR”** means gross revenue royalty.

**“Guide 7”** means the SEC’s Industry Guide 7.

**“g/t”** means gram per tonne.

**“ha”** means hectare.

**“Highland”** means Highland Copper Company Inc.

**“Horne 5 Project”** means Falco’s development-stage project located in Rouyn-Noranda, Québec.

“**HPGR**” means high-pressure grinding roll.

“**HK**” means hypabyssal kimberlite.

“**hypabyssal**” refers to an igneous intrusion, or the rock of that intrusion, whose depth of emplacement is intermediate. When applied to kimberlite, generally refers to dykes in the root zones of diatremes or to sills, which were not exposed at surface during emplacement.

“**IFRS**” means International Financial Reporting Standards adopted by the International Accounting Standards Board, as updated and amended from time to time.

“**indicator minerals**” means a suite of distinctive minerals, some of whom crystallised directly from a kimberlitic magma (phenocrysts) and others that are mantle derived (xenocrysts), and which are common constituents of kimberlites, lamproites and orangeites -the three primary host rocks for diamonds. Examples of indicator minerals include picroilmenite, titanium and magnesium rich chromite, chrome diopside, magnesium rich olivine, pyrope garnet and eclogite garnet, also known as kimberlite indicator minerals (KIMs) and diamond indicator minerals (DIMs).

“**IRR**” means internal rate of return.

“**IT**” means information technology.

“**James Bay Regional Government**” means a joint Regional Government composed of Crees and Jamésians.

“**JBNQA**” means the James Bay and Northern Québec Agreement 1975.

“**k**” means thousand.

“**Kan Earn-In Agreement**” has the meaning ascribed under the heading “Description of Business – Exploration and Evaluation Activities”.

“**kimberlite**” means a volatile-rich, potassic ultrabasic rocks with highly variable textures and mineralogic compositions that are one of the primary hosts for diamond deposits. Kimberlite is a hybrid igneous rock crystallised from a molten liquid (kimberlitic magma) originating from the Earth’s upper mantle.

“**kg**” means kilogram.

“**km**” means kilometre.

“**km<sup>2</sup>**” means square kilometre.

“**kV**” means kilovolt.

“**l**” means litre.

“**L**” means Mine level (depth below surface in metres).

“**LDR**” means large diamond recovery.

“**LNG**” means liquefied natural gas.

“**LOM**” means life-of-mine.

“**m**” means metre.

“**m<sup>2</sup>**” means square metre.

“**m<sup>3</sup>**” means cubic metre.

**“Ma”** means mega annum (million years).

**“Mantos”** means Mantos Copper S.A.

**“Mantos Blancos Mine”** means the Mantos Blancos copper mine located in northern Chile operated by Mantos.

**“Mantos Blancos Report”** has the meaning ascribed under “Schedule E - Technical Information Underlying the Mantos Blancos Mine”.

**“Mantos Blancos Stream”** means the 100% silver stream on the Mantos Blancos Mine.

**“Mantos Silver Purchase Price”** means the purchase price for silver under the Mantos Stream Agreement.

**“Mantos Stream Agreement”** means the silver purchase agreement dated September 11, 2015, as amended on March 9, 2016 and July 31, 2017, between Mantos, as seller and TitheCo, as purchaser, governing the purchase of silver produced at the Mantos Blancos Mine.

**“masl”** means meters above sea level.

**“mCarats”** means million carats.

**“Mecheshoo Agreement”** means the impact and benefits agreement dated March 27, 2012 between SDCI, the Cree Nation of Mistissini, The Grand Council of the Crees (Eeyou Istchee) and the Cree Regional Authority.

**“MELCC”** means the *Ministère de l'Environnement et de la Lutte contre les changements climatiques*.

**“MERN”** means the *Ministère de l'Énergie et des Ressources naturelles* (Ministry of Energy and Natural Resources) (formerly the MRNF).

**“mineralization”** means rock containing an undetermined amount of minerals or metals.

**“mm”** means millimetre.

**“Mt”** means million tonnes (metric tons).

**“MTQ”** means the *Ministère des Transports*.

**“MW”** means megawatts.

**“NCIB Program”** has the meaning ascribed under the heading “General Development of Osisko's Business - 2018 - Normal Course Issuer Bid Program”.

**“NG”** means natural gas.

**“NI 43-101”** means National Instrument 43-101 - *Standards of Disclosure for Mineral Projects* (or Regulation 43-101 *respecting Standards of Disclosure for Mineral Projects* in the Province of Québec).

**“NI 51-102”** means National Instrument 51-102 - *Continuous Disclosure Obligations* (or Regulation 51-102 *respecting Continuous Disclosure Obligations* in the Province of Québec).

**“NI 52-110”** means National Instrument 52-110 - *Audit Committees* (or Regulation 52-110 *respecting Audit Committees* in the Province of Québec).

**“NioGold”** means NioGold Mining Corporation.

**“NioGold Arrangement”** has the meaning ascribed under the heading “General Development of Osisko's Business - 2016 - Osisko Mining Inc. and NioGold Mining Corporation”.

**“Noranda”** means Noranda Inc.

**“North Arrow”** means North Arrow Minerals Inc.

**“NPI”** means net profit interest royalty.

**“NPV”** means net present value.

**“NSR”** means net smelter return.

**“NYSE”** means the New York Stock Exchange.

**“OBL”** means Osisko Bermuda Limited, a wholly-owned subsidiary of Osisko.

**“OMC Assets”** means the assets contributed pursuant to the OMC Contribution Agreement including the following: (a) \$157,000,000 in cash; (b) the Canadian Malartic Royalty; (c) the publicly traded equity investments of OMC held at the effective time of the Agnico-Yamana Arrangement; and (d) all right, title and interest to the name “Osisko Mining Corporation”.

**“OMC Contribution Agreement”** means the contribution agreement dated June 16, 2014 between Osisko Mining Corporation (now Canadian Malartic Corporation) and Osisko, pursuant to which Osisko Mining Corporation transferred to Osisko all of its entire legal and beneficial right, title and interest in and to the OMC Assets.

**“OMC Share”** means the common shares in the capital of Osisko Mining Corporation (now Canadian Malartic Corporation).

**“OP”** means open pit.

**“Opinaca”** means Les Mines Opinaca Ltée.

**“ore”** means a natural aggregate of one or more minerals which, at a specified time and place may be mined, processed and sold at a profit, or from which some part may profitably be separated.

**“Orion Acquisition Agreement”** means the acquisition agreement dated June 4, 2017 among Osisko and the Orion Parties, including all schedules attached thereto.

**“Orion Parties”** means, collectively, Orion Mine Finance (Master) Fund I LP, Orion Mine Finance (Master) Fund I-A LP, Orion Stream I, Orion Stream II, Orion Co-Investments IV LP, 8248567 Canada Limited and Lynx Metals Limited.

**“Orion Private Placement”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2017 - Orion Transaction”.

**“Orion Purchase Price”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2017 - Orion Transaction”.

**“Orion Stream I”** means Orion Co-Investments I (Stream) LLC (now OBL).

**“Orion Stream II”** means Orion Co-Investments II (Stream) Limited (now OBL).

**“Orion Transaction”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2017 - Orion Transaction”.

**“Osisko”** or **“Corporation”** means Osisko Gold Royalties Ltd, a corporation existing under the QBCA, and all successors thereto.

**“Osisko Board”** means the board of directors of Osisko, as the same is constituted from time to time.

**“Osisko DSUs”** means Osisko’s Deferred Share Units.

**“Osisko Exploration James Bay”** means Osisko Exploration James Bay Inc.

**“Osisko Mining”** means Osisko Mining Inc.

**“Osisko Mining Offering”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2016 - Osisko Mining Inc. and NioGold Mining Corporation”.

**“Osisko Mining Shares”** means the common shares in the capital of Osisko Mining.

**“Osisko Mining SRs”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2016 - Osisko Mining Inc. and NioGold Mining Corporation”.

**“Osisko Mining Warrants”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2016 - Osisko Mining Inc. and NioGold Mining Corporation”.

**“Osisko Options”** means the outstanding options to purchase Osisko Shares granted under Osisko Stock Option Plan or otherwise granted by Osisko.

**“Osisko Preferred Shares”** has the meaning ascribed under the heading “Description of Capital Structure - Osisko Preferred Shares”.

**“Osisko RSUs”** means Osisko’s Restricted Share Units granted under the Osisko RSU Plan.

**“Osisko RSU Plan”** means Osisko’s Restricted Share Unit Plan originally adopted by the Osisko Board on April 30, 2014, further ratified by the Osisko Board on June 30, 2014, amended on February 18, 2015 and further amended by the Osisko Board on February 16, 2018 and ratified by the Osisko Shareholders on May 3, 2018.

**“Osisko Shareholders”** means the holders of Osisko Shares.

**“Osisko Shares”** means common shares in the capital of Osisko.

**“Osisko Stock Option Plan”** means the stock option plan of Osisko adopted by the Osisko Board on April 30, 2014, approved on May 30, 2014 by the former OMC Shareholders, further ratified by the Osisko Board on June 30, 2014 and amended by the Osisko Board on May 22, 2015, and amended on March 21, 2018 and ratified by the Osisko Shareholders on May 3, 2018.

**“OSP”** means ore-waste sorting.

**“outcrop”** means an exposure of rock or mineral deposit that can be seen on surface, not covered by soil or water.

**“oz”** means ounce.

**“Pb”** is the chemical symbol for lead.

**“PEA”** means preliminary economic assessment.

**“Per Carat Cash Price”** means the amount obtained by multiplying (a) US\$50 (subject to an increase of 1% annually after three years of the Renard Streaming Agreement for the Forward Sale of Diamonds) by (b) an amount equal to 20% of the weight in carats in the Subject Diamond.

**“PFIC”** has the meaning ascribed under the heading “Cautionary Statement Regarding Forward-Looking Statements”.

**“PK”** means processed kimberlite.

**“PKC”** means processed kimberlite containment.

**“PMD”** means potential mineral deposit.

**“Pretium”** means, collectively, Pretium Exploration and Pretium Resources.

**“Pretium Exploration”** means Pretium Exploration Inc.

**“Pretium Resources”** means Pretium Resources Inc.

**“QA/QC”** means quality assurance and quality control.

**“QBCA”** means the *Business Corporations Act* (Québec) and the regulations made thereunder.

**“qualified person”** has the meaning ascribed in NI 43-101.

**“RACS”** means remote avalanche control system.

**“RC”** means reverse circulation.

**“Renard 2015 Mineral Resource Update”** means the report titled “2015 Mineral Resource Update for the Renard Diamond Project, Québec, Canada, National Instrument 43-101 Technical Report” dated January 11, 2016.

**“Renard 2016 Technical Report”** has the meaning ascribed under “Schedule D - Technical Information Underlying the Renard Diamond Mine”.

**“Renard Buyers”** means one or more of Orion Steam I’s designated affiliates and/or respective limited partners or investors.

**“Renard Closure Plan”** means the rehabilitation plan for the Renard Diamond Mine.

**“Renard Commencement of Commercial Production”** means the first day of the month immediately following the month in which the Renard project’s processing plant first processes ore at an average rate of 3,550.7 tons per day.

**“Renard Commencement of Commercial Production Date”** means October 1, 2017, extendible day for day for *force majeure* events up to a maximum of 180 days.

**“Renard Diamond Mine”** means Stornoway’s 100% owned Renard diamond mine located in north-central Québec, which is held through its wholly-owned subsidiary SDCl.

**“Renard Deposit”** means US\$250 million.

**“Renard Kimberlite Pipes”** means the kimberlites known as Renard 1, 2, 3, 4, 65, 7, 8, 9 and 10 located on the Foxtrot Property.

**“Renard Mine Road”** means the 97 km long mining-grade road on segments “C” and “D” of the Route 167 Extension.

**“Renard Stream”** means a 9.6% diamond stream on the Renard Diamond Mine.

**“Renard Stream Amendment”** has the meaning ascribed under the heading “Description of Business - Cornerstone Assets - Renard Stream (Stornoway Diamond Corporation)”.

**“Renard Streamers”** has the meaning ascribed under the heading “Description of Business - Cornerstone Assets - Renard Stream (Stornoway Diamond Corporation)”.



**“Renard Streaming Agreement for the Forward Sale of Diamonds”** means the streaming agreement for the forward sale of diamonds dated July 8, 2014 and amended on March 30, 2015 among FCDC, a wholly owned subsidiary of SDCI, Orion Stream I and the Renard Buyers.

**“Replacement Osisko Options”** means, collectively, the options to purchase Osisko Shares that were granted by Osisko on the Virginia Arrangement Effective Date in exchange for Virginia Options, where (a) each Virginia Option outstanding immediately prior to the Virginia Arrangement Effective Date was exchanged for an option (each a **“Replacement Osisko Option”**) to acquire from Osisko the number of Osisko Shares equal to the product of the number of Virginia Shares underlying such Virginia Option by 0.92, and (b) the exercise price per Osisko Share subject to a Replacement Osisko Option was equal to the quotient obtained by dividing the exercise price per Virginia Share underlying such Virginia Option by 0.92.

**“Ressources Québec”** means Ressources Québec inc., a wholly-owned subsidiary of Investissement Québec.

**“ROM”** means run-of-mine.

**“Route 167 Extension”** means the extension of Route 167 from Témiscamie to the Renard Diamond Mine mine site.

**“RQ Debenture”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2016 - \$50 Million Financing with Ressources Québec inc.”.

**“RQ Subscription Agreement”** means the subscription agreement dated February 12, 2016 between Osisko and Ressources Québec providing for the issuance of the RQ Debenture.

**“SDCI”** means Stornoway Diamonds (Canada) Inc., a wholly-owned subsidiary of Stornoway.

**“SEC”** means the United States Securities and Exchange Commission.

**“SEDAR”** means the System for Electronic Document Analysis and Retrieval.

**“SOX”** means the Sarbanes-Oxley Act of 2002.

**“SRC”** means Saskatchewan Research Council Geoanalytical Laboratories.

**“Stornoway”** means Stornoway Diamond Corporation or, if the context requires, its wholly owned subsidiary, SDCI.

**“Subject Diamonds”** means all diamonds derived from the Renard Diamond Mine.

**“Subject Diamond Interest”** has the meaning ascribed to such term in “Material Mineral Projects - The Renard Stream”.

**“t”** means tonne.

**“Taseko”** means Taseko Mines Limited.

**“Taseko Warrants”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2017 - Acquisition of Silver Stream on Taseko Mines Limited’s Gibraltar Copper Mine”.

**“Teck”** means collectively Teck Resources Limited and its subsidiary Teck Metals Ltd.

**“TitheCo”** or **“Orion TitheCo Limited”** means Orion TitheCo Limited (now OBL).

**“TFFE”** means a target for further exploration as defined in NI 43-101 (previously “potential mineral deposit”).

**“tpd”** means tonnes per day.

**“trenching”** means digging or blasting down from surface through dirt and into the underlying rock to expose mineralization that can then be examined.

**“TSX”** means Toronto Stock Exchange.

**“U.S. Exchange Act”** means the U.S. Securities Exchange Act of 1934, as amended.

**“V”** means volts.

**“VGM”** means Virginia Gold Mines Inc.

**“Victoria”** means Victoria Gold Corp.

**“Victoria Financing”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2018 - Acquisition of a gold royalty on Victoria Gold Corp.’s Eagle Gold Project in Canada”.

**“Victoria Private Placement”** has the meaning ascribed under the heading “General Development of Osisko’s Business - 2018 - Acquisition of a gold royalty on Victoria Gold Corp.’s Eagle Gold Project in Canada”.

**“Virginia”** means Virginia Mines Inc.

**“Virginia Shares”** means common shares in the capital of Virginia.

**“Virginia Options”** means the options to purchase Virginia Shares granted under the Virginia stock option plan that were outstanding on the Virginia Arrangement Effective Date.

**“Virginia Arrangement Effective Date”** means February 17, 2015.

**“WWW”** means WWW International Diamond Consultants Ltd.

**“Yamana”** means Yamana Gold Inc.

**“Zn”** is the chemical symbol for zinc.

## **NI 43-101 Definitions**

<b>"Indicated Mineral Resource"</b>	Refers to 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 testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.
<b>"Inferred Mineral Resource"</b>	Refers to 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, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
<b>"Measured Mineral Resource"</b>	Refers to 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.
<b>"Mineral Reserve"</b>	<p>Refers to the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a preliminary feasibility study. The 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 diluting materials and allowances for losses that might occur when the material is mined.</p> <p>Mineral Reserves are categorized as follows on the basis of the degree of confidence in the estimate of the quantity and grade of the deposit: probable Mineral Reserves and proven Mineral Reserves.</p>
<b>"Mineral Resource"</b>	Refers to 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.
<b>"Modifying Factors"</b>	Modifying Factors are considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.
<b>"NI 43-101"</b>	National Instrument 43-101 - <i>Standards of Disclosure for Mineral Projects</i> . An instrument developed by the Canadian Securities Administrators (an umbrella group of Canada's provincial and territorial securities regulators) that governs

public disclosure by mining and mineral exploration issuers. The instrument establishes certain standards for all public disclosure of scientific and technical information concerning mineral projects.

**“pre-feasibility study”  
and “feasibility study”**

Refers to a comprehensive study of the viability of a mineral project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established and an effective method of mineral processing has been determined, and includes a financial analysis based on reasonable assumptions of technical, engineering, legal, operating, economic, social, and environmental factors and the evaluation of other relevant factors which are sufficient for a qualified person, acting reasonably, to determine if all or part of the Mineral Resource may be classified as a Mineral Reserve. Feasibility studies have a greater degree of confidence associated with all aspects.

**“preliminary  
assessment”**

The term “preliminary assessment” or “preliminary economic assessment”, commonly referred to as a scoping study, means a study that includes an economic analysis of the potential viability of Mineral Resources taken at an early stage of the project prior to the completion of a preliminary feasibility study.

**“Probable Mineral  
Reserve”**

Refers to an economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proven Mineral Reserve.

**“Proven Mineral  
Reserve”**

A Proven Mineral Reserve is the economically mineable part of a Measured Mineral Resource. A Proven Mineral Reserve implies a high degree of confidence in the Modifying Factors.

**“qualified person”**

Means an individual who (a) is an engineer or geoscientist with at least five years experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these; (b) has experience relevant to the subject matter of the mineral project and the technical report; and (c) is a member in good standing of a professional association that, among other things, is self-regulatory, has been given authority by statute, admits members based on their qualifications and experience, requires compliance with professional standards of competence and ethics and has disciplinary powers to suspend or expel a member, as defined in NI 43-101.

The terms “Mineral Resource”, “Measured Mineral Resource”, “Modification Factors”, “Indicated Mineral Resource”, “Inferred Mineral Resource”, “Probable Mineral Reserve” and “Proven Mineral Reserve” used are Canadian mining terms as defined in accordance with NI 43-101 under the guidelines set out in the CIM Standards.

**Conversion Factors**

<b>To Convert From</b>	<b>To</b>	<b>Multiply By</b>
Feet	Metres	0.305
Metres	Feet	3.281
Acres	Hectares	0.405
Hectares	Acres	2.471
Grams	Ounces (Troy)	0.03215
Grams/Tonnes	Ounces (Troy)/Short Ton	0.02917
Tonnes (metric)	Pounds	2,205
Tonnes (metric)	Short Tons	1.1023

## CORPORATE STRUCTURE

### Name, Address and Incorporation

Osisko was incorporated on April 29, 2014 under the name “Osisko Gold Royalties Ltd / Redevances Aurifères Osisko Ltée” pursuant to the QBCA, as a wholly-owned subsidiary of Osisko Mining Corporation (now Canadian Malartic Corporation). On January 1, 2017, Osisko and its wholly-owned subsidiary Osisko Exploration James Bay amalgamated under the name “Osisko Gold Royalties Ltd / Redevances Aurifères Osisko Ltée”.

The Osisko Shares are listed on the TSX and on the NYSE under the symbol “OR”.

Warrants of Osisko are listed on the TSX under the symbols OR.WT (exercise price: \$36.50 / expiry date: March 5, 2022).

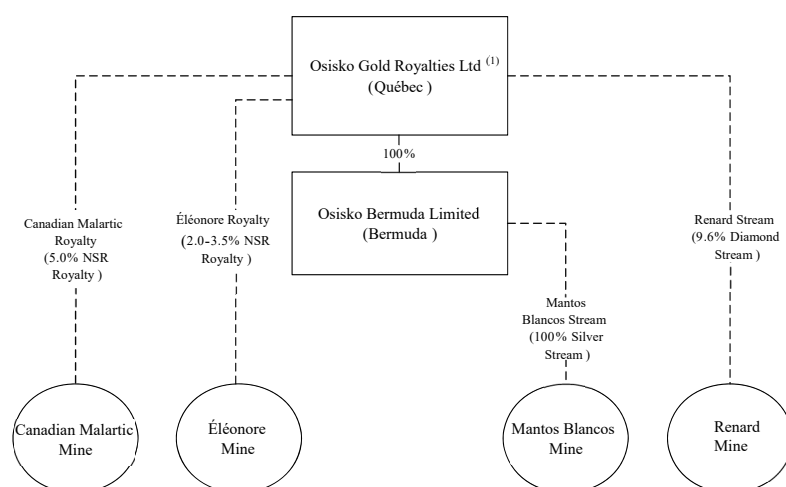
The Debentures are listed on the TSX under the symbol “OR.DB” (conversion price \$22.89 per Osisko Share and conversion rate of 43.6872 Osisko Shares per \$1,000 principal amount of Debentures).

As of the date of this Annual Information Form, Osisko is a reporting issuer in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Québec, New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland. Osisko is also a reporting issuer in the United States.

Osisko’s head office is located at 1100 avenue des Canadiens-de-Montréal, Suite 300, Montreal, Québec H3B 2S2.

### Intercorporate Relationships

As of December 31, 2018, Osisko’s only material subsidiary is OBL, acquired in connection with the Orion Transaction (see “General Development of Osisko’s Business - 2017 - Orion Transaction”).



- (1) Osisko and its subsidiaries have additional interests in other subsidiaries that do not meet the materiality thresholds for disclosure set out in Form 51-102F2 of the Canadian Securities Administrators.

## DESCRIPTION OF BUSINESS

### Description of the Business

Osisko is focused on acquiring and managing precious metal and other high-quality royalties, streams and other interests in Canada and worldwide.

Osisko's cornerstone assets include:

- (a) a 5% NSR royalty on the Canadian Malartic Properties;
- (b) a sliding scale 2.0% - 3.5% NSR royalty on the Éléonore Property;
- (c) a 9.6% diamond stream on the Renard Diamond Mine; and
- (d) a 100% silver stream on the Mantos Blancos Mine.

Osisko also owns a portfolio of royalties, streams, offtakes, options on royalty or stream financings and exclusive rights to participate in future royalty or stream financings on various projects, mainly in Canada. In addition, Osisko invests in equities of exploration, development and royalty companies.

### Business Model and Strategy

Osisko is a growth-oriented and Canadian-focused precious metal royalty and streaming company that is focused on maximizing returns for its shareholders by growing its asset base, both organically and through accretive acquisitions of precious metal and other high-quality royalties, streams and similar interests, and by returning capital to its shareholders through a quarterly dividend payment and share repurchases. Osisko has a unique growth strategy that consists not only of acquiring and structuring both producing and late-stage development royalty and stream products, but also of investing in longer term assets where Osisko feels it is uniquely positioned to create value and realize returns through the development of these assets. Osisko has a successful track-record of strong technical capabilities, which it puts to work creating its own pipeline of organic growth opportunities that provide exposure to the upside of commodity prices and to the optionality of mineral reserve and resource growth.

Osisko's main focus is on high quality, long-life precious metals assets located in favourable jurisdictions and operated by established mining companies, as these assets provide the best risk/return profile. Osisko also evaluates and invests in opportunities in other commodities and jurisdictions. Given that a core aspect of Osisko's business is the ability to compete for investment opportunities, Osisko plans to maintain a strong balance sheet and ability to deploy capital.

### Highlights - 2018

- Record GEOs earned of 80,553<sup>1</sup> (37% increase compared to 2017);
- Record revenues from royalties and streams of \$127.6 million (compared to \$93.8 million in 2017, an increase of 36%);

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<sup>1</sup> GEOs are calculated on a quarterly basis and include royalties, streams and offtakes. Silver earned from royalty and stream agreements was converted to gold equivalent ounces by multiplying the silver ounces by the average silver price for the period and dividing by the average gold price for the period. Diamonds, other metals and cash royalties were converted into gold equivalent ounces by dividing the associated revenue by the average gold price for the period. Offtake agreements were converted using the financial settlement equivalent divided by the average gold price for the period. For average metal prices used, refer to the "Portfolio of Royalty, Stream and Other Interests" section in Osisko's MD&A for the year ended December 31, 2018, which section is incorporated by reference herein.

- Record cash flows provided by operating activities of \$82.2 million (compared to \$48.7 million in 2017, an increase of 69%);
- Net loss attributable to Osisko Shareholders of \$105.6 million, \$0.67 per basic share (compared to \$42.5 million, \$0.33 per basic share in 2017), reflecting impairment charges of \$166.3 million (\$123.7 million, net of income taxes), including \$148.5 million on the Éléonore Royalty (109.1 million, net of income taxes);
- Adjusted earnings<sup>2</sup> of \$31.4 million, \$0.20 per basic share (compared to \$22.7 million, \$0.18 per basic share in 2017);
- Repaid \$123.5 million on the 2017 Credit Agreement and extended its maturity date by one year to November 14, 2022;
- Received payment from Pretium Exploration in regards to its election to exercise its option to fully repurchase OBL's interest in the Brucejack Stream for US\$118.5 million (\$159.4 million);
- Delivered shares of AuRico Metals Inc. to Centerra Gold Inc. for a \$1.80 cash consideration per share and for total proceeds of \$25.5 million, generating a gain<sup>3</sup> of \$15.5 million, based on the cash cost of the shares;
- Acquired from Victoria a 5% NSR royalty for \$98 million on the Dublin Gulch property which hosts the Eagle Project located in Yukon, Canada and subscribed for common shares of Victoria for \$50 million;
- Completed the Renard Stream Amendment, investing an additional \$21.6 million and improving the cash margin on the Renard Stream;
- Acquired an additional 1.75% NSR royalty on the Cariboo Property held by Barkerville for \$20 million, thus increasing Osisko's NSR royalty to a total of 4% (Osisko has the option to acquire an additional 1% NSR royalty for \$13 million);
- Announced a binding term sheet to provide Falco with the Falco Silver Stream with reference to up to 100% of the future silver produced from the Horne 5 Project located in Rouyn-Noranda, Québec. As part of the Falco Silver stream, Osisko committed to make staged upfront cash deposits to Falco of up to \$180 million;
- Converted the gold offtake agreement on the Matilda property operated by Blackham Resources Limited into a 1.65% gold stream, effective April 1, 2018;
- Maintained ownership and financing rights in respect to the Curraghinalt gold project through the take-private acquisition of Dalradian by Orion Mine Finance;
- Announced a share buyback program of up to \$100 million;

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<sup>2</sup> "Adjusted earnings" and "Adjusted earnings per basic share" are non-IFRS financial performance measures which have no standard definition under IFRS. For information regarding the non-IFRS financial measures used by Osisko, refer to the "Non-IFRS Financial Performance Measures" section in Osisko's MD&A for the year ended December 31, 2018, which section is incorporated by reference herein.

<sup>3</sup> The cash cost of an investment is a non-IFRS measure representing the cash paid on the acquisition of an investment. The gain or the loss is calculated by subtracting the cash cost from the cash proceeds on the sale of an investment.

- Acquired for cancellation 2,709,779 Osisko Shares for \$32.9 million (average acquisition cost of \$12.15 per share), including \$9.8 million under the current share buyback program; and
- Declared quarterly dividends totaling \$0.20 per share for 2018.

### **Highlights - Subsequent to December 31, 2018**

- Repaid the remaining \$30 million under the credit facility;
- Acquired for cancellation 852,500 Osisko Shares for \$10.2 million (average acquisition cost of \$11.95 per share); and
- Declared a quarterly dividend of \$0.05 per Osisko Share payable on April 15, 2019 to Osisko Shareholders of record as of the close of business on March 29, 2019; and
- Closed the Falco Silver Stream with reference to up to 100% of the future silver produced from the Horne 5 Project.

### **Cornerstone Assets**

#### ***Canadian Malartic Royalty (Agnico Eagle Mines Limited and Yamana Gold Inc.)***

One of Osisko's cornerstone assets is a 5% NSR royalty on the Canadian Malartic property which is located in Malartic, Québec, and operated by Canadian Malartic GP, formed by Agnico and Yamana. Canadian Malartic is Canada's largest and the world's 14<sup>th</sup> largest producing gold mine.

Osisko also holds a 3% NSR royalty on the Odyssey North zone and a 5% NSR royalty on the Odyssey South zone, which are located adjacent to the Canadian Malartic mine on Osisko's royalty ground.

On February 14, 2019, Agnico reported that Canadian Malartic GP is evaluating the potential for underground mining of the Odyssey deposit and East Malartic deposit, which lie on the Canadian Malartic mine property, from surface to a depth of 600 metres. These deposits could provide higher grade tonnes that could potentially supplement open pit production at Canadian Malartic. Agnico and Yamana reported that Odyssey contains inferred mineral resources of 809,000 ounces of gold (11.5 million tonnes grading 2.19 g/t Au) and East Malartic has indicated mineral resources of 361,000 ounces of gold (5.3 million tonnes grading 2.13 g/t Au) and inferred mineral resources of 1.4 million ounces of gold (22 million tonnes grading 1.98 g/t Au). Drilling is ongoing to extend and upgrade the mineral resources in these zones. The permit and certificate of authorization was received in December 2018, which allows for the development of an underground ramp at Odyssey.

#### ***Update on operations***

In February 2019, Agnico released its increased guidance for gold production at the Canadian Malartic mine to 660,000 ounces in 2019, and 690,000 to 710,000 in 2020 and 2021, as higher grades from the Barnat pit are expected to increase production.

On February 14, 2019, Agnico reported that gold production in the fourth quarter of 2018 increased to 169,464 ounces when compared to the prior-year period due to higher grades. Gold production for the full year 2018 increased to 698,000 ounces when compared to the prior-year period due to record annual mill throughput levels and higher grades.

Work on the Barnat extension project is proceeding on budget and on schedule. Work is primarily focused on the Highway 117 road deviation, overburden stripping and tailings expansion. The highway deviation is expected to be completed in late 2019. Production activities at Barnat are scheduled to begin in late 2019, following completion of the highway deviation.



Exploration programs are ongoing to evaluate several deposits to the east of the Canadian Malartic open pit, including the Odyssey, East Malartic, Sladen and Sheehan zones. These opportunities have the potential to provide new sources of ore for the Canadian Malartic mill. In the fourth quarter of 2018, 14 drill holes (5,460 metres) were completed at the Odyssey Zone and an additional 13 drill holes (17,416 metres) were completed at the East Malartic area. Additional exploration will be carried out in 2019 to assess the potential of these zones.

### ***Éléonore Royalty (Goldcorp Inc.)***

Through the acquisition of Virginia in 2015, Osisko owns a sliding scale 2.0% to 3.5% NSR royalty on the Éléonore Property located in the Province of Québec. Commercial production for the Éléonore Mine operated by Goldcorp was declared on April 1, 2015. The current NSR royalty is at 2.2%.

### ***Update on operations***

On February 13, 2019, Goldcorp released its results for the fourth quarter and fiscal year 2018 and reported that gold production for the three months ended December 31, 2018 was higher than the same period in the prior year at 104,000 ounces, reflecting the completion of the ramp up and contribution of higher grade ore during the fourth quarter of 2018 in line with the planned mining sequence. The mine achieved sustainable mining rates of over 6,100 tonnes per day in November 2018 and 6,600 tonnes per day in December 2018, in line with targeted annual gold production of 400,000 ounces. Gold production for the year ended December 31, 2018 was higher than the prior year at 342,000 ounces due primarily to an expected increase in grade and mined tonnes as the Éléonore Mine completed its ramp up to optimized production levels.

Goldcorp also mentioned that the expected future cash flows of the Éléonore Mine were negatively impacted due to a decrease in mineral reserves and mineral resources that impacted the estimated recoverable value. Mineral resources decreased by 2.23 million ounces due to a change in the geologic modeling methodology, which reduced the expected life of mine future cash flows. Additionally, the recoverable amount of the Éléonore Mine was negatively impacted by a reduction in the estimated fair value of the Éléonore Mine's exploration potential. As a result, Goldcorp recognized an impairment expense of US\$1.6 billion (US\$1.4 billion, net of income taxes) against the carrying value of the Éléonore Mine at December 31, 2018.

On October 24, 2018, Goldcorp had updated its mineral reserve and resource estimates for the Éléonore Mine as at June 30, 2018. Proven and probable gold mineral reserves as of June 30, 2018 totaled 3.3 million ounces (17.8 million tonnes grading 5.69 g/t Au), compared to 3.8 million ounces (19.6 million tonnes grading 6.02 g/t Au) as of June 30, 2017. Production depletion accounted for a decrease of 0.3 million ounces, while the balance of the adjustments to the geologic models was part of a continued effort to ensure only profitable ounces were included in the reserve model. Measured and indicated gold mineral resources as of June 30, 2018 were estimated at 0.5 million ounces (3.2 million tonnes grading 5.03 g/t Au) compared to 1.3 million ounces (7.2 million tonnes grading 5.81 g/t Au) as of June 30, 2017. Inferred gold mineral resources as of June 30, 2018 were estimated at 0.59 million ounces (3.2 million tonnes grading 5.76 g/t Au) compared to 1.99 million ounces (8.45 million tonnes grading 7.31 g/t Au) as of June 30, 2017. Goldcorp stated that mineral resources were negatively impacted by the geologic modelling methodology that has been applied to the mineral reserves has been applied to mineral resources, in addition to economic stope optimization. Exploration continued to delineate and expand the Main Ore Shoot and South Ore Shoot depth extensions. Goldcorp further stated that the Éléonore Mine's mineralized horizon remains open down dip where it has been drill tested 200 metres below the current mineral reserves to date and exploration is ongoing to test for extensions and structural repetitions.

For the year ended December 31, 2018, Osisko incurred an impairment charge of \$148.5 million (\$109.1 million, net of income taxes) with respect to the Éléonore Royalty.

### ***Renard Stream (Stornoway Diamond Corporation)***

The Renard Diamond Mine is operated by Stornoway and is Québec's first (1<sup>st</sup>) and Canada's sixth (6<sup>th</sup>) producing diamond mine. It is located approximately 250 kilometres north of the Cree community of Mistissini and 350 kilometres north of Chibougamau in the James Bay region of north-central Québec. Construction on the mine commenced on July 10, 2014, and commercial production was declared on January 1, 2017.

On October 2, 2018, Osisko announced that it has entered into an amended and restated purchase and sale agreement (the "**Amended Renard Streaming Agreement**") with Stornoway in relation to the Renard Stream (the "**Renard Stream Amendment**"). As part of the Amended Renard Streaming Agreement, Osisko, along with CDPQ, Triple Flag Mining Finance Bermuda Ltd., Albion Exploration Fund, LLC and Washington State Investment Board (collectively, the "**Renard Streamers**") paid Stornoway the U.S. dollar equivalent of \$45 million in cash (\$21.6 million attributable to Osisko) as an additional up-front deposit to Stornoway.

The terms of the Amended Renard Streaming Agreement provide that the Renard Streamers shall continue to hold a 20% undivided interest (9.6% stream attributable to Osisko) in all diamonds produced from the Renard Diamond Mine for the life of mine (prior to the amendment, the stream was applicable to all diamonds produced from the first 5 project kimberlites to be mined at the Renard Diamond Mine for the life of mine, and the first 30 million carats from the property overall). Upon the completion of a sale of diamonds, the Renard Streamers will remit to Stornoway a cash transfer payment which shall be the lesser of 40% of achieved sales price and US\$40 per carat (prior to the amendment, the cash transfer was a fixed amount of US\$50 per carat escalating at 1% per annum).

In addition, for the purpose of calculating stream remittances, Stornoway shall separately sell any diamonds smaller than the +7 DTC sieve size that are recovered in excess of the maximum agreed-upon proportion within a sale of run of mine diamonds (the excess small diamonds, or incidentals). In this manner, Stornoway shall restrict the proportion of small diamonds contained in a run of mine sale such that the Renard Streamers and Stornoway will be fully aligned on upside price exposure with downside protection on price and product mix.

The Renard Stream Amendment is part of a series of financing transactions with Stornoway's lenders and key stakeholders that provide Stornoway with greater financial and operational flexibility representing up to \$129 million in additional liquidity in the near term as the mine ramps up its operations.

### ***Update on operations***

On January 16, 2019, Stornoway reported fourth quarter mine production 485,616 carats recovered from the processing of 605,960 tonnes of ore at an attributable grade of 80 cpht. During the fourth quarter, mill feed was derived from the Renard 2 underground mine (92%), the Renard 65 open pit (6%), and Renard 3 underground development (1%). Processing rates in the quarter averaged 6,600 tonnes per day, compared to an annual plan of 7,000 tonnes per day. Processing rates were affected by the oversized material coming from the underground mine, and are expected to increase to nameplate capacity with the improvement of rockbreaking capacity on the primary crusher pad.

Stornoway further reported that mine production for 2018 reached 1.32 million carats recovered from the processing of 2.33 million tonnes of ore at an attributable grade of 57 cpht. Carats recovered and processed were below the low end of the revised guidance, due to lower tonnages processed in the second half of November and December resulting from technical issues with the front-end of the process plant. Carat recoveries in 2018 were affected by delays in the ramp up of the Renard 2 underground mine, the processing of low grade stockpiles to curtail the shortfall in mined tonnes during the transition from open pit to underground operations, and the mining of lower than expected grades at the margin of the orebody during the initial phase of the underground ramp up. By the end of the third quarter, the ramp up of underground production at Renard 2 was completed, and a steady feed was achieved from underground operations. Recovered grade improved by 39% and 45% in the third and fourth quarters, respectively. Carat

recoveries improved by 47% in both the third and fourth quarters. Carat recoveries missed the bottom end of the guidance range due to the process plant performing at lower than nameplate capacity in the second half of November and in December, due to the aforementioned factors.

During the fourth quarter of 2018, Stornoway reported sales of 253,929 carats of run of mine production sold at an average price of US\$92 per carat (\$122 per carat) from two tender sales. Fourth quarter diamond sales represent diamonds recovered between July 21 and October 5, 2018. For 2018, a total of 1.04 million carats of run of mine production were sold at an average price of US\$105 per carat (\$136 per carat).

In 2019, Stornoway expects to produce between 1.80 and 2.10 million carats from the processing of 2.40 to 2.55 million tonnes of ore. Ore will be derived primarily from the 290 meter level of the Renard 2 underground mine, with additional production from the Renard 65 open pit. Starting in the second quarter, Renard 3 underground ore is expected to be available to supplement Renard 2 production. 2019 production guidance reflects the steady-state operations at the 290 meter level of Renard 2 underground mine and improvement in grades demonstrated in the fourth quarter of 2018, with further operational flexibility and grade increases expected once Renard 3 underground ore becomes available. Between 1.80 and 2.10 million carats are expected to be sold in 8 tender sales at prices between US\$80 and US\$105 per carat.

### ***Mantos Blancos Stream (Mantos Copper S.A.)***

Mantos is a private mining company focused on the extraction and sale of copper. Mantos owns and operates the Mantos Blancos Mine and the Mantoverde project, located in the Antofagasta and Atacama regions in northern Chile.

Under the Mantos Stream Agreement, Osisko receives 100% of the payable silver from the Mantos Blancos Mine until 19.3 million ounces have been delivered, after which the stream percentage will be 30%. The purchase price for the silver under the Mantos Stream Agreement is 25% of the monthly average silver market price for each ounce of refined silver sold and delivered and/or credited by Mantos to OBL. Mantos may elect to reduce the amount of refined silver to be delivered and sold to OBL by 50% in either 2019 or 2020, provided that Mantos has delivered no less than 1.99 million ounces of silver under the Mantos Stream Agreement in which case Mantos shall make a cash payment of US\$70 million to OBL.

As of December 31, 2018, a total of 1.76 million ounces of silver have been delivered under the stream agreement. Osisko expects that Mantos will reach the 1.99 million ounces of silver threshold by the end of the second quarter of 2019, based on expected production. The buy-down payment of US\$70 million can be exercised in September 2019 or September 2020.

## Summary of Principal Royalties, Streams, Offtakes and Other Interests

Osisko owns a portfolio of 135 royalties, streams and offtakes assets, as well as 40 royalty options. The portfolio consists of 122 royalties, 8 streams and 5 offtakes. Currently, Osisko has 18 producing assets.

### Portfolio by Asset Stage

Asset Stage	Royalties	Streams	Offtakes	Total Number of Assets
Producing	11	5	2	18
Development (construction)	8	3	2	13
Exploration and evaluation	103	-	1	104
	122	8	5	135

### Producing Assets

Asset	Operator	Interest	Commodity	Jurisdiction
<b>North America</b>				
Canadian Malartic	Agnico and Yamana	5% NSR royalty	Au	Canada
Éléonore	Goldcorp	2.0-3.5% NSR royalty	Au	Canada
Renard	Stornoway	9.6% stream	Diamonds	Canada
Gibraltar	Taseko	75% stream	Ag	Canada
Seabee	SSR Mining Inc.	3% NSR royalty	Au	Canada
Island Gold	Alamos Gold Inc.	1.38-2.55% NSR royalty <sup>(1)</sup>	Au	Canada
Brucejack	Pretium Resources	50% offtake	Au	Canada
Veza	Ressources Nottaway Inc.	5% NSR royalty & 40% NPI	Au	Canada
Bald Mtn. Alligator Ridge / Duke & Trapper	Kinross Gold Corporation	1% / 4% NSR royalty	Au	USA
Pan	Fiore Gold Ltd.	4% NSR royalty	Au	USA
Parral	GoGold Resources Inc.	100% offtake	Au, Ag	Mexico
Lamaque South	Eldorado Gold Corp.	1.7% NSR royalty <sup>(1), (7)</sup>	Au	Canada
Holloway	Kirkland Lake Gold Ltd.	\$8.50/ounce	Au	Canada
<b>Outside of North America</b>				
Mantos Blancos	Mantos	100% stream	Ag	Chile
Sasa	Central Asia Metals plc	100% stream	Ag	Macedonia
Kwale	Base Resources Limited	1.5% GRR <sup>(2)</sup>	Rutile, Ilmenite, Zircon	Kenya
Brauna	Lipari Mineração Ltda	1% GRR <sup>(2)</sup>	Diamonds	Brazil
Matilda <sup>(3)</sup>	Blackham Resources Limited	1.65% stream	Au	Australia

### Key development / exploration and evaluation assets

Asset	Operator	Interest	Commodities	Jurisdiction
Amulsar	Lydian International Ltd.	4.22% Au / 62.5% Ag stream	Au, Ag	Armenia
Amulsar	Lydian International Ltd.	81.9% offtake	Au	Armenia
Eagle	Victoria	5% NSR royalty	Au	Canada
Back Forty	Aquila	18.5% Au / 75% Ag stream	Au, Ag	USA

Horne 5 <sup>(4)</sup>	Falco	90%-100% stream	Ag	Canada
Malartic - Odyssey South	Agnico and Yamana	5% NSR royalty	Au	Canada
Malartic - Odyssey North	Agnico and Yamana	3% NSR royalty	Au	Canada
Cariboo	Barkerville	4% NSR royalty <sup>(5), (6)</sup>	Au	Canada
Windfall Lake	Osisko Mining	1.5% NSR royalty <sup>(8)</sup>	Au	Canada
Hermosa	South 32 Limited	1% NSR royalty	Zn, Pb, Ag	USA
Spring Valley	Waterton Global Resource Management	0.5% NSR royalty	Au	USA
Upper Beaver	Agnico	2% NSR royalty	Au, Cu	Canada
Copperwood	Highland	3% NSR royalty <sup>(9)</sup>	Ag, Cu	USA
Marban	Osisko Mining	0.425% NSR royalty	Au	Canada
Ollachea	Kuri Kullu / Minera IRL	1% NSR royalty	Au	Peru
Casino	Western Copper & Gold Corporation	2.75% NSR royalty	Au, Ag, Cu	Canada
Altar	Sibanye-Stillwater	1% NSR royalty	Cu, Au	Argentina

(1) After the sale of a 15% interest in the royalties acquired from Teck to CDPQ.

(2) Gross revenue royalty.

(3) In March 2018, Osisko and Blackham Resources Limited entered into an agreement to restructure the gold offtake (which was applicable on 55% of the gold production from the Matilda mine) into a 1.65% gold stream, effective April 1, 2018.

(4) On February 27, 2019, Osisko entered into the Falco Silver Stream with reference to up to 100% of the future silver produced from the Horne 5 Project. For further details, see "Description of Business - Main Strategic Investments - Falco Resources Ltd."

(5) Osisko has the option to acquire an additional 1% NSR royalty on the Cariboo Property for additional cash consideration of \$13 million.

(6) Including the Bonanza Ledge mine that has produced gold in 2018.

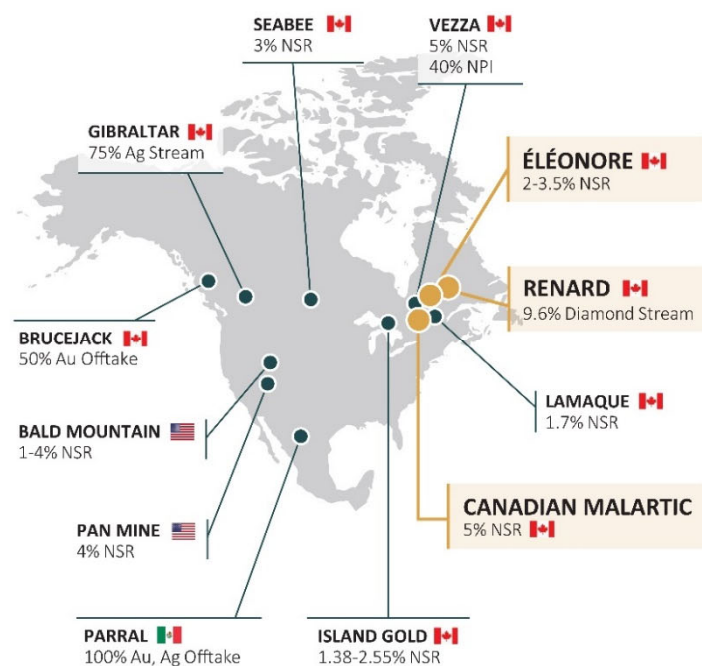
(7) Eldorado Gold Corporation has an option to buy back 50% of the NSR royalty for \$1.7 million within one year of the commencement of commercial production.

(8) In 2018, Osisko acquired a 1% NSR royalty on part of the Windfall Lake property located north of the majority of the mineral resource, hosting a small portion of the mineral resource, and a 2% NSR royalty on the northern part of the property.

(9) 3% NSR royalty on the Copperwood project. Upon closing of the acquisition of the White Pine project, Highland will grant Osisko a 1.5% NSR royalty on all metals produced from the White Pine project, and Osisko's royalty on Copperwood will be reduced to 1.5%.

## Significant Producing Royalty and Stream Assets

### NORTH AMERICA



### SOUTH AMERICA

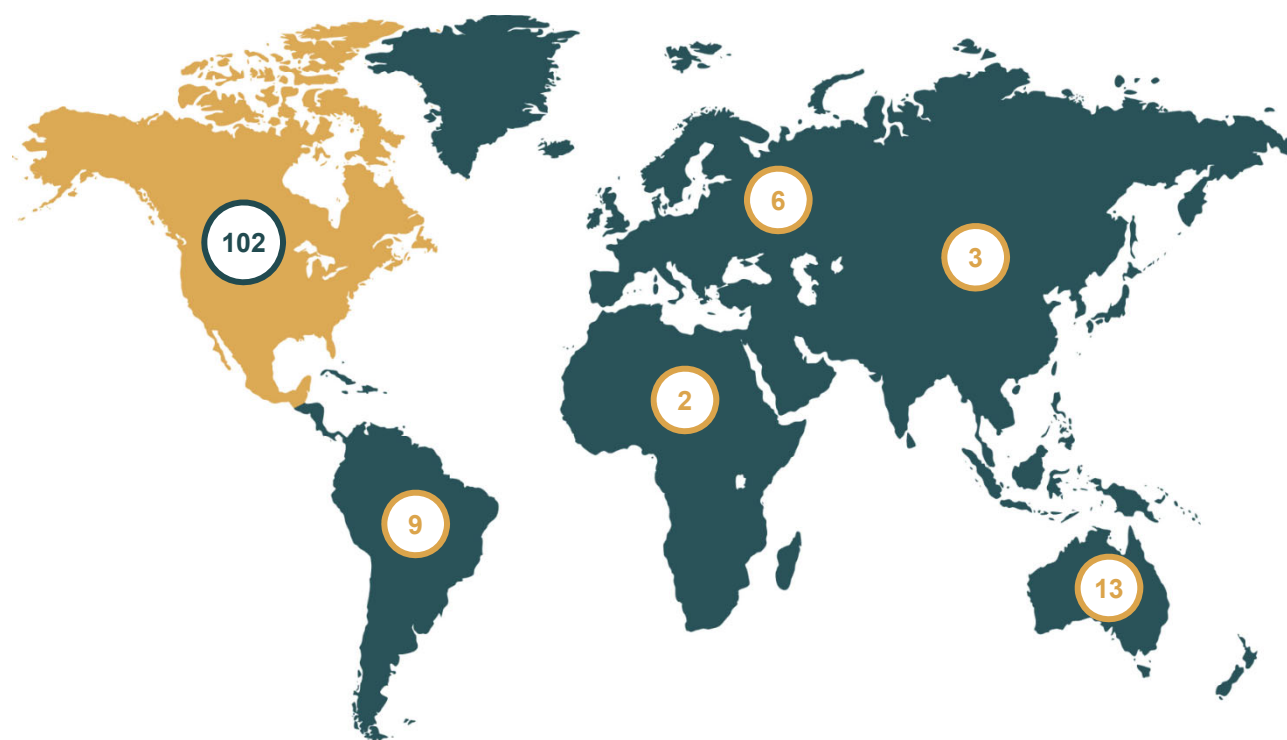


### OTHERS

- **SASA** (Tanzania): 100% Ag Stream
- **KWALE** (Kenya): 1.5% GRR
- **MATILDA** (Australia): 1.65% Au Stream

● Cornerstone Assets in Top Jurisdictions ● Other Cash Flowing Assets

## Geographical Distribution of Royalty and Stream Assets



## Portfolio of Investments

Osisko's assets include a portfolio of shares of publicly traded companies. Osisko invests, and intends to continue to invest, from time to time in companies where it holds royalties, streams or other interests and in various companies within the mining industry for investment purposes and with the objective of improving its ability to acquire interests in exploration assets, future royalties or revenue streams. In addition to investment objectives, in some cases, Osisko may decide to take a more active role, including providing management personnel, technical and/or administrative support, as well as nominating individuals to the investee's board of directors.

## Main Strategic Investments

The following table presents the main strategic investments of Osisko in marketable securities as at December 31, 2018 (in thousands of dollars):

Company	Number of Shares Held <sup>(i)</sup>	Ownership <sup>(i)</sup>	Cash Cost <sup>(iii)</sup>	Fair Value <sup>(i),(ii)</sup>
		%	\$	\$
Osisko Mining	42,890,269	16.7	91,383	131,673
Barkerville	162,864,251	32.2	78,274	65,146
Victoria	120,427,087	15.4	65,939	44,558
Falco	36,031,449	17.8	22,432	10,449

(i) As at December 31, 2018.

(ii) The fair value corresponds to the quoted price of the investments in a recognized stock exchange as at December 31, 2018. For private investments, an internal or external evaluation is used to determine the fair value.

(iii) The cash cost of an investment is a non-IFRS measure representing the cash paid on the acquisition of an investment.

### *Osisko Mining Inc.*

Osisko Mining is a Canadian focused gold exploration and development company. In 2016 and 2017, Osisko entered into earn-in agreements with Osisko Mining on properties held by Osisko in the James Bay area. Osisko invested \$40.1 million in Osisko Mining in 2017 and \$18 million in 2018.

Osisko holds a 1.5% NSR royalty on the Windfall Lake gold project and 1% NSR royalty on other properties held by Osisko Mining. As part of a previous investment agreement with Osisko Mining, Osisko obtained the right to purchase Osisko Mining's buy-back rights on existing royalties on the Windfall Lake property for \$5 million (of which \$2 million were paid in 2018), thus allowing it to increase its royalty by an additional 1-2% NSR royalty for a total potential NSR royalty of 2.5-3.5%.

In May 2018, Osisko Mining released a first mineral resources estimate on Windfall Lake gold deposit. Osisko Mining indicated that mineral resources were estimated at 601,000 ounces of gold in the measured and indicated category (2,382,000 tonnes grading 7.85 g/t Au) and 2,284,000 ounces of gold in the inferred category (10,605,000 tonnes grading 6.70 g/t Au). In addition, a positive PEA on the Windfall Lake project was released in July 2018 with an after-tax internal rate of return of 33%. Osisko Mining is also pursuing an 800,000 meter drilling program on the Windfall Lake property as well as a metallurgical program. In October 2018, through the construction of an exploration ramp, Osisko Mining achieved access to Zone 27, wireframe 115, which was selected for the initial 5,000 tonne bulk sample to be processed in the fourth quarter of 2018. In November 2018, Osisko Mining released a mineral resource update including the mineral resource update for the Lynx zone. Estimated measured and indicated resources were increased to 754,000 ounces of gold (2,874,000 tonnes grading 8.17 g/t Au) and inferred mineral resources were increased to 2,366,000 ounces of gold (10,352,000 tonnes grading 7.11 g/t Au). In December 2018, Osisko Mining released preliminary results from the first 2,078 tonnes mined. The average head grade obtained is 9.7 g/t Au and 5.5 g/t Ag, which is 39% higher than indicated in the resource block model for this area.

During the fourth quarter of 2018, Osisko Mining closed the acquisition of Beaufield Resources Inc. and a \$76.4 million private placement (Osisko subscribed for \$18 million). Kirkland Lake Gold Ltd. acquired 32,627,632 common shares of Osisko Mining in the public market. On October 30, 2018, Osisko Mining announced a private placement with CDPQ where CDPQ acquired 9,259,260 common shares of Osisko Mining at a price of \$2.70 per common share for a total investment of approximately \$25 million.

On February 20, 2019, Osisko Mining and Chantrell announced that they have entered into a binding letter agreement outlining the proposed terms and conditions upon which Osisko Mining will effect a business combination that will result in a reverse takeover of Chantrell by Osisko Mining. Pursuant to the proposed transaction, Osisko Mining will transfer certain non-core assets of Osisko Mining with a value of approximately \$99.9 million to Chantrell in exchange for shares of Chantrell. In addition, the shares of Chantrell will be subject to a consolidation on a 40:1 basis, subject to adjustment.

#### *Barkerville Gold Mines Ltd.*

Barkerville is focused on the development of its extensive land package located in the historical Cariboo Mining District of central British Columbia, Canada, where it has completed a 157,000 meter drilling program.

On September 6, 2018, Osisko announced that it had entered into a second amended and restated royalty purchase agreement with Barkerville (the “**Barkerville Amended Agreement**”) pursuant to which Osisko acquired an additional 1.75% NSR royalty for the aggregate purchase price of \$20 million on the Cariboo Property (the “**Barkerville Royalty Transaction**”).

Under the terms of the Barkerville Amended Agreement, Osisko has the option to acquire an additional 1% NSR royalty on the Cariboo Property for additional cash consideration of \$13 million (the “**Barkerville Royalty Option**”). Osisko also holds a right of first refusal relating to any gold stream offer received by Barkerville with respect to the Cariboo Property.

The Barkerville Royalty Transaction increased Osisko’s existing royalty on the Cariboo Property to a total of 4% NSR royalty, and a total of 5% NSR royalty if the Barkerville Royalty Option is exercised.

As part of the Barkerville Royalty Transaction, Barkerville has granted to Osisko 10,000,000 common share purchase warrants, each being exchangeable for one (1) common share of Barkerville at an exercise price of \$0.75 per share for a period of 36 months.

On May 2, 2018, Barkerville announced the maiden mineral resource estimate for Cow and Island Mountain deposits at its 100% owned Cariboo Property. The underground mineral resource estimate incorporates the Cow Mountain and Valley Zones on Cow Mountain and Shaft Zone and Mosquito Creek on Island Mountain at a cut-off grade of 3.0 g/t Au. A mineral resource on Bonanza Ledge and BC Vein is also included. The resource is defined over 6 kilometers of Barkerville’s 67-kilometer-long land package. Infill and exploration drilling is ongoing and resource updates will be presented annually. Barkerville indicated that mineral resources at the Cariboo Property was estimated at 1.60 million ounces of gold in the measured and indicated category (8.1 million tonnes grading 6.1 g/t Au) and 2.16 million ounces of gold in the inferred category (12.7 million tonnes grading 5.2 g/t Au).

In September 2018, Barkerville announced positive results from its initial test mining of 80,000 tonnes at Bonanza Ledge. Barkerville’s Bonanza Ledge mine has allowed Barkerville to assess mining methods, understand what ground conditions to expect in different lithological units, train a local workforce, and generate cash flows to offset some exploration expenditures. Test mining at Bonanza Ledge was completed in December 2018 on Barkerville Mountain. A total of 1,400 meters of development took place at the Bonanza Ledge and BC Vein test mine. Approximately 122,000 tonnes were extracted and processed at a grade of 5.98 g/t Au and 21,125 ounces of gold were poured in 2018. Barkerville has also applied for permit amendment to extend the test mining for BC vein ore bodies on Barkerville Mountain.



The 2019 exploration program will include a total of 50,000 meters planned for the initial phase and an additional 40,000 meters will be proposed following results of Phase 1.

*Victoria Gold Corp.*

On April 13, 2018, Osisko completed a \$148 million financing transaction with Victoria, pursuant to which Osisko acquired from Victoria a 5% NSR royalty for \$98 million on the Dublin Gulch property located in Yukon and which hosts the Eagle gold project (the “**Eagle Project**”) and acquired common shares of Victoria for \$50 million. The 5% NSR royalty applies to all metals and minerals produced from the Dublin Gulch property until an aggregate of 97,500 ounces of refined gold has been delivered to Osisko and a 3% NSR royalty thereafter. The first tranche of the \$98 million purchase price, representing \$49 million, was paid on the closing of the transaction, and the second tranche of \$49 million will be funded pro rata to drawdowns under the subordinated debt facilities provided by Orion Mine Finance Group (or a third party). In September and December 2018, two payments of \$14.7 million were made to Victoria as part of the second tranche of the royalty purchase price, for a remaining commitment of \$19.6 million as at December 31, 2018.

This financing was part of a comprehensive \$500 million construction financing package with Orion Mine Finance, Osisko and Caterpillar Financial Services Limited that will fund the development of the Eagle Project through to commercial production. The financing was comprised of two credit facilities totalling US\$175 million, an equipment financing facility for up to US\$50 million, the \$98 million NSR royalty acquired by Osisko and a private placement of Victoria common shares of \$125 million, including \$50 million from Osisko.

The Dublin Gulch property is located approximately 85 kilometres by road north northeast of the village of Mayo, in central Yukon, Canada. The property hosts the Eagle gold deposit, the Wolf tungsten deposit and a 13 kilometres-long belt of gold and silver mineralization known as the Potato Hills Trend. The Eagle Project is the most advanced project in the region and is on track to be the largest gold mine in Yukon history. The proposed Eagle gold mine will produce doré from a conventional open pit operation with a three-stage crushing plant, in-valley heap leach and carbon-in-leach adsorption-desorption gold recovery plant. Victoria currently has year-round road access to the site, and a fully operational 250-person all-season camp on site. Commercial grid power is available approximately 45 kilometres by road from the site, and an airstrip suitable for commercial planes is located 80 kilometres to the south. The project will employ 350 to 400 people and will be a significant economic contributor to Yukon. The Eagle Project has received all major permits for construction and operations, completed the environmental assessment process and has a signed comprehensive cooperation and benefits agreement with the local Nacho Nyak Dun First Nation, whose traditional territory the project is located within.

In December 2018, Victoria announced that mine construction was 60% complete and remained on track for delivery of first gold in the second semester of 2019.

*Falco Resources Ltd.*

Falco’s main asset is the Horne 5 Project, for which a positive feasibility study was released in October 2017.

On February 27, 2019, Osisko entered into a senior secured silver stream facility with Falco to provide Falco pursuant to which Osisko has agreed to commit up to \$180 million through a silver stream toward the funding of the development of the Horne 5 Project.

Osisko has agreed to commit up to \$180 million payable as follows:

- \$25 million on closing, net of any amounts owing by Falco to Osisko, including the repayment of the principal amounts due to Osisko under the Falco Loans (for further details on the Falco Loans, see “General Development of Osisko’s Business - 2016 - \$10 Million Senior Note with Falco

Resources Ltd.”, “General Development of Osisko’s Business - 2018 - \$10 Million Senior Secured Loan Agreement with Falco Resources Ltd.” and “General Development of Osisko’s Business - 2018 - Extension of Maturity Date of Senior Note and Senior Loan with Falco Resources Ltd.”);

- \$20 million upon Falco receiving all necessary material third-party approvals, licenses, right of ways, and surface rights;
- \$35 million following receipt of all material permits required for the construction of a mine on the Horne 5 Project, a positive construction decision for the Horne 5 Project, and raising a minimum of \$100 million in equity, joint venture or any other non-debt financing for the construction of the mine;
- \$60 million upon the total projected capital expenditure for the Horne 5 Project has been demonstrated to be financed; and
- An optional payment of \$40 million at the sole discretion of Osisko to increase stream percentage to 100%;

(the “**Falco Silver Stream**”).

Under the terms of a stream agreement dated February 27, 2019 between Falco and Osisko, Osisko will purchase up to 100% of the refined silver from the Horne 5 Project. In exchange for the refined silver delivered under the stream agreement, Osisko will pay Falco ongoing payments equal to 20% of the spot price of silver on the day of delivery, subject to a maximum payment of US\$6 per silver ounce.

The Falco Silver Stream is secured by the assets of Falco.

### **Sustainability Activities**

Osisko views sustainability as a key part of its strategy to create value for its shareholders and other stakeholders.

Osisko focuses on the following key areas:

- Promoting the mining industry and its benefits to society;
- Maintaining strong relationships with the federal government and the provincial, municipal and first nations governments in Québec;
- Supporting the economic development of regions where Osisko operates (directly or indirectly through its interests);
- Supporting university education in mining fields and employee development;
- Promoting diversity throughout the organization and the mining industry; and
- Encouraging investee companies to adhere to the same areas of focus in sustainability.

As part of its investment analysis process, Osisko evaluates the risk and performance of the investee companies in the sustainability areas on projects where Osisko has a direct or indirect interest.

### **Exploration and Evaluation Activities**

On October 4, 2016, Osisko entered into an earn-in transaction with Osisko Mining. Under the terms of the earn-in agreement (the “**Earn-In Agreement**”), Osisko granted to Osisko Mining with the right to earn a 100% interest in 28 exploration properties held by Osisko located in the James Bay area, Québec and the Labrador Trough area (excluding the Coulon copper-zinc project and four other exploration properties) (the “**Earn-In Properties**”) upon incurring exploration expenditures totaling \$32 million over a seven-year term. Under the Earn-In Agreement, Osisko Mining may earn a 50% interest upon completing expenditures totaling \$19.2 million on or before October 4, 2020. Osisko will retain an escalating NSR royalty ranging from 1.5% to a maximum of 3.5% on precious metals and a 2% NSR royalty on other metals and minerals

produced from the Earn-In Properties. Additionally, any new properties acquired by Osisko Mining in a designated area during the seven-year term of the Earn-In Agreement may also be subject to a royalty agreement in favour of Osisko with similar terms and subject to certain conditions.

On February 16, 2017, Osisko Mining and Osisko amended and restated the Osisko Mining Earn-In Agreement, pursuant to which the Kan project was carved out into a separate earn-in agreement (the “**Kan Earn-In Agreement**”). Under the terms of the Kan Earn-In Agreement, Osisko Mining shall incur \$6 million over the seven-year term of the Kan Earn-In Agreement, and Osisko Mining will earn a 50% interest upon completing expenditures of \$3.6 million over a four-year term. The entire commitment on the remainder of the Earn-In Properties has been reduced by the same amount and terms as the Kan Earn-In Agreement.

On December 15, 2017, Osisko Mining and Osisko entered into an amendment to the Osisko Mining Earn-In Agreement to extend until December 31, 2018 Osisko Mining’s firm commitment to spend \$4.1 million of exploration expenditures on all the properties. As of December 31, 2018, all required amounts have been spent.

On August 27, 2018, Osisko Mining and Osisko amended and restated the Earn-In Agreement, pursuant to which the FCI project was carved out into a separate earn-in agreement, and Osisko Mining entered into an earn-in agreement with 92 Resources Inc. on the FCI project.

As a result of the earn-in agreements with Osisko Mining, Osisko’s exploration and evaluation activities have been significantly reduced.

## Human Resources

As of December 31, 2018, Osisko had 40 employees, the services of 14 being back charged to investee companies.

Although Osisko has less than five (5) years of operations, it benefits from the continued availability and commitment of its key management, whose contributions to its immediate and future operations are of significant importance. Furthermore, Osisko implemented a succession plan in order to mitigate the risk of being dependent on such key management. From time to time, Osisko may also need to identify and retain additional skilled management and specialized technical personnel to efficiently operate its business.

## Material Mineral Projects

Osisko considers that the Canadian Malartic Royalty, the Éléonore Royalty, the Renard Stream and the Mantos Blancos Stream are currently its only material mineral projects for the purposes of NI 43-101.

## Outlook

Osisko’s 2019 outlook on royalty, stream and offtake interests is based on publicly available forecasts, in particular the forecasts for the Canadian Malartic mine published by Yamana and Agnico, for the Éléonore Mine published by Goldcorp, for the Renard Diamond Mine published by Stornoway, and for the Island Gold mine published by Alamos Gold Inc. When publicly available forecasts on properties are not available, Osisko obtains internal forecasts from the producers, which is the case for the Sasa mine and the Mantos Blancos Mine, or uses management’s best estimate. Attributable GEOs for 2019, estimated between 85,000 and 95,000, and cash margin by interest are as follows:

	<b>Low</b>	<b>High</b>	<b>Cash Margin</b>
	<b>(GEOs)</b>	<b>(GEOs)</b>	<b>(%)</b>
Royalty interests	54,700	61,100	99.9
Stream interests	28,000	31,300	65.5
Offtake interests	2,300	2,600	1.2
	<u>85,000</u>	<u>95,000</u>	

For the 2019 guidance, silver, diamonds and cash royalties have been converted to GEOs using commodity prices of US\$1,300 per ounce of gold, US\$15.50 per ounce of silver and US\$95 per carat for diamonds from the Renard Diamond Mine (blended sales price) and an exchange rate (US\$/C\$) of 1.30.

## **GENERAL DEVELOPMENT OF OSISKO'S BUSINESS**

### **2019**

#### ***Closing of Silver Stream Transaction with Falco Resources Ltd.***

On February 27, 2019, Falco announced the closing of the Falco Silver Stream. For further details on the Falco Silver Stream, see "Description of Business - Main Strategic Investments - Falco Resources Ltd."

Falco and Osisko have also reached an agreement to settle interest owed under the Falco Loans through the issuance of Falco Shares. The principal amount of each of the Falco Loans were reimbursed with the first instalment under the Stream Agreement. The interest owed under the Falco Loans was paid on March 13, 2019 through the issuance of 5,353,791 Falco Shares at a deemed price of \$0.34 per share. For further details on the Falco Loans, see "General Development of Osisko's Business - 2016 - \$10 Million Senior Note with Falco Resources Ltd.", "General Development of Osisko's Business - 2018 - \$10 Million Senior Secured Loan Agreement with Falco Resources Ltd." and "General Development of Osisko's Business - 2018 - Extension of Maturity Date of Senior Note and Senior Loan with Falco Resources Ltd."

#### ***Initial \$9.8 Million Investment towards \$100 Million Share Buy-Back Program and Reduction of Debt by US\$ 43 Million***

On January 7, 2019, Osisko reported that it had completed an initial investment of \$9.8 million towards its NCIB Program for a total 849,480 Osisko Shares purchased for cancellation at an average price of \$11.56 per share during the month of December 2018 and that it has repaid US\$43 million on its revolving credit facility. The share repurchases were completed as an initial investment towards Osisko's previously announced intention to deploy up to \$100 million towards purchases under its NCIB Program.

### **2018**

#### ***Extension of Maturity Date of Senior Note and Senior Loan with Falco Resources Ltd.***

On December 20, 2018, Falco and Osisko agreed to amend (a) the \$10 million senior note entered into by Falco on May 30, 2016, as amended on November 29, 2017, February 14, 2018 and May 31, 2018 (the "**Falco Senior Note**") and (b) the \$10 million secured senior loan entered into by Falco on September 10, 2018 (the "**Falco Senior Loan**" and, collectively with the Falco Senior Note, the "**Falco Loans**"), by extending their respective maturity to February 28, 2019. For further details on the Falco Loans, see "General Development of Osisko's Business - 2016 - \$10 Million Senior Note with Falco Resources Ltd." and "General Development of Osisko's Business - 2018 - \$10 Million Senior Secured Loan Agreement with Falco Resources Ltd."

The principal amount of the Falco Loans was reimbursed through the deposit made by Osisko on closing of the Falco Silver Stream. For further details on the Falco Silver Stream, see "Description of Business - Main Strategic Investments - Falco Resources Ltd."

#### ***Receipt of Proceeds of \$159.4 Million from Pretium Exploration Inc.***

On September 24, 2018, Osisko announced that OBL has received a notice from Pretium Exploration, a subsidiary of Pretium Resources, in regards to its election to exercise its option to fully repurchase OBL's interest in the Brucejack Stream, as provided for in the Brucejack Stream Agreement. Under the Brucejack

Stream Agreement, Pretium had an option to repurchase 100% of OBL's share of the Brucejack Stream by making a payment of US\$118.5 million (approximately \$154 million) to OBL on December 31, 2018.

On December 19, 2018, Osisko announced that OBL has received proceeds of US\$118.5 million (\$159.4 million) from Pretium Exploration, a subsidiary of Pretium Resources, in regards to Pretium's exercise of its option to fully repurchase OBL's interest in the Brucejack Stream, as provided for in the Brucejack Stream Agreement.

### ***Normal Course Issuer Bid Program***

On December 10, 2018, following TSX approval, Osisko announced the renewal of a normal course issuer bid to purchase for cancellation, from time to time, up to 10% of the public float of Osisko over a 12-month period (the "**NCIB Program**").

Repurchases under the NCIB Program commenced on December 12, 2018 and will terminate on December 11, 2019, or on such earlier date as the NCIB Program is complete. Purchases of Osisko Shares under the NCIB Program will be made in Canada through the facilities of the TSX in accordance with its rules. Daily purchases will be limited to 71,940 Osisko Shares, other than block purchase exemptions, representing 25% of the average daily trading volume of the Osisko Shares on the TSX for the six-month period ended November 30, 2018, being 287,760 Osisko Shares. The price that Osisko may pay for Osisko Shares purchased under the NCIB Program will be the prevailing market price at the time of purchase and any Osisko Shares purchased by Osisko will be cancelled.

As of the date hereof, Osisko has purchased and cancelled 1,701,980 Osisko Shares under the NCIB Program.

Under the prior NCIB program which ended on December 10, 2018, Osisko purchased 1,860,299 Osisko Shares at a weighted average price of \$12.4156 per Osisko Share through the facilities of the TSX.

### ***Agreement to Amend Renard Stream***

On October 2, 2018, Osisko announced that it has entered into the Amended Renard Streaming Agreement with Stornoway in relation to the Renard Stream Amendment. As part of the Renard Stream Amendment, Osisko provided Stornoway with the US\$ equivalent of \$21.6 million, representing Osisko's share of an additional up-front deposit provided to Stornoway. Certain other amendments were also made to the existing stream structure as part of the Amended Renard Streaming Agreement.

The Renard Stream Amendment was part of a series of financing transactions with Stornoway's lenders and key stakeholders that provide Stornoway with greater financial and operational flexibility representing up to \$129 million in additional liquidity in the near term as the mine ramps up its operations.

Osisko has funded its share of the Renard Stream Amendment through cash on hand, representing an outlay of \$21.6 million during the fourth quarter of 2018.

The terms of the Amended Renard Streaming Agreement provide that the Renard Streamers shall continue to hold a 20% undivided interest (9.6% stream attributable to Osisko) in all diamonds produced from the Renard mining property for the life of the mine, however upon the completion of a sale of diamonds, the Renard Streamers will remit to Stornoway a cash transfer payment which shall be the lesser of 40% of achieved sales price and US\$40 per carat.

Previously, the Renard Stream represented an undivided interest in 20% of all diamonds produced from the first 5 project kimberlites to be mined at Renard for the life of mine, and the first 30 million carats from the property overall, with the Renard Streamers remitting to Stornoway a cash transfer payment of US\$50 per carat escalating at 1% per annum.

In addition, for the purpose of calculating stream remittances, Stornoway shall separately sell any diamonds smaller than the +7 DTC sieve size that are recovered in excess of the maximum agreed-upon proportion within a sale of run of mine diamonds (the excess small diamonds or “Incidentals”). In this manner, Stornoway shall restrict the proportion of small diamonds contained in a run of mine sale such that the Renard Streamers and Stornoway will be fully aligned on upside price exposure with downside protection on price and product mix.

Pursuant to the Amended Renard Stream Amendment, Stornoway has granted to the Renard Streamers the right to nominate one (1) member on the Stornoway board of directors as long as their collective shareholding in Stornoway remains above 5%.

#### ***\$10 Million Senior Secured Loan Agreement with Falco Resources Ltd.***

On September 11, 2018, Osisko announced that it has entered into an agreement to provide Falco with the Falco Senior Loan under which Osisko has provided Falco with a \$10 million loan, with interest on the principal amount at a rate per annum that is equal to 7%, compounded quarterly.

The principal amount under the Falco Senior Loan was reimbursed through the deposit made by Osisko on closing of the Falco Silver Stream (See “General Development of Osisko’s Business - 2019 - Closing of Silver Stream Transaction with Falco Resources Ltd.”). The interest owed under the Falco Senior Loan was paid on March 13, 2019 through the issuance of Falco Shares at a deemed price of \$0.34 per share.

#### ***Dalradian Resources Inc.***

On September 7, 2018, Orion Mine Finance announced the completion of the acquisition and privatization of Dalradian for cash consideration of \$1.47 per common share. The common shares of Dalradian held by Osisko were not acquired in the transaction.

#### ***Acquisition of Additional Gold Royalty on Barkerville Gold Mines Ltd.’s Cariboo Property***

On September 6, 2018, Osisko announced that it has entered into the Barkerville Royalty Transaction. Under the terms of the Barkerville Amended Agreement, Osisko benefits from the Barkerville Royalty Option. Osisko also holds a right of first refusal relating to any gold stream offer received by Barkerville with respect to the Cariboo Property.

The Barkerville Royalty Transaction increased Osisko’s existing royalty on the Cariboo Property to a total of 4% NSR royalty, and a total of 5% NSR royalty if the Barkerville Royalty Option is exercised.

As part of the Barkerville Royalty Transaction, Barkerville has granted to Osisko 10,000,000 common share purchase warrants, each being exchangeable for one (1) common share of Barkerville at an exercise price of \$0.75 per share for a period of 36 months.

For further details on the Barkerville Royalty Transaction, see “Description of Business - Main Strategic Investments - Barkerville Gold Mines Ltd”.

#### ***Silver Stream with Falco Resources Ltd. in respect of the Horne 5 Project in Rouyn-Noranda, Québec***

On June 18, 2018, Falco and Osisko announced the execution of a binding letter agreement respecting the Falco Silver Stream. The Falco Silver Stream closed on February 27, 2019. For further details on the Falco Silver Stream, see “Description of Business - Main Strategic Investments - Falco Resources Ltd.”.

Concurrent to this announcement, Osisko also announced the purchase from Falco of a secured debenture having a principal amount of \$7,000,000 (the “**Falco Debenture**”).

On November 29, 2018, Falco obtained the required disinterested shareholder approvals for the conversion of the Falco Debenture and the Falco Debenture was converted into 12,104,444 units of Falco, each consisting of one (1) Falco Share and one-half ( $\frac{1}{2}$ ) of one common share purchase warrant, each whole warrant entitling its holder to purchase one (1) Falco Share, subject to customary anti-dilution clauses, at a price of \$0.75 for a period of thirty-six (36) months.

#### ***Acquisition of a Gold Royalty on Victoria Gold Corp.'s Eagle Gold Project in Canada***

On April 16, 2018, Osisko announced the completion of a \$148 million financing transaction with Victoria pursuant to which Osisko acquired a 5% NSR royalty for \$98 million (the “**Eagle Royalty Purchase**”) on the Dublin Gulch property which hosts the Eagle Project located in Yukon, Canada.

As part of the transaction, Osisko has also purchased on a private placement basis, 100,000,000 common shares of Victoria at a price of \$0.50 per common share (the “**Victoria Private Placement**”), for total financing by Osisko of \$148 million including the Eagle Royalty Purchase (the “**Victoria Financing**”).

Osisko purchased a 5% NSR royalty on all metals and minerals produced from the Dublin Gulch property, which includes the Eagle and Olive deposits, until an aggregate of 97,500 ounces of refined gold have been delivered to Osisko, and a 3% NSR royalty thereafter. The purchase price for the royalty is an aggregate of \$98 million, of which a first tranche of \$49 million was advanced as of April 16, 2018 and the second tranche of \$49 million will be funded pro rata to drawdowns under the subordinated debt component of the Orion debt facilities.

The proceeds of the Victoria Private Placement will be used primarily for the purpose of advancing construction of the Eagle Project and for working capital purposes. Additionally, in connection with the Victoria Financing, Osisko has obtained the right to nominate one of the members of Victoria's board of directors. In June 2018, Mr. Sean Roosen was appointed to the board of Victoria.

In connection with the Victoria Financing, Victoria has also entered into definitive and binding agreements with an affiliate of Orion Mine Finance pursuant to which Orion has agreed to provide debt facilities to Victoria, and has purchased from Victoria, on a private placement basis, 150 million common shares of Victoria at a price of \$0.50 per common share. Victoria has also entered into definitive agreements with Caterpillar Financial Services Limited with respect to a US\$50 million equipment financing facility. All of such agreements were entered into with respect to a construction financing package totaling approximately \$505 million in aggregate (including the Victoria Financing).

### **2017**

#### ***Increase of Credit Facility to \$350 Million***

On November 14, 2017, Osisko announced that it has amended its revolving credit facility, increasing the amount from \$150 million to \$350 million, with an additional uncommitted accordion of up to \$100 million, for a total availability of up to \$450 million (the “**2017 Credit Agreement**”). National Bank of Canada continues to act as administrative agent and as lender, and the syndicate of financial institutions includes Bank of Montreal, The Bank of Nova Scotia, Canadian Imperial Bank of Commerce, Royal Bank of Canada, The Toronto-Dominion Bank and Export Development Canada. National Bank Financial Inc. acted as sole lead arranger and bookrunner. The facility is secured by Osisko's assets and has an initial term of four (4) years. In 2018, Osisko extended the maturity date of the 2017 Credit Agreement by one (1) year to November 14, 2022.

#### ***Acquisition of a Gold Stream on Aquila Resources Inc.'s Back Forty Project in Michigan, USA***

On November 9, 2017, Osisko announced that OBL agreed to acquire a gold stream with reference to the future gold produced from the Back Forty property (the “**Back Forty Project**”) located in Michigan, USA from Aquila. OBL will make a staged upfront cash deposit to Aquila of up to US\$55 million for the gold

stream, and will make ongoing payments equal to 30% of the spot price of gold, to a maximum of US\$600 per ounce. In addition to the gold stream, OBL has agreed to purchase units in the amount of US\$10 million as part of a concurrent private placement with Aquila. OBL owns a 75% stream on all silver produced on the Back Forty Project, which was acquired in July 2017 through the acquisition of the Orion Mine Finance portfolio.

Pursuant to a gold purchase agreement dated November 27, 2017 between OBL and Aquila, OBL has purchased a gold stream equivalent to 18.5% of the refined gold from the Back Forty Project until 105,000 ounces of gold have been delivered (the **"Back Forty Threshold Stream"**), and 9.25% of the refined gold for the remaining life of mine (the **"Back Forty Tail Stream"**). Payable gold under the stream will be subject to minimum payability rates based on the product produced. As consideration for the gold stream, OBL will pay to Aquila a staged upfront cash deposit of up to US\$55 million (the **"Back Forty Deposit"**) plus ongoing payments equal to 30% of the spot price of gold on the day of delivery, to a maximum of US\$600 per ounce.

The Back Forty Deposit will be paid in four installments, as follows:

- (a) US\$7.5 million (paid on closing);
- (b) US\$7.5 million (paid in October 2018);
- (c) US\$10 million payable following a positive construction decision for the Back Forty Project; and
- (d) US\$30 million payable upon the first drawdown of an appropriate project debt finance facility (the **"Back Forty Fourth Deposit"**), subject to the Back Forty CoC Provision.

In the event of a change of control of Aquila prior to the advancement of the Back Forty Fourth Deposit, the person or entity acquiring control over the Back Forty Project may elect to forego the Back Forty Fourth Deposit, in which case the Back Forty Threshold Stream and Back Forty Tail Stream will reduce to 9.5% and 4.75%, respectively (the **"Back Forty CoC Provision"**). All other terms and conditions of the gold stream will remain unchanged.

The gold stream will be secured by a first priority lien on the Back Forty Project and all assets of Aquila.

As part of the transaction, OBL has purchased US\$10 million of units in Aquila at a price of \$0.26 per unit (the **"Aquila Private Placement"**). Each unit is comprised of one (1) common share and one quarter of one common share purchase warrant, with each full warrant entitling OBL to purchase one (1) common share of Aquila for \$0.34 for a period of 42 months following closing of the Aquila Private Placement. So long as OBL continues to hold more than 10% of the Aquila common shares, OBL will have the right to nominate one representative to Aquila's board of directors and the right to participate in any future equity or equity-linked offerings to maintain its pro rata ownership interest. Joseph de la Plante, current Vice President, Corporate Development of Osisko, was appointed to the board of Aquila.

### ***Closing of a \$300 million Financing of Debentures***

On November 3, 2017, Osisko closed an offering of convertible senior unsecured debentures in an aggregate principal amount of \$300 million (the **"Debentures"**). The offering was comprised of a public offering, by way of a short form prospectus, of \$184 million aggregate principal amount of Debentures and a private placement offering of \$116 million aggregate principal amount of Debentures, including the exercise in full of the underwriters' option. The Debentures were sold on a "bought deal" basis through the 2017 Underwriters.

The Debentures bear interest at a rate of 4.00% per annum, payable semi-annually on June 30 and December 31 each year, commencing on June 30, 2018. The Debentures will be convertible at the holders' option into Osisko Shares at a conversion price equal to \$22.89 per Osisko Share (representing a conversion rate of 43.6872 Osisko Shares per \$1,000 principal amount of Debentures). The Debentures



will mature on December 31, 2022 and may be redeemed by Osisko, in certain circumstances, on or after December 31, 2020.

#### ***Private Placement and Warrant Exercise with Dalradian Resources Inc.***

On October 10, 2017, Osisko announced that it has entered into an agreement with Dalradian pursuant to which Osisko has agreed to purchase 19,217,687 common shares of Dalradian at \$1.47 per common share for a total investment of \$28.3 million. In addition, Osisko exercised 6.25 million warrants at \$1.04 per warrant, bringing the total investment to approximately \$34.8 million. The agreement entered into with Dalradian contains various covenants and rights, including among other things, a standstill, participation rights in favour of Osisko to maintain its pro rata interest in Dalradian and rights to match other offers for project financing.

#### ***Arizona Mining Inc.***

On October 10, 2017, Osisko announced that it has divested its investment in Arizona Mining for gross proceeds of \$32.5 million, generating a gain for Osisko of \$22.8 million on the disposal of the investment, based on the cash cost of the shares.

#### ***Orion Transaction***

On July 31, 2017, Osisko acquired a precious metals portfolio of assets from the Orion Parties consisting of 61 royalties, 6 streams and 7 precious metal offtakes for \$1.1 billion (the “**Orion Transaction**”). The final acquisition price was comprised of US\$504.8 million (\$630.1 million) in cash consideration, which includes an estimate of US\$4.2 million (\$5.1 million) adjustment for the acquired working capital, and 30,906,594 Osisko Shares (the “**Orion Purchase Price**”).

This combination resulted in Osisko holding a total of 131 royalties, streams and offtakes, including 16 revenue-generating assets. Through the Orion Transaction, Osisko acquired a 9.6% diamond stream on the Renard Diamond Mine in addition to a 100% silver stream on the Mantos Blancos Mine. Certain assets are held through an international wholly-owned subsidiary which was renamed Osisko Bermuda Limited.

As part of the Orion Transaction, CDP Investissements Inc., an affiliate of CDPQ, and the Fonds FTQ subscribed for \$200 million and \$75 million in Osisko Shares, respectively, as part of a concurrent private placement (the “**Orion Private Placement**”) to fund a portion of the cash consideration and support the Orion Transaction. A total of 18,887,363 Osisko Shares were issued at a price of \$14.56 per share under the Orion Private Placement. The Orion Private Placement was subject to a 7% capital commitment payment payable partially in shares (2%, representing 385,457 Osisko Shares) and in cash (5%, representing \$13.8 million).

Osisko also drew US\$118 million (\$147.3 million) under its revolving credit facility, settled the foreign exchange forward contracts by disbursing \$275 million to acquire US\$204 million and paid US\$182.8 million (\$228.9 million) from Osisko’s cash and cash equivalents balance.

On closing of the Orion Transaction, Mr. Oskar Lewnowski, founder and Chief Investment Officer of Orion Resource Partners, has been appointed as nominee director to the Osisko Board.

#### ***Acquisition of Additional Gold Royalty on Barkerville Gold Mines Ltd.’s Cariboo Property***

In April 2017, Osisko acquired an additional 0.75% NSR royalty on the Cariboo Property for cash consideration of \$12.5 million, increasing the total NSR royalty held by Osisko to 2.25%.

### ***IDM Mining Ltd.***

On March 8, 2017, Osisko announced that it has subscribed for 29,400,000 common shares of IDM Mining Ltd. at a price of \$0.17 per share and 41,000,000 flow-through common shares at a price of \$0.25 per share for a total subscription price of \$15,248,000. In connection with this private placement, IDM Mining Ltd. granted to Osisko certain pre-emptive rights in respect to purchases or grants of royalties or streams from the Red Mountain gold project.

### ***Acquisition of Silver Stream on Taseko Mines Limited's Gibraltar Copper Mine***

On March 3, 2017, Osisko acquired a silver stream with reference to silver produced at the Gibraltar copper mine located in British Columbia, Canada, from Gibraltar Mines Ltd., a wholly-owned subsidiary of Taseko. Taseko owns a 75% joint venture interest in the Gibraltar copper mine. Osisko paid Taseko cash consideration of US\$33 million for the silver stream. In addition, Osisko will make ongoing payments of US\$2.75 per ounce of silver delivered.

The principal terms of this agreement are as follows:

- Osisko will receive from Taseko an amount equal to 100% of Taseko's share of the silver production on the Gibraltar copper mine until delivery of 5.9 million ounces of silver;
- Osisko paid Taseko a cash consideration of US\$33 million for the silver stream as an advance payment against the purchase price for the sale of silver to Osisko;
- The effective date of the transaction is January 1, 2017. Any silver in respect of which a delivery is made to an offtaker after January 1, 2017, is subject to the stream;
- The silver payability rate is 90% of contained silver in concentrate;
- Osisko will make ongoing payments of US\$2.75 to Taseko per silver ounce delivered;
- Silver deliveries will be the secured, subordinated obligation of Gibraltar Mines Ltd., but will be guaranteed by Taseko; and
- Taseko has granted Osisko 3 million common share purchase warrants (the "**Taseko Warrants**"), with each Taseko Warrant entitling Osisko to purchase one (1) common share of Taseko at an exercise price of \$2.74. The Taseko Warrants will expire on April 1, 2020. If at any point during the life of the Taseko Warrants, Taseko's share price trades at a premium of 25% above the exercise price for a 30-day consecutive period, Taseko may force the exercise of the Taseko Warrants.

### ***Sale of interest in Labrador Iron Ore Royalty Corporation***

Over the course of the fourth quarter of 2016 and January 2017, Osisko sold its 9.8% interest in Labrador Iron Ore Royalty Corporation. Osisko received \$113.4 million in proceeds (including \$98.2 million in 2016). During the period it held shares of Labrador Iron Ore Royalty Corporation, Osisko received \$10.7 million in dividends.

## **2016**

### ***Earn-In Agreement with Osisko Mining Inc.***

In 2015, Osisko was granted a right to acquire a 1% NSR royalty on all properties held by Osisko Mining as of August 25, 2015. This right was exercised by Osisko in October 2016 for \$5 million and included a

1% NSR royalty on the Windfall property. This exercise brought the total NSR royalty held by Osisko on the Windfall property to 1.5%, including a 0.5% NSR royalty acquired in 2015.

Effective October 4, 2016, Osisko entered into an earn-in agreement with Osisko Mining, which was subsequently amended to create two separate earn-in agreements. For further details, see “Description of Business - Exploration and Evaluation Activities”. As part of the transaction, Osisko Mining hired most of the Osisko Québec based exploration team (former Virginia employees) and took over the Québec office lease.

In 2018, Osisko GR acquired a 1% NSR royalty on part of the Windfall property located north of the majority of the mineral resource, hosting a small portion of the mineral resource, and a 2% NSR royalty on the northern part of the Windfall property.

### ***Listing on the NYSE***

On July 6, 2016, the Osisko Shares began to trade on the NYSE under the ticker symbol “OR”.

### ***Highland Copper Company Inc.***

On June 30, 2016, Highland and Osisko agreed to amend the terms of their agreement entered into in December 2014 and to convert the \$10 million secured loan into a 3% NSR royalty on all metals produced from the mineral rights and leases associated with the Copperwood project. Upon closing of the acquisition of the White Pine project, Highland will grant Osisko a 1.5% NSR royalty on all metals produced from the White Pine project, and Osisko’s royalty on Copperwood will be reduced to 1.5%. Following the conversion, Osisko retains its option to purchase for US\$26 million any future silver production from the White Pine and Copperwood projects.

### ***\$10 Million Senior Note with Falco Resources Ltd.***

On May 30, 2016, Osisko entered into an agreement to provide Falco with the 2016 Falco Senior Note under which Osisko has provided Falco with a \$10 million loan, with interest on the principal amount at a rate per annum that is equal to 7%. The Falco Senior Note was subsequently amended on November 29, 2017, February 14, 2018, May 31, 2018 and December 19, 2018 to extend its maturity.

The principal amount under the 2016 Falco Senior Note was reimbursed through the deposit made by Osisko on the closing of the Falco Silver Stream (See “General Development of Osisko’s Business - 2019 - Closing of Silver Stream Transaction with Falco Resources Ltd.”). The interest owed under the 2016 Falco Senior Note was paid on March 13, 2019 through the issuance of Falco Shares at a deemed price of \$0.34 per share.

### ***Arizona Mining Inc.***

On April 25, 2016, Osisko acquired for \$10 million a 1% NSR royalty on any lead/zinc/silver sulfide ores mined from the Hermosa project owned by Arizona Mining. The Hermosa project is located in Santa Cruz County, Arizona. Osisko also subscribed for a total of 8,930,000 units at a price of \$0.56 per unit, for gross proceeds of \$5,000,800. Each unit consisted of one (1) common share of Arizona Mining and one half of one common share purchase warrant, each whole warrant being convertible into one (1) common share of Arizona Mining at a price of \$0.75 for a period of 18 months.

### ***\$173 Million Bought Deal Public Offering***

On February 26, 2016, Osisko closed a bought deal public offering by way of a short form prospectus in all of the provinces of Canada of 11,431,000 units (the “**2016 Units**”), including the full exercise of an over-allotment option by a syndicate of underwriters co-led by BMO Nesbitt Burns Inc. and RBC Dominion

Securities Inc., at a price of \$15.10 per 2016 Unit, representing aggregate gross proceeds to Osisko of \$172.6 million.

Each 2016 Unit was comprised of one (1) Osisko Share and one-half of one common share purchase warrant, each full warrant entitling the holder thereof to purchase one (1) Osisko Share at a price of \$19.08 per Osisko Share for a period of 36 months.

#### ***\$50 Million Financing with Ressources Québec Inc.***

On February 12, 2016, Ressources Québec, a wholly-owned subsidiary of Investissement Québec, subscribed to a five-year \$50 million convertible debenture, bearing interest at an annual rate of 4% payable quarterly (the “**RQ Debenture**”). Ressources Québec will be entitled, at its option, to convert the RQ Debenture into Osisko Shares at a price of \$19.08 per Osisko Share at any time during its term.

#### ***Barkerville Gold Mines Ltd.***

On February 5, 2016, Osisko announced that it closed its previously announced royalty financing and the second tranche of the private placement with Barkerville (a first tranche of \$6 million closed on December 23, 2015). On November 30, 2015, Osisko and Barkerville announced the entering into of a binding letter agreement whereby Osisko agreed to purchase 32,000,000 common shares, issued on a flow-through basis, of Barkerville at a price of \$0.32 per share for total proceeds of \$10.24 million as well as a 1.5% NSR royalty on the Cariboo Property located in British Columbia, Canada, for cash consideration of \$25 million.

Osisko retains a right of first refusal relating to any gold stream offer received by Barkerville with respect to the Cariboo Property.

Osisko was also granted the right to appoint two nominees to the board of directors of Barkerville.

#### ***Osisko Mining Inc. and NioGold Mining Corporation***

On January 11, 2016, Osisko Mining announced its intention to acquire all of the outstanding shares of NioGold by way of a statutory plan of arrangement (the “**NioGold Arrangement**”). In connection with the NioGold Arrangement, Osisko Mining also announced a “best efforts” private placement of 8,333,333 subscription receipts of Osisko Mining (the “**Osisko Mining SRs**”) at a subscription price of \$1.20 per Osisko Mining SR for total gross proceeds of \$10 million (the “**Osisko Mining Offering**”).

Each Osisko Mining SR entitled the holder thereof to receive, for no additional consideration and without further action on the part of the holder thereof, following the satisfaction by Osisko Mining of the release conditions (a) one (1) Osisko Mining Share and (b) one (1) common share purchase warrant of Osisko Mining (an “**Osisko Mining Warrant**”). Each Osisko Mining Warrant is exercisable into one Osisko Mining Share for a period of thirty-six (36) months from the closing date of the Osisko Mining Offering at an exercise price of \$1.44.

The Osisko Mining Offering closed on February 3, 2016, with 10,521,700 Osisko Mining SRs sold (which included a partial exercise of an over-allotment option) for gross proceeds of \$12.6 million.

Osisko subscribed for and received 800,000 Osisko Mining SRs under the Osisko Mining Offering.

In connection with the NioGold Arrangement, which closed on March 11, 2016, Osisko received an additional 9,833,495 Osisko Mining Shares.

## **Significant Acquisitions**

Osisko has not completed any significant acquisition during its most recently completed financial year and for which disclosure is required under Part 8 of NI 51-102.

## **RISK FACTORS**

In evaluating Osisko and its business, the readers should carefully consider the risk factors which follow. These risk factors may not be a definitive list of all risk factors associated with an investment in Osisko or in connection with the business and operations of Osisko.

### **Commodity Price Risks**

***Changes in the market price of the commodities underlying Osisko's interests may affect the profitability of Osisko and the revenue generated therefrom***

The revenue derived by Osisko from its portfolio of royalties, streams and other interests and investments might be significantly affected by changes in the market price of the commodities underlying its agreements. Commodity prices, including those to which Osisko is exposed, fluctuate on a daily basis and are affected by numerous factors beyond the control of Osisko, including levels of supply and demand, industrial development levels, inflation and the level of interest rates, the strength of the U.S. dollar and geopolitical factors. All commodities, by their nature, are subject to wide price fluctuations and future material price declines will result in a decrease in revenue or, in the case of severe declines that cause a suspension or termination of production by relevant operators, a complete cessation of revenue from royalties, streams or other interests applicable to one or more relevant commodities. Moreover, the broader commodity market tends to be cyclical, and a general downturn in overall commodity prices could result in a significant decrease in overall revenue. Any such price decline may result in a material adverse effect on Osisko's profitability, results of operations and financial condition.

### **Third Party Operator Risks**

***Osisko has limited access to data regarding the operation of mines in which it has royalties, streams or other interests***

As a holder of royalties, streams or other interests, Osisko does not serve as the mine's operator and has little or no input into how the operations are conducted. As such, Osisko has varying access to data on the operations or to the actual properties themselves. This could affect its ability to assess the value of its interest or enhance the performance thereof. It is difficult or impossible for Osisko to ensure that the properties are operated in its best interest. Payments related to Osisko's royalties, streams or other interests may be calculated by the payors in a manner different from Osisko's projections. Osisko does, however, have rights of audit with respect to such royalties, streams or other interests.

***Osisko has little or no control over mining operations in which it holds royalties, streams or other interests***

Osisko has few or no contractual rights relating to the operation or development of mines in which it only holds royalties, streams or other interests. Osisko may not be entitled to any material compensation if these mining operations do not meet their forecasted production targets in any specified period or if the mines shut down or discontinue their operations on a temporary or permanent basis. Certain of these properties may not commence production within the time frames anticipated, if at all, and there can be no assurance that the production, if any, from such properties will ultimately meet forecasts or targets. At any time, any of the operators of the mines or their successors may decide to suspend or discontinue operations. Osisko is subject to the risks that the mines shut down on a temporary or permanent basis due to issues including, but not limited to, economic, lack of financial capital, floods, fire, mechanical malfunctions, social unrest,

expropriation, community relations and other risks. These issues are common in the mining industry and can occur frequently.

***Osisko is dependent on the payment or delivery of amounts for royalties, streams or other interests by the owners and operators of certain properties and any delay in or failure of such payments or deliveries will affect the revenues generated by Osisko's asset portfolio***

Royalties, streams and other interests in natural resource properties are largely contractual in nature. Parties to contracts do not always honour contractual terms and contracts themselves may be subject to interpretation or technical defects. To the extent grantors of royalties, streams or other interests do not abide by their contractual obligations, Osisko would be forced to take legal action to enforce its contractual rights. Such litigation may be time consuming and costly and there is no guarantee of success. While any proceedings or actions are pending, or if any decision is determined adversely to Osisko, such litigation may have a material adverse effect on Osisko's profitability, results of operations and financial condition.

In addition, Osisko is dependent to a large extent upon the financial viability and operational effectiveness of owners and operators of the relevant properties. Payments and/or deliveries from production generally flow through the operator and there is a risk of delay and additional expense in receiving such revenues. Payments and/or deliveries may be delayed by restrictions imposed by lenders, delays in the sale or delivery of products, the ability or willingness of smelters and refiners to process mine products, recovery by the operators of expenses incurred in the operation of the properties, the establishment by the operators of reserves for such expenses or the insolvency of the operator. Osisko's rights to payment and/or delivery under the royalties, streams or other interests must, in most cases, be enforced by contract without the protection of a security interest over property that Osisko could readily liquidate. This inhibits Osisko's ability to collect outstanding royalties, streams or other interests upon a default. In the event of a bankruptcy of an operator or owner, Osisko may have a limited prospect for full recovery of revenues. Failure to receive any payments and/or deliveries from the owners and operators of the relevant properties may result in a material and adverse effect on Osisko's profitability, results of operation and financial condition.

***Osisko is exposed to risks related to exploration, permitting, construction and/or development in relation to the projects and properties in which it holds a royalty, stream or other interest***

Many of the projects or properties in which Osisko holds a royalty, stream or other interest in are in the exploration, permitting, construction and/or development stage and such projects are subject to numerous risks, including but not limited to, delays in obtaining equipment, materials and services essential to the exploration, construction and development of such projects in a timely manner, delays or inability to obtain required permits, changes in environmental regulations or other regulations, currency exchange rates, labour shortages, cost escalations and fluctuations in metal prices. There can be no assurance that the owners or operators of such projects will have the financial, technical and operational resources to complete exploration, permitting, construction and/or development of such projects in accordance with current expectations or at all. It is also possible that such owners or operators will require additional capital in order for their projects to become producing mines. Osisko may be asked to provide additional capital to these entities and may decide to do so to preserve the value of its initial investment. There is a risk that the carrying values of certain of Osisko's assets may not be recoverable if the operating entities cannot raise additional capital to continue to explore and develop their assets. The value of Osisko's interests in these projects could thus be negatively affected by many factors, some of which cannot be assessed at the time of investment. Although Osisko undertakes a due diligence process for every investment, mining exploration and development are subject to many risks and it is possible that the value realized by Osisko be less than the original investment.

***Some agreements may provide limited recourse in particular circumstances which may further inhibit Osisko's ability to recover or obtain equitable relief in the event of a default under such agreements***

Osisko's rights to payment under royalties, streams or other interests must, in most cases, be enforced by contract. Osisko's ability to collect outstanding royalties, streams or other interests, or obtain equitable relief

upon cases of default, might be limited pursuant to such contracts. Certain royalty and stream agreements provide for certain protections and security interests in favour of Osisko. However, security arrangements may be difficult to realize upon and also be subordinate, which may cause Osisko to be at a disadvantage in the event of a default. In the event of a bankruptcy, it is possible that an operator or owner claims that Osisko should be treated as an unsecured creditor and that Osisko's rights should be terminated in an insolvency proceeding. Failure to receive payments from the owners and operators of the relevant properties, or termination of Osisko's rights, may result in a material and adverse effect on Osisko's profitability, results of operations and financial condition.

### ***Risks related to mining operations***

Mining operations involve significant risks that even a combination of careful evaluation, experience and knowledge may not eliminate or adequately mitigate. Major expenditures are required to develop metallurgical processes and to construct mining and processing facilities at a particular site. Whether a mineral deposit will be commercially viable depends on a number of factors, some of which are: the particular attributes of the deposit, such as size, grade and proximity to infrastructure; metal prices, which are highly volatile; and governmental regulations, including those relating to prices, taxes, royalties, land tenure, land use, allowable production, importing and exporting of minerals and environmental protection.

Thus, Osisko's business might be impacted by such risks inherent to mining operations and is dependent, among other things, on mining operations conducted by third parties.

### ***Osisko may acquire royalties, streams or other interests in respect of properties that are speculative and there can be no guarantee that mineable deposits will be discovered or developed***

Exploration for metals and minerals is a speculative venture necessarily involving substantial risk. There is no certainty that the expenditures made by the operator of any given project will result in discoveries of commercial quantities of minerals on lands where Osisko holds royalties, streams or other interests.

If mineable deposits are discovered, substantial expenditures are required to establish reserves through drilling, to develop processes to extract the resources and, in the case of new properties, to develop the extraction and processing facilities and infrastructure at any site chosen for extraction. Although substantial benefits may be derived from the discovery of a major deposit, no assurance can be given that resources will be discovered in sufficient quantities to justify commercial operations or that the funds required for development can be obtained on terms acceptable to the operator or at all. Although, in respect of these properties, Osisko intends to only hold royalties, streams or other interests and not be responsible for these expenditures, the operator may not be in a financial position to obtain the necessary funds to advance the project.

### **Operational Risks**

#### ***The properties on which Osisko holds royalties, streams or other interests are subject to exploration and mining risks***

Osisko seeks to acquire royalties, streams or other interests in mineral properties or equity interests in companies that have exploration properties, advanced staged development projects or operating mines. Royalties, streams or other interests are non-operating interests in mining projects that provide the right to revenue or production from the project after deducting specified costs, if any. Mineral exploration and development involves a high degree of risk and few properties which are explored are ultimately developed into producing mines. The long-term profitability of Osisko's operations will be in part directly related to the cost and ultimate success of the operating mines in which Osisko has royalties, streams or other interest or the companies in which Osisko has equity interests, which may be affected by a number of factors beyond Osisko's control.

Operating a producing mine involves many risks, which even a combination of experience, knowledge and careful evaluation may not be able to overcome. Operations in which Osisko has a direct or indirect interest are and will be subject to all the hazards and risks normally incidental to exploration, development and production of mineral resources and mineral reserves, any of which could result in work stoppages, damage to property, and possible environmental damage.

Hazards such as unusual or unexpected geological formations and other conditions such as fire, power outages, flooding, explosions, cave-ins, landslides and the inability to obtain suitable machinery, equipment or labour are involved in mineral exploration, development and operation. Operating companies which operate on properties on which Osisko has royalties, streams or other interests may become subject to liability for pollution, cave-ins or hazards against which they cannot insure or against which they may elect not to insure. The payment of such liabilities may have a material, adverse effect on the financial position of such operating companies, and in turn, may have a material adverse effect on the financial position of Osisko.

In addition, labour disruptions are a hazard to mineral exploration, development and operation. There is always a risk that strikes or other types of conflict with unions or employees may occur at any one of the properties on which Osisko may hold royalties, streams or other interests. Although it is uncertain whether labour disruptions will be used to advocate labour, political or social goals in the future, labour disruptions could have a material adverse effect on the results of operations of the mineral properties in which Osisko may hold an interest.

Agreements pertaining to royalties, streams or other interests are based on mine life and in some instances a drop in metal prices or a change in metallurgy may result in a project being shut down with a material, adverse effect on that company's financial position, and in turn, may have a material adverse effect on the financial position of Osisko.

***The properties held by Osisko or on which Osisko holds royalties, streams or other interests may require permits and licenses***

The properties held by Osisko or on which Osisko holds royalties, streams or other interests, including the mine operations, may require licenses and permits from various governmental authorities. There can be no assurance that the operator of any given project will be able to obtain or maintain, in a timely manner and on terms favourable to such operator, all necessary licenses and permits that may be required to carry out exploration, development and mining operations.

***Mineral resource and mineral reserve estimates have inherent uncertainty***

Mineral resource and mineral reserve figures are only estimates. Such estimates are expressions of judgment based on knowledge, mining experience, analysis of drilling results and industry practices. While Osisko believes that the mineral resource and mineral reserve estimates, as applicable, in respect of properties in which Osisko holds a direct interest or royalties, streams or other interests reflect best estimates performed by or on behalf of the owner of such properties, the estimating of mineral resources and mineral reserves is a subjective process and the accuracy of mineral resource and mineral reserve estimates is a function of the quantity and quality of available data, the accuracy of statistical computations, and the assumptions used and judgments made in interpreting available engineering and geological information. There is significant uncertainty in any mineral resource and mineral reserve estimate and the actual deposits encountered and the economic viability of a deposit may differ materially from estimates. Estimated mineral resources and mineral reserves may have to be re-estimated based on changes in prices of gold or other minerals, further exploration or development activity or actual production experience. This could materially and adversely affect estimates of the volume or grade of mineralization, estimated recovery rates or other important factors that influence such estimates. In addition, mineral resources are not mineral reserves and there is no assurance that any mineral resource estimate will ultimately be reclassified as proven or probable mineral reserves. Mineral resources which are not mineral reserves do not have demonstrated economic viability.



If operators reduce their mineral reserves and mineral resources on properties underlying Osisko's royalties, streams or other interests, this may result in a material and adverse effect on Osisko's profitability, results of operations, financial condition and the trading price of Osisko securities.

### ***Economics of developing mineral properties***

Mineral exploration and development is speculative and involves a high degree of risk. While the discovery of an ore body may result in substantial rewards, few properties which are explored are commercially mineable and ultimately developed into producing mines. There is no assurance that any exploration properties will be commercially mineable.

Should any mineral resources and mineral reserves exist, substantial expenditures will be required to confirm mineral reserves which are sufficient to commercially mine and to obtain the required environmental approvals and permitting required to commence commercial operations. The decision as to whether a property contains a commercially viable mineral deposit and should be brought into production will depend upon the results of exploration programs and/or feasibility studies, and the recommendations of duly qualified engineers and/or geologists, all of which involves significant expense. This decision will involve consideration and evaluation of several significant factors including, but not limited to: (a) costs of bringing a property into production, including exploration and development work, preparation of production feasibility studies and construction of production facilities; (b) availability and costs of financing; (c) ongoing costs of production; (d) metal prices; (e) environmental compliance regulations and restraints (including potential environmental liabilities associated with historical exploration activities); and (f) political climate and/or governmental regulation and control. Development projects are also subject to the successful completion of engineering studies, issuance of necessary governmental permits, and availability of adequate financing. Development projects have no operating history upon which to base estimates of future cash flow.

### ***Factors beyond the control of Osisko***

The potential profitability of mineral properties is dependent upon many factors beyond Osisko's control. For instance, world prices of and markets for minerals are unpredictable, highly volatile, potentially subject to governmental fixing, pegging and/or controls and respond to changes in domestic, international, political, social and economic environments. Another factor is that rates of recovery of minerals from mined ore (assuming that such mineral deposits are known to exist) may vary from the rate experienced in tests and a reduction in the recovery rate will adversely affect profitability and, possibly, the economic viability of a property. Profitability also depends on the costs of operations, including costs of labour, equipment, electricity, environmental compliance or other production inputs. Such costs will fluctuate in ways Osisko cannot predict and are beyond Osisko's control, and such fluctuations will impact on profitability and may eliminate profitability altogether. Additionally, due to worldwide economic uncertainty, the availability and cost of funds for development and other costs have become increasingly difficult, if not impossible, to project. These changes and events may materially affect the financial performance of Osisko.

### ***Influence of third party stakeholders***

The lands held by Osisko or the companies in which Osisko has royalties, streams or other interests, and the roads or other means of access which they utilize or intend to utilize in carrying out work programs or general business mandates, may be subject to interests or claims by third party individuals, groups or companies. In the event that such third parties assert any claims, work programs may be delayed even if such claims are not meritorious or the scope of the work may otherwise be affected. Such delays may result in significant financial loss and loss of opportunity for Osisko.

### ***Foreign operation risk***

Certain properties held by Osisko or the companies in which Osisko has royalties, streams or other interests are located outside of the United States and Canada. The ownership, development and operation of these properties may be subject to additional risks associated with conducting business in foreign countries,

including, depending on the country, nationalization and expropriation, social unrest, political and economic instability, lack of infrastructure, less developed legal and regulatory systems, uncertainties in perfecting mineral titles, crime, violence, corruption, trade barriers, exchange controls and material changes in taxation. These risks may, among other things, limit or disrupt the ownership, development or operation of properties, mines or projects to which such properties relate, restrict the movement of funds, or result in the deprivation of contractual rights or the taking of property by nationalization or expropriation without fair compensation.

### ***Information Systems and Cyber Security***

Osisko relies on its IT infrastructure to meet its business objectives. Osisko uses different IT systems, networks, equipment and software and has adopted security measures to prevent and detect cyber threats. However, Osisko and its counterparties under precious metal purchase agreements, third-party service providers and vendors may be vulnerable to cyber threats, which have been evolving in terms of sophistication and new threats are emerging at an increased rate. Unauthorized third parties may be able to penetrate network security and misappropriate or compromise confidential information, create system disruptions or cause shutdowns to Osisko or its counterparties. Although Osisko has not experienced any losses relating to cyber attacks or other information security breaches, there can be no assurance that there will be no such loss in the future. Significant security breaches or system failures of Osisko or its counterparties, especially if such breach goes undetected for a period of time, may result in significant costs, loss of revenue, fines or lawsuits and damage to reputation. The significance of any cyber security breach is difficult to quantify, but may in certain circumstances be material and could have a material adverse effect on Osisko's business, financial condition and results of operations.

### **Reputational Risks**

#### ***Osisko is subject to reputational risks***

Reputational risk is the risk that an activity undertaken by an organization or its representatives will impair its image in the community or lower public confidence in it, resulting in loss of revenue, legal action or increased regulatory oversight and loss of valuation and share price. Possible sources of reputational risk could come from, but not limited to, operational failures, non-compliance with laws and regulations, or leading an unsuccessful financing. In addition to its risk management policies, controls and procedures, Osisko has a formal Code of Ethics to help manage and support Osisko's reputation.

### **Financial Condition Risks**

#### ***Osisko is subject to risks related to its financial condition***

Osisko's financial condition has an impact on its risk profile. A sound financial condition can allow Osisko to compete for accretive investment opportunities: the better the financial condition, the more it can bid and compete on quality assets. If additional funds are required, the source of funds that may be available to Osisko, in addition to cash flows, is through the issuance of additional equity capital, borrowings or the sale of assets. There is no assurance that such funding will continue to be available to Osisko. Furthermore, even if such financing is available, there can be no assurance that it will be obtained on terms favourable to Osisko or provide Osisko with sufficient funds to meet its objectives, which may adversely affect Osisko's business and financial condition. In addition, failure to comply with financial covenants under Osisko's current or future debt agreements or to make scheduled payments of the principal of, or to pay interest on its indebtedness, would likely result in an event of default under the debt agreements and would allow the lenders to accelerate the debt under these agreements, which may affect Osisko's financial condition.

#### ***Additional financing may result in dilution***

Osisko may require additional funds to further its activities. To obtain such funds, Osisko may issue additional securities including, but not limited to, Osisko Shares or some form of convertible security, the effect of which could result in a substantial dilution of the equity interests of Osisko Shareholders.

There can be no assurance that Osisko will be able to obtain adequate financing in the future or that the terms of such financing will be favourable.

### ***Declaration and payment of dividends***

Any decisions to declare and pay dividends on the Osisko Shares is subject to the discretion of the Osisko Board, based on, among other things, Osisko's earnings, financial requirements for Osisko's operations, the satisfaction of applicable solvency tests for the declaration and payment of dividends and other conditions existing from time to time. As a result, no assurance can be given as to the frequency or amount of any such dividend.

### ***Osisko may be a "passive foreign investment company," or PFIC, under applicable U.S. income tax rules, which could result in adverse tax consequences for United States investors***

If Osisko were to constitute a PFIC for any year during a U.S. holder's holding period, then certain potentially adverse U.S. federal income tax rules would affect the U.S. federal income tax consequences to such U.S. holder resulting from the acquisition, ownership and disposition of Osisko Shares.

The U.S. Treasury Department has not issued specific guidance on how the income and assets of a non-U.S. corporation such as Osisko will be treated under the PFIC rules. Osisko believes, on a more likely than not basis, that it was not a PFIC for its tax year ended December 31, 2018, and, based on its current and anticipated business activities and financial expectations, Osisko expects, on a more likely than not basis that it will not be a PFIC for its current tax year and for the foreseeable future.

The determination as to whether a corporation is, or will be, a PFIC for a particular tax year depends, in part, on the application of complex U.S. federal income tax rules, which are subject to differing interpretations and uncertainty. In addition, there is limited authority on the application of the relevant PFIC rules to entities such as Osisko. Accordingly, there can be no assurance that the Internal Revenue Service will not challenge the views of Osisko concerning its PFIC status. In addition, whether any corporation will be a PFIC for any tax year depends on its assets and income over the course of such tax year, and, as a result, Osisko's PFIC status for its current tax year and any future tax year cannot be predicted with certainty. Each U.S. holder should consult its own tax adviser regarding the PFIC status of Osisko.

### ***Changes in tax legislation or accounting rules could affect the profitability of Osisko***

Changes to, or differing interpretation of, taxation laws or regulations in any of Canada, Australia, Brazil, Chile, Armenia, Kenya, Macedonia, Argentina, Peru, Mexico, United States of America or any of the countries in which Osisko's assets or relevant contracting parties are located could result in some or all of Osisko's profits being subject to additional taxation. No assurance can be given that new taxation rules or accounting policies will not be enacted or that existing rules will not be applied in a manner which could result in Osisko's profits being subject to additional taxation or which could otherwise have a material adverse effect on Osisko's profitability, results of operations, financial condition and the trading price of Osisko's securities. In addition, the introduction of new tax rules or accounting policies, or changes to, or differing interpretations of, or application of, existing tax rules or accounting policies could make royalties, streams or other interests by Osisko less attractive to counterparties. Such changes could adversely affect Osisko's ability to acquire new assets or make future investments.

### ***The CRA's recent focus on foreign income earned by Canadian companies may result in adverse tax consequences for Osisko***

There has been a recent focus by the CRA on income earned by foreign subsidiaries of Canadian companies. The majority of Osisko's offtake and stream assets are owned by and the related revenue is received by its Bermuda wholly-owned subsidiary. Osisko has not received any reassessment or proposal from the CRA in connection with income earned by its foreign subsidiaries. Although management believes that Osisko is in full compliance with Canadian tax law, there can be no assurance that Osisko's structure may not be challenged in future. In the event the CRA successfully challenges Osisko's structure, this could

potentially result in additional federal and provincial taxes and penalties, which could have a material adverse effect on Osisko.

## **Financial Reporting Risks**

### ***Osisko is subject to risks related to financial reporting***

In accordance with statutory requirements and sound management practices, Osisko issues financial statements, which present its financial condition at a given date and its financial performance over a certain period. The risk of misstatement of financial or restatement of financial statements can result in significant losses to Osisko: financial losses, as a result of litigation and fines, losses in market capitalization, reputational losses. Key misstatements would include (a) fraudulent misappropriation of assets; (b) fraudulent misrepresentation of performance motivated by personal gain; and (c) inadequate estimates with an impact on valuation of assets and liabilities.

### ***Osisko may fail to maintain the adequacy of internal control over financial reporting as per the requirements of the Sarbanes-Oxley Act***

Section 404 of the SOX requires an annual assessment by management of the effectiveness of Osisko's internal control over financial reporting and an attestation report by Osisko's external auditor addressing this assessment. While Osisko's internal control over financial reporting for its last completed financial year were effective, Osisko may in the future fail to achieve and maintain the adequacy of its internal control over financial reporting, as such standards are modified, supplemented or amended from time to time, and Osisko may not be able to ensure that it can conclude on an ongoing basis that it has effective internal control over financial reporting in accordance with Section 404 of SOX. Osisko's failure to satisfy the requirements of section 404 of SOX and achieve and maintain the adequacy of its internal control over financial reporting could result in the loss of investor confidence in the reliability of its financial statements, which in turn could harm Osisko's business and negatively impact the trading price of securities. In addition, any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm Osisko's operating results or cause it to fail to meet its reporting obligations. Future acquisitions of companies may provide Osisko with challenges in implementing the required processes, procedures and controls in its acquired operations. Acquired companies may not have disclosure controls and procedures or internal control over financial reporting that are as thorough or effective as those currently applicable to Osisko.

No evaluation can provide complete assurance that Osisko's internal control over financial reporting will detect or uncover all failures of persons within Osisko to disclose material information otherwise required to be reported. The effectiveness of Osisko's controls and procedures could also be limited by simple errors or faulty judgments. In addition, should Osisko expand in the future, the challenges involved in implementing appropriate internal control over financial reporting will increase and will require that Osisko continue to improve its internal control over financial reporting. Although Osisko intends to devote substantial time and incur substantial costs, as necessary, to ensure compliance, Osisko cannot be certain that it will be successful in complying with Section 404 on an ongoing basis.

## **Human Resources Risks**

### ***Osisko may experience difficulty attracting and retaining qualified management and specialized technical personnel to grow its business, which could have a material adverse effect on Osisko's business and financial condition***

Osisko may be dependent on the services of key executives and other highly skilled personnel focused on advancing its corporate objectives as well as the identification of new opportunities for growth and funding. The loss of these persons or its inability to attract and retain additional highly skilled employees required for its activities may have a material adverse effect on Osisko's business and financial condition. Osisko implemented a succession plan in order to mitigate the risk of being dependent on such key management

and specialized technical personnel. From time to time, Osisko may also need to identify and retain additional skilled management and specialized technical personnel to efficiently operate its business.

Osisko or the companies in which Osisko holds royalties, streams offtake or other interests may remain highly dependent upon contractors and third parties in the performance of their exploration, development and operational activities. There can be no guarantee that such contractors and third parties will be available to carry out such activities on their behalf or be available upon commercially acceptable terms.

## **Currency Risks**

***Osisko's revenue, earnings, the value of its treasury and the value it records for its assets are subject to variations in foreign exchange rates, which may adversely affect the revenue generated by the asset portfolio or cause adjustments to the recorded value of assets***

Osisko's main activities and offices are currently located in Canada and the costs associated with Osisko's activities are in majority denominated in Canadian dollar. However, Osisko's revenues from the sale of gold, silver or other commodities are in U.S. dollars. Osisko is subject to foreign currency fluctuations and inflationary pressures, which may have a material and adverse effect on Osisko's profitability, results of operations and financial condition. There can be no assurance that the steps taken by management to address variations in foreign exchange rates will eliminate all adverse effects and Osisko may suffer losses due to adverse foreign currency rate fluctuations.

## **Financial Markets Risks**

***Osisko is subject to risks related to financial markets***

Failure of financial markets can have a significant impact on the valuation of Osisko and its assets, and increasing financial and takeover risks.

## **Fluctuation in market value of Osisko Shares**

The market price of the Osisko Shares is affected by many variables not directly related to the corporate performance of Osisko, including the strength of the economy generally, the availability and attractiveness of alternative investments, and the breadth of the public market for the securities. The effect of these and other factors on the market price of Osisko Shares in the future cannot be predicted.

Securities markets have a high level of price and volume volatility, and the market price of securities of many companies have experienced wide fluctuations in price which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. Factors unrelated to the financial performance or prospects of Osisko include macroeconomic developments in North America and globally, and market perceptions of the attractiveness of particular industries or asset classes. There can be no assurance that continued fluctuations in mineral prices will not occur. As a result of any of these factors, the market price of Osisko's securities at any given time may not accurately reflect the long term value of Osisko.

## **Equity Price Risk and Liquidity of Investments**

Osisko is exposed to equity price risk as a result of holding a portfolio of investments in publicly listed companies. Just as investing in Osisko is inherent with risks such as those set out in this Annual Information Form, by investing in these other companies, Osisko is exposed to the risks associated with owning equity securities and those risks inherent in the investee companies. Osisko may have difficulty in selling its investments in exploration and mining companies in the event such sales would be contemplated.

## **Legal Risks**

### ***Osisko is subject to significant governmental regulations***

Osisko's activities are subject to extensive federal, provincial and local laws and regulations governing various matters, including environmental protection; management and use of toxic substances and explosives; management of natural resources; exploration of mineral properties; exports; price controls; taxation; labour standards and occupational health and safety, including mine safety; and historic and cultural preservation.

Failure to comply with applicable laws and regulations may result in civil or criminal fines or penalties or enforcement actions, including orders issued by regulatory or judicial authorities enjoining or curtailing operations or requiring corrective measures, installation of additional equipment or remedial actions, any of which could result in significant expenditures. Osisko may also be required to compensate private parties suffering loss or damage by reason of a breach of such laws, regulations or permitting requirements. It is also possible that future laws and regulations, or more stringent enforcement of current laws and regulations by governmental authorities, could cause additional expense, capital expenditures, restrictions on or suspensions of Osisko's activities and delays in the exploration of properties.

### ***Osisko's business is subject to evolving corporate governance and public disclosure regulations that have increased both Osisko's compliance costs and the risk of non compliance, which could have an adverse effect on the price of Osisko's securities***

Osisko is subject to changing rules and regulations promulgated by a number of Canadian and U.S. governmental and self-regulated organizations. These rules and regulations continue to evolve in scope and complexity and many new requirements have been created, making compliance more difficult and uncertain. Osisko's efforts to comply with rules and regulations have resulted in, and are likely to continue to result in, increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities.

### ***Osisko may be subject to liability or sustain loss for certain risks and hazards against which it does not or cannot economically insure***

Mining is capital intensive and subject to a number of risks and hazards, including environmental pollution, accidents or spills, industrial and transportation accidents, labour disputes, changes in the regulatory environment, natural phenomena (such as inclement weather conditions, earthquakes and encountering unusual or unexpected geological conditions). Such risk and hazards might impact the business of Osisko or of the companies in which Osisko holds royalties, streams or other interests. Consequently, many of the foregoing risks and hazards could result in damage to, or destruction of, mineral properties or future processing facilities, personal injury or death, environmental damage, delays in or interruption of or cessation of their exploration or development activities, delay in or inability to receive required regulatory approvals, or costs, monetary losses and potential legal liability and adverse governmental action. Osisko, or the companies in which Osisko holds royalties, streams or other interests, may be subject to liability or sustain loss for certain risks and hazards against which they do not or cannot insure or against which they may reasonably elect not to insure because of the cost. This lack of insurance coverage could result in material economic harm to Osisko.

### ***There can be no assurance of title to property***

There may be challenges to title to the mineral properties held by Osisko or the companies in which Osisko has royalties, streams or other interests. If there are title defects with respect to any such properties, they might be required to compensate other persons or perhaps reduce its interest in the affected property. Also, in any such case, the investigation and resolution of title issues would divert management's time from ongoing programs.

### ***There may be amendments to laws***

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

### ***Disputes may arise over the existence, validity, enforceability and geographic extent of royalties, streams or other interests***

Royalties, streams and other interests are subject to title and other defects and contestation by operators of mining projects and holders of mining rights, and these risks may be difficult to identify. While Osisko seeks to confirm the existence, validity, enforceability and geographic extent of the royalties, streams and other interests it holds, there can be no assurance that disputes over these and other matters will not arise.

### ***The properties on which Osisko holds royalties, streams or other interests or the companies in which Osisko has an equity interest may be the subject of litigation***

Potential litigation may arise on a property on which Osisko holds royalties, streams or other interests (for example litigation between joint venture partners or original property owners) or with respect to a company in which Osisko holds an equity interest. As a holder of royalties, streams or other interests, Osisko will not generally have any influence on the litigation nor will it generally have access to data.

### ***The registration of royalties, streams or other interests may not protect Osisko's interests***

The right to record or register royalties, streams or other interests in various registries or mining recorders offices may not necessarily provide any protection to Osisko. Accordingly, Osisko may be subject to risk from third parties.

### ***Environmental risks and hazards***

Osisko and the companies in which Osisko has royalties, streams or other interest are subject to environmental regulation in the jurisdictions in which they operate. These regulations mandate, among other things, the maintenance of air and water quality standards and land reclamation. They also set forth limitations on the general, transportation, storage and disposal of solid and hazardous waste. Environmental legislation is evolving in a manner that will require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees. There is no assurance that future changes in environmental regulation, if any, will not adversely affect Osisko's operations. Environmental hazards may exist on the properties which are unknown to Osisko at present and which have been caused by previous or existing owners or operators of the properties. Reclamation costs are uncertain and planned expenditures estimated by management may differ from the actual expenditures required.

### ***Foreign countries and regulatory requirements***

Osisko and the companies in which Osisko holds royalties, streams or other interests have investments in properties and projects located in foreign countries. The carrying values of these properties and the ability to advance development plans or bring the projects to production may be adversely affected by whatever political instability and legal and economic uncertainty might exist in such countries. These risks may limit or disrupt projects, restrict the movement of funds or result in the deprivation of contractual rights or the taking of property by nationalization, expropriation or other means without fair compensation.

There can be no assurance that industries which are deemed of national or strategic importance in countries in which Osisko has assets, including mineral exploration, production and development, will not be

nationalized. The risk exists that further government limitations, restrictions or requirements, not presently foreseen, will be implemented. Changes in policies intended to alter laws regulating the mining industry could have a material adverse effect on Osisko. There can be no assurance that Osisko's assets in these countries will not be subject to nationalization, requisition or confiscation, whether legitimate or not, by an authority or body.

In addition, in the event of a dispute arising from foreign operations, Osisko may be subject to the exclusive jurisdiction of foreign courts or may not be successful in subjecting foreign persons to the jurisdiction of courts in Canada. Osisko also may be hindered or prevented from enforcing its rights with respect to a governmental instrumentality because of the doctrine of sovereign immunity. It is not possible for Osisko to accurately predict such developments or changes in laws or policy or to the extent to which any such developments or changes may have a material adverse effect on Osisko's operations.

### **Conflict of Interest Risks**

#### ***Some of Osisko's directors and officers may have conflicts of interest as a result of their involvement with other natural resource companies***

Some of the persons who are directors and officers of Osisko are directors or officers of other natural resource or mining-related companies and these associations may give rise to conflicts of interest from time to time. As a result of these conflicts of interest, Osisko may miss the opportunity to participate in certain transactions, which may have a material adverse effect on Osisko's financial position.

### **Merger and Acquisitions Risks**

#### ***Any mergers, acquisitions or joint ventures would be accompanied by risks***

Osisko may evaluate from time to time opportunities to merge, acquire and joint venture assets and businesses. Global landscape has changed for mergers and acquisitions and there are risks associated to such transactions due to liabilities and evaluations with the aggressive timelines of closing transactions from increased competition. There is also a risk that the review and examination process of a potential investment might be inadequate and cause material negative outcomes. These acquisitions may be significant in size, may change the scale of Osisko's business and may expose it to new geographic, political, operating, financial and geological risks. Osisko's success in its acquisition activities will depend on its ability to identify suitable acquisition candidates and partners, acquire or joint venture them on acceptable terms and integrate their operations successfully with those of Osisko. Any acquisitions may be accompanied by risks, such as: (i) the difficulty of assimilating the operations and personnel of any acquired companies; (ii) the potential disruption of Osisko's ongoing business; (iii) the inability of management to maximize the financial and strategic position of Osisko through the successful incorporation of acquired assets and businesses or joint ventures; (iv) additional expenses associated with amortization of acquired intangible assets; the maintenance of uniform standards, controls, procedures and policies; (v) the impairment of relationships with employees, customers and contractors as a result of any integration of new management personnel; (vi) dilution of Osisko's present shareholders or of its interests in its subsidiaries or assets as a result of the issuance of shares to pay for acquisitions or the decision to grant interests to a joint venture partner; and (vii) the potential unknown liabilities associated with acquired assets and businesses. There can be no assurance that Osisko would be successful in overcoming these risks or any other problems encountered in connection with such acquisitions or joint ventures. There may be no right for shareholders to evaluate the merits or risks of any future acquisition or joint venture undertaken except as required by applicable laws and regulations.

#### ***Mergers and acquisitions contemplated by Osisko may require third party approvals***

Osisko may intend to enter into agreements to acquire royalties, streams or other interests that require the consent or approval of third parties in order to complete the contemplated acquisition. There can be no assurance that such third parties, which may include shareholders of the entity disposing of the interests,



regulatory bodies or entities with an interest in the applicable property or others, will provide the required approval or consent in a timely manner, or at all. Failure to complete acquisitions may result in a material adverse effect on Osisko's profitability, results of operation and financial condition.

***Osisko faces competition and the mining industry is competitive at all of its stages***

Many companies and investors are engaged in the search for and the acquisition of royalties, streams or other interests, and there is a limited supply of desirable mineral interests. The mineral exploration business is competitive in all phases. Many companies and investors are engaged in the acquisition of royalties, streams or other interests, including pension funds, private funds, mining companies, operators and large, established companies with substantial financial resources, operational capabilities and long earnings records. Osisko may be at a competitive disadvantage in acquiring interests in natural resource properties, whether by way of royalties, streams or other form of investment, as many competitors have greater financial resources and technical staffs. There can be no assurance that Osisko will be able to compete successfully against other companies and investors in acquiring interests in new natural resource properties and royalties, streams or other interests. In addition, Osisko may be unable to make acquisitions at acceptable valuations and on terms it considers to be acceptable. Osisko's inability to acquire additional royalties, streams or other interests in mineral properties may result in a material and adverse effect on Osisko's profitability, results of operation and financial condition.

In addition, there is no assurance that a ready market will exist for the sale of commercial quantities of metals. Factors beyond the control of Osisko may affect the marketability of any substances discovered. These factors include market fluctuations, the proximity and capacity of natural resource markets and processing equipment, government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of minerals and environmental protection. The exact effect of these factors cannot be accurately predicted, but the combination of these factors may result in Osisko not receiving any future payments related to royalties, streams or other interests or losing value on its equity investments.

**Fraud Risks**

***Osisko is subject to potential fraud and corruption***

Osisko is subject to risks related to potential to gain benefits from improper transactions (purchasing, gold, payroll) and financial reporting to hide operational deficiencies or enhance remuneration. Other risks include the potential for fraud and corruption by suppliers, personnel or government officials and which may implicate Osisko, compliance with applicable anti-corruption laws, by virtue of Osisko operating in jurisdictions that may be vulnerable to the possibility of bribery, collusion, kickbacks, theft, improper commissions, facilitation payments, conflicts of interest and related party transactions and Osisko's possible failure to identify, manage and mitigate instances of fraud, corruption, or violations of its Code of Ethics and applicable regulatory requirements.

**MATERIAL MINERAL PROJECTS**

**The Canadian Malartic Royalty**

Pursuant to the Canadian Malartic Royalty Agreement, Osisko holds a real right in the Canadian Malartic Properties (and the associated ores, minerals and mineral resources and by-products thereof which may be extracted from the Canadian Malartic Properties) and Canadian Malartic GP has agreed to pay Osisko a 5% NSR royalty from production of metals, ores and other materials recovered from the Canadian Malartic Properties (the "**Canadian Malartic Royalty**"). The term of the Canadian Malartic Royalty Agreement is perpetual.

For a description of the Canadian Malartic Properties, see “Schedule B - Technical Information underlying the Canadian Malartic Properties”.

Prior to the commencement of each fiscal year, Osisko may elect to receive payment of the Canadian Malartic Royalty for such fiscal year to the extent relating to gold and silver as an in-kind credit. If Osisko has elected to receive the in-kind royalty, where precious metals are shipped in the form of dore, Osisko's account shall be credited with 5% of the refined gold and 5% of the refined silver credited as soon as practicable and in any event no later than five (5) business days after the refined gold or refined silver is credited, subject to further adjustment. Since 2014, Osisko has elected to receive the Canadian Malartic Royalty in-kind. The Canadian Malartic Royalty is payable quarterly and all payments pursuant to the Canadian Malartic Royalty to be paid in cash must be paid in U.S. dollars.

Osisko has the right to inspect the Canadian Malartic Properties and to inspect and audit books and records upon 20 days' prior notice to Canadian Malartic GP. Canadian Malartic GP is required to deliver to Osisko an annual forecast report.

If Canadian Malartic GP intends to abandon any portion of the Canadian Malartic Properties, Osisko can elect to have such portion conveyed to it, subject to the satisfaction of certain conditions.

Canadian Malartic GP is required to pay Osisko a \$0.40 per tonne milling fee in respect of ore milled at the Canadian Malartic Properties after June 16, 2021 that is not produced from the Canadian Malartic Properties provided no fee is payable in respect of any tonnes of ore milled in excess of 65,000 tpd.

Osisko may assign all of its rights in the Canadian Malartic Royalty without the prior consent of Canadian Malartic GP. Canadian Malartic GP may not assign or otherwise convey the Canadian Malartic Properties unless certain conditions are satisfied.

A deed of hypothec was entered into in order to hypothecate the Canadian Malartic Properties in favour of Osisko and securing payment of the Canadian Malartic Royalty subject to certain terms and conditions. The hypothec is first-ranking subject to, among other things, security existing at the time of execution of the Canadian Malartic Royalty Agreement. The Canadian Malartic Royalty Agreement has been published at the Québec Public Register of Real and Immovable Mining Rights.

### **The Éléonore Royalty**

Pursuant to the terms of the Éléonore Royalty Agreement, Osisko holds a perpetual sliding-scale production royalty calculated on the NSR from all production from the Éléonore Property (the “**Éléonore Royalty**”).

For a description of the Éléonore Mine, see “Schedule C - Technical Information underlying the Éléonore Mine”.

The percentage applicable for gold is (a) set at 2.0% on the first three million ounces of gold; (b) increases by 0.25% per million ounces thereafter; (c) is subject to a 10% increase if the spot gold price is above US\$500 per ounce; and (d) will not be higher than 3.5%.

<b>Royalty Percentage Relative to the Total Ounces of Gold Produced from the Éléonore Property</b>	
<b>Royalty Percentage</b>	<b>Gold Ounces Produced from the Éléonore Property</b>
2.0%	On the first three (3) million ounces
2.25%	On the cumulative ounces produced between 3 million ounces and 4 million ounces
+ 0.25%	For every additional million ounces of gold produced above 4 million ounces

Royalty Percentage Relative to the Price of Gold	
The applicable Royalty Percentage less 10% of applicable Royalty Percentage	If price of gold less than or equal to US\$350 / ounce
The applicable Royalty Percentage less 5% of applicable Royalty Percentage	If price of gold greater than US\$350 / ounce but less than or equal to US\$400 / ounce
The applicable Royalty Percentage	If price of gold greater than US\$400 / ounce but less than or equal to US\$450 / ounce
The applicable Royalty Percentage plus 5% of applicable Royalty Percentage	If price of gold greater than US\$450 / ounce but less than or equal to US\$500 / ounce
The applicable Royalty Percentage plus 10% of applicable Royalty Percentage	If price of gold greater than US\$500 / ounce

The aggregate production royalty in respect of all precious metals other than gold is 2% NSR. The aggregate production royalty in respect of other minerals is 2% NSR.

All cash payments pursuant to the Éléonore Royalty Agreement must be paid in U.S. dollars. Osisko may elect to receive payment of the Éléonore Royalty on precious metals as an in-kind credit. Osisko has elected to receive the Éléonore Royalty in-kind since 2015 and does not anticipate to change its election to cash payments.

Osisko may not assign all of its rights in the Éléonore Royalty unless certain conditions are satisfied.

A deed of hypothec was entered into hypothecating the Éléonore Property (including the land, the buildings that are or will be erected thereon, and the property that is or will be, by accession or otherwise, incorporated into, united with, or attached or joined to the immovable) and securing payment of the Éléonore Royalty, subject to certain terms and conditions.

### The Renard Stream

Stornoway's Renard Diamond Mine is Québec's first and Canada's sixth producing diamond mine. It is located approximately 250 km north of the Cree community of Mistissini and 350 km north of Chibougamau in the James Bay region of north-central Québec. Construction on the project commenced on July 10, 2014, and commercial production was declared on January 1, 2017.

For a description of the Renard Diamond Mine, see "Schedule D - Technical Information underlying the Renard Diamond Mine".

The following is a summary of the material terms of the Renard Streaming Agreement for the Forward Sale of Diamonds:

- The term of the Renard Streaming Agreement for the Forward Sale of Diamonds is until July 8, 2054, with automatic renewals for additional terms of 10 years each, subject to the Renard Buyers' right to terminate;
- Under the terms of the Renard Streaming Agreement for the Forward Sale of Diamonds, FCDC sold a 20% undivided interest (in a proportion of 9.6% to Orion Stream I, 4% to CDPQ, 4% to BTO Shine L.P. and 2.4% to other purchasers) (the "**Subject Diamond Interest**") in each Subject Diamond;
- The Renard Buyers were required under the Renard Streaming Agreement for the Forward Sale of Diamonds to make certain up-front payments to FCDC, representing prepayment of a portion of the purchase price payable for the Subject Diamonds Interest, in an aggregate amount of the Renard Deposit, disbursed in three installments as follows: (a) a first installment of US\$80 million, which was paid on March 31, 2015; (b) a second installment of US\$80 million, which was paid on September 30, 2015; and (c) a third installment of US\$90 million, which was paid on

March 30, 2016. The Renard Deposit provides a partial offset against the purchase price for the Subject Diamonds Interest, as described below;

- The purchase price for the Subject Diamonds Interest in each Subject Diamond is: (a) until the Renard Deposit has been fully offset, equal to the Gross Proceeds payable by payment of the Per Carat Cash Price in cash, with any amount by which the Gross Proceeds exceeds the Per Carat Cash Price being offset against the Renard Deposit, and (b) once the Renard Deposit has been fully offset, equal to the Per Carat Cash Price; and
- Marketing expenses associated with the sale of the Subject Diamonds Interest in each Subject Diamond are borne by the Renard Buyers; provided that such expenses do not exceed 3% of the Gross Proceeds from the sale of each Subject Diamond Interest in the Subject Diamonds. Such expenses are deducted from the Gross Proceeds transferred to the Renard Buyers upon the sale of each Subject Diamond.

On October 2, 2018, Osisko announced that it has entered into the Amended Renard Streaming Agreement with Stornoway in relation to the Renard Stream. As part of the Amended Renard Streaming Agreement, Osisko, along with the Renard Streamers, paid Stornoway the U.S. dollar equivalent of \$45 million in cash (\$21.6 million attributable to Osisko) as an additional up-front deposit to Stornoway.

The terms of the Amended Renard Streaming Agreement provide that the Renard Streamers shall continue to hold a 20% undivided interest (9.6% stream attributable to Osisko) in all diamonds produced from the Renard mining property for the life of the mine (prior to the amendment, the stream was applicable to all diamonds produced from the first five (5) project kimberlites to be mined at Renard for the life of mine and the first 30 million carats from the property overall). Upon the completion of a sale of diamonds, the Renard Streamers will remit to Stornoway a cash transfer payment which shall be the lesser of 40% of achieved sales price and US\$40 per carat (prior to the amendment, the cash transfer was a fixed amount of US\$50 per carat escalating at 1% per annum).

In addition, for the purpose of calculating stream remittances, Stornoway shall separately sell any diamonds smaller than the +7 DTC sieve size that are recovered in excess of the maximum agreed-upon proportion within a sale of run of mine (ROM) diamonds (the excess small diamonds, or incidentals). In this manner, Stornoway shall restrict the proportion of small diamonds contained in a run of mine sale such that the Renard Streamers and Stornoway will be fully aligned on upside price exposure with downside protection on price and product mix.

The Renard Stream Amendment is part of a series of financing transactions with Stornoway's lenders and key stakeholders that provide Stornoway with greater financial and operational flexibility representing up to \$129 million in additional liquidity in the near term as the mine ramps up its operations.

### **The Mantos Stream**

On September 11, 2015, Mantos, as seller and TitheCo, as purchaser, entered into the Mantos Stream Agreement, that was subsequently amended and restated on March 9, 2016 and on July 31, 2017.

The following is a summary of the material terms of the Mantos Stream Agreement:

- The term of the Mantos Stream Agreement will be for the life of mine;
- Stream percentage, subject to reduction, of 100% of payable silver from the Mantos Blancos Mine until 19,300,000 ounces have been delivered, after which the stream percentage will be 30%;
- The purchase price for silver under the Mantos Stream Agreement is the Mantos Silver Purchase Price for each ounce of refined silver sold and delivered and/or credited by Mantos to OBL;
- In respect of any month, OBL may elect, on 30 days' prior notice to Mantos, to reduce (a) the

designated percentage of payable silver from 100% to 75%, and (b) the Mantos Silver Purchase Price to US\$0;

- Provided that no less than 1,990,000 ounces of refined silver has been delivered/credited by Mantos to OBL, Mantos may elect to reduce the amount of refined silver to be delivered and sold to OBL by 50%, in which case Mantos shall make a cash payment of US\$70 million to OBL; and
- TitheCo (now OBL) made cash deposits in two installments, in the aggregate amount of US\$82.5 in October 2015.

## DIVIDENDS

### ***Dividend Program and Dividend Payments***

On November 17, 2014, Osisko announced the initiation of a quarterly dividend program. Since the initiation of the program, Osisko declared dividends for the following quarters:

<b>Declaration Date</b>	<b>Dividend per Share</b>	<b>Record Date<sup>(i)</sup></b>	<b>Payment Date<sup>(i)</sup></b>	<b>Dividends Paid or Payable</b>
	\$			\$
Year 2014	0.03	n/a	n/a	1,551,000
Year 2015	0.13	n/a	n/a	12,229,000
Year 2016	0.16	n/a	n/a	17,037,000
Year 2017	0.18	n/a	n/a	24,275,000
February 16, 2018	0.05	March 30, 2018	April 16, 2018	7,811,000
May 3, 2018	0.05	June 29, 2018	July 16, 2018	7,811,000
August 2, 2018	0.05	September 28, 2018	October 15, 2018	7,812,000
November 6, 2018	0.05	December 31, 2018	January 15, 2019	7,779,000
Year 2018	<u>0.20</u>			<u>31,213,000</u>
February 20, 2019	0.05	March 29, 2019	April 15, 2019	tbd <sup>(ii)</sup>

(i) Not applicable ("n/a") for annual summaries.

(ii) To be determined ("tbd") on March 29, 2019 based on the number of shares outstanding and the number of shares participating in the Dividend Reinvestment Plan on the record date.

### ***Dividend Reinvestment Plan***

In 2015, Osisko implemented the Dividend Reinvestment Plan. The Dividend Reinvestment Plan allows Canadian shareholders and U.S. shareholders (commencing with the dividend paid on October 16, 2017 for U.S. shareholders) to reinvest their cash dividends into additional Osisko shares either purchased on the open market through the facilities of the TSX or the NYSE, or issued directly from treasury by Osisko, or acquired by a combination thereof. In the case of a treasury issuance, the price will be the weighted average price of the Osisko Shares on the TSX or the NYSE during the five (5) trading days immediately preceding the dividend payment date, less a discount, if any, of up to 5%, at Osisko's sole election. No commissions, service charges or brokerage fees are payable by shareholders who elect to participate in the Dividend Reinvestment Plan.

As at December 31, 2018, the holders of 29,627,597 Osisko Shares had elected to participate in the Dividend Reinvestment Plan, representing dividends payable of \$1.5 million. During the year ended

December 31, 2018, Osisko issued 310,492 Osisko Shares under the Dividend Reinvestment Plan, at a discount rate of 3%.

## **DESCRIPTION OF CAPITAL STRUCTURE**

### **Osisko Shares**

Osisko is authorized to issue an unlimited number of Osisko Shares without nominal or par value.

Subject to the rights and restrictions attaching to the Osisko Preferred Shares issuable in series and to the terms of an amended and restated shareholder rights plan dated May 4, 2017, the rights, privileges, conditions and restrictions attaching to the Osisko Shares, as a class, are equal in all respects and include the following rights.

#### ***Dividends***

Subject to the rights and restrictions attaching to any series of Osisko Preferred Shares, the holders of the Osisko Shares shall have the right to receive, if, as and when declared by the Osisko Board, any dividend on such dates and for such amounts as the Osisko Board may from time to time determine.

#### ***Participation in case of Dissolution or Liquidation***

Subject to the rights and restrictions attaching to any series of Osisko Preferred Shares, the holders of the Osisko Shares shall have the right, upon the liquidation, dissolution or winding-up of Osisko, to receive the remaining property of Osisko.

#### ***Right to Vote***

The holders of the Osisko Shares shall have the right to one (1) vote at any meeting of the shareholders of Osisko, except meetings at which only holders of any series of Osisko Preferred Shares are entitled to vote.

As of the date hereof, 155,141,744 Osisko Shares were issued and outstanding.

### **Osisko Preferred Shares**

The rights and restrictions attached to the preferred shares of Osisko issuable in series (the “**Osisko Preferred Shares**”) are as follows.

#### ***Issuance in Series***

The Osisko Preferred Shares may be issued in one or more series and subject as hereinafter provided and subject to the provisions of the QBCA, the Osisko Board shall determine, by resolution, before the issue of each series, the designation, rights and restrictions to be attached thereto, including, but without in any way limiting or restricting the generality of the foregoing: (a) the right, as the case may be, to receive dividends, the form of payment of dividends, the rate or amount or method of calculation of dividends, whether cumulative or non-cumulative, the date or dates and places of payment and the date or dates from which such dividends shall accrue or become payable; (b) the rights and/or obligations, if any, of Osisko or of the holders thereof with respect to the purchase or redemption of the Osisko Preferred Shares and the consideration for and the terms and conditions of any such purchase or redemption; (c) the conversion or exchange rights, if any, and the conditions attaching thereto; (d) the restrictions, if any, as to the payment of dividends on shares of Osisko ranking junior to the Osisko Preferred Shares; and (e) any other provisions deemed expedient by the directors, the whole subject to the issuance of a Certificate of Amendment setting forth the number and the designation, as well as the rights and restrictions to be attached to the Osisko Preferred Shares of such series.

### ***Dividends***

The Osisko Preferred Shares shall, with respect to the payment of dividends, be entitled to preference over any other class of shares of Osisko ranking junior to the Osisko Preferred Shares, and no dividends shall at any time be declared or paid or set apart for payment on any other shares of Osisko ranking junior to the Osisko Preferred Shares, nor shall Osisko call for redemption or purchase for cancellation any of the Osisko Preferred Shares unless at the date of such declaration, payment, setting apart for payment or call for redemption or purchase, as the case may be, all cumulative dividends up to and including the dividend payment for the last completed period for which such cumulative dividends shall be payable shall have been declared and paid or set apart for payment in respect of each series of cumulative Osisko Preferred Shares then issued and outstanding and the non-cumulative dividend payment for the then current fiscal year and any declared and unpaid non-cumulative dividends shall have been paid or set apart for payment in respect of each series of non-cumulative Osisko Preferred Shares then issued and outstanding.

### ***Liquidation or Dissolution***

In the event of the liquidation, dissolution or winding-up of Osisko or other distribution of assets of Osisko among shareholders for the purpose of winding-up its affairs, the holders of the Osisko Preferred Shares shall be entitled to receive, before any amount shall be paid to, or any property or assets of Osisko distributed among the holders of the Osisko Shares or of shares of any other class of shares of Osisko ranking junior to the Osisko Preferred Shares, and to the extent provided for with respect to each series, the amount of the consideration received by Osisko for such Osisko Preferred Shares, such premiums, if any, as has been provided for with respect to such series together with, in the case of cumulative Osisko Preferred Shares, all unpaid accrued dividends (which for such purpose shall be calculated as if such cumulative dividends were accruing from day to day for the period from the latest of the following dates, namely (a) the date fixed by the Osisko Board at the time of allotment and issue of such shares or if such date is not fixed, the date of their allotment and issue, or (b) the date of expiration of the last period for which cumulative dividends have been paid, up to and including the date of distribution) and, in the case of non-cumulative Osisko Preferred Shares, all declared and unpaid dividends. After payment to the holders of the Osisko Preferred Shares of the amounts so payable to them, they shall not be entitled to share in any further distribution of the property or assets of Osisko.

### ***Equal Rank of All Series***

The Osisko Preferred Shares of each series shall rank *pari passu* with the Osisko Preferred Shares of every other series with respect to the payment of dividends, as the case may be, and the distribution of assets in the event of the liquidation, dissolution or winding-up of Osisko, whether voluntary or involuntary, provided, however, that in the event of there being insufficient assets to satisfy in full the repayment of all moneys owing to the holders of Osisko Preferred Shares, such assets shall be applied rateably to the repayment of the amount paid up on such Osisko Preferred Shares and, then, to the payment of all unpaid accrued cumulative dividends, whether declared or not, and all declared and unpaid non-cumulative dividends.

### ***Voting Rights***

Subject to the provisions of the QBCA and, except as otherwise expressly provided herein, the holders of any series of the Osisko Preferred Shares shall not, as such, have any voting rights for the election of directors or for any other purpose nor shall they be entitled to receive notice of or to attend shareholders' meetings.

### ***Amendments***

As long as any of the Osisko Preferred Shares are outstanding, Osisko may not, except with the approval of the holders of the Osisko Preferred Shares hereinafter specified and after having complied with the relevant provisions of the QBCA, create any other shares ranking in priority to or *pari passu* with the Osisko Preferred Shares, voluntarily liquidate or dissolve Osisko or effect any reduction of capital involving a

distribution of assets on other shares of its share capital or repeal, amend or otherwise alter any of the provisions relating to the Osisko Preferred Shares as a class.

Any approval of the holders of the Osisko Preferred Shares as aforesaid shall be deemed to have been sufficiently given if contained in a resolution adopted by a majority of not less than 2/3 of the votes cast by the shareholders who voted in respect of that resolution at a meeting of the holders of the Osisko Preferred Shares duly called and held for that purpose, at which meeting such holders shall have one vote for each Osisko Preferred Share held by them respectively, or in an instrument signed by all the holders of the then outstanding Osisko Preferred Shares.

If an amendment as hereinabove provided especially affects the rights of the holders of Osisko Preferred Shares of any series in a manner or to an extent different from that in or to which the rights of the holders of Osisko Preferred Shares of any other series are affected, then such amendment shall, in addition to being approved by the holders of the Osisko Preferred Shares voting separately as a class, be approved by the holders of the Osisko Preferred Shares of such series, voting separately as a series, and the provisions of this paragraph shall apply, *mutatis mutandis*, with respect to the giving of such approval.

As of the date hereof, no Osisko Preferred Shares were issued and outstanding.

### **Warrants**

In connection with a \$200 million bought deal private placement, Osisko issued, on March 5, 2015, 5,480,000 common share purchase warrants entitling the holder thereof to purchase one (1) Osisko Share at a price of \$36.50 per Osisko Share, until March 5, 2022. These warrants are listed on the TSX under the ticker symbol "OR.WT".

As part of a \$173 million bought deal public offering completed on February 26, 2016, common share purchase warrants were issued at a price of \$19.08 for a period of 36 months following the closing date, namely having expired on February 26, 2019 after market close. These warrants were listed on the TSX under the ticker symbol "OR.WT.A".

### **Debentures**

On November 3, 2017, Osisko closed a "bought deal" offering of Debentures in an aggregate principal amount of \$300 million.

The Debentures bear interest at a rate of 4.00% per annum, payable semi-annually on June 30 and December 31 each year, commencing on June 30, 2018. The Debentures will be convertible at the holder's option into Osisko Shares at a conversion price equal to \$22.89 per Common Share (representing a conversion rate of 43.6872 Osisko Shares per \$1,000 principal amount of Debentures). The Debentures will mature on December 31, 2022 and may be redeemed by Osisko, in certain circumstances, on or after December 31, 2020. The Debentures are listed and posted for trading on the TSX under the symbol "OR.DB".



## MARKET FOR SECURITIES

### Trading Price and Volume

#### Osisko Shares

The Osisko Shares are currently listed on the TSX and on the NYSE under the symbol "OR". The following table sets forth the price range and trading volume for the Osisko Shares on the TSX and the NYSE, for the periods indicated.

	TSX			NYSE		
	High (C\$)	Low (C\$)	Volume (#)	High (US\$)	Low (\$US)	Volume (#)
<b>2018</b>						
January .....	15.17	13.55	11,682,734	12.10	10.90	13,702,923
February .....	14.08	12.00	10,550,537	11.45	9.51	14,528,834
March .....	13.11	12.18	7,721,860	10.17	9.38	14,054,479
April .....	12.91	11.90	6,215,136	10.30	9.31	10,114,238
May .....	13.76	12.33	7,534,736	10.79	9.56	8,980,606
June .....	13.38	12.17	4,475,269	10.32	9.14	11,315,527
July .....	12.82	12.30	4,557,785	9.77	9.34	9,649,030
August .....	12.37	10.27	5,665,333	9.51	7.85	13,362,333
September .....	10.37	9.49	8,782,717	7.92	7.29	14,194,490
October .....	10.96	9.66	7,722,717	8.43	7.45	12,154,613
November .....	10.73	9.27	5,459,790	8.21	7.00	11,020,576
December .....	11.99	9.35	9,057,799	8.90	7.09	15,081,603
<b>2019</b>						
January .....	12.95	11.29	10,407,364	9.855	8.50	9,712,735
February .....	15.13	12.60	8,164,972	11.515	9.55	10,142,602
March <sup>(1)</sup> .....	16.08	14.25	8,160,841	12.08	10.67	14,065,296

(1) Up to and including March 27, 2019.

The closing price of the Osisko Shares on the TSX on March 27, 2019 was \$15.89. The closing price of the Osisko Shares on the NYSE on March 27, 2019 was US\$11.85.

#### Warrants

During the fiscal year ended December 31, 2018, warrants of Osisko were listed on the TSX under the symbols OR.WT and OR.WT.A. The following table sets forth the price range and trading volume for the warrants on the TSX, for the periods indicated.

	OR.WT			OR.WTA		
	High (C\$)	Low (C\$)	Volume (#)	High (C\$)	Low (C\$)	Volume (#)
<b>2018</b>						
January .....	2.40	2.06	36,000	1.46	0.95	153,530
February .....	2.20	1.75	30,983	1.05	0.53	188,689
March .....	1.73	1.50	23,460	0.75	0.48	84,263
April .....	1.45	1.25	10,400	0.63	0.48	105,459
May .....	1.45	1.26	42,008	0.69	0.50	181,576
June .....	1.29	1.06	23,940	0.61	0.35	74,620
July .....	1.20	1.06	17,350	0.40	0.27	27,020
August .....	1.13	0.89	51,365	0.32	0.10	19,419
September .....	0.75	0.61	14,418	0.10	0.05	40,558
October .....	0.69	0.60	8,592	0.11	0.03	37,297
November .....	0.59	0.50	18,600	0.03	0.02	45,788
December .....	0.49	0.34	70,660	0.02	0.005	280,382
<b>2019</b>						
January .....	0.45	0.37	26,350	0.05	0.005	618,419
February <sup>(1)</sup> .....	0.45	0.35	118,822	0.005	0.005	55,900
March <sup>(2)</sup> .....	0.94	0.43	231,570	-	-	-

(1) Up to and including February 26, 2019, date on which the warrants listed under OR.WTA expired.

(2) Up to and including March 25, 2019.

The closing price of the warrants “OR.WT” on the TSX on March 25, 2019 was \$0.90.

## Debentures

The Debentures are listed on the TSX under the symbol “OR.DB” since November 3, 2017. The following table sets forth the price range and trading volume for the Debentures on the TSX, for the periods indicated:

	OR.DB		
	High (C\$)	Low (C\$)	Volume (#)
<b>2018</b>			
January .....	105.00	102.00	130,580
February .....	103.50	99.50	176,520
March .....	101.00	98.50	80,140
April .....	102.75	99.00	8,160
May .....	100.50	99.10	47,310
June .....	100.50	100.00	54,070
July .....	100.75	99.99	102,030
August .....	100.25	98.55	71,090
September .....	99.50	98.01	23,020
October .....	99.99	98.00	29,550
November .....	99.25	96.00	39,480
December .....	99.00	97.25	25,410
<b>2019</b>			
January .....	100.50	97.76	27,440
February .....	102.90	99.75	4,920
March <sup>(1)</sup> .....	103.50	101.50	12,140

(1) Up to and including March 25, 2019.

The closing price of the Debentures “OR.DB” on the TSX on March 25, 2019 was \$103.00.

### **Prior Sales - Securities Not Listed or Quoted on a Marketplace**

The only securities of Osisko that are outstanding but not listed or quoted on a marketplace are the RQ Debenture, the Osisko Options, the Replacement Osisko Options the RSUs and the DSUs.

### **RQ Debenture**

On February 12, 2016, Ressources Québec, a wholly-owned subsidiary of Investissement Québec, subscribed to the RQ Debenture. Ressources Québec will be entitled, at its option, to convert the RQ Debenture into Osisko Shares at a price of \$19.08 per Osisko Share at any time during its term.

### **Options**

The following table sets forth the number of options granted during the most recently completed financial year, the date of grant and the exercise price thereof.

<b>Date of Grant</b>	<b>Number of Options</b>	<b>Exercise Price Per Option</b>
February 22, 2018	94,900	\$12.35
May 7, 2018	747,000	\$12.97
August 7, 2018	45,000	\$11.92

### **Restricted Share Units**

As of December 31, 2018, Osisko has granted a total of 848,759 Osisko RSUs pursuant to the RSU Plan and under which equity securities of Osisko are authorized for issuance. The table below shows Osisko RSUs granted in 2018, which have a three-year vesting period and provide the right to receive payment in the form of Osisko Shares, cash or a combination of Osisko Shares and in cash:

<b>Date of Grant</b>	<b>Number of Osisko RSUs</b>	<b>Grant Price of Osisko RSUs</b>
February 22, 2018	23,700	\$12.35
February 22, 2018 (Bonus RSUs)	68,162	\$14.52
May 7, 2018	361,100	\$12.97

## **DIRECTORS AND OFFICERS**

### **Name, Address, Occupation and Security Holdings**

The following table sets out the Osisko directors and officers, together with their province or state and country of residence, positions and offices held, principal occupations during the last five years, the years in which they were first appointed as directors and/or officers of Osisko and the number of Osisko Shares, Osisko RSUs, Osisko DSUs, Osisko Options, Warrants, Debentures and Replacement Osisko Options beneficially owned, directly or indirectly, or over which control or direction is exercised by them, as of the date of this Annual Information Form.

<b>Name and place of residence</b>	<b>Principal occupations during the last five (5) years<sup>(5)</sup></b>	<b>Director and/or Officer since</b>	<b>Securities of Osisko beneficially owned</b>
Sean Roosen <sup>(4)</sup> Québec, Canada <i>Chair and Chief Executive Officer</i>	Chair and Chief Executive Officer of Osisko; prior to June 2014, President and Chief Executive Officer of Osisko Mining Corporation.	2014	428,278 Osisko Shares 179,714 Osisko RSUs 615,800 Osisko Options
Joanne Ferstman <sup>(1,3)</sup> Ontario, Canada <i>Lead Director</i>	Chartered Professional Accountant and Corporate Director; Prior to June 2012, President and Chief Executive Officer of Dundee Capital Markets Inc., an investment dealer; prior to January 2011, Vice-Chair and Head of Capital Markets of DundeeWealth Inc., a wealth management company.	2014	19,500 Osisko Shares 69,634 Osisko DSUs \$100,000 Osisko Debentures
Françoise Bertrand <sup>(3,4)</sup> Québec, Canada <i>Director</i>	Currently serves as chair of the boards of directors of Proaction International and Via Rail Canada. Former President and Chief Executive Officer of the <i>Fédération des chambres de commerce du Québec</i> (FCCQ) and director of numerous boards of profit and non-profit organizations; former Chair of Canadian Radio-television and Telecommunications Commission (CRTC).	2014	1,200 Osisko Shares 46,213 Osisko DSUs
John F. Burzynski <sup>(4,5)</sup> Ontario, Canada <i>Director</i>	President and Chief Executive Officer of Osisko Mining; prior to August 2016, Senior Vice President, New Business Development of Osisko; prior to June 2014, Vice President, Business Development of Osisko Mining Corporation.	2014	17,294 Osisko Shares 3,255 Osisko RSUs 16,809 Osisko DSUs 85,600 Osisko Options
Pierre D. Chenard <sup>(1,2,4)</sup> Québec, Canada <i>Director</i>	Vice President, Business Development and General Counsel, Aluminium at Rio Tinto.	2017	18,566 Osisko DSUs
Bryan A. Coates Québec, Canada <i>President</i>	President of Osisko; prior to June 2014, Vice President, Finance and Chief Financial Officer of Osisko Mining Corporation.	2014	128,219 Osisko Shares 107,893 Osisko RSUs 550,600 Osisko Options \$708,500 Osisko Debentures
Christopher C. Curfman <sup>(2,3)</sup> Illinois, United States of America <i>Director</i>	Former Senior Vice President of Caterpillar Inc. and former President of Caterpillar Global Mining.	2016	5,500 Osisko Shares 29,462 Osisko DSUs
Joseph de la Plante Québec, Canada <i>Vice President, Corporate Development</i>	Vice President, Corporate Development of Osisko; Senior Advisor, Investment and Corporate Development of Osisko Mining Corporation from November 2010 to June 2014; Analyst in the Global Metals & Mining Investment Banking Group at BMO Capital Markets prior to that.	2014	8,279 Osisko Shares 54,253 Osisko RSUs 282,300 Osisko Options \$25,000 Osisko Debentures
André Gaumond <sup>(4,5)</sup> Québec, Canada <i>Director</i>	While he retired from his executive position in November 2016, he remains a member of the Board of Directors; Senior Vice President, Northern Development of Osisko prior to November 2016; President and Chief Executive Officer of Virginia prior to February 2015.	2015	630,634 Osisko Shares 8,469 Osisko RSUs 16,809 Osisko DSUs 90,900 Osisko Options \$200,000 Osisko Debentures
Pierre Labbé <sup>(1,2)</sup> Québec, Canada <i>Director</i>	Chief Financial Officer of IMV Inc.; from April 2015 to March 2017, Vice President, Chief Financial Officer and Secretary of Leddartech Inc.; from October 2013 to April 2015, Vice President and Chief Financial Officer of Québec Port Authority and prior to October 2013, Vice President and Chief Financial Officer of Medicago Inc.	2015	6,145 Osisko Shares 36,389 Osisko DSUs 14,524 Replacement Osisko Options \$25,000 Osisko Debentures

<b>Name and place of residence</b>	<b>Principal occupations during the last five (5) years<sup>(5)</sup></b>	<b>Director and/or Officer since</b>	<b>Securities of Osisko beneficially owned</b>
André Le Bel Québec, Canada <i>Vice President, Legal Affairs and Corporate Secretary</i>	Vice President, Legal Affairs and Corporate Secretary of Osisko; prior to June 2014, Vice President, Legal Affairs and Corporate Secretary of Osisko Mining Corporation.	2015	40,024 Osisko Shares 82,425 Osisko RSUs 263,900 Osisko Options \$25,000 Osisko Debentures
Oskar Lewnowski New York, United States of America <i>Director</i>	Founder and Chief Investment Officer of Orion Resource Partners.	2017	19,680 Osisko DSUs
Luc Lessard Québec, Canada <i>Senior Vice President, Technical Services</i>	Senior Vice President, Technical Services of Osisko; President, Chief Executive Officer and Director of Falco; prior to June 16, 2014, Chief Operating Officer of Canadian Malartic GP (owned jointly by Agnico and Yamana) and Chief Operating Officer and Senior Vice-President of Osisko Mining Corporation.	2015	29,760 Osisko Shares 97,325 Osisko RSUs 264,400 Osisko Options
Elif Lévesque Québec, Canada <i>Chief Financial Officer and Vice President, Finance</i>	Chief Financial Officer and Vice President, Finance of Osisko; prior to June 16, 2014, Vice President and Controller of Osisko Mining Corporation.	2014	10,160 Osisko Shares 90,501 Osisko RSUs 414,200 Osisko Options \$50,000 Osisko Debentures
Charles E. Page <sup>(1, 3, 5)</sup> Ontario, Canada <i>Director</i>	Corporate Director and Professional Geologist; Former director of Osisko Mining Corporation; President and Chief Executive Officer of Queenston Mining Inc. prior to its acquisition by Osisko Mining Corporation.	2014	55,215 Osisko Shares 46,423 Osisko DSUs
Frédéric Ruel Québec, Canada <i>Vice President and Corporate Controller</i>	Vice President, Corporate Controller of Osisko and Falco; from January 2015 to November 2016, Corporate Controller of Osisko; from May 2015 to November 2016, Corporate Controller of Falco; from January 2011 to June 2014, Director, Corporate Reporting of Osisko Mining Corporation and of Canadian Malartic GP from June 2014 to November 2014.	2016	5,779 Osisko Shares 55,872 Osisko RSUs 158,800 Osisko Options \$50,000 Osisko Debentures
François Vézina Québec, Canada <i>Vice President, Technical Services</i>	Vice President, Technical Services of Falco and Osisko; Chief Operating Officer of Barkerville since October 2018. Prior to his appointment as Chief Operating Officer, he was Vice President, Technical Services; Technical Service Director of Osisko from May 2017 to May 2018 and Mine Director from April 2015 to April 2017; Mine Manager of the Canadian Malartic mine prior to April 2015 with Canadian Malartic GP and Osisko Mining Corporation.	2018	5,373 Osisko Shares 30,183 Osisko RSUs 21,500 Osisko Options

(1) Member of the Osisko Audit Committee.

(2) Member of the Osisko Governance and Nomination Committee.

(3) Member of the Osisko Human Resources Committee.

(4) Member of the Sustainability Committee.

(5) Member of the Investment Committee.

(6) The information as to principal occupations has been furnished by each director and/or officer individually.

## Biographic Notes

### **Sean Roosen, Chair of the Board of Directors and Chief Executive Officer**

Mr. Sean Roosen is Chair of the Osisko Board and Chief Executive Officer of Osisko since June 2014. Prior to this, Mr. Roosen was the President and Chief Executive Officer of Osisko Mining Corporation. He led the

transition of Osisko Mining Corporation from a junior exploration company to a leading intermediate gold producer. He was responsible for leading the strategic development of Osisko Mining Corporation and was instrumental in securing the necessary financing to fund the development of the \$1 billion Canadian Malartic mine. Mr. Roosen is an active participant in the resource sector and in the formation of new companies to explore for mineral deposits both in Canada and internationally. During 2017, Mr. Roosen received an award from Mines and Money Americas for best Chief Executive Officer in North America and was in addition named in the "Top 20 Most Influential Individuals in Global Mining". In prior years, he has been recognized by several organizations for his entrepreneurial successes and his leadership in innovative sustainability practices. Mr. Roosen is a Supervisory Board member of EurAsia Resource Holdings AG, a European based resource venture capital fund and a director of EurAsia Resource Value SE and is a member of the board of directors of Condor Petroleum Inc. Mr. Roosen also serves on the board of directors of: Barkerville (Chair), Osisko Mining (Chair) and Victoria Gold Corp. as a representative of Osisko. Mr. Roosen is a graduate of the Haileybury School of Mines.

***Joanne Ferstman, CPA, CA, Independent Lead Director***

Ms. Joanne Ferstman is a corporate director, who has been serving on a number of public company boards. From 2013 to 2014, Ms. Ferstman was a Director of Osisko Mining Corporation. Ms. Ferstman was until June 2012 the President and Chief Executive Officer of Dundee Capital Markets Inc., a full service investment dealer with principal businesses that include investment banking, institutional sales and trading and private client financial advisory. She has also held several leadership positions within Dundee Corporation and DundeeWealth Inc. over the last 18 years, primarily as Chief Financial Officer, where she was responsible for strategic development, financial and regulatory reporting and risk management.

Ms. Ferstman currently serves as Chair of the board of Dream Unlimited Corp, including serving as Chair of the Audit Committee, member of the Organization & Design Committee and member of the Leaders & Mentors Committee. She also serves as a director of Cogeco Communications Inc., including serving as Chair of the Audit Committee and a member of the Strategic Opportunities Committee. In August 2018 she was appointed to the board of the directors of ATS Automation Tooling Systems Inc. and currently serves as a member of its Audit Committee and serves as a member of the Governance Committee. She was formerly a director of Aimia Inc. (June 2008 to June 2017), Excellon Resources Inc. (April 2013 to February 2015) and Dream Office REIT (June 2003 to May 2018). Ms. Ferstman holds a Bachelor of Commerce and a Graduate degree in Public Accountancy from McGill University and is a Chartered Professional Accountant.

***Françoise Bertrand, O.C., C.Q., Independent Director***

Ms. Françoise Bertrand was appointed to the Board of Directors of Osisko in November 2014. In 2017, she was appointed as lead of Via Rail Canada's board of directors and as Chair of the board of directors of Proaction International. She currently serves as an Officer of the Order of Canada. Ms. Bertrand was formerly the President and Chief Executive Officer of the *Fédération des chambres de commerce du Québec* (FCCQ). She sits on numerous boards of directors of profit and non-profit organizations, including Valeurs mobilières Desjardins and Concordia University. Ms. Bertrand was also a former Chair of Canadian Radio-television and Telecommunications Commission (CRTC). Ms. Bertrand was recently nominated to receive the ICD Fellowship Award at the ICD National Conference to be held in June 2019.

Ms. Bertrand holds a Bachelor of Arts - Major in Sociology from Université de Montréal and a Master's degree in Environmental Studies from York University. She is a graduate from the Directors Education Program sponsored by the Institute of Directors of Canada and the Rotman School of Management - McGill. She is also a *Chevalier of l'Ordre national du Québec*.

***John F. Burzynski, M.Sc., P.Geo., Director***

Mr. John F. Burzynski has been a Director of Osisko since June 2014. He was also Senior Vice President, New Business Development of Osisko from June 2014 to August 2016. He is Director, President and Chief Executive Officer of Osisko Mining since August 2015. From 2004 to 2014, Mr. Burzynski was the Vice

President, Business Development of Osisko Mining Corporation. Mr. Burzynski has over 25 years of experience as a professional geologist on international mining and development projects. From 2011 to 2016, he served on the board of directors of Condor Petroleum Inc. and served on the board of Strongbow Exploration Inc. from September 2015 to October 2018. He currently serves on the boards of directors of Barkerville Gold Mines Ltd., Osisko Metals Incorporated and Major Drilling Group International Inc. Mr. Burzynski is also a founding member of EurAsia Resource Holdings AG, a European based resource venture capital fund. Mr. Burzynski holds a Bachelor of Science (Honours) degree in geology from Mount Allison University, and a Master of Science degree in exploration and mineral economics from Queen's University. He is a registered P.Geo. in the province of Québec.

***Pierre D. Chenard, LL.B., Director***

Mr. Pierre D. Chenard has been Vice President, Business Development and General Counsel, Aluminium at Rio Tinto since 2011. Mr. Chenard has held progressive roles in both the corporate development and legal areas, including General Counsel, Rio Tinto Global Aluminium and Canada, Vice President and General Counsel at Alcan Inc. and Vice President and Head of Corporate Development at Cambior Inc. Mr. Chenard was appointed to the Osisko Board in accordance with an investment agreement entered into with the CDPQ. Mr. Chenard earned Civil and Common Law degrees from McGill University and has been a member of the Quebec Bar since 1984.

***Bryan A. Coates, CPA, CA, ICD.D, President***

Mr. Bryan A. Coates has been President of Osisko since June 2014. From 2007 to 2014, he was the Vice President, Finance and Chief Financial Officer of Osisko Mining Corporation. Mr. Coates was responsible for all activities related to financing, financial reporting, marketing relating to the gold industry, risk management and government relations. Mr. Coates has more than 30 years of progressive experience within the international and Canadian mining industry. Before joining Osisko, he was Chief Financial Officer of IAMGOLD Corporation, Cambior Inc., and Compañía Minera Antamina. Mr. Coates serves on the board of directors of Falco, Alio Gold Inc. and of Golden Queen Mining Co. Ltd. Mr. Coates holds an Honours Bachelor of Commerce from Laurentian University, is a member of the Chartered Professional Accountants of Ontario and obtained the ICD.D designation from the Institute of Corporate Directors.

***Christopher C. Curfman, B.Sc., Independent Director***

Mr. Christopher C. Curfman was elected to the Board of Directors of Osisko in May 2016. Mr. Curfman is a retired senior executive of Caterpillar Inc., one of the world's largest mobile equipment suppliers to the mining industry. During his 21-year career with Caterpillar, Mr. Curfman has held several progressive positions in Asia, Australia and USA, including Senior Vice President of Caterpillar and President of Caterpillar Global Mining from 2011 to his retirement at the end of 2015. Mr. Curfman also held senior positions with Deere & Company prior to joining Caterpillar. He has extensive international experience and a customer focused legacy at Caterpillar. His global leadership was key to Caterpillar's success in the mining industry. He also served as a board member at various organisations, including the Canadian Institute of Mining, the National Mining Association, the World Coal Association and several universities.

Mr. Curfman holds a Bachelor of Science degree in Education from Northwestern University and has completed certificate programs in accounting and finance from the Wharton School of Business, University of Pennsylvania in 1991, a three-year executive program from Louisiana State University in 1997 and the executive program of Stanford Graduate School of Business in 2002. He was also awarded an Honorary Doctorate in Mining Engineering from the University Missouri-Rolla in 2013.

***Joseph de la Plante, B. Eng., Vice President, Corporate Development***

Mr. Joseph de la Plante has been Vice President, Corporate Development of Osisko since June 2014. Prior to this, Mr. de la Plante held the position of Senior Advisor, Investment and Corporate Development of Osisko Mining Corporation since November 2010, where he played a key role in the company's investor

relations and corporate development efforts, including certain aspects of the company's long-term financial planning. Before joining Osisko in 2010, he was an Analyst in BMO Capital Markets' Global Metals & Mining Investment Banking Group in Toronto, where he worked in an advisory role on merger and acquisition mandates as well as equity and debt offerings for various producing and development stage gold companies. He currently serves on the board of directors of Aquila Resources Inc. and the Québec Mineral Exploration Association. Mr. de la Plante holds a Bachelor of Mechanical Engineering from McGill University.

**André Gaumond, M.Sc. Eng., Director**

Mr. André Gaumond was Senior Vice President, Northern Development and Director of Osisko until he retired from his executive position in November 2016. A geological engineer by training, Mr. Gaumond has been recognized by several organizations for his entrepreneurial and geological achievements. Mr. Gaumond has been the founder and Chief Executive Officer of Virginia Gold Mines Inc., which discovered the Éléonore deposit, and was later sold to Goldcorp Inc. He continued his geological work in the James Bay area through Virginia which had retained a royalty on the Éléonore Property, and concluded business combination with Osisko in February 2015. He has extensive experience in the strategic development, financing and execution of search programs for new mineral deposits. He has also been recognized for his leadership role in various sustainability initiatives, including the recognition for the creation of *Fonds Restor-Action Nunavik*. Mr. Gaumond was a nominee to Osisko Board by Virginia as part of the Osisko-Virginia business combination. He currently serves as on the board of directors of Altius Minerals Corporation, Harfang Exploration Inc. and Junex Inc.

Mr. Gaumond holds a Bachelor of Geological Engineering from *Université Laval* and a Master degree in Geological Engineering from *École Polytechnique*. He is a member of *Ordre des géologues du Québec* and of *Ordre des ingénieurs du Québec*.

**Pierre Labbé, CPA, CA, ICD.D, Independent Director**

Mr. Pierre Labbé is Chief Financial Officer of IMV Inc. and was Vice President and Chief Financial Officer of Leddartech Inc. from April 2015 to March 2017. He has more than 25 years of progressive financial leadership roles in various industries. He was Vice President and Chief Financial Officer of the Québec Port Authority (October 2013 to April 2015), and has experience in the resource sector, having served as Chief Financial Officer of Plexmar Resources (May 2007 to November 2012), Sequoia Minerals (December 2003 to June 2004), and Mazarin Inc. (December 2002 to December 2003). Mr. Labbé, in his role as senior financial officer, has participated in the development of strategic plans and in mergers and acquisitions (over \$1 billion in transactions).

Mr. Labbé holds a Bachelor's Degree in Business Administration and a license in accounting from *Université Laval*, Québec City. He is a member of *Ordre des comptables professionnels agréés du Québec*, the Chartered Professional Accountants of Canada and the Institute of Corporate Directors.

**André Le Bel, LL.B., B.Sc.A, ICD.D, Vice President, Legal Affairs and Corporate Secretary**

Mr. André Le Bel has been appointed Vice President, Legal Affairs and Corporate Secretary of Osisko on February 17, 2015. From November 2007 to June 2014, Mr. Le Bel was Vice President, Legal Affairs and Corporate Secretary of Osisko Mining Corporation. Mr. Le Bel was Vice President Legal affairs with IAMGOLD Corporation from November 2006 to October 2007 and before November 2006, Mr. Le Bel was Senior Legal Counsel and Assistant Corporate Secretary of Cambior Inc. Mr. Le Bel was a director of RedQuest Capital Corp. until June 2017 and currently serves on the board of directors of Komet Resources Inc., listed on the TSX Venture Exchange. Mr. Le Bel was Vice President, Legal Affairs and Corporate Secretary of NioGold from March 20, 2015 to March 11, 2016 and Corporate Secretary of Falco from November 24, 2015 to November 22, 2016. Since that date, he is Vice President, Legal Affairs and Corporate Secretary of Falco. Mr. Le Bel was also a director and a member of the audit committee of Threegold Resources Inc. from May 2011 to June 2013. Mr. Le Bel obtained a Bachelor of Applied Science



from Université Laval and a Bachelor of Law from Sherbrooke University. He is a member of the Québec Bar and has recently obtained the ICD.D designation from the Institute of Corporate Directors.

***Oskar Lewnowski, BS/BA, MBA, Director***

Mr. Oskar Lewnowski is the founder and Chief Investment Officer of Orion Resource Partners. Prior to Orion, Mr. Lewnowski was a founding partner of the Red Kite Group and the Chief Investment Officer of the mine finance business. Before this, Mr. Lewnowski was a Director for Corporate Development at Varomet Ltd, a metals processor and merchant banking firm. While at Varomet, he was responsible for seven acquisitions and divestitures and business operations (offtake agreements, mining and processing). He was also responsible for structuring metal offtake agreements and other physical market transactions. Before this, Mr. Lewnowski was a Vice President for Credit Suisse First Boston in London, where he was responsible for preparing growth companies for public distribution of their securities. Until 1993, he held various positions in trading as well as mergers and acquisitions at Deutsche Bank both in New York and Frankfurt culminating in his founding membership of the Deutsche Capital Markets Division.

Mr. Lewnowski was appointed to the Osisko Board in connection with the Orion Transaction.

***Luc Lessard, Eng., Senior Vice President, Technical Services***

Mr. Luc Lessard is a mining engineer with more than 30 years of experience designing, building and operating mines. He is President, Chief Executive Officer and Director of Falco. He was previously Chief Operating Officer of Canadian Malartic GP (owned jointly by Agnico and Yamana), and prior to that was the Chief Operating Officer and Senior Vice President of Engineering and Construction for Osisko Mining Corporation where he was responsible for the design, construction and commissioning of the Canadian Malartic gold mine. During his career, Mr. Lessard has worked on many open pit and underground mine builds and prior to Osisko, Mr. Lessard was Vice President of Engineering and Construction for IAMGOLD Corporation and General Manager, Projects for Cambior Inc. From July 2014 to May 2016, he served on the boards of directors of Alio Gold Inc. (July 2014 to May 2016) and Highland (November 2015 to February 2019). Mr. Lessard was Chief Operating Officer of Barkerville until October 2018 and currently serves on the board of directors of Osisko Metals Incorporated and Nighthawk Gold Corp. Mr. Lessard holds a B.Sc. Mining Engineering from Université Laval and he is a member of l'Ordre des ingénieurs du Québec.

***Elif Lévesque, CPA, CGA, MBA, ICD.D, Chief Financial Officer and Vice President Finance***

Ms. Elif Lévesque is the Chief Financial Officer and Vice President Finance of Osisko since June 2014. Prior to this, Ms. Lévesque was Vice President and Controller of Osisko Mining Corporation and has contributed to the development of the financial reporting and planning functions at Osisko since 2008. Ms. Lévesque has over 15 years of experience with leading Canadian intermediate gold producers (Cambior Inc. 2002-2006 and IAMGOLD Corporation 2006-2008). She currently serves on the board of directors of TerraX Minerals Inc. She is a member of the *Ordre des Comptables Professionnels Agréés du Québec*, holds an MBA from Clark University, Massachusetts, USA and has recently obtained the ICD.D designation from the Institute of Corporate Directors.

***Charles E. Page, M.Sc., P.Geo., Director***

Mr. Charles E. Page is a Professional Geologist and has more than 40 years of experience in the mineral industry. During his career, Mr. Page has held progressive leadership roles in developing strategies to explore, finance and develop mineral properties in Canada and internationally. Mr. Page worked at Queenston Mining Inc. in various capacities, including President and Chief Executive Officer, from 1990 to its sale to Osisko Mining Corporation in 2012. Mr. Page also serves on the board of directors of Unigold Inc. and is Chair of the board of directors of Wesdome Gold Mines Ltd. Mr. Page holds a Bachelor of Science degree in Geological Science from Brock University and a Master of Science degree in Earth Science from the University of Waterloo. He is a Professional Geologist registered in the province of Ontario and Saskatchewan and is also a Fellow of the Geological Association of Canada.

***Frédéric Ruel, CPA, CA, Vice President, Corporate Controller***

Mr. Frédéric Ruel was appointed as Vice President, Corporate Controller of Osisko on November 9, 2016. Frédéric Ruel has over 15 years of experience in financial reporting and has been involved in the mining industry for over 10 years. Prior to joining Osisko, he held the position of Director, Corporate Reporting for Canadian Malartic GP, Osisko Mining Corporation and Consolidated Thompson Iron Mines. Mr. Ruel was Vice President, Corporate Controller of Falco from November 2016 to July 2017 and Chief Financial Officer of NioGold Mining Corporation from March 2015 to March 2016. Mr. Ruel began his career as an auditor in a premier Canadian accounting firm where he worked for seven (7) years. He is a member of the *Ordre des comptables professionnels agréés du Québec* and holds a Master in Accounting from Sherbrooke University.

***François Vézina, Eng., Vice President, Technical Services***

Mr. François Vézina is a Mining Engineer with over 18 years of experience in mining and has extensive experience in open pit and underground operations in Canada, Mexico and Finland. Mr. Vézina was Technical Service Manager for Agnico-Eagle Mines Limited and was responsible for overseeing the completion of the feasibility studies of LaRonde II, Pinos Altos and Kittilä. Mr. Vézina participated in the construction and commissioning of Pinos Altos as Mine Development Manager and Kittilä as Mine Operations Manager before joining Osisko Mining Corporation and participating as Mine Manager in the construction of the Canadian Malartic mine. He served for over 5 years as Mine Operations Manager at the Canadian Malartic mine. In October 2018, he was appointed as Chief Operating Officer of Barkerville. Mr. Vézina is a specialist in mine operation optimization and is recognized for innovative mining techniques and optimization of feasibility studies. Mr. Vézina holds a Bachelor degree in Mining Engineering and a Master in Business Administration (MBA). He is a registered Engineer (Eng.) in Quebec and (P.Eng.) in Ontario.

The directors of Osisko will be elected annually at each annual general meeting of the Osisko Shareholders and will hold office until the next annual general meeting unless a director's office is earlier vacated in accordance with the articles of Osisko or until his or her successor is duly appointed or elected.

As at the date of this Annual Information Form, all of the directors and officers, as a group, beneficially own, directly or indirectly, or exercise control or direction over 1,391,360 Osisko Shares, representing approximately 0.90% of the issued and outstanding Osisko Shares.

**Cease Trade Orders, Bankruptcies, Penalties or Sanctions**

***Corporate Cease Trade Orders***

As at the date of this Annual Information Form, no current director or executive officer of Osisko is, or within the ten years prior to the date of this Annual Information Form has been, a director, chief executive officer or chief financial officer of any company (including Osisko), that:

- (a) was subject to a cease trade order (including any management cease trade order which applied to directors or executive officers of a company, whether or not the person is named in the order), an order similar to a cease trade order, or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days (an “**Order**”) while that person was acting in that capacity; or
- (b) was subject to an Order that was issued after the current director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

## ***Bankruptcy***

To the knowledge of Osisko, as at the date of this Annual Information Form, no current director, executive officer, or shareholder holding a sufficient number of securities of Osisko to affect materially the control of Osisko is, or within the ten years prior to the date of this Annual Information Form has:

- (a) been a director or executive officer of any company (including Osisko) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
- (b) become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver manager or trustee appointed to hold the assets of the current or proposed director, executive officer or shareholder.

## ***Penalties and Sanctions***

To the knowledge of Osisko, as at the date of this Annual Information Form, no current director, executive officer, or shareholder holding a sufficient number of securities of Osisko to affect materially the control of Osisko has been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority or any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

## ***Conflicts of Interest***

Certain of the directors and officers of Osisko will not be devoting all of their time to the affairs of Osisko. Certain of the directors and officers of Osisko are directors and officers of other companies, some of which are in the same business as Osisko. See “Risk Factors”.

The directors and officers of Osisko are required by law to act in the best interests of Osisko. They have the same obligations to the other companies in respect of which they act as directors and officers. Any decision made by any of such officers or directors involving Osisko will be made in accordance with their duties and obligations under the applicable laws of Canada.

As part of its business model and in connection with its investments made in various other companies, either by acquiring equity interests, purchasing royalties, streams or other interests or options thereon or otherwise, Osisko generally expects from its directors and officers to be actively involved within such investee companies, which may include occupying seats on their board of directors. Osisko acknowledges that a director or an officer serving on too many public boards of directors might be “overboarded”. Consequently, all directors and officers of Osisko must submit to the Governance and Nomination Committee any offer to join an outside board of directors in order to ensure that any additional directorship would not impair the ability to adequately fulfill the responsibilities assigned to the directors and officers of the Corporation.

As a general guideline, the Governance and Nomination Committee of Osisko will consider that a director or officer of Osisko should be regarded as “overboarded” if he or she:

- (a) has attended fewer than 75% of Osisko’s board and committee meetings held within the past year without a valid reason for the absences;

and

- (b)
  - (i) is the President or Chief Executive Officer of Osisko, he or she sits on more than two (2) outside public company board, in addition to Osisko; or
  - (ii) if not the President or Chief Executive Officer of Osisko, sits on more than five (5) public company boards, in addition to Osisko.

In determining what is an "outside public company board", the Governance and Nomination Committee specifically excludes investee companies for the reason that becoming a director of such companies is crucial in order to oversee and supervise Osisko's investment in such investee companies. This representation allows Osisko to protect its shareholders' interests. Furthermore, these investee companies are mostly junior exploration companies which only hold few board meetings each year.

## **LEGAL PROCEEDINGS AND REGULATORY ACTIONS**

### **Legal Proceedings**

During the fiscal year ended December 31, 2018 and as of the date hereof, there have been and are no material legal proceedings outstanding, threatened or pending, by or against Osisko or to which Osisko is a party or to which any of Osisko's property is subject, nor to Osisko's knowledge are any such legal proceedings contemplated, and which could become material to Osisko.

### **Regulatory Actions**

During the fiscal year ended December 31, 2018 and as of the date hereof, there have been no penalties or sanctions imposed against Osisko (a) by a court relating to securities legislation or by a securities regulatory authority or (b) by a court or regulatory body that would likely be considered important to a reasonable investor making an investment decision in Osisko. Osisko has not entered into any settlement agreements with a court relating to securities legislation or with a securities regulatory authority during the fiscal year ended December 31, 2018 and as of the date hereof.

## **INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS**

Within the three (3) most recently completed financial years or during the current financial year, no director or executive officer of Osisko, or shareholder who beneficially owns, or controls or directs, directly or indirectly, more than 10% of the outstanding Osisko Shares, or any known associates or affiliates of such persons, has or has had any material interest, direct or indirect, in any transaction or in any proposed transaction that has materially affected or is reasonably expected to materially affect Osisko.

## **TRANSFER AGENTS AND REGISTRARS**

The transfer agent and registrar for the Osisko Shares is AST Trust Company (Canada), which is located at 2001 University, Suite 1600, Montreal, Québec, Canada H3A 2A6.

## **MATERIAL CONTRACTS**

The following are the material contracts entered into by Osisko or its subsidiaries:

- (a) the Canadian Malartic Royalty Agreement;
- (b) the Éléonore Royalty Agreement;
- (c) the RQ Subscription Agreement;

- (d) the 2016 Warrant Indenture;
- (e) the Orion Acquisition Agreement;
- (f) a subscription agreement dated June 4, 2017 between Fonds FTQ and Osisko;
- (g) a subscription agreement dated June 4, 2017 between CDP Investissements Inc. and Osisko;
- (h) a voting support agreement dated July 31, 2017 between Betelgeuse LLC and Osisko;
- (i) a shareholder participation agreement dated July 31, 2017 between Betelgeuse LLC and Osisko;
- (j) a shareholder rights agreement dated July 31, 2017 between CDP Investissements Inc. and Osisko;
- (k) the 2017 Underwriting Agreement;
- (l) a debenture indenture dated November 3, 2017 between Osisko and AST Trust Company (Canada), as debenture trustee, pursuant to which the Debentures were created and issued and by which they are governed; and
- (m) the 2017 Credit Agreement.

### **INTERESTS OF EXPERTS**

Mr. Guy Desharnais, Ph.D., P. Geo, is named in this Annual Information Form as having reviewed and approved certain scientific and technical information as set out in this Annual Information Form.

As of the date of this Annual Information Form, Mr. Guy Desharnais, Ph.D., P. Geo, beneficially owned, directly or indirectly, less than 1% of Osisko's outstanding securities including the securities of Osisko's associate or affiliate entities.

PricewaterhouseCoopers LLP, a partnership of Chartered Professional Accountants, the independent auditor of Osisko, has advised that it is independent with respect to Osisko within the meaning of the *Code of ethics of chartered professional accountants* (Québec) and has complied with the SEC's rules on auditor independence and Rule 3520 Auditor Independence of the Public Company Accounting Oversight Board.

Other than as described above, none of the aforementioned persons or companies, nor any director, officer or employee of any of the aforementioned persons or companies is, or is expected to be elected, appointed or employed as, a director, officer or employee of Osisko or of any associate or affiliate of Osisko.

### **ADDITIONAL INFORMATION**

Additional information relating to Osisko, which is not and shall not be deemed to be incorporated by reference in this Annual Information Form, is available electronically on SEDAR at [www.sedar.com](http://www.sedar.com), on EDGAR at [www.sec.gov](http://www.sec.gov) and on its website at [www.osiskogr.com](http://www.osiskogr.com).

Additional information, which is not and shall not be deemed to be incorporated by reference in this Annual Information Form, including directors' and officers' remuneration and indebtedness, principal holders of Osisko's securities and securities authorized for issuance under equity compensation plans, is contained in Osisko's management information circular for its annual and special meeting of shareholders held on May 3, 2018. For information relating to corporate governance related matters, please see "Statement of Corporate Governance Practices" in such circular.

Additional financial information, which is not and shall not be deemed to be incorporated by reference in this Annual Information Form, is provided in Osisko's financial statements and management discussion and analysis for its most recently completed financial year.

## **AUDIT COMMITTEE**

### **Description of the Audit Committee**

The Osisko Audit Committee assists the Osisko Board in fulfilling its oversight responsibilities with respect to the following: (i) in its oversight of Osisko's accounting and financial reporting principles and policies and internal audit controls and procedures; (ii) in its oversight of the integrity and transparency of Osisko's financial statements and the independent audit thereof; (iii) in selecting, evaluating and, where deemed appropriate, replacing the external auditor; (iv) in evaluating the independence of the external auditor; (v) in its oversight of Osisko's risk identification, assessment and management program; and (vi) in Osisko's compliance with legal and regulatory requirements in respect of the above. The Osisko Board has adopted the Osisko Audit Committee Charter, a copy of which is attached as Schedule "A", mandating the role of the Osisko Audit Committee in supporting the Osisko Board in meeting its responsibilities to Osisko Shareholders.

### **Audit Committee Members**

As of the date of this Annual Information Form, the Osisko Audit Committee is comprised of four (4) members, all of whom are independent directors of Osisko, namely: Ms. Joanne Ferstman (Chair), Mr. Pierre Labbé, Mr. Pierre D. Chenard and Mr. Charles E. Page. Ms. Ferstman (Chair) is an "audit committee financial expert" (as such term is defined in paragraph 8(b) of General Instruction B to Form 40-F under the U.S. Exchange Act).

### **Relevant Education and Experience**

#### ***Joanne Ferstman***

Ms. Ferstman (Chair) is a corporate director, sitting on a number of public company boards. From 2013 to 2014, Ms. Ferstman was a Director of Osisko Mining Corporation. Ms. Ferstman was until June 2012 the President and Chief Executive Officer of Dundee Capital Markets Inc., a full service investment dealer with principal businesses that include investment banking, institutional sales and trading and private client financial advisory. Prior to taking this position on January 31, 2011, Ms. Ferstman was Vice-Chair and Head of Capital Markets of DundeeWealth Inc., a diversified wealth management public company that managed and advised over \$75 billion of assets under management and administration, including the Dynamic Funds family, at the time it was sold to the Bank of Nova Scotia in early 2011. Prior to 2009, Ms. Ferstman was Executive Vice President and Chief Financial Officer of DundeeWealth Inc. and Executive Vice President, Chief Financial Officer and Corporate Secretary of Dundee Corporation. In these senior financial roles, Ms. Ferstman was intimately involved in all corporate strategy, including acquisitions and financings, and had responsibility for all public financial reporting. Additionally, Ms. Ferstman was regularly Dundee's nominee on investee company boards and audit committees in both the resources and real estate sectors.

Over the past 18 years, Ms. Ferstman has held a variety of executive positions with the Dundee group of companies until her retirement in June 2012. Prior to joining the Dundee group of companies, Ms. Ferstman spent five years at a major international accounting firm. She served on the board of directors of Aimia Inc. from June 25, 2008 to June 14, 2017. Ms. Ferstman currently serves as Chair of the board of Dream Unlimited Corp, including serving as Chair of the Audit Committee, member of the Organization & Design Committee and member of the Leaders & Mentors Committee. She also serves as a director of Cogeco Communications Inc., including serving as Chair of the Audit Committee and a member of the Strategic Opportunities Committee. In August 2018 she was appointed to the board of the directors of ATS Automation Tooling Systems Inc. and currently serves as a member of its Audit Committee and serves as a member of the Governance Committee. Ms. Ferstman holds a Bachelor of Commerce and a Graduate

Ms. Ferstman is considered to be independent of Osisko and is financially literate, within the meaning of NI 52-110 and under the U.S. Exchange Act and NYSE rules.

***Pierre Labbé***

Mr. Labbé was appointed to the Board of Directors of Osisko in February 2015. Prior to this, Mr. Labbé had been a Director of Virginia since April 2008 and was the Chairman of Virginia's Audit Committee. Mr. Labbé currently serves as the Chief Financial Officer of IMV Inc. and has served as Vice President, Chief Financial Officer and Secretary of Leddartech Inc. from April 2015 to March 2017. He was Vice President and Chief Financial Officer of the Québec Port Authority from October 2013 to April 2015. From July 2004 to May 2007 and from May 2008 until the completion of the privatization of Medicago Inc., following the acquisition by Mitsubishi Tanabe Pharma Corporation for an enterprise value of \$357 million, he was Chief Financial Officer and Secretary of Medicago Inc. Mr. Labbé was also acting Chief Financial Officer of Plexmar Resources Inc. from May 2007 to November 2012. He was Vice President and Chief Financial Officer and Secretary of Sequoia Minerals Inc. from December 2003 to June 2004, and of Mazarin Inc. from March 2000 to December 2003, while both companies were listed on the TSX. Prior to March 2000, he held management positions in accounting and finance notably with PricewaterhouseCoopers LLP (formerly Coopers & Lybrand). Mr. Labbé holds a Bachelor's Degree in Business Administration from Laval University, Québec City. He is a member of the *Ordre des comptables professionnels agréés du Québec* and the Institute of Corporate Directors. He is also a Director of Agility Health Inc., a rehabilitation services company.

Mr. Labbé is considered to be independent of Osisko and is financially literate, within the meaning of NI 52-110 and under the U.S. Exchange Act and NYSE rules.

***Pierre D. Chenard***

Mr. Pierre D. Chenard has been Vice President, Business Development and General Counsel, Aluminium at Rio Tinto since 2011. Mr. Chenard has held progressive roles in both the corporate development and legal areas, including General Counsel, Rio Tinto Global Aluminium and Canada, Vice President and General Counsel at Alcan Inc. and Vice President and Head of Corporate Development at Cambior Inc. Mr. Chenard was appointed to the Osisko Board in accordance with an investment agreement entered into with the CDPQ. Mr. Chenard earned Civil and Common Law degrees from McGill University and has been a member of the Quebec Bar since 1984.

Mr. Chenard is considered to be independent of Osisko and is financially literate, within the meaning of NI 52 110 and under the U.S. Exchange Act and NYSE rules.

***Charles E. Page***

Mr. Charles E. Page is a Professional Geologist and has more than 40 years of experience in the mineral industry. During his career, Mr. Page has held progressive leadership roles in developing strategies to explore, finance and develop mineral properties in Canada and internationally. Mr. Page worked at Queenston Mining Inc. in various capacities, including President and Chief Executive Officer, from 1990 to its sale to Osisko Mining Corporation in 2012. Mr. Page also serves on the board of directors of Unigold Inc. and is Chair of the board of directors of Wesdome Gold Mines Ltd. Mr. Page holds a Bachelor of Science degree in Geological Science from Brock University and a Master of Science degree in Earth Science from the University of Waterloo. He is a Professional Geologist registered in the province of Ontario and Saskatchewan and is also a Fellow of the Geological Association of Canada.

Mr. Page is considered to be independent of Osisko and is financially literate, within the meaning of NI 52 110 and under the U.S. Exchange Act and NYSE rules.

## External Auditor Service Fees

The fees billed to Osisko by its independent auditor, PricewaterhouseCoopers LLP, a partnership of Chartered Professional Accountants, for the fiscal years ended December 31, 2017 and December 31, 2018, by category, are as follows:

Year	Audit Fees <sup>(1)</sup>	Audit Related Fees <sup>(2)</sup>	Tax Fees <sup>(3)</sup>	All Other Fees
December 31, 2018	\$598,803	\$ -	\$69,144	\$ -
December 31, 2017	\$1,017,480	\$112,047	\$397,685	\$ -

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- (1) Audit fees were higher in 2017 primarily due 2017 being the first year of receiving the auditor's opinion on Osisko's internal control over financial reporting, the acquisition of the Orion precious metals portfolio of assets for \$1.1 billion and the services rendered in relation to the management information circular dated June 29, 2017, the issuance of convertible debentures and the services rendered in relation to the short-form prospectus dated October 27, 2017. The audit fees also include services rendered in connection with the audit of Osisko's annual consolidated financial statements and annual audit fee for a separate audit opinion of a subsidiary of Osisko.
- (2) Audit related fees for 2017 included primarily due diligence services pertaining to business combinations.
- (3) Tax fees are related to tax compliance, tax planning and tax advice services for the preparation of corporate tax returns and for proposed transactions, mainly the Orion Transaction for 2017.



## **SCHEDULE A - AUDIT COMMITTEE CHARTER**

### ***I. PURPOSES OF THE AUDIT COMMITTEE***

The purposes of the Audit Committee are to assist the Board of Directors:

1. in its oversight of the Corporation's accounting and financial reporting principles and policies and internal audit controls and procedures;
2. in its oversight of the integrity, transparency and quality of the Corporation's financial statements and the independent audit thereof;
3. in selecting, evaluating and, where deemed appropriate, replacing the external auditors;
4. in evaluating the qualification, independence and performance of the external auditors;
5. in its oversight of the Corporation's risk identification, assessment and management program; and
6. in the Corporation's compliance with legal and regulatory requirements in respect of the above.

The function of the Audit Committee is to provide independent and objective oversight. The Corporation's management team is responsible for the preparation, presentation and integrity of the Corporation's financial statements. Management is responsible for maintaining appropriate accounting and financial reporting principles and policies and internal controls and procedures that provide for compliance with accounting standards and applicable laws and regulations. The external auditors are responsible for planning and carrying out a proper audit of the Corporation's annual financial statements and other procedures. In fulfilling their responsibilities hereunder, it is recognized that members of the Audit Committee are not full-time employees of the Corporation and are not, and do not represent themselves to be, accountants or auditors by profession or experts in the fields of accounting or auditing including in respect of auditor independence. As such, it is not the duty or responsibility of the Audit Committee or its members to conduct "field work" or other types of auditing or accounting reviews or procedures or to set auditor independence standards, and each member of the Audit Committee shall be entitled to rely on (i) the integrity of those persons and organizations within and external to the Corporation from which it receives information, (ii) the accuracy of the financial and other information provided to the Audit Committee by such persons or organizations absent actual knowledge to the contrary (which shall be promptly reported to the Board of Directors) and (iii) representations made by management as to non-audit services provided by the auditors to the Corporation.

The external auditors are ultimately accountable to the Board of Directors and the Audit Committee as representatives of shareholders. The Audit Committee is directly responsible (subject to the Board of Directors' approval) for the appointment, compensation, retention (including termination), scope and oversight of the work of the external auditors engaged by the Corporation (including for the purpose of preparing or issuing an audit report or performing other audit, review or attestation services or other work of the Corporation), and is also directly responsible for the resolution of any disagreements between management and any such firm regarding financial reporting.

The external auditors shall submit, at least annually, to the Corporation and the Audit Committee:

- as representatives of the shareholders of the Corporation, a formal written statement delineating all relationships between the external auditors and the Corporation ("Statement as to Independence");
- a formal written statement of the fees billed in compliance with the disclosure requirements of Form 52-110F1 of National Instrument 52-110; and

- a report describing: the Corporation's internal quality-control procedures; any material issues raised by the most recent internal quality control review, or peer review, of the Corporation, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the Corporation, and any steps taken to deal with any such issues.

## **II. COMPOSITION OF THE AUDIT COMMITTEE**

The Audit Committee shall be comprised of three or more independent directors as defined under applicable legislation and stock exchange rules and guidelines and are appointed (and may be replaced) by the Board of Directors. Determination as to whether a particular director satisfies the requirements for membership on the Audit Committee shall be made by the Board of Directors.

All members of the Committee shall be financially literate within the meaning of National Instrument 52-110 – *Audit Committees* ("NI 52-110") and any other securities legislation and stock exchange rules applicable to the Corporation, and as confirmed by the Board of Directors using its business judgement (including but not limited to be able to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Corporation's financial statements), and at least one member of the Committee shall have accounting or related financial expertise or sophistication as such qualifications are interpreted by the Board of Directors in light of applicable laws and stock exchange rules, including the requirement to have at least one "audit committee financial expert" as such term is defined pursuant to Form 40-F under the U.S. Securities Exchange Act of 1934, as amended. The later criteria may be satisfied by past employment experience in finance or accounting, requisite professional certification in accounting, or any other comparable experience or background which results in the individual's financial sophistication, including being or having been a chief executive officer, chief financial officer or other senior officer of an entity with financial oversight responsibilities, as well as other requirements under applicable laws and stock exchange rules.

## **III. MEMBERSHIP, MEETINGS AND QUORUM**

The Audit Committee shall meet at least four times annually or more frequently if circumstances dictate, to discuss with management the annual audited financial statements and quarterly financial statements, and all other related matters. The Audit Committee may request any officer or employee of the Corporation or the Corporation's external counsel or external auditors to attend a meeting of the Audit Committee or to meet with any members of, or consultants to, the Audit Committee.

Proceedings and meetings of the Audit Committee are governed by the provisions of By-Laws relating to the regulation of the meetings and proceedings of the Board of Directors as they are applicable and not inconsistent with this Charter and the other provisions adopted by the Board of Directors in regards to committee composition and organization.

The quorum at any meeting of the Committee is a majority of members in office. All members of the Audit Committee should strive to be at all meetings.

## **IV. DUTIES AND POWERS OF THE AUDIT COMMITTEE**

To carry out its purposes, the Audit Committee shall have unrestricted access to information and shall have the following duties and powers:

1. with respect to the external auditor,

- (i) to review and assess, at least annually, the performance of the external auditors, and recommend to the Board of Directors the nomination of the external auditors for appointment by the shareholders, or if required, the revocation of appointment of the external auditors;
  - (ii) to review and approve the fees charged by the external auditors for audit services;
  - (iii) to review and pre-approve all services, including non-audit services, to be provided by the Corporation's external auditors to the Corporation or to its subsidiaries, and associated fees and to ensure that such services will not have an impact on the auditor's independence, in accordance with procedures established by the Audit Committee. The Audit Committee may delegate such authority to one or more of its members, which member(s) shall report thereon to the committee;
  - (iv) to ensure that the external auditors prepare and deliver annually a Statement as to Independence (it being understood that the external auditors are responsible for the accuracy and completeness of such statement), to discuss with the external auditors any relationships or services disclosed in the Statement as to Independence that may impact the objectivity and independence of the Corporation's external auditors and to recommend that the Board of Directors take appropriate action in response to the Statement as to Independence to satisfy itself of the external auditors' independence; and
  - (v) to instruct the external auditors that the external auditors are ultimately accountable to the Audit Committee and the Board of Directors, as representatives of the shareholders;
2. with respect to financial reporting principles and policies and internal controls,
- (i) to advise management that they are expected to provide to the Audit Committee a timely analysis of significant financial reporting issues and practices;
  - (ii) to ensure that the external auditors prepare and deliver as applicable a detailed report covering 1) critical accounting policies and practices to be used; 2) material alternative treatments of financial information within generally accepted accounting principles that have been discussed with management, ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the external auditors; 3) other material written communications between the external auditors and management such as any management letter or schedule of unadjusted differences; and 4) such other aspects as may be required by the Audit Committee or legal or regulatory requirements;
  - (iii) to understand the scope of the annual audit of the design and operation of the Corporation's internal control over financial reporting (based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)) and the related auditor's report;
  - (iv) to consider, review and discuss any reports or communications (and management's responses thereto) submitted to the Audit Committee by the external auditors, including reports and communications related to:
    - significant finding, deficiencies and recommendations noted following the annual audit of the design and operation of internal controls over financial reporting;
    - consideration of fraud in the audit of the financial statement;
    - detection of illegal acts;
    - the external auditors' responsibilities under generally accepted auditing standards;
    - significant accounting policies;
    - management judgements and accounting estimates;

- adjustments arising from the audit;
  - the responsibility of the external auditors for other information in documents containing audited financial statements;
  - disagreements with management;
  - consultation by management with other accountants;
  - major issues discussed with management prior to retention of the external auditors;
  - difficulties encountered with management in performing the audit;
  - the external auditors judgements about the quality of the entity's accounting principles; and
  - reviews of interim financial information conducted by the external auditors.
- (v) to meet with management and external auditors:
- to discuss the scope, planning and staffing of the annual audit and to review and approve the audit plan;
  - to discuss the audited financial statements, including the accompanying management's discussion and analysis;
  - to discuss the unaudited interim quarterly financial statements, including the accompanying management's discussion and analysis;
  - to discuss the appropriateness and quality of the Corporation's accounting principles as applied in its financial reporting;
  - to discuss any significant matters arising from any audit or report or communication referred to in item 2 (iii) above, whether raised by management or the external auditors, relating to the Corporation's financial statements;
  - to resolve disagreements between management and the external auditors regarding financial reporting;
  - to review the form of opinion the external auditors propose to render to the Board of Directors and shareholders;
  - to discuss significant changes to the Corporation's auditing and accounting principles, policies, controls, procedures and practices proposed or contemplated by the external auditors or management, and the financial impact thereof;
  - to review any non-routine correspondence with regulators or governmental agencies and any employee complaints or published reports that raise material issues regarding the Corporation's financial statements or accounting policies;
  - to review, evaluate and monitor the Corporation's risk management program including the revenue protection program. This function should include:
    - risk assessment;
    - quantification of exposure;
    - risk mitigation measures; and
    - risk reporting;
  - to review the adequacy of the resources of the finance and accounting group, along with its development and succession plans;
  - to monitor and review communications received in accordance with the Corporation's Internal Whistle Blowing Policy;
  - following completion of the annual audit and quarterly reviews, review separately with each of management and the independent auditor any

significant changes to planned procedures, any difficulties encountered during the course of the audit and reviews, including any restrictions on the scope of the work or access to required information and the cooperation that the independent auditor received during the course of the audit and review;

- (vi) to discuss with the Chief Financial Officer any matters related to the financial affairs of the Corporation;
  - (vii) to discuss with the Corporation's management any significant legal matters that may have a material effect on the financial statements, the Corporation's compliance policies, including material notices to or inquiries received from governmental agencies;
  - (viii) to periodically review with management the need for an internal audit function; and
  - (ix) to review, and discuss with the Corporation's Chief Executive Officer and Chief Financial Officer the procedure with respect to the certification of the Corporation's financial statements pursuant to National Instrument 52-109 *Certification of Disclosure in Issuer's Annual and Interim Filings* and any other applicable law or stock exchange rule.
3. with respect to reporting and recommendations,
- (i) to prepare/review any report or other financial disclosures to be included in the Corporation's annual information form and management information circular;
  - (ii) to review and recommend to the Board of Directors for approval, the interim and audited annual financial statements of the Corporation, management's discussion and analysis of the financial conditions and results of operations (MD&A) and the press releases related to those financial statements;
  - (iii) to review and recommend to the Board of Directors for approval, the annual report, management's assessment on internal controls and any other like annual disclosure filings to be made by the Corporation under the requirements of securities laws or stock exchange rules applicable to the Corporation;
  - (iv) to review and reassess the adequacy of the procedures in place for the review of the Corporation's public disclosure of financial information extracted or derived from the Corporation's financial statements, other than the public disclosure referred to in paragraph 3(ii) above;
  - (v) to prepare Audit Committee report(s) as required by applicable regulators;
  - (vi) to review this Charter at least annually and recommend any changes to the Board of Directors; and
  - (vii) to report its activities to the Board of Directors on a regular basis and to make such recommendations with respect to the above and other matters as the Audit Committee may deem necessary or appropriate.
4. to review, discuss with management, and approve all related party transactions;
5. to create an agenda for the ensuing year;
6. to review quarterly expenses of the Chief Executive Officer;
7. to establish and reassess the adequacy of the procedures for the receipt, retention and treatment of any complaint received by the Corporation regarding accounting, internal accounting controls or auditing matters, including procedures for the confidential anonymous submissions by employees of concerns regarding questionable accounting or auditing matters in accordance with applicable laws and regulations; and
8. to set clear hiring policies regarding partners, employees and former partners and employees of the present and, as the case may be, former external auditor of the Corporation.

**V. RESOURCES AND AUTHORITY OF THE AUDIT COMMITTEE**

The Audit Committee shall have the resources and authority appropriate to discharge its responsibilities, as it shall determine, including the authority to engage external auditors for special audits, reviews and other procedures and to retain special counsel and other experts or consultants. The Audit Committee shall have the sole authority (subject to the Board of Directors' approval) to determine the terms of engagement and the extent of funding necessary (and to be provided by the Corporation) for payment of (a) compensation to the Corporation's external auditors engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Corporation, (b) any compensation to any advisors retained to advise the Audit Committee and (c) ordinary administrative expenses of the Audit Committee that are necessary or appropriate in carrying out its duties.

**VI. ANNUAL EVALUATION**

At least annually, the Audit Committee shall, in a manner it determines to be appropriate:

- perform a review and evaluation of the performance of the Audit Committee and its members, including the compliance with this Chart; and
- Review and assess the adequacy of its Charter and recommend to the Board of Directors any improvements to this Charter that the Committee determines to be appropriate.

***This Charter was approved and ratified by the Board of Directors on April 30, 2014.***

***This Charter was last reviewed and amended on November 6, 2017.***

## **SCHEDULE B - TECHNICAL INFORMATION UNDERLYING THE CANADIAN MALARTIC PROPERTIES**

### **Most Recent Technical Report**

The most recent technical report filed by Agnico and Yamana in accordance with NI 43-101 is entitled "Technical Report on the Mineral Resource and Mineral Reserve Estimates for the Canadian Malartic Property" with an effective date of June 16, 2014 and a signature date of August 13, 2014 (the "**Canadian Malartic Report**"). Reference should be made to the full text of the Canadian Malartic Report.

### **Information Contained in this Section**

The technical information, tables and figures that follow have been derived from (a) the Canadian Malartic Report; (b) Yamana's and Agnico's most recent annual information forms as of the date hereof; and (c) various news releases publicly filed by Agnico and/or Yamana which may all be consulted under Agnico's and/or Yamana's issuer profiles on SEDAR at [www.sedar.com](http://www.sedar.com) and none of which is nor shall be deemed to be incorporated by reference in this Annual Information Form.

The technical information contained in this section has been reviewed and approved by Mr. Guy Desharnais, Ph.D., P.Geo, who is a "qualified person" for the purpose of NI 43-101. Portions of the following information are based on assumptions, qualifications and procedures which are not fully described herein.

Except where otherwise stated, the disclosure in this section relating to operations on the Canadian Malartic Property is based on information publicly disclosed by Agnico and/or Yamana and information/data available in the public domain as at March 28, 2019 (except where stated otherwise), and none of this information has been independently verified by Osisko. Osisko considers that Agnico and Yamana have publicly disclosed all scientific and technical information that is material to Osisko.

As a holder of royalties, streams or other interests, Osisko has limited access to properties included in its asset portfolio. Additionally, Osisko may from time to time receive operating information which it is not permitted to disclose to the public. Osisko is dependent on the operators of the properties and their qualified persons to provide information to Osisko or on publicly available information to prepare required disclosure pertaining to properties and operations on the properties on which Osisko holds interests and generally has limited or no ability to independently verify such information. Although Osisko does not have any knowledge that such information may not be accurate, there can be no assurance that such third party information is complete or accurate. Some information publicly reported by operators may relate to a larger property than the area covered by Osisko's interest. Osisko's interests often cover less than 100%, and sometimes only a portion of, the publicly reported Mineral Reserves, Mineral Resources and production of the property. Osisko shall not be held liable for any eventual misrepresentations in any scientific or technical information excerpted from any technical information publicly filed by Agnico and/or Yamana.

### **Project Description, Location and Access**

The Canadian Malartic mine is located approximately 25 kilometres west of the City of Val-d'Or and 80 kilometres east of City of Rouyn-Noranda. The mine lies within the town of Malartic. It straddles the townships of Fournière, Malartic and Surimau.

The Canadian Malartic mine operates under mining leases obtained from the Ministry of Natural Resources (Québec) and under certificates of approval granted by the Ministry of Sustainable Development, Environment and the Fight Against Climate Change (Québec). The Canadian Malartic mine is comprised of the East Amphi property, the CHL Malartic prospect, the Canadian Malartic property of Canadian Malartic Corporation and the Fournière, Midway and Piche-Harvey properties. The Canadian Malartic mine consists of a contiguous block comprising one (1) mining concession, six (6) mining leases and 272 mining claims. The Canadian Malartic mine is owned by Canadian Malartic GP. The Canadian Malartic mining claims give Canadian Malartic GP the right to explore for mineral substances on the subject land; the mining leases

give Canadian Malartic GP the right to mine mineral substances on the subject land; and the mining concession gives Canadian Malartic GP the right to mine mineral substances and with surface rights limited to those necessary for mining activities on the subject land.

Expiration dates for the mining leases on the Canadian Malartic Property vary between March 23, 2019 and July 27, 2037 and are automatically renewable for three further ten-year terms upon payment of a small fee.

The Canadian Malartic mine can be accessed either from Val d'Or in the east or from Rouyn-Noranda in the west via Québec provincial highway No. 117. A paved road running north-south from the town of Malartic towards Mourier Lake cuts through the central area of the Canadian Malartic mine. The Canadian Malartic Property is further accessible by a series of logging roads and trails. The Canadian Malartic mine is also serviced by a rail-line which cuts through the middle of the town of Malartic. The nearest large airport is located in Val-d'Or, about 25 km east of the Canadian Malartic mine.

A buffer zone 135 metres wide has been developed along the northern limit of the open pit to mitigate the impacts of mining activities on the citizens of Malartic. Inside this buffer zone, a landscaped ridge was built mainly using rock and topsoil produced during pre-stripping work.

The electrical power for the Canadian Malartic mine is supplied from the existing Hydro-Québec 120kV Cadillac main substation. A 120 kV electrical transmission line, approximately 19 kilometres long was built. The plant water systems consist of the process water system which is supplied principally from the plant thickener overflows, the fresh water system which is supplied from an old underground mine dewatering system, the reagent preparation water system, the gland water distribution system and the reclaim water from form the Southeast Pond area. The Canadian Malartic mine is also connected to the Malartic municipal sewage and potable water systems. Fuel storage facilities have 250,000 litres of storage capacity.

Skilled workers are available from the areas within an approximate 25 km radius of Malartic, specifically Cadillac to the west and Val-d'Or to the east, where a number of mines are still in operation.

The Canadian Malartic Property is situated in the Abitibi lowlands and is relatively flat, consisting of plains with a few small hills. The topography on the property has altitudes ranging from 310 metres above sea level ("**masl**") to 360 masl. Most of the area is sparsely wooded with secondary growth black spruce, larch and birch as the dominant species. The central, east-central and west-central parts of the property are cut by a number of small streams, generally oriented east-west and connecting bogs or swampy areas.

Overburden is characteristically a thin layer of till, typically only a few metres thick, with local surface development of organic-rich boggy material. Outcropping exposures of rock are rare to moderate, generally increasing towards the southern portion of the property and lithologies become harder and more resistant to erosion.

The Canadian Malartic mine includes open-pit operations, an administration/warehouse building, a mine office/truck shop building, a process plant, a tailings management facility and the crushing plant.

Following the joint acquisition of Osisko Mining Corporation (now Canadian Malartic Corporation) by Agnico and Yamana, most of the mining titles are subject to a 5% NSR royalty payable to Osisko. The mining claims comprising the CHL Malartic prospect are subject to 3% NSR royalties payable to each of Osisko and Abitibi Royalties Inc. In addition, of the 208 mining claims constituting the Canadian Malartic property on June 16, 2014, 101 were also subject to other net NSR royalties that vary between 1% and 2%, payable under varying circumstances. Osisko holds a 5% NSR royalty on the Odyssey South zone and a 3% NSR royalty on the Odyssey North zone, which adjoins the Canadian Malartic mine.



## **History**

Gold was first discovered in the Malartic area in 1923. Gold production on the Canadian Malartic property began in 1935 and continued uninterrupted until 1965. Following various ownership changes over the ensuing years, Osisko Mining Corporation (now Canadian Malartic Corporation) acquired ownership of the Canadian Malartic property in 2004. Based on a feasibility study completed in December 2008, Osisko Mining Corporation (now Canadian Malartic Corporation) completed construction of a 55,000 tonne per day mill complex, tailings impoundment area, 5 million cubic metre polishing pond and road network by February 2011, and the mill was commissioned in March 2011. The Canadian Malartic mine achieved commercial production on May 19, 2011.

## **Geological Setting, Mineralization and Deposit Types**

### ***Geology***

The Canadian Malartic property straddles the southern margin of the eastern portion of the Abitibi Subprovince, an Archean greenstone belt situated in the southeastern part of the Superior Province of the Canadian Shield. The Abitibi Subprovince is limited to the north by gneisses and plutons of the Opatika Subprovince, and to the south by metasediments and intrusive rocks of the Pontiac Subprovince. The contact between the Pontiac Subprovince and the rocks of the Abitibi greenstone belt is characterized by a major fault corridor, the east-west trending Larder Lake-Cadillac Fault Zone (“**LLCFZ**”). This structure runs from Larder Lake, Ontario through Rouyn-Noranda, Cadillac, Malartic, Val-d’Or and Louvicourt, Québec, at which point it is truncated by the Grenville Front.

The regional stratigraphy of the southeastern Abitibi area is divided into groups of alternating volcanic and sedimentary rocks, generally oriented at N280° - N330° and separated by fault zones. The main lithostratigraphic divisions in this region are, from south to north, the Pontiac Group of the Pontiac Subprovince and the Piché, Cadillac, Blake River, Kewagama and Malartic groups of the Abitibi Subprovince. The various lithological groups within the Abitibi Subprovince are metamorphosed to greenschist facies. Metamorphic grade increases toward the southern limit of the Abitibi belt, where rocks of the Piché Group and the northern part of the Pontiac Group have been metamorphosed to upper greenschist facies.

The majority of the Canadian Malartic property is underlain by metasedimentary units of the Pontiac Group, lying immediately south of the LLCFZ. The north-central portion of the property covers an approximately 9.5 kilometre section of the LLCFZ corridor and is underlain by mafic-ultramafic rocks of the Piché Group cut by porphyritic and dioritic intrusions. The Cadillac Group covers the northern part of the property (north of the LLCFZ). It consists of greywacke containing lenses of conglomerate.

Surface drilling by Lac Minerals Ltd. in the 1980s defined several near-surface mineralized zones now included in the Canadian Malartic deposit (the F, P, A, Wolfe and Gilbert zones), all expressions of a larger, continuous mineralized system located at depth around the historical underground workings of the Canadian Malartic and Sladen mines. In addition to these, the Western Porphyry Zone occurs 1 km northeast of the main Canadian Malartic deposit and the Gouldie mineralized zone occurs approximately 1.2 km southeast of the main Canadian Malartic deposit, although the relationship between these zones and the main deposit is presently unknown.

### ***Mineralization***

Mineralization in the Canadian Malartic deposit occurs as a continuous shell of 1 to 5% disseminated pyrite associated with fine native gold and traces of chalcopyrite, sphalerite and tellurides. The gold resource is mostly hosted by altered clastic sediments of the Pontiac Group (70%) overlying an epizonal dioritic porphyry intrusion. A portion of the deposit also occurs in the upper portions of the porphyry body (30%).

The South Barnat deposit is located to the north and south of the old South Barnat and East Malartic mine workings, largely along the southern edge of the LLCFZ. The disseminated/stockwork gold mineralization at South Barnat is hosted both in potassic-altered, silicified greywackes of the Pontiac Group (south of the fault contact) and in potassic-altered porphyry dykes and schistose, carbonatized and biotitic ultramafic rocks (north of the fault contact).

Several mineralized zones have been documented within the LLCFZ (South Barnat, Buckshot, East Malartic, Jeffrey, Odyssey, East Amphi, Fourax), all of which are generally spatially associated with stockworks and disseminations within dioritic or felsic porphyritic intrusions.

### ***Deposit Type***

Before the acquisition of the property in 2004 by Osisko Mining Corporation (now Canadian Malartic Corporation), several models were proposed by various authors to explain the origin of the gold deposits in the Malartic camp. Among the proposed models are an epigenetic model with structural and lithological control, an orthomagmatic-origin porphyry-related model, a porphyry gold model, and a disseminated-stockwork zone model centered on felsic porphyry intrusions.

In 2004, Osisko Mining Corporation (now Canadian Malartic Corporation)'s personnel adopted the porphyry gold model as a tool to drive exploration on the property. More recently, a new model was proposed to define the deposit type explaining the gold mineralization of the Canadian Malartic mine. It represents a magmatic-hydrothermal model that calls for the exsolution of an ore fluid from monzodioritic magma at mid-crustal levels. During its ascent, this fluid potassically altered, carbonated, sulphidized and locally silicified the host rocks and deposited gold. The porphyritic rocks that host some of the mineralization were thus not the source of the fluids. Rather, their contacts with Pontiac greywacke and Piché mafic and ultramafic rocks provided the competency contrasts that helped focus the mineralizing fluids.

### **Sampling, Analysis and Data Verification**

The available data from the QA/QC programs for the Canadian Malartic databases show overall acceptable results.

The statistics of the Certified Reference Materials (standards) are considered within industry-accepted limits of accuracy.

The level of contamination appears to be low as the blank samples do not display evidence of significant contamination.

The samples sent to an external laboratory do not show any significant bias as the global average is about the same and the coefficient of correlation between the two populations is higher than 98%.

The Canadian Malartic drill hole databases are considered robust and suitable enough for use in mineral resource estimation studies.

### **Mineral Processing and Metallurgical Testing**

Canadian Malartic ore is composed of four main lithologies (CPO, SPO, CGR and SGR) spread throughout the deposit in an average ratio of 10%, 20%, 28% and 42%. The deposit was studied (metallurgical testwork) along three axes: east-west, north-south and depth. The main parameters studied were hardness and abrasion variability, reagent consumption and gold recovery.

Gold deportment and diagnostic leach tests demonstrated that the residual gold, after the leach process, is encapsulated mainly in pyrite. The significant proportion of the gold remaining in the tailings after the leach process was characterized as very fine. It was demonstrated that gravimetric processes are inefficient due to the small grain size. The grind of the leach feed is the most important parameter observed, especially

for the gold encapsulated in sulphide. The finer the grind, the higher the recovery, especially for the gold in sulphide.

## Mining Operations

The Canadian Malartic mine is a large open-pit operation comprising the Canadian Malartic, Barnat and Gouldie pits. Canadian Malartic GP continues to work with the Québec Ministry of Transport and the town of Malartic on the deviation of Québec provincial highway No. 117 to gain access to the higher grade Barnat deposit. The final layout and the environmental impact study was completed by the end of January 2015.

The BAPE issued a report on the Canadian Malartic pit extension on October 5, 2016. The BAPE report concluded that the project is acceptable and provided several recommendations intended to enhance social acceptability. The Quebec government issued a decree authorizing both the pit extension and deviation of Quebec provincial highway No. 117 on April 12, 2017. The authorizing decree is subject to an application for judicial review. In 2018, development activities focused on the road deviation of Quebec provincial highway No. 117 continued, including overburden stripping and tailings expansion. The highway deviation is expected to be completed in late 2019, and production activities at Barnat are scheduled to begin in late 2019, following completion of the highway deviation.

Mining at the Canadian Malartic mine is done by open pit method using excavators and trucks, using large scale equipment. The primary loading tools are hydraulic excavators, with wheel loaders used as a secondary loading tool. The mine production schedule was developed to feed the mill at a nominal rate of 55,000 tonnes per day. The continuity and consistency of the mineralization, coupled with tight definition drilling, which has been confirmed by nine years of mining operations, demonstrates the amenability of the mineral reserves and mineral resources to the selected mining method

The following table sets forth operation statistics of the Canadian Malartic mine for the years ended December 31, 2018 and December 31, 2017. Figures have been adjusted by Osisko to reflect 100% of the Canadian Malartic operation.

	<b>Twelve Months Ended December 31, 2018</b>	<b>Twelve Months Ended December 31, 2017</b>
Tonnes of ore milled (thousands of tonnes) (100%)	20,484	20,358
Tonnes of ore milled per day (100%)	56,121	55,774
Gold grade (g/t)	1.20	1.09
Gold production (ounces) (100%)	<b>697,200</b>	<b>633,462</b>
Production costs per tonne (C\$)	\$25	\$24
Minesite costs per tonne (C\$)	\$25	\$24
Production costs per ounce of gold produced (US\$ per ounce)	\$573	\$595
Total cash costs per ounce of gold produced (US\$ per ounce)	\$559	\$576

Production costs per tonne for the full year 2018 were essentially the same when compared to the prior-year period. Production costs per ounce for the full year 2018 decreased when compared to the prior-year period due to higher gold production, partially offset by higher contractor and fuel costs.

Minesite costs per tonne for the full year 2018 were essentially the same when compared to the prior-year period. Total cash costs per ounce for the full year 2018 decreased when compared to the prior-year period due to higher gold production, partially offset by higher contractor and fuel costs.

Gold production for the full year 2018 increased when compared to the prior-year period due to record annual mill throughput levels and higher grades.

Work on the Barnat extension project is proceeding on budget and on schedule. Work is primarily focused on the Highway 117 road deviation, overburden stripping and tailings expansion. The highway deviation is expected to be completed in late 2019. Production activities at Barnat are scheduled to begin in late 2019, following completion of the highway deviation.

Exploration programs are ongoing to evaluate several deposits to the east of the Canadian Malartic open pit, including the Odyssey, East Malartic, Sladen and Sheehan zones. These opportunities have the potential to provide new sources of ore for the Canadian Malartic mill. In the fourth quarter of 2018, 14 drill holes (5,460 metres) were completed at the Odyssey Zone and an additional 13 drill holes (17,416 metres) were completed at the East Malartic area. Additional exploration will be carried out in 2019 to assess the potential of these zones.

The permit allowing for the development of an underground ramp at the Odyssey project was received in December 2018.

As part of ongoing stakeholder engagement, Canadian Malartic GP is in discussions with four First Nations groups concerning a potential memorandum of understanding, which is expected to also include a financial component. As with the Good Neighbour Guide and other community relations efforts at Canadian Malartic, the Company is working collaboratively with stakeholders to establish cooperative relationships that support the long-term potential of the mine.

## **Infrastructure, Permitting and Compliance Activities**

### ***Surface Facilities***

Surface facilities at the Canadian Malartic mine include the administration/warehouse building, the mine office/truck shop building, the process plant, a tailings management facility and the crushing plant. The processing plant has a nominal capacity of 55,000 tonnes of ore.

Ore is processed via conventional cyanidation. Ore blasted from the pit is first crushed by a gyratory crusher followed by secondary crushing prior to grinding. Ground ore feeds successively into leach and CIP circuits.

A Zadra elution circuit is used to extract the gold from the loaded carbon. Pregnant solution is processing via electrowining and the resulting precipitate is smelted into gold/silver dore bars.

Mill tails are thickened and detoxified, reducing cyanide levels below 20 parts per million. A recent study supported the change-over of the existing Combinox (sulfur dioxide – hydrogen peroxide) cyanide detoxifying process into a Caro's (sulfuric acid – hydrogen peroxide) acid process. Detoxified slurry is subsequently pumped to a conventional tailings facility.

### ***Environmental Matters***

In 2015, an action plan was developed and implemented by Canadian Malartic GP to mitigate noise, vibrations, atmospheric emissions and ancillary issues. Mitigation measures were put in place to improve the process and avoid any non-conformance. As a result, over time, Canadian Malartic GP has improved its environmental performance compared to previous years. With respect to activities in 2018, it received one non-compliance blast notice, a decrease from the three notices received with respect to activities in 2017. The mine's team of on-site environmental experts continuously monitor regulatory compliance in terms of approvals, permits and observance of directives and requirements.

The original design of the waste rock pile was developed to accommodate approximately 326 million of tonnes of mechanically placed waste rock requiring a total storage volume of approximately 161 million cubic metres. The design of the waste rock pile has been modified to accommodate the Canadian Malartic pit extension and now includes storage capacity for approximately 740 million tonnes.

The expansion of the open pit, with the production from the Canadian Malartic pit extension, will increase the total amount of tailings to 342 million tonnes over the life of mine. The total capacity of the current tailings management facility is estimated to be 198 million tonnes. An additional tailings cell was authorized by the Ministry of Sustainable Development, Environment and the Fight Against Climate Change (Quebec) and construction began in the third quarter of 2017. This cell will add capacity for approximately 50 million tonnes of tailings and is expected to be in operation in 2018. In addition, Canadian Malartic GP plans to store additional tailings in the Canadian Malartic pit at the end of its operations. According to the mine plan, up to 100 million tonnes of tailings will be deposited in the Canadian Malartic pit once mining in the pit is completed.

Regulatory approval for the proposed tailings deposition in the Canadian Malartic pit is part of the approval process for the Canadian Malartic pit extension. A hydrogeological study is being prepared to demonstrate that the Canadian Malartic pit would provide a hydraulic trap and contain the tailings with minimal environmental risk. Any delays in the expected timing of the permits required for the Canadian Malartic pit extension could have a negative impact on the mining sequence at Canadian Malartic.

The public hearings as part of the BAPE process took place in June and July 2016 for the Canadian Malartic pit extension and the BAPE issued their report in October 2016, with a recommendation to the Minister that the project be accepted with certain conditions. The Quebec government issued the decree authorizing both the pit extension and deviation of Quebec provincial highway No. 117 on April 12, 2017.

An annual hydrological site balance is maintained to provide a yearly estimate of water volumes that must be managed in the different structures of the water management system of the Canadian Malartic mine during an average climatic year (in terms of precipitation). Results of this hydrological balance indicate that excess water from the Southeast Pond will eventually need to be released into the environment. A water treatment plant is currently under construction to ensure that in the short and medium term the water to be released to the environment will meet water quality requirements. Adding a treatment plant is expected to reduce the risks associated with surface water management and add flexibility to the system.

Reclamation and closure costs have been estimated for rehabilitating the tailings facility and waste dump, vegetating the surrounding area, dismantling the plant and associated infrastructure, and performing environmental inspection and monitoring for a period of ten years.

## Mineral Resources and Mineral Reserves Estimates - Canadian Malartic

In February 2019, Agnico and Yamana disclosed mineral reserve and mineral resource estimates reported as at December 31, 2018. See also “*Notice to Investors – Technical Information*”. **All numbers published by Agnico and Yamana in respect of the Canadian Malartic mine reflect their respective 50% ownership in the mine. However, unless otherwise noted, the figures presented in this Annual Information Form have been adjusted, where applicable, to reflect 100% of the Canadian Malartic mine.**

The following table sets forth the estimated “Mineral Reserves” (as defined in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (“**CIM**”) - Definition Standards adopted by CIM Council on May 10, 2014 (the “**CIM Definition Standards**”) for the Canadian Malartic mine operated by Canadian Malartic GP, owned by Agnico (50%) and Yamana (50%), as of December 31, 2018 (figures below have been adjusted by Osisko to reflect 100% of the Canadian Malartic operation):

Proven and Probable Mineral Reserves <sup>(1)(2)(3)(4)</sup>			
Category	Tonnes (thousands)	Grade (grams per tonne)	Au (thousands of ounces)
Proven	46,058	0.89	1,316
Probable	111,598	1.18	4,244
Proven + Probable	157,656	1.10	5,560

**Notes:**

- (1) The Mineral Reserves have been calculated in accordance with the CIM Definition Standards and NI 43-101. The "Mineral Reserves" are classified as "Proven and Probable Mineral Reserves", and are based on the CIM Definition Standards.
- (2) Canadian Malartic GP, owned by Agnico (50%) and Yamana (50%), which owns and operates the Canadian Malartic mine, has estimated the mine's December 2018 Mineral Reserves and Mineral Resources using the following assumptions: US\$1,200 per ounce gold, a cut-off grade between 0.37 g/t and 0.38 g/t gold (depending on the deposit) and an exchange rate of C\$1.25 per US\$1.00.
- (3) The numbers in the "Tonnes" and "Contained Metal" columns are based on Agnico's disclosure of its 50% interest in the Canadian Malartic mine, and have been multiplied by a factor of two to reflect 100% of the Canadian Malartic mine.
- (4) Numbers may not add up due to rounding.

The following table sets forth the estimated "Mineral Resources" (as defined in accordance with the CIM Definition Standards) for the Canadian Malartic mine operated by Canadian Malartic GP, owned by Agnico (50%) and Yamana (50%), as of December 31, 2018 (figures below have been adjusted by Osisko to reflect 100% of the Canadian Malartic operation):

<b>Measured and Indicated Mineral Resources<sup>(1)(2)(3)(4)(5)</sup> (excluding Proven and Probable Mineral Reserves)</b>			
<b>Category</b>	<b>Mining Method</b>	<b>Tonnes (thousands)</b>	<b>Grade (grams per tonne)</b>
Measured	Open Pit	476	0.48
	Underground	3,294	1.49
Indicated	Open Pit	1,830	0.48
	Underground	12,852	1.66
Inferred	Open Pit	1,996	0.98
	Underground	3,388	1.38

**Notes:**

- (1) The Mineral Resources have been calculated in accordance with the CIM Definition Standards and NI 43-101. The "Mineral Resources" are classified as "Measured, Indicated and Inferred Mineral Resources", and are based on the CIM Definition Standards.
- (2) Mineral Resources are exclusive of Mineral Reserves. Mineral Resources are not known with the same degree of certainty as Mineral Reserves and do not have demonstrated economic viability.
- (3) Canadian Malartic GP, owned by Agnico (50%) and Yamana (50%), which owns and operates the Canadian Malartic mine, has estimated the mine's December 2018 Mineral Reserves and Mineral Resources using the following assumptions: US\$1,200 per ounce gold and an exchange rate of C\$1.25 per US\$1.00. At the Canadian Malartic mine, the mineral resources are estimated using 80% of the cut-off grades used to estimate the mineral reserves.
- (4) The quantity and grade of reported "Inferred Mineral Resources" have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an "Inferred Mineral Resource" will ever be upgraded to a higher category. Under Canadian rules, estimates of "Inferred Mineral Resources" may not form the basis of feasibility or pre-feasibility studies, except in rare cases. Investors are cautioned not to assume that part or all of an inferred mineral resource exists, or is economically or legally mineable.
- (5) The numbers in the "Tonnes" column are based on Agnico's disclosure of its 50% interest in the Canadian Malartic mine, and have been multiplied by a factor of two to reflect 100% of the Canadian Malartic mine.

### Updated Mineral Resource at Odyssey and New Mineral Resource Reported at East Malartic

The Odyssey property is composed of multiple mineralized bodies spatially associated with a porphyritic intrusion close to the contact of the Pontiac Group sediments and the Piché Group of volcanic rocks. They are grouped into two elongated zones, the Odyssey North and Odyssey South zones, that strike east-southeast and dip steeply south. Odyssey North has been traced from a depth of 600 to 1,300 metres below surface along a strike length of approximately 1.5 kilometres. Odyssey South currently has a strike length of 0.5 kilometres and has been located between approximately 200 and 550 metres below surface.



During 2017, a total of 125 holes (86,051 metres) were completed at the Odyssey property. The 2017 results have been incorporated with previous work to update the mineral resource for the Odyssey property (inclusive of the North and South zones). Inferred mineral resources (on a 50% basis) are estimated at 838,000 ounces of gold (11.2 million tonnes grading 2.32 g/t gold).

The inferred mineral resource includes a small contribution from the Jupiter Zone, which is an internal zone that extends from the Odyssey North Zone. Drilling carried out to date suggests that these internal zones could increase mineral resources and enhance the economics of the project by adding higher grade ounces that would require minimal additional infrastructure to access. Additional drilling is required to fully understand the complex nature of these zones so that they can be integrated into the mineral resource model.

In 2017, an initial inferred mineral resource was declared on the East Malartic property, which was a historical gold producer directly adjacent to the Canadian Malartic mine. Inferred mineral resources at East Malartic (on a 50% basis) are estimated at 1.2 million ounces of gold (19 million tonnes grading 2.02 g/t gold) to a depth of 1,000 metres.

The following table sets forth the estimated “Mineral Resources” (as defined in accordance with the CIM Definition Standards) for the Odyssey property and the East Malartic property, as of December 31, 2017 (for Odyssey, figures below have been adjusted by Osisko to reflect 100% of the operation):

<b>Measured and Indicated Mineral Resources<sup>(1)(2)(3)(4)(5)</sup></b>			
<b>Odyssey Property</b>			
<b>Category</b>	<b>Mining Method</b>	<b>Tonnes (thousands)</b>	<b>Grade (grams per tonne)</b>
Indicated	Underground	2,018	2.11
Inferred	Underground	22,996	2.19
<b>East Malartic Property</b>			
<b>Category</b>	<b>Mining Method</b>	<b>Tonnes (thousands)</b>	<b>Grade (grams per tonne)</b>
Indicated	Underground	10,530	2.13
Inferred	Underground	44,042	1.98

**Notes:**

- (1) The Mineral Resources have been calculated in accordance with the CIM Definition Standards and NI 43-101. The “Mineral Resources” are classified as “Measured, Indicated and Inferred Mineral Resources”, and are based on the CIM Definition Standards.
- (2) Mineral Resources are not known with the same degree of certainty as Mineral Reserves and do not have demonstrated economic viability.
- (3) Using the following assumptions: US\$1,200 per ounce gold and an exchange rate of C\$1.25 per US\$1.00. The cut-off grade is not specifically stated.
- (4) The quantity and grade of reported “Inferred Mineral Resources” have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an “Inferred Mineral Resource” will ever be upgraded to a higher category. Under Canadian rules, estimates of “Inferred Mineral Resources” may not form the basis of feasibility or pre-feasibility studies, except in rare cases. Investors are cautioned not to assume that part or all of an inferred mineral resource exists, or is economically or legally mineable.
- (5) The numbers in the “Tonnes” column are based on Agnico’s disclosure of its interest (Odyssey 50% and East Malartic 100%) and have been adjusted to reflect a 100% interest.

## **Estimated 2019 Capital Expenditures**

Budgeted 2019 capital expenditures at the Canadian Malartic mine are US\$165.4 million, excluding capitalized exploration (US\$4.6 million).

## Update on Canadian Malartic

On August 2, 2016, Canadian Malartic GP was served with a class action lawsuit, filed in the Superior Court of Quebec, with respect to allegations involving the Canadian Malartic mine. The complaint is in respect of “neighbourhood annoyances” arising from dust, noise, vibrations and blasts at the mine. The plaintiffs are seeking damages in an unspecified amount as well as punitive damages in the amount of \$20 million. The class action was certified in May 2017. In November 2017, a declaratory judgment was issued allowing Canadian Malartic GP to settle individually with class members for 2017 under its “Good Neighbor Guide”. In September 2018, the Superior Court of Quebec introduced an annual revision of the ending date of the class action period and a mechanism for the partial exclusion of class members, allowing residents to individually settle for a specific period (usually a calendar year) and to opt-out from the class action for such specific period. Both of these judgments were confirmed by the Quebec Court of Appeal and the class members will thus continue to have the option to benefit from the “Good Neighbor Guide”. In January 2018, a judgment was rendered in favor of Canadian Malartic GP, resulting in the removal from the class action of the pre-transaction period, spanning from August 2013 to June 16, 2014, during which the Canadian Malartic mine was not operated by Canadian Malartic GP. Canadian Malartic GP will take all necessary steps to defend themselves from this lawsuit. Osisko does not believe that this class action would have any impact on the financial results of Osisko as its royalty is based on production.

Since the spring of 2015, Canadian Malartic GP has been working collaboratively with the community of Malartic and its citizens to develop a “Good Neighbour Guide” that addresses the allegations contained in the class action lawsuit. Implementation of the Good Neighbour Guide, which includes a compensation program and a home acquisition program, began on September 1, 2016.

Under the compensation program, over 90% of the residents of Malartic have agreed to settle their claims for the compensation offered. Compensation offered to eligible residents of the northern sector of Malartic in 2017 was paid in the first quarter of 2018. Compensation offered to eligible residents of the southern sector of Malartic, who are also members of the class action, was paid in the third and fourth quarters of 2018 following a final judgment that allowed these residents to individually settle with Canadian Malartic GP until the end of the class action opt-out period. Compensation offered to both eligible residents of the northern and southern sectors of Malartic in 2018 will be paid in the first quarter of 2019, as the class action opt-out period will not be completed prior to then. To date, 42 residences have been acquired in the southern sector of Malartic under the acquisition program of the Good Neighbour Guide, of which 16 of them have subsequently been sold under Canadian Malartic’s resale program that was implemented in April 2018.

As part of ongoing stakeholder engagement, Canadian Malartic is in discussions with four First Nations groups concerning a potential memorandum of understanding, which is expected to also include a financial component. As with the Good Neighbour Guide and other community relations efforts at Canadian Malartic, Canadian Malartic GP is working collaboratively with stakeholders to establish cooperative relationships that support the long-term potential of the mine.

In addition, on August 15, 2016, Agnico and Yamana indicated that Canadian Malartic GP received notice of an application for injunction relating to the Canadian Malartic mine, which has been filed under the *Environment Quality Act* (Québec). The hearing related to the injunction took place in March 2017. A decision of the Superior Court of Quebec dismissed the injunction. An application for permanent injunction is currently pending. Canadian Malartic GP has reviewed the injunction request, considers the request without merit and will take all reasonable steps to defend against this injunction. These measures include a motion for the dismissal of the application for injunction, which has been filed and will be heard at a date that has yet to be determined.

Following the Québec BAPE public hearings in June and July 2016, permitting of the Canadian Malartic extension project and Highway 117 deviation reached an important milestone with the issue of the BAPE report on October 5, 2016. The report concluded that the project is acceptable and provides several recommendations intended to enhance social acceptability.



On April 19, 2017, the Government of Quebec announced the issuance of two decrees authorizing Canadian Malartic GP to carry out the proposed expansion of the Canadian Malartic mine and the diversion of Highway 117 in Malartic (the “**Project**”).

Diversion plans will include a temporary bridge over Highway 117 to minimize the impact of the construction work on local traffic. During the third quarter of 2017, construction commenced on the temporary bridge. The road construction is expected to occur over a two-year period. Agnico’s most recent production guidance assumes a modest contribution from the Project in late 2019.

The approval of the Project provides greater operating flexibility and allows for mill throughput of 55,000 tpd. The decree sets the maximum extraction rate at 241,000 tpd (ore and waste) as long as noise and dust thresholds are not exceeded.

On June 1, 2017, Canadian Malartic GP was served with an application for judicial review to obtain the annulment of a governmental decree. Canadian Malartic GP is an impleaded party in the proceedings. The applicant seeks to obtain the annulment of a decree authorizing the expansion of the Canadian Malartic mine. Canadian Malartic GP has reviewed the application for judicial review, considers the application without merit and will take all reasonable steps to defend against this application. The hearing on the merits occurred in October 2018, but no judgment has been rendered as of the date hereof.

On March 28, 2018, Agnico acquired all of Yamana’s indirect 50% interest in the Canadian exploration assets of Canadian Malartic Corporation. The transaction will not affect the Canadian Malartic mine and related assets including Odyssey, East Malartic, Midway and East Amphi, which will continue to be jointly owned and operated by the Agnico and Yamana through Canadian Malartic Corporation and Canadian Malartic GP.

At Canadian Malartic, Canadian Malartic GP is evaluating the potential for underground mining of the Odyssey and East Malartic deposits from surface to a depth of 600 metres. These deposits could provide higher grade tonnes that could potentially supplement open pit production at Canadian Malartic. Drilling is ongoing to extend and upgrade the mineral resources in these zones. The permit and Certificate of Authorization was received in December 2018, which allows for the development of an underground ramp at Odyssey.

## **2019-2021 Guidance**

At Canadian Malartic, there is a slight increase in guidance for 2019 and 2020 compared to the previous guidance. Gold production in 2020 and 2021 is expected to increase primarily due to the mining of higher grades in the Barnat pit.

The annual production at the Canadian Malartic mine in 2019 is expected to consist of approximately 660,000 ounces of gold and 560,000 ounces of silver from 20 million tonnes of ore grading 1.16 grams of gold per tonne and 1.16 grams of silver per tonne. The total cash costs per ounce in 2019 are expected to be approximately \$576 per ounce on a by-product basis, with estimated gold recovery of 88.5% and silver recovery of 75.2%. Minesite costs per tonne of approximately C\$25 are expected in 2019.

### ***Estimated Payable Gold Production (oz)***

	<b>2019 Forecast</b>	<b>2020 Forecast</b>			<b>2021 Forecast</b>		
		<b>Range</b>		<b>Mid-Point</b>	<b>Range</b>		<b>Mid-Point</b>
Canadian Malartic (100%)	660,000	690,000	710,000	700,000	690,000	710,000	700,000

**Canadian Malartic Forecast 2019**

<b>Ore Milled (‘000 tonnes)</b>	<b>Gold (g/t)</b>	<b>Gold Mill Recovery (%)</b>	<b>Minesite Costs per Tonne<sup>(1)</sup></b>
20,000	1.16	88.5%	C\$25

(1) Minesite costs per tonne is a non-GAAP measure.

**Total cash costs per ounce on a by-product basis of gold produced (US\$ per ounce)**

	<b>2018 Actual</b>	<b>2019 Forecast (mid-point)</b>
Canadian Malartic (100%)	US\$559	US\$576

## **SCHEDULE C - TECHNICAL INFORMATION UNDERLYING THE ÉLÉONORE MINE**

### **Most Recent Technical Report**

The most recent technical report filed by Goldcorp on the Éléonore project in accordance with NI 43-101 is entitled "Éléonore Operations, Québec, Canada, NI 43-101 Technical Report" (the "**Éléonore Report**") dated effective November 30, 2018. Reference should be made to the full text of the Éléonore Report.

### **Information Contained in this Section**

The technical information, tables and figures that follow have been derived from (a) the Éléonore Report; (b) Goldcorp's most recent annual information form as of the date hereof; and (c) various news releases publicly filed by Goldcorp which may all be consulted under Goldcorp's issuer profile on SEDAR at [www.sedar.com](http://www.sedar.com) and none of which is nor shall be deemed to be incorporated by reference in this Annual Information Form.

The technical information contained in this section has been reviewed and approved by Mr. Guy Desharnais, Ph.D., P.Geo, who is a "qualified person" for the purpose of NI 43-101. Portions of the following information are based on assumptions, qualifications and procedures which are not fully described herein.

Except where otherwise stated, the disclosure in this section relating to operations on the Éléonore project is based on information publicly disclosed by Goldcorp and information/data available in the public domain as at March 28, 2019 (except where stated otherwise), and none of this information has been independently verified by Osisko. This Schedule "C" contains references to United States dollars (" \$" or "US\$"). All dollar amounts referenced in this Schedule "C", unless otherwise indicated, are expressed in United States dollars. Osisko considers that Goldcorp has publicly disclosed all scientific and technical information that is material to Osisko.

As a holder of royalties, streams or other interests, Osisko has limited, if any, access to properties included in its asset portfolio. Additionally, Osisko may from time to time receive operating information which it is not permitted to disclose to the public. Osisko is dependent on the operators of the properties and their qualified persons to provide information to Osisko or on publicly available information to prepare required disclosure pertaining to properties and operations on the properties on which Osisko holds interests and generally has limited or no ability to independently verify such information. Although Osisko does not have any knowledge that such information may not be accurate, there can be no assurance that such third party information is complete or accurate. Some information publicly reported by operators may relate to a larger property than the area covered by Osisko's interest. Osisko's interests often cover less than 100%, and sometimes only a portion of, the publicly reported Mineral Reserves, Mineral Resources and production of the property. Osisko shall not be held liable for any eventual misrepresentations in any scientific or technical information excerpted from any technical information publicly filed by Goldcorp.

### **Project Description and Location**

The Éléonore Mine is located in the Lake Ell area, in the north-eastern part of the Opinaca Reservoir of the James Bay region, in the Province of Québec, Canada. The Éléonore Mine is located approximately 350 kilometres north of the towns of Matagami and Chibougamau, and 825 kilometres north of Montréal.

The closest towns to the operations are Matagami and Chibougamau. The Éléonore Mine is accessed via a road that extends from the Sarcelle hydroelectric facility to the Éléonore site. The Sarcelle hydroelectric station can be reached via a 40 kilometres long gravel road starting at the 396 kilometre marker along the James Bay Highway (Route de la Baie-James). All of the material, supplies, and food for the construction and operational phases are transported along this access route. Workers are brought on site via a permanent year-round air strip located approximately 1.5 kilometres north of the camp.

The Éléonore Mine comprises 369 contiguous claims totalling 18,971.7 hectares in addition to a granted mining lease (289.4 hectares), for a total tenure holding of 19,261.1 hectares. The claims are 100% owned by Les Mines Opinaca Ltée (“**Opinaca**”), Goldcorp’s indirect wholly-owned Subsidiary. The Éléonore Mine hosts the Roberto gold deposit, which consists of the Roberto, East Roberto, and Zone du Lac lenses. The Roberto deposit is located under the Opinaca Reservoir. Mining Lease #1009, covering the Roberto deposit, was granted by the Québec government in February 2014. The lease is valid for a 20-year period with annual fees payable. Under Québec law, claims in the James Bay area are map-staked.

The Éléonore Mine is located entirely in Cree territory, or Eeyou Istchee, on Category III lands belonging to the Québec government and subject to the James Bay and Northern Québec Agreement. Surface leases were obtained from the Ministry of Natural Resources for all infrastructures planned for the Éléonore Mine.

Goldcorp makes an annual payment to the Cree Nation under the terms of the confidential Opinagow Collaboration Agreement dated February 21, 2011 between Goldcorp, the Cree Nation of Wemindji, the Grand Council of the Crees (Eeyou Istchee) and the Cree Nation Government.

The Éléonore Mine currently holds all required permits to operate including environmental permits.

Goldcorp has indicated in its public disclosure that to the extent known, there are no other material factors and risks known to Goldcorp that may affect access, title, or the right or ability to perform work on the Éléonore Mine.

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

### ***Accessibility***

The closest towns to the Éléonore project are Matagami and Chibougamau which are both located approximately 350 kilometres to the south. A permanent road with two permanent bridges has been completed, extending from the Sarcelle hydroelectric facility to the Éléonore project. The Sarcelle station can be reached via a 40-kilometre gravel road, starting at the 396 kilometre marker along the James Bay Highway. All of the material, supplies, and food for the construction and operational phases will be transported along this access route. Workers are brought on site via a permanent year-round air strip located approximately 1.5 kilometres north of the camp.

### ***Climate***

The climate of the Éléonore project area is typical of Northern Canada and is a temperate to sub-arctic climate. Average summer temperatures between June and September vary between 10 degrees Celsius and 25 degrees Celsius during the day, and five degrees Celsius and 15 degrees Celsius at night. Winters can be cold, with temperatures from -60 degrees Celsius and -10 degrees Celsius. Precipitation varies throughout the year, reaching an average of two metres annually. Exploration activities are currently conducted year-round, but can be temporarily halted during spring thaw and fall freeze-up. Mining activities are expected to be conducted year-round.

### ***Local Resources and Infrastructure***

The James Bay region is surrounded by extensive hydroelectric facilities and associated infrastructure, the closest of which are the Sarcelle hydroelectric facility located 40 kilometres due west of the Éléonore project on the Opinaca Reservoir and the Eastmain Dam located 70 kilometres to the south. A 120 kilovolt overhead incoming transmission line with two 120/25 kilovolt 40/53/66.6 MVA oil step-down transformers supports the mining operation.

## **Physiography**

The physiography of the region is typical of the Canadian Shield and includes many lakes, swamps and rivers. Outcrop is limited, due to the presence of swamps and glacial deposits. The area is characterized by a gently undulating peneplain relief. The elevation of the few hills of this rolling landscape ranges from 215 metres to 300 metres above sea level. The area is drained by Lake Ell, which is itself part of the Opinaca Reservoir. Vegetation is typical of taiga and includes sparse spruce forests separated by large swampy areas devoid of trees.

## **History**

The first recorded exploration in the Éléonore Mine area was by Noranda, in 1964. Noranda Inc. identified a copper showing located within the Ell Lake diorite intrusion. From 2001 to 2005, VGM completed regional reconnaissance grab and channel sampling around Noranda's Ell Lake copper showing; this work identified a number of new showings. A series of mineralized corridors consisting of stockworked gold and chalcopyrite-bearing quartz veinlets were outlined within dioritic to tonalitic intrusions. In addition, a number of mineralized and partially-rounded erratic blocks, located about 300 metres from the mineralized corridors, returned significantly elevated copper, gold, and silver values.

The Roberto deposit was located toward the end of 2003. Work completed subsequent to the discovery included a helicopter-borne, detailed magnetic survey (45-line kilometres on two 50 metres line spaced grids), additional trenching, core drilling of 351 core holes (105,635 metres), 125.5 kilometres of grid lines, 226.3 line kilometres of IP geophysical survey, and B-horizon soil sampling (1,244 samples). From June to August 2004, additional trenching was performed on the Roberto Zone. VGM commenced core drilling in September 2004 and by November 2005 a total of 247 core holes had been drilled. Drilling completed by VGM successfully extended the mineralization found at surface to a depth of 800 metres below surface. It also extended the mineralization beyond the Roberto Peninsula into the James Bay area and on the north shore of Ell Lake as well as to the south.

Goldcorp reached an agreement to acquire the Éléonore Property with VGM in November 2005. Goldcorp took control of the Éléonore Property on March 31, 2006. Since the acquisition, Goldcorp has performed till sampling, lake-bottom sediment sampling, surface mapping and trenching, additional core drilling, Mineral Resource and Mineral Reserve estimation, engineering studies, and mine permitting activities. Mine construction commenced in November 2011, and the first gold pour occurred on October 1, 2014.

## **Geological Setting, Mineralization and Deposit Types**

The Roberto deposit is located in Archaean rocks of the Superior Province of Canada in the transition zone between the Opinaca Subprovince and the La Grande Subprovince. The contact between the two subprovinces is not well known and generally corresponds to regional-scale deformation zones and a sharp change in the metamorphic gradient. In some areas, the contact is masked by late intrusions of one or the other subprovince.

The Opinaca Subprovince basin is a sedimentary basin dominated by migmatized paragneisses and diatexites from the Laguiche Complex and intruded by syn to post-tectonic tonalite, granodiorite, granite and pegmatite intrusions from the Janin and Boyd intrusive suites. The metamorphic grade increases from amphibolites facies near the margins to granulite facies toward the center of the basin. The paragneisses are strongly metamorphosed and folded rocks that retained few of their original structures.

The "S-shaped" La Grande Subprovince surrounds the Opinaca Subprovince on its west and north sides, spanning a distance of 450 kilometres in the east-west direction and of 250 kilometres in the north-south direction. The La Grande Subprovince is an assemblage of volcano-plutonic rocks composed of 85% intrusive rocks and 15% volcano-sedimentary units, the latest forming the volcano-sedimentary units of the La Grande River and Eastmain River green belts. These assemblages overlay an older tonalitic basement. Metamorphic grade increases from the greenschist facies to the amphibolites facies toward the contact with

the Opinaca Subprovince. The Éléonore Mine is overlain by rocks of the Eastmain Group of the La Grande Subprovince. At its base, the Eastmain Group consists of the Bernou Formation and the Kasak Formation, which are composed of basalts and intermediate to felsic tuff.

Regional faults are mainly present in the La Grande Subprovince and are oriented north–south, east–west, and northwest–southeast. In outcrop, the faults can be recognized by either a strong tectonic banding or by the presence of intense shear zones with mylonitization. In the Opinaca Subprovince, faults and shear zones are mainly located along fold limbs.

The Éléonore Mine straddles the contact between the Opinaca and La Grande Subprovinces. The contact is located in the northeast corner of the property along a north-westerly trend that is defined by a strong shear zone, a change in the magnetic grain, and an increase in the metamorphic gradient. The Éléonore Mine is hosted in Achaean-age rocks of a volcano-sedimentary greenstone belt developed near the contact between the Opinaca and La Grande Subprovinces of the Superior Province. Rock units from the Opinaca Subprovince occur in the north-eastern corner of the Éléonore Mine area. Lithologies are dominated by granite, granodiorites and heterogeneous assemblages of pegmatites, tonalites and granites from the Janin Intrusive Suite intermixed with partially migmatized paragneiss from the Laguiche Complex. The structural grain is oriented in a north-westerly direction evolving to an east–west grain toward the east part of the Éléonore Mine area.

Rock units belonging to the La Grande Subprovince west of the Opinaca-La Grande comprise most of the Éléonore Mine area and host the Roberto deposit. The Roberto deposit is hosted in polydeformed greywacke units in contact with aluminosilicate-bearing greywacke and thin conglomerate units. The 1.9 kilometres long crescent shape of the deposit is believed to be the result of F2 folding. To date, mineralization has been intersected to a vertical depth of 1,400 metres. Gold-bearing zones are generally 5 to 6 metres in true thicknesses, varying from 2 metres to more than 20 metres locally. All zones remain open at depth.

Information from production drilling and underground mapping has shown that folding in the southern area edge of the main shoot is tighter than previously interpreted. The close folding that resulted in increased mining dilution during 2015 seems to be limited to within a 50 metres corridor.

The numerous subparallel mineralized zones are characterized by gold-bearing quartz-dravite-arsenopyrite veinlets, contained within quartz-microcline-biotite-dravite-arsenopyrite-pyrrhotite auriferous replacement zones. Sulphide concentrations within the auriferous zones vary from 2% to 5%, with the main sulphides being arsenopyrite, löllingite, pyrrhotite and pyrite. Relationships between the nearby diorite and pegmatite intrusions and the gold mineralization event are still unknown.

The knowledge of the deposit setting and lithologies, and of the mineralization style and its structural and alteration controls, is sufficient to support Mineral Resource and Mineral Reserve estimation. Prospects and targets are at an earlier stage of exploration, and the lithologies, structural, and alteration controls on mineralization are currently insufficiently understood to support estimation of Mineral Resources.

## **Exploration**

Exploration in support of mine development has included prospecting, mapping, ground induced polarization and magnetic surveys, a Hummingbird electromagnetic survey, grab and rock chip sampling, soil sampling, trench and channel sampling, core drilling, metallurgical test work, mineral resource and mineral reserve estimates, baseline environmental, geotechnical and hydrological studies, and technical studies. The exploration programs completed to date are appropriate to the style of the deposits and prospects within the Éléonore Mine. The exploration and research work supports the genesis and affinity interpretations. There is considerable remaining exploration potential in the vicinity of the current mining operations.

Until the summer of 2017, the main focus of the exploration activities was to extend the Roberto deposit at depth and laterally to increase Mineral Reserves. The greater Éléonore area outside the mining lease were not subject to significant exploration work until late 2016. From 2016 onward, extensive mapping, trenching, induced polarisation, till sampling and some drilling have been conducted over the Éléonore Mine area. Several targets have been identified and advanced. Exploration is planned to continue with drilling of some identified targets with accelerated programs planned for 2019 to 2020.

## **Drilling**

As of November 30, 2018, a total of 10,133 surface and underground drill holes (approximately 1,523,791 metres) had been completed by VGM and Goldcorp. Of these, a total of 351 holes (105,635 metres) were completed by VGM and 9,782 holes (1,418,156 metres) by Goldcorp.

Drilling includes 1,436,883 metres of exploration and delineation drilling; 70,966 metres of geotechnical drilling; 1,281 metres for hydrological/water bore purposes; and 1,119 metres for metallurgical purposes. Condemnation drilling as well as drilling to support the locations of planned infrastructure was completed from May 1, 2010 to October 31, 2012, for a total of 13,542 metres. Exploration drilling between 2017 and 2018 aimed to better define the mineralized zones between 400 metres and 1,300 metres below surface. This drilling remains ongoing. Results of the drilling appear to confirm the continuity of the geological model as interpreted. Since January 2013, exploration and delineation drilling has been exclusively done from underground infrastructure.

All core holes were drilled on sections spaced approximately 25 metres apart in most parts of the deposit. Drill hole spacing of 25 metres by 25 metres occurs over the bulk of the orebody to a depth of approximately 1,200 metres below surface. Below 1,200 metres, down to approximately 1,300 metres, a core hole spacing of 100 metres by 100 metres is usually observed. Only a few drill holes have been drilled below 1,200 metres. The deeper boreholes intersected the mineralized horizons at a depth of approximately 1,580 metres below surface. For definition drilling, drill hole spacing is generally 12.5 metres by 12.5 metres inside the existing 25 metre drill spacing, as permitted by the mine development schedule. In 2017, infill drilling at a 25 metre by 25 metre drill spacing was completed in Horizon 5 and Horizon 6, in the central portion (Main Ore Shoot and South Ore Shoot). Definition drilling at 12.5 metre by 12.5 metre spacing commenced late in 2017 in Horizon 5 with the opening of the 950 and 980 haulage drift and is ongoing.

Standardized logging forms and geological legends were developed for the Éléonore Mine in acQuire database software. Rock quality designation is completed in sequence prior to geological logging and in the pre-feasibility period; full geotechnical logging was completed on some drill holes. Geological logging use standard procedures and collect information on mineralization, lithological breaks, alteration boundaries, and major structures. All drill core is photographed. Some drill holes are oriented for structural measurements. Core recovery is acceptable for all drill programs.

Upon completion of a hole, surface drill hole collars were surveyed using a differential global position system instrument by in-house technicians. Underground drill holes are surveyed using a Leica TS15 robotized station.

Downhole surveys were carried out by the drill contractor for dip and deviation using a Reflex instrument.

Drill data are typically verified prior to Mineral Resource and Mineral Reserve estimation by running a software program check.

Sample intervals were determined by the geological relationships observed in the core and vary between 0.3 metres and 1.25 metres. An attempt was made to terminate sample intervals at lithological and mineralization boundaries.

Specific gravity data were collected by Goldcorp's personnel until the end of 2011. The specific gravity database contains 11,923 specific gravity results that were determined on core samples. A specific gravity

of 2.77 was used for all veins. The specific gravity database is currently sufficient to provide a reliable assessment of the variability of the specific gravity across the deposit and across the various rock types.

The quantity and quality of the lithological, geotechnical, collar, and down-hole survey data collected during the exploration and infill drill programs completed by VGM and Goldcorp are sufficient to support Mineral Resource and Mineral Reserve estimation.

### **Sampling, Analysis and Data Verification**

Exploration and infill core samples were analyzed by independent laboratories using industry-standard methods for gold analysis, including, but not limited to:

- Between January 2007 and April 2014, ALS Chemex Labs Ltd. ("**ALS Chemex**") in Val-d'Or, Quebec was the primary laboratory, which is accredited under ISO 17025 and 9001/2008 and independent of Goldcorp.
- Between April 2014 and February 2017, exploration and infill sample preparation and assay were performed by Accurassay Laboratories Inc. ("**Accurassay**") in Rouyn-Noranda, Québec, which is accredited under ISO 17025 and independent of Goldcorp.
- Between September 2017 and April 2018, exploration and infill sample preparation and assays were performed by Swastika Laboratories Ltd. ("**Swaslabs**") in Swastika, Ontario, which is accredited under ISO 17025 and independent of Goldcorp.
- From April 2018 to date, Activation Laboratories Ltd. ("**Actlabs**") has been used as the primary laboratory. Laboratory locations used include Ancaster, Timmins, Thunder Bay and Geraldton, Ontario. These laboratories hold either ISO 9001 or ISO 17025 accreditations and are independent of Goldcorp.
- Goldcorp's in-house laboratory started operation in February 2014 and began to process muck, chips and definition drilling samples. The in-house laboratory has a total capacity of approximately 500 samples per day. Overflow and other production samples were sent to ALS Chemex, Accurassay, Swaslabs or Actlabs. During the period from February to September 2017, the mine laboratory acted as the primary laboratory for definition drill sample.

Metallurgical testwork has been done at a number of laboratories, but was primarily performed by SGS Laboratories. Sample preparation for samples that support Mineral Resource and Mineral Reserve estimation has followed a similar procedure for all VGM and Goldcorp drill programs. The preparation procedure is in line with industry-standard methods for a clastic sediment-hosted stockwork-disseminated gold deposit in an orogenic setting.

The primary gold analytical method was fire assay with either an atomic absorption spectrometry finish or microwave plasma atomic emission spectroscopy finish. Depending on the external laboratory, values above either 3.0 g/t gold or 10 g/t gold received a gravimetric finish. Goldcorp's in-house laboratory re-assays above 34 g/t gold with a gravimetric finish.

The collected sample data adequately reflect deposit dimensions, true widths of mineralization, and the style of the deposits.

VGM and Goldcorp maintained a QA/QC program for the Éléonore Mine. This comprised the submission of analytical standard reference materials, duplicates and blanks. QA/QC submission rates meet industry-accepted standards of insertion rates. No material sample biases were identified by the QA/QC programs.



The results of the QA/QC programs did not indicate any problems with the analytical programs. Accordingly, Goldcorp has concluded that the drill core gold analyses are acceptably accurate and precise to support Mineral Resource and Mineral Reserve estimation.

Sample security has relied upon the fact that the samples were always attended or locked in the logging facility. Chain-of-custody procedures consisted of filling out sample submittal forms that were sent to the laboratory with sample shipments to make certain that all samples were received by the laboratory. Boxes are individually identified, and core is measured to ensure correct sample definition. Core is stored at the core logging facility until it is logged by professional geologists. As soon as the logging is complete, the core is bagged in individual samples and put into pallets to be delivered to the laboratory. Current sample storage procedures and storage areas are consistent with industry standards.

The quality of the gold analytical data is sufficiently reliable to support Mineral Resource and Mineral Reserve estimation and that sample preparation, analysis, and security are generally performed in accordance with exploration best practices and industry standards.

A reasonable level of verification has been completed, and no material issues would have been left unidentified from the programs undertaken. Data verification programs completed on the data collected from the Éléonore Mine adequately support the geological interpretations, and the quality of the analyses and the analytical database, and therefore support the use of the data in Mineral Resource and Mineral Reserve estimation.

### Mineral Processing and Metallurgical Testing

Metallurgical testwork has included chemical analyses, acid neutralization potential tests, semi-qualitative petrography, X-ray diffraction, comminution testwork (including standard bond, crushing work index, abrasion index, ball mill work index tests), semi-autogenous grind mill work index tests, Isamill signature plots, bench-scale flotation tests, Knelson/Lapante gravity-recoverable gold testwork, grade variability recovery testwork, establishment of a reagent suite, evaluation of intensive cyanide leach processing of flotation concentrates, cyanide leach tests on gravity tailings, cyanide backfill tests, pilot plant runs, cyanide destruction using the sulphur dioxide/air process, thickening and filtration tests.

Milling operations commenced in September 2014 and the first gold pour occurred in October 2014. Since 2014, more than 6.75 million tonnes of material from a wide variety of areas and depths has been processed. No correlation between metallurgical response and sample origin or position within the orebody has been established.

Current plans assume long-term average metallurgical recoveries of 92.0 to 92.5%, which are consistent with the results of previous testwork as well as operational experience.

### Mineral Reserve and Mineral Resource Estimates

The following table sets forth the gold Mineral Reserve estimations for the Éléonore Mine effective June 30, 2018:

<b>Proven and Probable Mineral Reserves</b> <sup>(1)(2)(3)(4)(5)(6)</sup>			
<b>Category</b>	<b>Tonnes (millions)</b>	<b>Grade (g/t)</b>	<b>Au (millions of ounces)</b>
Proven	3.65	5.97	0.70
Probable	14.14	5.61	2.55
Proven + Probable	17.78	5.69	3.25

(1) The Mineral Reserves are classified as Proven and Probable and are based on the CIM Definition Standards. Proven Mineral Reserves include stockpile material.

(2) Mineral Reserves are based on a gold price of US\$1,200 per ounce, an economic function that includes variable operating costs and metallurgical recovery of 93%, and a US\$ exchange rate of C\$1.30.

- (3) The global cut-off grade is 3.6 g/t (in situ). Total average US\$ operating costs in the peak years of the LOM (as defined below) 2018 are \$107.50 per tonne (mining: \$59.41 per tonne; processing: \$27.75 per tonne; G&A: \$20.34 per tonne).
- (4) An overall dilution of 15% is applied to the stopes using zero grade.
- (5) Mineral Reserves take into account mining recoveries that range from 85% to 95% depending on geotechnical risk.
- (6) Numbers may not add up due to rounding.

Goldcorp is not aware of any material environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that would reasonably be expected to materially affect the Mineral Reserve estimate that are not documented in the Éléonore Report. Factors that may affect the Mineral Reserve estimates are geological complexity impacting grade; geotechnical and design parameters changes impacting dilution and mining recovery factors; lower mill recovery in new mining areas; fluctuations in commodity price and exchange rate; and mining costs assumptions.

The following table sets forth the gold Mineral Resource estimations for the Éléonore Mine effective June 30, 2018:

<b>Measured and Indicated Mineral Resources <sup>(1)(2)(3)(4)(5)(6)</sup></b> <b>(excluding Proven and Probable Mineral Reserves)</b>			
<b>Category</b>	<b>Tonnes (millions)</b>	<b>Grade (g/t)</b>	<b>Au (millions of ounces)</b>
Measured	0.79	6.15	0.16
Indicated	2.39	4.67	0.36
Measured + Indicated	3.18	5.03	0.51
Inferred	3.19	5.76	0.59

- (1) The Mineral Resources are classified as Measured, Indicated and Inferred, and are reported using the CIM Definition Standards.
- (2) All Mineral Resources are reported exclusive of those Mineral Resources that were converted to Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- (3) A minimum true thickness of 2.5 metres was applied for all Mineral Resource estimates, using the grade of the adjacent material when assayed or a value of zero when not assayed.
- (4) A top cut varying from 50 g/t to 140 g/t (80 g/t for the dilution envelope) was applied to assay grades prior to compositing grades for interpolation into model blocks using Ordinary Kriging (OK), and inverse distance weighting to the second power (ID2) methods and was based on 2 metre composites within a block model made of 5 metre long x 5 metre wide x 5 metre high blocks. Average specific gravity (SG) is 2.77.
- (5) Mineral Resources are reported using a 2.7 g/t gold cut-off grade, which is based on assumptions of a US\$1,400 per ounce gold price, long-hole stoping underground mining methods, a life-of-mine metallurgical recovery of 93%, and a total mining cost of \$107.50/t (comprising the following costs: mining: \$59.41/t; processing: \$327.75/t; G&A: of \$20.34/t (LOM 2018)).
- (6) Numbers may not add up due to rounding.

Goldcorp is not aware of any material environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that would reasonably be expected to materially affect the Mineral Resource estimate that are not documented in the Éléonore Report.

Key areas of uncertainty that may materially impact the Mineral Resource estimate include geological complexity including folding and faulting of vein material between drill hole intercepts; commodity price assumptions; metal recovery assumptions; hydrological constraints; and rock mechanics (geotechnical) constraints.

There is upside potential for the estimates if mineralization that is currently classified as Inferred can be upgraded to higher-confidence Mineral Resource categories. Core drilling is currently underway in support of potential confidence category upgrades.

On October 24, 2018, Goldcorp updated its mineral reserve and resource estimates for the Éléonore mine as at June 30, 2018. Proven and probable gold mineral reserves as of June 30, 2018 totaled 3.3 million ounces (17.8 million tonnes grading 5.69 g/t Au), compared to 3.8 million ounces (19.6 million tonnes grading 6.02 g/t Au) as of June 30, 2017. Production depletion accounted for a decrease of 0.3 million ounces, while the balance of the adjustments to the geologic models was part of a continued effort to ensure only profitable ounces were included in the reserve model. Measured and indicated gold mineral

resources as of June 30, 2018 were estimated at 0.5 million ounces (3.2 million tonnes grading 5.03 g/t Au) compared to 1.3 million ounces (7.2 million tonnes grading 5.81 g/t Au) as of June 30, 2017. Inferred gold mineral resources as of June 30, 2018 were estimated at 0.59 million ounces (3.2 million tonnes grading 5.76 g/t Au) compared to 1.99 million ounces (8.45 million tonnes grading 7.31 g/t Au) as of June 30, 2017. Goldcorp stated that mineral resources were negatively impacted as the geologic modelling methodology that has been applied to the mineral reserves has been applied to mineral resources, in addition to economic stope optimization. Exploration continued to delineate and expand the Main Ore Shoot and South Ore Shoot depth extensions. Goldcorp further stated that the Éléonore mineralized horizon remains open down dip where it has been drill tested 200 metres below the current mineral reserves to date and exploration is ongoing to test for extensions and structural repetitions.

## **Mining Operations**

Mining operations exploit a complex orebody that consists of 117 different mineralized lenses with variable geometries and proximities. The mining method at the Éléonore Mine is long-hole stoping (down-hole drilling) longitudinal retreat with consolidated backfill (pastefill) or unconsolidated rockfill. Operations have converted from using the longhole transverse mining method that was initially proposed to a longitudinal longhole retreat stoping method because that method is better suited to the orebody geometry.

For mine scheduling purposes, the vertical extent of the orebody is subdivided into two parts: the upper part of the orebody located between 65 metres and 650 metres below surface (referred to as the upper mine), and the lower part of the orebody located between 650 metres and 1,370 metres below surface (referred to as the lower mine). Dividing the orebody into two mining sectors and seven mining horizons has accelerated the production start-up.

Mining started from two horizons, the 440 metre Level and the 650 metre Level, and expanded to cover from the 110 metre Level to the 980 metres Level from surface. The current mine plan assumes that all the ore and waste from Horizon 1 (80 metre Level to 230 metre Level) will be trucked to the surface as will material from the top of Horizon 2 (260–290 metre Level). Ore and waste from Horizons 2, 3, 4 and 5 (320–980 metre Level) will be either dumped down an ore pass (Horizon 2 and Horizon 3) or trucked to the 650 metre Level and hoisted by the production shaft. We are expanding the material handling system in the lower mine at the 1140 metre Level shaft station to support mining operations in Horizons 5 to 7 in 2020.

An average production rate of 1,050 tonnes per day per stope is used throughout the mine. Currently, rates are between 800 and 2,500 tonnes per day per horizon, excluding panel sequence beginnings and ends. The material handling system and producing horizons are capable of meeting an average 6,600 t/d production rate.

Studies to increase and sustain the production rate will be conducted as more drilling information becomes available. Based on the current Mineral Reserves, the planned operation has an eight-year mine life to 2026.

The production shaft excavation is complete to 1,190 metre depth, and the surface decline is progressing well, with the elevation in October 2018 being 1,130 metres from surface. The Gaumond shaft is completed to a depth of 715 metres and is only used for ventilation purposes.

The decline is currently used as the air exhaust and will continue to be so used when the final depth is reached and the ramp is complete. The main fresh ventilation raises are the Gaumond and production shafts. From both shafts, air is distributed into two internal ventilation raises, one located in the northern mine area, the second in the southern mine area. Currently, the ventilation on demand (VOD) system is fully operational.

The permanent pumping system is designed to be upgradable depending on the total water infiltration in the mine and also the mine plan. The system is designed to pump dirty water to the surface and consists of two main pumping stations on the 400 metre level and 650 metre level.

Stope widths vary from 2.5 to 20 metres, have an average length of 25 metres, a maximum length of 45 metres, and can reach 30 metres in height. Ground support consists of various combinations of rebar bolts, friction bolts, D-bolts, cables, screen and shotcrete depending on the rock quality and particular requirements of each heading.

Stopes are backfilled with pastefill. Unconsolidated backfill is used whenever possible in order to avoid hoisting waste rock to the surface. The current paste backfill mixture consists of 70% mill tailings, 25% fine sulphide concentrate, and 4 to 7% binder. The sulphide tailing concentration can reach as much as 25% without having an effect on the paste strength.

A fully-mechanized mining equipment fleet is used. Equipment includes scoop trams, dump trucks, mine service and personnel vehicles, jumbo drills, bolting platforms, scissor lifts, land cruiser and forklifts. The mine and fleet designs are appropriate for the Mineral Reserves defined and the selected throughput rate.

There is potential to extend the mine life and potentially sustain a 7,000 tonnes per day throughput rate if some or all of the Inferred Mineral Resources identified within the life-of-mine (“**LOM**”) production plan (“**LOMP**”) can be upgraded to higher confidence Mineral Resource categories, and eventually to Mineral Reserves. Mineralization remains open in the northern and southern extents of the Roberto orebody as well at depth. The deepest drill hole encountering mineralization was at 1,500 metre depth; the current mine plan extends to 1,370 metre depth.

As part of day-to-day operations, Goldcorp will continue to undertake reviews of the mine plan and consideration of alternatives to and variations within the plan. Alternative scenarios and reviews may be based on ongoing or future mining considerations, evaluation of different potential input factors and assumptions, and corporate directives.

### **Processing and Recovery Operations**

Comminution consists of conventional three-stage crushing circuit followed by a single stage of closed-circuit ball milling, so that 80% (P80) is smaller than 65 micrometres. Within the ball milling circuit, a gravity concentration circuit consisting of two Knelson Concentrators recovers coarse liberated gold, which is then leached in an Acacia reactor.

Grinding circuit product is fed to a flotation circuit for separation of sulphide minerals into a sulphide-rich concentrate. The flotation concentrate, which contains most of the gold, is reground so that 80% P80 is smaller than 15 micrometres being subjected to pre-oxidation and cyanidation. The flotation tails, which still contains a significant amount of gold, are also subjected to cyanidation in a separate circuit.

In both cases, gold in solution is recovered by dedicated in carousel CIP circuits (one for each leach circuit). Loaded carbon recovered from each CIP circuit is then stripped in a Zadra stripping circuit. Gold from the gold-loaded pregnant solutions (including the one from the Acacia reactor) is then recovered by electrowinning and melted into doré bars. Carbon is regenerated and returned to the CIP circuits.

The tails from each cyanidation circuit are detoxified in a conventional sulphur dioxide/air cyanide destruction circuit. Sulphide tailings, along with a portion of non-sulphide tailings, are returned to the underground mine in the form of paste backfill. The remaining non-sulphide tailings are filtered and trucked to the tailings management facility (“**TMF**”). The TMF is completely lined and designed for collection of contact water, which is sent to treatment. The TMF’s current design allows for storage of 22 Mt of tailings, which is sufficient for the current LOM.

The crushing area is designed for a capacity of 8,500 tonnes per day, including waste crushing (1,500 tonnes per day), while the other plant areas are designed for a processing capacity of 7,000 tonnes per day at 95% availability (2.55 Mt/a).

### **Infrastructure, Permitting and Compliance Activities**

The James Bay region is surrounded by extensive hydroelectric facilities and associated infrastructure, the closest of which are the Sarcelle hydroelectric facility located 40 kilometres due west of the Éléonore Mine on the Opinaca Reservoir and the Eastmain Dam located 70 kilometres to the south. Power is supplied by Hydro-Québec through a 120 kilovolt overhead electrical power line that was supplied and installed by Hydro-Québec specifically for the Éléonore Mine. A 120/25 kilovolt substation on site distributes the power required for the mining infrastructure.

Key infrastructure on site includes the underground mine, a processing plant, temporary waste rock storage facilities, TMF, fuel storage and distribution facilities, industrial water treatment plant (IWTP), a permanent camp that can accommodate 400 people, an administration building, warehouse and garage facilities, assay laboratory, airstrip, and a concrete plant.

Mining-related infrastructure comprise the Gaumond shaft, the production shaft, a seven kilometre long access ramp, a shaft loading station, ore and waste passes, ore and waste storage bins, a rock breaker/grizzly arrangement, a transfer drift, an exhaust raise, the mine ventilation system and a mine dewatering system.

The main process infrastructure consists of a crushing plant, ore storage bins, a grinding and gravity gold recovery circuit, a flotation circuit, a flotation tails cyanidation and CIP circuit, a flotation concentrate regrinding, cyanidation and CIP circuit, a Zadra stripping circuit, a gold refinery, concentrate and tailings dewatering circuits and a paste backfill system.

Goldcorp has completed baseline studies in support of the Strategic Environmental Assessment (SEA; or ESIE in French) and is carrying out continuous monitoring studies to support project permitting and various commitments. For the Éléonore Mine, the major issues identified include the potential impacts on the environment, the proper management of tailings and waste water, access (roads, airports), social acceptability and management of the post-reclamation site. These issues have been addressed and mitigated through a combination of baseline data collection, appropriate engineering and project design studies, and public consultation.

The Éléonore operations currently hold all required permits to operate, including environmental permits. Permits are renewed as required. Environmental liabilities associated with the project are those expected to be associated with an underground mine in Northern Canada.

Key elements for the mine operations include the proper management of tailings and waste water, access (roads, airports), social acceptability and post-reclamation management. A sustainability management system is in place, addressing these elements and allowing rigorous management. Goldcorp is of the opinion that these issues have been addressed and mitigated through a combination of baseline data collection, appropriate engineering and project design studies, and public consultation. The Éléonore Mine operations currently holds all permits required to operate, including environmental permits.

The Éléonore Mine operations are located on traditional family territories of the Cree Nation of Wemindji, and within the Municipality of Eeyou-Istchee-James Bay. The operations are located entirely in Cree territory, or Eeyou Istchee, on Category III lands belonging to the Quebec Government and subject to the James Bay and Northern Quebec Agreement (JBNQA). A collaboration agreement was signed with the Cree Nation of Wemindji in February 2011.

## Capital and Operating Costs

Capital and operating cost estimates were prepared by Goldcorp's staff. The capital cost estimates are based on a combination of quotes, vendor pricing, and Goldcorp's experience with similar-sized operations. The capital costs are based on the 2018 mine construction data and budgetary figures and quotes provided by suppliers. Capital cost estimates include funding for infrastructure, mobile equipment, development, and miscellaneous costs. Infrastructure requirements were incorporated into the estimates as needed. Sustaining capital costs reflect current price trends. The total LOM capital estimate is \$389 million, comprising \$365 million of sustaining capital and \$24 million of expansionary capital.

Area	Life-of-Mine (US\$ million)
Sustaining	365
Expansionary	24
<b>Total</b>	<b>389</b>

Note: Estimate is from 2019 for LOM. Totals may not sum due to rounding.

Operating cost estimates are based on the 2018 LOM budget, which includes estimates from first principles for major items and allowances or estimates for minor costs. Labour cost estimation is based on Goldcorp's 2018 salary scale and fringe benefits in force. Mining consumables are based on 2018 costs and contracts. The Éléonore Mine is located at a remote site. Costs for camp accommodation, meals, employee travel, and site security were included in the G&A component of the estimate. An average overall unit cost of \$113.38 per tonne was estimated, comprising \$29.29 per tonne for processing, including backfill and tailings treatment and transportation, \$62.19 per tonne for mining operations, and \$21.89 per tonne for G&A. Exploration expenditures are not included in the operating costs.

Area	Life-of-Mine (\$ per tonne)
Process Plant	29.29
Mining Operations	62.19
G&A	21.89
<b>Total</b>	<b>113.38</b>

Note: Estimate is from 2019 for LOM. Totals may not sum due to rounding.

## Exploration, Development and Production

The average production rate for 2018 was approximately 5,000 tonnes per day, with the second half of 2018 in ramp-up phase and finishing the year at over 6,500 tonnes per day. The mine is expected to achieve the LOM plan peak years average production rate of 6,600 tonnes per day in 2019.

The exploration drilling program in 2019 is a two-phase work program, which consists of exploration and delineation drilling. The first work phase is to investigate zones within the Roberto area that could be rapidly evaluated for potential for Mineral Resource estimation and potential conversion to Mineral Reserves once drill information is available. The second work phase is to support potential conversion of Mineral Resources to Mineral Reserves. Drilling at depth and laterally is also required to identify mineralization that may support estimation of additional Mineral Resource.

The two work phases are independent and can be conducted concurrently. Neither phase is dependent on completion of the other.

At the Éléonore Mine, gold production for 2019 is expected to be in the range of 350,000 to 380,000 ounces.

## **SCHEDULE D - TECHNICAL INFORMATION UNDERLYING THE RENARD DIAMOND MINE**

### **Most Recent Technical Report**

The most recent technical report filed by Stornoway in accordance with NI 43-101 is entitled “Updated Renard Diamond Project Mine Plan and Mineral Reserve Estimate, Québec, Canada, NI 43-101 Technical Report” (the “**Renard 2016 Technical Report**”) dated effective December 31, 2015. Reference should be made to the full text of the Renard Technical Report. The Renard Technical Report is not and shall not be deemed to be incorporated by reference in this Annual Information Form. References to the “project” or “property” refer to the Renard Diamond Mine as defined in the Renard Technical Report.

### **Information Contained in this Section**

The technical information, tables and figures that follow have been derived from (a) the Renard Technical Report; (b) Stornoway’s most recent annual information forms as of the date hereof; and (c) various news releases publicly filed by Stornoway which may all be consulted under Stornoway’s issuer profile on SEDAR at [www.sedar.com](http://www.sedar.com) and none of which is nor shall be deemed to be incorporated by reference in this Annual Information Form.

The technical information contained in this section has been reviewed and approved by Mr. Guy Desharnais, Ph.D., P.Geo, who is a “qualified person” for the purpose of NI 43-101. Portions of the following information are based on assumptions, qualifications and procedures which are not fully described herein.

Except where otherwise stated, the disclosure in this section relating to operations on the Renard Diamond Mine is based on information publicly disclosed by Stornoway and information/data available in the public domain as at March 28, 2019 (except where stated otherwise), and none of this information has been independently verified by Osisko. Osisko considers that Stornoway has publicly disclosed all scientific and technical information that is material to Osisko.

As a holder of royalties, streams or other interests, Osisko has limited access to properties included in its asset portfolio. Additionally, Osisko may from time to time receive operating information which it is not permitted to disclose to the public. Osisko is dependent on the operators of the properties and their qualified persons to provide information to Osisko or on publicly available information to prepare required disclosure pertaining to properties and operations on the properties on which Osisko holds interests and generally has limited or no ability to independently verify such information. Although Osisko does not have any knowledge that such information may not be accurate, there can be no assurance that such third party information is complete or accurate. Some information publicly reported by operators may relate to a larger property than the area covered by Osisko’s interest. Osisko’s interests often cover less than 100%, and sometimes only a portion of, the publicly reported Mineral Reserves, Mineral Resources and production of the property. Osisko shall not be held liable for any eventual misrepresentations in any scientific or technical information excerpted from any technical information publicly filed by Stornoway.

### **Summary and Project Status**

The Renard Diamond Mine, part of the Foxtrot Property, is 100% owned and operated by SDCl, a wholly owned subsidiary of Stornoway. The project is subject to a 2% direct royalty interest on diamonds, held by Diaquem. In addition, the Renard Streaming Agreement for the Forward Sale of Diamonds (as amended by the Amended Renard Streaming Agreement) has been entered into by FCDC, a wholly owned subsidiary of SDCl, with the Renard Streamers.

The project site is located in the James Bay region, central Québec, Canada, approximately 70 km north of the Otish Mountains and some 360 km north-northeast from the mining town of Chibougamau. The site is located at longitude 72°11’ West and latitude 52°49’ North; and benefits from an all year-round land and air access. Operations can be conducted year-round.

The execution plan proposes concepts and practices that are consistent with those in the Canadian diamond mining industry. The project design contemplates open pit mining of the Renard 2, Renard 3 and Renard 65 kimberlite pipes, followed by underground mining of the Renard 2, Renard 3 and Renard 4 kimberlite pipes by blasthole shrinkage (BHS). Ore was initially processed at the process plant nameplate capacity of 2.16 Mt per annum, and subsequently expanded to 2.5 Mt per annum, with three stages of crushing and a concentration process in two different stages, namely a large diamond recovery (LDR) process and a dense media separation (DMS). Each of the LDR and DMS produce a concentrate that is treated in a secure diamond recovery facility using diamond differentiation techniques based on magnetic, X-ray, laser Raman and ultra-violet technologies, with hand-sorting as the final de-falsing step to produce a nominally 98% diamond by weight product at final sorting. The non-diamond product generated by each of the LDR and DMS is further sized, and the coarser size fraction (+6mm) is recirculated through the HPGR to release locked diamonds. Process plant design and equipment selections were based on bulk sample plant operational data, test work, experience from other operations and proven technology to minimize diamond breakage. See “Recent Developments - Ore-Waste Sorting, and Mining Method” for modifications made to the mining method and improvements made to the processing.

Supporting infrastructure includes an effluent treatment plant, potable water treatment plant, a power plant (comprised of eight natural gas generators of 2,050 KW each and three diesel-powered generators of 1,800 KW each), LNG and diesel tank farms, LNG regasification plant, 370 bed accommodation complex, a six-bay maintenance facility, mine offices, an explosive storage and handling area, a 1,494 meter gravel airstrip and telecommunication systems.

Processed kimberlite is disposed of through a dry stack facility and the management of surface runoff water is facilitated through a system of peripheral drainage ditches designed to direct runoff water to an excavated catch basin for treatment, if required, before release to the environment. Suspended solids are determined to be the main concern for water treatment. Storage capacity of the catch basin accommodates spring runoff and a 100 year return storm event. Mine operations incorporate a program of progressive reclamation that minimizes costs and allows timely monitoring of performance. Waste rock generated by mining will be re-introduced to the underground as backfill. See “Recent Developments - Processed Kimberlite Containment Facility”.

The Renard 2016 Technical Report describes a Mineral Reserve estimate of 22.3 million Carats (33.4 Mt at an average grade of 67 cpht), based on mining, processing and infrastructure already in place or on designs as detailed, and incorporating current geological and diamond revenue data. Inferred Resources are considered too geologically speculative to have mining and economic considerations applied to them and to be categorized as Mineral Reserves and are not included in the Renard 2016 Technical Report.

Stornoway completed a financial analysis for the Renard Diamond Mine, reflected in the Renard 2016 Technical Report. For the purposes of the Renard 2016 Technical Report financial model, net-present valuations are presented on net cash flow after operating costs, marketing costs, net of all royalties, costs incurred under the Mecheshoo Agreement, with the effective revenue impairment associated with the Renard Streaming Agreement for the Forward Sale of Diamonds and on an unlevered basis. After-Tax NPV (7%) is estimated at \$974 million, and \$1,349 million on a pre-tax basis, in real dollar terms. After-tax NPV reflect the deduction of federal and Québec income taxes and applicable mining duties. See “Description of Business - Cornerstone Assets - Renard Stream (Stornoway Diamond Corporation)” for details on amendments made to the Renard Streaming Agreement on October 2, 2018 and “Recent Developments - Diamond Marketing and Sales” for updates on diamond price estimates since the Renard 2016 Technical Report.

All elements of the project development plan, including the required infrastructure, mine design, process plant design, waste disposal infrastructure and cost estimation, represent the current estimate for life of mine operations. The resulting information therefore met all of the applicable requirements for conversion of Indicated Mineral Resources to a Probable Mineral Reserve estimate. The Probable Mineral Reserve estimate was determined in accordance with CIM Definition Standards classification. Considering the risks inherent in all kimberlite deposits, such as sampling for geological continuity, diamond grade and diamond revenue determination, the Indicated portion of the Mineral Resources is considered suitable for the



estimate of Probable Reserve. The authors of the report recommended to perform additional work in order to reduce the uncertainties in the geomechanical and design analysis and to continually review these analysis to ensure they remain valid over time. They also recommended to test processed kimberlite material post production to confirm geochemical classification. There is no certainty that the results described in the Renard 2016 Technical Report will be realized.

## Property Description and Location

The Renard Diamond Mine is part of the Foxtrot Property situated in the Monts Otish (Otish Mountains) region of the province of Québec, Canada, 820 km north of the city of Montreal and 360 km north-northeast of the mining town of Chibougamau. The principal access point for employees, contractors and visitors to the project is via the Renard airport, specifically built for the use of the Renard Diamond Mine and located along the Renard Diamond Mine access road 10 km away from the Renard Diamond Mine gate, with goods and services delivered to site by road on the all-weather Renard Mine Road/Route 167 Extension, the construction of which was completed by Stornoway in 2014. The closest settlement is Témiscamie, on the shore of Lac Albanel. The regional centre of Chibougamau acts as staging posts for the trans-shipment of materials and personnel. Power is provided by a power plant (comprised of eight natural gas generators of 2050 KW each and three diesel-powered generators of 1800 KW each). Daily deliveries of LNG by tanker truck from Montreal are made possible by the all-season Renard Mine Road/Route 167 Extension to the project. On site LNG storage capacity is rated at 10 days of supply at full project production.

The Foxtrot Property comprises 650 claims (33,629.95 ha) in four blocks (one large contiguous landholding of 630 claims plus three smaller blocks), mining lease BM 1021 (143.71 ha) and a surface lease number 1303 10 000 (199.85 ha).

The claims are registered in the name of SDCI as a 100% interest and at the effective date of the Renard 2016 Technical Report, all claims were reported to be in good standing.

The claim holder has the exclusive right to search for all mineral substances in the public domain, with the exception of petroleum, natural gas, brine and loose surface materials. Claims are valid for a two-year period and can be renewed every two (2) years. Renewal fees are fixed by regulation. In order to maintain tenure, exploration work equivalent in amounts also determined by regulation are required depending on the number of terms of renewal a claim has undergone. Table 1 details the work requirements per renewal period north of the 52 parallel as set by regulation at the time of the Renard 2016 Technical Report. When the work carried out is insufficient, or if work was not carried out, the titleholder may pay an amount equivalent to the required amount in lieu of work. Alternatively, work expenditures that are in excess of the amount required for the term on a claim can be transferred to other contiguous claims that are within 4.5 km of its radius or can be credited towards future renewals.

**Table 1: Work Requirement per Renewal Period**

Term	Surface area of claim		
	Less than 25 ha	25 to 45 ha	More than 45 ha
1	\$48	\$120	\$135
2	\$160	\$400	\$450
3	\$320	\$800	\$900
4	\$480	\$1,200	\$1,350
5	\$640	\$1,600	\$1,800
6	\$750	\$1,800	\$1,800
7 or more	\$1,000	\$2,500	\$2,500

Mining lease BM 1021 was granted to SDCI on October 16, 2012, is valid for a period of 20 years (with three 10-year renewal periods and for 5-year renewal periods thereafter), and, at the time of the Renard

2016 Technical Report, was subject to annual payments set at \$46.50/ha. This mining lease encompasses the mine site and surface operations (excluding the processed kimberlite containment area).

The surface lease number 1303 10 000 encompassing the processed kimberlite containment area was also granted on October 16, 2012, and at the time of the Renard 2016 Technical Report had yearly renewal fees at \$99.00/ha. A number of additional surface leases were granted to SDCI to cover various requirements of the Renard Diamond Mine.

SDCI holds a 100% interest in the property, subject to a 2% direct gross revenue royalty on future life of mine diamond production in favour of Diaquem.

## **Environment**

The Renard Diamond Mine is located in a region with a subarctic climate. Temperatures range from summer maximums of +35°C to winter minimums of -45°C. Abundant precipitation falls in the form of rain and snow. Total annual precipitation averages around 80–100 cm. Operations can be conducted year-round.

The Renard Diamond Mine study area is located in the spruce-lichen bioclimatic domain. In this domain, black spruce punctuates the carpet of lichen, while jack pine and balsam fir reach the northern limit of their distribution range.

Topographic relief within the Foxtrot Property consists of steep-sided hills with rounded tops separated by muskeg-covered valleys. Elevations range between 450 masl and 550 masl. Lakes, ponds and small rivers are common.

The Renard Diamond Mine study area is located on Trapline M-11, which covers the entire Foxtrot Property. Traditional hunting is practiced by Crees in this area and targets mainly moose and waterfowl.

## **Government and Social License**

The Foxtrot Property is located within the region of Northern Québec governed by the JBNQA, a land claims agreement executed by the government of Québec, the government of Canada, the GCC and the Northern Québec Inuit Association, among others. This agreement defines the social and environmental protection regimes for the regions of James Bay and Nunavik. The JBNQA provides for three categories of land, Categories I to III, each with specifically defined rights. Category III lands are public lands where Cree communities have certain rights, particularly in regard to trapping, hunting, fishing and the development of outfitter operations. Members of the CNM undertake hunting, fishing and trapping activities within the Foxtrot Property, with the Renard Kimberlite Pipes occurring in an area known to them as “yuus-kanchiisu-saakahiikan” (mild rock Ptarmigan Lake). More specifically, the Renard Kimberlite Pipes lie within the CNM trapline area designated as M-11.

In February 2002, Québec and the Cree Nation signed a fifty year political and economic agreement known as *La Paix des Braves*. The GCC is the political body that represents approximately 14,500 Crees of Eastern James Bay and Southern Hudson Bay in Northern Québec. The GCC has twenty members: a Grand Chief and Deputy-Grand Chief elected at large, the chiefs elected by each of the nine Cree communities of the territory, and one other representative from each community. The CNM is the largest Cree community with 3,500 residents.

On July 24, 2012, the Crees of Eeyou Istchee and the Gouvernement du Québec signed the *Agreement on Governance in the Eeyou Istchee James Bay Territory*. This agreement provides for the creation of the James Bay Regional Government, replacing the Municipalité de Baie-James. The James Bay Regional Government is responsible for the management of Category III lands and exercises the same jurisdictions, functions, and authority on Category III lands in the Eeyou Istchee James Bay Territory as those formerly attributed to the Municipalité de Baie-James. The James Bay Regional Government is directed by a Council composed of 11 Cree representatives (the Grand Chief of the Cree Nation Government along

with ten other designates from elected members of the Council of the Cree Nation Government), 11 Jamésien representatives (designated from among elected members of the councils of the enclave municipalities and the non-Crees residing within the James Bay Regional Government's territory), and one non-voting representative of the Québec government. Authorizations and permits required for the development of all industrial projects are provided by the James Bay Regional Government.

Since the early stages of the Renard Diamond Mine, Stornoway has developed and maintained significant communications and relations with stakeholders including: the CNM, the Grand Council of the Crees (Eeyou Istchee), tallymen of Trapline M11 and the towns of Chibougamau, Chapais and the Municipality of James Bay. Public meetings, field visits, meetings with chiefs or mayors, environmental exchange group meetings, and business meetings with contractors and suppliers are amongst the many activities held by Stornoway on a regular basis. Stornoway has opened offices in Mistissini and Chibougamau to facilitate communications with these parties.

In March 2012, Stornoway completed negotiations with the CNM, the Grand Council of the Crees (Eeyou Istchee) and the Cree Regional Authority on the Mecheshoo Agreement. The Mecheshoo Agreement is a binding agreement that governs the long-term working relationship between Stornoway and the Cree parties during all phases of the Renard Diamond Mine. It provides for training, employment and business opportunities for the Crees during project construction, operation and closure, and sets out the principles of social, cultural and environmental respect under which the project is managed. The Mecheshoo Agreement includes a mechanism by which the Cree parties will benefit financially from the success of the project on a long term basis, consistent with the mining industry's best practices for engagement with First Nations communities.

In July 2012, Stornoway executed the Declaration of Partnership with the communities of Chibougamau and Chapais in the James Bay Region of Québec. The Declaration of Partnership is a statement of cooperation between the partners for the responsible development of the Renard Diamond Mine based on the principles of environmental protection, social responsibility and economic viability. The Declaration of Partnership provides for the Renard Liaison Committee that addresses issues of mutual interest such as communication, employment, and the economic diversification of local communities. In particular, the committee oversees initiatives to attract and retain new residents to the towns of Chibougamau and Chapais.

## **Permitting**

The Renard Diamond Mine was subject to the provincial and federal environmental and social assessment and review process under the *JBNQA*, the *Environment Quality Act* (Québec) and the CEAA. On December 28, 2011, Stornoway filed the ESIA meeting the requirements of the provincial and federal guidelines and following that submission, public hearings on the project were held by the federal Canadian government and Québec government in June and August 2012, respectively.

On December 4, 2012, Stornoway received the global certificate of authorization for the Renard Diamond Mine from the MELCC (formerly the *Québec Ministère du Développement Durable, de l'Environnement, de la Faune et des Parcs*), which certificate was periodically amended since then as the engineering and development plans of the Renard Diamond Mine refined. The certificate of authorization represents the principal regulatory approval that was required to commence mine construction. On July 12, 2013, Stornoway received a positive environmental assessment decision for the Renard Diamond Mine from the CEAA.

Under the *Mining Act* (Québec), the holder of mining rights has the responsibility to rehabilitate and restore the lands on which exploration and/or development activities have been carried out. This work must be completed in accordance with a restoration plan pre-approved by the MERN. In December 2012 Stornoway received approval from the MERN of the rehabilitation plan for the Renard Closure Plan. Under the *Mining Act* (Québec), a financial guarantee must be submitted to the MERN to guarantee 100% of the rehabilitation costs of a mining project, in accordance with a payment schedule prescribed by applicable regulation. On August 29, 2014, Stornoway arranged for a surety bond of up to \$15.2 million to provide a financial

guarantee to the MERN with respect to the Renard Closure Plan. The obligation to pay the first tranche of \$7.6 million was met in August 2014; the second installment of \$3.8 million was met in August 2015 and the third and last installment in August 2016. See “Recent Developments - Closure Plan of the Renard Diamond Mine”.

Since the beginning of the construction phase of the Renard Diamond Mine in July 2014, various additional operating permits have been sought for site specific activities under the authority of the overall global authorizations.

## **Project Geology**

The project area is located on the south-eastern portion of the Superior Structural Province, bordered by Proterozoic rocks of the Labrador Trough in the east and the Grenville Province in the south. This portion of the Superior Craton is sometimes referred to as the “Ungava Craton”. Proterozoic rocks of the Labrador Fold Belt in the east, the Cape Smith Fold Belt in the north and the Grenville Province in the south surround the project area. Northern portions of the project area consist of north-northwest trending, plutonic and gneissic terranes. Based on metamorphic grade, mineralogy, lithology and aeromagnetic observations, the terranes appear to vary in width from 70 km to 150 km.

The Foxtrot Property is situated between the La Grande greenstone (volcanic) belt to the north and the Eastmain greenstone (volcanic) belt to the south. Granite-gneiss and retrograde granulite gneiss are the predominant lithologies, with lesser amounts of granite and granodiorite. Contained within the gneiss are relict metasedimentary and metavolcanic rock assemblages along with associated mafic and ultramafic intrusive rocks. The Otish Mountain and Mistassini groups of Proterozoic, clastic, metasedimentary rocks overlie the Archean lithologies, marginal to the Grenville Province. Mafic and ultramafic intrusive rocks of variable affinities are more common in the southeast than in the southwest.

Granite-gneiss and retrograde granulite gneisses of sedimentary origin are the predominant lithologies in the Property area; however, lesser granite and granodiorite may also be present. The gneisses may contain relict metasedimentary and metavolcanic rock assemblages, as well as associated mafic and ultramafic intrusive rocks. Minor linear belts of supracrustal metavolcanic rocks occur throughout the area, generally trending east-west or west-northwest. Northwest-trending, Proterozoic Mistassini Swarm diabase and gabbro dykes up to 30 m wide cross-cut all lithologies. Isolated outliers of Proterozoic clastic metasedimentary rocks are present in the area.

Metamorphic grade within the Foxtrot area is primarily amphibolite facies with local granulite facies being reported near Lac Minto. Higher-grade lithologies in the north are interpreted as supracrustal relicts dating to 3.1 Ga. Granite and granite gneiss are dated at 2.7 Ga and local felsic and intermediate intrusive rocks are dated at 2.5 Ga.

There are five known episodes of kimberlitic volcanism in Québec; from south to north, the kimberlite fields are Témiscamingue, Desmaraisville, Otish, Wemindji and Torngat. The Renard Cluster is considered to be part of the 550 to 641 Ma Otish kimberlitic volcanic event.

Quaternary glacial cover in the area was controlled by the New Québec Ice Divide. From the divide, ice flowed north and northeast toward Ungava Bay and west to southwest toward Hudson Bay. Glacial lineaments are well developed and widespread. Glacial overburden within the Foxtrot Property can be up to 34 m thick, but is on average 10 m thick in the area of the Renard Cluster. Glacial deposits consist of till, eskers, moraine and post-glacial sediments, and their orientation reflects ice transport from the north-northeast.

## **Exploration**

All exploration has been carried out by Stornoway and its predecessor companies.

Since the inception of the Foxtrot project, approximately 12,000 heavy mineral samples have been collected over a 400,000 km<sup>2</sup> area of which some 8,140 lie within the current land holdings. Since 2000, approximately 274 ground magnetic surveys (2,486 line kilometers), 204 ground electromagnetic surveys (328 line kilometers) and 37,450 line kilometers of airborne geophysical surveys have been completed on the Foxtrot Property.

Structural mapping was undertaken in 2004 and 2006 to identify structural controls that could help locate more kimberlitic intrusions or dykes. The program results proved to be inconclusive. Geological mapping in October 2010 was to identify large-scale feature of interest interpreted from geophysical data and aerial photographs. Overburden in targeted areas was cleared to expose the bedrock for mapping. The program was successful in highlighting two large faults and two smaller ones within the proposed mine site.

## **Mineralization**

There are two types of diamond deposits: primary and secondary. Primary deposits are those in which the diamonds remain inside the original host rock (usually kimberlite) that conveyed them to the surface. Secondary deposits are formed when the diamonds are eroded from the host rock and concentrated by the action of water into alluvial deposits (in rivers) or marine deposits (in beaches). The Renard kimberlites are primary deposits emplaced into granitic and gneissic host rocks. Extensive sampling programs conducted between 2001 and 2014 have demonstrated that the kimberlites contain diamonds of potential economic interest.

To date, nine kimberlite pipes have been identified over a 2 km<sup>2</sup> area in the Renard Cluster (Renard 1 to Renard 10; with Renard 5 and Renard 6 forming one body, referred to as Renard 65). The kimberlite pipes are typically spaced between 50 m and 500 m from each other. Geophysical data and drill information from delineation and bulk sampling programs indicate that, in general, most of the Renard kimberlites are irregular and elliptical in plan view. Surface areas of the kimberlite portion of the pipes range from 0.1 ha to 2.0 ha. The Renard 2015 Mineral Resource Estimate describes Indicated/Inferred resources for the Renard 2, Renard 3, Renard 4, Renard 9 and Renard 65 pipes. The Renard 1, Renard 7 and Renard 10 pipes may have economic potential and are classified as TFFE. Two laterally extensive kimberlite dyke systems, known as the Lynx and Hibou dykes, have been identified to the west and northwest of the pipe cluster, respectively. Portions of both dykes are included in the mineral resource estimation. Additional dyke-like kimberlites have been discovered elsewhere on the property. These are not included in the mineral resource estimation but may warrant additional work at a later date.

The Renard kimberlite pipes comprise diatreme-zone to root-zone kimberlites, with overall similar internal geologies. These pipes can be classified as “typical” South-African-style kimberlites and contain a variety of phases that are distinguishable from one another by differing macroscopic and microscopic properties as well as diamond grades. In most pipes, with the exception of Renard 3 and Renard 10, the dominant phase is a massive volcanoclastic kimberlite that can be classified as tuffacitic kimberlite breccia. In general, these tuffacitic kimberlite breccias are extensively altered and have a massive texture. They consist of varying amounts of olivine, juvenile clasts and country rock xenoliths that are poorly sorted, typically loosely packed and less commonly clast supported, all set within a highly altered interclast matrix. In many pipes an additional pipe-filling phase is present that is typically a more coherent or transitional kimberlite characterized by lower country rock xenolith content and higher olivine content set within a crystalline to semi-crystalline groundmass. In all bodies, hypabyssal kimberlite is present as both dykes and irregularly shaped intrusions that are found within each pipe infilling phase, between contacts of phases and along pipe margins. These are typically considered later stage intrusions. The hypabyssal kimberlite intrusions can vary in thickness from a few centimetres to several metres and, in the case of the Lynx and Hibou dyke system, for example, can be laterally extensive.

The Renard pipe-like bodies are all associated with extensive cracked country rock created during the emplacement event and, with the exception of Renard 3 and Renard 8, have a significant CRB. The CCR consists of both broken and solid country rock with small amounts of HK dykes and veins throughout, and minor zones containing kimberlite-derived constituents. The CRB typically lies between the main kimberlite units and the CCR and is characterized by dominantly broken and pulverized clast-supported country rock,

with an overall dilution of 95% or greater. CRB contains up to 5% of kimberlitic components, present as olivine, rare altered magmaclasts and very rare garnet xenocrysts in the breccia matrix. The CRB contains a significant amount of additional diamond-bearing kimberlitic material, in the form of late-stage, cross-cutting HK dykes, and helps to define the pipe shape.

Previous U-Pb dating of groundmass perovskite in HK dykes within Renard 1 suggested an emplacement age of 631.6  $\pm$  3.5 Ma (Birkett et al., 2004). Recent data obtained for the main rock-types in Renard 2 and Renard 3 using the same method suggest an emplacement age of 640.5  $\pm$  2.8 Ma.

## **Drilling**

All drilling has been carried out under the control of Stornoway and predecessor company Ashton Mining of Canada, Inc. A total of 900 drill holes (132,719m) has been drilled on the property since 2001, comprising 36 RC holes (6,151m) and 631 exploration core holes (120,994m), 35 geomechanical holes (3,471 m), 133 geotechnical holes (1,219m) and 64 hydrogeological holes (884m). During 2007, and as part of the underground bulk sample work, 22 holes were drilled from underground on Renard 2 (1,508 m) and 21 holes from underground on Renard 3 (874 m).

Vertical and angled holes were drilled through the kimberlite bodies, from which three-dimensional geological models were constructed for resource estimation. Drilling intersections are therefore not related to true thickness of mineralization.

Between 2001 and 2002, drilling was completed for early-stage, exploration-focused programs for all the bodies except for Renard 9 and Renard 10, which were discovered in 2003 and 2005, respectively. From 2003, drilling was used primarily to support advanced-stage project evaluation and deposit delineation by providing bulk and mini-bulk samples. Target exploration drilling was undertaken between 2001 and 2010. Drilling in 2011 and 2012 was focused on collecting data to support the proposed mine plan and infrastructure design and drilling in 2014 concentrated on the Renard 2 kimberlite.

While drilling for delineation or mini-bulk samples, detailed geotechnical observations have been recorded from exploration drill core. All holes are logged for geotechnical parameters such as total core recovery, rock quality designation, intact rock strength, weathering/alteration, joint orientation, joint condition rating and fracture frequency in order to obtain rock mass quality values. Beginning in 2009, holes have been drilled to produce oriented core for the purpose of obtaining orientation data from the core. Azimuth (Alpha) and inclination (Beta) measurements for all fractures in the oriented drill core were recorded to aid in the development of a geotechnical model of the Renard mine site.

## **Sample Preparation, Analyses and Security**

Three basic levels of progressively larger diamond sampling procedures are summarized below (caustic fusion sampling, mini-bulk sampling and bulk sampling), followed by descriptions of the comparable core, reverse circulation, trenching and underground sample programs. Determining the moisture content of each sample prior to processing through caustic fusion, DMS or bulk density is necessary to allow an accurate dry weight of the kimberlite to be calculated. The dry bulk density database comprises 2,127 bulk density records, consisting of 1,672 measurements from drill core and 455 from bulk sampling. When multiple measurements from the same sample, and multiple subsamples from the same rock are averaged, and the laboratory QC checks removed, there are 1,770 spatially discrete density samples. Density variations did not show a correlation with country rock dilution, nor was there a clearly demonstrable change of density with increasing depth in the kimberlite pipes.

**Caustic Fusion Sampling:** The caustic fusion process is used to evaluate, characterize and correlate the diamond potential of individual kimberlite lithologies, and to provide data to facilitate the grade estimation process. The objective of this type of test is to extract all diamonds greater than 0.1 mm in size, through chemical dissolution of the host rock sample. Individual samples may vary in size from a few kilograms to hundreds of kilograms, depending on the available material and the specific purpose of the testing. Kimberlite may be collected from drill core, float boulders, subcrop, outcrop, underground exposures and

subsamples of material in a process facility or a combination thereof. Kimberlite is collected, described and recorded by the site geologists following protocols in place at the time. Samples are individually numbered, weighted, sealed in a tamper-resistant container appropriate for the volume of material, and transported to the test facility by a combination of charter aircraft and commercial couriers. Individual sample results from comparable kimberlite units may be merged together to provide larger, statistically more representative, samples.

During the Renard Diamond Mine exploration programs, microdiamonds were recovered by one internal facility situated in North Vancouver, British Columbia (owned and operated by Stornoway) and four external unrelated commercial facilities.

*Mini-Bulk Sampling:* Although there is no formal industry-accepted definition of a “mini-bulk” sample, many companies would agree that the term is generally used to refer to the processing of kimberlite material up to several tens of tonnes. This material may be derived from drill core, RC chips, boulders, subcrop, outcrop, trenches or underground workings. Mini-bulk samples are usually processed through DMS equipment that, depending on specifications and diamond recovery objectives of a particular program, may be configured to recover diamonds of greater than 0.5 mm, 0.85 mm or 1.18 mm on square-mesh screens. In some cases, caustic dissolution or other extraction techniques may be utilized to recover the diamonds. All of Stornoway’s mini-bulk samples were processed through DMS equipment, and the diamond content is based upon stones retained on either 1.18 mm square-mesh screens or +1 DTC screens. Stornoway’s mini-bulk sampling programs have used drill core, RC chips, boulders, and surface trenches to source kimberlite material.

*Bulk Sampling:* Although there is no formal industry-accepted definition of a “bulk” sample, many companies would agree that the term is generally used to refer to the processing of kimberlite material exceeding several tens of tonnes. This material may be derived from drill core, RC chips, boulders, subcrop, outcrop, trenches or underground workings. Bulk samples are usually processed through DMS equipment that, depending on specifications and diamond recovery objectives of a particular program, may be configured to recover diamonds of greater than 0.85 mm or 1.18 mm on square-mesh screens. In some cases, larger screen sizes or other extraction techniques may be utilized for diamond recovery. All of Stornoway’s bulk samples reported herein comprise either surface trench or underground sample material, and were processed through DMS equipment. The reported diamond content is based upon stones retained on either 1.18 mm square mesh or +1 DTC screens.

Certain drill core collected during historical drill programs was composited and treated for macrodiamond recovery. RC chip sampling programs were undertaken with objectives that varied from collecting a large amount of kimberlite to create representative samples, to characterizing the grade over various depth intervals, to regular sampling intervals. Since 2005, several thousand tonnes of kimberlitic material have been excavated from trenches on the Renard 4 and Renard 65 bodies and Lynx, Hibou and North Anomaly dykes. Macrodiamond sample results are summarized in Table 2.

**Table 2: Summary of Macrodiamond Sampling Results**

Kimberlite Body	Sample Type	Year	Number of Samples	Weight (dry t)	Total Carats (+1 DTC)
Renard 1	Drill Core	2002	1	0.3	0.00
	Drill Core	2003	11	10.0	0.73
	Drill Core	2014/2015	4	2.9	0.02
Renard 2	Drill Core	2002	7	5.0	3.29
	Drill Core	2003	8	8.6	5.24
	Drill Core	2004	9	12.5	13.45
	Drill Core	2005	16	6.7	4.96
	Drill Core	2006	7	2.8	2.71
	RC Chips	2004	12	171.2	146.96

<b>Kimberlite Body</b>	<b>Sample Type</b>	<b>Year</b>	<b>Number of Samples</b>	<b>Weight (dry t)</b>	<b>Total Carats (+1 DTC)</b>
	RC Chips	2007	15	86.8	70.95
	Underground	2006/2007	15	2448.8	1601.94
	Underground (drums)	2014/2015	7	1.4	1.77
	Drill Core	2014/2015	71	54.6	44.65
Renard 3	Drill Core	2002	5	4.9	6.47
	Drill Core	2004	13	13.8	13.66
	RC Chips	2004	10	157.0	185.11
	RC Chips	2007	13	59.4	34.86
	Underground	2006/2007	13	2113.7	2799.85
Renard 4	Drill Core	2002	6	4.8	2.94
	Drill Core	2003	15	12.4	5.32
	Drill Core	2004	36	32.4	13.62
	Drill Core	2005	1	0.5	0.48
	RC Chips	2004	17	141.8	53.23
	RC Chips	2006	14	41.4	33.21
	Surface Sample	2004	2	1.8	3.09
	Surface Sample	2005	6	9.8	17.76
	Surface Sample	2006/2007	7	2104.2	2721.88
Renard 65	Drill Core	2002	2	0.8	1.19
	Drill Core	2003	23	19.8	8.47
	Drill Core	2004	22	17.9	4.05
	RC Chips	2004	18	149.6	32.50
	Surface Sample	2007	2	266.0	51.77
	Surface Sample	2012	1	5080.8	963.38
Renard 7	Drill Core	2005	4	4.1	0.10
	Drill Core	2014/2015	3	2.3	0.00
Renard 8	Drill Core	2005	4	6.1	0.47
	Drill Core	2014/2015	2	1.4	0.03
Renard 9	Drill Core	2004	6	6.0	5.65
	Drill Core	2005	4	6.2	6.38
	RC Chips	2006	19	70.3	35.84
	RC Chips	2007	5	27.3	11.97
Renard 10	Drill Core	2014/2015	3	1.7	0.00
Hibou	Surface Sample	2005	5	19.8	4.68
	Surface Sample	2006	2	31.4	39.53
	Surface Sample	2008	1	543.9	781.41
Lynx	Surface Sample	2003	3	3.9	4.46
	Surface Sample	2004	2	10.3	14.92
	Surface Sample	2005	6	34.7	42.33
	Surface Sample	2007	3	494.3	528.93
North Anomaly	Surface Sample	2006/2008	3	46.4	44.90

Four DMS process facilities have been used as primary macrodiamond extraction laboratories during the Renard exploration programs to date: two separate third party commercial facilities (a 10 tonnes per hour plant owned by Thunder Bay Mineral Processing Laboratory and a 1.5 tonnes per hour plant operated by Microlithics) and two facilities owned and operated by Stornoway (a 5 tonnes per hour plant in North Vancouver, British Columbia and a 10 tonnes per hour plant at Camp Lagopède, Québec).

Diamond bearing concentrates generated by DMS processing of underground bulk samples, large tonnage trench samples and RC chip samples from the Renard Diamond Mine were all subjected to final processing



at Stornoway's North Vancouver laboratory facilities. The diamond recovery circuit includes a sizing circuit, an X-ray flow-sort machine and grease table equipment. All processing of concentrates was undertaken in secured, controlled access, closed-circuit TV monitored areas of the North Vancouver facilities. DMS operations, post-processing treatment of DMS concentrates, observing, and post-observation handling of concentrates and diamonds, from 2004 to the present, were conducted under approved security protocols and procedures, which include but are not limited to:

- Chain of custody documentation;
- Dual locking containers;
- Uniquely numbered, single use tamper resistant seals;
- Monitoring and control of sample weights;
- Limited access or dual access to certain laboratory premises;
- Closed-circuit TV surveillance; and
- External (third party) security guards.

Comparative analysis of diamond size distribution is checked against historical and external laboratory results. Data collected from the various exploration, mini-bulk, and sampling programs were collated into a SQL Server relational database where access is restricted to the database administrator only. The database is stored on the server in the North Vancouver office, with backups being performed every day. Processing and diamond results hard copy data are stored in fire resistant filing cabinets in the North Vancouver office as are hard copy data of the Renard core field logging. In addition, these hardcopies have been scanned as digital PDF files which are stored on the server.

QA/QC programs conducted by Stornoway include:

- Blind spiking of samples in processing;
- Blind spiking of samples in observing;
- Regular testing of all machines and equipment;
- Calibration and verification procedures;
- Routine audits of non-observable fractions and reject materials;
- Use of internal standards and reference materials;
- A record-keeping system of documentation, which retains in archives all original records and data, with all amendments clearly marked, initialled and dated for reference;
- Corrective actions which are implemented immediately when any aspect of laboratory analysis, or chain of custody documentation does not conform to procedural standards;
- The investigation and verification of any result which appears to be a potential statistical anomaly, to ensure laboratory results fit within the geological context; and
- Use of external laboratories for check samples including QP visits.

As part of the independent expert review, the following verification checks were conducted on the Foxtrot Property:

- Site visits from March 5 to March 8, 2009; August 21, 2012; July 29 to July 31, 2014; and April 20 to April 22, 2015
- Review of the surface and underground geological and mineralization interpretations;
- Review of the historic and current exploration programs;
- Review of deposit model;
- Review of data that are supporting Mineral Resource models. The review covered drill core inspection, review of core logging, sampling and assay protocols and methods, and review of sample security measures and sample storage;
- Review of QA/QC data protocols and methods, data integrity and validation of RC, drill core and underground data, and
- Review of diamond valuation methodologies.

Independent samples were not collected and treated since this is not practical for diamond sampling. Stornoway's published and practiced procedures for collection of data in the field and transposition of these data into data 'products' to support resource evaluation work and initial costing exercises meet industry best practice guidelines.

These data have been collected, compiled and analyzed by a combination of methodologies in order to cater to the spatial distribution of sampling and the amount of information available for each kimberlite domain in each body.

Unlike commodities such as gold or base metals, diamonds do not have a standard value per unit weight that can be used to calculate value of a deposit. A one carat diamond can be worth from less than one dollar to tens of thousands of dollars, depending on the shape, colour and quality. A parcel of diamonds must be individually examined to establish an average value. Multiple valuations from different professional diamond valuers, or *diamantaires*, are necessary, and are usually averaged to give an estimate of the probable true price of the goods in question. Diamond price estimates can differ between valuers by as much as  $\pm 20\%$ . This is especially so on smaller parcels of diamonds. These differences are simply due to the fact that different *diamantaires* will perceive the value of a stone or parcel of stones differently. Their price guidelines will differ somewhat as well.

A cumulative 8,315.58 carat diamond parcel acquired by bulk sampling underground, trench sampling and RC drilling completed by Stornoway between 2003 and 2007 was used for value modelling. In a valuation exercise, it is necessary to involve a number of *diamantaires* to obtain a range of valuations that can be averaged to get an accurate price estimate and to use these data to model an average price. Often, in early stage evaluations of diamond projects, diamond price modelling is undertaken. In price modelling, the small sample size is compensated for by estimation of what the diamond population in a larger sample would be. By doing this, the valuer attempts to predict the likelihood of finding larger stones and what their effect on the overall value of the parcel would be and, as such, estimate more closely what the run-of-mine value would be. Modelling involves study of the diamond parcel on hand, including size distributions and valuations, to statistically estimate the upper and lower limits of a production parcel at certain confidence levels based upon the small parcel on hand. To accomplish this, Stornoway contracted WWW to obtain valuations and perform price modelling. WWW are recognized international leaders in this field.

## **Mineral Resources and Mineral Reserves**

### **2015 Mineral Resource Estimate**

Following a 2014 deep directional drill program at the Renard 2 kimberlite, and extensive related sampling activities both at Renard 2 and other project kimberlites, an updated Mineral Resource estimate was completed in accordance with the CIM Mineral Resource and Mineral Reserve definitions referred to in NI 43-101 and reported on September 24, 2015, for Renard 2, Renard 3 and Renard 4. That work, as well as a target for further exploration for the Renard 1, Renard 7 and Renard 10 kimberlite pipes and the Hibou kimberlite dyke system, was more fully documented in an NI 43-101 technical report entitled "*2015 Mineral Resource Update for the Renard Diamond Project, Québec, Canada*" with an effective date of September 24, 2015 (the "**Renard 2015 Mineral Resource Estimate**").

The Renard 2015 Mineral Resource Estimate comprises the integration of kimberlite volumes, density, petrology and diamond content data derived from 101,078 m of diamond drilling (497 holes), 6,151 m of large diameter reverse circulation (RC) drilling (36 holes), 23.7 tonnes of samples submitted for microdiamond analysis, 196 carats (cts) of diamonds (3,107 stones) recovered from drill core, 605 cts of diamonds (7,181 stones) recovered from RC drilling, 4,404 cts of diamonds (40,521 stones) recovered from underground bulk sampling and 5,219 cts of diamonds (52,474 stones) recovered from surface and trench sampling. The estimate also incorporates information derived from approximately 150 drill holes, 37 surface test pits and 12 trenches undertaken for geotechnical and hydrogeological purposes. Results are tabulated in Table 3 and Table 4. The Renard 2015 Mineral Resource Estimate is based on the continuity of geology between kimberlite at depth and kimberlite nearer surface, and the generally low variation in sample results for the different kimberlite phases with depth.

**Table 3: September 2015 Indicated Mineral Resources of the Renard Diamond Mine**

Deposit	Total Tonnes <sup>4</sup>	Total Carats <sup>4</sup>	Average cpht <sup>5</sup>	Average Dilution %
Renard 2 Total	25,696,000	21,578,000	84.0	54.7
<i>Renard 2 w/o CRB<sup>6</sup></i>	<i>21,417,000</i>	<i>20,680,000</i>	<i>96.6</i>	<i>46.4</i>
<i>Renard 2 CRB</i>	<i>4,279,000</i>	<i>899,000</i>	<i>21.0</i>	<i>96.0</i>
Renard 3	1,820,000	1,859,000	102.2	33.5
Renard 4	7,246,000	4,437,000	61.2	48.9
Renard 65	7,865,000	2,300,000	29.2	42.8
Renard 9	0	0	0	n/a
Lynx	0	0	0	n/a
Hibou	0	0	0	n/a
Total	42,627,000	30,175,000	70.8	50.6

**Notes:**

1 Effective Date is September 24, 2015.

2 Classified according to CIM Definition Standards.

3 Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.

4 Totals may not add due to rounding.

5 Carats per hundred tonnes. Estimated at a +1 DTC sieve size cut-off.

6 Excludes discrete more dilute kimberlite facies not previously incorporated into July 2013 Resource.

Provided to facilitate more direct comparison with 2013 Mineral Resource estimate.

**Table 4: September 2015 Inferred Mineral Resources of the Renard Diamond Mine**

Deposit	Total Tonnes <sup>4</sup>	Total Carats <sup>4</sup>	Average cpht <sup>5</sup>	Average Dilution %
Renard 2 Total	6,589,000	3,883,000	58.9	72.8
<i>Renard 2 w/o CRB<sup>6</sup></i>	<i>4,080,000</i>	<i>3,356,000</i>	<i>82.3</i>	<i>58.5</i>
<i>Renard 2 CRB</i>	<i>2,510,000</i>	<i>527,000</i>	<i>21.0</i>	<i>96.0</i>
Renard 3	542,000	609,000	112.3	39.4
Renard 4	4,750,000	2,455,000	51.7	56.3
Renard 65	4,928,000	1,181,000	24.0	56.5
Renard 9	5,704,000	3,040,000	53.3	63.6
Lynx	1,798,000	1,924,000	107	n/a
Hibou	178,000	256,000	144	n/a
Total	24,490,000	13,348,000	54.5	n/a

**Notes:**

1 Effective Date is September 24, 2015.

2 Classified according to CIM Definition Standards.

3 Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.

4 Totals may not add due to rounding.

5 Carats per hundred tonnes. Estimated at a +1 DTC sieve size cut-off.

6 Excludes discrete more dilute kimberlite facies not previously incorporated into July 2013 Indicated Resource.

Provided to facilitate more direct comparison with 2013 Mineral Resource estimate.

There is additional potential for the project, as the geological models for Renard 2, Renard 3, Renard 4, Renard 65, and Renard 9 are based on conservative geometries for the kimberlites at depth, and the models do not incorporate areas of limited drilling at depth. New work was also undertaken during 2013, 2014 and 2015 on the Renard 1, Renard 7, Renard 8 and Renard 10 kimberlite pipes, and various kimberlite dyke systems on the property. The target for further exploration (TFE) - previously known as PMD before the

June 30, 2011 revisions to NI 43-101 - are detailed in Table 5. Total TFFE was identified as representing between 76 and 113 Mt, containing between 33 and 71 million carats of diamonds, at an average grade of 43 to 63 cpht. The potential quantity and grade of any TFFE is conceptual in nature, there is insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the target being delineated as a Mineral Resource.

**Table 5: September 2015 Target For Further Exploration of the Renard Diamond Mine**

Low Range				High Range		
Deposit	Total Tonnes	Total Carats	Average cpht	Total Tonnes	Total Carats	Average cpht
Renard 2	6,138,000	3,683,000	60	15,472,000	15,472,000	100
Renard 3	3,352,000	3,520,000	105	3,773,000	6,338,000	168
Renard 4	11,120,000	5,560,000	50	15,358,000	11,826,000	77
Renard 65	29,026,000	7,257,000	25	40,926,000	13,506,000	33
Renard 9	3,858,000	2,006,000	52	6,327,000	4,302,000	68
Lynx	3,089,000	2,966,000	96	3,199,000	3,839,000	120
Hibou	3,469,000	3,608,000	104	4,028,000	6,082,000	151
Renard 1	8,620,000	1,724,000	20	12,983,000	3,895,000	30
Renard 7	6,342,000	1,902,000	30	9,431,000	3,772,000	40
Renard 10	1,217,000	730,000	60	1,730,000	2,076,000	120
Total <sup>2</sup>	76,232,000	32,956,000	43	113,227,000	71,108,000	63

**Notes:**

1 Previously known as Potential Mineral Deposit prior to June 30, 2011 changes to NI 43-101.

2 Totals may not equal the sum of the individuals due to rounding.

For the purposes of the Renard 2016 Technical Report, only the Indicated Mineral Resources were considered.

## Mineral Reserves

A detailed mine plan was developed to extract the Indicated Mineral Resources of the Renard Diamond Mine. Dilution and recovery assumptions were applied, and cut-off grades were calculated using preliminary costs and diamond valuations. Open pit and underground Probable Mineral Reserves were estimated independently based on criteria specific to each method. A reconciliation of the Indicated Mineral Resources included in the open pit and underground mine plans was completed, confirming that all available resources were included.

The Renard 2 and Renard 3 kimberlite pipes will be mined through a combination of open pit and underground mining methods, while the Renard 65 pipe will be mined by open pit method only and Renard 4 pipe will be mined by underground methods only.

*Open Pit:* Reserves for the surface mine design are reported according to CIM standards. According to these standards, resource model blocks classified as Measured and Indicated are reported as Proven and Probable mineral reserves respectively. Owing to those reporting standards, the Inferred Resources cannot be included as reserves and so have not been included in the life of mine schedule. No resource blocks are classified as Measured and therefore no part of the Mineral Reserve classifies as Proven. The total Probable Mineral Reserve includes an ore dilution factor and an ore recovery factor to estimate a recoverable mining reserve.

The ore outline mining shapes consisted of expanding the modelled kimberlite solids to incorporate a 1 m dilution envelope. Specific dilution factors were estimated for each kimberlite orebody through compilations performed on a bench by bench basis. The dilution envelope is assumed not to contain diamonds and is therefore considered to be of zero grade. The dilution factors by bench per kimberlite pipe are shown in Tables 6 and 7. For Mineral Reserve estimation, a 98% mine recovery factor was then applied to account for ore unrecovered at the edge of the orebody. The cut-off grades used for the mineral reserve estimation are shown in Table 8.

**Table 6: R2, R3 & R65 Dilution by Bench**

Bench	Bench Dilution (%)				
	R2	R3	CRB	CRB2a	R65
500	-	10.1	-	-	-
490	4.4	10.5	4.4	3.4	-
480	1.6	12.9	3.3	2.5	4.2
470	0.8	13.6	3.4	2.3	3.8
460	0.9	16.6	3.5	2.1	3.6
450	1.5	12.6	3.3	1.9	3.7
440	1.7	10.8	4.6	2.0	3.6
430	2.0	9.8	5.3	1.7	4.1
420	2.6	9.1	5.3	1.3	3.6
410	2.4	9.3	6.7	1.1	3.8
400	1.3	5.5	6.2	0.6	3.6
390	0.5	-	-	-	3.6
380	0.2	-	-	-	3.5
370	-	-	-	-	3.5
360	-	-	-	-	2.6
350	-	-	-	-	2.1
Average	1.72	11.44	4.32	1.75	3.51

**Table 7: Average Dilution Factors**

Dilution	R2 (Kimb2a; Kimb2b; CRB2a; CRB)	R3	R65
Diluted Ore Tonnage	4,333,020	793,719	4,578,679
Dilution Factor	2.73%	11.44%	3.51%

**Table 8: Open Pit Cut-off grade (cpht)**

R2 (Kimb2a; Kimb2b; CRB2a; CRB)	R3	R65
16.2	22.1	17.0

The total in-situ open pit Probable Mineral Reserve is estimated at 8.91 Mt of ore at an average diluted grade of 44.4 cpht for 3.96 mCarats. The Renard 3 pipe has the highest average diamond grade at 92.3 cpht, followed by Renard 2 at an average grade of 59.6 cpht (after inclusion of the “CRB” and “CRB-2A” units). Renard 65 is a lower grade pit containing 4.58 Mt of ore at an average grade of 30.1 cpht for

1.38 mCarats. As of December 31, 2015, 153 kt of ore have been mined and stockpiled containing an estimated 113 thousand carats.

*Underground:* The first step in the estimation of the underground Probable Mineral Reserves was to create 3-D shapes for each of the proposed stopes based on the Indicated Mineral Resource model and the planned mining method. Practical shapes compatible with the planned development of the drawpoint levels and drill drifts, available drill patterns, the type of drilling equipment selected, and likely post blast outlines, were created. The pipes outlines in some areas are irregular and in these areas practical (smoothed) mining outlines were created, which typically encapsulated some waste rock and occasionally excluded some kimberlite. Once all volumes were created, the tonnage and grade of all the Indicated Mineral Resources contained within each stope shape were queried using the resource block model, Deswik software and excel spreadsheet for the resource to reserve conversion.

The modifying factors of mining recovery and external dilution of BHS mining have been applied to the contained Indicated Mineral Resource and waste in the stope shapes. The assumptions of recovery and dilution for BHS mining used for the Renard 2016 Technical Report are listed in Table 9. Additional simulations will be performed to optimise these factors as the mining strategy is being refined for R2, and new simulations will be done for R3 and R4 to validate current assumptions.

**Table 9: Assumptions of Recovery and Dilution of BHS Mining**

Modifying Factor	Pipe		
	R2	R3	R4
Mining Dilution	20%	14%	14%
Mining Recovery	82%	85%	78%

Considerations for recovery and dilution estimate assumptions for BHS mining were the following:

- the first 35% of the production is swell, which is expected to have very low dilution. When the stope is full of blasted ore, the first 50% to 60% of the drawdown is also expected to have very low dilution and high recovery. When backfill waste starts mixing with the ore as it is drawn down, it is expected that dilution for each tonne drawn will start increasing significantly;
- placement of drawpoints and drawdown planning are critical to achieve mass flow and minimize “rat-holing” of the blasted ore in the stope during drawdown;
- grade of all external dilution has been assumed to be zero, even if it is known that the CRB units, which surround the pipes in many locations, contain diamonds;
- for internal design dilution, a grade of 21 cpht has been assumed for the CRB above the 300 m elevation (Indicated Resources). The grade of the CRB below this elevation (Inferred Resources) was assumed at 0 cpht, the same for all other waste rock units;
- it is expected that much of the dilution will come from open pit waste rock, placed on top of the blasted kimberlite, which will contain no grade;
- Material from drawcones located mostly in waste will be screened according to the following guidelines:
  - waste/ore percentage < 75% = 0%
  - 250% > waste/ore percentage > 75% = 33%
  - 750% > waste/ore percentage > 250% = 67%
  - 750% < waste/ore percentage = 100%
- Where a significant amount of blasted waste is included in the stope design, it was considered that it would either be left in the stopes (if on top of the ore) or screened (if below the ore) following the assumption that 33% will be mixed with the blasted ore and recovered, and 67% will be left in place at the end of the stope extraction. This was done on a stope by stope basis, making sure that it is operationally feasible.

At the very bottom level (710L for Renard 2 and 270L for Renard 4), the kimberlite remaining on the underside of the drawpoint troughs will not be recovered as part of BHS mining. At the very end of the mine life, sublevel retreat mining will be used, to recover this ore. Up holes will be drilled from all the drawpoints and scam drifts located below the troughs and cones, and then the holes will be blasted and the ore mucked in a retreat fashion.

At this stage, the mine-life estimated average recovery and dilution factors have been applied to each individual mined block (drawcone, stopes and sills) as not enough information is available to perform this exercise on a stope by stope basis. These factors will certainly vary for each mined block.

The grade of all the stopes was compared to the cut-off grades shown in Table 10, and all stopes were found to exceed this cut-off.

**Table 10: Underground Cut-off grade (cpht)**

<b>R2</b> <b>(Kimb2a; Kimb2b; CRB2a; CRB)</b>	<b>R3</b>	<b>R4</b>
29.2	36.6	37.1

Of the three underground pipes in the Probable Mineral Reserve, Renard 2 contains 81% of the tonnes and 86% of the carats, Renard 4 contains 14% of the tonnes and 9% of the carats, and Renard 3 contains 5% of the tonnes and carats. All open pit and underground Mineral Reserves are in the “Probable” category. A consolidated summary of open pit and underground Probable Mineral Reserves, by mining method and pipe, effective as of December 31, 2015, is presented in Table 11.

**Table 11: Probable Mineral Reserve Summary – Open Pit and Underground**

<b>Mine</b>	<b>Tonnes</b>	<b>Grade</b>	<b>Carats</b>	<b>% Tonnes</b>	<b>% Carats</b>	<b>% Tonnes</b>	<b>% Carats</b>
	(k)	(cpht)	(k)	Total	Total	Method	Method
<b>OPEN PIT</b>							
R2	1,489	92.7	1,381	4.5%	6.2%	16.7%	34.9%
CRB2A	475	31.4	149	1.4%	0.7%	5.3%	3.8%
CRB	1,575	20.2	319	4.7%	1.4%	17.7%	8.1%
<b>R2 Subtotal</b>	<b>3,539</b>	<b>52.2</b>	<b>1,849</b>	<b>10.6%</b>	<b>8.4%</b>	<b>39.7%</b>	<b>46.7%</b>
<b>R3 Subtotal</b>	<b>794</b>	<b>92.3</b>	<b>733</b>	<b>2.4%</b>	<b>3.3%</b>	<b>8.9%</b>	<b>18.5%</b>
<b>R65 Subtotal</b>	<b>4,579</b>	<b>30.1</b>	<b>1,376</b>	<b>13.8%</b>	<b>6.2%</b>	<b>51.4%</b>	<b>34.8%</b>
<b>TOTAL OP</b>	<b>8,912</b>	<b>44.4</b>	<b>3,958</b>	<b>26.8%</b>	<b>17.9%</b>	<b>100%</b>	<b>100%</b>
<b>UNDERGROUND</b>							
R2-290	5,111	63.3	3,236	15.4%	14.6%	21.0%	17.8%
R2-470	4,744	84.7	4,017	14.3%	18.1%	19.5%	22.1%
R2-590	4,750	89.9	4,270	14.3%	19.3%	19.5%	23.5%
R2-710	5,073	81.4	4,132	15.2%	18.7%	20.8%	22.7%
<b>R2 Subtotal</b>	<b>19,679</b>	<b>79.6</b>	<b>15,655</b>	<b>59.1%</b>	<b>70.7%</b>	<b>80.8%</b>	<b>86.1%</b>
<b>R3 Subtotal</b>	<b>1,223</b>	<b>70.2</b>	<b>858</b>	<b>3.7%</b>	<b>3.9%</b>	<b>5.0%</b>	<b>4.7%</b>
<b>R4 Subtotal</b>	<b>3,458</b>	<b>48.3</b>	<b>1,671</b>	<b>10.4%</b>	<b>7.5%</b>	<b>14.2%</b>	<b>9.2%</b>
<b>TOTAL UG</b>	<b>24,360</b>	<b>74.6</b>	<b>18,184</b>	<b>73.2%</b>	<b>82.1%</b>	<b>100%</b>	<b>100%</b>
<b>STOCKPILE</b>	<b>153</b>	<b>73.5</b>	<b>113</b>				
<b>TOTAL OP, UG &amp; Stockpile</b>	<b>33,424</b>	<b>66.5</b>	<b>22,255</b>	<b>100%</b>	<b>100%</b>		

**Notes to accompany Probable Mineral Reserves Table:**

- 1) Probable Mineral Reserves have an effective date of December 31, 2015.
- 2) Probable Mineral Reserves are reported on a 100% basis.
- 3) The reference point for the definition of Probable Mineral Reserves is at the point of delivery to the process plant.
- 4) Probable Mineral Reserves are reported at +1.0 mm (effective cut-off of 1.0 mm).
- 5) Probable Mineral Reserves that will be or are mined using open pit methods include Renard 2, Renard 3 and Renard 65. Probable Mineral Reserves are estimated using the following assumptions: Renard 2 and Renard 3 open pit designs assuming external dilution of 4.3% and mining recovery of 98%; Renard 65 open pit design assuming external dilution of 3.5% and mining recovery of 98%.
- 6) Renard 2, Renard 3 and Renard 4 Probable Mineral Reserves are mined using underground mining methods. The Renard 2 Probable Mineral Reserve estimate assumed an external dilution of 20% and mining recovery of 82%. The Renard 3 Probable Mineral Reserve estimate assumed an external dilution of 14% and mining recovery of 85%. The Renard 4 Probable Mineral Reserve estimate assumed an external dilution of 14% and mining recovery of 78%.
- 7) Tonnes are reported as thousand metric tonnes, diamond grades as carats per hundred tonnes, and contained diamond carats as thousands of contained carats.
- 8) Tables may not sum as totals have been rounded in accordance with reporting guidelines.

Factors that may affect the Probable Mineral Reserve estimates include:

- New data from ongoing and upcoming sampling programs;
- Updates to assumptions used in estimating diamond carat content, including bulk density, pipe geometry and dimension, and grade interpolation method;
- Geological interpretation of internal kimberlite units and/or domain boundaries;
- Changes to mine design and/or planning parameters;
- Unforeseen mine geotechnical and/or hydrological conditions;
- Depletion due to mining or sampling;
- Further improvement, or deterioration, of process plant recovery;
- External influences on operating and sustaining capital costs, including without being limited to, energy costs and escalation;
- Diamond price and valuation assumptions;
- Foreign exchange rates, especially Canadian versus US;
- Variations to the permitting, operating or social licence regime assumptions, in particular if permitting parameters are modified by regulatory authorities during permit renewals.

**Mining Operations**

The mining strategy for the Renard Diamond Mine is to extract the near surface portions of the kimberlite orebodies by open pit mining methods and to recover the extensions at depth using the underground BHS method. The selection of this underground mining method is the result of a trade-off study that was conducted to determine the best method for the project. The fact that the orebody can be mined by underground mining methods affects the optimum open pit size and is a trade-off of profit from mining by open pit versus underground mining techniques. See "Recent Development - Mining Method" for modifications to the underground mining method used at the Renard Diamond Mine".

***Open Pit Design***

Open pit optimization was carried out using the Whittle software package implementing the Lerch-Grossman algorithm. The Whittle optimizations were performed using the Renard 2015 Mineral Resource Update. The Renard 2016 Technical Report considers mineralization classified in the Indicated Resource category, which limits open pit mining to the Renard 2, Renard 3 and Renard 65 kimberlite ore bodies.

A mining dilution factor was estimated for each pipe by including a 1 m envelope around the ore. The resulting dilution factor, which was employed in the optimization process, was used to calculate the diluted grade. For optimizations, an ore recovery of 96% was used for Renard 2 and Renard 3 and 100% for R65, while for Probable Mineral Reserves estimates, a uniform 98% was used for the open pits. Several optimization iterations and cases were performed for the R2/R3 open pit imposing certain surface and pit depth constraints. The selected R2/R3 pit shell is not limited by surface constraints, but is limited to



elevation 380 in the pit where the current underground mine is designed to recover the ore body. The R65 pit is constrained at surface due to the road and lake bounding the pit on the south side and does not consider that the ore body will be mined by underground methods. Bench heights of 10 m were selected to facilitate efficient drilling and blasting activities. The loading units mine the benches in 10-m-high cuts. The pit slope profile was determined using geotechnical recommendations. The modelled overburden thickness varies from 5 m at the edges to > 27 m over the center of the orebodies. The slope configuration recommendations vary based on overburden thickness. The Renard 2 and Renard 3 open pit excavations result in a single pit at surface with two pit bottoms centered on the respective orebodies. The excavation is therefore treated as a single pit and is referred to as the R2/R3 open pit. The R2/R3 open pit is too small to allow for internal pit phases. The Renard 65 pit is centered on one main kimberlite and will be mined in three phases to maximize value and sequence waste mining.

### *Underground Mine Development*

Access to the mine is provided by a ramp to exploit the Probable Mineral Reserves that have been defined down to a depth of 710 m for the Renard 2 pipe, 250 m for the Renard 3 pipe and 270 m for the Renard 4 pipe. The underground mine has been planned so that a single common ramp provides access to all three Renard pipes. The ramp has been sized to allow efficient ore extraction with an underground mobile equipment fleet, such as 60t haul trucks and 20t LHDs. It is driven from surface to the 710L and connects to ten drill levels and four production levels. Since only a ramp and a supported raise with a manway have access through to surface, all workers, equipment and materials are transported in and out of the underground mine via the ramp facility. To facilitate smooth traffic in the ramp during the ore haul, passing bays were incorporated into the ramp design to allow loaded ore trucks to travel the ramp with minimal interruptions. The Renard 3 and Renard 4 pipes will be accessed either from the main ramp or from existing levels initially developed to access Renard 2.

During the life-of-mine, a total of 37.0 km of development will be excavated of which 4.0 km will be in initial or pre-production capital with the remainder in operating and sustaining capital. This development will produce 0.6 Mt of kimberlite ore and 2.0 Mt of waste. Ramp development was initiated in December 2014 with an initial 8 m cut, and then recommenced in April 2015. As of December 31, 2015, 887 m of development had been completed. The main ramp was the highest priority task until it reached 290L, as it was part of the critical path to start the underground operation. The planned rates per development team are 5.2 m/d for the ramp; 5.5 m/d for a single face in standard size tunnels, and 6.5 m/d if there are multiple faces available in standard size tunnels. Except for the first 8 m, which were performed by a contractor, all lateral development will be done by Stornoway-employed crews with newly purchased equipment.

The main exhaust raise is a vertical and supported 6.5-m in diameter raise, extending from surface to 710L. It will be excavated in four sections: surface to 290L; 290L to 470L; 470L to 590L; and 590L to 710L. The main fresh air raise is a vertical 6.5-m diameter supported raise, also extending from surface to 710L. It will be excavated in five sections: surface to 160L; 160L to 290L; 290L to 470L; 470L to 590L and 590L to 710L. The fresh air raise also serves as the secondary egress from the mine in the event of emergency where the primary egress through the ramp is unavailable. Mine services such as electrical cables, fuel line, mine water, dewatering, compressed air and communications are provided through the raise as well.

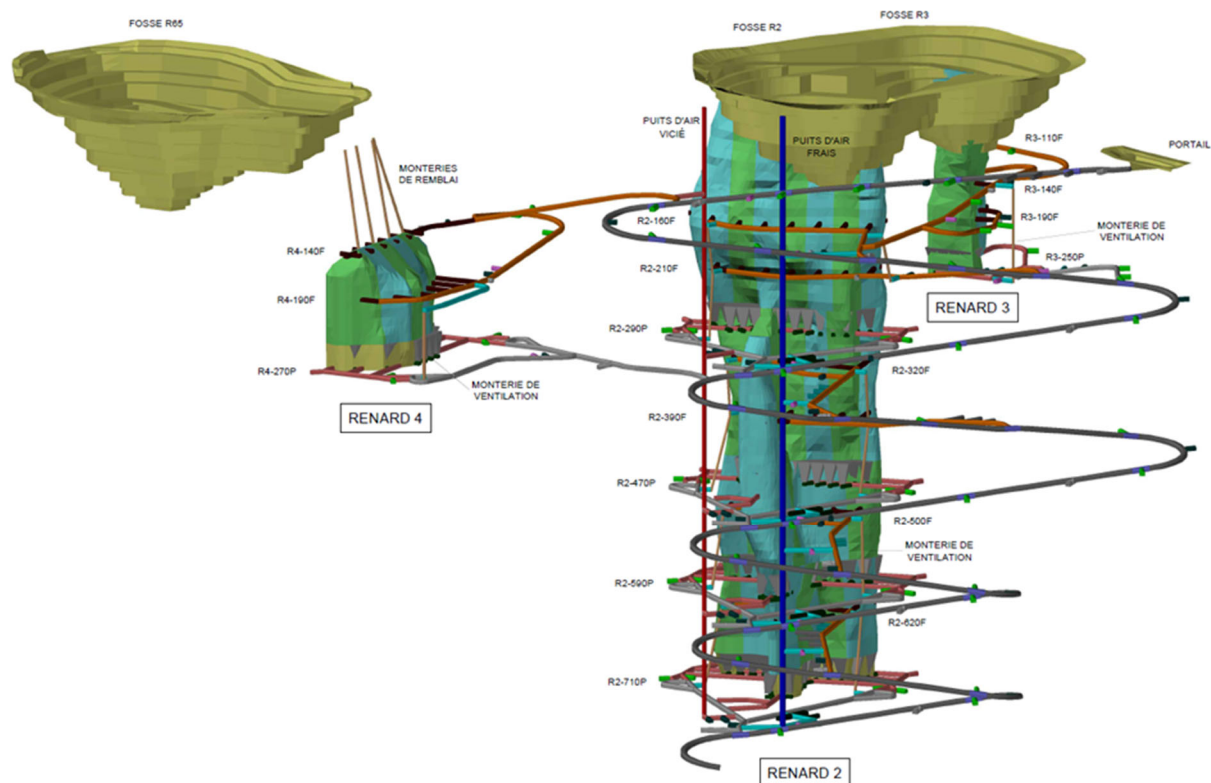
### *Underground Mining*

The BHS method has been designed to progress in four stages from the top of the pipe (bottom of the open pit) downwards. As the ore is drawn from the stope, a large open void will be created if no backfill is used. The mine plan is to fill this void using open pit waste as backfill placed into the stope by dumping it from trucks on surface onto the top of the broken ore column being drawn down in the pipe. For Renard 2 and Renard 3, waste will be dumped over the edge of the pit, while for Renard 4, wastes will be dumped into backfill raises leading to the top of the underground stope. This use of open pit wastes will also enable the rehabilitation of the waste rock pile during mine operation rather than at the end of the mine life.

See “Recent Developments - Mining Method” for a recent update on the underground mining method used at the Renard Diamond Mine”.

A 3D view of the planned development and stopes is shown in Figure 12.

**Figure 12: 3D View of the Renard Mine**



For production mining, the Renard 2 pipe has been divided vertically into four production stages (zones), each located at elevations where the ore body changes geometry and orientation, so that recovery and dilution factors could be optimized. The resulting production levels with this design are at level 290L, 470L, 590L and 710L (all level designations are depth below surface in meters). Their respective heights are 165 m (up to the pit bottom), 180 m and 120 m for the last two stages. Drawpoints and cones will be located at the base of each of the stages. A top-down mining sequence is planned for the four mining zones in Renard 2.

The base of the Indicated Resource in the Renard 4 pipe is 235 m below surface (270 m from FAR collar) and will be mined below a 100-m-thick crown pillar for a vertical height of 135 m. The interpretation of the shape of the Renard 4 pipe is oblong, and very regular in its outline, so this height was deemed to be suitable for BHS mining. One production level and two drill levels will be used to extract all reserves from the Renard 4 orebody, which will also be subdivided into vertical panels as Renard 2. The bottom production level for Renard 4 pipe is at the 270L.

The Renard 3 pipe is fairly large close to surface, but then necks down to a fairly small pipe below the open pit and further necks down at the base of the Indicated Mineral Resources at a depth of 250 m. Due to the very irregular shape of the orebody, the Renard 3 pipe was divided in two stopes. The stope on the West side of the pipe will first be mined bottom up by BHS as its grade and size are more important. This opens the opportunity to recover most of the carats in R3 without adding fill before the stope is depleted. Once the first stope is filled with waste, the stope on the East side of the pipe (stope 2) will be mined using standard long hole stoping, as it is too narrow to accommodate drawcones. The bottom of the only production level for the Renard 3 pipe is at 250L, and the mining of two stopes will extend up to the bottom of the pit.

## *Production Schedule*

The mine production schedule was developed to initially supply the plant at a nominal rate of 2.16 Mt per annum or 180,000 t/month. A plant ramp up schedule began in July 2016. Commercial Production was achieved on January 1, 2017. It is planned to increase the mill feed up to 210,000 t/month by July 2018 to reach 2.52 Mt per annum. The open pit production rate in the R2/R3 open pit is less than the mill capacity. An ore stockpile was accumulated to be used to balance the open pit and plant schedule until such time as sufficient ore produced by underground mining operations is available. The Renard 65 pipe is of lower grade than Renard 2 and Renard 3 pipes and is mined as supplemental feed to the underground operation once the R2/R3 open pit is exhausted. Waste rock mined from R65 is also used as underground backfill material and the Renard 65 pit will act as a water catchment basin to collect surface runoff water. Mining of the R2/R3 open pit commenced in March 2015.

Initial production blasting in the Renard 2 pipe on 290L was scheduled to start in August 2017, at a modest production rate with the commencement of drawcone blasting. The first production blast in the underground mine occurred successfully on December 20, 2017. Generally, each stope will provide between 1,000 tonnes per day and 2,000 tonnes per day in order to maintain a good ore/backfill interaction to optimize recovery and dilution factors. The underground production schedule has been designed to coordinate with the open pit production schedule so that the mill feed continues at the full rate of 6,000 tonnes per day during the transition period from the completion of the open pit through the build-up to full production from underground.

Underground production will continue until early 2029 for a total mine life of 14 years. For the Renard 2 pipe, the 290L mining area will be completed in Q1-2021, the 470L area in Q2-2023, the 590L in 2025, and the final 710L area in 2028. The R3 pipe has been scheduled in 2026 and 2027 during the transition of the production from the R2-710 zone towards R4. Due to its small body shape and confined design, the highest planned rate for Renard 3 is 3,000 tonnes per day. The first production from R4 starts in 2027 and continues to the end of the mine life in early 2029.

See also “General Development of the Business – Three Year History” for updates on production and other related developments.

## **Mineral Processing and Diamond Recovery**

The process flow sheet was developed by Stornoway based on the following key aspects:

- The material characteristics observed, and data obtained, from the treatment of underground samples from Renard 2, Renard 3 and Renard 4 in Stornoway's Lagopede bulk sample plant;
- Specific unit operation test work;
- Conventional diamond processing techniques as successfully employed in the diamond industry;
- Liberation effectiveness with focus on diamond breakage;
- Circuit simplicity; and
- Cost effectiveness.

To optimize footprint and capital costs, the diamond process plant design has a single process line for comminution and ore preparation. Capacity considerations dictate that two (2) DMS circuits for concentration and four (4) lines for fines dewatering are required. All process equipment including storage bins and materials handling equipment is housed within a heated building, heated transfer towers or heated conveyor galleries.

The process plant design capacity is 2.16 Mt per annum (dry solids basis). The plant overall utilization was estimated to be 78%, equivalent to an operating time of 6,833 hours per year or 315 tonnes per hour and 6,000 tonnes per day. Since January 2018, the plant has been operating at a throughput of 7,000 tonnes per day at an overall plant utilization of 83.5%, resulting from the optimization of plant maintenance sequences. Further optimization work is ongoing focusing on liberation, diamond breakage and increasing

the overall plant utilization. The ore processing system liberates, concentrates and recovers diamonds from 45 mm to 1mm.

Liberation design uses stage crushing where each crusher operates with a large crushing gap to protect against potential diamond breakage. ROM material is crushed, washed and sized at various stages to produce -45 mm ore, before all liberated diamonds are recovered within either a DMS or LDR concentration process. All rejected material larger than 6 mm from these processes is re-crushed within a HPGR crusher to maximize the liberation of trapped diamonds. The HPGR product is then returned to the scrubber circuit to wash and de-agglomerate the HPGR product. The HPGR promotes interparticle crushing used for tertiary crushing and is the principal diamond liberator generating a product size of 60% smaller than 6 mm. The majority of the unwanted fines (-1 mm) are separated from the ore in these circuits and then pumped to the thickening circuit for dewatering. See “Recent Developments - Ore-Waste Sorting”.

A surge bin with a capacity of 240 tonnes decouples the DMS from the ore preparation circuit. The process plant produces a DMS and LDR concentrate which is treated in a secure diamond recovery facility that uses diamond differentiation techniques based on magnetic, X-ray, laser Raman and ultra-violet technologies with hand sorting as final de-falsing step to produce a nominally 98% diamond product.

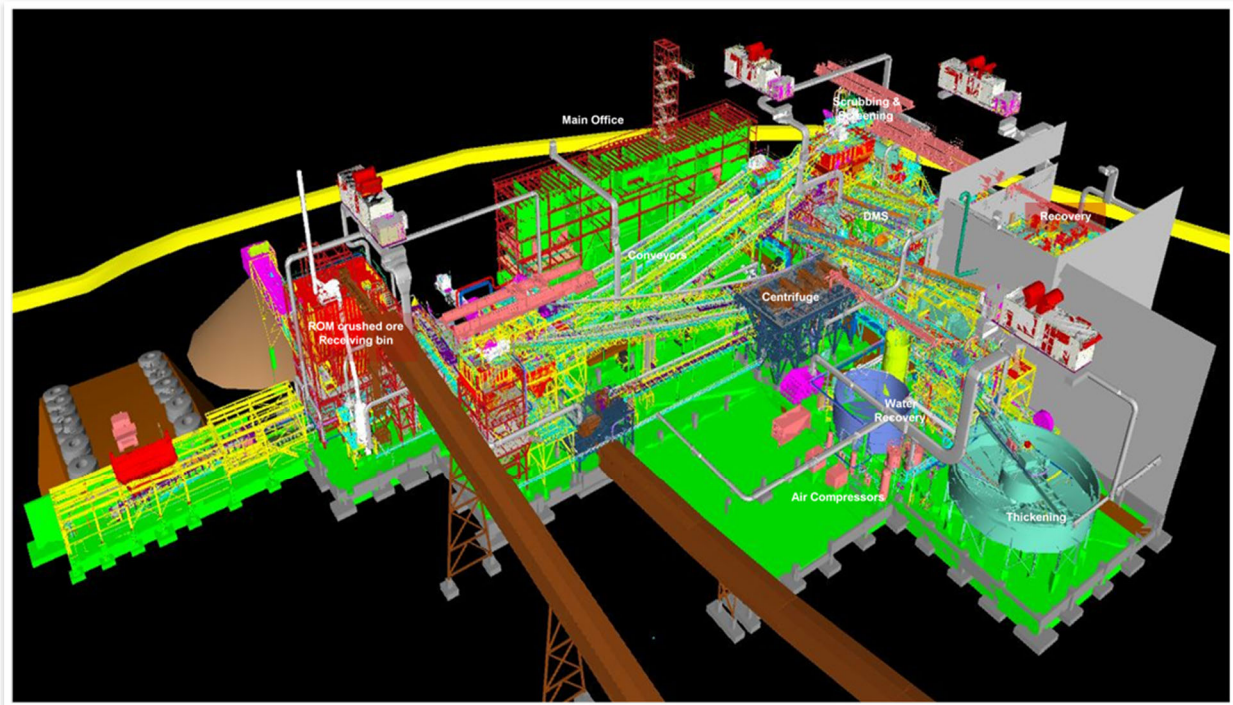
Final diamond recovery is achieved by hand sorting diamonds from waste in a secure glove box, located within the sorthouse in the recovery plant. The diamonds are chemically cleaned before preliminary valuation and export. The diamond plant is expected to have a diamond recovery efficiency of not less than 97% by mass and 99% by value of liberated diamonds.

Security is a key element of the process plant design given the high value and volume of the final diamond product. A security management system to detect, deter and reduce the possibility of diamond theft in conjunction with an automated diamond recovery process is part of the design.

The following facilities are included in the plant design:

- Main plant office, control room and electrical rooms
- Recovery plant office, control room and storage room
- Security offices, access control and search rooms
- Metallurgical laboratory
- Air compressor area
- Mid size maintenance workshop
- Diamond cleaning facility
- Diamond stock room
- Diamond valuation room

**Table 13: Main Plant 3D Model**



## **Project Infrastructure**

### On Site Ground Infrastructure

The on-site ground infrastructure of the Renard Diamond Mine include the following:

*Water distribution system:* a raw water intake in Lake Lagopede and a pumping station on the shore at hundred meters from the lake. It is located near the accommodation camp and a few hundred metres from the main process area. The same pumping station also supplies the potable water treatment plant.

*Wastewater treatment plant:* a wastewater treatment plant equipped with a membrane bioreactor treatment system.

*Potable water treatment plant.* The potable water treatment plant is installed in a container located within the emergency vehicles garage. It houses the water treatment equipment, pumps and a small office.

*Trench landfill:* A trench landfill system with a volume of 40,000 m<sup>3</sup> is in operation for domestic solid waste management.

*Power plant:* a power plan (comprised of eight natural gas generators of 2050 KW each and three diesel-powered generators of 1800 KW each) to provide power requirements of the mine.

*Fuel and LNG storage and regasification plant:* A tank farm to store arctic grade diesel and unleaded gasoline in double-walled fuel tanks, and an LNG storage and regasification plant. This facility consists of a truck offloading station, six storage tanks and a regasification station with its ancillary equipment.

*Explosive storage and handling area:* the explosive storage and handling area consists of storage containers for emulsion, one detonator magazine, one packaged explosive magazine and a garage / wash bay building.

*Service Buildings:* an accommodation complex, a camp reception complex, dormitories, emergency vehicle garage & potable water treatment plant, a service building, a leisure building, a heavy vehicle truck shop, light vehicle garage, workshop and warehouse and an office building.

*Telecommunication System:* A single satellite dish antenna, modems and related equipment have been installed at the mine site for recreational use (mainly TV signal to the rooms). Voice, video conferencing and data transmission are assured to the Renard mining site via a multi-megabit Microwave link going through seven repeater towers. The above Microwave link originates at the office building where MPLS connectivity to all other Stornoway locations is provided. The airport communication systems are serviced from the mine site by way of another multi-megabit Microwave link. This provides surveillance of the remote airport site while it is unmanned. IP Telephone service with QoS (Quality of Service) is installed at all site locations where warranted for operation and/or emergency communication needs. The industrial areas of the site (mill, power plant, garages etc.) are linked via fiber optic cables and equipped with more robust telephone sets and cabling, where warranted. VLANs with Firewall rules are used in order to keep recreational, corporate, production, CCTV and other types of content isolated from each other.

### On Site Underground Infrastructure

*Electrical power:* electrical power is provided throughout the mine for drills, jumbos, fans, pumps, lighting and other miscellaneous loads. The power is distributed to the mine at 4.16 kV through three primary feeders, two located in the fresh air raise (3C 250 MCM) and the third in the ramp. All three feeders are supplied from the power station electrical room. A substation located on surface feeds from the power house electrical room containing BUS A and B and having 2000 amp capacity. From there, power is distributed to the mine surface facilities, including the main intake fans.

*Ventilation system:* the mine has one main fresh air intake, which is a 6.5-m diameter supported raise with services and manway (secondary egress). Fresh air is distributed on most levels directly from the fresh air raise. Drill levels which are not connected to the fresh air raise are supplied via smaller vent raises connected to other levels with fresh air. Air distribution within the mine is controlled by a combination of ventilation doors (SAS), regulators, plastic flaps and secondary fans installed in walls. This allows large flow coverage of the levels with the use of auxiliary fans only locally (e.g., drill drifts). As the ramp is the primary egress, the secondary egress from the mine is provided via a ladderway installed in the fresh air raise. The mine fresh air intake is downcast so in the case of a fire, it is always in fresh air and provides a safe escape route. In the rare case of a fire in or near the raise, personnel will report to the nearest refuge station.

*Water pipelines:* process water is required underground for drilling, dust suppression, and wash-down of equipment and rock faces for geology and mining. Process water is supplied from the mine process water distribution system on surface, and is fed underground through 151 mm (6") pipelines in the fresh air raise and 102 mm (4") in the ramp. Provisions are made for water recirculation to reduce water consumption and water treatment. Potable water for underground use is provided using a 51 mm (2") line in the fresh air raise.

*Dewatering system:* a four-stage dewatering system is used for the underground mine. Main sumps and pumping stations are located on 290L, 470L, 590L and 710L, with water pumped from the lower pump station being rehandled at the upper station. It is anticipated that approximately 30% of the mine water inflows will be intercepted and contained at 290L, 470L and 590L as mining progresses deeper. Consequently, the 710L lower pumping station has been designed for 1960 m<sup>3</sup>/day (360 USgpm) while the 290L, 470L and 590L upper stations will be capable of pumping the full predicted flow of 2,725 m<sup>3</sup>/day (500 USgpm). All pump stations have two pump arrangements installed, one operational and the second on standby for maintenance. A gravity drainage system was established whereby drainage holes were drilled to connect the levels and channel mine water down to the sump on the nearest level.

*Communication system:* the communication system for the underground operation was installed in most tunnels and uses coaxial cable with modems, antennas and amplifiers. The system is capable of transmitting data and voice, as well as high speed internet, telephone and equipment/personnel tracking.

In addition, conventional telephone service is provided to the refuge stations, maintenance facilities and fueling stations.

*Explosive storage area:* explosive storage areas include three excavations: the explosive truck parking, the explosive magazine and the detonator magazine. Three explosive storage areas were planned to provide explosives underground, all located near the Renard 2 production horizons. The main magazine is located off the ramp close to surface, the second set at the entrance of the 390 drill level, and the third one at the same location on the 620 drill level. The explosive magazines have been designed to store 40 containers for a total capacity of 60,000 kg of emulsion and some packaged explosives.

*Underground fuel bays:* in addition to a surface fueling facility, a fueling system to deliver fuel underground through a pipeline has been installed. Underground fuel bays were constructed on all main production levels: 290L, 470L, 590L and 710L. Each fuel bay is equipped with a 20,000-litre receiving tank and dispensing equipment. The transfer of fuel underground is done through a 25-mm diameter piping system on a batch basis, and will be fully instrumented to ensure safe operation.

*Refuge Stations:* a total of 14 refuge stations are located at various strategic locations throughout the mine according to Quebec's regulations (15 min walk or 1000 m).

#### Offsite Infrastructure

*Renard Airport:* The airstrip for the Renard Diamond Mine is owned and operated by Stornoway with chartered aircrafts for its exclusive needs. The reference aircraft for the design of the runway is the DASH 8, Series 300 with a capacity of 50 passengers. The airport terminal is a two-storey building, erected on site from an engineered wood structure. It includes an office for the airport operator, toilets and a general waiting area. A service shed, also built from an engineered wood structure, houses the generators and de-icing equipment. Jet fuel and diesel are stored in double-walled tanks.

*Road Access:* land access to the Renard Diamond Mine is provided by the extension of provincial highway Route 167 (built by the Ministère des Transport du Québec) and the Renard mining road (built by Stornoway). This road infrastructure affords year-round access linking the project to the municipalities of Mistissini and Chibougamau. The Route 167 Extension was constructed to MTQ standards and is a two-lane gravel-topped road with two-lane bridges and a design speed limit of 70 km/h, while the mining road is a two-lane gravel topped Class III road with one-lane bridges and a design speed limit of 50 km/h.

### **Processed Kimberlite Containment Facility**

The PKC facility is the long-term storage facility for the PK generated during operations. The facility has a total footprint area of about 72 hectares (ha) and is planned to store 44.8 megatonnes (Mt) of PK (23 Mm<sup>3</sup> of PK) representing the total Indicated and Inferred Mineral Resources of the Renard Diamond Mine for a long-term life of mine that could reach 19 years.

The site, located in the Canadian subarctic, is permafrost-free and of low seismicity. The PKC facility is located on top of a watershed, which generally drains towards the processing plant located to the southwest, thus facilitating water management. Geotechnical testing carried out to date classifies the PK as well-graded sand with some gravel to gravelly sand with some low plastic or non-plastic fines. Of concern is the potential plasticity of the PK; therefore, the PKC facility was designed based on the potential undrained behaviour of the PK. Geochemical testing carried out to date showed that the PK and waste rock release low concentration of dissolved constituents; therefore, the PK and mine waste rock are classified as low risk materials. Furthermore, the waste rock is considered to be Category I and is suitable for use as a construction material without restriction. Geotechnical and geochemical testing of the PK will be performed throughout the development of the PKC facility.

The design objective of the PKC facility is that it receives all materials generated by the processing plant at all times such that neither mining nor processing operations are adversely affected. The design, including development and operating plans, have been developed in consideration of the expected variability of the

PK and in consideration of the facility having a high consequence of failure as per the 2013 Dam Safety Guidelines published by the Canadian Dam Safety Guidelines. The PK is dewatered at the processing plant and trucked to the PKC facility. The facility will be developed throughout operations as a stacked facility with an external slope configuration of 3H: 1V. Placement of the erosion protection layer on the exterior of the PKC facility will occur during operations, thereby progressively closing the facility during its development. No water will be allowed to pond within the PKC facility. See also "Recent Developments - Processed Kimberlite Containment Facility".

The PKC facility includes material placement zones (nominally compacted zone, engineered filled zone, and PK waste zone), a starter berm, a containment berm, an access ramp to allow haulage of PK, as well as a water management system, including internal drainage elements (rockfill blanket and foundation rock drains), a slope drainage channel for the access ramp, and a series of ditches and sumps around the perimeter of the facility. The engineered fill zone corresponds to the outer shell of the PKC facility and provides sufficient material strength to ensure stability of the facility. This zone is constructed on a prepared foundation and placed as an engineered fill. The nominally compacted fill zone corresponds to the internal portion of the PKC facility. This zone is built with PK material and provides PK storage capacity into which the material will be deposited with nominal compaction control measures. During processing plant commissioning and early operations, the PK is expected to have higher water content than for the duration of operations. The PK waste zone contains PK with excessively high water contents requiring the construction of the containment berm to separate the PK waste from both the engineered and nominally compacted fill zones. A rockfill embankment, namely the starter berm, was constructed prior to the deposition of PK to allow for the deposition of PK with high water content. The starter berm was placed on the interior limit of the engineered fill zone. See also "Recent Developments - Processed Kimberlite Containment Facility".

The PK is expected to be variable over the life of mine; this will affect its geotechnical behaviour. The key parameter for the development of the PKC facility is the water content of the PK. The PK hauled and placed in the PKC facility is expected to be several percents above the geotechnical optimum water content. Mechanical reworking of the PK to dry it to enable the required compaction within the engineered fill zone is expected to be required. The facility development and PK management plans are developed with this in mind.

PK is an erodible material. Therefore, the crest of the facility will be sloped and crowned to promote drainage of surface water and precipitation towards water collection systems. The placement of the erosion protection layer on the external slopes will be concurrent with PKC facility development. This is consistent with the progressive closure concept aimed to provide environmental, financial and operational benefits for the mine. For facility closure, the PKC facility pile will be contoured and surfaced to mimic the surrounding landforms.

The conditions in the foundation and deposited PK will be monitored during the development of the PKC facility and into the closure period. The geotechnical instrumentation program includes the installation and the monitoring of piezometers (measurement of phreatic surface and porewater pressures within the PK), thermistors (temperature measurement within the PK), and survey monuments (displacement measurement of the PK). See also "Recent Developments - Processed Kimberlite Containment Facility".

### **Diamond Market Fundamentals and Diamond Price Estimates**

Rough diamonds are a mined product characterised by a high degree of non-homogeneity in terms of size, colour, quality and shape. Rough diamonds are not exchange traded and have no terminal market. Rather, they are sold directly by mine producers to a wide range of clients within an industry pipeline that funnels their transformation into polished diamond jewellery through cutting and polishing, polished diamond wholesaling, diamond jewellery manufacturing, and end-product distribution to the retail markets of the world.

Most mine producers will undertake the sorting of their rough diamond production into parcels of like characteristics so as to maximise their attractiveness and value prior to sale. Sales mechanisms include



contracted sales with a regular list of qualified rough market buyers, tenders and auctions, offtakes with retail end-users, and downstream beneficiation partnerships designed to capture value-add. Sales are typically transacted on a cash basis in US dollars.

Diamond pricing is set by a mine producer based on a regularly adjusted price book, or set on the basis of an achieved price achieved in a tender or auction sale. No benchmark price list for rough prices exist, although several rough market agencies, such as RoughPrices.com, publish a rough price index based on proprietary transactional data and public data compiled from the international Kimberley Process and producer country customs agencies.

Stornoway intends to sell the diamond production from the Renard Diamond Mine in 10 tender sales per year in Antwerp, Belgium. To this end, Stornoway's wholly owned subsidiary FCDC Sales and Marketing Inc. has entered into a sales and marketing agreement with the diamond industry broker and rough distributor Bonas-Couzyn, which acts as sales commissionaire and tender agent for arm's length market sales. Sales of diamonds are undertaken by Bonas-Couzyn, on an undivided basis, on behalf of FCDC and the Renard Streamers. Stornoway's clients are typically large Indian-based manufacturers and rough traders.

In most diamond supply and demand forecasts, future rough diamond supply is assessed on the basis of current and future production plans at the major producing mines. These supply projections are generally robust, as most of the world's major diamond mines are operating on a steady-state basis or transitioning to lower production rates as they age, and it typically takes between 8 and 12 years to find and develop a new diamond mine.

Bain and Company forecast a potential maximum of 20 million carats of new diamond production between 2013 and 2019 on the basis that all currently known sources of rough supply are brought to the market. This yields a forecast Compound Annual Growth Rate of 4.5% to 5.5% in carat terms (Bain & Company, 2015).

Diamond demand forecasting (expressed as either demand for rough diamonds in the cutting centres or demand for polished diamonds for diamond jewelry manufacture) is a more complex calculation based on, amongst other things:

- long-term GDP growth forecasts in the main consumer markets;
- diamond jewelry consumer growth trends in developing markets; and
- short-term inventory draw-down or re-stocking trends within the diamond pipeline, often linked to levels of bank debt.
- The impact of diamond recycling or synthetic diamond substitution on polished diamond demand.

The principal difference between published diamond demand forecasts is whether they are based solely on the first of these elements and assume steady state diamond demand linked to GDP growth or whether they also take into account the second and third of these elements, and allow for market changes outside of GDP growth and short-term inventory factors.

2015 was a year of volatility in the world diamond markets which saw price declines for both rough and polished diamonds in the face of moderate sales growth for diamond jewellery in the US market, flat or negative growth in China, and low profitability for those in the transformative, middle part of the diamond pipeline (Bain & Company, 2015). High stocking levels of polished diamonds along with high debt levels in the cutting centers created the impression of a short-term over-supply of rough diamonds and low sell-through of polished diamond jewellery.

On a longer-term basis, Bain & Company forecast a global compound annual growth rate in rough diamond demand of 3% to 4% to 2030, with a period of supply balance between 2015 and 2019 as the new projects

come into production. The differential between a long-term positive demand outlook and negative supply outlook prompts the common adoption in the diamond mining industry of a real terms price escalation factor on rough diamond prices for the forward planning and valuation purposes, with real terms escalators of between 1% and 4% common. Stornoway has typically chosen to represent forward diamond prices based on a combination of “spot” diamond market pricing and a forward escalation factor of 2.5% compound annual growth rate in the base case, applied for a period of 10 years, with sensitivities of 0% and 5%.

Between May 9, 2011 and May 13, 2011, parcels of diamonds recovered during the 2007 bulk sampling program from the Renard 2, 3 and 4 kimberlite pipes were valued in Antwerp, Belgium under the supervision of WWW International Diamond Consultants Ltd. WWW also valued diamond parcels from the Lynx and Hibou kimberlite dykes. WWW is an internationally recognized independent diamond valuation and advisory service to diamond mining and exploration companies. In Canada WWW, through Diamonds International Canada (DICAN) Ltd., serves as the valuator for the Government of the Northwest Territories and the Government of Ontario.

In addition to performing its own valuation, WWW showed the Renard 2, 3 and 4 diamond samples to four other experienced rough diamond companies in order to obtain additional market-based valuations (an “open market” valuation). In each case WWW’s own valuation was higher than the average of the five independent valuations and the average was used by WWW to construct a diamond price model, with “High” and “Minimum” sensitivities based on alternate interpretations of diamond quality and potential value. Diamond price models represent the true diamond price that might reasonably be expected for a kimberlite ore body based on standard commercial-scale recoveries of all diamond size classes. They differ from the achieved diamond valuation price principally through a correction which is applied for the absence of large diamonds which are typically under-represented in exploration scale samples. The choice of “Minimum” and “High” to describe the sensitivity limits is deliberate: in WWW’s view it is highly unlikely that an actual diamond price achieved for each kimberlite ore body upon production would fall below the “Minimum” sensitivity, but it is possible that the actual diamond price achieved may be higher than the “High” sensitivity, which is not a maximum price.

At the time of the May 2011 open market valuation, WWW recommended the adoption of a single diamond price model for the Renard 2 and Renard 3 valuation samples given the similarity of the diamonds in terms of diamond qualities and size distribution.

A separate diamond price model was adopted for the Renard 4 valuation sample given its apparently finer distribution of diamond sizes and marginally different diamond quality characteristics. However, independent studies on diamond breakage and plant performance during the processing of the Renard bulk samples have indicated that the size distribution of the Renard 4 sample had most likely been modified during its recovery. For this reason, an alternate diamond price model for the Renard 4 sample has been adopted for planning purposes since the May 2011 valuation exercise which assumes a diamond size distribution equal to the average Renard 2-Renard 3 size distribution.

The collection of a bulk sample of diamonds from the Renard 65 kimberlite in 2013 revealed a diamond population with a markedly different assortment of diamond qualities compared to any of the other kimberlite pipes. Accordingly, individual price models have been adopted for each kimberlite pipe at the Renard Diamond Mine since this time on the basis that the small differences in diamond quality and size distribution that can be observed between the pipes should be treated as real. Updated diamond valuation exercises were conducted on this basis by WWW in March 2013 and March 2014. For the Renard 2, 3 and 4 valuation samples, the result of each WWW re-valuation was used to adjust the average valuations obtained in the May 2011 exercise from the five independent valuers, and a revised diamond price model with High and Minimum sensitivities generated. The Lynx and Hibou samples were not re-valued in 2013 and 2014 and the proposed mine plan for Renard presently does not include these kimberlite bodies. At the time of the most recent WWW re-valuation in March 2014, base case diamond price models of US\$197/carats were calculated for Renard 2, US\$157/carats for Renard 3, US\$155/carats for Renard 4 and US\$187/carats for Renard 65.

A tracking of world average rough diamond prices by RoughPrices.com, based on a market assortment maintained by WWW, indicates a -19% drop in average diamond pricing between March 2014 and March 2016. Stornoway has applied this market adjustment to the March 2014 WWW diamond price models to arrive at an estimate of “Spot” diamond pricing for each Renard kimberlite pipe for use in the Renard Diamond Mine’s economic analysis and the declaration of the project’s Mineral Reserves of the Renard 2016 Technical Report.

**Table 14: Estimated Diamond Price Adjustments, March 2014 to March 2016**

Body	March 2014 Diamond Price Model <sup>1</sup> (US\$/carat)	Estimated Market Price Adjustment March 2014 to March 2016	Adjusted Price Estimates March 2016: “Spot” Price Models <sup>1</sup> (US\$/carat)
Renard 2	<b>\$197</b> (High \$222, Min \$178)	-19%	<b>\$160</b> (High \$181, Min \$145)
Renard 3	<b>\$157</b> (High \$192, Min \$146)	-19%	<b>\$128</b> (High \$156, Min \$119)
Renard 4	<b>\$106 (\$155)<sup>2</sup></b> (High \$174, Min \$100)	-19%	<b>\$86 (\$126)<sup>2</sup></b> (High \$141, Min \$81)
Renard 65	<b>\$187</b> (High \$190, Min \$160)	-19%	<b>\$152</b> (High \$155, Min \$130)

**Notes:**

- 1 As determined by WWW International Diamond Consultants Ltd. at a +1 DTC sieve size cut off.
- 2 As determined by applying the world average rough price index of roughprices.com to the March 2014 price models, at a +1 DTC sieve size cut-off.
- 3 Should the Renard 4 diamond population prove to have a size distribution equal to the average of Renard 2 and 3, WWW have estimated that a base case diamond price model of US\$155 per carat would apply based on March 2014 pricing, equivalent to US\$126 per carat on a market price adjusted basis to March 2016.

See “Recent Developments - Diamond Marketing and Sales” for recent developments on diamond price estimates.

## Conclusions and Recommendations

All elements of the project development plan, including the remaining required infrastructure, mine design, process plant design, waste disposal infrastructure and cost estimation, represent the 2016 estimate for life of mine operations. The resulting information therefore met all of the applicable requirements for conversion of Indicated Mineral Resources to a Probable Mineral Reserve estimate. The Probable Mineral Reserve estimate was determined in accordance with CIM Definition Standards classification. Considering the risks inherent in all kimberlite deposits, such as sampling for geological continuity, diamond grade and diamond revenue determination, the Indicated portion of the Mineral Resources is considered suitable for the estimate of Probable Reserve. The authors of the report recommend to perform additional work in order to reduce the uncertainties in the geomechanical and design analysis and to continually review these analysis to ensure they remain valid over time. They also recommend to test processed kimberlite material post production to confirm geochemical classification in support of the processed kimberlite facility design. There is no certainty that the results described in the Renard 2016 Technical Report will be realized.

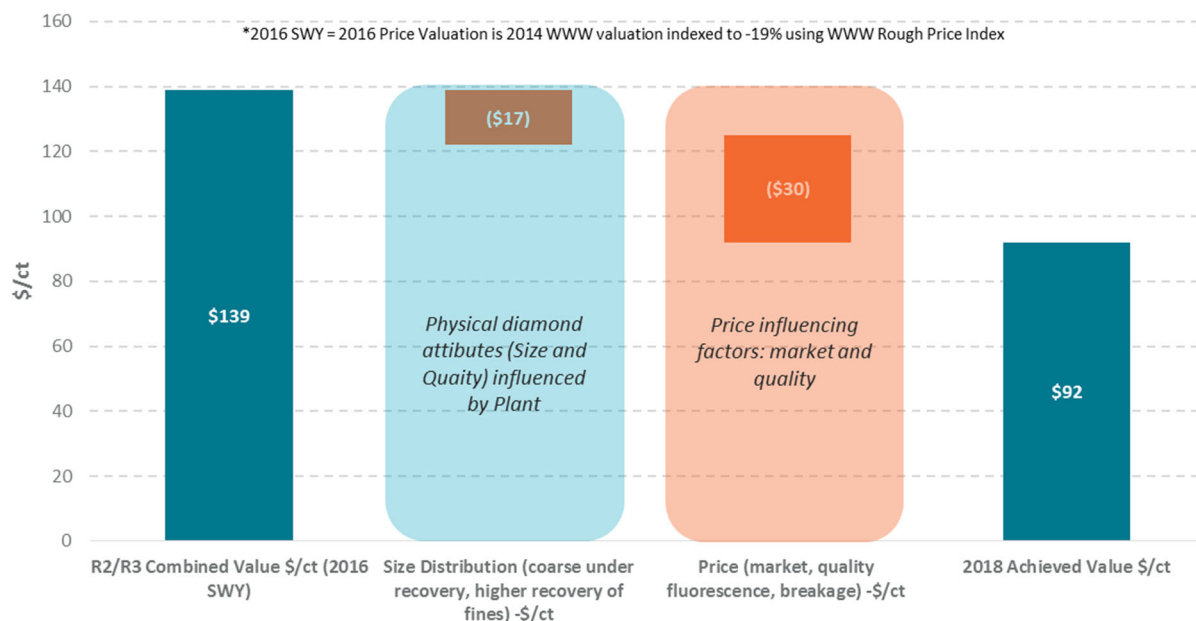
## Recent Developments

### *Diamond Marketing and Sales*

The prices of rough diamonds have fluctuated in recent years and are affected by numerous factors beyond Stornoway’s control.

The following chart provides a diamond price reconciliation between management estimates of mixed Renard 2-Renard 3 pricing as of the Renard 2016 Technical Report, and sales results on production sold in 2018.

**Chart 15: Diamond Price Reconciliation<sup>1</sup>**



(1) Based on mixed Renard 2-Renard 3 production, US\$/ct.

### **Mining Method**

At the outset of the mine design a trade-off study was conducted to select the preferred underground mining method or methods to be used to extract the Renard 2, Renard 3 and Renard 4 pipes and based on this study, the BHS mining method was selected to mine the underground portions of the Renard 2, Renard 3 and Renard 4 kimberlite pipes. In 2018, after beginning underground mining using the BHS method, it was determined that the Block Caving (BC) mining method would in fact better suit the rockmass behaviour of the Renard Diamond Mine and the underground mining method was modified from BHS to BC.

The BC method is a mass mining method in which the full plan area of the orebody is undercut. Following the drawing of the broken ore, the cave progress upwards until it daylight into the open pit. The ore is drawn from various drawpoints located on each extraction level. The drawing of the broken ore is sequenced such a way that the ore-waste interface is lowered sub-horizontally. Some production drilling and blasting is required to assist the cave and to improve fragmentation. However, the quantity of production drilling and blasting is significantly less than BHS and it does not require backfilling.

The BC method allows to achieve the expected underground production rate of 6,000 tonnes per day and no modification to the equipment fleet of the Renard Diamond Mine was required in order to transition from a BHS to a BC mining method.

For production mining, the Renard 2 pipe has been divided vertically into three production stages (mining horizons), each located at elevations where the ore body changes geometry and orientation, so that recovery and dilution factors could be optimized. The resulting extraction levels with this design are at level 290L, 470L and 710L (all level designations are depth below surface in meters). Their respective heights are 165 m (up to the pit bottom), 180 m and 240 m. Drawpoints will be located at the base of each extraction point.

The base of the Indicated Resource in the Renard 4 pipe is 235 m below surface (270 m from FAR collar) and will be mined below a 100-m-thick crown pillar for a vertical height of 135 m. The interpretation of the shape of the Renard 4 pipe is oblong, and very regular in its outline, so this height was deemed to be suitable for block caving mining. One production level and two drill levels will be used to extract all reserves from the Renard 4 orebody. The bottom production level for Renard 4 pipe is at the 270L.

The Renard 3 pipe is fairly large close to surface, but then necks down to a fairly small pipe below the open pit and further necks down at the base of the Indicated Mineral Resources at a depth of 290 m. The Renard 3 pipe will be mined using a conventional long hole mining method. Production drilling drifts will be developed on two levels, 220L and 160L. Production drilling will be performed downward and upwards. Drawpoints will be developed on the extraction level 290L. Blasted ore will be drawn from the drawpoints. Mining will extend up to the bottom of the pit.

### ***Mineral Reserves Update***

On March 28, 2019 Stornoway announced that Mineral Reserves as of December 31, 2018 had been updated based on mining depletion and on an updated open pit design in R65. The Renard reserves total 18.2 million carats (25.6 million tonnes at 71cpht).

Exclusive of the Mineral Reserves, the Renard Diamond Mine includes additional Indicated Mineral Resources of 3.7 million carats (8.7 million tonnes at 42 cpht), Inferred Mineral Resources of 13.0 million carats (23.4 million tonnes at 56 cpht), and 33.0 to 71.1 million carats of non-resource exploration upside (76.2 to 113.2 million tonnes at grades ranging from 43 to 63 cpht). Readers are cautioned that the potential quantity and grade of any such exploration target is conceptual in nature, there has been insufficient exploration to define a mineral resource, and it is uncertain if further exploration will result in the target being delineated as a mineral resource. All kimberlites remain open at depth. The 2018 Updated Mineral Resource incorporates geological data on kimberlite contacts and internal geology as revealed through development production and drilling activities at the Renard Diamond Mine.

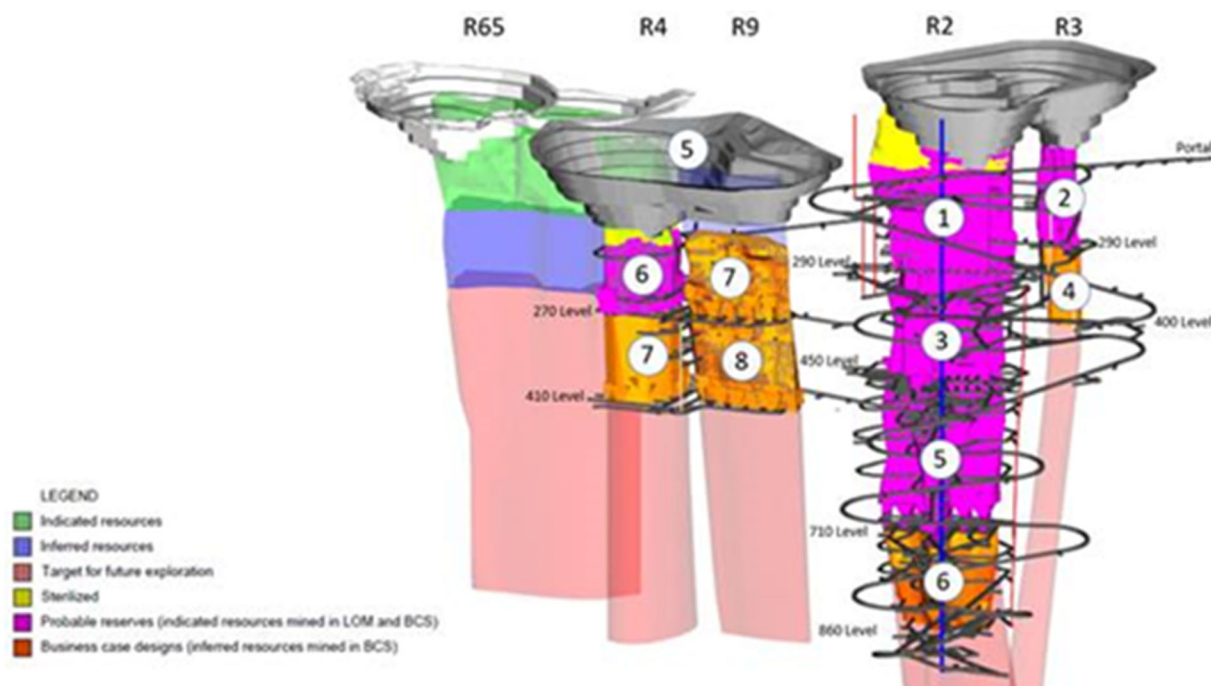
### ***Extending and Optimizing the Mine Plan***

The Renard Diamond Mine provides operating margins over the life of mine with high-grade material from Renard 2 and 3 kimberlite pipes. The current mine life based on reserves is 10 years with all kimberlite pipes open at depth for possible resource upside.

Stornoway believes the addition of currently defined Inferred Mineral Resources in additional stopes has the potential to extend the mine plan to 15 years.

Figure 15 shows the 2019 Business Case mining sequence based on the mine plan including Inferred Mineral Resources.

**Figure 15**



### ***Processed Kimberlite (PK) Containment Facility***

During 2017, Stornoway commissioned a modified method for the handling and disposal of PK. From the beginning of ore processing, PK was being de-watered with centrifuges for trucking to a dry-stack disposal site. High moisture content in the PK reduced its competence for stacking, and made disposal cumbersome. Under the modified disposal system, fine PK is pumped for disposal into a modified containment facility, with water outflow collected and recirculated to the plant or treated at the existing water treatment facility. A degrit module was installed in the process plant and civil works modifications completed at the containment facility to accommodate the disposal of the coarse PK. A modification to the mine's operating permit in support of these changes was received on schedule, and the new PK handling and disposal method has been operating successfully since the beginning of the third quarter of 2017.

### ***Renard Closure Plan for the Renard Diamond Mine***

Under the *Mining Act* (Québec), the rehabilitation plan of a mine and closure costs need to be reviewed and submitted to the MERN for approval every five years. On June 15, 2018 an updated Renard Closure Plan for the Renard Diamond Mine was submitted to the MERN for approval. Under the updated Renard Closure Plan, the closure costs are now estimated at \$21 million. The increase in closure costs relate to the addition of new infrastructures such as the ore waste sorting and the liquid natural gas facilities, additional lands being impacted by the operations of the Renard Diamond Mine and various changes and modifications from the original design of the Renard Diamond Mine infrastructures, which were not reflected as part of the initial Renard Closure Plan. Approval of the updated Renard Closure Plan by the MERN is expected at the end of 2019.

### ***Ore-Waste Sorting***

In August 2017, Stornoway introduced a plant improvement project aimed at improving the quality profile of Renard production. At the centre of this plan is the introduction of an ore-waste sorting circuit (OSP) rated at 7,000 tonnes of ore per day, and expandable, designed to extract waste in the +30mm-200mm size range immediately prior to its introduction to the secondary cone crusher. The OSP includes covered

conveyors, a gravity fed tower containing primary, secondary and scavenging spectral sorters, and a waste rock load out. Its primary objective is to reduce waste content in the plant feed ore, for the purpose of mitigating breakage risk and for the benefit of achieving better diamond liberation. Secondary benefits of the OSP include a net increase in plant feed rates, a reduction in power consumption and equipment wear from abrasive waste processing. Commissioning of the OSP at Renard commenced in March 2018 and by May 2018 full ramp up was achieved. As per design, the facility has been successful at removing on average 15% of the waste contained in the plant feed ore while maintaining a very low kimberlite rejection rate of less than 2%.

## **Exploration**

### *Renard 3*

Since the beginning of 2019, Stornoway has been conducting a program of drilling and sampling at the Renard Diamond Mine with the goal of converting certain Mineral Resources to Mineral Reserves, and of accelerating the mining of both the Renard 3 and Renard 4 ore bodies in the Renard mine plan.

Renard 3 was mined between 2016 and April 2018 in the Renard 2-Renard 3 open pit to a depth of 120 meters. The current Renard mine plan contemplates the mining of Renard 3 by underground methods between 2019 and 2020 concurrently to the mining of Renard 2. As of December 31, 2018, Renard 3 comprised 0.88 million carats of Probable Mineral Reserves (0.89 million tonnes at 99 cpht below the base of the open pit to a depth of 290 meters, and 0.50 million carats of Inferred Mineral Resources (0.42 million tonnes at 117 cpht) to a depth of 415 meters). In addition, a TFFE has been estimated at between 3.5 and 6.3 million carats below the Inferred Mineral Resources. The potential quantity and grade of any TFFE is conceptual in nature; there is insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the target being delineated as a mineral resource.

In 2014, in drilling undertaken on the Renard 2 kimberlite, Renard 3 was interpreted to have been intersected fortuitously over 126.6 meters at a vertical depth of approximately 1,000 meters. The implied true width of this intersection was a minimum 47 meters, supporting the potential for mineable widths at Renard 3 even at a considerable depth.

During the course of 2018, Renard 3 has been successfully delineated in 5,345 meters of detailed drilling between 255 and 290 meters of depth, with additional intersections of kimberlite confirmed over mineable widths to as deep as 315 meters below surface, below which Renard 3 remains open. The new drilling has confirmed the expected location and width of Renard 3, and the continuation at depth of the high grade Renard 3dg and 3h units that support the body's high grade estimate in the Mineral Resource statement. Renard 3 continues to be open at further depth.

The new data are being incorporated into a revised geological model and Mineral Resource estimate for Renard 3, with a view to the incorporation of new Renard 3 Mineral Reserves above the 290 meter level into the 2019 mining schedule. This will potentially allow two underground sources of ore feed to be mined simultaneously and provide additional high grade ore feed to supplement Renard 2 production.

### *Renard 4*

In the current Renard mine plan, the Renard 4 kimberlite is scheduled for underground mining between 2026 and 2028, following the completion of mining at the Renard 2 and Renard 3 kimberlites. As of December 31, 2018, the Renard 4 kimberlite comprised 4.43 million carats of Indicated Mineral Resources (7.23 million tonnes at an average grade of 61 cpht), including 1.82 mcarats of Probable Mineral Reserves (3.69 million tonnes at an average grade of 49 cpht) in the underground mine plan, as well as 1.98 million carats of Indicated Mineral Resources (2.91 million tonnes at an average grade of 68 cpht) between surface and 140 meters depth, and 2.46 million carats of Inferred Mineral Resources below the Mineral Reserves (4.75 million tonnes at an average grade of 52 cpht).

Stornoway is investigating the potential for open pit mining at the Renard 4 and nearby Renard 9 kimberlites to supply additional ore feed earlier in the mine life. Such a pit would allow the extraction of a portion, or all, of the approximately two million carats of diamonds in the top 140 meters of Renard 4. These diamonds are contained within the project's Indicated Mineral Resources but are outside the current Mineral Reserve as they occur in the area of the proposed crown pillar for the Renard 4 underground mine.

During July and August of 2018, a surface bulk sample of approximately 13,546 tonnes was excavated from the Renard 4 kimberlite at a site where it occurs close to surface adjacent to Lagopède Lake. In 2007, a 2,104 tonne surface sample located on a nearby outcrop of the high grade kimb4d unit returned 2,722 carats of diamonds for a grade of 129 cpht. The new sampling is designed to recover parcels of diamonds from the lower grade kimb4a and kimb4b units which comprise the remainder of the Renard 4 diatreme.

A total of 11,646 tonnes of sample were processed through the main Renard process plant during a three-day period in September. In addition, approximately 1,900 tonnes of material are being processed through Renard's 10 tonne per hour bulk sampling plant. Diamond recovery from concentrate is being conducted at Renard, and at Stornoway's Vancouver exploration office. Sample processing and diamond recovery is ongoing. However, to date, a parcel of 574 carats of diamonds have been recovered from the Renard 4b unit (1,287 tonnes at 45 cpht), and 2,444 carats have been recovered from the Renard 4a unit (10,359 tonnes at 24 cpht). Of note, three "special" stones have been recovered so far: a 14.89 carat white octahedral gem, a 12.42 carat white octahedral gem, and a 11.12 carat brown clivage stone. Initial indications are that the grade, size distribution and quality assortment of the diamonds recovered are consistent with previous sampling.

The results of the current sampling will be used to support an economic assessment for the potential development of a Renard 4-Renard 9 open pit, which will require a water retention structure within Lagopède Lake. If successful, such a pit would provide sufficient ore to take full advantage of the increased process plant capacity created by the introduction of the OSP.

### ***Other Renard Exploration***

The Renard Property comprises more than 600 mineral claims providing a 10-12 km buffer around the Renard Diamond Mine. In addition to the nine known kimberlite pipes in the Renard core area (five of which are in the present mine plan), there are at least eleven additional kimberlite dykes on the property. During March and April 2018, three light reverse circulation (RC) drill rigs tested a total of 91 geophysical anomalies situated throughout the Renard Property. Certain promising lake targets were not tested due to deteriorating ice conditions. Kimberlite chips were recovered at three targets, indicating the presence of dyke-like bodies, and chips of Country Rock Breccia (CRB) or related alteration were recovered at nine targets. CRB is a clast supported breccia, with or without kimberlitic components, and at Renard is an integral part of the volcanic emplacement process. It forms a halo around the kimberlite pipes, and commonly has gradational contacts with the main volcanoclastic kimberlite units. While RC drilling facilitates rapid cost effective preliminary testing of targets, core drilling will be required to follow up the CRB discoveries for adjacent or blind kimberlite diatremes.



## **SCHEDULE E - TECHNICAL INFORMATION UNDERLYING THE MANTOS BLANCOS MINE**

### **Most Recent Technical Report**

The most recent technical report filed by Osisko in accordance with NI 43-101 is entitled "NI 43-101 Technical Report on the Mantos Blancos Mine, II Region, Chile", effectively dated June 23, 2017 (the "**Mantos Blancos Report**"). Reference should be made to the full text of the Mantos Blancos Report. The Mantos Blancos Report is not and shall not be deemed to be incorporated by reference in this Annual Information Form.

### **Information Contained in this Section**

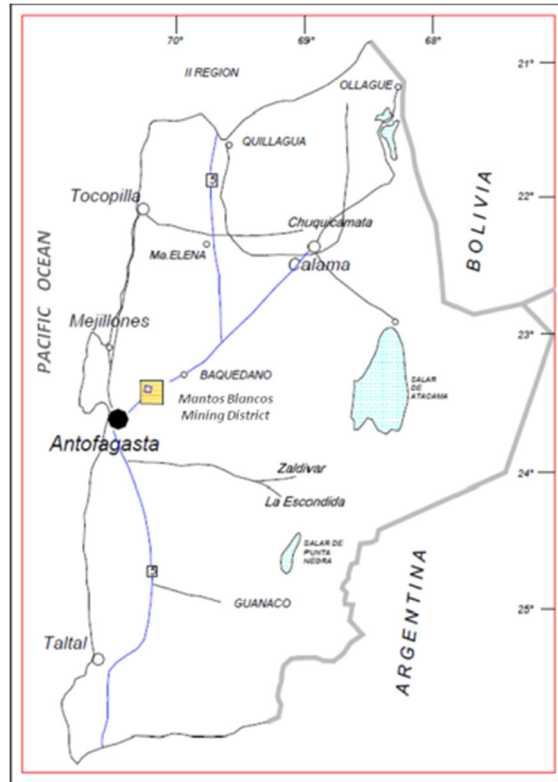
The technical information, tables and figures that follow have been derived from the Mantos Blancos Report, which may be consulted under Osisko's issuer profile on SEDAR at [www.sedar.com](http://www.sedar.com).

The technical information contained in this section has been reviewed and approved by Mr. Guy Desharnais, Ph.D., P.Geo, who is a "qualified person" for the purpose of NI 43-101. Portions of the following information are based on assumptions, qualifications and procedures which are not fully described herein.

As a holder of royalties, streams or other interests, Osisko has limited access to properties included in its asset portfolio. Additionally, Osisko may from time to time receive operating information which it is not permitted to disclose to the public. Osisko is dependent on the operators of the properties and their qualified persons to provide information to Osisko to prepare required disclosure pertaining to properties and operations on the properties on which Osisko holds interests and generally has limited or no ability to independently verify such information. Although Osisko does not have any knowledge that such information may not be accurate, there can be no assurance that such third party information is complete or accurate.

### **Project Description, Location and Access**

The Mantos Blancos mining district is located in the II Region of Antofagasta, northern Chile. The property is centered on latitude 23°25'0"S and longitude 70°4'60"W, approximately 45 km to the north-east of the city of Antofagasta and approximately 20 km to the southwest of the town of Baquedano. The properties are easily accessed using Route 5 connecting Antofagasta with Calama. Cerro Moreno airport is serviced by national flights from Santiago and other destinations on a daily basis. The airport is located approximately 17 km to the north of Antofagasta. Antofagasta itself is strategically located on the Panamericana highway, a well-maintained, multi-lane highway. There is also a railroad line available, which is used to transport supplies.



Mantos Copper S.A (MC) owns 100% of the Mantos Blancos Mine, composed of 85 mining properties covering an area of 7,848 ha and 33 exploration rights claims totaling 19,130 ha.

Production from the Mantos Blancos Mine is subject to the Mantos Stream Agreement.

One of the risks to the Mine is the receipt of permit approval from the various government agencies. No significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the exploration information, the Mineral Resources and Mineral Reserves estimates, or associated projected economic outcomes has been identified.

## History

The economic importance of the district has been known since 1883, when David Cervantes and Carlos Mercado, discovered veins of oxidized copper ore deposited in the hills located north of the road connecting Antofagasta and Lomas Bayas (the Panamericana highway).

In 1953, after various exploration works, the Hochschild Group acquired part of this ore deposit. Subsequently, in 1955 and after the first exploration works started using churn-drill drillings, the Hochschild group, together with other investors and CORFO (a Chilean government industrial development entity), formed Empresa Minera Mantos Blancos S.A. Studies were conducted indicating the presence of 11 million tonnes of ore with an average grade of 1.90% soluble copper. This is a historical estimate only, and a qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. None of Osisko, the Orion Parties or Mantos Blancos is treating the historical estimate as current mineral resources or mineral reserves. For a statement of current mineral resources and mineral reserves, see the heading “*Mineral Resource and Mineral Reserve Estimates*” below.

Mantos Blancos has been in production since 1960 as an open pit mine, with an oxide plant and smelting operations. The mine has long been one of the major copper mines in the region, with annual refined copper output reaching 20 kt in 1962, at peak production of ingots and a minor amount of cement of copper. In

1961 the exploitation of oxide ore through “pits” began, which was treated in a leaching plant, with capacity of 100,000 tonnes per month. The gradual decline of the grades led the company to an expansion of the plan in order to maintain production; and so, as in 1967, capacity increased to 200,000 tonnes per month. With some modifications, in 1978 it reached a capacity of 250,000 tonnes per month.

Between 1963 and 1964, the Mala Suerte mine, being property of Andromeda Mining Company (owned by Mr. Bartolomé Marré), partially supplied Mantos Blancos plant with production of 2,000 tonnes per month with grades around 3.5% SCu. Production history prior to this date is imprecise. Between 1965 and 1968, production averaged 3,000 tons per month, with an average grade of 2.5% soluble copper.

In 1974 the underground exploitation of Mantos Blancos started, due to the discovery of large reserves of high grade sulphide ore. Between 1968 and 1980 fine copper production averaged 32 ktpa.

The construction of the flotation plant to treat sulphide ores began in 1980, when Anglo American acquired 40% of the mine, and four years later the mine became a main associate of the company. The flotation plant began operation in March 1981, with a capacity of 4,000 tpd, and a head grade of 1.90% Cu insoluble and 19 ppm of Ag, reaching a fine copper production of 45 ktpa in 1981. From this year fine copper production incorporated concentrates, in addition to ingots and cement of copper.

By mid-1993, pre-stripping began for the Santa Barbara project, which basically consists of the union of the four existing pits (Elvira, Marina, Tercera and Quinta, including the underground works) with the aim of maximizing the recovery of the mineralized zones of the deposit. In December 1996, the exploitation of underground ore of Mantos Blancos temporarily ended, with the extraction of the Patricia ore body. From this year on, copper production comes from concentrates and cathodes.

The last major milestone was in the year 2000, when Anglo American reached 99.97% ownership of the Mining Company of Mantos Blancos S.A., which also included the Mantoverde Division in Chañaral. In this year fine copper production reached a peak of 102 ktpa.

From 2012, the exploitation of Santa Barbara project has fed the leaching plant and electrowinning with 4.5 Mt of copper oxide ore, with a head grade of 0.70% SCu, and a flotation plant with 4.5 Mt of copper sulphide with head grade of 1.10% ICu.

In 2015, the Mantos Blancos Mine was acquired by Mantos, which is owned by Audley Advisors Limited and Orion Fund JV Limited.

### **Geological Setting, Mineralization and Deposit Types**

The Mantos Blancos deposit is located within the coastal range in Region II of Antofagasta, Chile. The deposit is a volcanic-hosted, strata-bound copper deposit emplaced during the Upper Jurassic, related to a system of hydrothermal breccia feeder structures that intruded into the Paleozoic metasedimentary basement and the La Negra formation, which includes the mineralized Mantos Blancos volcanic sequence. In a general context, the Coastal Range in northern Chile is mainly formed by volcanic rocks of Jurassic age, intruded by granitoids emplaced between the Jurassic and Lower Cretaceous. In the Mantos Blancos Mining District, sedimentary, volcanic and igneous rocks are observed ranging in age from Paleozoic and Cenozoic, which represent a volcanic paleo-arc developed during the Jurassic that would consist of the Volcanic Sequence Mantos Blancos and the La Negra Formation. These units are affected by a set of faults located west of the district, who are immersed in the domain of Atacama's fault zone and are part of the Salar del Carmen segment.

Mineralization at Mantos Blancos occurs as lenses within specific lithologies. The lenses have been displaced by faults. The porphyritic dacite unit is the most favourable for mineralization and contains the largest number of high grade bodies. Mineralized bodies extend discontinuously for approximately 3 km in an E-W direction, with an approximate width of 1.5 km and thickness of 450 m.

Sulphide minerals include chalcopyrite, bornite, silver-rich digenite and pyrite. This assemblage occurs as disseminations, veinlets and as rims on quartz phenocrysts within the rhyolitic dome, which developed mainly within the dioritic and granodioritic magmatic-hydrothermal breccia pipes. Mineralisation shows lateral copper grade zoning. The highest grade occurs within the breccia pipe, with lateral zoning to progressively lower concentrations.

The mineralization consists of chalcocite (and / or digenite), covellite, bornite, chalcopyrite, pyrite, specularite, magnetite, galena and low sphalerite, occurring in disseminated form, following irregular guides and discontinuous with varying thicknesses. The oxidized copper correspond to atacamite, chrysocolla, and minor malachite, antlerite, tenorite, cuprite and almagres, according dissemination and fracture filling. Silver presence occurs in the crystal structure of the copper sulphides and occasionally as native silver. The ore bodies are irregular lenses and oxidized copper sulfides arranged in tabular form with a 100-200 m thick strongly controlled by structures.

The mineralization has a distinct vertical zonation, with specularite at the top (porphyritic andesite and Superior andesite), which is followed in depth an area of oxidized copper (atacamite with chrysocolla low), moving to a zone of high grade Sulphide (chalcocite-bornite). The latter corresponds to irregular lenses chalcocite- rich center, which decreases towards the edge going to predominate bornite. Surrounding these lenses is a zone of lower grade with chalcopyrite and bornite, ending in depth with a pyritic zone, occasionally in some sectors associated with chalcopyrite. The areas with secondary enrichment are of small extent, predominantly covellite over chalcocite and located near major faults of the deposit. The oxidized copper would have developed by the in situ oxidation of primary sulphides.

Mantos Blancos is a stratabound hydrothermal copper deposit with subordinate silver mineralization hosted in a riodacitic volcanic complex where copper mineralization is strongly controlled by structures. Stratabound hydrothermal copper deposits are mainly associated with hydrothermal breccia feeder structures that contain at least 50% of the economic mineralization and the highest ore grade. The mineralization at Mantos Blancos is concentrated within a dacitic lava package dipping south between 18° and 25° in the main mineralized area.

## **Exploration**

Ongoing exploration is conducted by Mantos Blancos with the primary purpose of supporting mining and increasing Mineral Resources available for mining exploitation. The exploration strategy is focused on tracing known targets as extensions from current orebodies utilizing host rock and alteration features down dip and along strike. Historically, this strategy has proven effective in defining new Mineral Resources.

## **Drilling**

Mantos Blancos collects two different types of sample for geological modelling and resource estimation, diamond drill hole core (DDH) and reverse circulation drill chips (RC). Diamond drill holes (DDH) were drilled historically, and most are located in the mined-out part of the mine. DDH are no longer being drilled at Mantos Blancos, except for geotechnical or geometallurgical purposes.

Mantos Blancos conducted drill programs for exploration and mine development purposes. The 2016 resource model update considered the inclusion of 362 new drill samples and 90,611 metres, distributed as RC, DDH and sonic (dumps). The new drillings included drill holes from the 2014 drilling campaigns (drill holes not included in the previous resource model), 2015, and also included 89,000 metres from the 2012, 2013 and 2014 campaigns delayed as a result of the implementation of the QA/QC program.

For the update of the 2016 model, a total of 15,643 drill holes with a total of 2,274,947 metres were used, corresponding to all drillings accumulated up to the date of closing of the database.

The collar surveying at the Mantos Blancos mine is obtained using high precision GPS and total station for the surface data. Daily operational surveying is undertaken with either GPS or total station and prism. Mantos Blancos adopted the local coordinate system based on UTM coordinates.

For the 2014 and 2015 drilling campaigns, down hole surveys were measured by Wellfield Services with an SRG gyroscope. Measures were taken each 10 metres over the depth of the drillhole, and a second measurement is taken when the equipment is lifted. Also as a QA/QC procedure 10% of the drill holes were re-surveyed, with most of the holes showing little deviation.

## **Sampling, Analysis and Data Verification**

### *Reverse Circulation Samples*

Since 2009, RC samples are taken at regular 6.0 metre intervals, weighing approximately 120 kg per 6.0 metre interval. The material is dropped directly from the cyclone to a riffle splitter. The cyclone has a lever at the side used to open the bin at the end of the sample interval. Both portions of the sample are directly passed twice through two splitters located in series to obtain four equally sized samples. Each sample is passed through another splitter to obtain the sample that will be sent to mechanical preparation. The samples are put into plastic bags, weighed at the site, and the values are recorded manually.

### *Sample Preparation*

The mechanical sample preparation of RC and DDH samples is conducted in Inspectorate laboratory in Antofagasta.

- Cleaning: before each batch of samples the crusher is cleaned with quartz, and the material is discarded.
- Blank sample: the first sample of each batch corresponds to the quartz, and this sample follows the entire cycle until chemical analysis to check for the presence of contamination.
- Primary/Secondary Crushing: the entire sample is crushed to 95% passing 2.36 mm particle size. For 1 in each 30 samples a granulometric test is carried to check particle size.
- Splitting: depending on the weight of the sample the splitting follows one of two procedures,
  - Samples > 15 kg use a rotary splitter until 1.5 to 2 kg is obtained. The sample is passed through a Jones splitter until 300 g remains.
  - Samples < 15 kg are split with a Jones splitter until 300 g is obtained.
- In both situations, one duplicate is obtained every 20 samples.
- Pulverization: the entire sample is pulverised with an LM1 until 95% of the sample passes < 0.104 mm. For one in every 30 samples, a granulometric test is carried out to check particle size.
- The sample is then put into a paper envelope, labelled with a bar code and sent to the chemical lab for assaying.

### *Assaying*

For TCu and Pb, 1 g of sample is taken, 10 ml of HNO<sub>3</sub>, 5ml of HClO<sub>4</sub> and 15 ml of HF are added, a cold digestion is carried out for one hour and then salts are dissolved with 25 ml of HCl and filled to 100 ml.

For SCu 0.5 g of sample is taken, 50 ml of H<sub>2</sub>SO<sub>4</sub> are added, it is stirred for 20 minutes at 140 rpm, then transferred to 100 ml and flocculant is added (boiling method).

For Ag, 2 g of the sample is taken, 10 ml of HNO<sub>3</sub>, 5 ml of HClO<sub>4</sub> and 15 ml of HF are added, a cold digestion is carried out for one hour and then salts are dissolved with 12.5 ml of HCl and filled into 50 ml.

For carbonate (Ca<sub>3</sub>), weigh 0.1 g of sample (in a refractory crucible), 1 g of accelerator is added and LECO equipment is used.

### *Sample Security*

Drill core is moved from the drill rig to the core shack by external personnel. In the core shack, geological data logging is completed at site using a digital system. Before the data is available for estimation purposes, data is verified and reviewed, field checked if necessary, and then uploaded to the main database. Samples are delivered by Mantos Blancos for sample preparation at the laboratory.

Mantos Blancos uses BDGeo as the system to coordinate and handle the complete data input process. The database is backed up on a regular basis.

All Mantos Blancos samples are stored and secured in the mine site under good conditions to ensure their quality.

### *Quality Assurance and Quality Control*

All QA/QC is handled online automatically using BDGeo software®. QA/QC procedures include the insertion of a control sample of: standards, pulp and coarse duplicates, and blank samples into every batch of samples sent to the laboratories. The creation of the batch is done on site in BDGeo by personnel of Mantos Blancos, and include 1 standard, 1 blank, 1 coarse and 1 pulp duplicate. Sample batches contain 20 samples.

The quality assessment over the 2015 campaign was controlled through standards insertion (certificated in OREAS-Australia). Apart of standards, coarse and pulp duplicates have been used. The insertion rate is 5% for each stage of control. The mass reduction of samples was carried out by Inspectorate Company and the chemical analysis was made by SGS Chile Ltda. Coarse, pulp and standards (internal checks) verifications were also carried out in this last laboratory.

The quality control procedure (standards, blanks, and duplicates) have acceptable levels of accuracy and precision, the preparation of sample and laboratory results have been controlled.

### *Certified Reference Material*

Mantos Blancos routinely inserts Certified Reference Materials (CRMs) or standards into the analytical stream to assess the assaying laboratory for accuracy and to determine if there is any bias present. The material used for the construction of the standards is from the mine and prepared and certified by external laboratories. Standards cover a range of TCu concentrations to appropriate represent different ranges. The result of the standards are good and no obvious issues with the exactitude were identified. The tolerance limit for acceptance are +- 2 standard deviations. If the standard value is out of the defined limit the complete batch is sent back to the laboratory for analysis.

### *Blank Samples*

Blank samples are inserted into the sampling stream as a QA/QC check for sample contamination and is inserted as part of the batch sent for mechanical preparation. The material used as blank is obtained from blast holes with TCu grades of 0.01 % which were logged as rhyodacite. There is no evidence of contamination during the mechanical preparation.

### *Duplicate Samples*

The duplicates are prepared and inserted on-site, and include two types of samples:

- Coarse Duplicate: correspond to a second portion of material obtained after the first crushing.
- Pulp Duplicate: correspond to a second portion of material obtained after the pulverization of the sample.

The protocol details that the duplicate of a sample must be sent in a different batch than the one used for the original sample. The result of the coarse and pulp duplicates were acceptable and no obvious issues with the accuracy were identified.

### *Data Verification*

Data verification has been an integral part of Mantos Blancos drilling campaigns and resource estimation. As part of the protocols all sample rejects and pulp samples are appropriately stored inside shipping containers modified for this purpose. Inside the containers samples are properly organized and stored. The database for the resource Model is extracted directly through the DBGEO © interface software. This software is a geological database administrator, which validates the information according to the primary key. For data validation purposes and to avoid errors in the Resource Model construction the database is analyzed prior to the compositing. This verification includes consistence between different tables, existence of gaps and duplicity of information.

A set of data validation queries was completed using Vulcan and internal software (Datacheck) and no important validation issues was found.

### **Mineral Processing and Metallurgical Testing**

The copper recovery considered for vat and dump leaching was defined assuming the average of the last twelve months, which was used to update the recovery model considering the metallurgic balance, tonnage and chemical grades.

The sulphide copper recovery in the concentrator was based on the geometallurgical model for the first five years (2017 – 2021) that considered the laboratory samples. For the following years (after 2022), the copper recovery was defined assuming the average of the last twelve months - that includes metallurgic balance, tonnage and chemical grades - which are used to update the polynomial recovery curve.

### **Mineral Resource and Mineral Reserve Estimates**

#### *Mineral Resources*

The geological modelling of the Mantos Blancos mine considers the construction of two models.

- Lithology model, this model is not used for any estimation purpose, and only for geometallurgical considerations. The lithological model was developed by Mantos Blancos geologists using a probabilistic model considering the lithological description from the geological mapping of rock units present in Mantos Blancos.
- Dike model, this model is constructed deterministically by interpretation in sections and uses information from drill holes and bench logging. 3D solids are constructed based on the sectional interpretation and the block model (with small blocks) is flagged. The dike model has not been updated since 2015.

The lithology model is based on the probability of the existence of a specific rock unit. This probability is estimated by interpolation of indicators that are based on the rock codes extracted from the database. Mantos Blancos used a probability threshold of 50% to assign the blocks to a given unit. Mantos Blancos found a few cases where there were equal probabilities for multiple units and these cases were solved by taking into account the unit that was predominant in the local neighborhood.

The dike model is not used for grade estimation. During the estimation it is assumed that grades are continuous across units in the deposit, and then the dike model is used for dilution assuming a TCu grade of 0% for all complete and partial dike blocks (the dike model is constructed with small blocks 5 x 5 x 5 m).

The drill hole database used for resource estimation contains 15,643 drill holes (drill type: DDH, RCD, Sonic drilling for dump). The information used in the current resource model is equivalent to 2,274,947 metres.

### *Resource Classification*

The Mineral Resources were classified by two indicators probabilistic methodology, which uses grade kriging variance as classification thresholds. The method is based on relative errors in metal and tonnage calculated for monthly and annual production periods using spatial indicators and grade variability models.

The Mineral Resources are classified as measured when the local grade, whose variability is corrected to 1-month of production, is estimated with an error that is not greater than 15% with a 90% level of confidence.

Mineral Resources are classified as indicated when the local grade, whose variability is corrected to 1-year of production, is estimated with an error not greater than 15% with a 90% level of confidence.

Mineral Resources that do not comply with the aforementioned criteria are classified as inferred.

To avoid the extrapolation effect, only Mineral Resources within the approved drilled and sampled perimeter were considered for classification.

### *Mineral Resource Estimates*

The Mineral Resource estimates for Mantos Blancos are shown in Tables 1 and Table 2. The resource is separated by material type. The mineral resource estimate uses ordinary kriging grades as these are believed to be the most robust. The deposit has silver mineralization which is not currently included in the Resource estimate, and will not be until an appropriate validation is completed. Based on the current resource model, Mantos Blancos estimation for silver content for sulphide mineralization inside the Mineral Resources pit indicates a total of 99 Mt with an average grade of 4.88 g/t. Mineral Resources are enclosed within pit shells that were optimized using Measured, Indicated and Inferred resources at a copper price of US\$3.77 USD/lb.

**Table 1**

### **Mineral Resources inclusive of Reserves as of December 31, 2016 - Sulphides - Mantos Blancos**

Process	Category	Tonnes (000 t) <sup>(2)</sup>	Grade % ICu <sup>(3)</sup>	Current Contained Cu (t) <sup>(4)</sup>
<b>Sulphide (Flotation and LF)<sup>(1)</sup></b>	Measured	14,344	0.71	101,771
	Indicated	62,390	0.54	336,906
	<b>Measured + Indicated</b>	<b>76,724</b>	<b>0.57</b>	<b>438,677</b>
	Inferred (inside reserve pit)	3,253	0.52	16,916
	Inferred (outside reserve pit)	19,209	0.50	96, 045



Process	Category	Tonnes (000 t) <sup>(2)</sup>	Grade % ICu <sup>(3)</sup>	Current Contained Cu (t) <sup>(4)</sup>
	Inferred stockpile (Cancha 90)	21	0.38	80
	<b>Total Inferred</b>	<b>22,483</b>	<b>0.50</b>	<b>113,040</b>

**Notes:**

- (1) Cut-off grade of 0.26% ICu.
- (2) Tonnes on dry basis.
- (3) Copper grade based on Insoluble Copper (ICu).
- (4) Contained Metal (CM) is calculated by the following formulas: CM = Tonnes (000 t) x 10 (% ICu) x 10.
- (5) Mineral Resource pit is based on 3.77 US\$/lb of Cu.

**Table 2**

**Mineral Resources inclusive of Reserves as of December 31, 2016 - Oxides - Mantos Blancos**

Process	Category	Tonnes (000 t) <sup>(3)</sup>	Grade % ICu <sup>(4)</sup>	Current Contained Cu (t) <sup>(5)</sup>
<b>Oxide (Heap and Vat Leaching)<sup>(1)</sup></b>	Measured	2,427	0.43	10,436
	Indicated	9,027	0.39	35,205
	<b>Measured + Indicated</b>	<b>11,454</b>	<b>0.40</b>	<b>45,641</b>
	Inferred (inside reserve pit)	460	0.35	1,610
	Inferred (outside reserve pit)	4,438	0.42	18,640
	<b>Total Inferred</b>	<b>4,898</b>	<b>0.41</b>	<b>20,250</b>
<b>Oxide (Dump Leaching)<sup>(2)</sup></b>	Measured	458	0.18	824
	Indicated	5,611	0.17	9,539
	<b>Measured + Indicated</b>	<b>6,069</b>	<b>0.17</b>	<b>10,363</b>
	Inferred in situ (inside reserve pit)	633	0.17	1,076
	Inferred in situ (outside reserve pit)	2,702	0.17	4,593
	Inferred (in LOM) Mercedes F2	21,996	0.19	41,792
	Inferred (in LOM) F2 Botadero E	6,053	0.18	10,895
	<b>Total Inferred</b>	<b>31,384</b>	<b>0.19</b>	<b>58,357</b>

**Notes:**

- (1) Cut-off grade of 0.22% permits that are considered in the matrix of identification and SCu.
- (2) Cut-off of 0.13% SCu.
- (3) Tonnes on dry basis.
- (4) Copper grade based on Soluble Copper (SCu).
- (5) Contained Metal (CM) is calculated by the following formulas: CM = Tonnes (000 t) x (% SCu) x 10.
- (6) Mineral Resource pit is based on 3.77 US\$/lb of Cu.

**Mineral Reserves**

The Mineral Reserves as of December 31, 2016, are presented in Table 3 and Table 4. A Level 1 Mineral Reserves audit was carried out for Mantos Blancos Division according the JORC Code (2012). The activities developed included a review of input data, methodology, and results supporting the 2016 LoM.

**Table 3****Mineral Reserves inclusive of Resources as of December 31, 2016 - Sulphides - Mantos Blancos**

Process	Category	Tonnes (000 t) <sup>(3)</sup>	Grade % ICu <sup>(3)</sup>	Current Contained Cu (t) <sup>(4)</sup>
<b>Sulphides (Flotation)<sup>(1)</sup></b>	Proved	27,132	0.86	233,335
	Probable	54,021	0.60	323,110
	<b>Total</b>	<b>81,153</b>	<b>0.69</b>	<b>556,445</b>

**Notes:**

- (1) Cut-off grade of 0.26% ICu.  
(2) Tonnes on dry basis.  
(3) Copper grade based on Insoluble Copper (ICu).  
(4) Contained Metal (CM) is calculated by the following formulas: CM = Tonnes (000 t) x (% ICu) x 10.

**Table 4****Mineral Reserves inclusive of Resources s of December 31, 2016 - Oxides - Mantos Blancos**

Process	Category	Tonnes (000 t) <sup>(3)</sup>	Grade % SCu <sup>(4)</sup>	Current Contained Cu (t) <sup>(5)</sup>
<b>Oxides (Dump Leaching)<sup>(1)</sup></b>	Proved	1,720	0.35	6,020
	Probable	11,825	0.29	33,853
	<b>Total</b>	<b>13,545</b>	<b>0.29</b>	<b>39,873</b>
<b>Este Stockpile (Dump Leaching)<sup>(1)</sup></b>	Proved	-	-	-
	Probable	11,378	0.18	20,480
	<b>Total</b>	<b>11,378</b>	<b>0.18</b>	<b>20,480</b>
<b>Mercedes Stockpile (Dump Leaching)<sup>(1)</sup></b>	Proved	-	-	-
	Probable	36,639	0.19	69,614
	<b>Total</b>	<b>36,639</b>	<b>0.19</b>	<b>69,614</b>
<b>Oxides (Heap and Vat Leaching)<sup>(2)</sup></b>	Proved	1,004	0.46	4,618
	Probable	2,852	0.45	12,834
	<b>Total</b>	<b>3,856</b>	<b>0.45</b>	<b>17,452</b>

**Notes:**

- (1) Cut-off grade of 0.13% SCu.
- (2) Cut-off grade of 0.22% SCu.
- (3) Tonnes on dry basis.
- (4) Copper grade based on soluble copper (SCu).
- (5) Contained Metal (CM) is calculated by the following formula:  $CM = \text{Tonnes (000 t)} \times (\% \text{ SCu}) \times 10$ .

Mantos Copper maintains a reconciliation between the Mineral Reserve model and actual mine production. Reconciliations to 2016 production indicate that the Mineral Resource model is performing well for sulphide ore with the normal range of variability ( $\pm 10\%$ ). The long-term model for oxide ore has consistently reported more tonnage (19% higher in the period) and copper grade (11% higher in the period).

**Mining Operations**

Mantos Blancos is an open pit mine extracting both sulphide and oxide copper ores, which are treated in crushing, milling, concentrator, leaching, solvent extraction and electro-winning plants, producing copper concentrates and high purity (LME Grade A) copper cathodes.

The Mantos Blancos Mine includes one large open pit (Santa Barbara) that provides sulphide ore to feed the concentrator and oxide ore to the leach pads. Other sources of ore in the Mantos Blancos Mine are sulphide ore stock (Cancha 90) and oxide ore stocks (Mercedes and Este).

The Mineral Resources reported as of December 31, 2016 are based on the resources model developed in June 2016 and used to define the LoM that consists of ten pushbacks which will be mined during the period from 2017 to 2029. The total material (ore and waste) moved increases by 30.2 Mt in 2017 to 60.0 Mt in 2020, remaining at this level until 2026 when it begins to decrease until 2029. Considering the ore re-handle from stockpiles to concentrator and the oxide ore to the Mercedes dump, the total material moved reaches 62.1 Mt in 2024.

The cut-off grades were defined based on economic parameters for the three metallurgical processes used in Mantos Blancos mine, adopting the values of 0.26% (Insoluble copper - ICu), 0.22% (Soluble copper - SCu) and 0.13% (Soluble copper - SCu) for flotation, Vat and Dump leaching respectively.

**Processing and Recovery Operations**

Oxide ore from the mine is processed using a combination of vat, dump, and heap leaching. Currently, vats process 1.5 Mtpa of oxide ore. Dump leaching is used to process around 5.9 to 15.0 Mtpa from the Este and Mercedes dumps. The vat and dump leaching processes end in 2019.

Treatment of the copper-rich pregnant leach solution occurs in the solvent extraction-electrowinning plant to produce copper cathodes. The maximum production capacity is 65 ktpa of fine copper. The life of mine plan for the solvent extraction-electrowinning cathode plant considered a fine copper production of 18.0 ktpa up to 2018 and 13.4 ktpa in 2019.

Sulphide ore is processed in the concentrator plant, where copper concentrate is produced, with an average grade ranging from 29% to 33%. The sulphide processing plant will operate at a throughput capacity of 4.7 Mtpa from 2017 to 2019 when the ramp-up of the new sulphide line is expected to start, increasing the processing plant capacity up to 7.3 Mtpa from 2021. According to the life of mine plan, the concentrator will produce 25.7 ktpa of fine copper (contained) in 2017, reaching the maximum production of 57.2 ktpa in 2023.

In order to maintain the copper production and use the sulphide ore reserves available at deeper levels of the deposit, Mantos Blancos has developed an expansion plan to increase the current processing level of 4.7 Mtpa up to 7.3 Mtpa, starting in 2020. Mantos Copper has contracted Hatch for the related engineering studies to develop technical solutions, estimating capex and opex, and defining the plan for implementing the facilities expansion.

### *Current Mineral Processing*

The current ore processing at Mantos Blancos has two operating lines, one for sulphide ore and the other for oxide ore. When the Mantos Blancos Mine operation began, the oxide line was the most important due to the processing of oxidized and mixed ores mined in the upper portions of the deposit. With the deepening of the mine, these materials became more scarce and consequently the cathode production has decreased. For these reasons Mantos Copper is conducting studies on increasing the sulphide processing capacity to compensate for the production of the oxide operation that will be shut down.

### **Infrastructure, Permitting and Compliance Activities**

#### *Access*

The Mantos Blancos Mine is accessed by paved public roads. The mine has a number of private roads for access to the various facilities. The private roads include small vehicle roads as well as a network of haul roads. The haul roads are built to a width suitable for the haul trucks. Most consumables and personnel are transported these routes by light vehicles.

#### *Buildings and Facilities*

The infrastructure for the Mantos Blancos mine is developed and in service. Figure 3.1 shows the general layout of Mantos Blancos infrastructure.

**Figure 3.1**



The main facilities in the Mantos Blancos Mine are the Santa Barbara pit, the Argentina Norte dump, the Fase 8 dump, the Este dump, the Oeste dump, the concentrator plant, the vats, the coarse tailings deposit, the fine tailings deposit, the Mercedes stockpile, the Mercedes dump, secondary leaching piles, and the solvent extraction - electrowinning plant. Ancillary facilities in the mine are workshops and warehouses, administrative buildings and offices and explosives and chemicals storage.

### *Water Supply*

Water is supplied by Ferrocarriles Antofagasta Bolivia (FCAB) and Aguas Antofagasta. Water is pumped and transported by pipelines from Siloli and Toconce, located approximately 250 km from the Mantos Blancos Mine. Currently, the water consumption of the Mantos Blancos site is 10,000 m<sup>3</sup>/day, and the maximum storage capacity is 17,000 m<sup>3</sup>.

Due to the reduction of the material treated in the vats, reduction of processing in the dump leach and optimization of the water recovery in the tailings, the estimated water consumption for the life of the mine does not exceed the 145 l/s value contracted with FCAB and Aguas Antofagasta, except in the years 2017 and 2018, where it will be supplied based on an additional contract.

The industrial water supply contract of 130 l/s with Aguas Antofagasta ends in 2023, with a clause allowing a first renewal for five years until 2028, and a second extension for the same time until 2033. A contract with FCAB to supply 15 l/s of better quality water to be used in specific processes ends in 2018. Mantos Blancos plans to renew this contract during 2017. The Mantos Blancos site does not have a water intake permit.

### *Power*

Electrical power is provided by ENORCHILE and delivered to the mine through a high voltage power line (220 kV) connected to the national grid. The Mantos Blancos site has a power plant managed by an external company and connected to the national grid as well. The current electrical power supply contracts are sufficient to comply with the demands according to the mine plan.

### *Communications*

The mine site has a communication network of telephones and licensed UHF radio repeaters within the main pit mining area. Outside this area the communication is by means of UHF CB radio, satellite phone, and cellular phone.

### *Tailings Storage Facility*

Tailings from the concentrator plant are separated into fine and coarse tailings. Currently, tailings production is 4.42 Mtpa, including 1.76 Mtpa of fine tailings and 2.66 Mtpa of coarse tailings.

### *Social or Community Impact*

The Mantos Blancos area of influence includes the city of Antofagasta, and Baquedanoa, a small community of 900 people located 20 km north of the mine. The engagement plan developed by Mantos Copper focuses on the following three pillars of action:

- Education: providing quality educational establishments in the area of influence and development through support of talented students;
- Sustainable communities: supporting projects to improve the quality of life of the local people and the quality of the environment;
- Entrepreneurship and employability: providing technical to micro and small businesses from different industries in the area of influence and development, along with improving the employability of vulnerable groups.

## Permitting

Environmental studies are ongoing and conducted as required to support the operation and any ancillary projects. The qualified persons for the Mantos Blancos Technical Report are not aware of any known environmental issues that could materially impact Mantos Blancos' ability to operate.

The permit classification adopted by Mantos Copper is divided into the following categories:

- Approved: current licenses with a control plan of the commitments and monitoring included. This category includes licenses that have been corrected or rectified;
- In process: licenses that have been submitted to the competent departments, or those do not have the total of commitments or without a control plan of the commitments and monitoring included. This category includes permits in process that were refused by the authorities or withdrawn by Mantos Copper.
- Pending: licenses that have been identified as necessary but not submitted, awaiting approval of previous stages of projects. This category could be classified as "In preparation" or "In planning";
- In preparation: permit that is in preparation or under internal review;
- In planning: permits that are considered in the matrix of identification and that have been reported to the corresponding areas as necessary;
- Closed: permits that have complied with its term of validity.
  - In 2016, twenty-three new permits were approved and eleven were in process.

## Capital and Operating Costs

### Capital Costs

Table 5 provides the capital costs (CAPEX) from 2017 to 2029. The total CAPEX for the life of mine plan is USD\$228.5 million.

**Table 5**

### Capital Costs

Description	Unit	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Mining fleet	MUSD			2.2										
Sulphide concentrator	MUSD	2.3	1.2	0.9	0.4	1.2								
Oxide plant	MUSD	4.8												
Tailings dam	MUSD			1.3	4.8	2.3								
Infrastructure	MUSD	1.8	0.9	2.5	0.6	0.6								
Minor projects	MUSD	0.3	0.3	0.3	0.3	0.3								
Deferred Capex MB Project	MUSD							2.3	17.1	16.2	3.9			

Description	Unit	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Stay-in-business - Long-term (3% of direct cost)	MUSD						5.8	5.9	6.0	6.0	5.9	4.6	4.5	
Expansionary Capex	MUSD		6.6	81.9	32.8									
<b>Total</b>	<b>MUSD</b>	<b>9.1</b>	<b>9.0</b>	<b>89.2</b>	<b>38.9</b>	<b>4.4</b>	<b>5.8</b>	<b>8.2</b>	<b>23.1</b>	<b>22.1</b>	<b>9.7</b>	<b>4.6</b>	<b>4.5</b>	

### Operating Costs

The operating costs for Mantos Blancos are developed annually as part of the site budget process. The OPEX is shown in the tables below. The average operating cost (C1 cash cost) from 2017 to 2029 is 2.10 USD/lb. The operating cost estimates in the LoM plan are considered to be reasonable and consistent with historical performance. The concentrate produced by Mantos Blancos contains silver that is also commercialized. Table 6 shows the unit cost.

**Table 6**

### Cash Cost

Description	Unit	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Mining Cost	c/lb	79.5	97.4	104.6	141.0	96.7	89.7	89.2	103.8	113.4	110.6	64.0	50.3	8.5
Processing Cost	c/lb	107.6	115.3	101.0	74.6	65.0	64.3	58.4	64.7	71.3	71.3	69.7	83.8	94.8
G&A	c/lb	19.5	20.3	19.0	15.5	10.6	10.1	9.5	10.5	11.6	11.6	11.3	11.6	16.8
<b>C0</b>	<b>c/lb</b>	<b>206.7</b>	<b>233.1</b>	<b>224.5</b>	<b>231.1</b>	<b>172.3</b>	<b>164.2</b>	<b>157.0</b>	<b>179.0</b>	<b>196.3</b>	<b>193.5</b>	<b>145.0</b>	<b>145.6</b>	<b>120.1</b>
Freight	c/lb	4.1	4.1	4.6	5.4	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.0	4.6
TCRC	c/lb	14.1	13.9	17.4	25.6	25.3	25.6	25.6	25.6	25.6	25.6	25.6	22.2	17.4
<b>C1 (before by-products)</b>	<b>c/lb</b>	<b>224.8</b>	<b>251.1</b>	<b>246.5</b>	<b>262.1</b>	<b>202.9</b>	<b>195.1</b>	<b>188.0</b>	<b>209.9</b>	<b>227.2</b>	<b>224.5</b>	<b>176.0</b>	<b>172.8</b>	<b>142.1</b>
By-products credit	c/lb	9.2	1.5	15.3	17.7	23.2	15.1	18.4	27.7	20.2	13.7	15.8	11.2	15.2
<b>C1 cash cost</b>	<b>c/lb</b>	<b>215.7</b>	<b>239.6</b>	<b>231.2</b>	<b>244.4</b>	<b>179.7</b>	<b>180.0</b>	<b>169.6</b>	<b>182.3</b>	<b>207.1</b>	<b>210.8</b>	<b>160.2</b>	<b>161.6</b>	<b>126.9</b>
Def Stripping	c/lb													
<b>C1</b>	<b>c/lb</b>	<b>215.7</b>	<b>239.6</b>	<b>231.2</b>	<b>244.4</b>	<b>179.7</b>	<b>180.0</b>	<b>169.6</b>	<b>182.3</b>	<b>207.1</b>	<b>210.8</b>	<b>160.2</b>	<b>161.6</b>	<b>126.9</b>
Depreciation	c/lb	57	48	30	70	45	35	29	27	10	13	15	16	29
Stripping Amortization	c/lb													
<b>C2</b>		<b>272.3</b>	<b>287.9</b>	<b>261.4</b>	<b>314.2</b>	<b>225.1</b>	<b>215.1</b>	<b>199.0</b>	<b>208.9</b>	<b>217.0</b>	<b>224.1</b>	<b>175.2</b>	<b>177.8</b>	<b>155.5</b>

### Net Present Value

A sensitivity analysis for the NPV was performed using variations in OPEX, CAPEX, discount rate, and copper prices. Simulations were conducted treating the variables independently. Ten percent increments were adopted for a total variation of  $\pm 30\%$ . The NPV is 185m USD at a discount rate of 8.0%.

The sensitivity analysis was performed disregarding the credits obtained with silver to simulate the worst case, verifying if in this condition the outcome is still a positive cash flow that supports the statement of Mineral Reserves.

Results of the sensitivity analysis suggest significant exposure to variations in copper prices and OPEX. According to the analysis, a decrease in the copper price of more than 11% or an increase in the OPEX of more than 12% could result in a negative cash flow and, therefore, make the project not feasible.

The impact of CAPEX variations is not significant compared to variations in copper price and OPEX.

**Table 7**

**NPV sensitivity analysis - MUSD**

Parameter/Variation	-30%	-20%	-10%	0%	+10%	+20%	+30%
Copper Price	(405)	(184)	23	185	337	483	622
OPEX	236	219	202	185	169	152	135
CAPEX	665	505	345	185	26	(134)	(294)
Discount rate	231	215	200	185	172	160	148

A study was also developed to quantify the sensitivity of the NPV to variations in the silver price using similar methodology to the sensitivity analysis presented above.

The sensitivity analysis for the NPV was performed using variations in OPEX, CAPEX, discount rate, copper and silver prices. Simulations were conducted treating the variables independently. Ten percent increments were adopted for a total variation of  $\pm 30\%$ . Considering the silver scenario, the NPV is 277M USD at a discount rate of 8.0%. The silver content increased the NPV by 33%.

Results of the sensitivity analysis suggest significant sensitivity to variation in copper prices and OPEX. According to the analysis, a decrease in the copper price of more than 17% or an increase in the OPEX of more than 17% could result in a negative cash flow and, therefore, make the project not feasible.

The impact of CAPEX and silver price variations is not significant compared to variations in copper price and OPEX.

**Table 8**

**NPV sensitivity analysis - MUSD - including silver content**

Parameter/Variation	-30%	-20%	-10%	0%	+10%	+20%	+30%
Copper Price	(271)	(55)	122	277	426	568	703
Silver Price	245	256	267	277	289	298	308
OPEX	756	597	437	277	117	(43)	(203)
CAPEX	328	311	294	277	260	243	226
Discount rate	334	314	295	277	260	245	230



