

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2022

TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE  
ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

000-54416

(Commission File Number)

SCANDIUM INTERNATIONAL MINING CORP.

(Exact name of registrant as specified in its charter)

British Columbia, Canada

(State or other jurisdiction  
of incorporation or organization)

98-1009717

(IRS Employer  
Identification No.)

1390 Ione Pass Trail, Reno, Nevada 89523

(Address of principal executive offices) (Zip Code)

(775) 355-9500

(Registrant's telephone number, including area code)

N/A

(Former name, former address and former fiscal year, if changed since last report)

Securities registered pursuant to Section 12(b) of the Act: None

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company  Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. [ ]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes [ ] No [X]

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date: **As of August 10, 2022, the registrant's outstanding common stock consisted of 355,860,813 shares.**

**PART I. FINANCIAL INFORMATION**

**Item 1. Financial Statements**

## **Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations**

The following discussion of the operating results, corporate activities and financial condition of Scandium International Mining Corp. (hereinafter referred to as “we”, “us”, “Scandium International”, “SCY”, or the “Company”) and its subsidiaries provides an analysis of the operating and financial results between December 31, 2021, and June 30, 2022, and a comparison of the material changes in our results of operations and financial condition between the six and three-month periods ended June 30, 2021, and the six and three-month periods ended June 30, 2022. This discussion should be read in conjunction with Management’s Discussion and Analysis of Financial Condition and Results of Operations included in our Annual Report on Form 10-K for the year ended December 31, 2021.

This discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of many factors, including, but not limited to, those set forth under the heading “Risk Factors and Uncertainties” in our Annual Report on Form 10-K for the year ended December 31, 2021, and elsewhere in this Quarterly Report on Form 10-Q.

The interim statements have been prepared in accordance with US Generally Accepted Accounting Principles, as required under U.S. federal securities laws applicable to the Company, and as permitted under applicable Canadian securities laws. The Company is a reporting company under applicable securities laws in Canada and the United States. The reporting currency used in our financial statements is the United States Dollar.

The information contained within this report is current as of August 10, 2022, unless otherwise noted. Additional information relevant to the Company’s activities can be found on SEDAR at [www.sedar.com](http://www.sedar.com) and on EDGAR at [www.sec.gov](http://www.sec.gov).

Technical information in this Form 10Q, including the MD&A, has been reviewed and approved by John Thompson, a Qualified Person as defined by Canadian National Instrument 43-101 (“NI 43-101”).

### **Cautionary Note to U.S. Investors Regarding Reserve and Resource Estimates**

The Company uses Canadian Institute of Mining, Metallurgy and Petroleum definitions for the terms “proven reserves”, “probable reserves”, “measured resources” and “indicated resources.” U.S. investors are cautioned that while these terms are recognized and required by Canadian regulations, including National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (“NI 43-101”), the U.S. Securities and Exchange Commission (“SEC”) does not recognize them. Canadian mining disclosure standards differ from the requirements of the SEC under SEC Industry Guide 7, and reserve and resource information referenced in this Form 10-Q may not be comparable to similar information disclosed by companies reporting under U.S. standards. In particular, and without limiting the generality of the foregoing, the term “resource” does not equate to the term “reserve.” Under United States standards, 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. The SEC’s disclosure standards normally do not permit the inclusion of information concerning “measured mineral resources” or “indicated mineral resources” or other descriptions of the amount of mineralization in mineral deposits that do not constitute “reserves” by U.S. standards in documents filed with the SEC. Disclosure of “contained ounces” in a resource estimate is permitted disclosure under Canadian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute “reserves” by SEC standards as tonnage and grade without reference to unit measures. The requirements of NI 43-101 for identification of “reserves” are also not the same as those of the SEC, and reserves in compliance with NI 43-101 may not qualify as “reserves” under SEC standards.

## **Cautionary Note Regarding Forward-Looking Statements**

Certain statements made in this Quarterly Report on Form 10-Q may constitute forward-looking statements about the Company and its business. Forward-looking statements are statements that are not historical facts and include, but are not limited to, reserve and resource estimates, estimated value of the project, projected investment returns, anticipated mining and processing methods for the project, the estimated economics of the project, anticipated scandium recoveries, production rates, scandium grades, estimated capital costs, operating cash costs and total production costs, planned additional processing work and environmental permitting. The forward-looking statements in this report are subject to various risks, uncertainties and other factors that could cause the Company's actual results or achievements to differ materially from those expressed in or implied by forward-looking statements. These risks, uncertainties and other factors include, without limitation, risks related to uncertainty in the demand for scandium and pricing assumptions; uncertainties related to raising sufficient financing to fund the Nyngan Scandium Project in a timely manner and on acceptable terms; changes in planned work resulting from logistical, technical or other factors; the possibility that results of work will not fulfill expectations and realize the perceived potential of the Company's properties; uncertainties involved in the estimation of scandium reserves and resources; the possibility that required permits may not be obtained in a timely manner or at all; the possibility that capital and operating costs may be higher than currently estimated and may preclude commercial development or render operations uneconomic; the possibility that the estimated recovery rates may not be achieved; risk of accidents, equipment breakdowns and labor disputes or other unanticipated difficulties or interruptions; the possibility of cost overruns or unanticipated expenses in the work program; risks related to projected project economics, recovery rates, and estimated NPV("Net Present Value") and anticipated IRR("Internal Rate of Return") and other factors identified in the Company's SEC filings and its filings with Canadian securities regulatory authorities. Forward-looking statements are based on the beliefs, opinions and expectations of the Company's management at the time they are made, and other than as required by applicable securities laws, the Company does not assume any obligation to update its forward-looking statements if those beliefs, opinions or expectations, or other circumstances, change.

## **Scandium International Corporate Overview**

Scandium International is a specialty metals and alloys company focused on developing the production and sale of scandium and other specialty metals. The Company intends to utilize its knowhow and, in certain instances, patented technologies to maximize opportunities in scandium and other specialty metals.

The Company was formed in 2006, under the name Golden Predator Mines Inc. As part of a reorganization and spin-out of the Company's precious metals portfolio in March 2009, the Company changed its name to EMC Metals Corp. In order to reflect our emphasis on mining for scandium minerals, effective November 19, 2014, we changed our name to Scandium International Mining Corp. The Company currently trades on the Toronto Stock Exchange under the symbol "SCY".

Our focus of operations is the exploration and development of the Nyngan scandium deposit located in New South Wales ("NSW"), Australia ("Nyngan" or the "Nyngan Scandium Project.") We also hold exploration-stage properties in Australia, known as the "Honeybugle Scandium Property", and in Finland, known as the "Kiviniemi Scandium Property."

We acquired a 100% interest in the Nyngan Scandium Project in June of 2014 pursuant to the terms of a settlement agreement with Jervois Mining Ltd. of Melbourne, Australia. The project is held through our Australian subsidiary, EMC Metals Australia Pty Ltd. ("EMC Australia"), which also holds the Honeybugle Scandium Property.

During the third quarter of 2015, the Company converted a \$2,500,000 loan from Scandium Investments LLC ("SIL"), an unrelated investment company, into a 20% minority interest in EMC Australia. As a result, from the third quarter 2015 until October 2017, the Company held an 80% equity interest in EMC

Australia, with SIL holding a 20% interest. EMC Australia was operated as a joint venture between SIL and SCY with SIL holding a carried interest in the Nyngan Scandium Project until the Company met certain development milestones. The Company completed the development milestones during May 2017, and triggered a limited period option whereby SIL had a right to convert the fair market value of its 20% interest in EMC Australia into an equivalent value of SCY common shares, at then prevailing market prices.

In June of 2017, the Company entered into a share exchange agreement with SIL for the purchase of SIL's 20% interest in EMC Australia in exchange for 57,371,565 common shares of SCY as well as an additional 1,459,080 common shares as a royalty adjustment payment. Closing of the purchase of the EMC Australia shares was subject to shareholder approval, which the Company obtained at a special meeting of shareholders held on September 11, 2017. The transaction subsequently closed on October 9, 2017. Under the terms of the share purchase agreement, on closing SIL was granted the right to nominate two individuals to the board of the Company for so long as SIL held at least 15% of Scandium's issued and outstanding shares, and one director for so long as SIL held at least 5% but less than 15% of Scandium's issued and outstanding shares. Pursuant to the nomination rights, Peter Evensen and R. Christian Evensen were appointed as directors to the SCY Board on closing of the transaction.

Corporate activity during the second quarter of 2022 focused on increasing our financial strength through a non-brokered equity private placement and reducing costs. SCY raised aggregate gross proceeds of C\$3,402,290 through the sale of 37,803,218 units (a "Unit") spanning three tranches and closing dates. The aggregate proceeds exceed the C\$3,000,000 placement amount originally announced to the market. Each Unit consists of one common share of the Company (a "Common Share") and one share purchase warrant (a "Warrant"). Each Warrant will entitle the holder to acquire a Common Share at C\$0.1075 for sixty (60) months from date of closing of each tranche. The net proceeds from the sale of the Units will be used towards the maintenance of the Company's scandium minerals properties and for general and administrative expenses.

SCY has been successful in reducing corporate SG&A costs including being able to reverse over \$1 million in accruals during the first six months of 2022. SCY ended the quarter with \$2.3 million in cash and no debt.

During the first quarter of 2022, SCY completed an internal review of its portfolio of assets and projects. The purpose of this review was to determine the appropriate allocation of capital between the Company's scandium activities and the recently announced initiatives on Critical Metals Recovery (CMR) and High Purity Alumina (HPA). The board decided and announced on April 18 that the best return on invested capital for its shareholders is to prioritize the Company's portfolio of scandium assets including the Nyngan Scandium Project that already holds a mining license and to idle its CMR and HPA initiatives. As a result of the review, leadership changes were also made with the appointment of an interim CEO and CFO and a downsizing of the board to 4 directors.

Our plan of operation for the remainder of 2022, is to continue to reduce costs and position the Company to benefit from the growing market adoption of Scandium. This includes moving forward with our patent portfolio and filing a new mine lease application to re-establish the original Mining License, giving access to the full scandium resource at Nyngan and conduct a drilling campaign at Honeybugle to further delineate the resource.

## **Principal Properties Review**

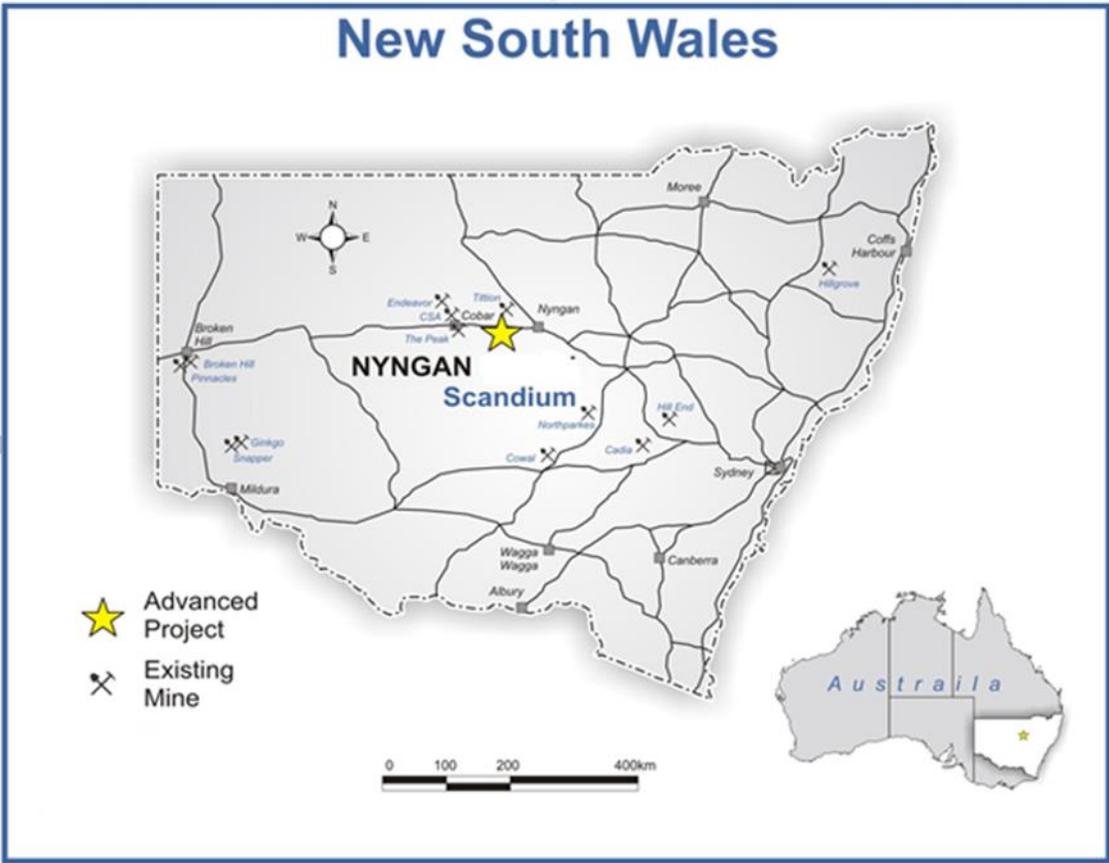
### **Nyngan Scandium Project (NSW, Australia)**

#### **Nyngan Property Description and Location**

The Nyngan Scandium Project site is located approximately 450 kilometers northwest of Sydney, NSW, Australia and approximately 20 kilometers due west of the town of Nyngan, a rural town of

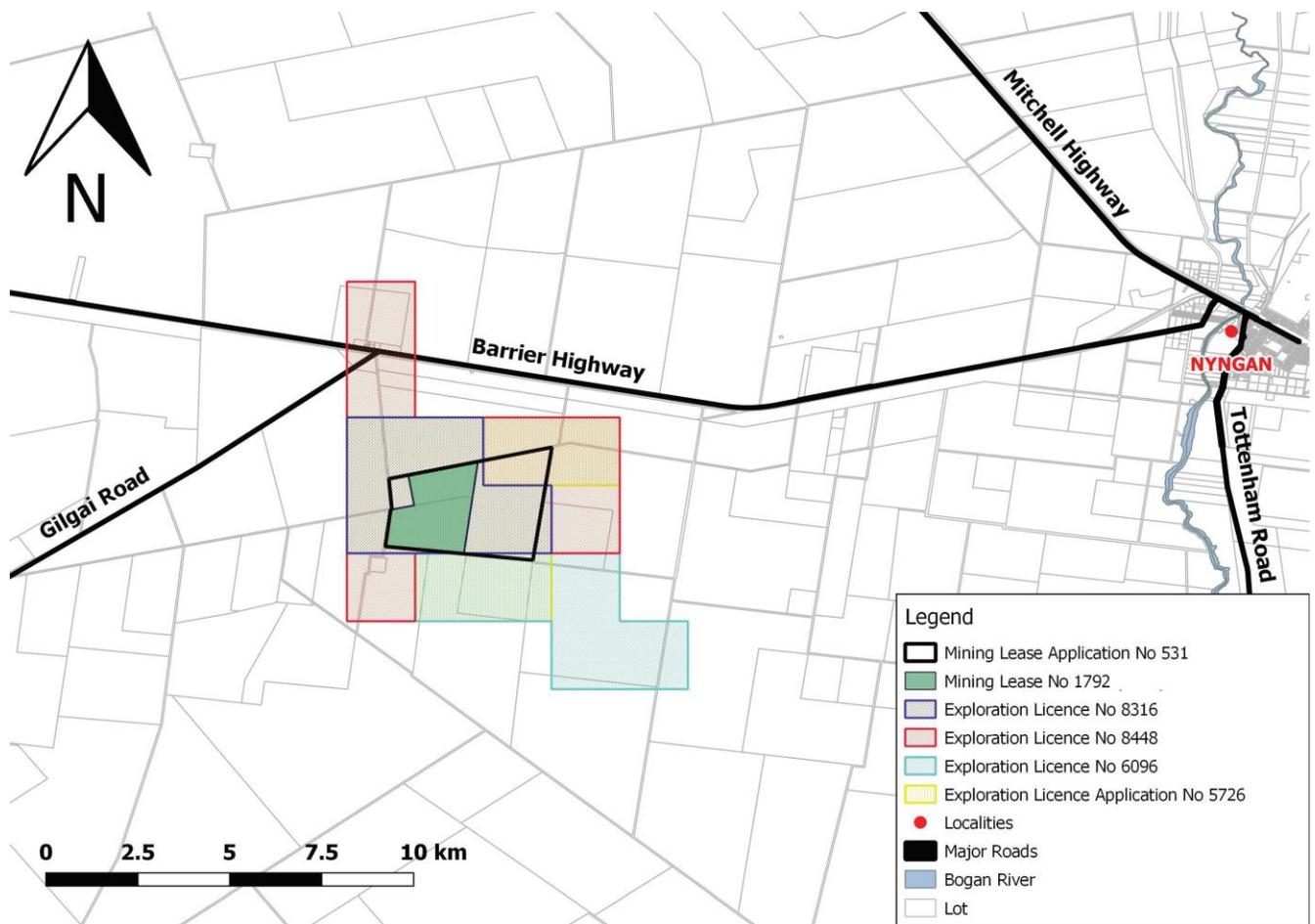
approximately 2,900 people. The general area can be characterized as flat countryside and is classified as agricultural land, used predominantly for wheat farming and livestock grazing.

**Figure 1: Location of Nyngan Project**



**Note: None of the Existing Mines identified in Figure 1 produce scandium.**

**Figure 2: Location of the Exploration Licenses and Mining Lease for the Nyngan Scandium Project**



Note: All Exploration Licenses and Leases described in Figure 2 are held 100% by EMC-A.

### Nyngan Feasibility Study

On April 18, 2016, the Company announced the results of an independently prepared feasibility study on the Nyngan Scandium Project. The technical report on the feasibility study entitled “*Feasibility Study – Nyngan Scandium Project, Bogan Shire, NSW, Australia*” is dated May 4, 2016, and was independently

compiled pursuant to the requirements of NI 43-101 (the “Feasibility Study” or the “DFS”). The report was filed on May 6, 2016 and is available on SEDAR ([www.sedar.com](http://www.sedar.com)), on the Company’s website ([www.scandiummining.com](http://www.scandiummining.com)) and the SEC’s website ([www.sec.gov](http://www.sec.gov)). A full discussion on the technical report was provided in the Company’s Form 10Q for the quarterly period ending March 31, 2016, as filed with the SEC and on SEDAR on May 13, 2016.

The Feasibility Study concluded that the Nyngan Scandium Project has the potential to produce an average of 37,690 kilograms of scandium oxide (scandia) per year, at grades of 98.0%-99.8%, generating an after-tax cumulative cash flow over a 20 year Project life of US\$629 million; with an NPV<sub>10%</sub> of US\$177 million. The average process plant feed grade over the 20 year Project life is 409ppm of scandium.

The financial results of the Feasibility Study are based on a conventional flow sheet, employing continuous high pressure acid leach (HPAL) and solvent extraction (SX) techniques. The flow sheet was modeled and validated from METSIM modeling and considerable bench scale/pilot scale metallurgical test work utilizing Nyngan resource material. A number of the key elements of this flowsheet work have been protected by the Company under US patent applications, four of which have been granted, with two of those four directly applicable in the flowsheet applied to the current Feasibility Study.

The Feasibility Study has been developed and compiled to an accuracy level of +15%/-5% by a globally recognized engineering firm that has considerable expertise in laterite deposits and process facilities, as well as in smaller mining and processing projects, and has excellent familiarity with the Nyngan Scandium Project location and environment.

### ***Nyngan Scandium Project Highlights***

- Capital cost estimate for the Project is US\$87.1 million,
- Annual scandium oxide product volume averages 37,690 kg per year over 20 years,
- Annual revenue of US\$75.4 million (oxide price assumption of US\$2,000/kg),
- Operating cost estimate for the Project is US\$557/kg scandium oxide,
- Project Constant Dollar NPV10% is US\$177 million, NPV8% is US\$225 million,
- Project Constant Dollar IRR is 33.1%,
- Oxide product grades of 98-99.8% based on customer requirements,
- Project resource increases by 40% to 16.9 million tonnes, grading 235ppm Sc, at a 100ppm cut-off in the measured and indicated categories, and
- Project Reserve totaling 1.43 million tonnes, grading 409ppm Sc was established on part of the resource.

### ***DFS Conclusions and Recommendations***

The production assumptions in the Feasibility Study are backed by solid independent flow sheet test work on the planned process for scandium recovery and consolidate a significant amount of metallurgical test work and prior study on the Nyngan Scandium Project. The entire body of work demonstrates a viable, conventional process flow sheet, utilizing a continuous-system HPAL leaching process, and good metallurgical recoveries of scandium from the resource. The metallurgical assumptions are supported by various bench and pilot scale independent test work programs that are consistent with known outcomes in other laterite resources. The continuous autoclave configuration, as opposed to batch systems explored in previous flow sheets, is also a more conventional and current design choice.

The level of accuracy established in the Feasibility Study substantially reduces the uncertainty levels inherent in earlier studies. The greater confidence intervals around the Feasibility Study were achieved by reliance on significant project engineering work, a capital and operating cost estimate supported by detailed requirements and vendor pricing, plus one conditional offtake agreement and an independent marketing assessment, both supportive of the marketing assumptions on the business.

The Feasibility Study delivered a positive result on the Nyngan Scandium Project, and recommended the Nyngan Scandium Project owners seek finance and proceed to construction. Recommendations were made therein for additional immediate work, notably to complete some optimizing flow sheet studies, and to initiate as early as possible detailed engineering required on certain long-lead capital items. The Company has subsequently completed certain confirmatory flow sheet studies and test results, but intends to defer cost on detailed project engineering until such time as long-term offtake agreements for scandium product have been secured.

### ***Confirmatory Metallurgical Test Results***

On June 29, 2016, we announced the results of a confirmatory metallurgical test work report from Altrius Engineering Services (AES) of Brisbane, Australia. The test work results directly relate to the list of recommended programs included in the Feasibility Study. AES devised and supervised these test work programs at the SGS laboratory in Perth, Australia and at the Nagrom laboratory in Brisbane, Australia.

The project DFS recommended that a number of process flowsheet test work programs be investigated prior to commencing detailed engineering and construction. Those study areas included pressure leach (“HPAL”), counter-current decant circuits, solvent extraction (“SX”), and oxalate precipitation, with specific work steps suggested in each area. This latest test work program addressed all of these recommended areas, and the results confirmed recoveries and efficiencies that either meet or exceed the parameters used in the DFS. Highlights of the testing were:

- Pressure leach test work achieved 88% recoveries, from larger volume tests,
- Settling characteristics of leach discharge slurry show substantial improvement,
- Residue neutralization work meets or exceeds all environmental requirements as presented in the DFS and the environmental impact statement,
- Solvent extraction circuit optimization tests generated improved performance, exceeding 99% recovery in single pass systems, and
- Product finish circuits produced 99.8% scandium oxide, completing the recovery process from Nyngan ore to finished scandia product.

### ***Engineering, Procurement and Construction Management Contract***

On May 30, 2017, the Company announced that its subsidiary EMC Australia signed an Engineering, Procurement and Construction Management (“EPCM”) contract with Lycopodium Minerals Pty Ltd (“Lycopodium”), to build the Nyngan Scandium Project in New South Wales, Australia. The EPCM contract also provides for start-up and commissioning services.

The EPCM contract appoints Lycopodium (Brisbane, QLD, Australia) to manage all aspects of project construction. Lycopodium was the principal engineering firm involved with the DFS. Lycopodium's continued involvement in project construction and commissioning ensures valuable technical and management continuity for the project during the construction and startup of the project.

On October 19, 2017, we announced that Lycopodium has been instructed to initiate critical path engineering for the Nyngan Scandium Project. Lycopodium commenced work on select critical path components for the project, including design and specification engineering on the high-pressure autoclave unit, associated flash and splash vessels, and several specialized high-pressure input pumps. The engineering work was completed in 2018 and will enable final supplier selection, firm component pricing and delivery dates for these key process components.

### ***Environmental Permitting/Development Consent/Mining Lease***

On May 2, 2016, the Company announced the filing of an Environmental Impact Statement (“EIS”) with the New South Wales Department of Planning and Environment (the “Department”) in support of the planned development of the Nyngan Scandium Project. The EIS was prepared by R.W. Corkery & Co.

Pty. Limited, on behalf of the Company's subsidiary, EMC Australia, to support an application for Development Consent for the Nyngan Scandium Project. The EIS is a self-contained set of documents, which includes a Specialist Consultants' Study Compendium, and is considered the foundational environmental document used to seek a Development Consent.

#### EIS Highlights:

- The EIS finds residual environmental impacts represent negligible risk.
- The proposed development design achieves sustainable environmental outcomes.
- The EIS finds net-positive social and economic outcomes for the community.
- Nine independent environmental consulting groups conducted analysis over five years, and contributed report findings to the EIS.
- The Nyngan Project development is estimated to contribute A\$12.4M to the local and regional economies, and A\$39M to the State and Federal economies, annually.
- The EIS is fully aligned with the DFS and with a NSW Mining License Application for the Nyngan Project.

The conclusion statement in the EIS reads as follows: "In light of the conclusions included throughout this *Environmental Impact Statement*, it is assessed that the Proposal could be constructed and operated in a manner that would satisfy all relevant statutory goals and criteria, environmental objectives and reasonable community expectations."

#### Development Consent:

The Development Consent is considered the key approval required to build a mine facility in Australia. As the Nyngan Scandium Project is considered a State Significant Project (capital cost + A\$30 million), the Minister of Planning and Environment is designated to manage the investigation and approval process for any granting of a Development Consent.

On November 10, 2016, the Company announced that the Development Consent had been granted. This Development Consent represents an approval to develop the Nyngan Scandium Project and is based on facts and findings contained in the EIS. The Development Consent follows an in-depth review of the EIS, the project plan, community impact studies, public EIS exhibition and commentary, and economic viability, and involved more than 12 specialized governmental agencies and groups.

#### Mining Lease:

During July 2019, EMC Australia received notice of approval for its most current mining lease (ML) application. The ML (ML 1792) overlays select areas previously covered by exploration licenses and represents the final major development approval required from the NSW Government to begin construction on the project. The ML 1792 grant is issued for a period of 21 years and is based on the development plans and intent submitted in the ML application. The ML can be modified by NSW regulatory agencies, as requested by EMC Australia over time, to reflect changing operating conditions.

In addition to these two key governmental approvals, other required licenses and permits must be acquired but are considered routine and require only compliance with fixed standards and objective measurements. These remaining approvals include submittal of numerous plans and reports supporting compliance with the Development Consent and Mining Lease. In addition, the following water, roads, dam and electrical access reviews and arrangements must be finalized:

- Water Supply Works and Use Approval and Water Access License,
- State and local approval for construction of the intersection of the Site Access Road and Gilgai Road,
- An approval from the NSW Dams Safety Committee for the design and construction of the Residue Storage Facility, and
- A high voltage connection agreement with Essential Energy.

The 2019 ML 1792 grant covers 810 acres (370 hectares) of surface area fully owned by the Company, an area adequate to construct and operate a scandium mine of a scale outlined in the definitive Feasibility Study. The Company had originally filed a mining lease application (MLA 531) covering an area of 874 hectares, which was granted in 2017 as a mining lease (ML 1763), and later ruled invalid. At that time, it was unknown, to both the Department and the Company, that a local landowner had filed a prior, timely and valid objection to the granting of that mining lease. The reduction in area between the initial 2017 ML 1763 and the replacement 2019 ML 1792 represented acreage protested in an "Agricultural Land" objection lodged by a local landowner. The landowner holds freehold surface ownership over a portion of the original grant that was previously covered by the 2017 ML 1763.

On September 10, 2020, the Company announced receipt of a final determination letter from the Deputy Secretary, Department of Regional NSW, Division of Mining, Exploration and Geoscience resolving the outstanding objection filed by the landowner in 2016.

Written advice from the Department to the Company makes clear that all required independent investigative processes, and all affected party comment periods, were completed, and the Department's decision in this dispute matter is final. There are further state courts of appeal available to the landowner, but the facts supporting this final decision are confirmed by the NSW Department of Primary Industry and follow governing law.

This Final Determination from the NSW Government will again allow all measured and indicated resource included in the Nyngan Scandium Project DFS to be reinstated in a new mining lease grant, which will require the filing of a new mine lease application. The Company intends to file this application in Q3 2022.

### **Downstream Scandium Products**

In February 2011, we announced the results of a series of laboratory-scale tests investigating the production of aluminum-scandium master alloys directly from aluminum oxide and scandium oxide feed materials. The overall objective of this research was to demonstrate and commercialize the production of aluminum-scandium master alloy using impure scandium oxide as the scandium source, potentially significantly improving the economics of aluminum-scandium master alloy production. In October 2019, the Company was granted Patent No. 10450634, titled "Scandium-Containing Master Alloys And Method For Making The Same."

During the 2015-2017 timeframe, we continued our own internal laboratory-scale investigations into the production of aluminum-scandium master alloys, furthering our understanding of commercial processes, and achievable recoveries. We also advanced our abilities to make a commercial-grade 2% scandium master alloy product.

On March 2, 2017, we announced the signing of a Memorandum of Understanding ("MOU") with Weston Aluminium Pty Ltd. ("Weston") of Chatswood, NSW, Australia. The MOU defines a cooperative commercial alliance to jointly develop the capability to manufacture aluminum-scandium master alloy. The intended outcome of this alliance will be to develop the capability to offer Nyngan Scandium Project aluminum alloy customers scandium in form of Al-Sc master alloy, should customers prefer that product form.

The MOU outlines steps to jointly establish the manufacturing parameters, metallurgical processes, and capital requirements to convert Nyngan Scandium Project scandium product into Master Alloy, at Weston's existing production site in NSW. The MOU does not include a binding contract with commercial terms at this stage, although the intent is to pursue the necessary technical elements to arrive at a commercial contract for conversion of scandium oxide to master alloy, and to do so prior to first mine production from the Nyngan Scandium Project.

On March 5, 2018, the Company announced that it had initiated a small scale pilot program (4kg scale) at the Alcereco Inc. metallurgical research facilities in Kingston, Ontario, to confirm and refine previous lab-scale work on the manufacture of aluminum-scandium 2% master alloy (MA). The program advanced the process understanding for commercial scale upgrade of Nyngan scandium oxide product to master alloy product.

The 2018 pilot program consisted of 5 separate trials on two MA product types, production of MA in various forms, and gross analysis to ascertain scandium recoveries to product. The mass of master alloy and product variants produced in the program totaled approximately 20kg and was completed in December of 2018. The results of the program included the successful production of 2% grade MA, with recoveries of scandium to product of 85%.

A second phase of the small-scale pilot program was initiated in the first half of 2019, again at 4kg scale, building on the work done in phase I. The results of this second program included successful production of 2% grade MA, with improvements in form of rapid kinetics, and recoveries of scandium to product of +90%.

On March 5, 2018, the Company also announced that it filed for patent protection on certain process refinements for master alloy manufacture that it believes are novel methods, and also on certain product variants that it believes represent novel forms of introducing scandium more directly into aluminum alloys. In April of 2021, the Company was granted Patent No. 10,988,830, titled “Scandium Master Alloy Production.”

### ***Master Alloy Capability Demonstrated***

On February 24, 2020, the Company announced the completion of a three year, three stage program to demonstrate the capability to manufacture aluminum-scandium master alloy (Al-Sc2%), from scandium oxide, using a patent pending melt process involving aluminothermic reactions.

This master alloy capability will allow the Company to offer scandium product from the Nyngan Scandium Project in a form that is used directly by aluminum alloy manufacturers globally, either major integrated manufacturers or smaller wrought or casting alloy consumers.

#### **Research Highlights:**

- Program achieved full 2% target product quality requirement,
- Sc recoveries from oxide exceeded target, demonstrated in final tests,
- The microstructure and metal quality meet major alloy producers’ specifications,
- Rapid kinetics achieved, important for commercial viability,
- Individual testing batches done at 4kg scale, and
- Successful program testing forms a basis for a larger scale demonstration facility, supporting large scale samples required for industrial aluminum alloy trials.

### **Focus on Aluminum Alloy Applications for Scandium Products**

Our focus is on the use of scandium as an alloying ingredient in aluminum-based products. The specific scandium product forms we intend to sell from the Nyngan project include both scandium oxide ( $\text{Sc}_2\text{O}_3$ ) and aluminum-scandium master alloys (Al-Sc 2%).

Scandium as an alloying agent in aluminum allows for aluminum metal products that are much stronger, more easily weldable and exhibit improved performance at higher temperatures than current aluminum-based materials. This means lighter structures, lower manufacturing costs and improved performance in areas that aluminum alloys do not currently compete.

## **Aluminum Alloy Research Partner – Alcereco**

In 2015, the Company entered into a memorandum of understanding (“MOU”) with Alcereco Inc. of Kingston, Ontario (“Alcereco”), forming a strategic alliance to develop markets and applications for aluminum alloys containing scandium. This MOU represented keen mutual interest in foundry-based test work on aluminum alloys containing scandium, based on understandings that Alcereco’s team had gained from prior work with Alcan Aluminum, and based on SCY’s twin goals of understanding and identifying quality applications for scandium, and also understanding the scandium value proposition for customers.

The Company subsequently sponsored considerable research work with the Alcereco team. This work has developed and documented the improvement in strength characteristics scandium can deliver to aluminum alloys without degrading other key properties. The Alcereco team has run multiple alloy mix programs with varied scandium loading, in order to look at response to scandium additions on a cost/benefit basis. This work has been done in the context of industries and applications where these alloys are suitable for application today. The programs focused on 1000 series, 3000 Series, 5000 Series and 7000 Series Al-Sc alloys, and have served to make independent data and volume samples available for sales efforts.

Along with the signing of the MOU in 2015, the parties also signed an offtake agreement for scandium sales from the Nyngan Scandium Project. The 2015 offtake agreement specified product prices, annual delivery volumes, and timeframes for commencement of delivery of scandium oxide product. This offtake agreement expired in late 2017 and was renewed on similar price/volume terms, although the sale product was redefined to an aluminum-scandium 2% master alloy. Neither of these offtake agreements contained a mandatory annual minimum purchase volume of scandium product by Alcereco, nor any requirement for payment in lieu of purchase.

The 2017 Alcereco offtake agreement expired in December 2020 and was not renewed by the parties. Alcereco was seeking new company sponsorship at that time, was financially distressed, and the parties could see no benefit to renew under those circumstances. Alcereco had notified SCY of a planned closure of operations in December, with future re-start possibilities unknown. Alcereco halted operations in late December, at which time all current programs with SCY were completed.

The results of our research work with Alcereco are positive, and consistent with the body of published literature available today on aluminum scandium alloys. We are observing noteworthy strengthening effects with scandium additions at and above 0.1%, and dramatic strengthening improvements with additions of 0.3%, while preserving or enhancing other alloy properties and characteristics. We have also demonstrated that alloy hardening process techniques can have significant effect on the final alloy properties, offering the opportunity to tune alloy characteristics to suit specific applications. These findings belong to SCY and can continue to be shared with select potential customers, as is deemed relevant to their specific areas of commercial interest.

### ***Letters of Intent***

During 2018 and 2019, the Company announced that it entered into letter of intent (“LOI”) agreements with nine unrelated partnering entities. In each LOI, we have agreed to contribute scandium samples, either in form of scandium master alloy product, or aluminum-scandium alloy product, for trial testing by the partners in their downstream manufacturing applications. Each of the parties to the LOI agreements have agreed to report the parameters and general results of the testing program utilizing these scandium-containing alloys, upon completion of testing.

These formal LOI agreements, with distinct industry segment leaders, represent a key marketing program demonstrating precisely how scandium will perform in specific products, and in production-specific environments. Potential scandium customers insist on these sample testing opportunities, directly in their research facilities or on their shop floor, to ensure their full understanding of the impacts, benefits, and costing implications of introducing scandium into their traditional aluminum feedstocks.

The partnering entities in these formal 2018-2019 LOI agreements are set out below:

Austral Ltd. (“Austral”) headquartered in Henderson, Western Australia, (Australia). Austral is a public corporation, listed on the Australian Stock Exchange (ASX), with shipbuilding facilities in Perth, Australia, Mobile, Alabama (USA), Vung Tau, Vietnam and Balamban, Cebu (Philippines). The company maintains a focus on research and development of emerging maritime technologies and cutting-edge ship designs and is a recognized world leader in the design and construction of large aluminum commercial and defense vessels. Austral continues to test and report on material samples, both plate and wire, under this program.

Impression Technologies Ltd. (“ITL”), based in Coventry, UK. ITL is a privately-held technology company, developing and licensing its advanced aluminum forming technology, Hot Form Quench (“HFQ®”), to automotive, aerospace, rail and electronics industries, globally. ITL manufactures custom parts for customers with its patented HFQ® technology, which enables the single-pass forming of complex, lightweight, high-strength aluminum parts that cannot otherwise be similarly formed today. ITL has completed their samples testing and no further testing is planned at this time.

PAB Coventry Ltd. (“PAB”), based in Coventry, UK. PAB is a privately-held manufacturing and prototyping company offering specialty metal parts and design capabilities, serving the automotive, aerospace, defense and HVAC industries. PAB has been a well-known parts and forms supplier to the premium market segment of the British automotive industry for decades. PAB has completed their samples testing and no further testing is planned at this time.

Eck Industries Inc. (“Eck”), based in Manitowoc, Wisconsin, USA. Eck is a privately-held manufacturer of precision sand cast parts, and engineering services. Eck Industries operates a 210,000 sq. ft. facility with over 250 employees, and 110 customers. Customer segments include commercial aircraft parts, automotive and trucking cast parts, military drivetrain casings, marine propulsion system castings, and military aerospace components. ECK continues to test and report on scandium material samples, and to employ both scandium and cerium in samples they cast for their external customers.

Grainger & Worrall Ltd. (“GW”), based in Shropshire, UK. GW is a privately-held manufacturer of precision sand cast parts, and engineering services. GW is a well-recognized precision air-set sand cast parts manufacturer in the UK, specializing in low to intermediate volume cast parts for commercial automotive, motorsports/racing, defense, marine, and aerospace applications. GW has completed their samples testing and no further testing is planned at this time.

Gränges AB (“Gränges”), based in Stockholm, Sweden. Gränges is a public company, traded on the NASDAQ Stockholm Stock Exchange (GRNG:OMX), and a large global player in the rolled aluminum products business, with production assets in Europe, USA, and China, and a worldwide customer base, majority concentrated in the USA. Gränges is focused on advanced aluminum materials and holds a leading global position in rolled products for brazed heat exchangers, which it estimates at 20%. Granges has completed their samples testing and no further testing is planned at this time.

Ohm & Häner Metallwerk GmbH & Co. GK (“O&H”), based in Olpe, Germany. O&H is a privately-held manufacturer of sand cast and gravity die cast parts, using metal alloys, servicing a significant, global customer base. O&H produces over 3,000 individual cast parts, and currently works with over 40 different alloys, primarily aluminum and copper-based alloys. O&H has completed their samples testing and no further testing is planned at this time.

AML Technologies (“AML”), an Adelaide, Australia based start-up company with proprietary technology for applying aluminum alloys to additive layer manufacturing processes, also commonly referred to as 3D printing. AML continues to test and report on scandium wire samples, under this program.

Bronze-Alu Group (“BAL”), based in La Couture-Boussey, northern France. BAL is a privately-held manufacturer of precision high-pressure die cast parts, and offers prototyping, machining, finishing and engineering services, employing both aluminum and copper-based alloys. BAL exports approximately 80% of its products to customers outside of France. BAL has completed their samples testing and no further testing is planned at this time.

These LOI agreements are part of a developing strategy by the Company to engage with innovative, research-capable partners, willing to test scandium in their applications. The Company also has similar agreements with other research capable partners who do not wish to be publicly named at this time. We are selecting and approaching these specific partners because we have an understanding, from our commissioned alloy mixing programs, that scandium additions can make value-added contributions to their specific products, and we have the alloy samples to enable an expedient uptake on that validation. The scandium market for aluminum alloys needs to be built, and that construction should be seen as underway in the most direct sense.

### ***Cerium-Scandium Aluminum Alloy Program Agreement***

On February 27, 2020, the Company announced signing a Program Agreement with Eck Industries (“ECK”) located in Manitowoc, Wisconsin, to pursue novel alloy development of a combined cerium-scandium aluminum alloy, based on previous work done independently by the companies in this area.

The companies intend to pursue alloy refinements in both wrought and cast alloy applications, specifically targeting property improvements related to strength, corrosion resistance, and heat-working tolerance, principally in A5000 series alloys.

#### **Program Highlights:**

- Joint economic and technical support to alloy design,
- Joint sharing of previous data, and new data produced from this program,
- Samples production for customer trials, either as cast products, or wrought sample shapes for various potential customers and alloy manufacturers,
- Initial high value application expected to be in marine applications, and
- Program work is protected by existing patent applications filed by ECK.

### **Use Of Scandium In Lithium-Ion Batteries**

On September 24, 2020, the Company announced the filing of a provisional patent application with the US Patent Office seeking patent rights on various applications of scandium in lithium-ion batteries. The patent application covers a number of scandium enhancements, including doping potential for both anodes and cathodes, and for solid electrolytes.

#### ***Patent Application Highlights:***

- US Patent Application filed for use of scandium in lithium-ion battery applications.
- Scandium doping applications are explained for anodes, cathodes and electrolytes.
- Scandium offers conductivity advantages as a dopant, over other options, and
- Scandium in other aluminum components offers numerous property improvements, including conductivity, strength and corrosion resistance.

#### ***Patent Application Discussion:***

Rechargeable lithium-ion batteries (LIBs) are a staple of everyday life. The search for improved performance through design and materials advances is intense today. Considerable effort is being expended in developing next-generation materials for LIBs that will make batteries safer, lighter, more

durable, faster to charge, more powerful, and more cost-effective. A sampling of some these efforts follows:

- Minimizing or removing cobalt from cathode materials, based on cost, supply and geographic sourcing issues.
- Improving the durability of liquid electrolytes with dopants, or substitution with safer and higher performing liquid or solid electrolyte systems.
- Designing for higher voltage potential by utilizing different anode or cathode materials.
- Determining combinations of metals that can better withstand harsh internal conditions.

Scandium, along with other specialty metals, has a clear role to play in each of these areas.

One particularly promising area for scandium contributions is in a lithium nickel manganese oxide (LNMO) battery. The cathode in this design substitutes manganese for cobalt and supports a higher nickel content as well. The substitution then delivers higher working potentials (voltage), higher energy densities, and faster charge/discharge rates, all of which offer the promise of improved battery performance.

Delivering on that promise requires a number of improvements, including employing a dopant for stabilization of the manganese in the LNMO cathode, potential stabilization of lithium titanate (LTO) anode materials as well, and use of dopants to improve the conductivity of both these anode and cathode materials. Conventional liquid electrolytes may see improved function and longevity with the improved cathode and anode conductivity. Scandium represents a suitable and effective dopant in each of these applications.

Solid state electrolytes (SSEs) represent another potential break-through improvement in LIBs. They will handle higher voltages, higher temperatures, greater power densities, are potentially easier to package, and are considered safer in use. Scandium represents a suitable and effective dopant in these applications, analogous to the use of scandium to stabilize solid zirconia electrolytes in solid oxide fuel cells. Recently technical papers (available upon request) covering the use of Lithium Super Ion Conductors (LiSICON) for SSEs have indicated that primary compounds containing scandium, such as  $\text{Li}_3\text{Sc}_2(\text{PO}_4)_3$ ,  $\text{LiScP}_2\text{O}_7$  and  $\text{Li}_3\text{Sc}(\text{BO}_3)_2$ ,  $\text{LiScO}_2$  as well as certain doped compounds such as  $\text{Li}_{1.33}\text{ScSi}_{0.33}\text{P}_{1.67}\text{O}_7$ ,  $\text{Li}_{3.375}\text{Mg}_{0.375}\text{Sc}_{0.625}(\text{BO}_3)_2$ ,  $\text{Li}_{1.5}\text{Al}_{0.33}\text{Sc}_{0.17}\text{Ge}_{1.5}(\text{PO}_4)_3$ , etc. can provide desirable crystal structural frameworks for solid state electrolytes. Non-oxide LiSICON fast conductors have also been identified recently, such as some lithium cryolite types:  $\text{Li}_3\text{ScCl}_6$ , as well as its fluoride counterpart  $\text{Li}_3\text{ScF}_6$ .

Lithium-ion batteries employ aluminum in a number of areas, specifically in cathode structure, current connectors, and in general battery structure. Aluminum-scandium alloys represent an enhanced aluminum alloy option, based on their combination of conductivity and strength.

The intent of this SCY patent filing was to advise the battery industry that scandium is a prospective dopant choice for enhanced performance of LIBs, both under existing design parameters and in particular for next-generation LNMO batteries. We want to ensure that battery research and design groups consider scandium additions, amongst their various materials choices, as they race to build a better lithium-ion battery.

## **Other Properties Review**

### **Honeybugle Scandium Property (NSW, Australia)**

On April 2, 2014, the Company announced that it had secured a 100% interest in an exploration license (EL 7977) covering 34.7 square kilometers in New South Wales, Australia. The license area we call the 'Honeybugle Scandium Property' is located approximately 24 kilometers west-southwest from the

Company's Nyngan Scandium Project and approximately 36 kilometers southwest from the town of Nyngan, NSW.

Exploration rights for the Honeybugle Scandium Property include certain minimum expenditure requirements. The Company intends to fulfill those minimum expenditure requirements.

### *Honeybugle Drill Results*

On May 7, 2014, the Company announced completion of an initial program of 30 air core ("AC") drill holes on the property, specifically at the Seaford anomaly, targeting scandium (Sc). Results on 13 of these holes are shown in detail, in the table below. These holes suggest the potential for scandium mineralization on the property similar to Nyngan.

Highlights of initial drilling program results include the following:

- The highest 3-meter intercept graded 572 ppm scandium (hole EHAC 11).
- EHAC 11 also generated two additional high grade scandium intercepts, grading 510 ppm and 415 ppm, each over 3 meters.
- The program identified a 13-hole cluster which was of particular interest; intercepts on these 13 holes averaged 270 ppm scandium over a total 273 meters, at an average continuous thickness of 21 meters per hole, representing a total of 57% (354 meters) of total initial program drilling.
- The 13 holes produced 29 individual (3-meter) intercepts over 300 ppm, representing 31% of the mineralized intercepts in the 273 meters of interest.
- This initial 30-hole AC exploratory drill program generated a total of 620 meters of scandium drill/assay results, over approximately 1 square kilometer on the property.

### **Kiviniemi Scandium Property (Eastern Finland Province, Finland)**

On September 25, 2017, the Company announced that its wholly-owned subsidiary company, Scandium International Mining Corp., Norway AS, was granted a reservation on an Exploration License for the Kiviniemi Scandium property in central Finland from the Finnish regulatory body governing mineral exploration and mining in Finland. The exploration license was subsequently granted during August 2018.

The Geological Survey of Finland ("GTK") conducted airborne survey work on the area in 1986, conducted exploration drilling on the property in 2008-2010, and published those program results on their public GTK website in 2016. The Company's Exploration License area is approximately 24.6 hectares (0.25 square kilometer), identical to the historic GTK exploration license on the property.

### *Highlights*

- Kiviniemi property previously identified for scandium and explored by GTK.
- Property is a high iron content, medium grade scandium target, located on surface, with on-site upgrade potential.
- Early resource upgrade work done for GTK promising, confirmed by SCY.
- Property is all-weather accessible, close to infrastructure.
- Finland location is mining-friendly and ideally suited to EU customer markets.

### *Kiviniemi Summary*

The Kiviniemi property represents a medium grade scandium resource target that has remained unrecognized and overlooked by exploration work, largely due to the absence of the more commonly sought-after minerals in the region, specifically copper, nickel and cobalt. We believe that Kiviniemi is Europe's largest underdeveloped primary scandium resource.

The target has benefited significantly from valuable early exploration work by the GTK, which has advanced the property to a stage where successful metallurgical investigations may prove value that offsets grade concerns. SCY estimates roughly US\$2M of work value has been directed at this property to date, including field work, drilling programs, assay work, overheads, and metallurgical upgrade studies, but firm numbers are not available.

### Operating results - Revenues and Expenses

The Company's results on a year-to-date basis reflect lower operating costs. Cash expenditures were \$139,888 lower due to lower consulting fees, exploration costs, salaries, and general and administrative fees. The lower exploration costs reflect a refund received for the costs associated with filing a second mineral lease application that was incurred due to the landowner objection of our original mineral lease application. The landowner objection was dismissed validating the original mineral lease.

The Company's results when comparing Q2 2022 to Q2 2021 reflect a decrease of \$70,303 in cash operating costs due to lower consulting fees, exploration costs, salaries, and general and administrative fees. The lower exploration costs are detailed in the previous paragraph.

### Summary of quarterly results

A summary of the Company's quarterly results is shown below at Table 1.

**Table 1. Quarterly Results Summary (US\$)**

|   | 2022   |         | 2021      |           |           |           | 2020      |           |
|---|--------|---------|-----------|-----------|-----------|-----------|-----------|-----------|
|   | Q2     | Q1      | Q4        | Q3        | Q2        | Q1        | Q4        | Q3        |
| Net Sales   | -      |         |           | -         | -         | -         | -         | -         |
| Net Income (Loss) attributable to Scandium Mining Corp. Basic and diluted | 28,578 | 522,946 | (215,111) | (278,704) | (761,080) | (312,137) | (706,306) | (265,057) |
| Net Income (Loss) per share attributable to Scandium Mining Corp.         | (0.00) | (0.0)   | (0.00)    | (0.00)    | (0.00)    | (0.00)    | (0.00)    | (0.00)    |

### Results of Operations for the three months ended June 30, 2022

The net profit for the quarter was \$28,578, an increase of \$789,658 from a loss of \$761,080 in the same quarter of the prior year. Details of the individual items contributing to the net profit are set out below at Table 2:

**Table 2. Variance Analysis for Net Loss**

|  |
|--|
| <b>Q1 2022 vs. Q1 2021 – Variance Analysis</b> |
|--|

| Item                         | Variance Favourable / (Unfavourable) | Explanation   |
|------------------------------|--------------------------------------|---|
| Stock-based compensation     | \$521,938                            | Stock options granted in Q2 2022 will vest and be expensed over an 18-month period while stock options granted in Q2 2021 vested and were expensed immediately. Also, the options granted in Q2 2021 were at a higher price resulting in higher amounts expensed. These costs are non-cash costs. |
| Accrual reversal             | \$251,600                            | In the current quarter, the Company reversed additional accrued liabilities for certain staff who are no longer with the Company. No such item was incurred in the comparable quarter in 2021.  |
| Salaries and benefits        | \$70,335                             | This favorable variance is due to the resignation of senior staff that have not been replaced in Q1 2022.   |
| Exploration                  | \$57,720                             | In Q2 2022, the Company received a refund for the cost of a new mine lease after the original mine lease was objected to. The cost of the second mine lease was refunded as it was determined that the original mine lease was valid.   |
| Consulting                   | \$34,526                             | The resignation of a consultant in Q1 2022 led to this favorable variance.  |
| Insurance                    | \$1,751                              | Lower fees were negotiated in Q4 2021 resulting in lower costs in the current quarter when compared to Q2 2021.   |
| Foreign exchange             | \$1,689                              | The gain is due to the strengthening of the US\$ against both the Australian and Canadian dollar.   |
| Amortization                 | \$(2,094)                            | In Q2 2022, all depreciable assets were disposed of resulting in this negative variance.  |
| Professional fees            | \$(10,026)                           | Audit fees have increased resulting in this unfavorable variance when compared to Q2 2021.  |
| Loss on derivative liability | \$(53,741)                           | Warrants issued in Q2 2022 are in Canadian funds. As the exchange rate with the Canadian dollar fluctuates, a gain or loss on this is recorded in the financial statements. In Q2 2022 a loss was calculated. This is a non-cash item.  |
| General and administrative   | \$(84,040)                           | The increase in Q2 2022 when compared to the same period one year ago is due to property tax  |

| Q1 2022 vs. Q1 2021 – Variance Analysis |                                      |  |
|---|--------------------------------------|--|
| Item                                    | Variance Favourable / (Unfavourable) | Explanation  |
|   |                                      | refund received in Australia in the comparable period in 2021. |

### Results of Operations for the six months ended June 30, 2022

The net profit for the six-month period was \$551,524, an increase of \$1,624,741 from a loss of \$1,073,217 in the same quarter of the prior year. Details of the individual items contributing to the net profit are set out below at Table 2:

**Table 2. Variance Analysis for Net Loss**

| Six months ended June 30, 2022, vs. six months ended June 30, 2021 – Variance Analysis |                                      |   |
|--|--------------------------------------|---|
| Item   | Variance Favourable / (Unfavourable) | Explanation   |
| Accrual reversal   | \$1,032,044                          | In the current six-month period, the Company reversed accrued liabilities for certain staff who are no longer with the Company. No such item was incurred in the comparable six-month period in 2021.   |
| Stock-based compensation   | \$521,938                            | Stock options granted in Q2 2022 will vest and be expensed over an 18-month period while stock options granted in Q2 2021 vested and were expensed immediately. Also, the options granted in Q2 2021 were at a higher price resulting in higher amounts expensed. These costs are non-cash costs. |
| Salaries and benefits  | \$96,048                             | This favorable variance is due to the resignation of senior staff that have not been replaced in Q1 2022.   |
| Exploration  | \$53,785                             | In Q2 2022, the Company received a refund for the cost of a new mine lease after the original mine lease was objected to. The cost of the second mine lease was refunded as it was determined that the original mine lease was valid.   |
| Consulting   | \$42,622                             | The resignation of a consultant in Q1 2022 led to this favorable variance.  |

| <b>Six months ended June 30, 2022, vs. six months ended June 30, 2021 – Variance Analysis</b> |   |  |
|---|---|--|
| <b>Item</b>   | <b>Variance Favourable / (Unfavourable)</b> | <b>Explanation</b>   |
| Insurance   | \$2,800                                     | Lower fees were negotiated in Q4 2021 resulting in lower costs in the current six-month period when compared to the comparable period in 2021.   |
| Amortization  | \$(2,042)                                   | In Q2 2022, all depreciable assets were disposed of resulting in this negative variance.   |
| Foreign exchange  | \$(13,346)                                  | The loss is due to the weakening from December 31, 2021, of the US\$ against both the Australian and Canadian dollar.  |
| Professional fees   | \$(15,313)                                  | Audit fees have increased resulting in this unfavorable variance when compared to the six-month period in 2021.  |
| General and administrative  | \$(40,054)                                  | The increase in Q2 2022 when compared to the same period one year ago is due to property tax refund received in Australia in the comparable period in 2021 which is partially offset by overall lower costs in 2022.                   |
| Loss on derivative liability  | \$(53,741)                                  | Warrants issued in Q2 2022 are in Canadian funds. As the exchange rate with the Canadian dollar fluctuates, a gain or loss on this is recorded in the financial statements. In Q2 2022 a loss was calculated. This is a non-cash item. |

### **Cash flow discussion for the six-month period ended June 30, 2022, compared to June 30, 2021**

The cash outflow for operating activities was \$506,305, an increase of \$268,327 (June 30, 2021 – \$237,978), due mainly to payment of accrued salaries in Q2 2022.

Cash inflows from financing activities of \$2,726,423 reflect the private placement and options being exercised in the current six-month period when compared to the six-month period ended June 30, 2021, in which options exercised brought in \$227,064.

### **Financial Position**

#### *Cash*

The Company's cash position increased during the six-month period by \$2,040,118 to \$2,134,012 (December 31, 2021 - \$93,894) due mainly to a private placement carried out in Q2 2022.

### *Prepaid expenses and receivables*

Prepaid expenses and accounts receivable decreased by \$15,127 to \$19,915 during the three-month period due to the expensing of the prepaids without additional funds being added to the prepaid accounts (December 31, 2021 - \$35,042).

### *Property and equipment*

Property and equipment consisted of computer equipment at the Nevada office. The decrease of \$2,932 to \$Nil (December 2021 - \$2,932) is due to the disposal of that computer equipment in the six-month period.

### *Mineral interests*

Mineral interests remained the same at \$704,053.

### *Accounts payable, accrued liabilities and accounts payable with related parties*

Accounts payable have increased by \$617,444 to \$2,345,158 (December 2021– \$1,727,714) due to the warrant derivative liability being classed as a current liability which was partially offset by the write off of certain salary deferrals. Excluding the derivative liability, a decrease of \$1,217,234 took place for this item.

### *Capital Stock*

Capital stock increased by \$1,015,318 to \$111,164,495 (December 31, 2021 - \$110,149,177 due to the private placement in Q2 2022 as well as options exercised.

Additional paid-in capital increased by \$17,773 to \$6,909,283 (December 31, 2021 - \$6,891,510) reflecting stock-based compensation expensing which was offset by stock options exercised.

## **Liquidity and Capital Resources**

At June 30, 2022, the Company had a working capital of \$1,823,447 including cash of \$2,314,012, as compared to a working capital of \$(1,598,778) including cash of \$93,894 at December 31, 2021.

At June 30, 2022, the Company had a total of 35,015,000 stock options exercisable between C\$0.065 and C\$0.30 that have the potential upon exercise to generate a total of C\$4,872,000 in cash over the next five years. There is no assurance that these securities will be exercised. At June 30, 2022, the Company had a total of 37,803,218 share purchase warrants exercisable at C\$0.1075 that have the potential upon exercise to generate a total of C\$4,603,846 in cash over the next 5 years. The Company's continued development is contingent upon its ability to raise sufficient financing both in the short and long term. There are no guarantees that additional sources of funding will be available to the Company; however, management is committed to pursuing all possible sources of financing in order to execute its business plan. The Company continues its cost control measures to conserve cash to meet its operational obligations.

## **Outstanding share data**

At the date of this report, the Company has 355,860,813 issued and outstanding common shares, 37,803,218 purchase warrants currently outstanding at an exercise price of C\$0.1075 and 35,015,000 stock options currently outstanding at a weighted average exercise price of C\$0.14.

## **Off-balance sheet arrangements**

At June 30, 2022, the Company had no material off-balance sheet arrangements such as guarantee contracts, contingent interest in assets transferred to an entity, derivative instruments obligations or any obligations that trigger financing, liquidity, market or credit risk to the Company.

### **Transactions with related parties**

During the 6-month period ended June 30, 2022, the Company reversed \$669,733 of accruals to related parties. No such transactions occurred in the 6-month period ended June 30, 2021.

During the 6-month period ended June 30, 2022, the Company expensed \$80,688 for stock-based compensation for stock options issued to Company directors. During the 6-month period ended June 30, 2021, the Company expensed \$441,277 for stock-based compensation for stock options issued to Company directors.

During the 6-month period ended June 30, 2022, the Company expensed a consulting fee of \$17,000 to one of its directors. During the 6-month period ended June 30, 2021, the Company expensed a consulting fee of \$51,000 to one of its directors.

As at June 30, 2022, the Company owed \$187,655 to an officers of the Company. (December 31, 2021 - \$1,159,713)

### **Proposed Transactions**

There are no proposed transactions outstanding other than as disclosed.

### **Critical Accounting Estimates**

The preparation of financial statements in conformity with generally accepted accounting policies requires management of the Company to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. These estimates are based on past experience, industry trends and known commitments and events. By their nature, these estimates are subject to measurement uncertainty and the effects on the financial statements of changes in such estimates in future periods could be significant. Actual results will likely differ from those estimates.

#### *Stock-based compensation*

The Company uses the Black-Scholes option pricing model to calculate the fair value of stock options and compensatory warrants granted. This model is subject to various assumptions. The assumptions the Company makes will likely change from time to time. At the time the fair value is determined, the methodology the Company uses is based on historical information, as well as anticipated future events. The assumptions with the greatest impact on fair value are those for estimated stock volatility and for the expected life of the instrument.

#### *Future income taxes*

The Company accounts for tax consequences of the differences in the carrying amounts of assets and liabilities and their tax bases using tax rates expected to apply when these temporary differences are expected to be settled. When the future realization of income tax assets does not meet the test of being more likely than not to occur, a valuation allowance in the amount of the potential future benefit is taken and no future income tax asset is recognized. The Company has taken a valuation allowance against all such potential tax assets.

#### *Mineral properties and exploration and development costs*

The Company capitalizes the costs of acquiring mineral rights at the date of acquisition. After acquisition, various factors can affect the recoverability of the capitalized costs. The Company's recoverability evaluation of our mineral properties and equipment is based on market conditions for minerals, underlying mineral resources associated with the assets and future costs that may be required for ultimate realization through mining operations or by sale. The Company is in an industry that is exposed to a number of risks and uncertainties, including exploration risk, development risk, commodity price risk, operating risk, ownership and political risk, funding and currency risk, as well as environmental risk. Bearing these risks in mind, the Company has assumed recent world commodity prices will be achievable. The Company has considered the mineral resource reports by independent engineers on the Nyngan Scandium Project in considering the recoverability of the carrying costs of the mineral properties. All of these assumptions are potentially subject to change, out of our control, however such changes are not determinable. Accordingly, there is always the potential for a material adjustment to the value assigned to mineral properties and equipment.

### **Recent Accounting Pronouncements**

Accounting Standards Update 2021-04 - Earnings Per Share (Topic 260), Debt Modifications and Extinguishments (Subtopic 470-50), Compensation—Stock Compensation (Topic 718), and Derivatives and Hedging Contracts in Entity's Own Equity (Subtopic 815-40). This update is to provide clarity around earnings per share calculations and is effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. The Company has reviewed this standard and concluded that there is no impact on its financial statements.

### **Financial instruments and other risks**

The Company's financial instruments consist of cash, receivables, accounts payable, accounts payable with related parties, accrued liabilities and promissory notes payable. It is management's opinion that the Company is not exposed to significant interest, currency or credit risks arising from its financial instruments. The fair values of these financial instruments approximate their carrying values unless otherwise noted. The Company has its cash primarily in three commercial banks: (i) one in Vancouver, British Columbia, Canada, (ii) one in Mackay, Queensland, Australia, and (iii) one in Chicago, Illinois, United States.

### **Information Regarding Forward-Looking Statements**

This Management's Discussion and Analysis of Financial Condition and Results of Operations contain certain forward-looking statements. Forward-looking statements include but are not limited to those with respect to the prices of metals, the estimation of mineral resources and reserves, the realization of mineral reserve estimates, the timing and amount of estimated future production, costs of production, capital expenditures, costs and timing of the development of new deposits, success of exploration activities, permitting time lines, currency fluctuations, requirements for additional capital, government regulation of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims and limitations on insurance coverage and the timing and possible outcome of pending litigation. In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "estimates", "intends", "anticipates" or "does not anticipate" or "believes" or variations of such words and phrases, or statements that certain actions, events or results "may", "could", "would", or "will" be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance, or achievements of Scandium International to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, the actual results of current exploration activities, conclusions or economic evaluations, changes in project parameters as plans continue to be refined, possible variations in grade and or recovery rates, failure of plant, equipment or processes to operate as anticipated, accidents, labor disputes or other risks of the mining industry, delays in obtaining government approvals or

financing or incompleteness of development or construction activities, risks relating to the integration of acquisitions, to international operations, and to the prices of metals and risks relating to the COVID-19 pandemic. While Scandium International has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. Scandium International expressly disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

### **Item 3. Quantitative and Qualitative Disclosures About Market Risk**

Not applicable.

### **Item 4. Controls and Procedures**

#### **Disclosure controls and procedures**

The Company's management is responsible for establishing and maintaining adequate disclosure controls and procedures. The Company's management, including our principal executive officer and our principal financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)) as of the end of the period covered by this report. Based on that evaluation, the principal executive officer and principal financial officer concluded that as of the end of the period covered by this report, the Company has maintained effective disclosure controls and procedures in all material respects, including those necessary to ensure that information required to be disclosed in reports filed or submitted with the SEC (i) is recorded, processed, and reported within the time periods specified by the SEC, and (ii) is accumulated and communicated to management, including the principal executive officer and principal financial officer, as appropriate to allow for timely decision regarding required disclosure.

#### **Changes in Internal Control**

There have been no changes in internal control over financial reporting that occurred during the last fiscal quarter that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

## PART II – OTHER INFORMATION

### Item 1. Legal Proceedings

We are not aware of any material current, pending, or threatened litigation with respect to the Company.

### Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

Not applicable.

### Item 3. Defaults Upon Senior Securities.

Not applicable.

### Item 4. Mine Safety Disclosures

Not applicable.

### Item 5. Other Information

Not applicable.

### Item 6. Exhibits

- 31.1 Certification of the Principal Executive Officer, pursuant to Rule 13a-14(a) or 15d-14(a) of the U.S. Securities Exchange Act of 1934 (filed herewith)
- 31.2 Certification of the Principal Financial Officer, pursuant to Rule 13a-14(a) or 15d-14(a) of the U.S. Securities Exchange Act of 1934 (filed herewith)
- 32.1 Section 1350 Certification of the Principal Executive Officer (filed herewith)
- 32.2 Section 1350 Certification of the Principal Financial Officer (filed herewith)
- 101 Financial Statements from the Quarterly Report on Form 10-Q of the Company for the three months ended March 31, 2021, formatted in XBRL (filed herewith)

## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: August 10, 2022

**SCANDIUM INTERNATIONAL MINING CORP.**  
(Registrant)

By:           /s/ "Peter Evensen"          

Principal Executive Officer

By:           /s/ "Chris Evensen"          

Principal Financial Officer