



**ARIZONA SONORAN COPPER COMPANY INC.**

ANNUAL INFORMATION FORM  
FOR THE FINANCIAL YEAR ENDED DECEMBER 31, 2021

March 30, 2022

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## INTRODUCTORY NOTES

### Cautionary Statement Regarding Forward-Looking Information

This annual information form (this "AIF") of Arizona Sonoran Copper Company Inc. (the "**Company**" or "**ASCU**") contains or incorporates by reference "forward-looking information" within the meaning of applicable Canadian securities laws. Forward-looking information includes statements that use forward-looking terminology such as "may", "could", "would", "will", "intend", "plan", "expect", "budget", "estimate", "forecast", "schedule", "anticipate", "believe", "continue", "potential" or the negative or grammatical variation thereof or other variations thereof or comparable terminology. Such forward-looking information includes, without limitation, statements with respect to Mineral Resource (defined below) estimates; targeting additional Mineral Resources and expansion of deposits; the capital and operating cost estimates and the economic analyses (including cashflow projections) from the Integrated Cactus PEA (defined below); the expected outcomes of the Integrated Cactus PEA development plan; the Company's expectations, strategies and plans for the Cactus Project (defined below), including the Company's planned exploration and development activities; the results of future exploration and drilling and estimated completion dates for certain milestones; successfully adding or upgrading Mineral Resources and successfully developing new deposits; the costs and timing of future exploration and development, including the timing for completion and commencement of production; the timing and amount of future production at the Cactus Mine (defined below); the timing, receipt and maintenance of approvals, licenses and permits from the federal and state government agencies and from any other applicable government, regulator or administrative body; opportunities to expand operations and resources; the future supply and demand of copper; the impact of technological developments on the demand of copper; the environmental impact of the Company's mining operations; fees associated with investor relations and ongoing legal and advisory fees; costs associated with being a public issuer; the revision of the Company's directors' and officers' liability insurance policy; expected production at the Cactus Project; future financial or operating performance and condition of the Company and its business, operations and properties; the ability and timing to complete of initial development of the Cactus Project and commence commercial production (if at all); and any other statement that may predict, forecast, indicate or imply future plans, intentions, levels of activity, results, performance or achievements.

Forward-looking information is not a guarantee of future performance and is based upon a number of estimates and assumptions of management, in light of management's experience and perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances, as of the date of this AIF including, without limitation, assumptions about: favourable equity and debt capital markets; the ability to raise any necessary additional capital on reasonable terms to advance the development of the Cactus Project and pursue planned exploration; future prices of copper and other metal prices; the timing and results of exploration and drilling programs; the accuracy of any Mineral Resource estimates; the geology of the Cactus Project being as described in the Integrated Cactus PEA; the metallurgical characteristics of the Cactus Project being suitable for processing; the successful operation of the processing facility; production costs; the accuracy of budgeted exploration and development costs and expenditures, including to complete development of the infrastructure at the Cactus Project; the price of other commodities such as fuel; future currency exchange rates and interest rates; operating conditions being favourable, including whereby the Company is able to operate in a safe, efficient and effective manner; political and regulatory stability; the receipt of governmental and third party approvals, licences and permits on favourable terms; obtaining required renewals for existing approvals, licences and permits and obtaining all other required approvals, licences and permits on favourable terms; sustained labour stability; stability in financial and capital goods markets; and availability of equipment. While the Company considers these assumptions to be reasonable, the assumptions are inherently subject to significant business, social, economic, political, regulatory, competitive, and other risks and uncertainties, contingencies and other factors that could cause actual actions, events, conditions, results, performance or achievements to be materially different from those projected in the forward-looking information. Many assumptions are based on factors and events that are not within the control of the Company and there is no assurance they will prove to be correct.

Furthermore, such forward-looking information involves a variety of known and unknown risks, uncertainties and other factors which may cause the actual plans, intentions, activities, results, performance or achievements of the Company to be materially different from any future plans, intentions, activities, results, performance or achievements expressed or implied by such forward-looking information. Such risks include, without limitation: copper prices are volatile and may be lower than expected; product alternatives may reduce demand for the Company's products;

estimating mineral reserves and mineral resources is risky and no assurance can be given that such estimates will be achieved; nature of mineral exploration, development and mining involves significant financial risks; dependence on the success of the Cactus Project as the principal operation of the Company; the Company may not be able to obtain further financing and continue as a going concern; the Company is reliant on appropriate governmental authorities to obtain, renew and maintain the necessary permits for Company operations; estimates of capital cost and operating costs may be lower than actual costs; geological hydrological and climatic events could suspend future mining operations or increase costs; title to mineral properties may be challenged or impugned; social and environmental activism can negatively impact exploration, development and mining activities; the Company's success is dependent on developing and maintaining relationships with local communities, stakeholders and its labour force; success of the Company and the successful development of the Cactus Project depends on retaining the skills of the Company's management and key personnel; operations during mining cycle peaks are more expensive; mining operations are very risky; inadequate infrastructure may constrain mining operations; risks from unknown hazards; changes in climate conditions may affect the Company's future operations; substantial government regulation and changes to regulation or more stringent implementation of regulations could have a material adverse effect on the Company's operations and financial condition; regulation of greenhouse gas emissions and climate change issues may adversely affect the Company's operations and markets; risks associated with changing environmental legislation and regulations; the mining industry is intensely competitive; the Company may incur losses and experience negative operating cash flow for the foreseeable future; the Company's insurance coverage may be inadequate and result in losses; currency fluctuations can result in unanticipated losses; enforcement of judgements and effecting service of process on directors may be difficult due to residency outside of Canada; the directors and officers may have conflicts of interest with the Company; Tembo (defined below) exercises significant control over the Company; current and future debt ranks senior to Common Shares (defined below); future acquisitions may require significant expenditures or dilution and may result in inadequate returns; dependence on information technology systems; the Company may be subject to costly legal proceedings and securities class action litigation; risks related to the Company's holding company structure; investors may lose their entire investment; dilution from equity financing could negatively impact holders of Common Shares; equity securities are subject to trading and volatility risks; sales by existing shareholders can reduce share prices; no intention to pay dividends; decline in price and trading volume of Common Shares if securities or industry analysts do not publish research or publish inaccurate or unfavourable research about the Company's business; reduction in share prices due to global financial conditions; COVID-19 public health crisis; and international conflict. Although the Company has attempted to identify important factors that could cause actual actions, events, conditions, results, performance or achievements to differ materially from those described in forward-looking information, there may be other factors that cause actions, events, conditions, results, performance or achievements to differ from those anticipated, estimated or intended. See "*Risk Factors*" for a discussion of certain factors prospective investors should carefully consider before deciding to invest.

The Company cautions that the foregoing lists of important assumptions and factors are not exhaustive. Other events or circumstances could cause actual results to differ materially from those estimated or projected and expressed in, or implied by, the forward-looking information contained herein. There can be no assurance that forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, prospective investors should not place undue reliance on forward-looking information.

### **Currency and Exchange Rate Information**

In this AIF, unless otherwise indicated, all references to "\$" or "dollars" refer to Canadian dollars, all references to "US\$" refer to United States dollars.

The following table sets forth: (i) the rates of exchange for U.S. dollars expressed in Canadian dollars in effect at the end of the periods indicated; (ii) the average exchange rates in effect during such periods; (iii) the high rate of exchange in effect during such periods; and (iv) the low rate of exchange in effect during such periods, such rates, in each case, based on the noon or daily average exchange rate, as applicable, for conversion of one U.S. dollar to Canadian dollars as reported by the Bank of Canada.

	Year Ended December 31, 2021 <sup>(1)</sup>	Year Ended December 31, 2020 <sup>(1)</sup>	Year Ended December 31, 2019 <sup>(1)</sup>
Period End	1.2678	1.3415	1.2988
Average	1.2535	1.3412	1.3269
High	1.2942	1.4058	1.3600
Low	1.2040	1.2808	1.2988

**Notes:**

(1) Exchange rate based on the daily average rate of exchange as reported by the Bank of Canada.

As at 4:00 P.M. March 30, 2022, the daily average rate of exchange as reported by the Bank of Canada was US\$1.00 = \$1.2470.

**Technical Terms and Abbreviations**

Unless the context otherwise requires, technical terms or abbreviations not otherwise defined in this AIF shall have the following meanings:

Abbreviation	Definition
Afy	Acre foot per year
Ag	silver
Au	Gold
Cu	Copper
ft	foot
g	gram
g/t	grams per short ton
ha	hectare
km	kilometre
kW	kilowatt
/lb	per pound
lbs	pounds
m	metre
masl	metres above sea level
mm	millimetre
mlbs	millions of pounds
Mo	molybdenum
Moz	millions of Troy ounces
Mt	millions of short tons
MW	megawatt
MWh/yr	megawatt hours per year
PM	particulate matter
T	short ton
tpd	short tons per day

Abbreviation	Definition
µm	micrometre

The Mineral Resources for the Cactus Project (including as used in the Integrated Cactus PEA) have been estimated in accordance with the Canadian CIM Definition Standards, which are incorporated by reference in NI 43-101. The following definitions are reproduced from the CIM Definition Standards:

**"Mineral Resource"** means a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.

**"Inferred Mineral Resource"** means that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

**"Indicated Mineral Resource"** means that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors as described below in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

**"Measured Mineral Resource"** means that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

**"Mineral Reserve"** means the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at pre-feasibility or feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which Mineral Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. The public disclosure of a Mineral Reserve must be demonstrated by a pre-feasibility study or feasibility study.

**"Probable Mineral Reserve"** means the economically mineable part of an Indicated Resource, 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"** means the economically mineable part of a Measured Mineral Resource. A Proven Mineral Reserve implies a high degree of confidence in the Modifying Factors.

For the purposes of the CIM Definition Standards, **"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.

## CORPORATE STRUCTURE

### The Company

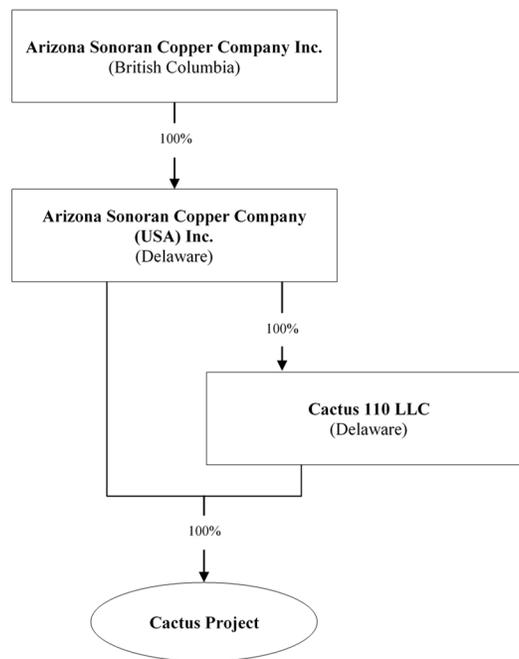
The Company was incorporated under the *Business Corporations Act* (British Columbia) (the "**BCBCA**") on April 2, 2019, under the name "Elim Mining Incorporated". On July 12, 2021, the Company changed its name from "Elim Mining Incorporated" to "Arizona Sonoran Copper Company Inc."

On November 16, 2021, the Company completed the initial public offering and secondary offering of its common shares (the "**Common Shares**"). The Company became a reporting issuer in all provinces and territories of Canada, except for Québec on November 9, 2021. The Common Shares are listed for trading on the Toronto Stock Exchange (the "**TSX**") under the symbol "ASCU". See "*General Development of the Business – Initial Public Offering*".

The Company's corporate office is located at 1545 Industrial Way, Sparks, Nevada, 89431, its main operations office is located at 950 W Elliot Road, Suite 122, Tempe, Arizona, 85284. The Company has its registered office at 666 Burrard Street, 2500 Park Place, Vancouver, British Columbia, V6C 2X8 and its Canadian head office at Simpson Tower, 401 Bay Street, Suite 2704, Box #4, Toronto, Ontario M5H 2Y4.

### Intercorporate Relationships

The Company has two wholly-owned subsidiaries, Arizona Sonoran Copper Company (USA) Inc. ("**ASCU USA**") and Cactus 110 LLC ("**Cactus 110**"), which hold the Company's interest in the Cactus Project and the assets related thereto.



## DESCRIPTION OF THE BUSINESS

### General

The Company is a mineral resource company engaged in the identification, acquisition, exploration, development and production of base metal properties in geographic regions known to have low geopolitical risk. The Company's principal asset is a 100% interest in the Cactus Project, which it acquired from ASARCO Multi-State Environmental Custodial Trust ("**ASARCO Trust**") in July 2020.

## **Business Strategy**

The Company's strategy is to explore and develop the Cactus Project towards a production decision while continuing to broaden exploration activities at the Parks/Salyer Project and the wider land package held by the Company. To execute the strategy, ASCU is currently undertaking a 16,154 m infill drilling program at the Cactus Project to support a pre-feasibility study ("**PFS**"). The Company has also begun infill drilling at the Cactus Project to target planned measured drill spacing and has budgeted exploration drilling targeting opportunities proximal to the current mine plan. At the Parks/Salyer Project, the Company has budgeted a 12-hole drill program with the intent to issue a Mineral Resource estimate

## **Specialized Skills and Knowledge**

The nature of the Company's business requires specialized skills and knowledge, which include, but are not limited to, expertise related to mineral exploration, geology, drilling, permitting, metallurgy, logistical planning, and implementation of exploration programs, as well as legal compliance, finance, and accounting. The Company expects to rely upon various legal and financial advisors, consultants and others in the operation and management of its business.

In order to attract and retain personnel with the specialized skills and knowledge required for the Company's operations, the Company maintains competitive remuneration and compensation packages. To date, the Company has been able to meet its staffing requirements. See "*Directors and Officers*" for details as to the specific skills and knowledge of the Company's directors and management.

## **Competitive Conditions**

The Company's primary business is expected to be to produce and sell copper. Prices are determined by world markets over which the Company has no influence or control. The Company's competitive position will be primarily determined by its costs compared to other producers throughout the world and its ability to maintain its financial integrity through metal price cycles. Costs are governed to a large extent by the grade, nature and location of Mineral Reserves and Mineral Resources as well as by input costs and the level of operating and management skill employed in the production process. In contrast with diversified mining companies, the Company in the shorter term will primarily be focusing on exploration and developing the development stage mine project forming part of the Cactus Project (the "**Cactus Mine**") and, if commercial production is achieved, copper production, and is therefore subject to unique competitive advantages and disadvantages related to the price of copper. The Company is strongly positioned to benefit from a rising copper price and conversely, if copper prices decrease, the Company will be at a competitive disadvantage to diversified mining companies.

Further, the Company competes with numerous other entities and individuals, including many large established mining companies having substantial capabilities and greater financial and technical resources than the Company. Such competition may result in the Company being disadvantaged in the acquisition of attractive properties. The ability of the Company to acquire attractive properties in the future will also depend on its ability to successfully construct and develop the Cactus Mine and upon the terms and conditions from time to time of arrangements with third parties.

The Company also competes with other mining companies and other third parties over sourcing raw materials and supplies in connection with its construction, development and exploration operations, as well as for skilled experienced personnel and transportation capacity. See "*Risk Factors – The mining industry is intensely competitive*".

## **Economic Dependence and Components**

The Company's business is not dependent on any contract to sell a major part of its products or to purchase a major part of its requirements for goods, services or raw materials, or on any franchise or license or other agreement to use a patent, formula, trade secret, process or trade name upon which its business depends. It is not expected that the Company's business will be affected in the current financial year by the renegotiation, amendment or termination of contracts or subcontracts.

## **Business Cycles**

Demand for and the price of copper are volatile and affected by numerous factors beyond the Company's control. See "*Risk Factors – Copper prices are volatile and may be lower than expected*".

## **Environmental Protection**

The Company's development and exploration activities are subject to various levels of federal, state, and local laws and regulations relating to the protection of the environment, including requirements for closure and reclamation of mining properties. Permitting for the Cactus Project is driven entirely by state and county regulations. Since the Cactus Acquisition (defined below) in July 2020, the Company has operated in material compliance with its environmental approvals and has successfully administered a rigorous environmental monitoring and reporting program.

The environmental conditions at the Cactus Mine have been reviewed in detail and no environmental fatal flaws that would materially impede the advancement of the Cactus Project have been identified. The Company continues to maintain rigorous baseline data collection programs required to support the future permitting of the Cactus Mine and compliance with local regulations. See "*Cactus Mine Project*".

The Company believes its operational, developmental and environmental plans adequately address the environmental risks associated with its operations and that it currently has in place the appropriate safeguards to protect the environment.

The Company believes it has appropriately accounted for the costs associated with its environmental protection, monitoring and controls; however, environmental regulations are evolving in a manner which has tended to impose higher standards with respect to permitting and environmental controls, and stricter enforcement of non-compliance penalties for companies and their directors, officers and employees with respect to compliance. As the Cactus Mine is advanced, the Company may be required to post additional security in respect of its environmental obligations. Any changes to the current environmental regulatory regime to which the Company is subject may result in increased capital costs and decreased production and revenue to the Company in the future, which could adversely affect the Company's earnings and competitive position. See "*Risk Factors – Risks from changing environmental legislation and regulations*".

## **Employees**

As of December 31, 2021, the Company had **ten** full-time employees, inclusive of executives, and **twelve** contractors. The number of employees and contractors of the Company is expected to increase during 2022 and reach approximately sixteen full-time employees and twelve contract employees and twenty contractors.

## **Foreign Operations**

The Company has established its operational headquarters in Arizona and its principal asset and only material property of the Company, the Cactus Project is located in the city of Casa Grande, Pinal County, Arizona.

## **GENERAL DEVELOPMENT OF THE BUSINESS**

The Company was incorporated under the *Business Corporations Act* (British Columbia) on April 3, 2019. The Company completed its initial public offering and secondary offering of its Common Shares on November 16, 2021 (together, the "**Offering**"). The following is a description of ASCU's business development since its incorporation.

### **Initial Public Offering**

On November 16, 2021, the Company completed the Offering of 19,066,518 Common Shares at a price of \$2.45 per common share (the "**Offering Price**") for total gross proceeds of \$46,712,969.10 with ASCU and RCF Opportunities Fund L.P. ("**RCF**") receiving gross proceeds of \$45,000,000.15 and \$1,712,968.95, respectively. The units were sold pursuant to an underwriting agreement dated November 8, 2021 (the "**Underwriting Agreement**") between the

Company, RCF, RBC Dominion Securities Inc. ("**RBC**"), Haywood Securities Inc. ("**Haywood**", together with RBC, the "**Co-Lead Underwriters**") and a syndicate of underwriters which included Canaccord Genuity Corp., Cormark Securities Inc., Stifel Nicolaus Canada Inc., Beacon Securities Limited and Paradigm Capital Inc. (collectively with the Co-Lead Underwriters, the "**Underwriters**" and each, an "**Underwriter**").

Following the receipt of its final long form prospectus on November 9, 2021, the Company became a reporting issuer in all provinces and territories of Canada, except for Québec. The Common Shares commenced trading on the TSX under the symbol "ASCU" upon the closing of the Offering on November 16, 2021.

## **Key Developments following the Offering**

### ***Cactus Project and Park / Salyer Project Updates***

Subsequent to the effective date of the Preliminary Economic Assessment (NI-43-101) produced by Stantec in relation to the Cactus Project (the "**Integrated Cactus PEA**") and the Offering, the Company continued drilling on the Cactus Project and the Parks/Salyer property in Arizona.

On November 17, ASCU announced the first set of drilling results from its 8 initial diamond drill holes for over 2,938 m (9,639 ft) along the western periphery of the Cactus West pit. The drilling demonstrates continuous leachable mineralization including extensions outwards from the modelled pit shell by at least 61 m (200 ft). Mineralization from the infill drilling remains open to the west.

On November 22 ASCU announced it began its initial 6 hole (3,658 m | 12,000 ft) drilling campaign at the Parks/Salyer property in Arizona.

On November 29, ASCU appointed Minviro Ltd. to complete a Life Cycle Assessment to review its carbon emissions framework and determine the best path towards establishing a net-zero operation at the Cactus Project. The review was based on the impact of mining, processing and refining options and solutions, and detailed environmental impacts of the operation, as outlined in the Integrated Cactus PEA.

On December 7, ASCU announced assays from two drill holes (1,133.5 m | 3,718.9 ft) in the Cactus East deposit as part of a 9,144 m (30,000 ft) Pre-Feasibility Study ("**PFS**") infill to indicated drilling program. The drilling targeted the oxide material along the periphery of the Cactus East orebody from the Integrated Cactus PEA underground mine plan, defining mineralization towards the East Fault and gathering an understanding of the geometry of the fault.

Subsequent to year-end, in February 2022, the Company announced the drill results from the first two drill holes in the 12-hole drill program at the Parks/Salyer Project, which indicated the porphyry copper grade, thickness and continuity to be improving to the north and remaining open in all directions. The planned program totals 22,000 ft (~6,700 m) and aims to test the extension of the porphyry copper system from the southern border of its Parks/Salyer property, along the mine trend towards the Cactus Project. With success, the Company may increase the number of drill holes on the project. A summary of the main results of the two of drill holes are set out below:

- ECP-045: 595 ft (181.4 m) of 1.29% CuT, 1.18% TSol, 0.018% Mo (enriched)
- ECP-042: 86 ft (26.2 m) of 2.26% CuT, 2.11% TSol, 0.020% Mo (enriched)
  - including: 27 ft (8.2 m) of 4.22% CuT, 3.78% TSol, 0.019% Mo.

The details of the results of the two drill holes are set out in Schedule "B".

Exploration drilling to date has been undertaken from the Company's southern property boundary northward along the north-easterly regional trend of known copper mineralization. Hole ECP-042 intercepted oxide and enriched mineralization with a post mineral dacite dike truncating the continuity of the high-grade enrichment. Similar dacite dikes were encountered during the mining of the Sacaton (Cactus West) pit where they were observed as localized and discontinuous features. Thick, continuous primary chalcopyrite-molybdenite mineralization was intercepted at



<b>Stockpile</b>								
Oxide	90%	40%	22	18	90%	40%	22	16 (-)
<b>Open Pit &amp; Underground</b>								
Oxide	90%	72%	22	18	92% (+)	73% (+)	22	16 (-)
Enriched	90%	72%	22	1	92% (+)	73% (+)	22	0 (-)

Subsequent to year end, ASCU completed the General Plan Amendment with the City Council of Casa Grande. The amendment is related to a 2,159 acre parcel of land, including the LKY, ARCUS and Merrill Properties, newly demarcated for manufacturing/industrial use. The Company's entire land package consists of 4,698 acres of private land sufficient to accommodate all the infrastructure envisioned within its 18-year Life-of-Mine Operating Plan. With the new amendment, the entire land package is fully zoned for industrial purposes. The Company subsequently received a positive review of the jurisdictional waters on the Company's newly rezoned properties by the United States Army Corps of Engineers ("USACE"). As a result, all future permitting processes at Cactus will continue to be driven by State and County levels.

Subsequent to year end, ASCU was granted an amended Aquifer Protection Permit ("APP") by the Arizona Department of Environmental Quality ("ADEQ") for the Company's Cactus Mine. On July 29, 2021, the Company was granted an APP for the Stockpile Project, which has now been amended to add the Cactus Mine open pit and underground operations to the Stockpile Project.

### **Key Developments prior to the Offering**

#### ***Corporate Appointments***

During the year, ASCU appointed several new members to its Executive Team, including Rod Prokop as CFO (Jan 7), Alan Edwards as Director and Interim CEO (May 10), David Laing as Chairman (May 28), George Ogilvie as President, CEO and Director (July 7) and Rita Adiani as SVP Strategy and Corporate Development (July 26).

Subsequent to year-end, Sarah Strunk was appointed to the board of directors of the Company (the "**Board**") as an independent director effective on January 1, 2022 and Nicholas Nikolakakis was appointed as the Chief Financial Officer and Vice President, Finance of the Company effective on January 10, 2022.

#### ***Consolidation***

On July 20, 2021, the Company completed a consolidation of the Company's Common Shares on the basis of three (3) pre-Consolidation common shares for one (1) post-Consolidation common share (the "**Consolidation**"). All figures set out in this AIF, relating to a number, value or price of Common Shares have been adjusted to reflect the Consolidation. If the application of the Consolidation to an issuance of Common Shares resulted in a fractional Common Share, such Common Share was rounded down to the nearest whole Common Share. As a result, certain post-Consolidation numbers described in this section will vary slightly from a 1:3 ratio from the applicable pre-Consolidation number because the issuance they relate to comprises of individual issuances that were rounded down.

#### ***Acquisition of the Cactus Mine (formerly the Sacaton Mine)***

##### ***Cactus Purchase Agreement***

On July 23, 2019, ASCU USA entered into a purchase agreement with ASARCO Trust and Le Petomane XXV Inc. (in its representative capacity as Trustee of ASARCO Trust) for the purchase of certain properties which included the Cactus Mine (formerly the Sacaton Mine) for an aggregate purchase price of US\$6.0 million, as amended on March

24, 2020, April 29, 2020 and June 15, 2020 ("**Cactus Purchase Agreement**"). In accordance with the Cactus Purchase Agreement, ASCU USA agreed to purchase approximately 2,035.67 acres of real property located in Pinal County, Arizona from ASARCO Trust (the "**Cactus Project**"). Pursuant to the terms of the Cactus Purchase Agreement, ASCU USA acquired all rights and interests in and to the Cactus Project, including: (i) all improvements and appurtenances located on the Cactus Project and all patented mining claims related to the Cactus Project; (ii) all minerals located on, under or within the Cactus Project and any and all mineral rights, royalty interests, profits interest of any type, relating to the Cactus Project; (iii) fixtures, equipment and fixed assets located on the Cactus Project. ASARCO Trust held ownership rights in the Cactus Project pursuant to a certain quitclaim deed from AR Sacaton LLC and acquired title to the Cactus Project through bankruptcy proceedings. The Cactus Purchase Agreement was amended to extend the closing date to allow the Company more time to secure the required funds to complete the acquisition of the Cactus Project. The Cactus Project was purchased on July 10, 2020, concurrently with the completion of each of the Loan (defined below) and July Unit Offering (defined below).

### ***Loan Agreement***

On July 10, 2020, the Company entered into a secured loan agreement (the "**Loan Agreement**") by and between the Company, as borrower, ASCU USA, Cactus 110, (together with ASCU US, the "**Guarantors**"), as guarantors, and Tembo Capital Elim Co-Investment LP ("**Tembo**"), as agent and lender, and RCF, as lender. Pursuant to the terms of the Loan Agreement, Tembo and RCF agreed to loan a principal amount of US\$8,786,000 to the Company for the purpose of acquiring or refinancing the acquisition of properties associated with the Cactus Project as well as to advance the development and operation of such properties ("**Loan**"). In conjunction with the Loan Agreement, the Guarantors entered into a net smelter royalty agreement with each of Tembo and RCF, pursuant to which Tembo and RCF were granted a net smelter royalty on the Cactus Project equal to 1.5% for Tembo and 0.41% for RCF. In addition, the Company entered into an option agreement with each of Tembo and RCF, pursuant to which Tembo and RCF have an option to purchase a net smelter royalty on the Cactus Project of 1.0% for Tembo (the "**Tembo Option Royalty**") and 0.27% for RCF (the "**RCF Option Royalty**", together with the Tembo Option Royalty, the "**Option Royalties**") at a purchase price of US\$6,900,000 and US\$1,886,000, respectively (the "**Option Agreements**"). Pursuant to each of the Option Agreements, the purchase price payable by Tembo and RCF, respectively, may be offset by any indebtedness, obligations, or amounts owed by the Company to Tembo and RCF, respectively. Each of Tembo and RCF have exercised the option pursuant to the Option Agreements on October 27, 2021. The purchase price for each of the Option Royalties under the Option Agreements will be offset by the outstanding principal amounts due under the Loan Agreement. The closing of the option exercises and set-off against the Loan Agreement was completed on January 7, 2022 and December 31, 2022 for Tembo and RCF respectively (the "**Option Exercise Closing**"). As a result of the Option Exercise Closing, the principal amount outstanding under the Loan Agreement was reduced to zero.

Under the terms of the Option Agreements, the Company will have the right at any time prior to July 2025, to buy-down: (i) 0.5% of the percentage interest of the Tembo Option Royalty granted to Tembo, for a purchase price of US\$7,000,000; and (ii) 0.14% of the percentage interest of the RCF Option Royalty, for a purchase price of US\$1,913,333.

The Company also completed a non-brokered private placement of 33,955,560 units (post-Consolidation: 11,318,520 units) to Tembo and RCF for aggregate gross proceeds of US\$5,093,334 (the "**Lenders' Subscription**"), as more particularly described below under the heading "*General Development of the Business—Financings and Issuances of the Company's Securities 2020 to 2021*".

### ***Investor Rights Agreement***

On July 10, 2020, the Company entered into an investor rights agreement with Tembo and RCF (the "**Investor Rights Agreement**"). Provided that each of Tembo and RCF, together with any of their respective affiliates, hold or control 9.9% or more of the issued and outstanding Common Shares (calculated on a non-diluted basis), then each of Tembo and RCF, as applicable, have, among other things the right: (i) to designate one nominee each for election or appointment to the Board; (ii) to maintain their *pro rata* shareholdings in the Company (calculated on a fully diluted basis) upon certain equity issuances undertaken by the Company to raise capital including the Offering ("**Equity Issuance**"); (iii) to maintain their *pro rata* shareholdings in the Company (calculated on a fully diluted basis) upon the completion of any merger, acquisition of all or substantially all of the shares of a third party, tender offer, exchange

offer, take-over bid or any other arrangement pursuant to which the Company will issue Common Shares to any third party ("**Business Combination**"); and (iv) to maintain their *pro rata* shareholdings in the Company (calculated on a fully diluted basis) once per year to accommodate for the completion of any issuance of Securities pursuant to (i) any equity incentive plan adopted by the Company for the benefit of employees of the Company or its Subsidiaries; (ii) the issuance of Securities in a share dividend, capital reorganization or similar transaction, where all holders of Common Shares are treated in an equivalent manner; or (iii) the issuance of Securities to an Investor (as defined in the Investor Rights Agreement) pursuant to Article 3 of the Investor Rights Agreement ("**Non-Financing Issuance**").

In particular pursuant to Section 3 of the Investor Rights Agreement, any time the Company desires to complete an issuance of any (i) Common Shares; (ii) other equity securities; or (iii) any security that is exercisable or convertible into, directly or indirectly, or exchangeable for, or otherwise carries the right of the holder to acquire Common Share or other equity securities ("**Securities**") from the Company's treasury for the purpose of raising capital ("**Equity Financing**") or a transaction whereby the Company (a) acquires all or substantially all of the shares of a third party in exchange for the issuance of Common Shares; (b) merges with or into a third party or a third party will merge with or into the Company to any third party; or (c) any other corporate transaction such as a tender offer, exchange offer, a take-over bid or other arrangement and in connection with such transaction will issue Common Shares to any third party ("**Business Combination**"), the Company shall first, or concurrently, offer Tembo and RCF a sufficient number of Securities, so as to permit Tembo and RCF to maintain, immediately following the closing of any Equity Financing or Business Combination, up to its *pro rata* shareholding in the Company, or of the entity surviving the Business Combination, as applicable, that it had immediately prior to the closing of the Equity Financing or Business Combination (calculated on a fully-diluted basis) (the "**Pre-Emptive Right**").

The Securities issuable pursuant to the Pre-Emptive Right for the purposes of an Equity Issuance shall be issued on the same terms as the Securities issued under the Equity Issuance and the Securities issuable pursuant to the Pre-Emptive Right for the purposes of a Business Combination shall be issued at a price not less than fair-market value. The Company shall provide Tembo and RCF written notice of any Equity Financing or Business Combination as soon as possible, but in any event at least fifteen Business Days prior to the expected closing of the Equity Financing or Business Combination (the "**Offer**"). However, if the fifteen Business Days prior written notice requirements of the Offer are not practicable in certain instances, the Company may proceed with the Equity Financing or Business Combination, provided that the Company takes all steps necessary to enable Tembo and RCF to exercise their respective Pre-Emptive Right as soon as practicable following closing. Upon receipt of the Offer, each of Tembo and RCF shall provide an irrevocable and unconditional written notice to the Company that it intends to exercise its Pre-Emptive Right within fifteen Business Days. In addition to the Pre-Emptive Right, each of Tembo and RCF have the right, once per calendar year during any day during the month of June, to subscribe for additional Common Shares up to such number as necessary to maintain their respective *pro rata* shareholding in the Company (calculated on a fully diluted basis) as at the later of: (i) the earlier of: (a) the last trading day of the Common Shares in the month of June of the immediately preceding calendar year; and (b) the closing date of Tembo or RCF's exercise of the Top Up Right (as defined herein), as applicable, if any, during the month of June in the immediately preceding calendar year; and (ii) the closing date of Tembo's and RCF's latest exercise of Pre-Emptive Right, if any, since the last trading day of the Common Shares in the month of June of the immediately preceding calendar year (the "**Top Up Right**"). Each of Tembo and RCF may assign its Pre-Emptive Right and Top Up Right to an Affiliate (as defined in National Instrument 45-106).

As of the date of this AIF, Tembo holds approximately 37.5% of the issued and outstanding Common Shares and is a significant shareholder of the Company. See "*Risk Factors— Tembo exercises significant control over the Company*". As of the date of this AIF, RCF holds approximately 5.6% of the issued and outstanding Common Shares and as such does not have a Pre-Emptive Right, Top Up Right or nomination rights pursuant to the Investor Rights Agreement at this time.

#### ***Other Transactions***

The Company has also entered into two land acquisition agreements in 2021 which form part of the site plan for the Cactus Project, as further described below.

### ***Arcus Purchase and Sale Agreement***

On February 2, 2021, Cactus 110 entered into a purchase and sale agreement ("**Arcus Agreement**") with Arcus Copper Mountain Holdings, LLC, Arcus Forever 7, LLC, East Pioneer-Arcus Copper Mountain, LLC, and Arcus & Arete Capital Investments, LLC (the "**Sellers**") for the purchase of approximately 750 acres of real property located in Pinal County, Arizona (the "**Arcus Property**") for an aggregate purchase price of US\$6.0 million (the "**Arcus Transaction**"). In connection with the Arcus Transaction, Cactus 110 deposited in escrow US\$100,000 as an earnest money deposit (the "**Deposit**"). The Arcus Agreement provided for a ninety-day due diligence period which expired on May 5, 2021, at which time and upon Cactus 110's delivery of a notice confirming that the Arcus Property satisfies its criteria (the "**Approval Notice**"), the Deposit would become non-refundable unless Cactus 110 terminated the transaction prior to such time. On May 5, 2021, the Arcus Agreement was terminated as Cactus 110 did not provide the Approval Notice. On May 17, 2021, the parties entered into a reinstatement and amendment agreement (the "**R&A Agreement**"), whereby the Arcus Agreement was reinstated in its entirety and amended. Pursuant to the R&A Agreement, Cactus 110 acknowledged that the Arcus Property satisfied its criteria, waived its right to terminate relating to suitability of the property and the Deposit became non-refundable except in an event of an uncured event of default by the Sellers.

Pursuant to the Arcus Agreement, as amended by the R&A Agreement, the Arcus Transaction was completed in three phases (the "**Phases**" and each, a "**Phase**"), comprised of: (i) the closing of the first portion of the Arcus Transaction for a cash purchase price of approximately US\$2.7 million, initially scheduled for June 30, 2021 (the "**Phase 1 Closing Date**"), subject to the Arcus Extension (as defined below), was completed on August 29, 2021 (as further described below); (ii) the closing of the second portion of the Arcus Transaction for a cash purchase price of approximately US\$2.4 million set for September 30, 2021 (the "**Phase 2 Closing Date**"); and (iii) the closing of the third and final portion of the Arcus Transaction for a cash purchase price of approximately US\$900,000, initially scheduled for September 30, 2021 (the "**Phase 3 Closing Date**"), was completed on September 29, 2021. Cactus 110's obligation to purchase the Arcus Property pursuant to the Arcus Agreement is conditional upon Cactus 110's ability to obtain financing for the Arcus Transaction prior to the Phase 1 Closing Date (the "**Arcus Financing Condition**"). If Cactus 110 had been unable to satisfy the Arcus Financing Condition, it could have terminated the Arcus Agreement on or prior to the Phase 1 Closing Date by written notice to the Sellers. Moreover, Cactus 110's intended use of the Arcus Property may require certain land use approvals, as determined by the applicable local governmental authorities governing the Arcus Property (the "**Entitlements**"). If Cactus 110 did not expect to obtain the Entitlements prior to the Phase 1 Closing Date, it could elect to extend the Phase 1 Closing Date for a period of sixty days (the "**Arcus Extension**") by providing twenty days' written notice to the Sellers and making an additional non-refundable deposit in escrow in the amount of US\$100,000. The Arcus Extension did not affect the Phase 2 Closing Date or Phase 3 Closing Date. Cactus 110's obligation to complete the purchase of the Arcus Property was not contingent on its ability to obtain the Entitlements.

On June 8, 2021, Cactus 110 elected to obtain the Arcus Extension and the Phase 1 Closing Date was extended to August 29, 2021. As consideration for the Arcus Extension, Cactus 110 deposited an additional non-refundable deposit of US\$100,000 in escrow to the Sellers. As of the date of this AIF, the remaining portion of the aggregate purchase price under the Arcus Transaction due to the Sellers on the Phase 1 Closing Date, being US\$2.6 million, has been paid in full. The Company satisfied the US\$2.6 million payment by drawing down on available funds under the 2021 Loan. On September 29, 2021, the Arcus Transaction successfully closed.

### ***LKY Purchase and Sale Agreement***

On May 20, 2021, Cactus 110 entered into a real estate purchase and sale agreement (the "**LKY Agreement**") with LKY/Copper Mountain Investments Limited Partnership L.L.L.P to purchase approximately 1,000 acres of real property located in Township 5, South Range 5 East in Pinal County, Arizona (the "**LKY Property**") for an aggregate purchase price of US\$20 million (the "**LKY Transaction**"). The purchase price will be adjusted if a survey of the land indicated total net acreage of the LKY Property deviates more than 1% from the approximated acreage. An escrow account was established on May 20, 2021 with First American Title Company (the "**LKY Escrow Agent**") for the LKY Transaction ("**LKY Escrow Account**").

Pursuant to the LKY Agreement, Cactus 110 provided an initial deposit of US\$100,000 (the "**Initial Deposit**") into the LKY Escrow Account and has delivered an additional deposit of US\$400,000 (the "**Second Deposit**", together

with the Initial Deposit, the "**LKY Deposit**") prior to the end of the due diligence period. As at the date of this AIF, Cactus 110 has provided the LKY Deposit, which is non-refundable, except in the event of an uncured event of default by LKY.

The purchase price in connection with the LKY Transaction is payable in three installments and delivered to the LKY Escrow Agent: (i) US\$7.5 million less the LKY Deposit (the "**First Installment**") on the closing date of the LKY Transaction, subject to and upon satisfaction of certain conditions precedents to closing, (ii) US\$7.5 million plus accrued interest at a rate of 6.0% per annum from the closing date (subject to any prepayments in accordance with the LKY Note and Carryback Loan (as defined below)) (the "**Second Installment**") payable on the first anniversary of the closing date (the "**Second Installment Date**"), and (iii) US\$5.0 million (subject to any prepayments in accordance with the LKY Note and Carryback Loan) (the "**Third Installment**", together with the Second Installment, the "**Post-Closing Purchase Price**") payable on the fifth anniversary of the closing date (the "**Third Installment Date**"). A real estate broker fee of 3.0% broker is payable by Cactus 110 to a third-party real estate broker on the closing date pursuant to the LKY Agreement.

The Post-Closing Purchase Price will be secured by a commercial carryback real estate loan in the amount of the Post-Closing Purchase Price (the "**Carryback Loan**") to be evidenced by a secured promissory note (the "**LKY Note**") bearing an interest rate of 6.0% on the Second Installment from the closing date until the Second Installment Date, with no interest applicable on the Third Installment. The LKY Note matures on the Third Installment Date. The Post Closing Purchase Price will be distributed to LKY on execution of a deed of release and full reconveyance by LKY prior to the Third Installment Date.

The closing date of the LKY Transaction would be thirty days after the City of Casa Grande's approval of the general plan amendment, rezoning of the LKY Property to industrial use (the "**General Plan Amendment**") and a development agreement being entered into between the City of Casa Grande and Cactus 110. The completion of the General Plan Amendment and the City of Casa Grande's approval of the development agreement was announced by the Company on January 5, 2022. If closing does not occur by March 31, 2022, then Cactus 110 will have the right to purchase two thirty-day extensions beyond March 31, 2022 (each an "**LKY Extension**") for a non-refundable payment of US\$100,000 per LKY Extension. These payments will not be applied towards the purchase price of the LKY Property. This would entail the First Installment being payable on May 31, 2022. The closing of the First Installment occurred in February 2022.

In connection with the LKY Transaction, the LKY Agreement includes certain restrictions on the sale of the LKY Property:

*Foreclosure*

If within fifteen years from the closing date, the LKY Property becomes subject to a third party foreclosure proceeding due to a default on a third-party loan encumbering the LKY Property and during such process of foreclosure, if the LKY Property is subject to a sale, Cactus 110 must deliver a written notice (the "**LKY Notice**") to LKY appointing an affiliate of LKY as the broker to sell the LKY Property at the highest possible price within the immediately ensuing 12-month period from the date of the LKY Notice in accordance with the terms of the LKY Agreement (the "**Sale Period**"). The net proceeds of such sale will first be applied and paid to Cactus 110 in the amount of US\$20 million and all interest paid under the Carryback Loan (together, the "**Buyer Repayment Amount**"). The remaining proceeds will be paid to LKY. The LKY affiliate brokering the sale will receive a success fee of 5.0% of the sale price of the LKY Property. If the sale of the LKY Property is not consummated before the expiration of the Sale Period, Cactus 110 will retain full ownership and control of the LKY Property and the LKY Agreement will terminate; provided, however, that if Cactus 110 is subject to undertake post mine-closure remediation actions as required by law or statute, Cactus 110 will have the right to fully discharge such obligations prior to the close of the acquisition of the LKY Property and in such case exclusively the Sale Period will be extended to accommodate such period.

## *Sale*

If Cactus 110 decides to sell the LKY Property at any time after the fifteenth-year anniversary of the closing date, it is required to exercise one of but not both of the LKY Put Option (as defined below) or the LKY Sale Option (as defined below).

- **LKY Put Option:** Cactus 110 has the right to sell the LKY Property to LKY on "as is where is basis" subject to certain conditions, at a purchase price equal to the Buyer Repayment Amount and upon the terms and conditions in the put option purchase and sale agreement (as appended to the LKY Agreement) (the "**LKY Put Option**"). The LKY Put Option is binding on LKY and LKY will have 12 months from the date of exercise of the LKY Put Option (the "**LKY Purchase Period**") to pay Cactus 110, provided that LKY shall have provide proof of committed funds within 180 days of such exercise. If (i) LKY fails to timely provide such proof of committed funds; or (ii) Cactus 110 reasonably determines that the proof of funds provided is unacceptable and thirty days have passed without providing proof of funds reasonably satisfactory to Cactus 110; or (iii) LKY fails to consummate the acquisition of the LKY Property for the Buyer Repayment Amount within the LKY Purchase Period, then the LKY Agreement and the put option purchase and sale agreement will automatically terminate, Cactus 110 will retain full ownership and control of the LKY Property, and neither Cactus 110 nor LKY will have any further rights or obligations under the LKY Agreement; provided, however, to the extent that Cactus 110 needs time beyond the LKY Purchase Period to complete any mine closure and associated cleanup processes as required by applicable environmental regulations or laws (including any reclamation plans, as required under applicable laws) prior to the close of the acquisition of the LKY Property to LKY then, the LKY Purchase Period will be extended to accommodate such period.
- **LKY Sale Option:** Cactus 110 may engage an affiliate of LKY as a broker to sell the LKY Property to a third-party purchaser at the highest possible price (the "**Third-Party Purchase Price**"). The Third-Party Purchase Price shall be first applied to pay the success fee (being 5% of the Third-Party Purchase Price) to the LKY affiliate acting as broker and second to the Buyer Repayment Amount and any remaining amount shall be apportioned 80% to LKY and 20% to Cactus 110. Cactus 110 will not be obliged to sell the LKY Property for a Third-Party Purchase Price less than the Buyer Repayment Amount. If the LKY broker affiliate is unable to find and arrange for a third-party purchaser prior to the expiration of the LKY Notice Period then, the LKY Agreement shall automatically terminate and Cactus 110 shall retain full ownership and control of the LKY Property and the parties shall have no further obligations, except as expressly provided for in the LKY Agreement.

## ***Tembo Letter Agreement and 2021 Loan Agreement***

On June 22, 2021, the Company entered into a binding letter agreement with Tembo ("**Tembo Letter Agreement**"). Pursuant to the terms of the Tembo Letter Agreement, Tembo agreed to exercise its 20,000,000 July Warrants (post-Consolidation: 6,666,666 July Warrants) in accordance with the terms thereof and pay the aggregate exercise price of US\$4,000,000 to the Company in exchange for 20,000,000 Common Shares (post-Consolidation: 6,666,666 Common Shares). As consideration for the early exercise of the July Warrants, the Company issued to Tembo 6,666,666 Common Share purchase warrants ("**Tembo Incentive Warrants**") (post-Consolidation: 2,222,222 Tembo Incentive Warrants). Each Tembo Incentive Warrant entitles Tembo to purchase one Common Share at a price of US\$0.65 per Common Share (post-Consolidation: US\$1.95 per Common Share) for a period of three years following the issue date of the Tembo Incentive Warrants.

In addition, on June 22, 2021, the Company entered into an unsecured loan agreement by and between the Company, as borrower, and Tembo, as lender, pursuant to which the Company may borrow an aggregate principal amount of up to US\$6,000,000 from Tembo (the "**2021 Loan**"). This agreement was amended on July 19, 2021, in connection with the Consolidation (the loan agreement, as amended, "**2021 Loan Agreement**"). The outstanding principal amount of the 2021 Loan bears interest at a rate of 8.0% per annum. The 2021 Loan Agreement contains terms and conditions with respect to the 2021 Loan customary for a transaction of this nature, including but not limited to representations, warranties, borrower covenants, permitted indebtedness, assignment rights and events of default.

As consideration for making the 2021 Loan to the Company, the Company is required to issue up to an aggregate, on a post-Consolidation basis, of 485,711 Common Shares to Tembo ("**Drawdown Shares**") on each date that proceeds of the 2021 Loan are advanced to the Company as follows: (i) 100,952 Drawdown Shares for the first US\$1,000,000 advanced; (ii) 92,380 Drawdown Shares for the second US\$1,000,000 advanced; (iii) 83,809 Drawdown Shares for the third US\$1,000,000 advanced; (iv) 75,238 Drawdown Shares for the fourth US\$1,000,000 advanced; and (v) Drawdown Shares will be issued to Tembo at the ratio of 66,666 Drawdown Shares for every US\$1,000,000 of the 2021 Loan advanced thereafter. The Drawdown Shares were issued on September 23, 2021, in connection with the drawdown of US\$6,000,000 in full on the 2021 Loan.

On November 1, 2021, the Company and Tembo entered into an amending agreement with respect to the 2021 Loan Agreement (the "**2021 Loan Amendment**"). Pursuant to the 2021 Loan Amendment, the maturity date of the 2021 Loan was extended from December 31, 2021 to July 31, 2023. The Company repaid US\$5 million of the principal amount of the 2021 Loan from the net proceeds of the Offering at the closing of the Offering. The balance of the principal amount of the 2021 Loan, being US\$1 million, together with all accrued interest payable under the 2021 Loan (including interest that had accrued on the US\$5 million repaid at the closing of the Offering) will be due and payable on July 31, 2023 pursuant to the 2021 Loan Amendment.

### ***Financings and Issuances of the Company's Securities 2020 to 2021***

#### ***2020 Issuances of Shares for Services Provided to the Company***

Between January 1, 2020 and May 26, 2020, the Company issued an aggregate 605,112 Common Shares (post-Consolidation: 201,700 Common Shares) at deemed issue prices of US\$0.10 to US\$0.40 per Common Share (post-Consolidation: US\$0.30 to US\$1.20 per Common Share) to certain service providers, in consideration for services performed in favour and for the benefit of the Company.

#### ***2020 Private Placement of Convertible Debenture Units***

On May 8, 2020, the Company issued an aggregate 1,830 units ("**Debenture Units**") at an issue price of US\$1,000 per Debenture Unit for aggregate gross proceeds of US\$1,830,000. Each Debenture Unit was comprised of (i) one secured convertible debenture in the principal amount of US\$1,000 (each, a "**Debenture**"), and (ii) 2,083 Common Share purchase warrants (a "**May Warrant**") (post-Consolidation: 694 May Warrants), with each May Warrant entitling the holder thereof to acquire one Common Share in the capital of the Company at an exercise price of US\$0.15 per Common Share (post-Consolidation: US\$0.45 per Common Share) at any time prior to May 8, 2023. Each Debenture issued by the Company, plus any accrued and unpaid interest in respect thereof, was convertible into units of the Company (each, a "**Conversion Unit**") prior to June 15, 2020, which was subsequently amended to July 17, 2020 ("**Maturity Date**") at a conversion price of US\$0.08 per Conversion Unit (post-Consolidation: US\$0.24 per Conversion Unit). Each Conversion Unit was comprised of (i) one Common Share ("**Conversion Share**"), and (ii) one Common Share purchase warrant ("**Conversion Warrant**"), entitling the holder thereof to acquire one Common Share at an exercise price of US\$0.10 per Conversion Warrant (post-Consolidation: US\$0.30 per Conversion Warrant). In connection with the private placement, the Company issued an aggregate of 50 finder's units to certain finders ("**May Finder's Units**"). Each May Finder's Unit was comprised of 50 secured convertible debentures in the principal amount of US\$1,000, on the same terms as the Debentures, and 104,150 Common Share purchase warrants ("**May Finder's Warrants**") (post-Consolidation: 34,716 May Finder's Warrants). Each May Finder's Warrant is exercisable by the holder thereof to acquire one Common Share in the capital of the Company at an exercise price of US\$0.15 per Common Share (post-Consolidation: US\$0.45 per Common Share) at any time prior to May 8, 2023.

Between June 15, 2020 and July 8, 2020, an aggregate of 3,275,000 Conversion Units (post-Consolidation: 1,091,666 Conversion Units) were issued upon conversion of the Debentures, at a conversion price of US\$0.08 per Conversion Unit. Each Conversion Unit was comprised of one Conversion Share and one Conversion Warrant. Each Conversion Warrant may be exercised for a Common Share at an exercise price of US\$0.10 per Common Share (post-Consolidation: US\$0.30 per Common Share) at any time for a period of three years from the date of issuance. The remaining Debentures were repaid on the Maturity Date.

### ***2020 Private Placements***

On January 6, 2020, the Company completed the first tranche of a non-brokered private placement financing of 413,115 Common Shares (post-Consolidation: 137,701 Common Shares) at an issue price of US\$0.40 per Common Share (post-Consolidation: US\$1.20 per Common Share), for aggregate gross proceeds to the Company of US\$165,246.

On February 21, 2020, the Company completed a non-brokered private placement financing of 125,000 Common Shares (post-Consolidation: 41,666 Common Shares) at an issue price of US\$0.40 per Common Share (post-Consolidation: US\$1.20 per Common Share), for aggregate gross proceeds to the Company of US\$50,000.

On March 24, 2020, the Company completed the second and final tranche of a non-brokered private placement of 130,025 Common Shares (post-Consolidation: 43,340 Common Shares) at an issue price of US\$0.40 per Common Share (post-Consolidation: US\$1.20 per Common Share), for aggregate gross proceeds to the Company of US\$52,010.

On July 10, 2020, the Company completed a non-brokered private placement financing of units ("**July Unit Offering**"), pursuant to which the Company issued an aggregate 33,955,560 units ("**July Units**") (post-Consolidation: 11,318,520 July Units) at an issue price of US\$0.15 per July Unit (post-Consolidation: US\$0.45 per July Unit) for aggregate gross proceeds of US\$5,093,334. Each July Unit was comprised of (i) one Common Share in the capital of the Company, and (ii) three-quarters (3/4) of one Common Share purchase warrant ("**July Warrants**"). Each whole July Warrant entitles the holder thereof to acquire one Common Share in the capital of the Company ("**July Warrant Share**") at an exercise price equal to US\$0.20 per July Warrant Share (post-Consolidation: US\$0.60 per July Warrant Share). In connection with the July Unit Offering, the Company issued to certain finders an aggregate 5,333,333 finder's warrants ("**July Finder's Warrant**") (post-Consolidation: 1,777,777 July Finder's Warrants). Each July Finder's Warrant entitles the holder thereof to acquire one Common Share in the capital of the Company at an exercise price of US\$0.20 per Common Share (post-Consolidation: US\$0.60 per Common Share) at any time prior to July 27, 2023. The Company also issued 2,533,333 Common Shares (post-Consolidation: 844,444 Common Shares) in satisfaction of a corporate finance fee payable to a finder in connection with the July Unit Offering.

Between December 21, 2020 and December 22, 2020, the Company completed a non-brokered private placement of 12,685,402 Common Shares (post-Consolidation: 4,228,453 Common Shares) at an issue price of US\$0.30 per Common Share (post-Consolidation: US\$0.90 per Common Share), for aggregate gross proceeds to the Company of US\$3,805,620.60. The Company issued an additional 20,000 (post-Consolidation: 6,666) Common Shares at an issue price of US\$0.30 per Common Share (post-Consolidation: US\$0.90 per Common Share) to a subscriber on December 23, 2020, bringing the aggregate number of Common Shares issued under the private placement financing to 12,705,402 Common Shares (post-Consolidation: 4,235,134 Common Shares) for aggregate gross proceeds to the Company of US\$3,811,621. The Company completed the issuance of an additional 10,000 (Post-Consolidation: 3,333) Common Shares at an issue price of US\$0.30 per Common Share (post-Consolidation: US\$0.90 per Common Share) to a subscriber under the private placement on January 8, 2021.

### ***2020 Shares for Debt Issuances***

In accordance with the terms of the Loan Agreement, the Company may elect to satisfy any interest amounts owing under the Loan Agreement by issuing Common Shares at a price of US\$0.15 per Common Share ("**2020 Interest Shares**"). On October 23, 2020, the Company issued an aggregate 1,615,035 (post-Consolidation: 538,345) 2020 Interest Shares to satisfy \$242,255.27 in accrued and unpaid interest due under the Loan Agreement. On December 2, 2020, the Company issued an aggregate of 1,590,588 Common Shares (post-Consolidation: 530,196 Common Shares) to Tembo to satisfy \$238,588 in outstanding legal fees payable to Tembo in accordance with the terms of the Loan Agreement.

### ***2021 Private Placements***

On March 9, 2021, the Company (i) completed a non-brokered private placement of 6,355,073 Common Shares (post-Consolidation: 2,118,357 Common Shares) at an issue price of US\$0.30 per Common Share (post-Consolidation: US\$0.90 per Common Share), for aggregate gross proceeds of US\$1,906,521.90 ("**March Financing**"); and (ii) issued

3,261 Common Shares (post-Consolidation: 1,087 Common Shares) to a consultant of the Company ("**Consultant**"), equal to 15% of the Consultant's participation in the March Financing, pursuant to a consulting agreement dated January 4, 2021.

On June 8, 2021, the Company completed a non-brokered private placement financing of units ("**June Unit Offering**"), in respect of previously agreed contractual arrangements with an employee, pursuant to which the Company issued an aggregate of 343,750 units ("**June Units**") (post-Consolidation: 114,583 June Units) for aggregate gross proceeds of US\$27,500. Each June Unit was comprised of (i) one Common Share, and (ii) one Common Share purchase warrant ("**June Warrants**"). Each June Warrant entitles the holder thereof to acquire one Common Share in the capital of the Company at an exercise price equal to US\$0.10 per Common Share (post-Consolidation: US\$0.30 per Common Share). On January 25, 2021, the Company issued an aggregate 373,333 Common Shares (post-Consolidation: 124,444 Common Shares) to a service provider, in consideration for services performed in favour and for the benefit of the Company.

On July 7, 2021, the Company completed a non-brokered private placement of Common Shares in respect of previously agreed contractual arrangements with an employee, pursuant to which the Company issued an aggregate of 714,286 Common Shares (post-Consolidation: 238,095 Common Shares) for aggregate gross proceeds of US\$500,000.20.

During the year ended December 31, 2020 and the six month period ended June 30, 2021, the Company raised a total of approximately \$9.2 million and \$2.4 million, respectively, from private placements. A significant proportion of these funds were spent on acquisition costs for the Cactus Project with remaining funds allocated towards drilling and advancement of project related studies and general and administration.

#### ***Haywood Letter Agreement***

On September 1, 2021, the Company entered into a binding letter agreement with Haywood ("**Haywood Letter Agreement**"). Pursuant to the terms of the Haywood Letter Agreement, on September 8, 2021, Haywood exercised its post-Consolidation 1,777,777 July Finder's Warrants in accordance with the terms thereof and paid the aggregate exercise price of US\$1,066,666.20 to the Company in exchange for 1,777,777 post-Consolidation Common Shares ("**Underlying Finder's Warrant Shares**"). As consideration for the early exercise of the July Finder's Warrants, the Company issued to Haywood 161,616 post-Consolidation Common Share purchase warrants ("**Haywood Incentive Warrants**"). Each Haywood Incentive Warrant entitles Haywood to purchase one post-Consolidation Common Share at a price of US\$2.10 per post-Consolidation Common Share for a period of three years following the issue date of the Haywood Incentive Warrants.

### **CACTUS MINE PROJECT**

ASCU's principal asset is the Cactus Project which is situated on private land in an infrastructure rich area of Arizona. The Cactus Project is a world class re-development project in a Tier 1 location.

ASCU's strategy is to advance and develop the Cactus Project towards a construction decision. To execute the strategy, ASCU is currently undertaking a 53,000 ft (16,154 m) infill drilling program at the Cactus Project to support a PFS. The Company has also begun infill drilling at the Cactus Project to target planned measured drill spacing and has budgeted exploration drilling targeting opportunities proximal to the current mine plan. In 2021, 345 new holes (90,135 ft | 27,473 m) were drilled into the Project supporting various technical programs -

- Cactus Infill Drilling – 94 holes (55,938 ft | 17,050 m),
- Cactus Metallurgical Drilling – 6 holes (5,466 ft | 1,666 m),
- Cactus Exploration Drilling – 1 hole (1,539 ft | 469 m),
- Cactus Stockpile Infill Drilling – 241 holes (21,142 ft | 6,444 m)

- Parks/Salyer Exploration Drilling – 3 holes (6,050 ft | 1,844 m)

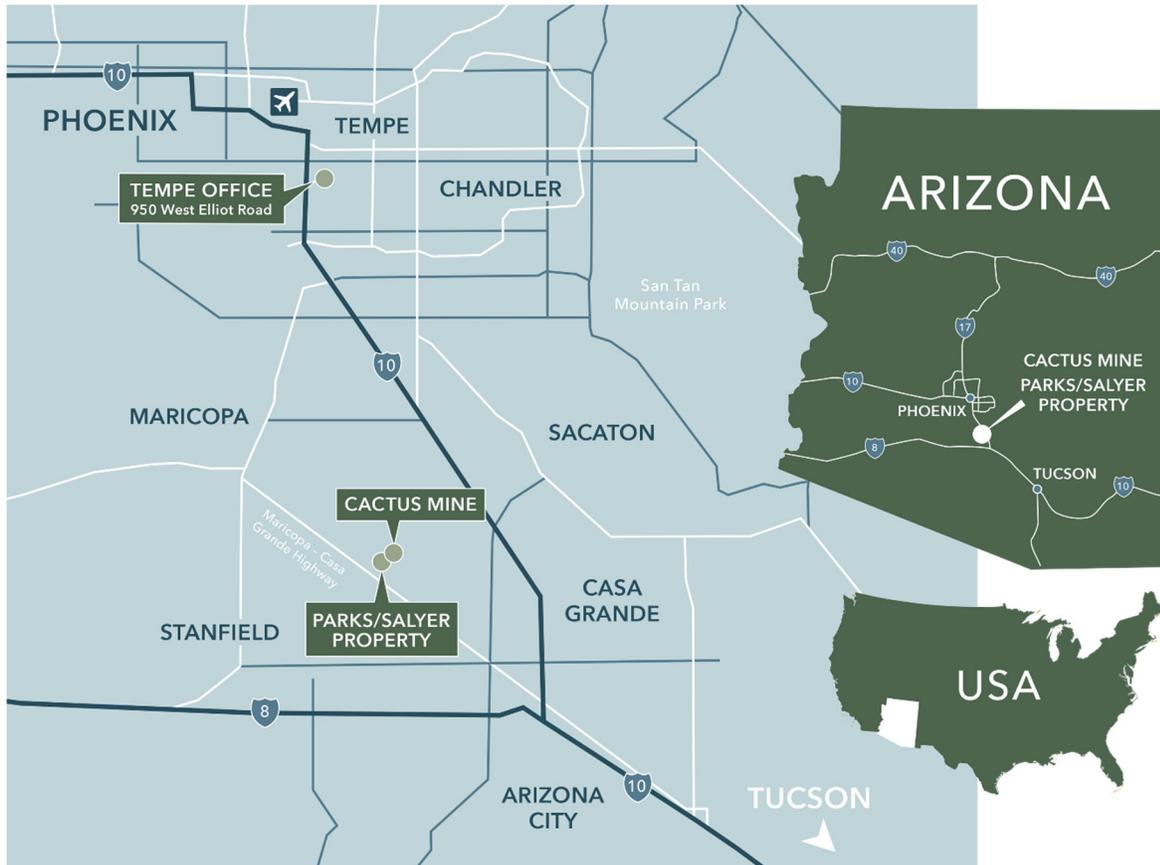
### Current Technical Report

The scientific and technical information in this section relating to the Cactus Project is derived from, and in some instances is a direct extract from, and based on the assumptions, qualifications and procedures set out in, the Integrated Cactus PEA. Such assumptions, qualifications and procedures are not fully described in this AIF and the following summary does not purport to be a complete summary of the Integrated Cactus PEA. Reference should be made to the full text of the Integrated Cactus PEA, which is available for review under the Company's profile on the System for Electronic Document Analysis and Retrieval, which may be accessed at [www.sedar.com](http://www.sedar.com) ("SEDAR").

### Project Description, Location and Access

The Cactus Project is located 40 road miles south southeast of the Greater Phoenix metropolitan area and approximately 3 miles northwest of the city of Casa Grande, Pinal County, Arizona. The Cactus Project, located at the historic Sacaton mine, is 10 miles due west of the Interstate 10 (I-10) freeway. Access to the Cactus Project is approximately 4.6 miles west of Arizona State Route 387 (AZ-387) on North Bianco Road off the West Maricopa-Casa Grande Highway. The Greater Phoenix area is a major population center (approximately 4.5 million persons) with a major airport and transportation hub, and well-developed infrastructure and services that support the mining industry.

The following figure shows the general location of the Cactus Project:



In July and August 2019, ASCU USA, a subsidiary of ASCU, executed a purchase agreement and prospective purchase agreement with the ASARCO Trust and the Arizona Department of Environmental Quality (the "ADEQ"), respectively, for the right to acquire all American Smelting and Refining Company ("ASARCO") land parcels representing the Cactus Project, as well as all infrastructure therein, and all associated mineral rights.

In July 2020, ASCU USA successfully closed on the property and acquired full title for the Cactus Project. In addition, Cactus 110 closed on the Merrill land parcels comprising the Parks/Salyer Property. Also in 2020, ASCU acquired a prospecting permit for adjacent land owned by the Arizona State Lands Department.

In February 2021, Cactus 110 entered into the Arcus Agreement to purchase 750 acres of land also adjacent to the Cactus Project known as the Arcus Property. Further, in May 2021, Cactus 110 entered into the LKY Agreement to purchase 1,000 acres of land adjacent to the Cactus Project referred to as the LKY Property.

The Cactus Project comprises total landholdings of over 4,000 acres. The privately-owned land assets represent, among other things, the mineral rights to the old Sacaton East, Sacaton West and Parks/Salyer deposits. ASCU USA intends to operate the mine under the name Cactus.

***Property and Rights***

The following table describes the surface, mineral and leasehold property rights comprising the Cactus Project. These rights and title have not been independently verified and the title documents have been relied upon by the authors of the Integrated Cactus PEA.

Owner	Parcel No.	Property Description	Township	Range	Section	Acres
<b>CACTUS 110 LLC</b>						
CACTUS 110 LLC	503-31-004B	NWNW LESS WEST 215 FEET OF SEC 10, 6S-5E	6 South	5 East	10	33.5
CACTUS 110 LLC	502-36-004A	S1/2S1/2NW OF SEC 27, 5S-5E	5 South	5 East	27	40
CACTUS 110 LLC	502-36-001A	S1/2S1/2W1/2NE OF SEC 27, 5S-5E	5 South	5 East	27	20
CACTUS 110 LLC	502-36-009A	S1/2S1/2E1/2NE OF SEC 27, 5S-5E	5 South	5 East	27	20
CACTUS 110 LLC	502-37-001E	SESENE OF SEC 28, 5S-5E	5 South	5 East	28	10
CACTUS 110 LLC	502-37-006B	E1/2E1/2SE OF SEC 28, 5S-5E	5 South	5 East	28	40
CACTUS 110 LLC	502-41-0080	LOT 7 OF SEC 33, 5S-5E	5 South	5 East	33	10
CACTUS 110 LLC	502-41-0090	LOT 8 OF SEC 33, 5S-5E	5 South	5 East	33	10
CACTUS 110 LLC	502-41-0100	LOT 9 OF SEC 33, 5S-5E	5 South	5 East	33	10
CACTUS 110 LLC	502-41-0110	LOT 10 OF SEC 33, 5S-5E	5 South	5 East	33	10
CACTUS 110 LLC	502-41-0220	LOT 21 OF SEC 33, 5S-5E	5 South	5 East	33	10
CACTUS 110 LLC	502-41-0230	LOT 22 OF SEC 33, 5S-5E	5 South	5 East	33	10
CACTUS 110 LLC	502-41-0240	LOT 23 OF SEC 33, 5S-5E	5 South	5 East	33	10
CACTUS 110 LLC	502-41-0250	LOT 24 OF SEC 33, 5S-5E	5 South	5 East	33	10
CACTUS 110 LLC	502-41-0310	LOT 30 OF SEC 33, 5S-5E	5 South	5 East	33	10
CACTUS 110 LLC	502-41-0330	LOT 32 OF SEC 33, 5S-5E	5 South	5 East	33	10
CACTUS 110 LLC	502-25-0120	SW OF SEC 34-5S-5E	5 South	5 East	34	160
CACTUS 110 LLC	503-69-004B	WEST 215 FET OF SW OF SEC 3-5S-5E	5 South	5 East	3	10
CACTUS 110 LLC	503-31-004A	WEST 215 FET OF NWNW OF SEC 10-5S-5E	5 South	5 East	10	6.5
CACTUS 110 LLC	502-36-0060	SW OF SEC 27-5S-5E	5 South	5 East	27	160
CACTUS 110 LLC	502-36-0070	W1/2SE OF SEC 27-5S-5E	5 South	5 East	27	80
CACTUS 110 LLC	502-36-0080	E1/2SE OF SEC 27-5S-5E	5 South	5 East	27	80
CACTUS 110 LLC	502-25-008A	SW OF SEC 26-5S-5E	5 South	5 East	26	160
CACTUS 110 LLC	502-25-007A	SE OF SEC 26-5S-5E	5 South	5 East	26	160
CACTUS 110 LLC	502-25-007C	S-265.72 OF E-1450 OF NE OF SEC 26-5S-5E	5 South	5 East	26	8.85
CACTUS 110 LLC	502-25-005A	W-630 OF THE N-1855 OF THE S-2905 OF SEC 25-5S-5E	5 South	5 East	25	26
CACTUS 110 LLC	502-25-014A & 502-25-014B	NE OF SEC 35-5S-5E	5 South	5 East	35	160
CACTUS 110 LLC	502-25-0130	NW OF SEC 35-5S-5E	5 South	5 East	35	160
CACTUS 110 LLC	502-25-0110	N1/2 OF SEC 34-5S-5E AC E-CRETE IPR #502-25-800	5 South	5 East	34	320
CACTUS 110 LLC	502-25-0220	SW SEC 35-5S-5E (surface only)	5 South	5 East	35	160
CACTUS 110 LLC	502-25-0150	SE OF SEC 35-5S-5E	5 South	5 East	35	160

Owner	Parcel No.	Property Description	Township	Range	Section	Acres
CACTUS 110 LLC	502-25-021A	COMM @ NW COR OF SEC 36-5S-5E TH S-1316.64' TO POB TH S88D E- 227.58' TO POB THE POINT OF A TANG-CUR CONCAVE SW W/RAD OF 217.19' TH SWLY 325.21- TH S02D E-980.73' TO THE POINT OF A NON- TANG-CUR CONCAVE NW W/RAD OF 123.28' TH SWLY 192.7' TH W-360.55' TH N (Surface Only)	5 South	5 East	36	13.5
CACTUS 110 LLC	503-69-001A	LOTS 1-4 & S1/2N1/2 OF SEC 3-6S-5E	6 South	5 East	3	340.24
CACTUS 110 LLC	515-28-0020	SEC 28-5S-6E WATERWELL SITE #1 NWNENE AND PIPELINE RIGHT OF WAY EXTENDING IRREGULARLY FROM EAST EDGE OF NE TO N EDGE OF NE	5 South	6 East	28	15.46
CACTUS 110 LLC	515-28-0100	SEC 28-5S-6E WATERWELL SITE IN NENENESE AND PIPELINE RIGHT OF WAY ALONG EAST EDGE OF SE	5 South	6 East	28	15.12
TOTAL FOR CACTUS 110 LLC						2,459.17
<b>ARCUS COPPER MOUNTAIN HOLDINGS LLC (OPTIONED LANDS)</b>						
ARCUS COPPER MOUNTAIN HOLDINGS LLC	502-37-006A	W1/2E1/2SE OF SEC 28-5S-5E	5 South	5 East	28	40
ARCUS COPPER MOUNTAIN HOLDINGS LLC	502-37-005C	NWSE OF SEC 28-5S-5E	5 South	5 East	28	40
ARCUS COPPER MOUNTAIN HOLDINGS LLC	502-37-005A	E1/2SWSE OF SEC 28-5S-5E	5 South	5 East	28	20
ARCUS COPPER MOUNTAIN HOLDINGS LLC	502-37-005B	W1/2SWSE OF SEC 28-5S-5E	5 South	5 East	28	20
ARCUS COPPER MOUNTAIN HOLDINGS LLC	502-37-001A	N1/2NE OF SEC 28-5S-5E	5 South	5 East	28	80
ARCUS COPPER MOUNTAIN HOLDINGS LLC	502-37-001B	SWNE OF SEC 28-5S-5E	5 South	5 East	28	40
ARCUS COPPER MOUNTAIN HOLDINGS LLC	502-37-001C	W1/2SENE OF SEC 28-5S-5E	5 South	5 East	28	20
ARCUS COPPER MOUNTAIN HOLDINGS LLC	502-37-001D	NESENE OF SEC 28-5S-5E	5 South	5 East	28	10
ARCUS COPPER MOUNTAIN HOLDINGS LLC	502-37-0040	SW OF SEC 28-5S-5E	5 South	5 East	28	160
ARCUS COPPER MOUNTAIN HOLDINGS LLC	502-41-0360	NE OF SEC 33-5S-5E 160.00 AC (surface only)	5 South	5 East	33	160

Owner	Parcel No.	Property Description	Township	Range	Section	Acres
ARCUS COPPER MOUNTAIN HOLDINGS LLC	502-41-0340	W1/2NW OF SEC 33-5S-5E (surface only)	5 South	5 East	33	80
ARCUS COPPER MOUNTAIN HOLDINGS LLC	502-41-0350	E1/2NW OF SEC 33-5S-5E (surface only)	5 South	5 East	33	80
TOTAL FOR ARCUS COPPER MOUNTAIN HOLDINGS LLC (OPTIONED LANDS)						750
<b>LKY/COPPER MOUNTAIN INVESTMENT LIMITED PARTNERSHIP (100% Ownership Subject to Contract Terms)</b>						
LKY/COPPER MOUNTAIN INVESTMENT LTD PSHIP	50225005B	W1/2 OF SEC 25-5S-5E EXC W-630 OF N-1855 OF S-2905 THEREOF	5 South	5 East	25	Partial
LKY/COPPER MOUNTAIN INVESTMENT LTD PSHIP	502250040	NE OF SEC 25-5S-5E	5 South	5 East	25	Partial
LKY/COPPER MOUNTAIN INVESTMENT LTD PSHIP	502250060	SE OF SEC 25-5S-5E	5 South	5 East	25	Partial
LKY/COPPER MOUNTAIN INVESTMENT LTD PSHIP	50225008B	NWNW OF SEC 26-5S-5E	5 South	5 East	26	Partial
LKY/COPPER MOUNTAIN INVESTMENT LTD PSHIP	50225008C	NENW & S1/2NW OF SEC 26-5S-5E	5 South	5 East	26	Partial
LKY/COPPER MOUNTAIN INVESTMENT LTD PSHIP	50225007D	NE OF SEC 26-5S-5E EXC S-265.72 OF E-1450 THEREOF	5 South	5 East	26	Partial
LKY/COPPER MOUNTAIN INVESTMENT LTD PSHIP	50225021B	ALL OF SEC 36-5S-5E EXC SESESESE AND THAT POR DESC AS FOLLOWED; COMM @ NW COR OF SEC 36- TH S-1316.64' TO POB TH S88D E-227.58' TO THE POINT OF A TANG-CUR CONCAVE SW W/RAD OF 217.19' TH SWLY 325.21' TH S02D E-980.73' TO THE POINT OF A NON/TANG/CUR CON (Surface only)	5 South	5 East	36	Partial
TOTAL FOR LKY						1000
<b>ARIZONA STATE LANDS DEPARTMENT (LEASED LANDS)</b>						
Arizona State Lands Department (Prospecting Permit # 008-121173-00-100)	503-26-7000	Lots 3 4 S2NW S2	6 South	5 East	1	489.12
TOTAL						4,698.29

A graphical representation of the above landholdings is as provided below:



Along with these properties, ASCU filed a Notice of Intent to Locate with the Bureau of Land Management Arizona in October 2019 (AZA 37933), staked 18 lode claims on January 17, 2020, and acquired the rights to the federal minerals under the Arcus surface. These claims are for lands in the north half of section 35, Township 5 South, Range 5 East, of which ASCU has recently entered into a definitive purchase agreement with the current landowner, Arcus.

### ***Royalties and Encumbrances***

A 3.18% royalty is assumed to be applicable to the Cactus Project for the purposes of the Integrated Cactus PEA based on current contractual arrangements. In addition to the royalties granted by ASCU USA, the Cactus Project is also subject to existing 5% net smelter royalty on the SW $\frac{1}{4}$ , W $\frac{1}{2}$ SE $\frac{1}{4}$ , and E $\frac{1}{2}$ SE $\frac{1}{4}$  of Section 27 and the SW $\frac{1}{4}$ , Township 5 South, Range 5 East, which are outside the areas contemplated by the mine plan in the Integrated Cactus PEA. Presently, ASCU also has debt facilities pursuant to which the property is a secured interest.

### ***Existing Litigation***

Ramm Power Group LLC ("**Ramm**") had expressed interest in developing a pumped hydro renewable energy project at the site and had previously publicly announced that it would apply for a Federal Energy Regulatory Commission ("**FERC**") license so that it could use FERC's eminent domain authority to acquire the property. The application was not contested and, consistent with its practice to issue preliminary permits to uncontested applications, by order of 19 July 2018, FERC granted the preliminary permit. The preliminary permit gives Ramm no rights in the site or rights to develop their project. The preliminary permit only initiates the longer permitting process. On January 15, 2020, Ramm began the formal licensing process by filing its Notice of Intent ("**NOI**") and Pre-Application Document ("**PAD**"), together with a Letter Requesting Use of Traditional Licensing Process ("**TLP**"). The ASARCO Trust, to which ASCU is under contract to acquire the property from, ASCU, and ADEQ all filed comments opposing Ramm's initiation of the licensing process. ASCU is an interested party in any permitting and licensing activities related to the Sacaton mine site. On March 4, 2020, FERC rejected Ramm's NOI and PAD as "patently deficient". FERC determined the pre-application document relied upon a single study conducted for the purpose of remediating a copper mine site, lacked agency or tribal consultation, and was therefore incomplete. FERC also cited the public comments received from ASCU that Ramm does not have rights to access the site to conduct the required studies.

On July 9, 2021, Ramm requested a two-year extension of its preliminary permit. On August 12, 2021, FERC denied the request because Ramm filed the request after the deadline. FERC noted, however, that the rejection does not

preclude Ramm from filing for an entirely new preliminary permit for the project. On September 9, 2021, Ramm requested rehearing of FERC's denial of Ramm's request for a two-year extension of Ramm's preliminary permit. FERC did not act on the request for rehearing within 30 days of the filing of the request, and therefore the request was considered denied by operation of law. An aggrieved party has 60 days from FERC's action on a request for rehearing or the request's denial by operation of law to appeal the decision to the United States Court of Appeals. Until FERC files the record on appeal with a reviewing court, FERC may modify a previous order. FERC's right to modify a previous order applies regardless of whether an appeal is actually filed.

By June 10, 2020, ASCU was notified of a FERC application filed by REAggregators ("**REA**") for a preliminary permit for Project No. 15010-000 to study the feasibility of developing an approximately 200 megawatt (MW) closed-loop, pumped-storage hydro project near Casa Grande in Pinal County, Arizona. Note that REA is a direct affiliate of Ramm. As portrayed in the application, approximately 50-100 acres of the proposed project site ("**Casa Grande Hydro Site**") would overlap with land ASCU purchased in July 2020 from the ASARCO Trust. As a result, ASCU is an interested party in this matter. On August 8, 2020, ASCU filed their response with FERC, again outlining plans to develop a copper mine on the Cactus Project, further re-iterating that REA has no permission to access the property. The Casa Grande Hydro Site would encroach on the mine shaft of the Cactus Project materially impeding underground extraction activities. On October 21, 2021, FERC granted REA's application for a preliminary permit. In its Order granting the preliminary permit to REA, FERC noted ASCU's concerns and stated the permit does not grant land-disturbing or other property rights and that if REA later filed a license application, FERC would consider all relevant issues, including potential land use conflicts such as those raised by ASCU.

## History

ASARCO geologists first discovered the Sacaton mineral deposit in the early 1960s while examining an outcrop of leached capping composed of granite cut by several thin monzonite porphyry dikes. The nature of this original find indicated the likely presence of porphyry copper-type mineralization. Following this lead, ASARCO initiated a drilling program that defined copper mineralization zones. The west zone contained the ore body that was ultimately accessed through the open pit. The deeper east zone was the target of potential mining by underground methods.

During the life of the project, ASARCO drilled an approximate 223,246.4 ft (68,046 metres) of both core and rotary exploration drilling. A detailed list of historic drilling is provided in Appendix "A" to the Integrated Cactus PEA.

Project construction and mining of the west zone via open pit method commenced by 1972, and the mine operated continuously from 1974 to 1984. An underground copper deposit at Sacaton was under development until September 1981, when work was suspended because of high costs and a weak copper market. The Sacaton mine permanently closed on March 31, 1984, due to exhaustion of the open pit ore reserves.

The resultant Sacaton open pit mine is roughly circular, approximately 3,000 feet (914 metres) in diameter and 1,040 feet (317 metres) deep. The pit has a visible internal lake with the surface at approximately 980 feet (299 metres) in depth from the pit rim. During operation, the Sacaton mine consisted of the pit, crushing facilities and coarse ore stockpile, a 9,000 tpd flotation mill, a tailings storage facility that covered approximately 300 acres, a return water impoundment, an overburden dump, and a waste rock dump that covered approximately 500 acres. Copper flotation mill concentrate was sent by rail to the ASARCO smelter in El Paso, Texas.

Over the operating life of the mine, 38.1 million short tons of ore were mined and processed, recovering 199,030 short tons of copper, 27,455 ounces of gold and 759,000 ounces of silver. See table below for the Sacaton mine historic production.

**Sacaton Mine Historic Production (Fiscal Years Ended 12/31)**

<b>Year</b>	<b>Ore Milled Short Tons</b>	<b>Mill Grade Cu%</b>	<b>Mill Grade Ag Oz./Short Ton</b>	<b>Cu Short Tons</b>	<b>Au Troy Oz.</b>	<b>Ag Troy Oz.</b>
1974	2,020,000	0.63	0.05	9,516	N/A	N/A
1975	3,630,000	0.74	0.06	21,918	3,153	N/A
1976	3,782,000	0.71	0.07	22,021	3,151	N/A
1977	3,471,000	0.70	0.06	19,872	3,103	N/A
1978	4,153,000	0.67	0.07	23,042	3,691	N/A
1979	4,006,000	0.65	0.07	21,367	3,558	142,000
1980	3,819,000	-	-	16,097	2,504	124,000
1981	4,103,000	-	-	21,015	3,334	172,000
1982	4,165,000	-	-	20,892	2,499	154,000
1983	4,003,000	-	-	18,794	1,983	134,000
1984	1,000,000	-	-	4,496	479	33,000
<b>Total</b>	<b>38,152,000</b>	<b>0.69</b>	<b>0.06</b>	<b>199,030</b>	<b>27,455</b>	<b>759,000</b>

Source: Sacaton Mining Operations Report Version 2005. By David F. Briggs 10/22/2004.

During mining of the open pit, a waste dump was created through dumping of defined waste material. All oxide copper mineralization, and sulfide copper mineralization below the working grade control cutoff of 0.3% copper, were deposited to the waste dump. The historic waste dump forms the basis of the Stockpile Project resource modelled in the Integrated Cactus PEA due to the level of mineralized material discarded.

During the operating period, ASARCO also sank a 2,000-foot shaft just east of the pit to access the deeper east deposit. Since the suspension of activity at the site in 1984, intermittently and per a site improvement plan ("SIP"), fixed equipment and rolling stock have been removed from the site, and fixed plant locations and the tailings disposal facility were covered with previously salvaged and stockpiled desert alluvial soil material and revegetated.

In 2005, ASARCO filed for reorganization under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the Southern District of Texas, Corpus Christi Division (the "**United States Bankruptcy Court**"). By 2008, the United States Bankruptcy Court approved the process by which ASARCO would pursue the selection of a plan sponsor and sale of its operating assets. During that year, and after a bidding process for the purchase of ASARCO's assets, Sterlite (USA), Inc. ("**Sterlite**"), a subsidiary of Vedanta Resources PLC, executed a purchase and sale agreement in the amount of US\$2.6 billion for ASARCO's assets. After the purchase and sale agreement was executed, copper prices began to decline, and by October 2008, Sterlite representatives informed the United States Bankruptcy Court that the company could not honor the contract.

On June 5, 2009, the United States Bankruptcy Court approved a custodial trust settlement agreement (the "**Settlement Agreement**") that resolved claims pertaining to past and potential future cleanup costs associated with approximately 18 sites owned by ASARCO in 11 states. The Settlement Agreement required the establishment of a custodial trust to oversee cleanup of the sites and transfer of site property to the custodial trust. The Settlement Agreement also provided funding in the amount of US\$20 million to clean up the Sacaton site and to fund the administrative expenses associated with the ASARCO Trust.

From 2009 to 2018, attempts were made by other parties to purchase the Sacaton site and associated facilities. In 2019, Cactus 110 executed a purchase agreement and prospective purchase agreement with the ASARCO Trust and the ADEQ, respectively, for the right to acquire all ASARCO land parcels representing the historic Sacaton mine, all infrastructure therein, and all associated mineral rights. The acquisition closed in July 2020 following the completion of SIP activities undertaken by the ASARCO Trust and approved by the ADEQ. Since 2020, the Sacaton deposits are referred to as the Cactus deposits.

ASARCO worked continuously on the project from the early 1960s to the mid-1980s, and significant records of the development of the geological understanding, mining operations and processing results remained with the property. ASCU is benefiting from the high quality of work and historical records remaining from the past operators.

## **Geological Setting, Mineralization and Deposit Types**

### ***Regional Geology***

The Cactus Project occurs in the desert region of the Basin and Range province of Arizona. The basal formation in the area is the Proterozoic Pinal Schist. At the close of Older Precambrian, the Oracle Granite batholith intruded the Pinal Schist. In Younger Precambrian time, Apache Group sediments were deposited and igneous activity resulted in the emplacement of the Sacaton Granite northwest of the mine along with numerous diabase dikes. In the Paleozoic Era, an unknown thickness of sediments was deposited and later eroded along with most of the Apache Group rocks. During the Laramide Orogeny, two granitic stocks, the Three Peaks Monzonite and the Sacaton Peak Granite, were emplaced in the vicinity of the Cactus Project.

At a location removed from the current mine, Laramide porphyries of a similar composition intruded the Oracle Granite and introduced hydrothermal solutions that altered and mineralized a large area of the surrounding rocks. Subsequent Tertiary extension rotated and dismembered the mineralized rocks. A low angle listric fault (the Basement fault) moved the Sacaton deposits to their current location. Quaternary basin-fill deposits covered all evidence of mineralization except for the small Sacaton discovery outcrop.

With the exception of the Pinal Schist, found below the Basement fault, all pre-mineral rocks in the vicinity of the mineralized deposits are pervasively altered. In addition, two stages of brecciation are present, often resulting in an intimate mixture of rock types. These features have complicated the delineation and identification of the rocks. Major host rocks are Precambrian Oracle Granite, Laramide monzonite porphyry and quartz monzonite porphyry.

The porphyries are similar in composition and texture but are distinguished by the presence of 10% clear quartz phenocrysts in the latter. They intrude the older rocks and occur as large masses, poorly defined dike-like masses and thin well-defined but discontinuous dikes. They also form monolithic breccias and mixed breccias containing varying percentages of granite. Discontinuous pre-mineral diabase and post-mineral dacite porphyry dikes intrude the older rocks in both deposits.

Structurally both deposits are complex with intense fracturing, faulting and brecciation. Pre-mineral brecciation is related to the intrusion of the Laramide porphyries and occurs primarily in the west deposit, which had a central core of pre-mineral brecciation that was a control for hypogene mineralization. Angular vugs are a diagnostic feature of the pre-mineral breccia. They occur between fragments in the breccia and vary in size from 0.2 inch to 2.0 inch. Post-mineral brecciation is ubiquitous in both deposits and has affected the rocks in a number of ways, depending on rock composition, degree and type of alteration, and relative location in the mineralized deposits. Manifestations of this period of brecciation include shattering, crushing and granulation, mixing of rock types, and the presence of linear breccia structures containing crushed sulfides. Mineralized fractures in the west deposit generally strike E-NE while post-mineral fractures strike N-NW.

A great number of minor faults have been mapped in the west mineralized deposit. The faults are often variable in strike and dip, and are usually difficult to trace along strike. The prevailing strike direction is N60°E to E-W. Slickensides on some of the faults indicate that horizontal components of displacement are relatively common. Generally, the lack of predictable lithologic contacts to act as markers makes the direction and magnitude of displacement difficult to estimate. Total displacement on most of the faults is thought to be less than 100 feet. Both pre-mineral and post-mineral movement is often present.

Besides being terminated at depth by the Basement fault, both deposits are bounded by normal faults that drop post-mineral conglomerate into contact with the mineralized rocks. The west deposit is in a horst block formed with the Sacaton fault forming the east side, which strikes N20°W, and the West fault trending N45°W on the west side. The Sacaton fault dips 60° to the east and has a displacement of up to 1,500 feet (457 metres). The east deposit is the displaced portion of the west deposit in the hanging wall of the Sacaton fault.

The Parks/Salyer Property, also owned by ASCU, is located 1.3 miles to the southwest of Cactus and displays the same geological characteristics as Cactus. Located within a repeat horst block similar to Cactus, it is a portion of the same larger porphyry system that shows lesser displacement from the in situ source. Similar northwest trending normal faults are interpreted to bound the Parks/Salyer mineralization.

### ***Alteration and Mineralization***

The dominant hypogene alteration assemblages in the deposit are phyllic and potassic. Phyllic alteration is characterized by quartz, sericite and clay, but quartz and sericite predominate. Secondary silica in the porphyries occurs as a fine-grained replacement of the groundmass (intergrown with sericite and clay). Minor amounts of quartz are also found, with sericite and clay replacing plagioclase phenocrysts in the porphyries and granite. Quartz-sulfide veinlets are associated with the phyllic assemblage and comprise up to 1% of the rock by volume. Alteration minerals occurring in rocks of the potassic assemblage include varying quantities of biotite, chlorite, quartz, sericite and clay, with traces of secondary K-feldspar, calcite and anhydrite. Secondary biotite and chlorite characterize the potassic assemblage. Since phyllic and supergene alteration are superimposed upon, and largely destroy, potassic alteration, it is uncertain how much of the quartz, sericite and clay are part of the original potassic suite. Supergene alteration associated with the process of secondary enrichment of sulfides has modified the suite of hypogene alteration minerals. In Cactus West, effects of this supergene overprint are not always assessable due to post-enrichment oxidation and leaching penetrating the chalcocite blanket into the primary sulfide zone.

The major hypogene sulfide minerals at Sacaton are pyrite, chalcopyrite and molybdenite. Traces of bornite and sphalerite have been observed in concentrate samples. Hypogene sulfides occur as disseminated grains, veins and vug fillings. Disseminated sulfides are more abundant in the granite and strongly brecciated rocks than in the porphyries and weakly brecciated rocks. In the West mineralized zone, disseminated grains usually comprise less than 50% of the hypogene sulfides, but in the East mineralized zone, where granite breccia is the main rock type, disseminated grains account for over 50% of the sulfides.

The total sulfide content for both mineralized zones is variable, ranging from approximately 1.0% to 4.0% by volume. Rock type and pre-mineral brecciation cannot be directly correlated to variations in total sulfide content. North and south of the mineralized zones, the total sulfide content decreases similarly to the overall alteration intensity. Drilling and pit mapping have defined a core zone within which the grade of hypogene mineralization is at least 0.40% copper as chalcopyrite. Outside the zone, the copper grade gradually drops off to less than 0.10% copper. The pyrite to chalcopyrite ratio varies from 1:1 to 3:1 within the core zone and increases to 10:1 or more outside of it. Molybdenite occurs in quartz veins and as smears on fractures. The molybdenum content averages approximately 0.010% for the Cactus West mineralized zone and 0.025% for the Cactus East mineralized zone.

The major supergene sulfide mineral at Cactus Project is chalcocite. Covellite and digenite are also present in much smaller quantities. The intensity of secondary enrichment is greatest at the top of the enriched zone and decreases gradually toward the base. In the upper portions of the enriched zone chalcocite completely replaces chalcopyrite and partially replaces pyrite. Toward the base of the zone chalcopyrite is partially replaced and pyrite is rimmed by thin coatings of chalcocite. The enrichment factor (the ratio of supergene copper grade to hypogene copper grade) varies from 3:1 to 5:1 for both mineralized zones. The most important control for supergene enrichment is the grade of primary mineralization. The bulk of economic supergene mineralization is underlain by primary sulfides averaging at least 0.40% copper.

The Cactus deposits have undergone two periods of oxidation and leaching. The first period resulted in the formation of what was probably a uniform high-grade chalcocite blanket that was continuous through the Cactus East and Cactus West deposits. Some, and probably all, of the original blanket formed prior to movement on the Sacaton and West faults. Substantial quantities of oxidized copper minerals are found erratically distributed through the capping of both deposits. In the Cactus East deposit, the oxide minerals usually occur just above chalcocite mineralization and are thought to have resulted from in-place oxidation of chalcocite along zones of deep oxidation. Copper grades over 1.0% are common. In-place oxidation is also found in the Cactus West deposit, but generally the oxides occur over a greater horizontal and vertical range, and the copper has likely been transported from the point of oxidation. Chrysocolla, brochantite and malachite are the most common oxidized copper minerals. In upper portions of the capping chrysocolla predominates, while brochantite and malachite predominate in the lower portions.

### ***Deposit Types***

The Cactus deposit is a portion of a large porphyry copper system that has been dismembered and displaced by Tertiary extensional faulting. Porphyry copper deposits form in areas of shallow magmatism within subduction-related tectonic environments. Cactus has typical characteristics of a porphyry copper deposit, defined as follows:

One wherein copper-bearing sulfides are localized in a network of fracture-controlled stockwork veinlets and as disseminated grains in the adjacent altered rock matrix.

- Alteration and mineralization at 1 km to 4 km depth are genetically related to magma reservoirs emplaced into the shallow crust (6 km to over 8 km), predominantly intermediate to silicic in composition, in magmatic arcs above subduction zones.
- Intrusive rock complexes that are emplaced immediately before porphyry deposit formation and that host the deposits are predominantly in the form of upright-vertical cylindrical stocks and/or complexes of dikes.
- Zones of phyllic-argillic and marginal propylitic alteration overlap or surround a potassic alteration assemblage.
- Copper may also be introduced during overprinting phyllic-argillic alteration events.

Hypogene (or primary) mineralization occurs as disseminations and in stockworks of veins, in hydrothermally altered, shallow intrusive complexes, and their adjacent country rocks. Sulfides of the hypogene zone are dominantly chalcopyrite and pyrite. The hydrothermal alteration zones of porphyry copper deposits are well known and provide an excellent tool for advancing exploration.

Uplift of the porphyry system to shallow depths can result in secondary enrichment processes where copper is leached from the weathering of hypogene mineralization and redeposited below the water table as supergene copper sulfides, such as chalcocite and covellite. Above the water table, copper oxide minerals typically form. Cactus has a history of oxidation and leaching which resulted in the formation of an enriched chalcocite blanket. A later stage of oxidation and leaching modified the blanket by oxidizing portions of it in place and mobilized some of the chalcocite to a greater depth.

### **Historical Exploration**

ASARCO geologists first identified the Sacaton mine area in early 1961 while performing regional mapping and sampling in and around the Sacaton Mountains. A lone outcrop of altered and weakly mineralized granite encompassed by alluvium was the only indicator of the potential for porphyry copper-type mineralization in the surrounding area. Following its acquisition of mineral rights, ASARCO conducted several geophysical surveys, including magnetics and induced polarization ("IP"). The IP survey identified a large area just south of the outcrop with a chargeability response indicative of sulfide mineralization.

### **Drilling**

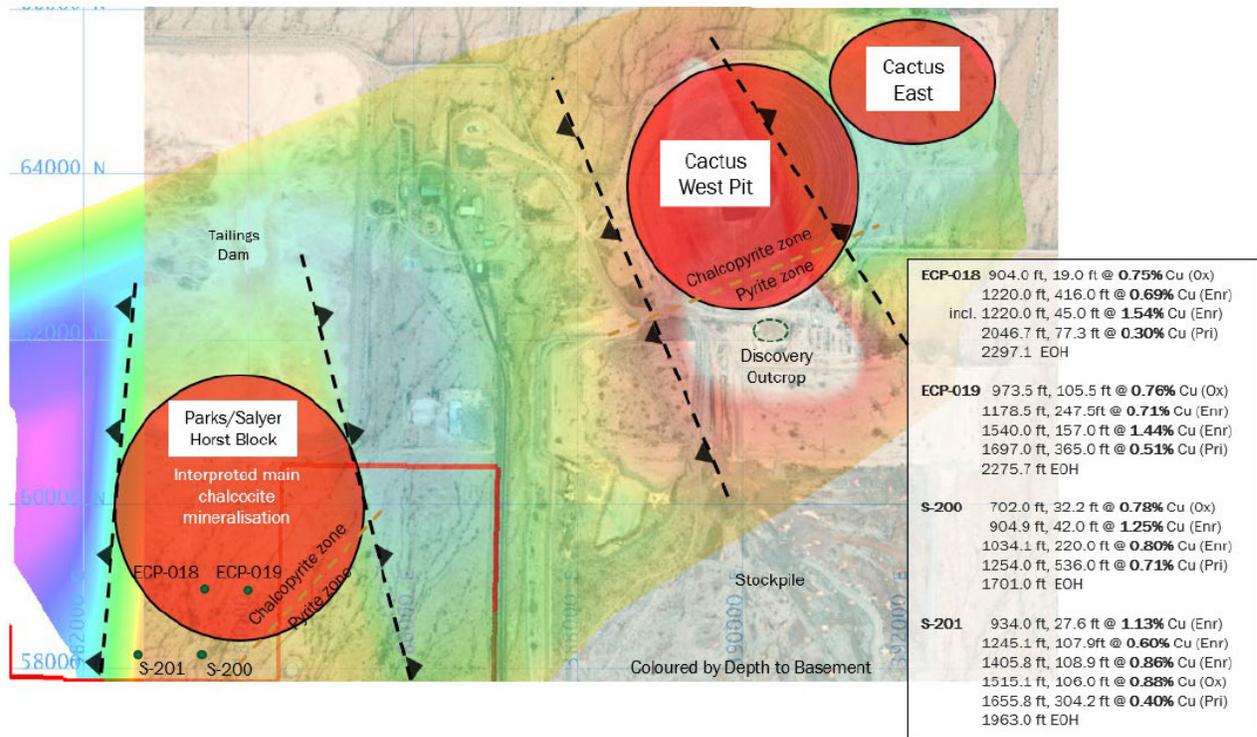
In the fall of 1961, ASARCO authorized and initiated a modest six-hole drilling program. The first drill hole was located just north of the discovery outcrop, intersecting approximately 50 feet (15 metres) averaging close to 0.5% Cu. The next four holes were drilled south, east and west of the first hole in the geophysical target area but did not hit significant results. The sixth and final budgeted drill hole (located to the northwest of the IP anomaly and the discovery outcrop) did intercept high grade mineralization — the discovery of the Sacaton West deposit. In 1962 through to the first half of 1963, 82 more holes were drilled. These 88 holes outlined a north-easterly trending alteration zone approximately 4 miles (6.4 km) long and 1.5 miles (2.4 km) wide dominated by what was recognized as two potential ore bodies, the Sacaton West and Sacaton East deposits, as well as widespread intercepts of copper mineralization throughout. Low copper prices precluded any further exploration drilling at that time.

Improving market conditions prompted ASARCO to continue exploration drilling in 1968 and 1969, leading to 37 more holes being drilled. The additional information led to the decision to plan and develop the mine. An additional 10 holes were drilled (1970 and 1971) to sterilize areas under planned facilities. After mining was initiated in 1972, development and definition drilling was conducted for the open pit (Sacaton West deposit). Through 1974 and 1976, 8 additional holes were drilled in the Sacaton East deposit for definition purposes.

The adjacent Parks/Salyer Property was variably explored between the 1970s and the late 1990s. Parks/Salyer is a less displaced portion of the larger porphyry copper system that both deposits were detached from. A number of diamond drill holes identified mineralization and geological characteristics consistent with the Cactus deposits in a similar horst block environment. In 1996, two exploration diamond drill holes were undertaken by ASARCO at the southern edge of the Parks/Salyer Property (S-200 and S-201). As interpreted, they intersected well-mineralized zones of oxide, enriched and primary material that indicated grades were increasing to the north.

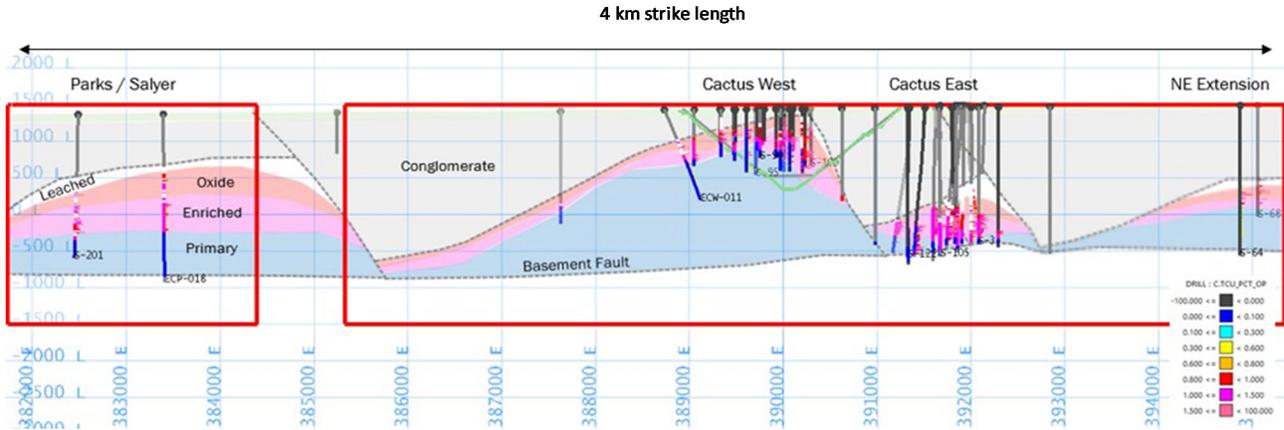
ASCU conducted an ionic leach soil geochemistry program over the Parks/Salyer Property in 2019 on 325-foot (100 metre) spacing. This confirmed anomalous soil geochemistry across the property for copper, molybdenum, silver and gold and a general northeast trend of the higher anomalous values. ASCU followed this work with two diamond drill holes in 2020 (ECP-018 and ECP-019). This extended mineralization a further 900-1,000 feet (275-305 meters) to the northeast of previously drilled mineralization. The figure below plots the location and scale of the potential Parks/Salyer deposit with respect to the Cactus mine deposits and highlights the significant intercepts defined by the four exploration holes drilled into the deposit on the property to date.

**Location and Scale of the Potential Parks/Salyer Deposit with respect to the Cactus Mine Deposits**



The figure below is a northeast oriented long section displaying the horst and graben block fault and mineralization interpretation from the Parks/Salyer deposit in the southwest through to the NE Extension mineralization in the northeast. Northeast movement along the Basement fault was accommodated by block rotation and the formation of northwest trending normal faults. The red boxes indicate ASCU controlled property boundaries. The existing Cactus West pit is displayed on the long section.

**Northeast Oriented Long Section Displaying Mineralization Interpretation and Property Boundaries**



The NE Extension is located 3,000 feet (915 metres) to the northeast of Cactus East. ASARCO defined the mineralized zone with wide spaced exploration drilling (> 1,000 feet [305 metres]) in 1962 and 1963 as part of the initial property-wide exploration program. The table below provides the significant intercepts for the two main holes drilled into the NE Extension mineralization. ASCU has not performed any exploration programs on the NE Extension area to date.

**Significant Intercepts for the Two Main Holes Drilled into the NE Extension Mineralization**

Hole ID	From (ft)	To (ft)	Length (ft)	TCu (%)	Mineral Zone
S-68	1,016.5	1,044.5	28.0	1.27	oxide
	1,078.5	1,125.8	47.3	0.95	oxide
	1,161.0	1,208.8	47.8	3.05	oxide
	1,275.0	1,290.1	15.1	1.96	enriched
	1,322.4	1,354.1	31.7	0.97	enriched
	1,354.1	1,526.0	171.9	0.38	primary
S-64	1,093.9	1,104.2	10.3	1.01	oxide
	1,163.0	1,227.3	64.3	1.37	enriched
	1,333.7	1,350.9	17.2	0.89	enriched
	1,350.9	1,776.0	425.1	0.34	primary

ASCU has focused their exploration by way of definition and expansion core drilling around the two known mineralized zones (now known as Cactus East and Cactus West). In 2019, two vertical PQ core holes were drilled into the Cactus East mineralized zone for verification of grade and for metallurgical testing as part of the evaluation program prior to purchase. One additional vertical PQ core hole was drilled into Cactus East in 2020 for further metallurgical testing, for a total of 5,768 feet (1,758 metres). Five angled HQ core holes totaling 9,252 feet (2,820 metres) were drilled in late 2019 and 2020 around the northern and western edges of Cactus East to define and expand mineralization. Also in 2020, 11 angled HQ core holes totaling 15,377 feet (4,687 metres) were drilled around the perimeter of the Cactus West pit to further define and expand Cactus West mineralization beyond the pit limits.

The Cactus deposits are covered with post mineral alluvium and conglomerate, which may be up to 1,500 feet (457 metres) thick. ASARCO rotary drilled through the cover alluvium and conglomerate and completed the remainder of the holes with NX/HX core tails. All of ASARCO's drill holes, exploratory and production holes within the developing pit were drilled vertically and very few were downhole surveyed. ASCU started a similar program in 2019 on the first

two (PQ) metallurgy holes but converted to coring the full hole after unsatisfactory results. Core recovery, on average, was greater than 95%.

As detailed in the table below, ASCU completed a total of 20 core holes in the resource area in 2019 and 2020 for a total of 30,397 feet (9,265 metres) of drilling. Of the 20 diamond drill holes completed, 19 were used for the Mineral Resource estimate.

**2019 – 2020 Drilling Completed by ASCU**

<b>Drill Hole</b>	<b>Core</b>	<b>Total Depth (ft)</b>	<b>Total Depth (m)</b>	<b>Azimuth</b>	<b>Dip</b>
SE-01	PQ	2,058	627.3	0	-90
SE-02	PQ	2,013	613.6	0	-90
SE-03	PQ	1,697	517.2	0	-90
ECE-001	HQ	1,896	577.9	220	-80
ECE-002	HQ	2,013	613.6	230	-80
ECW-003	HQ	1,936	590.0	180	-60
ECW-004	HQ	500	152.4	0	-60
ECW-005	HQ	664	202.4	129	-60
ECW-006	HQ	1,000	304.8	10	-60
ECW-007	HQ	1,811	552.0	123	-55
ECW-008	HQ	1,000	304.8	20	-65
ECW-009	HQ	906	276.1	30	-60
ECW-010	HQ	1,469	447.8	110	-65
ECW-011	HQ	1,329	414.2	60	-65
ECW-012	HQ	1,459	444.7	65	-65
ECW-013	HQ	1,616	492.6	205	-55
ECW-014	HQ	1,687	514.2	160	-50
ECE-015	HQ	1,723	525.2	0	-90
ECE-016	HQ	1,783	543.5	0	-90
ECE-017	HQ	1,837	559.9	0	-90
<b>Totals</b>		<b>30,397</b>	<b>9,265.0</b>		

In 2019, 55 surface sonic drill holes totaling 5,120 feet (1,560 metres) of 6-inch diameter holes were drilled across the Stockpile Project to support an initial resource based on approximately 750 feet (229 metres) spaced drilling. Through late 2020 and early 2021, an infill surface sonic drill program was undertaken to reduce the spacing to 400 feet (122 metres). The resource database for the Stockpile Project resource contains 210 holes, including four historical sterilization holes drilled into the barren alluvium dumps to the immediate north of the Stockpile Project. Drilling continues on the Stockpile Project to reduce the spacing to 200 feet (61 metres).

***Collar Surveying***

The coordinates for drill hole collars for the Cactus diamond drilling were determined using a Trimble Geo 7x handheld unit with sub-foot accuracy, post-processed by Allan Instruments using TerraSync software from Trimble. Collar coordinates (metric in Universal Transverse Mercator (UTM) Zone 12 grid projection) for the sonic drilling on the Stockpile Project were determined using a Trimble R8 Model 2 Base and Rover GNSS GPS, surveyed in Real Time Kinematic with sub-centimetre accuracy. Data processing was completed using Trimble Business Center software.

### ***Downhole Surveying***

All of ASCU's diamond drill holes for the Cactus Project, including vertical drill holes, have downhole surveys completed by the drill contractor using either a Reflex EZTRAC XTF magnetic survey instrument or a Reflex EZGYRO MEMS gyroscopic survey instrument. Surveys were taken nominally every 100 feet (30.5 metres) while the hole was being drilled.

All drill holes for the Stockpile Project were drilled vertically. Due to the depth of holes averaging approximately 80 feet (24.4 metres), downhole surveys were not deemed necessary.

### ***Core Logging and Photography***

Core logging was performed in ASCU's core shed at the project site. Drill core was delivered to the core shed by the drillers at the end of each drill shift. The following preparation and logging processes were performed on the core:

- The core was given a final cleaning.
- Core boxes were marked for identification / verification of footages.
- Core boxes were photographed.
- Point-load testing was performed.
- Geological characteristics of the core, such as lithology, copper mineralogy, brecciation, alteration and oxidation, were logged.
- Geotechnical characteristics of the core, such as core recovery, rock quality designation, fracture frequency and joint types, were logged.
- Two holes (one in Cactus West and one in Cactus East) were drilled with oriented core. For these holes, structures were measured for orientation data and the information was logged into the database.

Data logging of all core characteristics is performed digitally on Galaxy S5e tablets that write directly into the cloud-based MX-Deposit drill hole database when internet connection is available. When internet connection is not available, holes are locked by the logging geologist, who can then log the hole offline. Locking out of the hole ensures two geologists cannot edit the same hole at the same time. Once internet is available, the logging information is uploaded to the database. In addition to the digital table view of the database for logging, a visual strip log view is used to review logging.

Core sample intervals are determined by the logging geologist based on logging characteristics. Sample interval breaks are determined by geological parameters, but within core containing the same geological characteristics, samples are undertaken on a regular 10-foot (3.28 metre) sample length. Each sample interval is defined as follows:

- Sample interval is marked at its beginning in the core box with the interval and a unique sample identification ("ID") number.
- The sample number is taken from a tag book of sequential sample cards to ensure duplicate samples cannot be produced. The sample tag is stapled into the box at the sample start location.
- A twin sample tag is stapled to a clean sample bag to collect the sample when it is split and sent to the lab.
- Interval information for the hole ID and from/to depths is written in the tag book.

- The logging geologist enters the same from/to intervals directly into the sample logging table of MX-Deposit for the drill hole being logged.

All cores sampled are split into two equal portions along the long axis of the core, using either a diamond saw or a hydraulic blade splitter. One half of the split core is placed into the sample bag marked with that sample's unique sample number. The bagged samples are placed in a shipping tote for transport to the analytical lab in Tucson. The other half of the split core is placed back in the core box and is archived in ASCU's secure core storage room located at the Cactus site.

For the Stockpile Project, sonic drill holes are logged for main material type, lithologies, color, iron oxide minerals, copper minerals and clast size distribution. Data logging of all characteristics is performed digitally on Galaxy S5e tablets that write directly into the cloud-based MX-Deposit drill hole database and use the same lockout version control features as the Cactus Project deposit logging. Stockpile Project drill holes are managed in a separate database activity to the Cactus Project deposit drill holes.

All Stockpile Project samples are collected at the drill in plastic tubing at regular 2.5-foot (0.7 metre) intervals. After logging, each sample interval is placed into a new sample bag with a unique sample number unrelated to drill hole number or drill interval in a manner similar to that described for core samples.

### ***QP Opinion***

The QP reviewed the survey methodology and results of the drill hole location and downhole data for historical and recent drilling on the Cactus Project. The QP also reviewed abnormal grades within the mineralized zone to ensure they were based on visible mineralization.

Individual high grades were dealt with in the capping grades as explained below. The drill recovery has been consistently above 95%, with good control of sample location with the downhole survey program. The QP feels that the drilling results of the in situ mineralized zones and the stockpile resource meets the expected standards and best practices as defined in the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines 2019 (the "**CIM Best Practice Guidelines 2019**"). The drill hole spacing and sample location data meets the level of accuracy expected for the Integrated Cactus PEA.

### **Sample Preparation, Analysis and Security**

#### ***Sample Preparation***

ASCU has been exclusively using Skyline Assayers and Laboratories ("**Skyline Labs**") in Tucson, Arizona for their sample preparation and analysis. This lab is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017, Certificate #2953.01. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system. The QP has visited this lab to review the procedures used for sample preparation, analysis and the lab's internal quality assurance / quality control ("**QA/QC**") system.

The lab dispatches drivers to pick up samples at the mine site when they are informed there is a full shipment ready. Upon arrival at the lab, totes were offloaded and stored. When the samples were ready to be processed, the bags were emptied into metal bins and the sample bags with tags placed on top. The bins and bags were placed in an oven at 220°F (105°C) for 24 hours to dry before moving into the lab for processing.

Each sample was crushed in a TM Engineering – Terminator roll crusher to 95% passing 1/4 inch. This material was passed through a riffle splitter and mixed three times to ensure homogeneity of the sample. Three-quarters of the sample was then bagged, labelled and returned to ASCU as coarse reject. The remaining material was returned to the roll crushers and crushed to 95% passing -10 mesh. A 280-gram sample of this material was put in a Labtech LM2-P puck pulverizer and run to 95% passing -150 mesh. This sample was then placed into labelled heavy paper envelopes and sent to the lab for assay.

### ***Sample Analysis***

As a first pass, each sample was assayed for total copper ("CuT"). The pulverized samples were received from sample preparation and a measured portion of the sample was digested in a mix of hydrochloric acid, nitric acid and perchloric acid on a hot plate for 15 to 20 minutes. The sample was left to cool, rinsed with distilled water and then digested in hydrochloric acid for an additional 15 minutes on a hot plate. The sample was then cooled and sent to atomic absorption ("AA") analysis to return a CuT value.

To support potential heap leaching for metal recovery, a sequential acid leach assay procedure was conducted on each sample to return an acid soluble copper value ("CuAS") and a cyanide soluble copper ("CuCN") value. The samples were first run using a digestion in 5% sulfuric acid for one hour on a shaker table, then 15 minutes in a centrifuge, before the liquid was transferred to a 250-millilitre flask. The residue was rinsed and that liquid was used to top up the flask. The flask was sent to the assay lab for AA analysis to return a CuAS value. The residue from the centrifuge was then digested in 10% sodium cyanide for 30 minutes on a shaker table. After 15 minutes in the centrifuge, the liquid portion was transferred to a flask and the residue was rinsed and that liquid used to top off the flask. That sample was sent to the assay lab for AA analysis to return a CuCN value. The remaining pulverized sample in the heavy paper envelope was returned to ASCU together with the coarse reject.

### ***Sample Security***

Bagged samples with identification tags are placed in large 3-foot (1 metre) square plastic totes which are stored at a core shed situated within the secured mine site away from any point of access until ready for transport. ASCU uses a private contractor to transport the sampled totes to the lab. When 8 to 10 totes are filled, the contractor is called to make a pickup. A transmittal sheet is prepared that lists all the samples in the shipment with an assay order sheet for the analysis to be done. A chain of custody sheet is signed by ASCU upon dispatch, signed by Skyline Labs upon arrival, and returned to ASCU to show secure delivery.

### ***Laboratory Quality Assurance / Quality Control***

Skyline Labs is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. Their quality management system has been certified as conforming to the requirements defined in the International Standard ISO 9001:2015. The standard operating procedure used while processing the ASCU samples was to process samples in groups of 20. Each tray consisted of 18 samples, with samples No. 1 and No. 10 repeated as duplicates. The results from each tray were analyzed and any variance in the duplicates of more than 3% would result in the entire tray being re-assayed.

The results of these analyses, including the QA/QC checks, were transmitted to a select set of individuals at ASCU and Stantec.

### ***QP Opinion***

For this section of the Integrated Cactus PEA, the QP has reviewed the assay lab's procedures and QA/QC results in detail and finds that it meets all of the expected standards and best practices as defined in CIM's Best Practice Guidelines 2019. The assay results and associated data meets the level of accuracy expected for the Integrated Cactus PEA.

### ***Data Verification***

The bulk of the drilling database was rebuilt from historical drilling logs and assay certificates from exploration work undertaken by ASARCO. ASCU performed significant verification work on the historical drill holes to support the use of this data in the Integrated Cactus PEA. Since 2019, ASCU has also drilled 20 new holes at the Cactus Project to support verification, metallurgical testing and resource extension for the new mineral resource estimate. An additional two holes were drilled at the Parks/Salyer exploration site.

### ***Historical Exploration Data***

Two core sheds were located at the Cactus Project that stored the historical drill core and sample pulps from ASARCO's exploration programs. This physical data verified the historical data quality and its use in the new mineral resource statement. While modern assay QA/QC procedures have evolved significantly, there is evidence in the historical records that ASARCO was using best practices of the day. In addition to these procedures, ASARCO ran a series of pulp duplicate checks against their regular laboratories to test assay quality.

Specific data verification work undertaken by ASCU for the historical drill holes included the following:

- Verification of the collar locations.
- Reinstatement of downhole survey data drilled into the Cactus East deposit.
- Verification of drill hole locations and geological interpretations against historical cross sections and pit maps.
- Relogging of historical drill hole lithology, copper mineral zones and alteration.
- Re-assaying of historical pulp samples to compare CuT grades and establish soluble copper contents confirming expected copper mineral zones and leachable copper mineralogies.

### ***Historical Collar Locations***

Historical collar locations were verified through the identification of historical survey control and field survey pickup. A final ASARCO control document entitled *Sacaton – Drill Hole Files and Information* produced in 1998 by Bret S. Canale was located. A page from this document detailed the final collar survey coordinates for all Sacaton drill holes and the aerial control survey points for the property. The coordinates were specified in two local grids: the Santa Cruz coordinate system and the Sacaton coordinate system. The Sacaton coordinate system was used for all drilling and mapping information related to the Cactus deposits. In addition to this document, a survey control map was located at the site that detailed the location of the historical drill holes and survey control points spatially and in conjunction with site locations, such as land sections and the discovery outcrop. From this information, new survey control could be established from the known historical locations in the field to tie the historical local grid coordinates to a modern grid system.

As a cross validation of this work, historical drill hole collars were located in the field and surveyed by differential GPS ("DGPS"). There were holes that could not have their collar surveys checked due to their location being within the mined pit extents or under alluvium dumps. The consistency of the field collar locations and historical collar coordinates for those that could be located, and the consistency of historical drill hole locations against historical cross sections and pit maps, confirmed that collars that could not be verified in the field are correctly spatially located.

### ***Historical Downhole Survey Data***

Deep vertical holes were drilled in the Cactus East deposit. In some cases, the holes deviated significantly as a function of depth and local drilling conditions. The downhole survey data was plotted on downhole survey plots. Using Vulcan software, the plots could be remapped into three dimensions ("3D") and the downhole survey data reinstated. From these strings, downhole surveys were created so that the drill holes were plotted correctly in 3D. Holes were then compared against historical cross sections to confirm downhole survey data had been reinstated correctly. The following holes from Cactus East contained historical downhole surveys: S-49, S-98, S-99, S-104, S-108, S-113, S-118, S-121, S-123, S-137, S-138, S-139, S-140, S-142, S-145, S-146, S-147 and S-149. All other historical holes within Cactus East and all historical holes within Cactus West were drilled vertically and contain no downhole surveys.

### ***Recent Drilling***

The Qualified Person completed physical checks on collar, downhole survey and logging for the 22 new Cactus Project drill holes and 206 new Stockpile Project drill holes undertaken by ASCU since 2019.

Collar locations were picked up in the field by DGPS and the coordinates imported into the MX-Deposit drill hole database by CSV file. Collar coordinates were independently field checked by the QP on a site visit at the end of the drilling program to ensure surveyed collar coordinates matched their field locations. Visual inspection by the QP confirmed that the drill holes were located as shown in the drilling database. This was also confirmed with a handheld GPS.

All modern drill holes, regardless of the drill angle or depth, are surveyed with a Reflex EZTrac XTR instrument for their downhole deviation. Downhole surveys were reviewed by the QP against the designed survey and in the field for the collar survey orientation. A review of the downhole survey data for a few of the early holes drilled in ASCU's 2019 / 2020 drill campaign revealed that magnetic declination had been improperly applied. This was fixed in the affected holes. The entire database was reviewed to ensure that the error did not occur elsewhere. The database was found to be correct.

All modern drill holes are also logged for lithology, copper minerals and mineralization, alteration, oxidation, brecciation and geotechnical attributes. Logging is viewed in three-dimensional software to confirm consistency with surrounding drilling and the geological interpretation. Once assays are attained, results are compared back against the logged copper mineral zones to ensure consistency and as continuous improvement of the logging process. The QP reviewed specifically requested drill holes to confirm logging and assays against the physical core. Three pseudo-random drill holes were selected, as each had intervals that were inconsistent in comparison to intervals on either side. The first reviewed drill hole contained an interval with a comparatively high CuAS assay. It was explained by a zone of near massive malachite and other copper oxides. The second reviewed drill hole contained high grades in a dacite dyke. Visual inspection revealed the presence of significant covellite mineralization. The third drill hole reviewed contained high grades over a narrow zone. This occurred on the contact between the oxide and the enriched zone, which typically contains the highest grades intercepted within the enriched zone. All the pseudo-random checks of drilling showed compliance with logging.

In addition to validation checks performed in the MX-Deposit drill hole database, specific drill hole database checks are undertaken on the Vulcan ISIS drill hole database to be used for the resource estimate. Checks that were undertaken and passed were as follows:

- All drill hole collars had a unique collar location.
- No collar end of hole depth was less than individual intercept depths logged within the hole.
- There was no overlapping from/to intervals in any table.
- All fields (including depths) that should increase between records were increasing.
- All hole IDs and sample IDs were unique.
- All assay grades were within expected tolerance ranges.
- All mandatory critical fields were populated in the database (e.g., easting, northing, elevation, total depth, from, to, azimuth, dip and assay values).

### ***Sample Quality Assurance / Quality Control***

For the Cactus Project and Stockpile Project drill holes undertaken by ASCU since 2019, and the re-assay program undertaken on historical pulps, a modern QA/QC program was undertaken composed of blanks and standards.

Blanks were inserted into the sample stream at a rate of one per 20 samples (or 5%) to test for contamination in the sample preparation process. Two blanks were used. In all cases, the assayed CuT grades were below the maximum value and indicate no evidence of contamination in the sample preparation process.

Site-specific standards were created from onsite samples. Standards were inserted into the sample stream at a rate of one per 20 samples (or 5%) to test for precision of the lab to replicate an expected assay value. In all cases, the assayed CuT grades were within expectations. Pulp duplicates will feature in future programs on modern pulp samples.

### ***QP Opinion***

For this section of the Integrated Cactus PEA, the QP has reviewed all of the associated data in detail and finds that it meets all of the expected standards and best practices as defined in CIM's Best Practice Guidelines 2019. The drill results and associated data meets the level of accuracy expected for the Integrated Cactus PEA.

### ***Mineral Processing and Metallurgical Testing***

The material to be processed as part of the Cactus open pit expansion project is an extension of the open pit mining operations conducted by ASARCO that took place in the 1970s and early 1980s. The prior operations comprised traditional copper milling and flotation concentration operations to produce copper sulfide concentrates for processing at local smelters.

In consideration of a potential copper heap leaching and solvent extraction / electrowinning ("SX/EW") processing facility at Cactus based on processing existing Stockpile Project oxidized copper resources, a hydrometallurgical approach was also contemplated to process the oxide and enriched sulfides (chalcocite / covellite dominant) material identified in the mineralized Cactus East and Cactus West extensions to the existing open pit reported in the Mineral Resource estimate.

ASCU geologists are working with metallurgical engineers to quantify the recovery of copper from samples obtained in a large drilling campaign. The drill core samples are safely recovered and placed in bags to be studied by geologists and shipped to a well-established mineral processing research and development firm in Reno, Nevada — McClelland Analytical Service Laboratory, an ISO 17025 accredited facility. The metallurgical test program has been developed by Samuel Engineering, Inc. and supervised by Mr. James L. Sorensen.

Metallurgical characterization testing has been completed as part of the Integrated Cactus PEA in the form of sequential assay (sulfuric acid and cyanide steps) for the resources considered and bottle roll testing. Three samples from newly drilled core were selected to reflect copper grades close to the presumed average of the economically processable material in the open pit resource for column testing to be completed in the next phase of work. Assay data and bottle roll testing was completed for this study on head samples from the three column test samples currently under acidic and bioleach conditions.

Based on typical recovery estimates for CuAS and CuCN as provided by a standard sequential copper assay methodology developed at the Skyline Labs facility in Tucson, Arizona, projected copper recovery estimates have been derived based on leachable copper content that will be validated in the ongoing column testing program.

Based on the current understanding of the potential Stockpile Project resources to be processed, the leachable materials are characterized as oxide having a CuAS content of greater than or equal to 80% and a CuCN content for the balance to a cutoff grade of 0.095% CuAS + CuCN content, or soluble copper ("TSol") that is potentially recoverable.

The cutoff grade considered at 0.095% is estimated from preliminary operating costs and is not based on a mining evaluation or detailed analysis and was therefore used to establish a potential economically viable component of the resources estimated. There is a reasonable probability of eventual economic extraction of this resource using sulfuric acid leaching and SX/EW recovery at a cutoff of 0.095% TSol.

Materials with a TSol grade above the cutoff of 0.095% TSol but having a CuAS content of less than 80% is classified as sulfide or enriched materials for leaching purposes. Primary mineralization that is not acid or cyanide copper soluble (e.g., chalcopyrite) that reports in the CuT assays is not considered as recoverable metal in the current analysis.

The distribution of leachable oxide and enriched material types in the current mine plans is set out in the table below.

**Potential Leach Materials Distribution**

Mining Source	Material Type	Tons of Leach Material (tons)	Grade % TSol (% Cu)	Leachable Cu (tons)	Distribution Percent	
					Material	Cu
Stockpile Project	Oxide	82,331,000	0.141%	116,279	100%	100%
Open Pit	Oxide	46,810,000	0.190%	88,939	67%	48%
	Enriched	23,131,000	0.420%	97,150	33%	52%
Underground	Oxide	6,317,000	1.100%	74,271	23%	21%
	Enriched	21,208,000	1.330%	274,597	77%	79%
Total	Oxide	135,458,000	0.203%	279,489	75%	43%
	Enriched	44,339,000	0.822%	371,747	25%	57%
	<b>Total</b>	<b>179,797,000</b>	<b>0.355%</b>	<b>651,236</b>		

In parallel, copper flotation testing is also being conducted on higher grade sulfide material to consider the possible future incorporation of a traditional copper milling and flotation operation to treat higher grade enriched and primary mineralization (chalcocite / chalcopyrite dominant) material identified. Resources containing a maximum of 20% oxidized copper content are considered potential mill feed based on ASARCO historical performance.

The following is a summary of the major results and conclusions from the metallurgical test programs.

**Stockpile Project Metallurgical Testwork**

Based on the preliminary scoping testwork completed for Stockpile Project materials, the authors of the Integrated Cactus PEA provide the following observations:

- Copper recovery exceeded bottle roll 90-day predictions for the initial Stockpile Project column testing and should achieve extraction levels more than the predicted 83.3% for the soluble copper components.
- Based on the results to date, a copper recovery for 90% of CuAS and 40% of CuCN for a 90-day leaching cycle is recommended for resource evaluation and economic assessment at this time.

Additional considerations include the following:

- TSol recovery sensitivity showing at over 3/4 inch and P80 particle size of approximately 1.5 inch may indicate some oversize crushing could be considered.
- Larger run-of-Stockpile Project testing is required to evaluate the need for crushing particles larger than 1 inch.
- Rapid copper recovery less than 60 days and low CuCN content / impact indicates potential for on-off pad to minimize excess acid consumption and capital investment requirements for oxide ore types.
- Scalability has been considered in extending the timeframe to achieve the column testwork by 50% and employing a 95% extraction efficiency factor to both the CuAS and CuCN average column copper extractions achieved to date, allowing for inefficiencies in the leach solution flows and heap operations. As more information is developed, these factors will be re-evaluated in future reporting.

Acid consumption exceeded bottle roll expectations for test composites WD-22 and WD-50. A gross acid consumption of 20-40 pounds of acid per ton leached appears to be required for completion of the leaching process which implies a net acid consumption of 18-21 lb/t for the expected Stockpile Project resource soluble copper grades and 15-18 lb/t for higher copper grade open pit resources.

Additional considerations include the following:

- Acid / water initial leach solution is likely more aggressive than SX raffinate (buffering not realized). Ongoing testing will employ leach solutions more like SX raffinate.
- Targeted initial leach solution acid concentration 15 gpl sulfuric acid was too high; pregnant leach solution pH  $\leq 1.4$  indicates that excess acid was applied and apparent for much of the testing period. Future testing will adopt a lower initial acid concentration of 10 gpl sulfuric acid as a starting point with additional adjustments as results warrant.
- Possible slow reacting gangue consumption (biotite and limonite) could be problematic for longer term leaching based on the preliminary results. Consideration of a longer duration (96-hour) bottle roll testing will be incorporated in future protocols.

### ***Open Pit Metallurgical Testwork***

Open pit column testwork is in progress and results presented in the Integrated Cactus PEA are indicative in nature only until column tail assays are completed for the sulfide / enriched columns.

Copper recovery for oxide materials appears to be consistent with the Stockpile Project materials tested so far, and copper extraction and acid consumption recommendations should be used for oxide open pit resource evaluation.

Based on the indicative results for sulfide materials, a longer leaching time will be required to achieve copper extraction of 70% to 75% for the soluble copper components. Mineralogy also suggests that gangue encapsulation and pyrite inclusion is present, also indicating a longer leaching time requirement.

Scalability has been considered in extending the timeframe to achieve the column test work by 100% projected average column copper one-year extractions, allowing for inefficiencies in the leach solution flows and heap operations. As more information is developed, these factors will be re-evaluated in future reporting.

Historically, ASARCO testing in 1968 suggested a gross acid consumption of approximately 20.8 lb/t for the Sacaton West fresh core material. Gross acid consumption for the materials tested in the column work completed to date ranged from 21 lb/t to 31 lb/t.

Bottle roll tests suggest a net acid consumption of approximately 7 lb/t; however, copper extractions were low due to the mineralogical content. Net acid consumption was highly variable and ranged from 28.5 lb/t to 5.6 lb/t for the columns completed and is generally associated with the sample copper grade. The column result for the open pit oxide column was 5.6 lb/t on a net basis, attributing to the higher copper grade in this sample.

Due to the higher copper content and sulfide mineralization oxidation, the sulfide columns are presently net acid producing. This may be an advantageous feature once sulfide material is mined. For resource evaluations, an experience-based long-term net acid consumption of 1 lb/t is recommended as a conservative value for use in current economic evaluations until the current column testing is completed.

### ***Floating Scoping Metallurgical Testwork***

Based on the initial testing results, reasonable concentrator options exist for the Cactus primary copper sulfide material:

- Copper flotation recoveries approaching 90% or better appear to be reasonable.

- Significant improvement in the oxide copper recovery components with modern reagents are apparent which can simplify the prior ASARCO plant design.
- A SAG/Ball milling circuit is the most likely grinding option given the relatively soft material at Cactus. Given the apparent power requirements, relatively low energy costs should also be expected.
- The associated rougher concentrate grades provide positive starting points for saleable final concentrate grades once locked cycle testing is completed.
- No optimization work was completed; the results provide only indicative performance expectations. Locked cycle testing is planned as part of this initial program; however, this testing has not been started or completed.

### ***Deleterious Elements***

Preliminary testing has been completed on leach solutions, residues and testwork head samples that do not indicate the presence of constituents that would be deleterious to the proposed process methodology or indicate unexpected environmental impacts.

Head samples for the enriched samples leached were provided by McClelland to PMC Laboratory Ltd for multi-element analysis by 4-acid digest with ICP-AES finish (22 element). A polished block section was systematically scanned in high-resolution particle mapping mode using the Tescan Integrated Mineral Analyser (TIMA) equipped on the Tescan Vega Scanning Electron Microscope to determine the modal composition of the sample and collect more detailed information on the Cu-department. These analyses do not indicate the presence of known deleterious elements.

Minor amounts of atacamite (chloride copper mineral) have been historically observed, however no presence has been reported in current sampling. Silver is a known minor constituent of the deposit.

TCLP 8 RCRA metals (As, Ba, Cd, Cr, Pb, Se, Ag, Hg) analysis of final leach residues from the initial stockpile column tests was completed by Western Environmental Testing Laboratory (January 2021) and results included in the McClelland final report (February 2021). Results do not show significant or concerning levels of RCRA elements. The completed open pit oxide column 4600-01 head sample was submitted by McClelland to ALS USA Inc. for 4-acid digest with ICP (48 element) and trace mercury analysis for initial consideration of potential environmental concerns. Fresh material was deemed to be most representative of the material as mined. No material or unusual levels of potential contaminants or processing concerns were identified in this initial work. Water chemistry for probable site well make up sources have not been analyzed as part of this work. Prior hydrogeologic characterization completed by Tetra Tech Inc. for the Site Improvement Plan – Sacaton Mine Site, for the ASARCO Trust (11 March 2019) indicates water sources may contain natural chloride levels up to approximately 120 ppm which may have an impact on bio-leaching if confirmed and not mitigated.

### **Mineral Resource Estimates**

The Mineral Resource estimate for the Cactus Project is comprised of two parts:

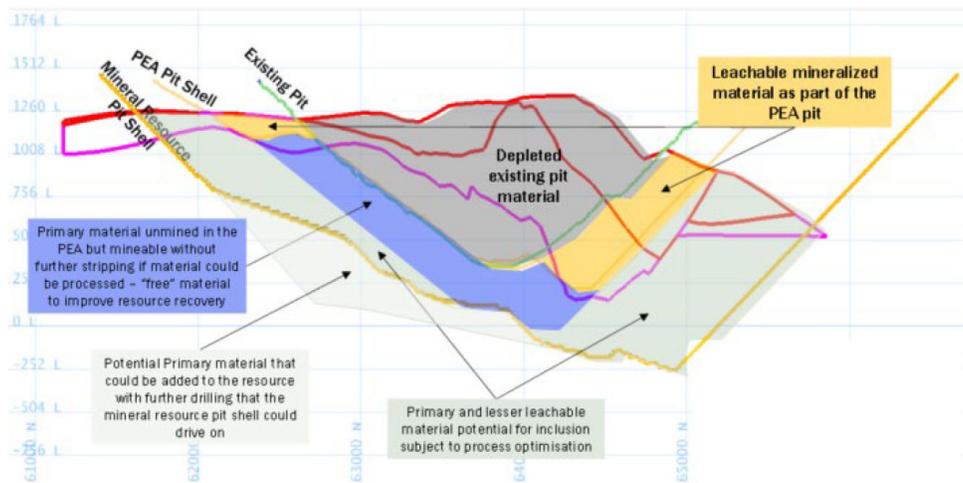
- Cactus Project deposits – in situ Cactus West and Cactus East deposits located adjacent to the historical Sacaton pit. This is the first Mineral Resource estimate undertaken under CIM Definition Standards for the Cactus Project in situ deposits. The Mineral Resource estimate includes all drilling, geological logging and historical mapping completed prior to February 13, 2021, and mining depletion of the historical pit mined by ASARCO between 1972 and 1984.
- Stockpile Project – a historic mineralized Stockpile Project generated as a result of waste dumping from the historic Sacaton pit. Material historically considered as waste included all oxide material, sulfide material considered below the mining cutoff grade of 0.3% CuT, and sulfide material above the mining cutoff grade but where the oxide component was considered too high. This is an update to the previously reported Mineral Resource estimate undertaken under CIM Definition Standards for the Stockpile Project (dated March 1,

2020) and includes infill drilling to 400-foot spacing. The Mineral Resource estimate includes all drilling, geological logging, historic pit dump information and topographical updates from rehabilitation work to April 4, 2021.

The Mineral Resource estimate was prepared in accordance with CIM Definition Standards. The estimate supports both Indicated Mineral Resources and Inferred Mineral Resources for the Cactus Project in situ deposits, and Inferred Mineral Resources for the Stockpile Project.

The copper mineralization at the Cactus Project was estimated using Vulcan modelling software (v2020.2). Modelling of the geological domains to support the estimate was undertaken by ASCU personnel. Grade estimates were undertaken by Allan Schappert, Certified Professional Geologist (CPG #11758) of Stantec. All data coordinates are presented in NAD83 ft., Zone 12 truncated to the last six whole digits for easting and five whole digits for northing. All quantities are given in imperial units unless indicated otherwise. All copper values are presented in percent. The below figure represents a cross-sectional view of the Cactus West pit. The green outline is the existing pit reflecting depletion. The PEA pit shell contains the leachable resource contemplated for that shell. The Mineral Resource pit shell captures all leachable and primary material as reflected in the Mineral Resource.

**Cross Section Looking North Reflecting Depleted Material and Current Resource**



The table below details the breakdown of Mineral Resources by mineral zone and classification within the Cactus Project open pit and potential underground mine.

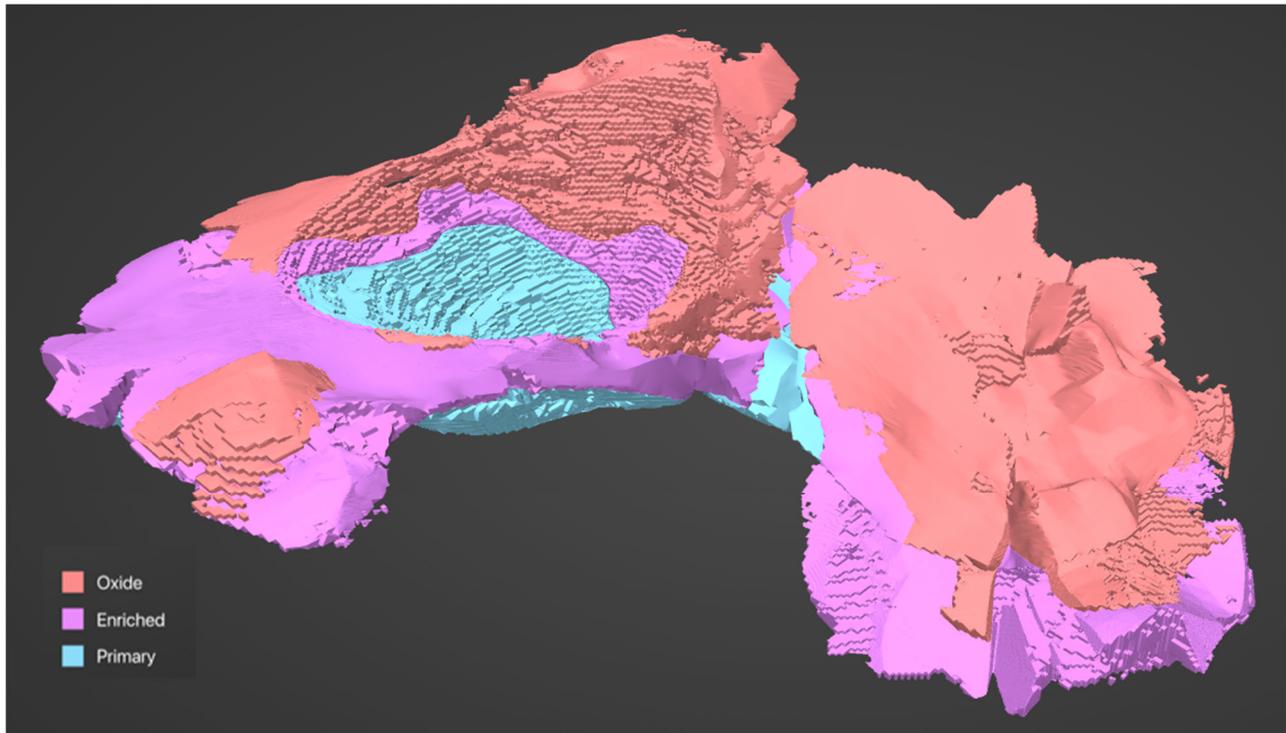
**Cactus Project Deposits – Total Mineral Resources as of March 1, 2021**

<b>Material Type</b>	<b>Tons (kt)</b>	<b>CuT (%)</b>	<b>TSol (%)</b>	<b>TSol_lb (klb)</b>
<b>Indicated</b>				
Oxide	31,400		0.559	349,700
Enriched	42,500		0.844	715,500
Total Leachable	73,900		0.723	1,065,200
Primary	77,900	0.350		545,500
<b>Total Indicated</b>	<b>151,800</b>	<b>0.531</b>		<b>1,610,700</b>
<b>Inferred</b>				
Oxide	62,500		0.346	430,500
Enriched	55,100		0.498	548,800
Total Leachable	117,600		0.417	979,300
Primary	111,300	0.349		776,000
<b>Total Inferred</b>	<b>228,900</b>	<b>0.384</b>		<b>1,755,300</b>

**Notes:**

- (1) Whittle resources are inside the pit generated by Whittle and below present topography.
- (2) CuT means total copper and TSol means total soluble copper as the addition of sequential acid soluble and sequential cyanide soluble copper assays. Tons are reported as short tons.
- (3) Technical and economic parameters defining resources pit shell: copper price US\$3.15/lb; mining cost US\$2.45/t; G&A US\$0.55/t; and 44°-46° pit slope angle.
- (4) Technical and economic parameters defining underground resource outside pit shell: copper price US\$3.15/lb; mining cost US\$28.93/t; and G&A representing 7% of direct costs.
- (5) Technical and economic parameters defining processing: Heap leach ("HL") processing cost including selling US\$1.77/t; HL recovery 83% of CuT; and mill processing cost US\$8.50/t.
- (6) Variable cutoff grades were reported depending on material type, potential mining method and potential processing method. Oxide material within resource pit shell = 0.096% TSol; enriched material within resource pit shell = 0.098% TSol; primary material within resource pit shell = 0.205% CuT; oxide material outside resource pit shell = 0.56% TSol; enriched material outside resource pit shell = 0.70% TSol; primary material outside resource pit shell = 0.70% CuT.
- (7) Mineral Resources, which are not Mineral Reserves, do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, sociopolitical, marketing or other relevant factors.
- (8) The quantity and grade of reported Inferred Mineral Resources in this estimation are uncertain in nature and there is insufficient exploration to define these Inferred Mineral Resources as an Indicated Mineral Resource or a Measured Mineral Resource; it is uncertain if further exploration will result in upgrading them to an Indicated Mineral Resource or Measured Mineral Resource classification.
- (9) Totals may not add up due to rounding.

A graphical representation of the Oxide, Enriched and Primary material is as below:



The Inferred Mineral Resources for the Stockpile Project are reported in the table below.

**Total Cactus Stockpile Project Inferred Mineral Resources as of April 2021**

<b>Tons (Kt)</b>	<b>CuT (%)</b>	<b>TSol (%)</b>	<b>CuAS (%)</b>	<b>CuCN (%)</b>	<b>CuT Metal (Klb)</b>	<b>TSol Metal (Klb)</b>
<b>Inferred</b>						
77,400	0.169	0.144	0.118	0.026	262,100	223,500

**Notes:**

- (1) There is a reasonable probability of eventual economic extraction of this resource using sulfuric acid leaching and SX/EW recover at a TSol cutoff of 0.095% and a copper price of US\$3.15/lb.
- (2) Mineral Resources, which are not Mineral Reserves, do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, socio-political, marketing or other relevant factors.
- (3) The quantity and grade of reported Inferred Mineral Resources in this estimation are uncertain in nature and there is insufficient exploration to define these Inferred Mineral Resources as an Indicated Mineral Resource or a Measured Mineral Resource; it is uncertain if further exploration will result in upgrading them to an Indicated Mineral Resource or Measured Mineral Resource classification.

The tables below provide a breakdown of resource by mineral zone and classification within the Whittle pit and the same for the potential underground mineral resource in Cactus East.

<b>Material Type</b>	<b>Tons (kt)</b>	<b>CuT (%)</b>	<b>TSol (%)</b>	<b>TSol_lb (klb)</b>
<b>Indicated</b>				
Oxide	27,000		0.512	275,900
Enriched	39,200		0.822	643,800
Total Leachable	66,200		0.696	919,700
Primary	75,700	0.338		511,900
<b>Total Indicated</b>	<b>141,900</b>	<b>0.505</b>		<b>1,431,600</b>
<b>Inferred</b>				
Oxide	51,600		0.268	282,000
Enriched	48,100		0.405	390,100
Total Leachable	99,700		0.334	672,100
Primary	110,000	0.344		756,600
<b>Total Inferred</b>	<b>209,700</b>	<b>0.339</b>		<b>1,428,700</b>

**Notes:**

- (1) Refer to Table 14 17 for applicable notes to the open pit resource parameters and assumptions. Totals may not add up due to rounding.

<b>Material Type</b>	<b>Tons (kt)</b>	<b>CuT (%)</b>	<b>TSol (%)</b>	<b>TSol_lb (klb)</b>
<b>Indicated</b>				
Oxide	4,400		0.844	74,200
Enriched	3,300		1.101	72,000
Total Leachable	7,700		0.954	146,200
Primary	2,200	0.767		33,800
<b>Total Indicated</b>	<b>9,900</b>	<b>0.912</b>		<b>180,000</b>
<b>Inferred</b>				
Oxide	10,900		0.718	157,200
Enriched	7,000		1.136	158,500
Total Leachable	17,900		0.881	315,700
Primary	1,300	0.762		20,200
<b>Total Inferred</b>	<b>19,200</b>	<b>0.873</b>		<b>335,900</b>

**Notes:**

- (1) Whittle resources are inside the pit generated by Whittle and below present topography.
- (2) CuT means total copper and TSol means total soluble copper as the addition of sequential acid soluble and sequential cyanide soluble copper assays. Tons are reported as short tons.
- (3) Technical and economic parameters defining resource pit shell: copper price US\$3.15/lb, mining cost US\$2.45/t; G&A US\$0.55/t, and 44°-46° pit slope angle.
- (4) Technical and economic parameters defining underground resource outside pit shell: copper price US\$3.15/lb, mining cost US\$28.93/t, and G&A representing 7% of direct costs.
- (5) Technical and economic parameters defining processing: Heap leach (HL) processing cost including selling US\$1.77/t; HL recovery 83% of CuT; mill processing cost US\$8.50/t.
- (6) Variable cutoff grades were reported depending on material type, potential mining method, and potential processing method. Oxide material within resource pit shell = 0.096% TSol; enriched material within resource pit shell = 0.098% TSol; primary material within resource pit shell = 0.205% CuT; oxide material outside resource pit shell = 0.56% TSol; enriched material outside resource pit shell = 0.70% TSol; primary material outside resource pit shell = 0.70% CuT.

- (7) Mineral resources, which are not mineral reserves, do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, sociopolitical, marketing, or other relevant factors.
- (8) The quantity and grade of reported inferred mineral resources in this estimation are uncertain in nature and there is insufficient exploration to define these inferred mineral resources as an indicated or measured mineral resource; it is uncertain if further exploration will result in upgrading them to an indicated or measured classification.
- (9) Totals may not add up due to rounding.

### ***Resource Classification***

There were three key criteria affecting the classification of Mineral Resources for the Cactus deposits: understanding of the geological model and controls on mineralization, drill hole spacing, and the presence of downhole surveys for deeper mineralization, such as Cactus East.

The geological model and its controls on mineralization is generally well understood with the combination of copper mineral zones and sequential copper analyses to confirm relationships. Due to more local variation in geology and the current drill spacing, there is no material considered for Measured Resources.

Drill spacing within the Cactus Project deposits was defined with the following in mind:

- Wide exploration drill holes were infilled to 500-foot (152 metre) spacing to support initial resource delineation. A 500-foot spacing was determined to be an appropriate spacing for an Inferred Resource classification. Drilling to 500-foot spacing was undertaken both historically and as part of the resource expansion drilling undertaken by ASCU in 2020.
- In the higher-grade core of the deposits, further infill drilling was undertaken historically to reduce the drill spacing to 250-foot (72 metre) spacing to support resource definition drilling. A 250-foot drill spacing is seen as an appropriate spacing to determine an Indicated Resource classification.

In the historic drilling, only a few of the holes within the core of the Cactus East mineralized zone contained downhole surveys. In the early drilling phases of the Cactus Project, vertical holes drilled were assumed to not deviate significantly at depth. Later downhole surveying proved this to be untrue, especially as holes got deeper. In areas of the Cactus East deposit where holes did not have downhole surveys, material has been downgraded from Indicated Mineral Resource back to Inferred Mineral Resource as the accuracy of the drill hole location, and therefore geological contacts and metal, may vary significantly from that modelled.

The basic definition of Inferred and Indicated classifications was defined by the estimation pass in which the blocks were estimated. Blocks estimated in Pass 1 could be assigned to Indicated and blocks estimated in Pass 2 would be assigned to Inferred. A subsequent test pass of the Indicated classification was undertaken using only holes that contained downhole surveys. From this pass, an interpreted triangulation was created that finalized the classification of Indicated by downgrading areas based on the drill holes supporting it.

The drill spacing for the Stockpile Project has been reduced from approximately 750-foot (229 metre) to 400-foot (122 metre) spacing. Due to the nature of the dumping of material to the stockpile and inherent variability, at this drill spacing the mineral resource classification remains at an Inferred status. Of particular note is that through the process of halving the drill spacing and tripling the number of drill holes, there has been little change to the grade tonnage curve and global resource from that previously reported in 2020.

### ***Capping***

Raw assay data was reviewed to determine if there were sufficient high grades in the various populations to require capping of the high grades during compositing. Histogram and log normal cumulative probability plots were reviewed for CuT assays and TSol results in each of the mineral zones in the Cactus Project resource. A review of a log normal probability chart for CuT showed a good linear plot of values above the assay lab's detection levels. There is a visible minor break in linearity at 1.6 on the log normal scale, which transforms to 5% CuT. A review of a histogram plot of CuT values showed that 5% represents the high-end tail of the grades. A further review of a box plot of CuT grades, shows that 5% CuT does represent the high end of grades in the deposit. A capping grade of 5% CuT was chosen,

with all grades above 5% set to 5% at time of compositing. This only affected two intervals in the dataset. The process was repeated for TSol, which identified 5% TSol as an appropriate capping grade. This affected 20 intervals in the diamond drill database.

For the Stockpile Project, histogram and log normal cumulative probability plots were reviewed for CuT, CuAS and CuCN assays. Cutoffs were defined within individual Stockpile Project lifts and ranged between 0.45% to 0.51% for CuT, 0.29% to 0.38% for CuAS, and 0.11% to 0.21% for CuCN.

### ***Resource Cutoff Grades***

In order to meet a reasonable expectation of eventual economic extraction requirement, as stated in the CIM Best Practice Guidelines 2019, cutoff grades were applied to both a potential open pit across the Cactus West deposit and a potential underground mine at depth in Cactus East.

Conceptually, copper from oxide and enriched material in the open pit would be recovered in a heap leach. Therefore, cutoff grades in the amenable oxide and enriched zones were based on TSol assays. Cutoff grades for the sulfides in the primary material was based on CuT assays. High-level cost analysis for the open pit suggested cutoff grades of 0.096% TSol for the oxides and 0.098% TSol for the enriched material. A cutoff of 0.205% CuT was applied to primary material mined and therefore stockpiled for potential recovery in the future using a sulfide recovery process. Whittle open pit optimization software was run using these parameters to define the ultimate pit shell for reporting of open pit resources.

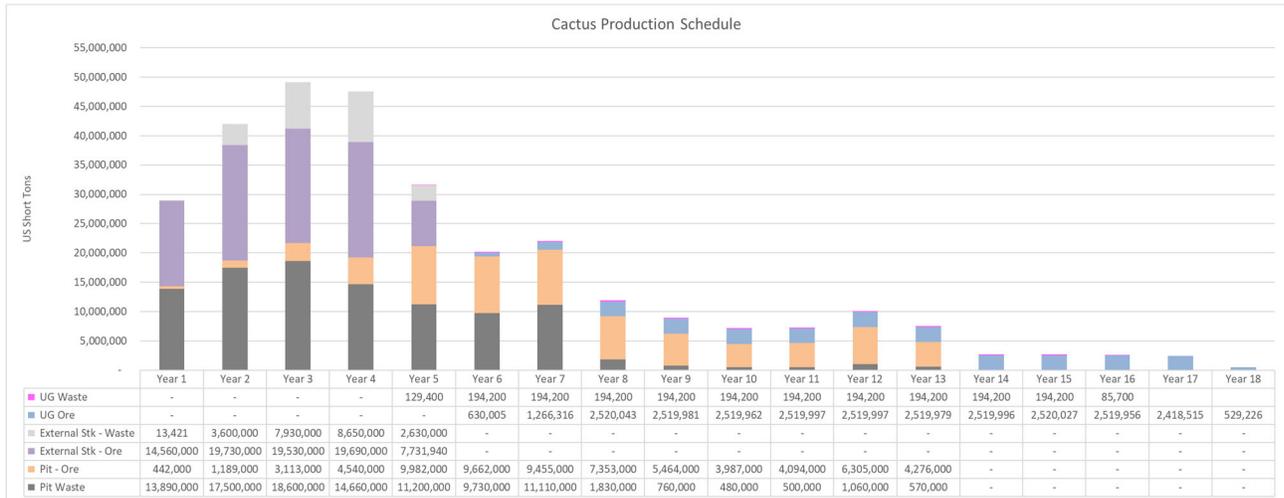
Additional resource outside of the Whittle pit in Cactus East has the potential to be amendable to underground mining. High-level analysis of the material yielded cutoffs of 0.560% TSol for the oxides and 0.700% TSol for the enriched. The primary had a 0.700% cutoff applied to the CuT grade for potential recovery in a future sulfide recovery process.

The Stockpile Project resources were defined using a cutoff grade of 0.095% TSol.

### **Mining Operations**

The Cactus Project considers mill feed originating from three sources: an existing, historical low-grade stockpile (the Stockpile Project) located on the surface, a traditional open pit operation and an underground mine operation. To determine the appropriate mining approach, mine planning exercises were conducted consisting of combinations of processing and mining strategies. For the Integrated Cactus PEA, the outcome was to adopt a layered approach that considered initial Stockpile Project mining concurrent with Cactus West open pit stripping and early production for Years 1-4, before Cactus West achieves steady state production by Year 5. The open pit and Stockpile Project will be a truck and loader / shovel mining method. Once the pit reaches a suitable depth, development and early production of Cactus East via a Transverse Longhole Stopping ("TLS") method will commence in Year 6 and achieve steady state production by Year 8.

Complete extraction of the mineable resource is expected to take 17 years. The production profile for the life of mine is provided in the following table.



### Stockpile Project and Open Pit

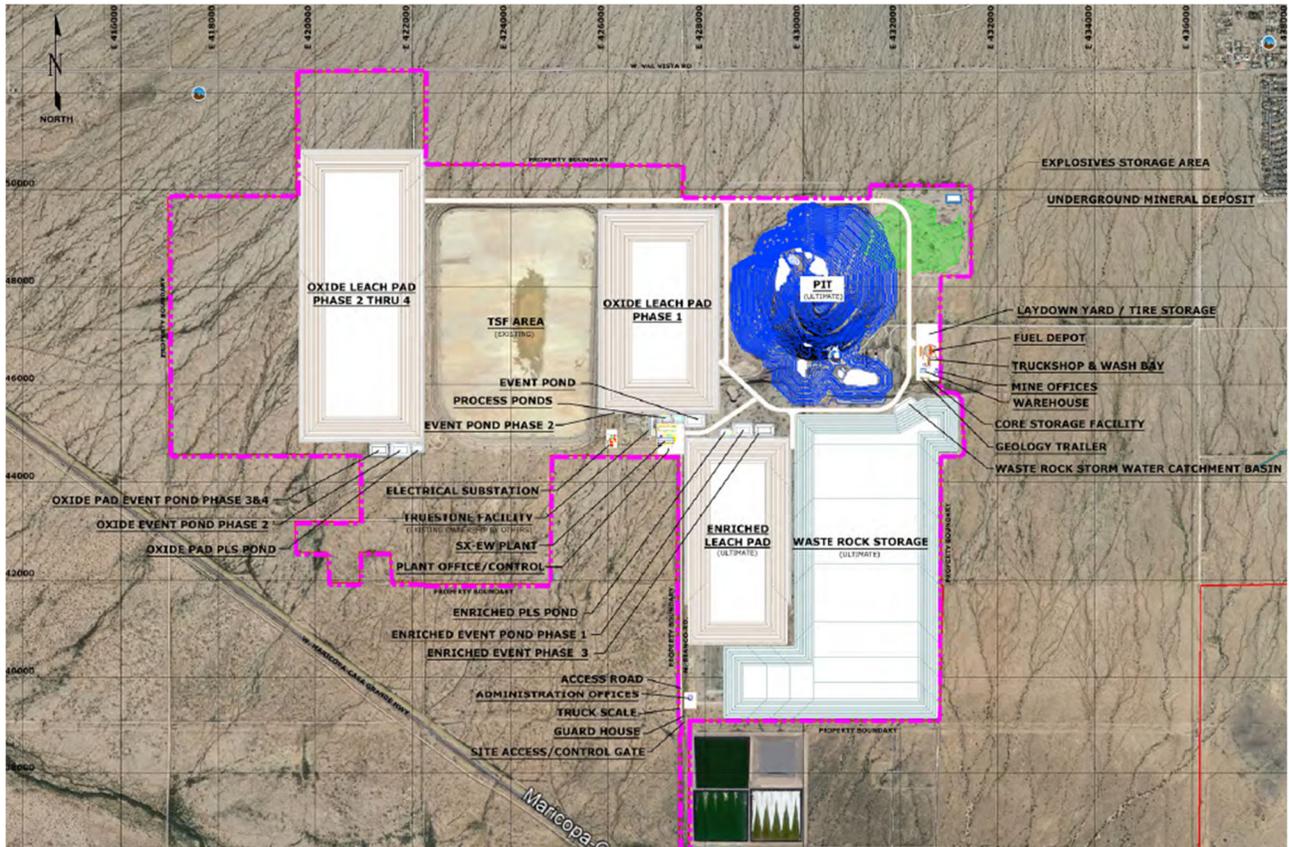
Since the open pit operation has a limited life, it is envisioned that the operation will be operated with a contract mining fleet. This will increase the unit operating cost to some extent but will reduce mining capital requirements significantly.

The open pit expansions will provide a total of approximately 71.8 million tons of mineralized material and 101.9 million tons of waste. Based on the planned production rate, the primary equipment fleet will consist of a fleet of rigid dump trucks in the 100-150 short ton range. Loading equipment will consist of at least two digging units in the mine, assisted by a wheel loader. The sizing of these machines will be determined by the specifications of the haul truck fleet, as well as the actual rock conditions. The primary fleet will be complemented by a fleet of ancillary machines consisting of at least two track dozers, one road grader, one wheel dozer, one water truck and drill and blast equipment.

The Stockpile Project contains approximately 81.2 million tons of low-grade material and 22.8 million tons of waste. It is expected that a separate, smaller fleet will be used to move the low-grade material out of the Stockpile Project. This allows for direct haul to leach pad facilities while keeping larger mining equipment dedicated to overburden stripping of the pit.

Haul trucks will travel approximately 8,000 feet (2,438 metres), on average, to the leach pad, with waste materials re-handled within the current Stockpile Project footprint. The haul trucks will use a maintained dirt haulage road to move material to the leach pad, placing material in lifts.

### General Site Arrangement



Material will be removed from the Stockpile Project from a series of sequenced production faces. After each cycle, each face will be sampled and those samples will be sent to the lab for sample preparation and assays. The face will sit stagnant until the CuAS results are received from the lab, then the material will be directed to the correct dump point on the waste pile or leach pad. Three or more production faces will be in rotation to allow time for the assay checks without disturbing a continual feed to the leach pad.

Total waste tonnage per lift is illustrated in the table below. As material is identified as leach pad feed or waste through sampling and assaying, short range mine planning activities will be updated regularly as new information is available to reduce the amount of waste re-handle.

**Total Waste Tonnage Per Lift**

Lift No.	Leach Material (t)	Strip Ratio	Waste (Mt)	Waste/Tons to be Removed	
				% Waste	Mt
4	0.563	0.024	0.013	100%	0.013
3	36.0	0.16	5.8	60%	3.6
2	30.2	0.91	27.7	30%	8
1	14.7	1.13	16.6	68%	11.5
<b>Total Material</b>	<b>81.2</b>	<b>0.62</b>	<b>50.1</b>	<b>45%</b>	<b>22.8</b>

As illustrated in the above table, all waste encountered in Lift 4 (upper lift) is required to be handled to the designated waste area to ensure subsequent lifts are available for mineralized material release.

For Lift 3, approximately 60% of the waste material will be required to be re-handled to a designated waste area. For Lift 1 (lower lift), material that is under any waste that is left in place from Lift 2 will be sampled using short range mine planning activities coordinating with mine operations to develop drop-cuts as required. This will drop the Lift 3 mining elevation to expose the material to be sampled, assayed and kriged. Subsequent leach pad feed determinations that, at a minimum, meet cutoff grade criteria will determine if the waste material from Lift 2 will be required to be moved to access the leach pad feed in Lift 1. It is currently envisioned that approximately 50% of the modeled waste will be required to be excavated to allow leach pad feed extraction below from Lift 1.

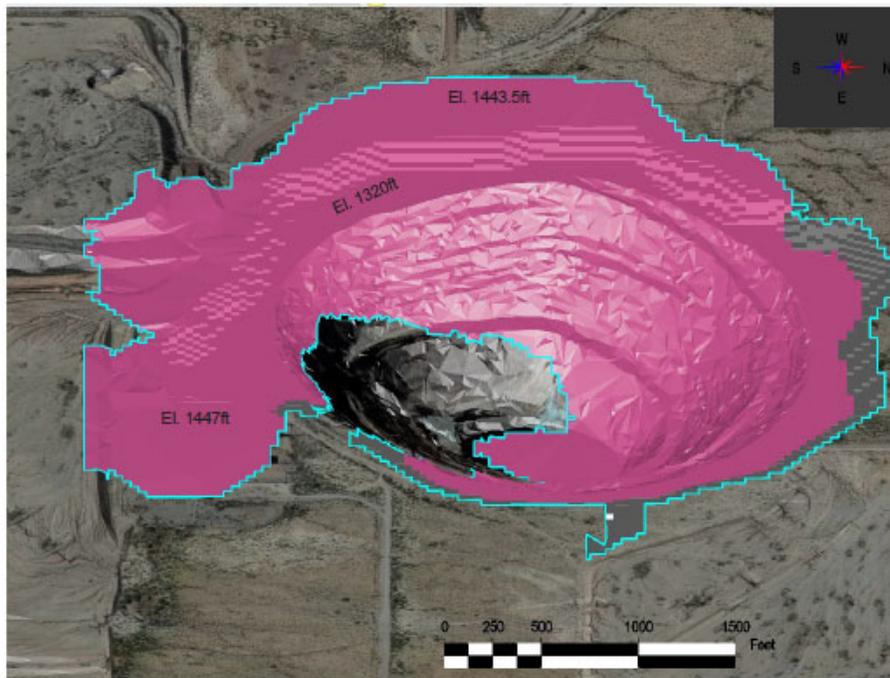
Any waste that is encountered in Lifts 2 and 1 will ideally be left in place except for material that may need to be removed for optimizing haulage and reducing operating costs. It is currently estimated that approximately 30% of this waste will need to be handled and placed in the designated waste area.

All activities will be performed by a contractor; therefore, modifications to this method may include equipment selection changes and discharge changes.

*Year 1 (2023)*

Pit-stripping of waste occurs in year 1 (2023) at 13.9 million tons with minimal mineralized material release (0.4 million tons). Mineralized material tons mentioned in this year and all subsequent years have a dilution factor of 5% incorporated. Phase 1 pit shell is mined to elevation 1,320 ft (402 m). The figure below illustrates the end of period pit for year 1 (2023).

**Open Pit at End of Year 1**



*Year 2 (2024)*

Waste removal ramps up to 17.5 million tons. Mineralized material release increases to 1.29 million tons as Phase 1 is mined to elevation 1,260 ft (384 m) and Phase 2 is mined to elevation 1,380 ft (421 m). A total of nine vertical benches are mined. This vertical advance rate (or sinking rate) was chosen to reflect the difficulty of mining the pit geometry.

*Year 3 (2025)*

Peak waste removal is reached with 18.6 million tons for the year. Mineralized material release increases to 3.1 million tons. Phase 1 is mined to elevation 1,140 ft (347 m) and Phase 2 is mined to 1,290 ft (393 m). Due to the difficulty of the geometry, a total of nine vertical benches are mined.

*Year 4-7 (2026-2029)*

As waste removal tons decreases mineralized material release increases. Average waste tons in Year 4-7 (2026-2029) are 11.7 Mtpa and the average mineralized material tons release is 8.4 Mtpa. Phase 1 is mined to elevation 750 ft (229 m) and Phase 2 is mined to 870 ft (265 m). Vertical mining is capped at nine benches where applicable.

*Year 8 -13 (2023 – 2035)*

Waste rock mining during this period is minimal since the majority of material is ore. Average waste removal is 0.9 Mtpa and average mineralized material release is 5.2 Mtpa. Pit mining is completed to Elevation 240 ft (73.2 m).

***Underground***

The top of the underground deposit, Cactus East, is roughly 800 feet (244 metres) below the surface and extends an additional 1,000 feet (305 metres) vertically. The deposit averages 800 feet (244 metres) in thickness, from hanging wall to footwall. TLS with cemented rockfill ("**CRF**") for primary stopes and unconsolidated rockfill ("**URF**") for secondary stopes was selected as the preferred mining method. The secondary stopes will be partially filled with CRF to build the bulkhead on the lower sill and then the remaining void can be filled with URF.

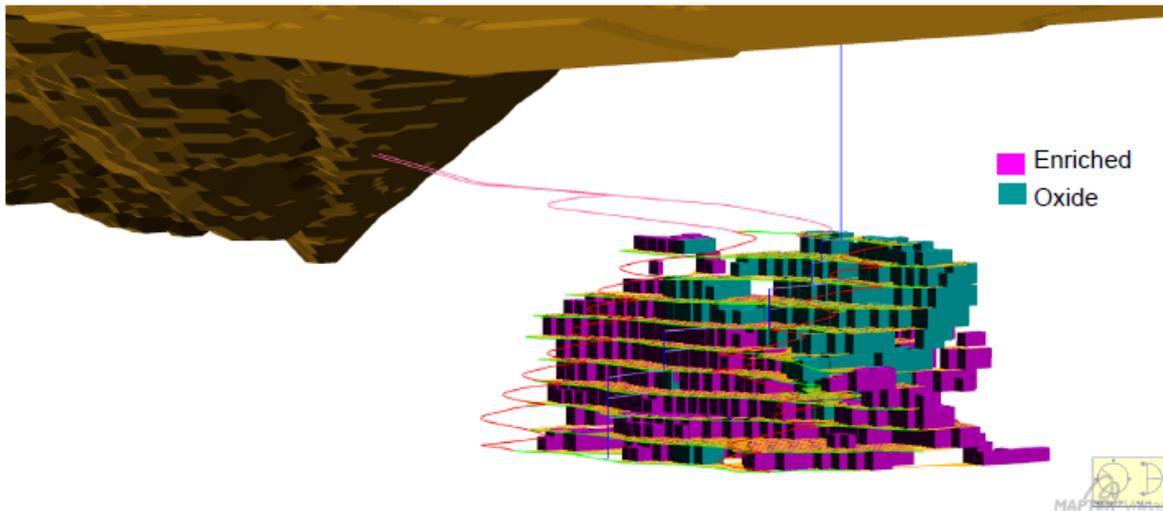
The mine plan is expected to ramp up to an initial production rate of 3,500 tpd and reach a daily production of 7,000 tpd for several years before end of mine life. To achieve this production rate, the deposit will be split into two mining horizons. Given the size of the deposit, both laterally and vertically, each mining horizon will be capable of extraction of 3,500 tpd.

To access the underground mine, twin declines will be developed from the wall of the new open pit. Due to the high daily production rate required, the declines will use one-way traffic to minimize traffic congestion. Pre-production development will excavate the twin declines down to the center of the deposit and split to opposite ends of the deposit.

Once the top sublevel is established, the main ventilation raise can be driven to surface. Dual internal ramps will be driven down to the midpoint of the deposit (15 Level). The 15 Level will define the first horizon. Ventilation from the initial vent raise will be carried down through the sublevels from the top level to the first horizon. Production of the initial stopes will begin once the ventilation circuit is established. All the mined-out stopes on the 15 Level will be filled with CRF to establish a sill pillar and separate the two mining horizons within the mine. While production mining on the 15 Level begins, development of the two internal ramps will continue to the lowest level where the second mining horizon can begin.

Using Vulcan Mining Stope Optimizer software (MSO), transverse stope shapes were generated for the oxide and enriched material at their respective COGs. A grade sensitivity analysis was run on the generated stopes to further optimize the grade and tonnage combination. The 0.85% cutoff was chosen as the base case for the Cactus PEA as it was closest to the 30 million tons requirement for the underground deposit while optimizing cash flow for the underground resource. The 30 million tons was based on processing constraints, production rate and mine life. The resulting LOM development designs and production schedule were based on the 0.85% cutoff scenario. The figure below illustrates the enriched and oxide stopes, with development, within the underground deposit. For the scoping level study, no mineralized material loss or dilution factors were determined for the underground mine.

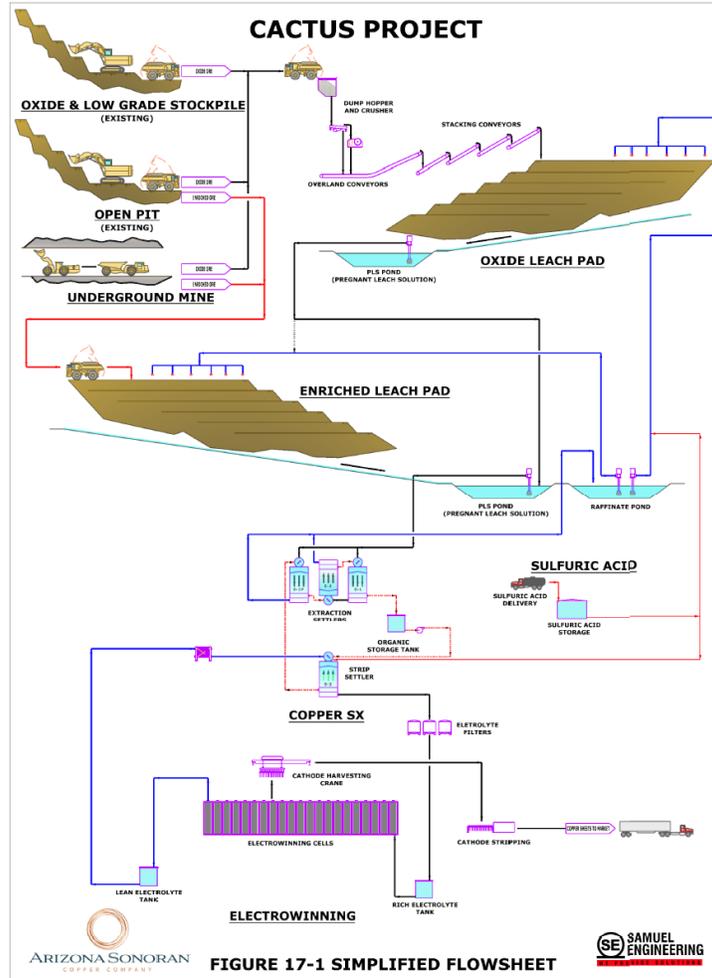
### Underground LOM Design – Isometric



### Processing and Recovery Operations

A hydrometallurgical approach via a potential copper heap leaching and SX/EW processing facility at Cactus has been contemplated to process existing Stockpile Project oxidized copper resources and Cactus Project oxide and enriched sulfides (chalcocite/covellite dominant) material identified in the mineralized Cactus East and Cactus West extensions.

A conceptual flow diagram for the processing facilities included in the Cactus Project is presented below:



The integrated project has been designed to accommodate a 30,000 tpd permanent acid oxide heap leach and permanent acid enriched heap leach. Material will be "as mined" from the new mining operations with no additional crushing or handling and stacked with mine trucks using an end dumping methodology. The following table shows the processing by source and material type.

### Processing by Material Type

Mining Source	Material Type	Leach Material (t)
Stockpile Project	Oxide	82,331,000
Cactus West – Open Pit	Oxide	46,810,000
Cactus East – Underground	Enriched	23,131,000
	Oxide	6,317,000
Total	Enriched	21,208,000
	<b>Oxide</b>	<b>135,458,000</b>
	<b>Enriched</b>	<b>44,339,000</b>
	<b>Total</b>	<b>179,797,000</b>

The following table shows the recovery and acid consumption assumptions achieved by bottle roll and column testwork by material type used for the Integrated Cactus PEA.

**Average Metallurgical Performance Criteria**

<b>Resource Component</b>	<b>Source Information</b>	<b>Net Copper Recovery (% - CuAS)</b>	<b>Net Copper Recovery (%- CuCN)</b>	<b>Gross Acid Consumption (lb/ton)</b>	<b>Net Acid Consumption (lb/ton)</b>
<b>Stockpile</b>					
Oxide	Preliminary Column Tests	90%	40%	22	18
<b>Open Pit &amp; Underground</b>					
Oxide	Preliminary Column Tests	90%	72%	22	18
Enriched	Preliminary Column Tests	90%	72%	22	1

**Heap Leaching**

Leach material mined from the Stockpile Project and new mining operations will be placed in 20-foot (6 metre) lifts on lined heap leach pads depending on an oxide or enriched designation based on soluble copper sequential assay.

Oxide material mined from the Stockpile Project is expected to be relatively fine (approximately 80% -1 inch based on bulk sampling) and freshly mined material from open pit and underground operations will be blasted to a -4 inch top size. The initial oxide materials pad is 8.5 million square feet (790 thousand square metres) to hold approximately 40 million tons of leach material, approximately 2-3 years of mined material. Initial leach material is predominantly coming from the Stockpile Project with some open pit contribution as pre-stripping activities are initiated.

As enriched material is encountered in sufficient quantities, a second leach pad will be constructed for this material. A leach pad to hold approximately 6 million tons of enriched materials is planned for operation in Year 2 to allow for sufficient materials to be mined and will be built as part of the initial project installations. The capacity of the enriched pad is sufficient for the initial 5-6 years of material feed.

Material will be "as mined" from the new mining operations with no additional crushing or handling and stacked with mine trucks using an end dumping methodology. Mine blasting protocols will be evaluated to ensure a minimal occurrence (10%-15%) of plus 4 inch materials.

Placement of materials on the leach pads will be by truck dump and push methods. Surfaces will be ripped and cross ripped to a depth of 6 feet (2 metres) to minimize surface compaction and surface permeability degradation. Fresh materials will be placed over previously leached materials in 20-foot (6 metre) lifts. The height of the leach material on the pad will eventually reach 200 feet (61 metres) in overall height. The leaching sequence for the oxide and enriched pads is planned as follows:

**Average Leach Cycle Times by Material Type**

<b>Leach Cycle Component</b>	<b>Oxide Leach Pads (days)</b>	<b>Enriched Leach Pads (days)</b>
Pad Loading	14	14
Surface Preparation / Piping	7	7
Active Solution Application	90	180
Drain Down and Decommissioning	9	9
Minimum Total Cycle Time	120	210

Leaching solutions containing dilute sulfuric acid (5-10 g/L H<sub>2</sub>SO<sub>4</sub>) will be pumped and applied to the top of each lift and allowed to percolate through the copper leach material. Solution application is planned to be by a combination of sprinklers and drip emitters. The planned solution application rate for oxide materials is approximately 0.01 gpm/ft<sup>2</sup>. The solution application rate planned for enriched materials is 0.005 gpm/ft<sup>2</sup> allowing for slower bio-leaching of sulfide minerals.

Since mineralized material placement occurs over a year's time in the mine production plan, the last quarter of the year (3 months) is not expected to contribute to the production in the year mined. Recovery has been shifted to the following year to account for the placement and preparation time required in the current estimations.

### ***SX/EW Processing Plant***

The pregnant leach solution ("PLS") from the heap leach ponds will be pumped for processing in a copper SX/EW plant capable of nominally producing 22,000 tpa of copper cathodes (design maximum of approximately 25,000 tpa) with a design PLS flow to the SX units of up to 3,000 gpm and grade at approximately 4.1 g/L Cu based on an average 92% CuT recovery from PLS to cathodes. The plant layout and critical equipment design will allow for easy expansion to 32,000 tpa production (35,000 tpa maximum) in the future.

The design basis for the Cactus Project SX/EW processing plant is a modular facility. Metalex Technologies ("Metalex"), a company based in Santiago, Chile that designs and supplies small, modular and relocatable standard SX/EW plants for the recovery of copper, was contacted for preliminary equipment sizing and costs.

Metalex plants are designed to have a low capital cost and be easily transportable, with everything fitting onto trucks or containers for easy transportation of equipment. Materials of construction and equipment sizing for the facility will generally be based on shop fabricated fiberglass reinforced plastic, high-density polyethylene ("HDPE"), chlorinated polyvinyl chloride or similar materials. Metalex has based the SX/EW equipment for Cactus on the designs from two other operating facilities: Benkala Copper Mine and Andacollo. Metalex has endeavored to combine the best features of each to provide ASCU with a package that maximizes the amount of preassembly that can be done, thereby minimizing the time needed onsite for field installation.

The SX plant is designed to process up to 3,000 gpm of PLS and be operated in a series-parallel configuration with a single stage of stripping (E1×E2×E1P×1S). Two minutes mixing time per mixer-settler unit is anticipated. No wash stages or after-settlers are anticipated or included in the current design. A loaded organic tank and diluent storage tank are collocated with the SX mixer settlers.

The initial EW plant construction will be 22,000 tpa copper production able to accommodate a maximum designed production up to 25,000 tpa of copper cathodes (production Years 1-7). A future expansion to 35,000 tpa copper cathodes production with a maximum production up to 40,000 tpa is also considered in the design to accommodate higher grade open pit and underground materials in future (production Years 8-18).

Copper EW is expected to require 36 cells, constructed of polymer concrete and containing 87 cathodes (25 ft<sup>2</sup> plating area per cathode) and 88 anodes each, operating in series and connected to two parallel rectifier transformer units (32 kA/100 VDC). Expected current efficiency is 92% operating at a nominal 28 A/ft<sup>2</sup> current density (design 32 A/ft<sup>2</sup>). Cathode stripping from the permanent stainless steel blanks will be done in a stripping machine that is of a semi-automatic, robotic design. The addition of 18 EW cells in a new building annex is contemplated for the future expansion, with a single rectifier transformer unit installed compatible with the initial units.

Copper cathode bundles of up to 4,500-5,500 pounds each will be sampled, weighed, labeled and strapped, then placed in a secure area for pick up by a copper broker for transport and sale.

The leaching system at the Cactus Project is intended for a conventional heap leach built over time in 20-foot (6.1 metre) lifts to a maximum elevation of approximately 200 feet (61.0 metres) over a period of four years. The ASCU pad is in a gently sloping terrain northwest to southeast and considered as a flat pad base (less than 2% grade) arrangement for design purposes. Pad ultimate height is not considered extreme for design purposes. The design will

be compliant with ADEQ Best Available Demonstrated Current Technology general principles and prescriptive requirements.

The oxide leach pad will be constructed in two phases. The footprint of the initial leach pad area is about 4,000 ft (1,219.2 m) × 2,250 ft (685.8 m) = 9.0 million ft<sup>2</sup> (0.84 km<sup>2</sup>) total and will support approximately 57 million tons of leach material. The initial build out (Phase 1) will be in two sub-phases and will be roughly 42% of the total 135.5 million tons of oxide material to be mined. Phase 1a will be roughly 45% of the Phase 1 total. The capital cost estimate includes only Phase 1a of the leach pad with a base footprint of roughly 2,100 ft (640 m) × 2,250 ft (685.8 m) or 4.8 million ft<sup>2</sup> (0.45 km<sup>2</sup>), which will support approximately 25 million tons. Phase 1b will occur in Year 3 of the operations.

The remaining material will be placed on a second oxide pad area west of the existing tailings facility initially constructed in Year 4 (44.8 million tons, 9.3 million ft<sup>2</sup> (0.86 km<sup>2</sup>)), with incremental additions in Year 7 (20.1 million tons, 5.2 million ft<sup>2</sup> (0.48 km<sup>2</sup>)) and Year 10 (12.3 million tons, 1.3 million ft<sup>2</sup> (0.12 km<sup>2</sup>)) of the mine life.

The first phase of the enriched material leach pad will also be constructed in the area made available by mining of the north end of the Stockpile Project area in Years 2-3 of the operations. The footprint of the initial enriched leach pad area is about 2,200 ft (670.6 m) × 1,000 ft (304.8 m) = 2.2 million ft<sup>2</sup> (0.2 km<sup>2</sup>) total and will support approximately 5.3 million tons of leach material. The initial build out (Phase 1) will be roughly 12% of the total 44.3 million tons of enriched material to be mined.

The remaining enriched material will be placed on subsequent extensions of the initial pad area constructed in incremental additions extending south in Year 6 (22.4 million tons, 5.1 million ft<sup>2</sup> (0.47 km<sup>2</sup>)) and Year 12 (16.6 million tons, 2.0 million ft<sup>2</sup> (0.19 km<sup>2</sup>)) of the mine life.

When necessary, solution stacking of PLS from the oxide to enriched leach pads will be employed to manage both overall PLS flow rates and optimal pH in the SX plant.

Leach pad design is assumed to be a double-lined system consisting of a single 60-mil non-textured HDPE primary liner with a compacted soil secondary liner. The soil liner will be a low-permeability soil layer ( $K_d = 1 \times 10^{-6}$  cm/sec hydraulic conductivity rating), compacted amended soil approximately 12 inches in depth (built in two 6-inch layers) consisting of a non-gap graded particle size distribution minus 3/8 inch material with a greater than or equal to P30 of -200 mesh content. Existing site alluvium is expected to meet these requirements.

In addition to the first phase of the oxide leach pad, there are three ponds that would also need to be constructed to initiate operations: the SX raffinate pond, 270 ft (82.3 m) × 190 ft (57.9 m); the PLS pond, 270 ft (82.3 m) × 190 ft (57.9 m); and an event pond, 600 ft (182.8 m) × 320 ft (97.5 m). The three ponds will be situated below the leach pad, and leach solution will flow by gravity downhill via collection ditches that will discharge into the lined storage ponds.

In addition to the first phase of the enriched leach pad, there are two ponds that would also need to be constructed to initiate operations: the PLS pond, 300 ft (91 m) × 190 ft (58 m); and an event pond, 440 ft (134.1 m) × 290 ft (88.4 m). The two ponds will be situated below the leach pad and leach solution will flow by gravity downhill via collection ditches that will discharge into the lined storage ponds.

The second phase of the oxide pad will require a PLS pond for that area. Subsequent pad area expansions at both the oxide and enriched pads will also include additional stormwater pond capacity construction.

The order of precedence for pond volumes is designed as PLS, raffinate and stormwater, whereby fluids from the leaching system (largest inflow contributor) report first to the PLS pond, and when/if this pond is full, a spillway directs the flows to the raffinate pond. For extreme events (e.g., 4.85 inch 100 year / 24-hour storm event), a spillway directs flows to the storm water pond.

All ponds are designed with a 2:1 slope on the sides in an inverted pyramid frustum shape. Pond depths are 30 feet (9.1 metres). A 2-foot (0.6 metre) freeboard is assumed for all ponds. The normal operating volume of the two processing ponds (PLS and raffinate) is 50% full by effective height based on pond inflows under normal operations.

Process solution ponds are assumed to be constructed with a triple-lined system consisting of two 60-mil non-textured HDPE liners with a compacted soil tertiary liner and integrated leak detection between the HDPE liners.

***Reagents, Water and Power***

Projected reagent and operating consumables requirements for the Cactus Project are summarized as follows:

<b>Reagent / Operating Consumable</b>	<b>Requirement</b>
Energy	1.50 kWh/lb Cu produced
Makeup fresh water	658-951 gpm (including dust control)
Sulfuric Acid	300 tpd
Leaching	13.4-3.4 lb/ton leached net of SX/EW credits
SX Reagents	
Extractant	637-890 lb/d (289-404 kg/d)
Diluent	150-200 gallons/d
EW Reagents	
Cobalt Sulfate	0.05 lb/t Cu produced
Guar	0.01 lb/ton Cu produced
Mist Suppressant	FC-1100

The heap leach acid consumption estimate varies with the tonnage rates processed, types or materials leached (oxide and enriched) and the recovered copper content (grade). The expected sulfuric acid consumption in Years 1-6 is high, at approximately 300 tpd on a 100% basis. Acid consumption in Years 7-17 is much different at 14 tpd due to significantly higher copper grades and enriched (sulfide) mineralized material comprising approximately half the material leached overall.

**Project Infrastructure**

***Mining and Maintenance***

The mining operations are anticipated to be contracted to a local company experienced in larger scale earthmoving. Given the proximity to major infrastructure in Casa Grande, the contractor may bring temporary facilities onto the site to facilitate their operations and maintenance activities self-sufficiently on the project site. A specific contractor plan has not been developed. This will be similar to the facilities set up on-site as part of the recent reclamation effort.

Waste material will either be set aside in the Stockpile Project as the material is mined or taken to existing nearby waste dumps on site. Although a detailed mine plan and sequence has not yet been developed, it is expected that most of the waste material will remain in the current Stockpile Project area.

***Process Buildings***

A new SX/EW facility will be constructed inside the fenced area of an abandoned process building known as the TruStone facility. The area has been cleared and graded, and was previously used for parking or laydown.

The EW operation will be housed in a pre-engineered building fitted with an overhead crane for copper production material handling. Siding will be fiberglass, PVC-coated fabric or protected steel. An administration / control building located near the site entrance will consist of a new prefabricated double-wide structure. The facilities will also include a tank farm area composed of electrolyte solution tanks, electrolyte filters, crud handling system and a solution management holding tank.

There are existing access roads to the facilities along with a rail spur that dead-ends in front of the plant across the access road, although it is not currently connected to the main line. There are no current plans to reconnect or use the rail line.

An incoming utility powerline is connected to an existing substation owned by Arizona Power System that was originally used to power the TruStone facility. This substation will be used to power the new SX/EW facility and other project loads. No work is currently planned on the electrical system upstream of the low-side connection to the main transformer.

### ***Site Buildings / Maintenance Shops / Administration Buildings***

Given the proximity to the city of Casa Grande, limited non-process facilities are required. The Cactus Project will require minimal buildings and shops in light of the existing infrastructure, contract mining and minimal site-based staffing needed.

The SX/EW plant site offices, control room and security will be housed in a single prefabricated building located on-site near the main gate and process plant facilities. A 200 feet (61.0 metre) × 400 feet (121.9 metre) building is included for these purposes.

The EW process office and process control room will be located in a prefabricated building with space allowed for minor maintenance activities and materials storage, including a small wet laboratory for process control assays and mine grade control Stockpile Project sample assays. Additional storage of materials will be provided within the fenced area near the plant and in shipping containers repurposed from the delivery of materials and equipment to site. The abandoned TruStone facility may also be considered in the future for additional maintenance, warehousing and other uses.

ASCU maintains a corporate office in Tempe, Arizona for administrative staff not required to be regularly on site.

Mine support infrastructure has been assumed to be provided by the selected contract mining company as required, and locations have been identified for those potential facilities within the property boundaries.

### ***Other Facilities Considerations***

The maximum height of all site facilities was considered due to the site's proximity to the existing Casa Grande Municipal Airport that is owned and operated by the City of Casa Grande. A draft airport master plan currently includes proposals for a 4,750-foot (1,447.8 metre) southwesterly extension of the existing runway for a total ultimate runway length of 8,400 feet (2,560 metres). The plan also considered construction of new exit taxiways and a new 3,650-foot (1,112.5 metre) parallel runway located north and west of the existing runway.

Federal Aviation Administration ("FAA") requirements are outlined in the Federal Aviation Act of 1958, as amended and pursuant to 49 U.S.C. Section 46301(a). A summary of the relevant Federal Aviation Regulations, Part 77 Section 77.9 is provided as follows:

§ 77.9 — Any person/organization who intends to sponsor any of the following construction or alterations must notify the Administrator of the FAA:

- Any construction or alteration exceeding 200 feet above ground level.
- Any construction or alteration:
  - Within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 feet.
  - Within 10,000 feet of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 feet.

- Within 5,000 feet of a public use heliport which exceeds a 25:1 surface.
- Any highway, railroad or other traverse way whose prescribed adjusted height would exceed that above noted standards.
- When requested by the FAA.
- Any construction or alteration located on a public use airport or heliport regardless of height or location.

### ***Acid Supply and Storage (Truck or Rail)***

Acid will be provided by a local broker, delivered to site in bulk 3,300 gallon (25 ton) acid truck / trailers. Tanker trucks will be off-loaded to a mild steel site storage tank located in the SX/EW tank farm area with a nominal capacity of 60,000 gallons (two days nominal usage). Approximately eight to nine trucks will be received and off-loaded per day.

Consideration will be given in the future to refurbishing the existing rail spur connecting the site with the Union Pacific Railroad Line approximately 3.7 miles south of the site and delivery by 100 ton railway cars.

### ***Water Supply and Distribution***

ASCU, as part of the sale of the property, acquired the historic Type 2 Non-Irrigation grandfather rights (Certificate 58-100706.0005) for 136 acre-foot per year ("afy"). In addition to the grandfathered rights, ASCU has obtained a permit from the Arizona Department of Water Resources ("ADWR") (Permit 59-233782.0000) for an additional 3,600 afy under a Permit to Withdraw Groundwater for Mineral Extraction and Metallurgical Processing within an Active Management Area (A.R.S. § 45-514). The secured water rights have a permit life of 50 years and will serve as water supply requirements for the life of the Cactus Project.

Water will be sourced from two offsite wells, No. 1 and No. 2, and two onsite wells, No. 5 and No. 6. Process makeup water can also be sourced from open pit dewatering and the existing flooded production shaft constructed and abandoned by ASARCO. Potable water is available on the project site via buried pipeline (servicing the prior TruStone and ASARCO facilities) for the minor potable usage requirements.

If needed, additional requirements can be met by purchasing water from the Gila River Water Storage, LLC resources in the Pinal Active Management Area ("AMA"), or through mine dewatering credits as the Cactus Project is developed in the future. The Pinal AMA covers approximately 4,000 square miles in central Arizona and consists of five sub-basins with unique groundwater underflow, storage and surface water characteristics. These sub-basins are Maricopa-Stanfield, Eloy, Vekol Valley, Santa Rosa Valley and Aguirre Valley. New on-site metering, storage and distribution systems will be required for the Cactus Project for use of these resources.

### ***Power Supply and Distribution***

Approximately 11 MW of power will be required for the initial Cactus Project site process facilities, and 14.3 MW will be required for the expanded facilities. Power is available to an existing 115 kV substation at site. Arizona Public Service ("APS") will provide power via existing 115 kV power transmission lines owned by APS which run from its Casa Grande substation to the existing substation on the site located about 400 feet (121.9 metres) west from the planned processing plant location.

The site substation has not been evaluated but it is operational and serviced the prior ASARCO mine operations and more recently the TruStone production facility (now closed) next to the proposed SX/EW plant location. Expected average annual power costs are US\$0.058/kWh (including demand charges) based on preliminary discussion with APS and a new customer services rate for a Small General Service Plan (non-residential).

## **Environmental Studies, Permitting and Social or Community Impact**

### ***Environmental Studies***

Several documents were reviewed to provide an indication of the existing environmental conditions at the Cactus Project.

Review of historical water quality data collected from 1972 through the present identified sulfates, nitrates and fluoride exceedances over Arizona drinking water standards at various locations throughout the site.

No environmental fatal flaws that would materially impede the advancement of the project have been identified. Prior due diligence research through the State of Arizona has indicated that the soil and groundwater at the site is highly mineralized and contaminated with heavy constituents such as arsenic, chromium, selenium and zinc, and therefore is unfit for domestic, livestock or agricultural use. These constituents were not the result of any mining activity in the area, but are related to the younger geologic activity in the region. The open pit from ASARCO's mining contains water with high mineralization and a very low pH.

### ***Permitting***

The Cactus Project consists of private surface and mineral rights. Permitting for an operation on private land will require the following major permits and certifications, already issued or in progress:

- Dust Permit Pinal Air Quality Control Permit (permit obtained).
- Arizona Pollutant Discharge Elimination System ("**AZPDES**") permits (construction and Multi-Sector General Permit) (permit obtained for both the mine facility and the TruStone facility).
- ADWR Permit to Withdraw Groundwater for Mineral Extraction and Metallurgical Processing Permit No. 59-233782.0000. This permit allows ASCU the rights to 3,600 afy for 50 years for heap leach mining activities, dust control and processing at the Cactus Project site. The effective date of the permit is April 14, 2021, and the expiration date is April 14, 2070.
- ADEQ Aquifer Protection Permit ("**APP**"). This permit has been obtained by ASCU for the Stockpile Project and becomes effective upon demonstration of financial capability submitted along with an amendment application. The relevant amendments for full project coverage to include expanded leach facilities, waste dumps and both open pit and underground infrastructure will be filed by ASCU and assessed by the ADEQ in due course.
- Pinal Air Quality Control Industrial Permit (to be applied for).
- Arizona State Mine Inspector Mined Lands Reclamation Permit (to be applied for).
- Radio Station License & Wireless Communication (to be applied for).

Further permitting will be required, as well as modification of existing permits to account for the final operational and mine plan to be adopted and to reflect processing and other facilities.

The following table outlines the major permits required as a precursor for project construction, along with anticipated timing. An approximate total of US\$0.5 million is required to complete these permitting activities.

Cactus Project – Permitting Plan

		CACTUS MINE PERMITTING TIMELINE																			
Key Permits		Lead Agency	2021						2022												
			Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Acquired	Air Quality Permit	Pinal County	Renewed yearly																		
	Arizona Pollution Discharge Elimination System (402) - Cactus Project	ADEQ	Legacy until Cancelled																		
	Arizona Pollution Discharge Elimination System (402) - TruStone Water Rights	ADEQ ADWR	Legacy until Cancelled 2070																		
<b>Aquifer Protection Permit</b>																					
	Public Comment Period	ADEQ																			
	Permit Approval																				
<b>Aquifer Protection Permit (Amendment)</b>																					
	Detailed Engineering	ADEQ																			
	Submit Permit Application																				
	Permit Application Review																				
	Public Comment Period																				
	Permit Approval																				
<b>General Plan Amendment</b>																					
	Pre Application	City of Casa Grande																			
	Application																				
	Review																				
	Approval																				
<b>Mined Land Reclamation Permit</b>																					
	Finish Engineering	AZ State Mine Inspector																			
	Draft Permit																				
	Submit Permit Application																				
	Permit Application Review																				
	Permit Approval																				
	Submit Reclamation Bond																				
<b>Industrial Permit</b>																					
	Finish Engineering (Plant FEED)	Pinal County																			
	Draft Permit																				
	Submit Permit Application																				
	Permit Application Review																				
	Permit Approval																				

The following additional permits will be required pursuant to a construction decision:

- Arizona Department of Agriculture Notice of Intent to Clear Land.
- Pinal County Mining Construction Permits.
- ADEQ Above-Ground Tank Storage.

An estimate of US\$1.5 million will be required for the initial reclamation bond based on the initial construction plan and prior estimates for site closure for the Stockpile Project. An additional US\$3.5 million is estimated to be required to close the planned facilities and bonding will be adjusted as new facilities are added, particularly the Phase 2 leach pad. Closure funding is expected to be supplemented by resale of the modular SX/EW plant and other infrastructure and equipment, with a salvage value consideration of US\$5 million.

**Hydrogeology**

Stantec completed a review of hydrogeologic information and completed a numerical groundwater flow model to assess the groundwater flow conditions and potential for dewatering associated with mine expansion options. This model was used to evaluate predictive flow scenarios from the anticipated mine operations.

For future mining operations and water management, two options were evaluated using the numerical groundwater model: (1) dewatering via wells; and (2) pit extraction via sump pumping.

Dewatering via groundwater production wells was assessed in several model simulations. Due to the low hydraulic conductivity of the bedrock formations, significant production from wells could not be achieved, which also limits the cone of depression from expanding laterally from the wellbore. Therefore, a relatively large number of wells would be anticipated to dewater the bedrock aquifer and the resulting open pit. Model simulations resulted in approximately 18 wells of 200 gpm each required to dewater the conglomerate formation (Layer 1) surrounding the pit (the more productive formation that contributes inflow to the pit).

As an alternative, extraction via pumping from the existing and future pit areas was simulated. Because the open pit is not in direct communication with the groundwater flow system and infiltration rates are low (as evidenced by the

pit lake stage approximately 700 feet (213 metres) below the groundwater table), mine water management should be effective via sump pumping from the open pit or underground operations. This was simulated by assigning the pit elevations via drains and evaluating the model output to estimate the outflow (i.e., required pumpage) of the drain features. These results indicate approximately 300-450 gpm of pumping from the future pit areas may be required, depending on the selected mining method and progression schedule.

Groundwater quality below the site has been reported as slightly saline (relatively high specific conductance or total dissolved solids ("TDS")), while pit water has been reported as poor quality. Historic groundwater sample data indicates relatively high concentrations of several parameters including arsenic (ranging from approximately 0.02-2.1 mg/L), fluoride (ranging from approximately 3-19 mg/L), TDS (ranging from approximately 550-10,000 mg/L), nitrate (ranging from non-detect to approximately 68 mg/L) and uranium (ranging from non-detect to approximately 0.1 mg/L). Many of the sample result concentrations exceed respective Arizona Aquifer Water Quality ("AWQ") standards; however, the ranges of concentrations for these parameters are not uncommon in aquifers of central and southern Arizona.

The pit lake is a terminal hydrologic sink, and seepage inflow is subjected to evaporation which enriches the mineral content of the water. Historic pit lake water quality indicates elevated concentrations of arsenic (0.06 mg/L), fluoride (6-84 mg/L), nitrate (6.5-48 mg/L) and TDS (8,400 mg/L), and a relatively low pH (4.1). Although other metals and ion concentrations are higher than the surrounding groundwater concentrations (enriched within the pit lake water), they are unlikely to cause concern for water management.

If mine operation water management includes dewatering the pit lake, water quality considerations should be factored into the management design strategy. If pumped water will be applied to the heap leach and captured (operations adhere to the BADCT), water quality considerations may not be imperative. However, if any discharge is anticipated, permit conditions may dictate water quality thresholds and treatment technology may be necessary for compliance.

### ***Social or Community Impact***

In keeping with ASCU's community engagement and partnership standards, the Cactus Project will be developed with a plan to establish and maintain the support of our host communities.

ASCU has commenced early-stage community outreach and is currently evaluating partnerships within the community. As the Cactus Project's permits will involve a public process and are based on the permit submission and review schedule, ASCU plans to elevate outreach during the permitting process and throughout the life of the mine. Some steps have been completed and others have been delayed due to COVID-19. The following actions have been completed or are planned.

- Creation of a Conduit for Concerns. Establish a website, email and phone conduit for members of the community to contact with concerns. All interactions are logged and ASCU takes steps to address legitimate concerns as expediently as possible. The external relations team maintains a record of all steps taken to address concerns.
- Community Partnerships. Form partnerships with community service organizations to identify the needs of the community. This is achieved through the creation of a community partnership foundation with grant and in-kind standards. A committee of community members and ASCU representatives is planned for goal-setting and decision-making. ASCU has also identified several high-visibility projects that will help the community.
- Interact with Local Government. Attend virtual (and when it is safe and permitted to do so post COVID-19, in-person) local council and county board of supervisors' meetings and present project updates. Capture pressing issues, both related and unrelated to mining, with local governments. Reach out and offer site tours and briefings to all interested local and county officials. Create a schedule and develop a plan for frequency of visits with local officials. Keep community leaders and elected officials up to date on project developments.

- Interaction with Opposition Groups. With acceptance that some groups might not change their position on mining, ASCU will take steps to create a constructive and friendly dialogue, and address attainable concerns.
- Participate in Local Events. Create and maintain a calendar of local events. Sponsor, support and attend events as frequently as possible. Keep a record of events and sponsorships.
- Advertise Local Partnerships and Sponsorships. Make sure that the community is aware of ASCU's investments.

The following steps will be completed post-COVID-19, when it is safe, permitted and prudent to do so:

- Open Houses. Lead periodic Cactus Project open houses, which differ from any potential ADEQ or other agency statutory requirements. Open houses should be advertised to drive community attendance.
- Community Support Coalition. Identify enthusiastic community members that will be willing to voice support via person-to-person interactions, comment letters, editorial, and social media posts. Convene meetings of these individuals as needed and make sure they are informed of project development and milestones.
- Downtown Office. Plan a small community office in Casa Grande with enough space to hold and host meetings and maintain a visible presence within the community. Advertise office hours in local publications. The office may be offered to community service organizations as a resource for meetings.

ASCU conducted public opinion research related to the re-development of the site in 2019. The data showed significant support for the Cactus Project in the region. ASCU has committed to maintaining and growing their support over the life of the operation. The polling data also provided ASCU with useful information regarding messages that resonate with the community. ASCU has developed a comprehensive environmental, social and governance framework which aims to address any community concerns and operate the Cactus Project in a socially responsible manner.

## **Capital and Operating Costs**

### ***Capital Costs***

The estimated initial construction capital cost for the Cactus Project is US\$124 million. The capital cost estimates for the project are summarized in the table below. All cost estimates are expressed in second quarter 2021 US\$ dollars. No provision has been included to offset future escalation.

### Initial Capital Cost Estimate

CAPITAL COSTS		-2	-1	0	1
Project Infrastructure	US\$	-			
Leachpad Infrastructure	US\$	(24,500,000)		(20,000,000)	(4,500,000)
SXEW Facilities	US\$	(74,000,000)		(50,000,000)	(24,000,000)
Flotation Processing Facilities	US\$	-			
Tailings Facilities	US\$	-			
Capitalised Drilling - Cactus Orebodies	US\$	(7,833,238)	(5,013,878)	(2,819,359)	
Capitalised Drilling - Stockpile	US\$	-			
Technical Studies	US\$	(4,100,543)	(2,696,543)	(1,404,000)	
Project/Other Costs	US\$	(2,582,841)	(1,003,000)	(1,579,841)	
OP- Capitalised Stripping	US\$	(47,085,000)			(20,835,000)
UG-Capitalised Development	US\$	(29,124,000)			-
Mobile Mine Equipment (OP_UG)	US\$	-			
Mine Equipment (OP_UG)	US\$	-			
Sustaining Capital - Leachpad Facilities	US\$	(74,600,000)			
Sustaining Capital - SXEW Facilities	US\$	(26,000,000)			
Sustaining Capital - Open Pit	US\$	(130,979,500)			-
Sustaining Capital - UG	US\$	(108,752,000)			-
Exploration	US\$	-			
Land Acquisitions	US\$	(27,475,000)	(7,000,000)	(7,525,000)	(7,950,000)
TAGC Founders Fee	US\$	(1,100,000)		(300,000)	(500,000)
Cash Reclamation	US\$	(5,000,000)			
Salvage Value	US\$	5,000,000			
	US\$	-			
	US\$	-			
	US\$	-			
	US\$	-			
	US\$	-			
	US\$	-			
<b>Total CAPEX</b>	<b>US\$</b>	<b>(558,132,122)</b>	<b>(15,713,421)</b>	<b>(13,328,201)</b>	<b>(78,250,000)</b>
					<b>(49,835,000)</b>

The capital cost estimate was put together by Stantec, Samuel Engineering and ASCU based on industry benchmarking, historical information recovered for the site, 2020 project resource drilling and analysis, preliminary metallurgical bottle roll and column testing of fresh mineralized material and Stockpile Project samples, preliminary flowsheets, and conceptual heap leach and SX/EW processing facilities.

The costs reflect the construction CAPEX required to bring the Cactus Project into production and includes US\$23 million in respect of binding obligations entered into by ASCU to make payments for land acquisitions in relation to the Cactus Project. Another US\$99 million is allocated for initial SX/EW and leach pad facilities. The construction cost does not include the cost of open pit stripping for the first year (US\$21 million) or pre-feasibility and feasibility stage work (totaling US\$16 million as of the start of July 2021).

The table below details the initial capital required to build process facilities to support initial copper production of 22,000 tpa.

### Process Initial Capital Expenditure

Direct & Indirect Cost Components	Leach Pads, Ponds & Pipelines	SX/EW Facility	Total Capital Cost
Description	Cost (USD)	Cost (USD)	Cost (USD)
<b>Directs</b>			
Mechanical Equipment	0	24,545,000	24,545,000
Civil	16,638,000	1,849,000	18,487,000
Foundations	68,000	2,369,000	2,437,000
Structures	0	1,386,000	1,386,000
Buildings	0	1,849,000	1,849,000
Piping	1,013,000	8,318,000	9,331,000
Electrical	706,000	3,882,000	4,588,000
Instruments	0	1,035,000	1,035,000
Miscellaneous	0	665,000	665,000

<b>Direct &amp; Indirect Cost Components</b>	<b>Leach Pads, Ponds &amp; Pipelines</b>	<b>SX/EW Facility</b>	<b>Total Capital Cost</b>
<b>Subtotal Directs</b>	<b>18,425,000</b>	<b>45,898,000</b>	<b>64,323,000</b>
<b>Indirects</b>			
Contractor Indirect	Included Above	4,720,000	4,720,000
Construction Equipment	Included Above	2,360,000	2,360,000
Surveying & Testing Services	666,000	225,000	891,000
EP Services	1,105,000	4,049,000	5,154,000
Construction Management	921,000	3,179,000	4,100,000
Vendor Reps	0	555,000	555,000
Spare Parts	0	277,000	277,000
Initial Fills	0	500,000	500,000
Commissioning	0	443,000	443,000
Freight	368,486	2,803,000	3,171,486
Mining Equipment	0	0	0
Owner's Cost	Excluded	Excluded	Excluded
Taxes	Excluded	Excluded	Excluded
<b>Subtotal Indirects</b>	<b>3,060,486</b>	<b>19,111,000</b>	<b>22,171,486</b>
Contingency	3,008,000	9,036,000	12,044,000
<b>Total Cost (USD) – 22 ktpa (Initial)</b>	<b>\$24,493,486</b>	<b>\$74,045,000</b>	<b>\$98,538,486</b>

A contingency of 15% has been included in the capital cost for ancillary mine equipment, leach pad infrastructure and the SX/EW facility. Contingency is an allowance to cover unforeseeable costs that may arise during the project execution, which reside within the scope-of-work but cannot be explicitly defined or described at the time of the estimate due to lack of information. It is assumed that contingency will be spent; however, it does not cover scope changes or project exclusions.

Minimal design has been performed on the facilities other than preliminary flowsheets and rough plot plan layouts. The design will continue to evolve throughout future studies. Construction materials, quantities, equipment selection and sizing as well as other design development issues are not resolved at this stage. Costs will increase and decrease as designs develop and the scope is narrowed.

The authors of the Integrated Cactus PEA made the following assumptions in developing the Cactus Project's capital cost:

- Assumes contractor mining and no additional equipment is required for the mining contractor.
- Mobile light duty equipment is assumed to be leased not purchased.
- Pursuant to recent land acquisitions, new fencing around the facilities is required. Some minor repairs or new gates may be necessary.
- It is assumed that there will be no buried interferences. No allowance has been made in the estimate for any utility relocations or demolition. Additionally, no allowances have been made for encountering hazardous waste or other buried items.

- There are sufficient water rights available sourced from both off-site and on-site wells that can be used to supply fresh water to the plant.

Items not included in the capital estimate are as follows:

- Mobile equipment (except cathode forklift).
- Utility power transmission lines and substation, including the main transformer.
- Access roads.
- Ancillary buildings and/or refurbishment of other existing buildings.
- Allowance for special incentives (schedule, safety, etc.).
- Taxes.
- Working capital, sustaining capital, interest and financing cost.
- Force majeure occurrences, such as risk due to labor disputes, permitting delays, etc.

### ***Operating Costs***

The operating costs for the Cactus Project were developed based on a combination of benchmarks, direct build-up from metallurgical parameters, typical unit consumption and costs for similar operations and factoring.

For the SX/EW plant and based on an initial plant size of 22,000 tpa copper production, the direct operating costs are expected to average US\$0.59 per pound of copper cathode produced through the first six years of production, as presented in the table below.

**Processing Annual Operating Cost Estimate Summary (US\$)**

Average Yr 1-6 Cactus Mine Operating Costs - 23.2 ktpy Cu & Combined Tons									
	Unit		Consumption Rate	Unit Price		Annual Cost	\$/ton Processed	\$/lb Copper	
	Units	Consumptn							
Power	kWh/lb	1.60	8485 kWh	\$ 0.058	\$/kWh	\$ 4,278,900	\$ 0.24	\$ 0.09	
EW	kWh/lb	1.00	5303 kWh	\$ 0.058		\$ 2,674,312	\$ 0.15	\$ 0.06	
SX/TF	kWh/lb	0.45	2387 kWh	\$ 0.058		\$ 1,203,441	\$ 0.07	\$ 0.03	
Utilities/Misc.	kWh/lb	0.15	796 kWh	\$ 0.058		\$ 401,147	\$ 0.02	\$ 0.01	
<b>SX/Reagents</b>						<b>\$ 1,953,259</b>	<b>\$ 0.11</b>	<b>\$ 0.04</b>	
Extractant	kg/kg Cu	0.005	289 kg/d	\$ 9.95	\$/kg	\$ 1,048,399	\$ 0.06	\$ 0.02	
Acid			2 tons/d	\$ 120.00	\$/ton	\$ 87,600	\$ 0.00	\$ 0.00	
EW Reagents (Cobalt, Guar, FC1100)			\$ 0.015	\$/lb Cu		\$ 660,000	\$ 0.04	\$ 0.01	
Diluent				15%	% of Ext	\$ 157,260	\$ 0.01	\$ 0.00	
MTCE/Misc.				\$ 0.05	\$/lb Cu	\$ 2,200,000	\$ 0.12	\$ 0.05	
<b>Direct Labor</b>		<b>49</b>	<b>staff</b>			<b>\$ 3,536,000</b>	<b>\$ 0.20</b>	<b>\$ 0.08</b>	
	Gen Frmn	1		\$ 120,000	\$/yr	\$ 120,000	\$ 0.01	\$ 0.00	
	Metallurgist	1		\$ 100,000	\$/yr	\$ 100,000	\$ 0.01	\$ 0.00	
	Ops Frmn	4		\$ 95,000	\$/yr	\$ 380,000	\$ 0.02	\$ 0.01	
	Mntce Frmn	4		\$ 95,000	\$/yr	\$ 380,000	\$ 0.02	\$ 0.01	
	Shift Operator	12		\$ 70,000	\$/yr	\$ 840,000	\$ 0.05	\$ 0.02	
	EW Crew	4		\$ 70,000	\$/yr	\$ 280,000	\$ 0.02	\$ 0.01	
	Laboratory	6		\$ 50,000	\$/yr	\$ 300,000	\$ 0.02	\$ 0.01	
	Mech/Pipe	4		\$ 83,000	\$/yr	\$ 332,000	\$ 0.02	\$ 0.01	
	Elect	2		\$ 83,000	\$/yr	\$ 166,000	\$ 0.01	\$ 0.00	
	Tech/Instr.	3		\$ 86,000	\$/yr	\$ 258,000	\$ 0.01	\$ 0.01	
	Labor	4		\$ 50,000	\$/yr	\$ 200,000	\$ 0.01	\$ 0.00	
	Security	4		\$ 45,000	\$/yr	\$ 180,000	\$ 0.01	\$ 0.00	
<b>SXEW TOTAL</b>						<b>\$ 11,968,159</b>	<b>\$ 0.67</b>	<b>\$ 0.26</b>	
Acid (Net)	lbs/ton ore	13.4	298 tons/d	\$ 120.00	\$/t	\$ 13,067,875	\$ 0.73	\$ 0.28	
Oxide Ore	lbs/ton ore	14.5							
Enriched Ore	lbs/ton ore	1.0							
MTCE/Misc.				\$ 0.025	\$/t	\$ 444,650	\$ 0.03	\$ 0.01	
Power	100 kW		2400 kWh	\$ 0.058	\$/kWh	\$ 1,210,227	\$ 0.07	\$ 0.03	
Water (all Areas)			1,534 ac-ft/y	\$ 10.00	\$/a-ft	\$ 15,340	\$ 0.00	\$ 0.00	
<b>Labor</b>		<b>11</b>	<b>staff</b>			<b>\$ 640,000</b>	<b>\$ 0.04</b>	<b>\$ 0.01</b>	
	Leach Frmn	1		\$ 100,000	\$/yr	\$ 100,000	\$ 0.01	\$ 0.00	
	Eq. Operator	2		\$ 70,000	\$/yr	\$ 140,000	\$ 0.01	\$ 0.00	
	Leach Labor	8		\$ 50,000	\$/yr	\$ 400,000	\$ 0.02	\$ 0.01	
<b>LEACHING TOTAL</b>						<b>\$ 15,378,092</b>	<b>\$ 0.86</b>	<b>\$ 0.33</b>	
<b>Direct OPEX</b>		<b>60</b>	<b>staff</b>			<b>\$ 27,346,251</b>	<b>\$ 1.54</b>	<b>\$ 0.59</b>	

No contingency has been included in the operating costs presented. Taxes are considered in the financial analysis model.

With a plant expansion reflecting 35,000 tons of annual copper production, the direct operating costs are expected to average US\$0.26/lb of copper cathode produced, as presented in the table below.

**Processing Operating Cost Details (US\$)**

Average Yr 7-17 Cactus Mine Operating Costs - 32.5 ktpy Cu & Combined Tons									
	Unit		Consumption Rate	Unit Price	Annual Cost	S/ton Processed	S/lb Copper		
	Units	Consumptn							
Power	kWh/lb	1.60	11875 kWh	\$ 0.058	\$/kWh	\$ 5,987,955	\$ 0.98	\$ 0.09	
EW	kWh/lb	1.00	7422 kWh	\$ 0.058		\$ 3,742,472	\$ 0.61	\$ 0.06	
SX/TF	kWh/lb	0.45	3340 kWh	\$ 0.058		\$ 1,684,112	\$ 0.28	\$ 0.03	
Utilities/Misc.	kWh/lb	0.15	1113 kWh	\$ 0.058		\$ 561,371	\$ 0.09	\$ 0.01	
<b>SX/Reagents</b>						<b>\$ 2,434,817</b>	<b>\$ 0.40</b>	<b>\$ 0.04</b>	
Extractant	kg/kg Cu	0.005	404 kg/d	\$ 9.95	\$/kg	\$ 1,467,145	\$ 0.24	\$ 0.02	
Acid			2 tons/d	\$ 120.00	\$/ton	\$ 87,600	\$ 0.01	\$ 0.00	
EW Reagents (Cobalt, Guar, FC1100)			\$ 0.015	\$/lb Cu		\$ 660,000	\$ 0.11	\$ 0.01	
Diluent				15%	% of Ext	\$ 220,072	\$ 0.04	\$ 0.00	
MTCE/Misc.				\$ 0.05	\$/lb Cu	\$ 2,200,000	\$ 0.36	\$ 0.03	
<b>Direct Labor</b>		<b>52</b>	<b>staff</b>			<b>\$ 3,739,000</b>	<b>\$ 0.61</b>	<b>\$ 0.06</b>	
	Gen Frmn	1		\$ 120,000	\$/yr	\$ 120,000	\$ 0.02	\$ 0.00	
	Metallurgist	1		\$ 100,000	\$/yr	\$ 100,000	\$ 0.02	\$ 0.00	
	Ops Frmn	4		\$ 95,000	\$/yr	\$ 380,000	\$ 0.06	\$ 0.01	
	Mntce Frmn	4		\$ 95,000	\$/yr	\$ 380,000	\$ 0.06	\$ 0.01	
	Shift Operator	12		\$ 70,000	\$/yr	\$ 840,000	\$ 0.14	\$ 0.01	
	EW Crew	5		\$ 70,000	\$/yr	\$ 350,000	\$ 0.06	\$ 0.01	
	Laboratory	6		\$ 50,000	\$/yr	\$ 300,000	\$ 0.05	\$ 0.00	
	Mech/Pipe	4		\$ 83,000	\$/yr	\$ 332,000	\$ 0.05	\$ 0.01	
	Elect	3		\$ 83,000	\$/yr	\$ 249,000	\$ 0.04	\$ 0.00	
	Tech/Instr.	3		\$ 86,000	\$/yr	\$ 258,000	\$ 0.04	\$ 0.00	
	Labor	5		\$ 50,000	\$/yr	\$ 250,000	\$ 0.04	\$ 0.00	
	Security	4		\$ 45,000	\$/yr	\$ 180,000	\$ 0.03	\$ 0.00	
<b>SXEW TOTAL</b>						<b>\$ 14,361,771</b>	<b>\$ 2.35</b>	<b>\$ 0.22</b>	
<b>Acid (Net)</b>	<b>lbs/ton ore</b>	<b>3.4</b>	<b>14 tons/d</b>	<b>\$ 120.00</b>	<b>\$/t</b>	<b>\$ 602,684</b>	<b>\$ 0.10</b>	<b>\$ 0.01</b>	
	Oxide Ore	6.0							
	Enriched Ore	1.0							
MTCE/Misc.				\$ 0.025	\$/t	\$ 152,950	\$ 0.03	\$ 0.00	
Power	100 kW		2400 kWh	\$ 0.058	\$/kWh	\$ 1,210,227	\$ 0.20	\$ 0.02	
Water (all Areas)			1,061 ac-ft/y	\$ 10.00	\$/a-ft	\$ 10,610	\$ 0.00	\$ 0.00	
<b>Labor</b>		<b>11</b>	<b>staff</b>			<b>\$ 640,000</b>	<b>\$ 0.10</b>	<b>\$ 0.01</b>	
	Leach Frmn	1		\$ 100,000	\$/yr	\$ 100,000	\$ 0.02	\$ 0.00	
	Eq. Operator	2		\$ 70,000	\$/yr	\$ 140,000	\$ 0.02	\$ 0.00	
	Leach Labor	8		\$ 50,000	\$/yr	\$ 400,000	\$ 0.07	\$ 0.01	
						\$ -			
<b>LEACHING TOTAL</b>						<b>\$ 2,616,471</b>	<b>\$ 0.43</b>	<b>\$ 0.04</b>	
							0	0	
<b>Direct OPEX</b>		<b>63</b>	<b>staff</b>			<b>\$ 16,978,243</b>	<b>\$ 2.78</b>	<b>\$ 0.26</b>	

A total of 49 direct operating staff and 11 attributed general and administrative ("G&A") staff is initially anticipated for the operations running 24 hours per day, seven days per week and 365 days per year. Labor costs include a 30% benefits consideration.

Power has been considered from Arizona Public Service Company at a fully built-up rate of US\$0.058/kWh. Water will be sourced from four wells, two off-site and two on-site, to fulfill anticipated yearly consumption of 1,061 acre-ft. ASCU has secured State water rights for a 50-year period totaling 3,600 afy.

Contract mining costs for the Stockpile Project, open pit and underground were derived from either benchmarking and/or zero-based principles using cost inputs from the local area, including operating and maintenance labor rates

and diesel price. Consumables such as tire and ground engaging tools are included in maintenance costs and are calculated as cost per hour. Productivities of the mining equipment are based on OEM performance curves and the fleet has been matched to average production rates and corresponding haulage. A 20% contractor premium has been applied to all costs.

For the life of the project, surface material movements average US\$2.09/t and include mineralized material and waste movements of the Stockpile Project, open pit and underground. The underground unit mining rate of US\$28.93/t is separate and reflects a benchmark cost of mining TLS.

An allowance equal to approximately 7% of direct operating costs has been included for G&A costs for the Cactus Project. These costs are people-related and include G&A staffing directly related to the project, off-site costs (such as offices, computer and office supplies for staff), associated insurance and state and local taxes.

### ***Economic Analysis***

A discounted cash flow analysis was completed to evaluate the potential viability of the Mineral Resources at the Cactus Project. The analysis was prepared using technical and cost inputs developed by Stantec, Samuel Engineering and ASCU. These inputs have been reviewed in detail by Stantec and are accepted as reasonable. The table below presents the model inputs used in the economic analysis.

#### **Financial Model Parameters – Model Inputs**

<b>Area</b>	<b>Description</b>	<b>Units</b>	<b>Values</b>
	Construction period	Years	1.3
	Mine life (after preproduction)	years	18
	Avg. annual production rate copper	t × 1,000	28,216
<b>Metal pricing</b>	Copper price	US\$/lb	3.35
	Estimate basis	US\$	second quarter 2021
<b>Cost criteria</b>	Inflation/currency fluctuation		None
	Leverage	% equity	100
	United States Corporate Income	% profit	21
<b>Income tax</b>	Arizona Corporate Income	% profit	6.9
	Arizona Mining Severance	% profit	2.5
<b>Royalties / payments</b>	None	n/a	3.18%
<b>Transportation, smelting, and refining charges</b>	Shipping, handling and fees	US\$/lb Copper	0.04

The discounted cash flow analysis was performed on a stand-alone project basis with annual cash flows discounted on an end-of-year basis. The economic evaluation used a real discount rate of 8% and was performed as of July 2021 using average second quarter 2021 U.S. dollars. While all costs prior to the start of construction are considered as "sunk costs", these are still included in the economic analysis for the purpose of a project valuation.

There are no Mineral Reserves for the Cactus Project currently. The information reported in the Integrated Cactus PEA is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. Inferred Mineral Resources are based on limited geological evidence and sampling. The tonnage and grade of Inferred Mineral Resources have significant uncertainty as to their existence and as to whether they can be mined economically. There is no certainty that the Integrated Cactus PEA will be realized. See "*Cautionary Statement Regarding Forward-Looking Information*".

The Integrated Cactus PEA highlights include the following:

- Life of Mine ("**LOM**") average annual payable production of 28 ktpa LME Grade A copper cathode.
- An 18 year mine life based on the current mine plan comprising leachable mineralized material only.
- Initial processing capacity of 22 ktpa of copper with ramp up to 35 ktpa of copper by Year 7 of operations resulting in low initial construction CAPEX of US\$124 million.
- Low OPEX driven open pit mining in the initial phase from start of first production until commencement of underground mining anticipated in six years from first production.
- Average LOM cash cost (C1) of US\$1.55/lb of copper produced. Cash cost includes all direct and indirect costs associated with the physical activities that generate concentrate products for sale to customers, including mining, processing, direct G&A costs and royalties.
- Average LOM all-in sustaining costs of US\$1.88/lb of copper produced. All-in sustaining cost includes cash cost and sustaining CAPEX.
- Average LOM total costs of US\$2.06/lb of copper produced. Total cost includes all costs associated with the project each year, including all initial and expansion CAPEX.
- After-tax, a project net present value ("**NPV**") of US\$312 million at an 8% discount rate and an internal rate of return ("**IRR**") of 33% based on a copper price of US\$3.35/lb.
- Total inventory of 1.27 billion pounds of copper of a total leachable resource of 2 billion pounds, providing significant upside opportunities for in-pit expansion.

Details of the assumptions and the outcome of the analysis are provided in the following table.

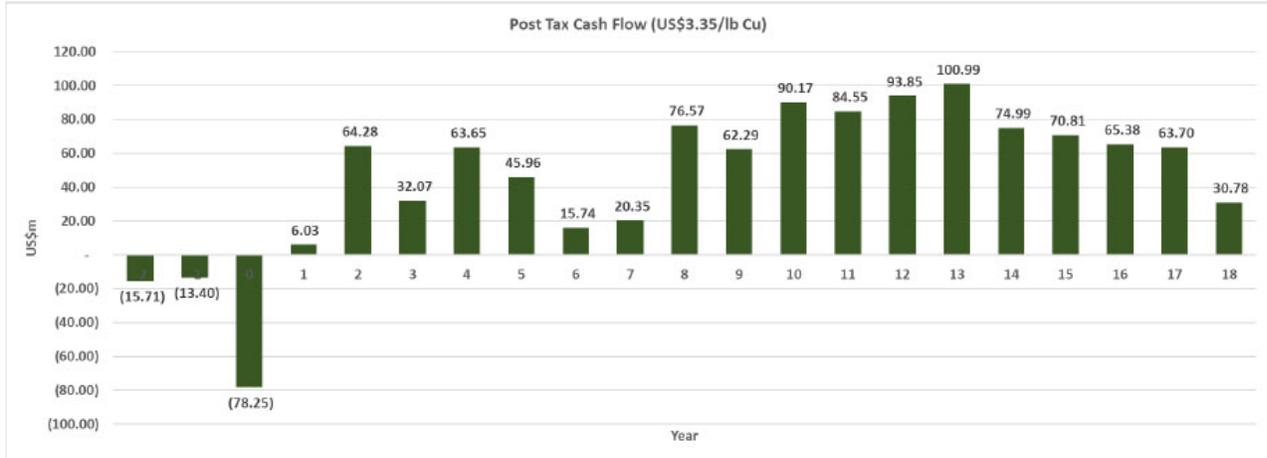
### Financial Assumptions and Results

Assumption/Outcome	Value/Results
Copper Price	US\$3.35/lb
Total Mineralized Material Mined	179 million tons
Annual Average Processing Rate Over LOM	10 million tons per annum
Average Recovery Rates Over LOM	Stockpile Project: CuAS: 90%, CuCN: 40% Open Pit / Underground: CuAS: 90%, CuCN: 72%
Average Production Over LOM	28 ktpa
Operating Costs (per ton processed)	US\$9.06/ton
Average LOM Cash Cost (C1)	US\$1.55/lb copper
Average LOM All-In Sustaining Cost (C1 cost + sustaining CAPEX)	US\$1.88/lb copper
Average LOM Total Costs	US \$2.06/lb copper
Sustaining CAPEX Over LOM (open pit and underground, SX/EW and leach pad expansions)	US\$340 million
LOM Free Cash Flow (post-tax undiscounted)	US\$960 million
Post-Tax NPV (8%)	US\$312 million
Post-Tax IRR	33%

Assumption/Outcome	Value/Results
Payback	3.5 years

The graphic below captures LOM cash flows on a post-tax basis using a copper price of US\$3.35/lb, with positive cash flow commencing in Year 1 post-development capital investment.

**Life-of-Mine Post-Tax Cash Flow**



**Conclusions and Recommendations**

The authors of the Integrated Cactus PEA concluded that the resource estimates for the Stockpile Project and Cactus Project in situ deposits, combined with the associated metallurgical testing, appear adequate for the Integrated Cactus PEA, with additional work warranted to continue to investigate the project. Based on the outcomes of the scoping level study and the absence of fatal or serious flaws, the Cactus Project is worthy of continued development to a prefeasibility study ("PFS") level of confidence, and consequently definitive feasibility study ("DFS") level, to advance the understanding of the technical risks associated with resource confidence, metallurgical performance and project development costs.

The authors suggest that the primary goals of future work programs should be as follows:

- In-fill drill programs of the current resource volume in order to convert Inferred material to Indicated and Measured Resource categories.
- Continue to expand the current resource through additional step-out drilling.
- Continue to explore the mineralized targets away from the deposit, such as Parks/Salyer, in order to evaluate the potential for additional deposits to add to the medium term expansion potential.
- Conduct additional metallurgical testing as outlined in the Integrated Cactus PEA.
- Complete a PFS of the Cactus Project based on the positive outcome from the Integrated Cactus PEA.

**Work Program**

The authors recommend the completion of a PFS to advance the development of the Cactus Project. Recommendations for further work study programs have been divided into two phases in order to better define the goals and objectives, and assist in planning and budgeting the work. Phase 1 is the completed PFS and Phase 2 is advancing the project to a DFS. Phase 2 is dependent on positive results from Phase 1.

The first table, directly below, captures all Phase 1 costs required to complete a PFS, whereas the second table reflects the additional Phase 2 costs for the DFS, including final detailed engineering and future exploration drilling on Parks/Salyer and NE Extension. The budget has been estimated for project expenditures commencing in Q4 2021 for the next two phases of the work program. The results of the lab testing, particularly metallurgical, will form the basis to proceed the study to a DFS.

**Phase 1 – Prefeasibility Study Costs**

<b>Phase 1 - PreFeasibility Study</b>		
<b>Budget Category</b>	<b>Estimate Cost (US\$ 000)</b>	
	<b>Q3 2021</b>	<b>Q4 2021</b>
Drilling	2,782	1,232
Project Support	396	276
Technical Studies	750	750
Lab testing (Assaying and Metallurgical)	493	198
Permitting	59	80
Land Payments	7,000	
Exploration - Adjacent Properties		
<b>Total</b>	<b>11,479</b>	<b>2,535</b>

**Phase 2 – Definitive Feasibility Study Costs**

<b>Phase 2 - Definitive Feasibility Study</b>	
<b>Budget Category</b>	<b>Estimate Cost (US\$ 000)</b>
Drilling	3,128
Project Support	750
Technical Studies	652
FEED Engineering	800
Lab testing (Assaying and Metallurgical)	398
Permitting	124
Land Payments	7,900
Exploration - Adjacent Properties	2,916
<b>Total</b>	<b>16,669</b>

According to the authors of the Integrated Cactus PEA, it is expected that the following tasks will be undertaken as part of the Phase 1 work program:

**Phase 1 Work Program – Specific Tasks**

- |                |   |
|----------------|---|
| Sustainability | <ul style="list-style-type: none"> <li>• Continue permitting activities and land acquisition as planned.</li> <li>• While adequate for the Integrated Cactus PEA, further hydrogeologic study is required to better quantify aquifer levels and impacts from mining.</li> </ul>   |
| Geotechnical   | <ul style="list-style-type: none"> <li>• Develop geotechnical information required for engineering design.</li> <li>• For example, the proposed pillar between open pit high wall and underground stopes is fairly represented in the Integrated Cactus PEA, but needs geotechnical verification once additional data becomes available.</li> </ul> |

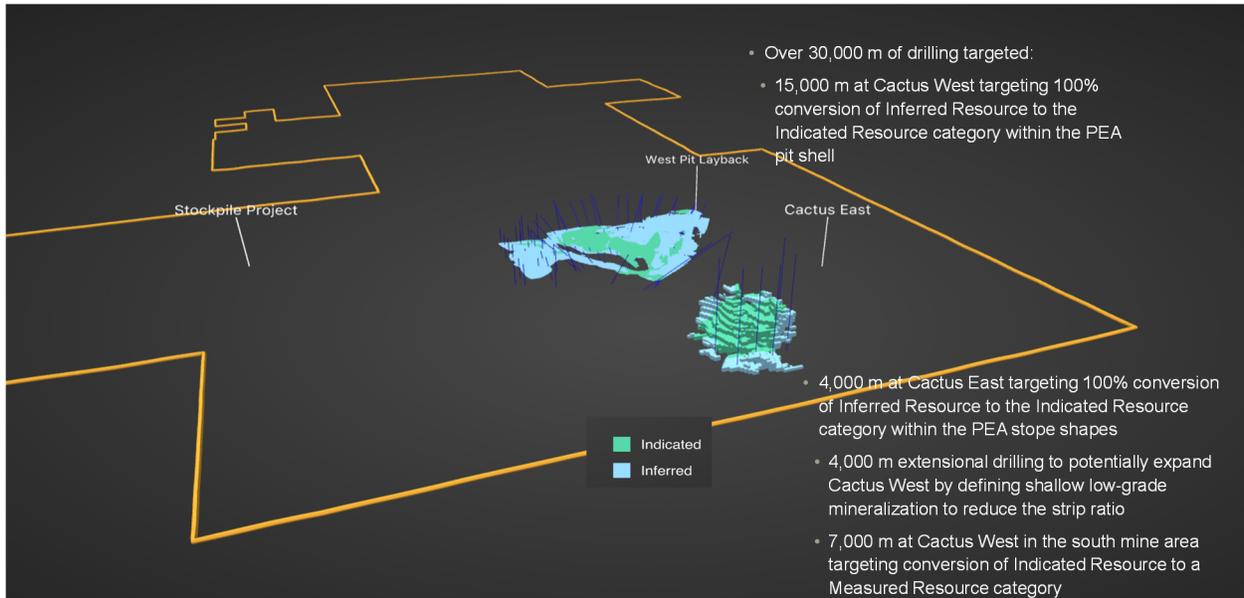
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**Phase 1 Work Program – Specific Tasks**

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- |                    |  |
|--------------------|--|
| Drilling           | <ul style="list-style-type: none"><li>• The present Cactus West and Cactus East deposit outlines appear to be drill limited to the north and east. Continued step out drilling in these areas could very well extend the limits of known mineralization.</li><li>• Continue metallurgical sample drilling across the Cactus Project area.</li><li>• Condemnation/step-out drilling to be completed to confirm the placement of dumps, leach pads and plant facilities.</li><li>• If the decision is made to go underground at Cactus East, plans should be made to have a close spaced definition drilling program to provide a more detailed understanding of mineralized material zone boundaries for slope design purposes.</li></ul>   |
| Lab Testing        | <ul style="list-style-type: none"><li>• Significant additional column testing, particularly large columns, recovery by size fraction to determine merits of crushing / agglomeration and importance of isolating oxides and sulfides from open pit, leaching characteristics of mixed oxides and sulfides will be required.</li><li>• Reduce the number of calculated soluble grades in the model through assaying of historical pulps (currently 30% of composites use calculated CuAS and CuCN grades based on CuT grades and mineralization domains).</li></ul>   |
| Mine Design        | <ul style="list-style-type: none"><li>• Regarding the Cactus East underground:<ul style="list-style-type: none"><li>○ While current plans do not expect Cactus East to be operated as an in situ leach operation, this proposed leaching method should be considered further with the existing core and resource information. In situ leach may be an alternative to underground mining in a low copper price environment, thereby still realizing high value material.</li><li>○ The proposed TLS mining method is suited for the deposit and the primary/secondary sequence with access from sublevels at 75-foot (23 metre) spacing is logical. An economic trade-off study that envisions Avoca style TLS should be commissioned. With the relatively wide dimensions of the mineralized deposit, additional opposite side access to set up Avoca mining (continuous mining and backfilling) may prove to add enough additional productivity gains to offset the additional development costs.</li><li>○ If the timing of the open pit layback schedule is not conducive to commence portal excavation in a timely manner, then access from the surface, which lengthens the development declines, should be considered.</li></ul></li></ul> |
| Costs and Schedule | <ul style="list-style-type: none"><li>• The mining costs seem reasonable and sufficient for a PEA-level evaluation but will need a higher level of detail and productivity analysis in the next stage. This will include a total buildup of equipment, personnel, and materials.</li><li>• A more detailed production and development schedule is required to verify the mines' ability to achieve the mining schedules presented for the Stockpile Project and Cactus Project.</li></ul>  |

A graphical representation of the drill plan is as provided below:



### ***Project Execution Plan***

Project execution will follow a typical EPCM approach. The execution timeframe considered is approximately 16 months from notice to proceed through commissioning completion. Project ramp-up will be commensurate with heap leaching pad development. A preliminary development schedule is included in Figure 21-1 of the Integrated Cactus PEA.

Permitting and long lead order timelines are the highest risks to the proposed schedule development plan. Equipment delivery times, particularly the rectifier-transformer units, is expected to be over 6-8 months based on Metalex's budget estimate. Equipment delivery will drive the timeline for completion of the project. Assuming permitting can be achieved as indicated, the overall project schedule could be brought forward 6-8 months by reducing the equipment delivery timeframes and commencing the leach pad construction immediately upon receipt of permits. Any early execution or equipment purchase would be at the risk of project delays.

The following is a high-level expected development timeline for the Cactus Project reflecting Phase 1 PFS and Phase 2 DFS. The execution plan remains conceptual and is subject to various factors outside of ASCU's control. The timeline below outlines actions relevant to the next two phases of work.

**Project Development and Funding Timelines**

Project Development	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022
<b>Drilling</b>							
Cactus West & East							
Parks/Salyer & NE Extension							
<b>Metallurgy</b>							
Oxide							
Enriched							
Sulphide							
<b>Technical Studies</b>							
Integrated Cactus PEA							
Integrated Cactus PFS							
Integrated Cactus DFS/FS							
Parks/Salyer PEA							
<b>Engineering</b>							
EPCM/Feed for Cactus							
<b>Permitting</b>							
Integrated Cactus Project							

**RISK FACTORS**

The Company's business, being the identification, acquisition, exploration, development and production of base metal properties in geographic regions known to have low geopolitical risk, and the present stage of exploration and development of the Company's mineral properties, is speculative and involves a high degree of risk. The risk factors listed below could materially affect the Company's financial condition and/or future operating results, and could cause actual events to differ materially from those described in forward-looking statements made by or relating to the Company.

***Copper prices are volatile and may be lower than expected***

The Company's future development plans and its ability to commence and sustain operations in the future are dependent on, amongst other things, the market price of copper. The prices of copper prevalent and that are likely to be realized by the Company will affect future development, construction and production decisions, earnings, cash flows, the financial condition and prospects of the Company.

The market price of copper is affected by numerous factors beyond the Company's control. Some factors that affect the price of copper include: industrial demand; forward or short sales of copper by producers and speculators; future levels of copper production; and rapid short-term changes in supply and demand due to speculative or hedging activities by producers, individuals or funds. Copper prices are also affected by macroeconomic factors including: confidence in the global economy; expectations of the future rate of inflation; the availability and attractiveness of alternative investment vehicles; the strength of, and confidence in, the US dollar, the currency in which the price of copper is generally quoted, and other major currencies; global political or economic events; and costs of production of other copper producing companies. All of the above factors can, through their interaction, affect the price of copper by increasing or decreasing the demand for or supply of copper.

The price of copper has fluctuated widely in recent years, and any future material price declines could cause the development and restart of the Cactus Mine to be uneconomic. Depending on the expected price of copper, projected cash flows from planned mining operations may not be sufficient to warrant commencing development or mining, and the Company could be forced to discontinue plans of development, or delay or abandon making a construction or production decision. The Company may be forced to sell one or more portions of the Cactus Project to generate cash. Future production from the Cactus Mine will be dependent on a price of copper that is adequate to make a deposit

economically viable. Furthermore, future mine plans using significantly lower copper prices could result in material write-downs of the Company's investment in the Cactus Mine and in reductions in Mineral Resource estimates. The occurrence of any of the foregoing could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows and prospects.

Further a declining or sustained low price of copper could negatively impact the Company's ability to finance the exploration and development of the Cactus Project.

Although the price of copper is only one of the several factors that the Company will consider in making development, construction and production decisions in relation to the Cactus Project, if the Company determines from a reassessment that the Cactus Mine is not economically viable in whole or in part, then operations may cease or be curtailed and the Cactus Mine may never be fully developed or developed at all. The occurrence of any of the foregoing could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows and prospects.

***Product alternatives may reduce demand for the Company's products***

Copper has a number of different applications, including being used in wiring and cable products, copper tubing and the transportation industry. The projected medium-long term demand for copper is expected to be driven significantly by amongst other factors, the current anticipated global energy transition to renewable energy & electrification and electric vehicles. Alternative technologies are continually being investigated and developed with a view to reducing production costs or for other reasons, such as minimizing environmental or social impact. If competitive technologies emerge that use other materials in place of copper, demand and price for copper might fall, which could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

***Estimating Mineral Reserves and Mineral Resources is risky and no assurance can be given that such estimates will be achieved***

The Company's Mineral Resources are estimates only, and no assurance can be given that the anticipated tonnages and grades reported in the Integrated Cactus PEA will be achieved, that the indicated level of recovery reported in the Integrated Cactus PEA will be realized or that estimated Mineral Resources will be declared as Mineral Reserves and can or will be mined or processed profitably. The Company's Mineral Resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing and other factors. There are numerous uncertainties inherent in estimating Mineral Resources, including many factors beyond the Company's control. Estimation is a subjective process, and the accuracy of the Company's Mineral Resource estimate is a function of the quantity and quality of available data, and of the assumptions made and judgments used in engineering and geological interpretation of that data and the level of congruence with the actual size and characteristics of the Company's deposits. These estimates may require adjustments or downward revisions based upon further exploration or development work or drilling.

Fluctuations in copper prices, results of drilling, metallurgical testing, the evaluation of mine plans after the date of any estimate, permitting requirements or unforeseen technical or operational difficulties may require revision of the Company's Mineral Resource estimates. Mineral Resource estimates are based on drill hole information, which is not necessarily indicative of conditions between and around the drill holes. Accordingly, such Mineral Resource estimates may require revision as more geologic and drilling information becomes available and as further studies are conducted. Should reductions in Mineral Resources occur, the Company may be required to take a material write-down of its investment in the Cactus Project, reduce the carrying value of the Cactus Project or delay the development of, or production from, some or all of the deposits forming the Cactus Project, which could have a material adverse effect on the Cactus Project and the Company's business, financial condition, results of operations, cash flows and prospects. Mineral Resources should not be interpreted as assurances of expected LOM or of the profitability of future operations. There is a degree of uncertainty in estimating Mineral Resources and of the grades and tonnage that are forecast to be mined and, as a result, the grade and volume of copper that the Company eventually mines, processes and recovers may not be the same as currently anticipated. Any material reductions in estimates of Mineral Resources, could have a material adverse effect on the Cactus Project and the Company's business, financial condition, results of operations, cash flows or prospects.

Mineral Resources are not Mineral Reserves and have a greater degree of uncertainty as to their existence and feasibility. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. There is no assurance that Mineral Resources will be upgraded to Proven or Probable Mineral Reserves. Mineral Resources that are in the Inferred category are even more risky. Due to the uncertainty and speculative nature of Inferred Mineral Resources, economic considerations cannot be applied to this category and there is no assurance that Inferred Mineral Resources will be upgraded to Proven or Probable Mineral Reserves as a result of continued exploration.

***Nature of mineral exploration, development and mining***

The Company's future is dependent on its exploration, development and successful results from technical study programs. The exploration and development of mineral deposits involves significant financial risks over a prolonged period of time, which may not be eliminated even through a combination of careful evaluation, experience and knowledge. Major expenditures on the Company's properties may be required to construct or repair mining and processing facilities at a site, and it is possible that further detailed studies may show uneconomic results, leading to the abandonment of projects. It is impossible to ensure that economic studies on the Company's projects, or the current or proposed exploration programs on any of the properties in which the Company has exploration rights, will result in any profitable commercial mining operations. The Company cannot give any assurance that its current and future exploration activities will result in a discovery of mineral deposits containing mineral reserves. Estimates of mineral resources and any potential determination as to whether a mineral deposit will be commercially viable can also be affected by such factors as: the particular attributes of the deposit, such as its size and grade; unusual or unexpected geological formations and metallurgy; proximity to infrastructure; financing costs; copper and by-product metal prices, which are highly volatile; and governmental regulations, including those relating to prices, taxes, royalties, infrastructure, land use and acquisition, importing and exporting of metal, exchange controls and environmental protection. The effect of these factors cannot be accurately predicted, but the combination of any or all of these factors may result in the Company not receiving an adequate return on its invested capital or suffering material adverse effects to its business and financial condition. Exploration and development projects also face significant operational risks including but not limited to an inability to obtain access rights to properties, accidents, equipment breakdowns, labour disputes (including work stoppages and strikes), and other unanticipated interruptions.

***Dependent on the success of the Cactus Mine***

The Company's current principal operation is expected to be the Cactus Mine in Arizona and the Company is dependent upon the success of this project. The continued development of mining operations at the Cactus Mine will require the commitment of substantial additional resources for capital expenditures and operating expenditures, which may increase in subsequent years as needed, and for consultants, personnel and equipment associated with additional development and mining of such project.

***The Company may not be able to obtain further financing and continue on a going concern basis***

The Company's primary sources of capital resources are comprised of cash and cash equivalents and the issuance of securities. The Company will continuously monitor its capital structure and, based on changes in operations and economic conditions, may adjust the structure by issuing new shares or new debt as necessary. While it is anticipated that funds from the Offering will support further technical work and drilling in connection with the Cactus Mine, the Company will need to raise further funds to complete the development of the Cactus Mine, as well as to conduct other exploration and development activities. The Company will seek to raise further funds through equity or debt financings. The Company's ability to continue as a going concern in the short-term is dependent on the continued support of its equity holders. In the long-term the Company's ability to continue as a going concern is dependent on raising further funding. While the Company has been successful in securing financing to date, there are no guarantees that it will be able to secure such financing in the future on terms acceptable to the Company, if at all. This could, in turn, have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

***Risk of not obtaining relevant permits or renewal of permits***

The Company's operations are subject to extensive laws and regulations governing, among other things, such matters as environmental protection, management and use of toxic substances and explosives, health, exploration and

development of mines, production and post-closure reclamation, safety and labour, taxation and royalties, maintenance of leases and claims, and expropriation of property. The activities of the Company require permits and licenses from various governmental and/or regulatory authorities.

The costs associated with compliance with these laws and regulations and of obtaining permits and licenses are substantial, and possible future laws and regulations, changes to existing laws and regulations and more stringent enforcement of current laws and regulations by governmental and/or regulatory authorities, could cause additional expenses, capital expenditures, restrictions on or suspensions of the Company's operations and delays in the development of its properties. There is no assurance that future changes in such laws and regulations, if any, will not adversely affect the Company's operations. Moreover, these laws and regulations may allow governmental authorities and private parties to bring lawsuits based upon damages to property and injury to persons resulting from the environmental, health and safety practices of the Company's past and current operations, or possibly even the actions of former property owners, and could lead to the imposition of substantial fines, penalties or other civil or criminal sanctions. The Company may fail to comply with current or future laws and regulations. Such non-compliance can lead to financial restatements, civil or criminal fines, penalties, and other material negative impacts on the Company.

As the development of the Cactus Mine and exploration activities proceed, the Company may be required to obtain or renew further government permits for its current and contemplated operations. Obtaining or renewing the necessary governmental permits and licenses can be a time-consuming process potentially involving numerous regulatory agencies, involving public hearings and costly undertakings on the Company's part. The duration and success of the Company's efforts to obtain and renew permits are contingent upon many variables not within its control, including the interpretation of applicable requirements implemented by the relevant permitting authority. The Company may not be able to obtain or renew permits that are necessary to its operations, or the cost to obtain or renew permits may exceed what the Company believes it can ultimately recover from a given property once in production. Any unexpected delays or costs associated with the permitting process could delay the development of or impede the operation of a mine. To the extent necessary permits, licenses or authorizations are not obtained or renewed, or are subsequently suspended or revoked, the Company may be curtailed or prohibited from proceeding with planned development, commercialization, operation and exploration activities. Such curtailment or prohibition may result in a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

***Estimates of capital cost and operating costs may be lower than actual costs***

As a result of the substantial expenditures involved in the development of a mineral project, the need to project years into the future, the need to make assumptions and use models that may not adequately approximate reality, and the fluctuation of costs over time, a development project is prone to material cost overruns. The Cactus Mine does not have a recent operating history upon which the Company can accurately base estimates of future operating costs. The Integrated Cactus PEA is preliminary in nature and estimates cash operating costs based upon, among other things:

- anticipated tonnage, grades and metallurgical characteristics of the mineralized material to be mined and processed;
- anticipated development access for access to mineralized material;
- anticipated recovery rates of copper and other metals from the mineralized material;
- cash operating costs of comparable facilities and equipment; and
- anticipated availability of labour and equipment.

Capital costs, operating costs, production and economic returns, and other estimates may differ significantly from those anticipated by the Integrated Cactus PEA, and there can be no assurance that the Company's actual capital or operating costs will not be higher than currently anticipated or that returns will not be lower than anticipated. The current inflationary trends in the global economy and supply chain issues may negatively impact study inputs. The Company's actual costs may vary from estimates for a variety of reasons, including: limitations inherent in modelling; changes to assumed third party costs; short term operating factors; revisions to mine plans; risks and hazards associated

with development and mining described elsewhere in this AIF and the Integrated Cactus PEA; natural phenomena, such as inclement weather conditions, water availability, floods, and earthquakes; and unexpected labour shortages or strikes. Operating costs may also be affected by a variety of factors, including: mining methods, changing waste-to-ore ratios, mineralized material grade metallurgy, labour costs, cost of commodities, general inflationary pressures and currency exchange rates. Many of these factors are beyond the Company's control. Failure to achieve estimates or a material increase in costs could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows and prospects.

***Geological, hydrological and climatic events could suspend future mining operations or increase costs***

All mining operations face geotechnical, hydrological and climate challenges. Unanticipated adverse geotechnical and hydrological conditions, such as landslides, subsidence and uplift, embankment failures and rock fragility may occur in the future and such events may not be detected in advance. Geotechnical instabilities and adverse climatic conditions can be difficult to predict and are often affected by risks and hazards outside of the Company's control, such as severe weather and seismic activity.

Geotechnical failures could result in limited or restricted access to mines, suspension of operations, environmental damage, government investigations, increased monitoring costs, remediation costs, loss of mineralized material and other impacts, which could result in loss of revenue or increased costs, and could result in a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

Certain areas surrounding the Cactus Mine which are non-operational and are in the development buffer zone, lie within a potential flood zone risk. Although flooding has not occurred to date, flooding at the Company's properties may nonetheless occur in the future. Once on the Company's properties, this water must be treated as any other water which the Company seeks to discharge from its properties and must meet environmental standards. This means that, provided there is no regulatory relief, the Company may be required to store and potentially treat the water, and to limit discharge to the approved limits under the Company's permits. If the amount of such water flowing onto the properties exceeds the capacity of the Company's storage ponds, the Company may be required to store water in underground areas of its mines, limiting its ability to operate in those areas. Production and capital development could be delayed if the Company cannot operate in necessary areas as a result of such flooding, which could cause the Company to delay future development plans, construction, production and loss of future revenue. The Company may also incur additional costs as a result of such flooding, both in dealing with the excess water and in remediating any damage resulting from flooding.

***Title matters***

Once acquired, title to, and the area of, mineral properties may be disputed. There is no guarantee that title to one or more claims, concessions or leases at the Cactus Project will not be challenged or impugned. There may be challenges to any of the Company's titles which may result in the Company paying substantial costs to settle or dispute, and if such challenges are successful, could result in the loss or reduction of the Company's interest in such titles. The Cactus Project may be subject to prior unregistered liens, agreements, transfers or claims, and title may be affected by, among other things, undetected defects. In addition, the Company may be unable to operate its properties as permitted or to enforce its rights with respect to its properties. The failure to comply with all applicable laws and regulations, including a failure to pay taxes or to carry out and file assessment work, can lead to the unilateral termination of concessions by mining authorities or other governmental entities.

***Social and environmental activism can negatively impact exploration, development and mining activities***

There is an increasing level of public concern relating to the effects of mining on the natural landscape, on communities and on the environment. Certain non-governmental organizations, public interest groups and reporting organizations ("NGOs") who oppose resource development can be vocal critics of the mining industry. In addition, there have been many instances globally in which local community groups have opposed resource extraction activities, which have resulted in disruption and delays to the relevant operation. Although the Company has historically benefited from a

supportive community within the Pinal county area and more widely in Arizona, NGOs or local community organizations could direct adverse publicity and/or disrupt the operations of the Company in respect of one or more of its properties in the future, regardless of its successful compliance with social and environmental best practices, due to political factors, activities of unrelated third parties on lands in which the Company has an interest or the Company's operations specifically. Any such actions and the resulting media coverage could have an adverse effect on the reputation and financial condition of the Company or its relationships with the communities in which it operates, which could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

***The Company's success depends on developing and maintaining relationships with local communities, stakeholders and its labour force***

The Company's future success depends on developing and maintaining productive relationships with the communities surrounding its operations who may have rights or may assert rights to certain Company properties, and other stakeholders in the Company's operating locations. The Company believes that its operations can provide valuable benefits to surrounding communities in terms of direct employment, training and skills development and other benefits associated with ongoing payment of taxes. In addition, the Company's environmental, social & governance framework set out in the Technical and Sustainability Committee Charter ("**ESG Framework**") and its corporate policies and procedures involve active community participation and interaction. Notwithstanding the Company's ongoing efforts, local communities and stakeholders can become dissatisfied with the Company's activities or the level of benefits provided, which may result in legal or administrative proceedings, civil unrest, protests, direct action or campaigns against us. Any such occurrence could materially and adversely affect the Company's business, financial condition or results of operations.

Further, the Company's development of the Cactus Project will be dependent upon the efforts of its employees and the Company's operations would be adversely affected if it failed to maintain satisfactory labour relations. Relations between the Company and its employees may be affected by changes in the scheme of labour relations that may be introduced by the relevant governmental authorities who have jurisdiction over the various aspects of the Company's business. Changes in such legislation or in the relationship between the Company and its employees may have a material adverse effect on the Company's business, results of operations or financial condition.

***Dependence on the skills of the Company's management and key personnel***

The Company's business is dependent on retaining the services of its key management personnel with a variety of skills and experience, including in relation to the development and operation of mineral projects. The success of the Company is, and will continue to be, dependent to a significant extent on the expertise and experience of its directors and senior management. Failure to retain, or loss of, one or more of these people could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects. The Company's success will also depend to a significant degree upon the contributions of qualified technical personnel and the Company's ability to attract and retain highly skilled personnel. Competition for such personnel is intense, and the Company may not be successful in attracting and retaining qualified personnel, or in obtaining the necessary work permits to hire qualified expatriates. The Company's inability to attract and retain these people could have a material adverse effect on its business, financial condition, results of operations, cash flows or prospects. In addition, the COVID-19 pandemic may cause the Company to have inadequate access to an available skilled workforce and qualified personnel, which could have an adverse impact on the Company's financial performance and financial condition.

***Operations during mining cycle peaks are more expensive***

During times of increased demand for metals and minerals, price increases may encourage expanded mining exploration, development and construction activities. These increased activities may result in escalating demand for and cost of contract exploration, development and construction services and equipment. Increased demand for and cost of services and equipment could cause exploration, development and construction costs to increase materially, resulting in delays if services or equipment cannot be obtained in a timely manner due to inadequate availability, and increased potential for scheduling difficulties and cost increases due to the need to coordinate the availability of services or equipment, any of which could materially increase project exploration, development or construction costs, result in project delays, or increase operating costs.

### ***Mining operations are very risky***

Any future development or mining operations of the Company, involves various types of risks and hazards typical of companies engaged in the mining industry. These risks affect the current exploration and development activities of the Company, and will affect the Company's business to an even larger extent if commercial mining operations commence. Such risks include, but are not limited to: (i) industrial accidents; (ii) unusual or unexpected rock formations; (iii) structural cave-ins or slides and pitfall, ground or slope failures and accidental release of water from surface storage facilities; (iv) fire, flooding and earthquakes; (v) rock bursts; (vi) metals losses; (vii) periodic interruptions due to inclement or hazardous weather conditions; (viii) environmental hazards; (ix) discharge of pollutants or hazardous materials; (x) failure of processing and mechanical equipment and other performance problems; (xi) geotechnical risks, including the stability of the underground hanging walls and unusual and unexpected geological conditions; (xii) unanticipated variations in grade and other geological problems, water, surface or underground conditions; (xiii) labour disputes or slowdowns; (xiv) work force health issues as a result of working conditions; and (xv) force majeure events, or other unfavourable operating conditions.

These risks, conditions and events could result in: (i) damage to, or destruction of the value of, the Cactus Mine or its facilities; (ii) personal injury or death; (iii) environmental damage to the Cactus Mine, surrounding lands and waters, or the properties of others; (iv) delays or prohibitions on mining or the transportation of minerals; (v) monetary losses; and (vi) potential legal liability. Any of the foregoing could have a material adverse effect on the Company's business, financial condition, results of operation or prospects. In particular, open pit and/or underground development and exploration activities present inherent risks of injury to people and damage to equipment. Significant mine accidents could occur, potentially resulting in a complete shutdown of the Company's operations at the Cactus Mine which could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

There are also risks related to the reliance on the reliability of current and new or developing technology; the reliance on the work performance of outside consultants, contractors, and manufacturers; changes to project parameters over which the Company does not have complete control such as the copper price or labour or material costs; unknown or unanticipated or underestimated costs or expenses; unknown or unanticipated or underestimated additions to the scope of work due to changing or adverse conditions encountered as a mine is refurbished and redeveloped; unexpected variances in the geometry or quality of ore zones; unexpected reclamation requirements or expenses; permitting time lines; unexpected or unknown ground conditions; unexpected changes to estimated parameters utilized to estimate past timelines, projections, or costs; and liquidity risks. An adverse change in any one of such factors, hazards and risks may result in a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

### ***Inadequate infrastructure may constrain mining operations***

Development and commencement of operations at the Cactus Mine depends on adequate infrastructure. In particular, reliable power sources, water supply, transportation and surface facilities are all necessary to develop and operate mines. Although the Cactus Project benefits from existing infrastructure, failure to adequately meet all appropriate infrastructure requirements required as per the development plan or changes in the cost of such requirements could affect the Company's ability to complete development and commence operations at the Cactus Mine and could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

### ***Risks from unknown hazards***

Environmental hazards may also exist on the properties on which the Company holds interests that are unknown to the Company at present and that have been caused by previous or existing owners or operators of the properties and for which the Company may be liable for remediation. Although ASCU acquired the property following completion of the site improvement plan activities undertaken by the ASARCO Trust, parties engaged in mining operations in some cases, including the Company, may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed for violations of applicable environmental laws or regulations, regardless of whether the Company actually caused the loss or damage. The costs of such compensation, fines or penalties could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

***Changes in climate conditions may affect the Company's future operations***

A number of governments have introduced or are moving to introduce climate change legislation and treaties at the international, national, state/provincial and local levels. Regulation relating to emission levels (such as carbon taxes) and energy efficiency is becoming more stringent. If the current regulatory trend continues, this may result in increased costs at the Company's future operations. In addition, the physical risks of climate change may also have an adverse effect on the Company's anticipated operations. These risks include the following:

- extreme weather events (such as prolonged drought) have the potential to disrupt operations at the Company's mines and may require the Company to make additional expenditures to mitigate the impact of such events; and
- the Company's facilities will depend on regular supplies of consumables (diesel, tires, reagents, etc.) to operate efficiently. In the event that the effects of climate change or extreme weather events cause prolonged disruption to the delivery of essential commodities, development decisions may be delayed.

There can be no assurance that efforts to mitigate the risks of climate change will be effective and that the physical risks of climate change will not have an adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

***The Company is subject to substantial government regulation and changes to regulation or more stringent implementation could have a material adverse effect on the Company's results of operations and financial condition.***

The Company's development and mineral exploration activities are subject to numerous laws governing prospecting, development, production, taxes, labor standards and occupational health, mine safety, toxic substances, land use, water use, land claims of local people and other matters. Mining and exploration activities are also subject to various laws and regulations relating to the protection of the environment, such as the federal Clean Air and Clean Water Act, Endangered Species Act, Resource Conservation and Recovery Act and their state analogs, including the Arizona Water Pollution Control Law. Although the Company currently believes that it is in compliance with existing environmental and mining laws and regulations and that its proposed work programs will also meet those standards, no assurance can be given that the Company will remain in compliance with applicable regulations or that new rules and regulations will not be enacted or that existing rules and regulations will not be applied in a manner that could limit or curtail production or development of the Company's properties.

Amendments to current laws and regulations governing the Company's current or prospective operations and activities of exploration, development mining and milling or more stringent implementation thereof could have a material adverse effect on the Company's business, financial condition and results of operations and cause increases in exploration expenses, capital expenditures or production costs or reduction in levels of production or require delays or abandonment in the development of new mining properties. In addition, the Company is required to expend significant resources to comply with numerous corporate governance and disclosure regulations and requirements adopted by Canadian federal and provincial governments, U.S. federal and state governments, as well as the TSX. These additional compliance costs and related diversion of the attention of management and key personnel could have a material adverse effect on the Company's business, financial condition and results of operations.

***Regulation of greenhouse gas emissions and climate change issues may adversely affect the Company's operations and markets.***

Global climate change continues to attract considerable public, scientific and regulatory attention, and greenhouse gas emission regulation is becoming more commonplace and stringent. As energy, including energy produced from the combustion of carbon-based fuels, will be significant input to the Company's future operations, the Company will be required to comply with emerging climate change regulatory requirements, including programs to reduce greenhouse gas emissions. The Company's principal energy sources are expected to be electricity from the Arizona grid. In addition, the Company's mobile mining equipment will emit carbon dioxide. The U.S. federal and state governments may enact an emission trading, carbon tax or similar program for greenhouse gas emissions, which could significantly

increase the Company's future energy and regulatory compliance costs. For example, the U.S. federal government has considered legislation to reduce greenhouse gas emissions through a cap-and-trade system of allowances and credits, among other provisions. In addition, the United States Environmental Protection Agency has developed final rules requiring certain emitters of greenhouse gases to collect and report data with respect to their greenhouse gas emissions.

As part of its ESG Framework the Company is committed to working towards a reduced carbon footprint in relation to its operations, however there are no assurances that this will be achieved. A carbon tax or a cap-and-trade program will likely result in increased future energy costs. The regulations will also likely increase the Company's compliance costs. For example, the Company may be required to install new equipment to reduce emissions in relation to its future processing facilities in order to comply with new regulatory standards or to mitigate the financial impact of a new climate change program. The Company may also be subject to additional and extensive monitoring and reporting requirements. It is uncertain at this time how provincial and regional initiatives will interact with any federal climate change regulations. The potential physical impacts of climate change on the Company's operations are highly uncertain. These may include changes in weather and rainfall patterns, water shortages, changing storm patterns and intensities and changing temperatures. These physical impacts could require the Company to curtail or close mining, development and exploration activities and could prevent the Company from pursuing future expansion opportunities. These effects may adversely impact the Company's cost and financial performance of its operations.

### ***Risks from changing environmental legislation and regulations***

All phases of the Company's operations are subject to environmental laws and regulations in the jurisdictions in which it operates. These laws and regulations provide for restrictions, requirements and prohibitions relating to spills, releases or emissions of various substances produced in association with certain mining operations, such as seepage from tailings disposal areas, which would result in environmental pollution and the protection of species and land, water, and air quality. A violation of these laws and regulations may result in the imposition of fines and penalties or orders to suspend operations. In addition, some federal and state laws and regulations require an environmental impacts analysis of operations before the Governmental Authority can issue permits necessary for operations. While the Company does not currently anticipate out of usual course analysis being necessary before obtaining the permits necessary for the Cactus Project there is the potential that changes in laws or regulations or the configuration of the Cactus Project could result in such an analysis being necessary. Environmental laws and regulations are 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 existing or future environmental laws or regulations will not materially adversely affect the Company's business, financial condition and results of operations. Government environmental approvals and permits are currently, or may in the future be, required in connection with the Cactus Mine. To the extent such approvals are required and not obtained, the Company may be curtailed or prohibited from proceeding with planned exploration, development or operation of the Cactus Mine. Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment or remedial actions. Parties engaged in mining operations, including the Company, may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations. Amendments to current laws, regulations and permits governing operations and activities of companies in the mining industry, or more stringent implementation thereof, could have a material adverse impact on the Company and cause increases in exploration expenses, capital expenditures or production costs, reduction in levels of production at producing properties, or abandonment or delays in development of new mining properties.

### ***The mining industry is intensely competitive***

The mining industry is intensely competitive. The Company competes with other mining companies, many of which have greater resources and experience. Competition in the mining industry is primarily for: (i) properties which can be developed and can produce economically; (ii) the technical expertise to find, develop, and operate such properties; (iii) labour to operate the properties; and (iv) capital to fund such properties. Such competition may result in the Company being unable to acquire desired properties, to recruit or retain qualified employees or to acquire the capital necessary to fund its operations and develop its properties. The Company's inability to compete with other mining

companies for these resources could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

***The Company may incur losses***

For the financial year ended December 31, 2021, the Company had a loss and comprehensive loss of approximately US\$13.1 million (US\$5.1 million in 2020) and at December 31, 2021, had a deficit of approximately US\$20.0 million (US\$6.9 million in 2020). The Company has incurred various expenses in recent periods and plans to incur further expenses as cash flows allow. The planned increases in expenses may result in larger losses in future periods.

The exploration and development of the Company's mineral properties will require the commitment of substantial financial resources that may not be available. The amount and timing of expenditures will depend on a number of factors, including the progress of ongoing exploration and development, the results of consultants' analyses and recommendations, the rate at which operating losses are incurred, the execution of any joint venture agreements with strategic partners and the acquisition of additional property interests, some of which are beyond the Company's control. The Company's business strategies may not be successful and it may not be profitable in any future period. The Company's operating results have varied in the past and they may continue to fluctuate in the future. In addition, the Company's operating results may not follow any past trends.

***The Company may experience negative operating cash flow for the foreseeable future***

The Company has a limited history of operations, and no history of earnings, cash flow, or profitability. The Company had negative operating cash flows for the financial period from incorporation on April 3, 2019 to December 31, 2019, for the financial period ended December 31, 2020, and the financial period ended December 31, 2021. To the extent that the Company has negative operating cash flow in future periods, the Company may need to allocate a portion of its cash reserves to fund such negative operating cash flow. The Company may also be required to raise additional funds through the issuance of equity or debt securities. There can be no assurance that additional equity capital or other types of financing will be available when needed or that these financings will be on terms favorable to the Company.

***The Company's insurance coverage may be inadequate and result in losses***

The Company's business is subject to a number of risks and hazards (as further described in this AIF). Although the Company maintains insurance to protect against certain risks in such amounts as it considers to be reasonable, its insurance will not cover all the potential risks associated with its activities, including any future mining operations. The Company may also be unable to obtain or maintain insurance to cover its risks at economically feasible premiums, or at all. Insurance coverage may not continue to be available or may not be adequate to cover any resulting liability. Moreover, insurance against risks such as environmental pollution or other hazards as a result of exploration or production may not be available to the Company on acceptable terms. Losses from these events may cause the Company to incur significant costs which could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

***Currency fluctuations can result in unanticipated losses***

The Company is subject to foreign exchange rate fluctuations with respect to United States and Canadian currencies. Copper is sold throughout the world principally in United States dollars. From time to time, the Company may borrow funds and incur expenditures that are denominated in a foreign currency, generally United States dollars.

***It may be difficult to enforce judgements and effect service of process on directors***

Some of the directors of the Company, particularly Alan Edwards, Thomas Boehlert, Sarah Strunk and Mark Palmer reside outside of Canada. Some or all of the assets of those persons may be located outside of Canada. Therefore, it may not be possible for investors to collect or to enforce judgments obtained in Canadian courts predicated upon the civil liability provisions of applicable Canadian securities laws against such persons. Moreover, it may not be possible for investors to effect service of process within Canada upon such persons.

***The directors and officers may have conflicts of interest with the Company***

Certain directors and officers of the Company are or may become associated with other mining and/or mineral exploration and development companies which may give rise to conflicts of interest. Directors who have a material interest in any person who is a party to a material contract or a proposed material contract with the Company are required, subject to certain exceptions, to disclose that interest and generally abstain from voting on any resolution to approve such a contract. In addition, directors and officers are required to act honestly and in good faith with a view to the best interests of the Company. Some of the directors and officers of the Company have either other full-time employment or other business or time restrictions placed on them and accordingly, the Company will not be the only business enterprise of these directors and officers. Further, any failure of the directors or officers of the Company to address these conflicts in an appropriate manner or to allocate opportunities that they become aware of to the Company could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

***Tembo exercises significant control over the Company***

As of the date hereof, Tembo holds approximately 37.5% of issued and outstanding Common Shares on a non-diluted basis. The Investor Rights Agreement provides Tembo with, among other things: (i) the right to maintain its percentage interest in the Company upon certain equity issuances undertaken by the Company so long as its ownership of the outstanding Common Shares is at least 9.9%; and (ii) the right to nominate one Company director so long as its ownership of the outstanding Common Shares is at least 9.9%. In some cases, the interests of Tembo may not be the same as those of the Company's other shareholders, and conflicts of interest may arise from time to time that may be resolved in a manner detrimental to the Company or its minority shareholders. See "*General Development of the Business – Investor Rights Agreement*".

***Current and future debt ranks senior to Common Shares***

The incurrence or issuance of debt, which ranks senior to the Common Shares upon the liquidation, and future issuances of equity or equity-related securities, which would dilute the holdings of the Company's existing holders of Common Shares and may be senior to Common Shares for the purposes of making distributions, periodically or upon liquidation, may negatively affect the market price of the Common Shares.

The Company incurred and may in the future incur or issue debt or issue equity or equity-related securities to finance its operations, acquisitions or investments. Upon the liquidation of the Company, lenders and holders of our debt and holders of our preferred shares (if any) would receive a distribution of our available assets before holders of Common Shares. Any future incurrence or issuance of debt would increase the Company's interest cost and could adversely affect our results of operations and cash flows. Any preferred shares issued by the Company would likely have a preference on distribution payments, periodically or upon liquidation, which could eliminate or otherwise limit the Company's ability to make distributions to holders of Common Shares. Because the Company's decision to incur or issue debt or issue equity or equity-related securities in the future will depend on market conditions and other factors beyond the Company's control, the Company cannot predict or estimate the amount, timing, nature or success of its future capital raising efforts. Thus, holders of the Common Shares bear the risk that our future incurrence or issuance of debt or issuance of equity or equity-related securities will adversely affect the market price of the Common Shares.

***Future acquisitions may require significant expenditures or dilution and may result in inadequate returns***

The Company may seek to expand through future acquisitions; however, there can be no assurance that the Company will locate attractive acquisition candidates, or that the Company will be able to acquire such candidates on economically acceptable terms, if at all, or that the Company will not be restricted from completing acquisitions pursuant to the terms and conditions from time to time of arrangements with third parties, such as the Company's creditors. Future acquisitions may require the Company to expend significant amounts of cash, resulting in the Company's inability to use these funds for other business or may involve significant issuances of equity. Future acquisitions may also require substantial management time commitments, and the negotiation of potential acquisitions and the integration of acquired operations could disrupt the Company's business by diverting management and employees' attention away from day-to-day operations. The difficulties of integration may be increased by the

necessity of coordinating geographically diverse organizations, integrating personnel with disparate backgrounds and combining different corporate cultures.

Any future acquisition involves potential risks, including, among other things: (i) mistaken assumptions and incorrect expectations about mineral properties, Mineral Resources and costs; (ii) an inability to successfully integrate any operation the Company acquires; (iii) an inability to recruit, hire, train or retain qualified personnel to manage and operate the operations acquired; (iv) the assumption of unknown liabilities; (v) limitations on rights to indemnity from the seller; (vi) mistaken assumptions about the overall cost of equity or debt; (vii) unforeseen difficulties operating acquired projects, which may be in geographic areas new to the Company; and (viii) the loss of key employees and/or key relationships at the acquired project.

At times, future acquisition candidates may have liabilities or adverse operating issues that the Company fails to discover through due diligence prior to the acquisition. If the Company consummates any future acquisitions with unanticipated liabilities or that fails to meet expectations, the Company's business, results of operations, cash flows or financial condition may be materially adversely affected. The potential impairment or complete write-off of goodwill and other intangible assets related to any such acquisition may reduce the Company's overall earnings and could negatively affect the Company's balance sheet.

***The Company is dependent on information technology systems***

The Company has entered into agreements with third parties for hardware, software, telecommunications and other information technology ("IT") services in connection with its operations. Such operations depend, in part, on how well the Company and its suppliers protect networks, equipment, IT systems and software against damage from a number of threats, including, but not limited to, cable cuts, damage to physical plants, natural disasters, terrorism, fire, power loss, hacking, computer viruses, vandalism and theft. The Company's operations also depend on the timely maintenance, upgrade and replacement of networks, equipment, IT systems and software, as well as pre-emptive expenses to mitigate the risks of failures. Any of these and other events could result in information system failures, delays and/or increase in capital expenses.

The failure of information systems or a component of information systems could, depending on the nature of any such failure, adversely impact the Company's reputation, results of operations, cash flows and financial condition. Although to date the Company has not experienced any material losses relating to cyber-attacks or other information security breaches, there can be no assurance that it will not incur such losses in the future. The Company's risk and exposure to these matters cannot be fully mitigated because of, among other things, the evolving nature of these threats. As a result, cyber security and the continued development and enhancement of controls, processes and practices designed to protect systems, computers, software, data and networks from attack, damage or unauthorized access remain a priority. As cyber threats continue to evolve, the Company may be required to expend additional resources to continue to modify or enhance protective measures or to investigate and remediate any security vulnerabilities.

Any of these factors could have a material adverse effect on the Company's results of operations, cash flows and financial position.

***The Company may be subject to costly legal proceedings and securities class action litigation***

The Company may be subject to regulatory investigations, civil claims, lawsuits and other proceedings in the ordinary course of its business. The results of these legal proceedings cannot be predicted with certainty due to the uncertainty inherent in regulatory actions and litigation, the difficulty of predicting decisions of regulators, judges and juries and the possibility that decisions may be reversed on appeal. Defense and settlement costs of legal claims can be substantial, even with claims that have no merit. Moreover, securities class action litigation has often been brought against a company following a decline in the market price of its securities. If the Company faces such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could materially harm its business. Management is committed to conducting business in an ethical and responsible manner, which it believes will reduce the risk of legal disputes. However, if the Company is subject to legal disputes, there can be no assurances that these matters will not have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

On February 28, 2018, Ramm filed with FERC a preliminary permit application for the proposed Sacaton Project, seeking priority of application for a license. On March 4, 2020, FERC rejected Ramm's notice of intent and preliminary permit application, finding it "patently deficient." On July 9, 2021, Ramm requested a two-year extension of its preliminary permit. On August 12, 2021, FERC denied the request because Ramm filed the request after the deadline. FERC noted, however, that the rejection does not preclude Ramm from filing for an entirely new preliminary permit for the project. On September 9, 2021, Ramm requested rehearing of FERC's denial of Ramm's request for a two-year extension of Ramm's preliminary permit. FERC did not act on the request for rehearing within 30 days of the filing of the request, and therefore the request was considered denied by operation of law. See "*Cactus Mine Project – Existing Litigation*".

On October 1, 2019, REA filed with FERC a notice of intent and preliminary permit application for the proposed Casa Grande Project, seeking priority of application for a license. ASCU submitted comments and moved to intervene in the application process on August 7, 2020. On October 21, 2021, FERC granted REA's application for a preliminary permit. See "*Cactus Mine Project – Existing Litigation*".

### ***Dilution from equity financing could negatively impact holders of Common Shares***

The Company's ability to continue its business operations is dependent on management's ability to secure additional financing. The Company's only source of liquidity is its cash and cash equivalent balances. Liquidity requirements are managed based upon forecasted cash flows to ensure that there is sufficient working capital to meet the Company's obligations.

The advancement, exploration and development of the Company's properties, including continuing exploration and development projects, and, if warranted, construction of mining facilities and the commencement of mining operations, will require substantial additional financing. As a result, the Company may from time to time raise funds through the issuance of Common Shares or the issuance of debt instruments or other securities convertible into Common Shares in the future. The Company cannot predict the size or price of future issuances of Common Shares or the size or terms of future issuances of debt instruments or other securities convertible into Common Shares, or the effect, if any, that future issuances and sales of the Company's securities will have on the market price of the Common Shares. Sales or issuances of substantial numbers of Common Shares, or the perception that such sales could occur, may adversely affect prevailing market prices of the Common Shares. With any additional sale or issuance of Common Shares, or securities convertible into Common Shares, investors will suffer dilution to their voting power and the Company may experience dilution in its earnings per share.

### ***Equity securities are subject to trading and volatility risks***

The Common Shares trade on the TSX under the symbol "ASCU". The securities of publicly traded companies, particularly mineral exploration and development companies, can experience a high level of price and volume volatility and the value of the Company's securities can be expected to fluctuate depending on various factors, not all of which are directly related to the success of the Company and its operating performance, underlying asset values or prospects. These include the risks described elsewhere in this AIF. Factors which may influence the price of the Company's securities, including the Common Shares, include, but are not limited to: worldwide economic conditions; changes in government policies; investor perceptions; movements in global interest rates and global stock markets; variations in operating costs; the cost of capital that the Company may require in the future; metals prices; the price of commodities necessary for the Company's operations; recommendations by securities research analysts; issuances of equity securities or debt securities by the Company; operating performance and, if applicable, the share price performance of the Company's competitors; the addition or departure of key management and other personnel; the expiration of lock-up or other transfer restrictions on outstanding Common Shares; significant acquisitions or business combinations, strategic partnerships, joint ventures or capital commitments by or involving the Company or its competitors; news reports relating to trends, concerns, technological or competitive developments, regulatory changes and other related industry and market issues affecting the mining sector; litigation; publicity about the Company, the Company's personnel or others operating in the industry; loss of a major funding source; and all market conditions that are specific to the mining industry.

There can be no assurance that such fluctuations will not affect the price of the Company's securities, and consequently purchasers of Common Shares may not be able to sell Common Shares at prices equal to or greater than the price or value at which they purchased the Common Shares or acquired them by way of the secondary market.

***Sales by existing shareholders can reduce share prices***

Sales by existing shareholders of a substantial number of Common Shares in the public market could occur at any time. These sales, or the market perception that the holders of a large number of Common Shares intend to sell Common Shares, could reduce the market price of the Common Shares. If this occurs and continues, it could impair the Company's ability to raise additional capital through the sale of securities.

***The Company does not intend to pay dividends***

The Company has not, since the date of its incorporation, declared or paid any dividends or other distributions on its Common Shares. The Company anticipates that, for the foreseeable future, it will retain its cash resources for the operation and development of its business. The declaration and payment of any dividends in the future is at the discretion of the Board and will depend on numerous factors, including compliance with applicable laws, financial performance, working capital requirements of the Company and such other factors as its directors consider appropriate, and the Company may never pay dividends.

***If securities or industry analysts do not publish research or publish inaccurate or unfavourable research about the Company's business, the price and trading volume of the Common Shares could decline***

The trading market for the Common Shares will depend on the research and reports that securities or industry analysts publish about the Company and its business. The Company does not have any control over these analysts. The Company cannot assure that analysts will cover it or provide favourable coverage. If one or more of the analysts who cover the Company downgrade its stock or change their opinion of the Common Shares, price of Common Shares would likely decline. If one or more of these analysts cease coverage of the Company or fail to regularly publish reports, the Company could lose visibility in the financial markets, which could cause the price and trading volume of the Common Shares to decline.

***Global financial conditions can reduce share prices***

The economic viability of the Company's business and development plans is impacted by the Company's ability to obtain financing. Global economic conditions impact general availability of financing. The COVID-19 pandemic has led to changes in the debt and equity capital markets. The Company's access to the global credit market is likely to be limited given its status as a development stage company without Mineral Reserves. A general risk-adverse approach to investing, which may become more predominant as a result of market turmoil, may limit the Company's ability to obtain future equity financing. Inability to obtain financing at all, or on acceptable terms, would have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

Furthermore, general market, political and economic conditions, including, for example, inflation, interest and currency exchange rates, structural changes in the global mining industry, global supply and demand for commodities, political developments, legislative or regulatory changes, social or labor unrest and stock market trends will affect the Company's operating environment and its operating costs, profit margins and share price. Any negative events in the global economy could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

***COVID-19 public health crisis***

The Company's business, operations and financial condition, and the market price of the Common Shares could be materially and adversely affected by the outbreak of epidemics or pandemics or other health crises, including further local and national continuing outbreaks of COVID-19. To date, there have been a large number of temporary business closures, quarantines and a general reduction in consumer activity in a number of countries, including Canada and the United States. The outbreak has caused companies and various international jurisdictions to impose travel, gathering

and other public health restrictions. While these effects are expected to be temporary, the duration of the various disruptions to businesses locally and internationally and the related financial impact cannot be reasonably estimated at this time. Similarly, the Company cannot estimate whether, or to what extent, this outbreak and the potential financial impact may again impact countries outside of those currently impacted. Such public health crises can result in volatility and disruptions in the supply and demand for copper and other metals and minerals, global supply chains and financial markets, as well as declining trade and market sentiment and reduced mobility of people, all of which could affect commodity prices, interest rates, credit ratings, credit risk, share prices and inflation.

The risks to the Company of such public health crises also include risks to employee health and safety, a slowdown or temporary suspension of operations in geographic locations impacted by an outbreak, increased labor and fuel costs, regulatory changes, political or economic instabilities or civil unrest. The Company may also be adversely affected by COVID-19 related risks outside of its control, such as the failure by its contractors and suppliers to perform their obligations under the applicable contracts due to business failure, supply shortage, force majeure, or other reasons as a result of COVID-19. Such failure may put the Company at risk of not meeting its contractual obligations to third parties, which may result in penalties, increased costs, or the declaration of a force majeure event. At this point, the extent to which the full impact of future COVID-19 disruptions will or may impact the Company is uncertain and these factors are beyond the Company's control; however, it is possible that COVID-19 and its related impacts over a longer term may have a material adverse effect on the Company's business, results of operations and financial condition and the market price of the Common Shares. To the extent that COVID-19 adversely affects the Company's business and financial results, it may also have the effect of heightening many of the other risks described in this "*Risk Factors*" section.

### ***International Conflict***

International conflict and other geopolitical tensions and events, including war, military action, terrorism, trade disputes and international responses thereto have historically led to, and may in the future lead to, uncertainty or volatility in global commodity and financial markets and supply chains. Russia's recent invasion of Ukraine has led to sanctions being levied against Russia by the international community and may result in additional sanctions or other international action, any of which may have a destabilizing effect on commodity prices, supply chains and global economies more broadly. Volatility in commodity prices and supply chain disruptions may adversely affect the Company's business, financial condition and results of operations. The extent and duration of the current Russia-Ukraine conflict and related international action cannot be accurately predicted at this time and the effects of such conflict may magnify the impact of the other risks identified in this AIF, including those relating to commodity price volatility and global financial conditions. The situation is rapidly changing and unforeseeable impacts, including on our shareholders and counterparties on which we rely and transact with, may materialize and may have an adverse effect on the Company's business, results of operation and financial condition.

## **DIVIDENDS OR DISTRIBUTIONS**

The Company has not, since the date of its incorporation, declared or paid any dividends or other distributions on its shares, and does not currently have a policy with respect to the payment of dividends or other distributions. The Company does not generate any revenues and does not expect to generate revenues in the near future and as such, the Company does not pay dividends and does not intend to pay dividends in the foreseeable future.

The payment of dividends in the future will depend on earnings, if any, and the Company's financial condition and such other factors as its directors consider appropriate. Furthermore, achieving production and generating cash flow at the Cactus Project is unlikely to result in payment of dividends or other distributions by the Company to shareholders of the Company.

There can be no assurance that the Company will pay dividends under any circumstances. See "*Risk Factors – The Company does not intend to pay dividends*".

## DESCRIPTION OF CAPITAL STRUCTURE

### Common Shares

The Company's authorized share capital consists of an unlimited number of Common Shares without par value, of which 71,148,099 Common Shares are issued and outstanding as at March 30, 2022.

All of the Common Shares rank equally as to voting rights, participation in a distribution of the assets of the Company on a liquidation, dissolution or winding-up of the Company and entitlement to any dividends declared by the Company. The holders of the Common Shares are entitled to receive notice of, and to attend and vote at, all meetings of shareholders (other than meetings at which only holders of another class or series of shares are entitled to vote). Each Common Share carries the right to one vote. In the event of the liquidation, dissolution or winding-up of the Company, or any other distribution of the assets of the Company among its shareholders for the purpose of winding-up its affairs, the holders of the Common Shares will be entitled to receive, on a pro rata basis, all of the assets remaining after the payment by the Company of all of its liabilities. The holders of Common Shares are entitled to receive dividends as and when declared by the Board in respect of the Common Shares on a pro rata basis.

Any alteration of the rights, privileges, restrictions and conditions attaching to the Common Shares under the Company's articles must be approved by at least two-thirds of the Common Shares voted at a meeting of the Company's shareholders.

## MARKET FOR SECURITIES

### Trading Price and Volume

#### Common Shares

The Common Shares trade on the TSX under the symbol "ASCU". The following table sets out the high and low trading prices, as well as the trading volume, for the Common Shares on the TSX for each month of the financial year ended December 31, 2021 since the Common Shares commenced trading on November 16, 2021.

Date	High	Low	Trading Volume
November 16 – 30, 2021	\$2.50	\$1.79	876,350
December 2021	\$2.10	\$1.75	2,058,288

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

During the financial year ended December 31, 2021, other than the issuance of Common Shares, the Company issued options to acquire Common Shares ("**Options**"), restricted share units ("**RSUs**"), and Common Share purchase warrants ("**Warrants**").

#### Options

During the financial year ended December 31, 2021, the Company issued the following Options:

Date of Grant	Number of options	Exercise Price (US\$)	Expiry Date
January 4, 2021	107,649	US\$0.90	January 4, 2026
May 27, 2021	172,832	US\$1.50	January 4, 2026
July 6, 2021	250,000	US\$2.10	July 6, 2026

## RSUs

During the financial year ended December 31, 2021, the Company issued the following RSUs, which pursuant to the Company's equity incentive plan may be settled in Common Shares, in cash or a combination of both.

Date of Grant	Number of RSUs
January 4, 2021	46,064 <sup>(1)(2)(5)</sup>
January 25, 2021	64,489 <sup>(1)(2)(5)</sup>
May 20, 2021	74,331 <sup>(1)(5)(7)</sup>
May 27, 2021	101,166 <sup>(1)(3)(4)(5)</sup>
May 27, 2021	186,666 <sup>(1)(5)(7)</sup>
July 1, 2021	62,997 <sup>(1)(5)(7)</sup>
July 6, 2021	166,666 <sup>(6)</sup>

### Notes:

- RSUs vest only if both the service condition requirement to earn the RSUs by performing services as described in the applicable award agreement (the "**Service Condition**") and the Company's achievement of the performance condition (as defined below) (the "**Performance Condition**") have been satisfied. Subject to the terms of the Plan, if the holder of RSUs remains in continuous service with the Company or its subsidiary, and does not experience a termination prior to the applicable milestone(s) set forth below (each a "**Service Condition Milestone**"), the Service Condition will be satisfied with respect to the designated number of RSUs. If the Service Condition is satisfied with respect to the designated RSUs, those RSUs will remain outstanding and eligible to become vested if, and at such time as, the Performance Condition is satisfied.
- The Service Condition Milestones for these RSUs are as follows: 30% following completion of the July Unit Offering; 30% following the approval of the Integrated Cactus PEA; 20% following completion of the 2nd Financing; and 20% following the acquisition of the APP.
- 76,166 RSUs have the following Service Condition Milestones: 30% on the date of grant; 30% on July 1, 2021; and 40% on July 1, 2022.
- 25,000 RSUs have the following Service Condition Milestones for these RSUs are as follows: 80% on the date of grant; and 20% following the acquisition of the APP.
- The Performance Condition is as follows. Upon the consummation of a "Liquidity Event" (as defined below) within seven years following the date of grant, the Performance Condition will be satisfied. "**Liquidity Event**" means the listing of the Common Shares on a recognized securities exchange. Notwithstanding the foregoing, the Board or a designated committee thereof may, in its sole discretion, waive the Performance Condition and deem it to be satisfied, and in such case the RSUs will remain outstanding and eligible to become vested if, and at such time as, the Service Condition is satisfied. Further, if the Performance Condition is deemed satisfied prior to a Service Condition Milestone, the Board or a designated committee thereof, in its sole discretion, may waive the Service Condition and deem it to be satisfied, and in such case the RSUs will become vested as of the date the Performance Condition is satisfied or deemed satisfied.
- The Service Condition Milestones for these RSUs are as follows: 33% on successful completion of the Offering, 33% on completion of positive PFS and 33% on successful closing of project construction financing.
- 100% vested on the date of grant in lieu of director fees.

## Warrants

During the financial year ended December 31, 2021, the Company issued the following Warrants:

Date of Issuance	Number of Warrants	Exercise Price (US\$)	Expiry Date
June 8, 2021 <sup>(1)</sup>	114,583	US\$0.30	June 8, 2024
July 7, 2021 <sup>(2)</sup>	2,222,222	US\$1.95	July 7, 2024
September 8, 2021 <sup>(3)</sup>	161,616	US\$2.10	September 8, 2024

### Notes:

- On June 8, 2021, the Company issued, on a pre-Consolidation basis, an aggregate 343,750 units of the Company ("**June Units**") (114,583 June Units on a post-Consolidation basis) pursuant to a non-brokered private placement of units, in respect of previously agreed contractual arrangements with an employee, for aggregate gross proceeds of US\$27,500 ("**June 2021 Unit Financing**"). Each June Unit was comprised of (i) one Common Share in the capital of the Company; and (ii) one common share purchase warrant with each common share purchase warrant entitling the holder thereof to acquire one Common Share in the capital of the Company at a price of US\$0.30 per Common Share (on a post-Consolidation basis) until June 8, 2024.
- On June 22, 2021, the Company entered into the Tembo Letter Agreement, pursuant to which Tembo agreed to exercise, on a pre-Consolidation basis, 20,000,000 July Warrants for 20,000,000 Common Shares (6,666,666 July Warrants for 6,666,666 Common Shares on a post-Consolidation basis) and as an incentive for the early exercise of the July Warrants, the Company agreed to issue, at no additional cost, 6,666,666 Tembo Incentive Warrants, on a pre-Consolidation basis, each Tembo Incentive Warrant entitling the holder thereof to purchase

- one Common Share at a price of US\$0.65 per Common Share for a period of three years following the issue date of the Tembo Incentive Warrants (the "**Incentive Transaction**") (2,222,222 Tembo Incentive Warrants at US\$1.95 per Common Share on a post-Consolidation basis).
- (3) On September 8, 2021, the Company issued 161,616 Haywood Incentive Warrants, at no additional cost, to Haywood pursuant to the Haywood Letter Agreement as an incentive for the early exercise of Haywood's 1,777,777 July Finder's Warrants. See "*General Development of the Business – ons to the Stockpile Project*".
- (4) Key Developments prior to the Offering – *Haywood Letter Agreement*". Each Haywood Incentive Warrant entitles the holder thereof to purchase one post-Consolidation Common Share at a price of US\$2.10 per post-Consolidation Common Share for a period of three years following the issue date of the Haywood Incentive Warrants. Pursuant to the terms of the Haywood Letter Agreement, on September 8, 2021, an aggregate of 1,166,667 Underlying Finder's Warrant Shares were sold to an institutional buyer by Haywood at a price of US\$2.10 per share. Prior to their exercise 888,889 of the July Finder's Warrants were held by Haywood, 800,000 of the July Finder's Warrants were held in the name of Ryan Matthiesen, Managing Director, Investment Banking, at Haywood, and 88,889 of the July Finder's Warrants were held in the name of Blake Morgan, Vice President, Investment Banking, at Haywood. Subsequent to the exercise of the July Finder's Warrants, each of the parties sold their respective *pro-rata* holdings of the Underlying Finder's Warrant Shares to the institutional buyer and each of the parties received the Haywood Incentive Warrants on a *pro rata* basis in accordance with their exercise.

See "*General Development of the Business – ons to the Stockpile Project*".

Key Developments prior to the Offering – *Financings and Issuances of the Company's Securities 2020 to 2021*".

### ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTION ON TRANSFER

Pursuant to the Underwriting Agreement and in connection with the Offering, certain holders of Common Shares, Options, RSUs and Warrants entered into lock-up agreements with the Underwriters (the "**Lock-Up Agreements**"). The number of securities which are subject to transfer restrictions pursuant to Lock-Up Agreements are set out below:

Class of Security	Number of securities subject to a contractual restriction on transfer	Percentage of Class
Common Shares	44,807,885 <sup>(2)</sup>	63% <sup>(1)</sup>
Options	1,582,576 <sup>(3)</sup>	92% <sup>(1)</sup>
RSUs	1,134,707 <sup>(4)</sup>	95% <sup>(1)</sup>
Warrants	6,217,709 <sup>(5)</sup>	93% <sup>(1)</sup>

**Notes:**

- (1) Calculated on a basic, non-diluted basis, based on the issued and outstanding of each class as of December 31, 2021.
- (2) 38,355,240 Common Shares are subject to a contractual lock-up of 180 days from the date of closing of the Offering (the "**IPO Closing Date**"), with certain exceptions and carve-outs. In addition, 6,452,645 Common Shares are subject to a contractual lock-up of 120 days from the IPO Closing Date, releasable pursuant to the following waterfall, subject to certain additional conditions: (i) 25% during the period from the IPO Closing Date to a date that is 30 calendar days after the IPO Closing Date, (ii) a further 25% during the period that is 31 calendar days from the IPO Closing Date to the date that is 90 calendar days after the IPO Closing Date, (iii) a further 25% during the period that is 91 calendar days from the IPO Closing Date to the date that is 120 calendar days from the IPO Closing Date, and (iv) the final 25% 121 calendar days after the IPO Closing Date (the "**120 Day Lock-Up**").
- (3) Value indicated represents the aggregate number of Common Shares under the applicable Options that are non-transferable pursuant to the Company's stock option grant agreement entered into by each Option holder. Out of 1,582,576 Options that are subject to a Lock-Up Agreement, 1,507,339 Options are subject to a contractual lock-up of 180 days from the IPO Closing Date and 75,237 Options are subject to the 120 Day Lock-Up.
- (4) Value indicated represents the aggregate number of Common Shares under the applicable RSUs that are non-transferable pursuant to the Company's RSU award agreement entered into by each RSU holder. Out of 1,134,707 RSUs that are subject to a Lock-Up Agreement, 1,010,894 RSUs are subject to a contractual lock-up of 180 days from the IPO Closing Date and 123,813 RSUs are subject to the 120 Day Lock-Up.
- (5) Warrants are subject to a contractual lock-up of 180 days from the IPO Closing Date.

### DIRECTORS AND OFFICERS

The following table sets forth the name of each director and executive officer of the Company, their province or state and country of residence, their position(s) and office(s) held with the Company, their principal occupation(s) during the preceding five years and the date they became a director or executive officer of the Company. Each director's term will expire immediately prior to the next annual meeting of shareholders.

<b>Name, Province or State and Country of Residence</b>	<b>Position(s) with Company</b>	<b>Date of Appointment as Director</b>	<b>Principal Occupation(s) for Five Preceding Years</b>
George Ogilvie, Ontario, Canada	President, Chief Executive Officer and Director	July 6, 2021	President & Chief Executive Officer of ASCU since July 2021; previously, President & Chief Executive Officer of Battle North Corporation from December 2016 to May 2021 and President & Chief Executive Officer of Kirkland Lake Gold from November 2013 to June 2016.
David Laing <sup>(1)(3)(4)</sup> British Columbia, Canada	Director (Chairman)	May 27, 2021	Consultant since November 2018; previously, Chief Operating Officer of Equinox Gold Corp. from August 2016 to November 2018.
Mark Palmer <sup>(1)(2)(3)</sup> London, United Kingdom	Director	August 1, 2020	Partner of Tembo Capital LLC since September 2015.
Thomas Boehlert <sup>(2)(3)(4)</sup> New York, USA	Director	October 5, 2020	Executive Vice President and Chief Financial Officer of Bunge Limited from January 2017 to September 2019.
Alan Edwards <sup>(1)(2)(4)</sup> Arizona, USA	Director	May 7, 2021	President of AE Resources Corp. since January 2017 and Interim CEO of ASCU from May 2021 to July 2021.
Sarah Strunk Arizona, USA	Director	January 1, 2022	Chair of the Board of Fennemore Craig, P.C. since 2015; former Chair of Brio Gold (now part of Equinox Gold) and a member of the Audit, Compensation and Governance Committee
Ian McMullan Arizona, USA	Chief Operating Officer	July 1, 2019	Chief Operating Officer of ASCU since July 1, 2019; previously, Project Manager of Nyrstar NV from August 2018 to July 2019 and Vice President, Mining of Klondex Mines Ltd. from June 2016 to July 2018.
Nicholas Nikolakakis Ontario, Canada	Chief Financial Officer and Vice President of Finance	January 10, 2022	Chief Financial Officer of ASCU since January 10, 2022; previously, Chief Financial Officer of Battle North Corporation from October 2013 until its acquisition by Evolution Mining in May 2021
Rita Adiani London, United Kingdom	Senior Vice President, Strategy & Corporate Development	July 22, 2021	Senior Advisor to ASCU USA since January 2021. Prior to that, she was Head of Business Development at Xiana Mining Inc. from June 2019 to June 2020, previously Managing Director at NRG Capital Partners from April 2015 to May 2019.

**Notes:**

- (1) Member of the Technical & Sustainability Committee of the directors of the Company of which Alan Edwards is Chair.
- (2) Member of the Audit Committee of the directors of the Company of which Thomas Boehlert is Chair.
- (3) Member of the Governance and Nominating Committee of the directors of the Company of which David Laing is Chair.
- (4) Member of the Compensation Committee of the directors of the Company of which Thomas Boehlert is Chair.

Based on the disclosure available on the System for Electronic Disclosure by Insiders ("**SEDI**"), as of March 30, 2022 the directors and executive officers of the Company (as listed in this AIF), as a group, beneficially owned, or controlled or directed, directly or indirectly, a total of 2,301,585 Common Shares, representing approximately 3.2% of the total number of Common Shares outstanding.

Set forth below is a brief description of the background of the directors and executive officers of the Company, including a description of each individual's principal occupation(s) within the past five years.

***David Laing, Chair of the Board of Directors***

David Laing is a mining executive and engineer with 40 years of experience in mining operations and construction, project development, consulting, mining finance, corporate development & M&A, and investor relations. During his career, Mr. Laing has held multiple executive positions in precious and base metals companies. Mr. Laing served as Executive VP of Technical Services and Senior VP of Operations for Endeavour Mining from 2010-2014 and was a key member of the team in implementing the development strategy of the company. He has also held positions as COO of Equinox Gold Corp, True Gold Mining Inc., and Quintana Resources. Additionally, he has held senior positions at Standard Bank and Endeavour Financial. His previous experience also includes roles at MRDI, BHP Billiton and Royal Dutch Shell's mining business. Mr. Laing currently serves as Chairman of Fortuna Silver Mines Inc. and a Director of Northern Dynasty Minerals, Blackrock Silver Corp and Amarillo Gold Corp.

Mr. Laing has a BSc Mining Engineering (Honors) from the Royal School of Mines, Imperial College at the University of London, England.

***Mark Palmer, Director***

Mark Palmer is a mine finance executive with 26 years of experience in the financial industry and was previously directly involved with mining companies in Australia. In 1994, Mr. Palmer joined NM Rothschild & Sons Limited in the London mining finance team assessing mines and projects globally. In 1997, he moved to the investment banking team at UBS to focus on global mergers and acquisitions, equity and debt financing in the mining sector. Mr. Palmer ran the EMEA mining team at UBS for 8 years. In 2014, he joined Canaccord Genuity Corp. as Vice Chairman responsible for the mining sector coverage. Mr. Palmer joined the Tembo group in 2015 and currently serves as a Partner. Mr. Palmer currently sits on the board of Orion Minerals Ltd.

Mark Palmer has a B.Sc. in Mining Geology from University College Cardiff.

***Thomas Boehlert, Director***

Thomas Boehlert is a financial expert and has been a C-Suite executive at six international public and private resource companies in the agribusiness, mining, and energy sectors. Most recently, Mr. Boehlert served as Executive Vice President and Chief Financial Officer of Bunge Limited from 2017-2019. Prior to joining Bunge Limited, he was President, and Chief Executive Officer of First Nickel Inc. from 2011 to 2015 and Executive Vice President, Chief Financial Officer of Kinross Gold Corporation from 2006-2011. Mr. Boehlert also previously served as Executive Vice President, Chief Financial Officer of Texas Genco in 2005, Direct Energy in 2004 and Sithe Energies Inc., from 2000- 2003. Prior to Sithe Energies, Mr. Boehlert was an infrastructure and energy project finance banker at Credit Suisse for 14 years. Mr. Boehlert serves an executive director and chief financial officer of RCF Acquisition Corp and previously served as a non-executive director of Harry Winston Diamond Corp. and TMAC Resources, now part of Agnico Eagle.

Mr. Boehlert, ICD.D, has a BA in Accounting and Finance from Indiana University and an MBA (Finance) from New York University's Leonard N. Stern School of Business.

***Alan Edwards, Director***

Alan Edwards has more than 35 years of operations and executive mining industry experience. During the course of his career, he has overseen the development and operations of world class base and precious metals deposits in the Americas. Mr. Edwards is currently the President of AE Resources Corp., an Arizona based company. He formerly led Oracle Mining Corporation (CEO), Copper One Inc. (President and CEO), Frontera Copper Corporation (President & CEO) and Apex Silver Corporation (COO). Currently, Mr. Edwards serves as a Non-Executive Director for Americas Gold and Silver Corporation, Entrée Resources Ltd. and Orvana Minerals Corp. Mr. Edwards has previously held the positions of Non-Executive Chairman of the Boards for Tonogold Resources Inc., Mason Resources Corp.

(until its acquisition by Hudbay Minerals Inc.), Rise Gold Corp., AQM Copper Inc. (until its acquisition by Teck Resources Ltd.) and AuRico Gold Inc. Mr. Edwards began his career at Phelps Dodge Mining Company in Ajo, Arizona.

Mr. Edwards has Bachelor of Science Degree in Mining Engineering and an MBA (Finance) from the University of Arizona.

***Sarah Strunk, Director***

Sarah Strunk practices in business and finance law, with an emphasis on mergers and acquisitions, finance transactions, corporate governance, international sales contracts and exploration projects. Throughout her 37-year law career, she has represented numerous clients in the mining and natural resource industry. She has been the Chair of the Board of Directors of Fennemore Craig since 2015, a Mountain West Law Firm. Prior to joining Fennemore, Ms. Strunk was Chief Corporate Counsel to the copper and molybdenum division of Cyprus Amax Minerals Company (1992-2000). She has served on the Board of the Arizona Mining Association and has been a trustee of the Foundation for Natural Resource and Energy Law (Rocky Mountain Mineral Law Foundation) and currently serves on their Investment and International Committees. She has presented papers at the Foundation's Special and Annual Institutes, including on Corporate Audits and Investigations and International Mining Due Diligence. Additionally, Ms. Strunk was the Chair of the Board of Brio Gold (2016-2018), now part of Equinox Gold and a member of the Audit, Compensation and Governance Committees. She was a recipient of the 2021 Medal of Merit for her work in the mining industry at the American Mining Hall of Fame.

Ms. Strunk received master of law degree from New York University School of Law and a law degree from University of Kansas School of Law, following a B.A in Politics and minoring in Economics, Spanish and History at the Wichita State University. She has been admitted to practice law in Arizona, California, New York, Connecticut and Kansas.

***George Ogilvie, President & Chief Executive Officer***

George Ogilvie, has over 30 years of management, operating and technical experience in the mining industry. Mr. Ogilvie was until most recently the President & CEO of Battle North, a position he was appointed to, in 2016 whilst the company was under financial insolvency & restructuring proceedings. During his 5 year tenure at Battle North, Mr. Ogilvie and his team successfully completed a turnaround of the company resulting in an increase in the resource base from 400 k ounces Au to approximately 1.3 million oz Au, completion of a positive bulk mining reconciliation program resulting in de-risking of the project, delivery of a preliminary economic assessment and follow on feasibility study in relation to the project with a post-tax IRR of 50% and completion debt and equity financing of over C\$100m associated with project construction. Battle North was acquired by Evolution Mining Limited in May 2021 at a 45% premium to the prevailing spot price. Prior to this, Mr. Ogilvie was the CEO of Kirkland Lake Gold Inc. where he and his team implemented a turnaround strategy which included, amongst other items, improving operations at the Macassa Mine and the acquisition of St. Andrew Goldfields, resulting in significant returns for shareholders. Previously, Mr. Ogilvie was the CEO of Rambler Metals and Mining PLC, where he and his team guided the evolution of the company from grassroots exploration to a profitable junior producer. Mr. Ogilvie began his mining career in 1989 with AngloGold in South Africa and he subsequently held other roles at the Ruttan Mine in Northern Manitoba for HudBay Minerals Inc., the McCreedy West Mine and also as Area Manager for Dynatec Corporation. Currently, Mr. Ogilvie also serves on the board of Rupert Resources Ltd.

Mr. Ogilvie received his B.Sc. (Hons.) in Mining and Petroleum Engineering from Strathclyde University in Glasgow, Scotland. He is a Professional Engineer and also holds his Mine Managers Certificate (South Africa). Currently, Mr. Ogilvie also serves on the board of Rupert Resources Ltd.

***Ian McMullan, Chief Operating Officer***

Ian McMullan has over 25 years of mining experience in operational and management roles. Mr. McMullan's career has advanced through a variety of progressive responsibility roles whilst spanning both underground and surface mining applications in the United States and Canada, including a 20-year tenure with Newmont Mining Corporation. Mr. McMullan is well versed in planning and execution and has managed significant mining projects including the

full production ramp-up of the Leeville Mine, and expansion of the Carlin Portal Mines, both in Nevada, during his career. Until the acquisition of Klondex Mines Ltd. by Hecla Mining Company, Mr. McMullan served as Vice President of Mining for Klondex Mines Ltd and was responsible for operational oversight of the United States and Canadian operations of the company comprising of five underground mines, two open pits and three processing facilities.

Mr. McMullan holds a Bachelor's degree in Mining Engineering from Dalhousie University (Technical University of Nova Scotia) and a Masters in Business Administration from Lansbridge University. Mr. McMullan is also licensed with the province of Ontario as a professional mining engineer.

***Nicholas Nikolakakis, Chief Financial Officer and Vice President, Finance***

Mr. Nikolakakis has over 27 years of corporate finance, accounting and senior management experience within the mining sector. Over his career, he has raised over US\$2 billion in numerous mining transactions. Most recently he was the Chief Financial Officer for Battle North Corporation (acquired by Evolution Mining in 2021). He was also the former Chief Financial Officer of Rainy River Resources. Prior to Rainy River, Nick was the Vice President of Corporate Finance at Barrick Gold Corporation, where he led a US\$1 billion project financing for Barrick's Pueblo Viejo mine in the Dominican Republic and successfully negotiated a US\$1.5 billion corporate revolving credit facility. Other previously held positions by Mr. Nikolakakis include, Vice President and Chief Financial Officer of Placer Dome Canada, and Treasurer at North American Palladium Ltd.

Mr. Nikolakakis holds an Applied Science degree in Geological Engineering from the University of Waterloo and a Master of Business Administration from the University of Western Ontario's Ivey School of Business.

***Rita Adiani, Senior Vice President, Strategy***

Ms. Adiani has over 16 years of experience in the mining industry spanning executive industry roles, investment banking and corporate law. Ms. Adiani was Senior Adviser to ASCU USA since January 2021 and was responsible for leading execution of the initial public offering and other corporate finance and development activities. Previously, she was Executive Vice President of Xiana Mining Inc., a copper producer and developer in Chile where she was Head of Business Development responsible for group finance & corporate finance matters. Prior to that, she was Managing Director in the mining team at NRG Capital Partners in London and also served as Vice President within the Mining M&A Team at Societe Generale. Ms. Adiani has advised on and been involved in transactions in excess of US\$10 billion during the course of her career, including landmark industry transactions. She was Senior Corporate Finance Manager for La Mancha Resources (reporting to the CFO), which remains one of the largest private investors in the gold sector with over US\$1 billion of assets under management. She is also admitted to practice as a solicitor of the Supreme Court of England & Wales (currently non-practicing) and practiced corporate law at Linklaters LLP in London and Dubai from 2006-2011.

Ms. Adiani is a law graduate from the University of Oxford and University of Sheffield. She has a CFA in ESG Investing from the CFA Institute and also has a Certificate in Mining Studies — Mining & Minerals Engineering from the University of British Columbia (Norman B. Keevil Institute of Mining Engineering). Currently, Ms. Adiani also serves on the board of Brixton Metals Corporation.

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

Other than as disclosed below, to the knowledge of the Company, no other director, executive officer, or proposed nominee for election as director, is, as at the date hereof, or was within 10 years before the date hereof, a director, chief executive officer or chief financial officer of any company (including the Company) that (a) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant issuer access to any exemption under securities legislation, that was in effect for a period or more than 30 consecutive days (an "Order") that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer of such issuer, or (b) was subject to an Order that was issued after the 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.

Mr. David Laing has been a director of Fortuna Silver Mines Inc. ("**Fortuna**") since September 2016. On April 3, 2017, a management cease trade order ("**MCTO**") was issued by the British Columbia Securities Commission and other Canadian provincial securities regulatory authorities pursuant to National Policy 12-203 Management Cease Trade Orders in connection with the late filing of the Fortunas' annual audited financial statements and related management's discussion and analyses for the years ended December 31, 2016 and 2015 and the annual information form for the year ended December 31, 2016 (the "**Fortuna Annual Documents**"). The MCTO prohibited the Chief Executive Officer and the Chief Financial Officer of Fortuna from trading in securities of Fortuna until Fortuna completed the required filing of the Fortuna Annual Documents as well as its Interim Financial Documents (as defined below) for the first quarter of 2017. The Fortuna Annual Documents were filed on May 15, 2017. Due to the delay in finalizing the Annual Documents, Fortuna was delayed in filing its interim financial statements and related management discussion and analysis for the three months ended March 31, 2017 and 2016 (together, the "**Fortuna Interim Financial Documents**"). Fortuna filed the Fortuna Interim Financial Documents on May 24, 2017, and the MCTO was revoked by the British Columbia Securities Commission on May 25, 2017.

Other than as disclosed below, to the knowledge of the Company, no other director, executive officer, proposed nominee for election as director, nor, to its knowledge, any shareholder holding a sufficient number of its securities to affect materially the control of the Company (a) is, as at the date hereof, or has been within the 10 years before the date hereof, a director or executive officer of any company (including the Company) 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) has, within the 10 years before the date hereof, 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, receiver manager or trustee appointed to hold the assets of such director, executive officer or shareholder.

Mr. Thomas Boehlert was a director and President and Chief Executive Officer of First Nickel Inc. from September 12, 2011 to August 20, 2015. On August 19, 2015, the Ontario Superior Court granted an application made by First Nickel Inc.'s creditors to appoint a receiver under the Bankruptcy and Insolvency Act (Canada). On January 21, 2016, the liquidation of First Nickel Inc.'s assets was substantially complete.

Mr. Alan Edwards was Chairman of the Board of Oracle Mining Corp until his resignation effective on February 15, 2015. On December 23, 2015, Oracle Mining Corp. announced that the Superior Court of Arizona had granted the application of Oracle's lender to appoint a receiver and manager over the assets, undertaking and property of Oracle Ridge Mining LLC.

None of the Company's directors or executive officers, nor, to its knowledge, any shareholder holding a sufficient number of its securities to affect materially the control of the Company, has been subject to (a) 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 (b) 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**

Other than as otherwise described in this AIF, to the best of the Company's knowledge, there are no existing or potential material conflicts of interest between the Company and any of its directors or officers as of the date hereof. Mark Palmer, a director of the Company, is also a partner of Tembo, a significant shareholder and creditor of the Company, and may be considered to have a conflict of interest with matters relating to Tembo and the Company. To the extent required, the Board manages this potential conflict of interest in accordance with its Code, policies and the BCBCA. See "*Risk Factors – Tembo exercises significant control over the Company*".

Certain of the Company's directors and officers are, or may become, directors or officers of other companies with businesses which may conflict with its business. Accordingly, conflicts of interest may arise which could influence these individuals in evaluating possible acquisitions or in generally acting on the Company's behalf. In an attempt to mitigate this risk, the Code prohibits conflicts of interest as a matter of policy, except as approved by the Board, and

any transaction, relationship or interest that reasonably could give rise to a conflict of interest must be reported to the Chairman of the Board. See also "*Risk Factors – Tembo exercises significant control over the Company*".

Pursuant to the BCBCA, directors and officers of the Company are required to act honestly and in good faith with a view to the best interests of the Company. As required under the BCBCA and the Company's articles:

- a director or senior officer who holds any office or possesses any property, right or interest that could result, directly or indirectly, in the creation of a duty or interest that materially conflicts with that individual's duty or interest as a director or senior officer of the Company, must promptly disclose the nature and extent of that conflict; and
- a director who holds a disclosable interest (as such term is defined under the BCBCA) in a contract or transaction into which the Company has entered or proposes to enter may generally not vote on any directors' resolution to approve such contract or transaction.

Generally, as a matter of practice, directors who have disclosed a material interest in any contract or transaction that the Board is considering will not take part in any board discussion respecting that contract or transaction. If on occasion such directors do participate in the discussions, they will refrain from voting on any matters relating to matters in which they have disclosed a material interest. In appropriate cases, the Company will establish a special committee of independent directors to review a matter in which directors or officers may have a conflict.

## AUDIT COMMITTEE

### The Audit Committee's Charter

The Board has adopted a Charter for the Audit Committee, which sets out the Audit Committee's mandate, organization, powers and responsibilities. The audit committee charter was approved by the Board on October 27, 2020 as amended and approved by the Board on June 21, 2021 (the "**Audit Committee Charter**"). The full text of the Audit Committee Charter is attached hereto as Schedule "A".

### Composition of the Audit Committee

The Audit Committee is composed of Thomas Boehlert (Chair), Mark Palmer and Alan Edwards, all of whom are independent directors and all of whom are financially literate, in each case within the meaning of National Instrument 52-110.

Name of Member	Independent <sup>(1)</sup>	Financially Literate <sup>(2)</sup>
Thomas Boehlert (Chair)	Yes	Yes
Sarah Strunk	Yes	Yes
Alan Edwards	Yes	Yes

#### Notes:

- (1) To be considered independent, a member of the Audit Committee must not have any direct or indirect "material relationship" with the Company. A "material relationship" is a relationship which could, in the view of the Board, be reasonably expected to interfere with the exercise of a member's independent judgment.
- (2) To be considered financially literate, a member of the Audit Committee must have the ability 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 issues that can reasonably be expected to be raised by the Company's financial statements.

### Relevant Education and Experience

For the education and experience of each of Thomas Boehlert, Mark Palmer and Alan Edwards that is relevant to his performance as a member of the Audit Committee, see "*Directors and Officers*".

## Pre-Approval Policies and Procedures

The Audit Committee mandate requires that the Audit Committee pre-approve any retainer of the auditor of the Company to perform any non-audit services to the Company that it deems advisable in accordance with applicable legal and regulatory requirements and policies and procedures of the Board. The Audit Committee is permitted to delegate such pre-approval, as the Committee may determine and as permitted by applicable securities laws.

In the event that the Company wishes to retain the services of the Company's external auditors for tax compliance, tax advice or tax planning, the Chief Financial Officer (the "CFO") shall consult with the Chair of the Audit Committee, who shall have the authority, subject to confirmation that such services will not compromise the independence of the Company's external auditors, to approve or disapprove on behalf of the Audit Committee, such non-audit services. All other non-audit services shall be approved or disapproved by the Audit Committee as a whole. The CFO shall maintain a record of non-audit services approved by the Chair of the Audit Committee or the Audit Committee for each fiscal year and provide a report to the Audit Committee no less frequently than on a quarterly basis.

## External Auditor Service Fees

The following table discloses the fees charged to the Company by its external auditor during the last two financial years:

Financial Year Ending	Audit Fees <sup>(1)</sup> (US\$)	Audit-Related Fees <sup>(2)</sup> (US\$)	Tax Fees <sup>(3)</sup> (US\$)	All Other Fees <sup>(4)</sup> (US\$)s
December 31, 2021	91,670	93,045	11,031	Nil
December 31, 2020	17,715	Nil	Nil	14,268

### Notes:

- (1) "Audit Fees" are fees necessary to perform quarterly review engagements and the annual audit of the Company's financial statements, including review of tax provisions, accounting consultations on matters reflected in the financial statements, and audit or other attest services required by legislation or regulation, such as comfort letters, consents, reviews of securities filings and statutory audits. "Audit Fees (ELIM)" are all audit fees related to ASCU and include the audit of the purchase price equation for the acquisition of the Cactus Project.
- (2) "Audit-Related Fees" are fees for services that are traditionally performed by the auditor including employee benefit audits, due diligence assistance, accounting consultations on proposed transactions, internal control reviews and audit or attest services not required by legislation or regulation.
- (3) "Tax Fees" are fees for all tax services other than those included in "Audit Fees (ASCU)" and "Audit-Related Fees" including tax compliance, tax planning and tax advice. Tax planning and tax advice includes assistance with tax audits and appeals, tax advice related to mergers and acquisitions, and requests for rulings or technical advice from tax authorities. No Tax Fees were paid to PricewaterhouseCoopers in 2020.
- (4) "All Other Fees" include all other non-audit services.

## LEGAL PROCEEDINGS AND REGULATORY ACTIONS

Other than as described herein, to the Company's knowledge, there are no legal proceedings or regulatory actions material to the Company to which it is a party, or has been a party to, or of which any of its property is the subject matter of, or was the subject matter of, since the beginning of the financial year ended December 31, 2021, and no such proceedings or actions are known by the Company to be contemplated.

There have been no penalties or sanctions imposed against the Company by a court or regulatory authority, and the Company has not entered into any settlement agreements before any court relating to provincial securities legislation or with any securities regulatory authority, as of the date hereof or since its incorporation.

## INTERESTS OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Except as disclosed elsewhere in this AIF, no (a) director or executive officer, (b) person or company that beneficially owns, controls or directs, directly or indirectly, more than 10% of the Common Shares, nor (c) associate or affiliate of any of the persons or companies referred to in (a) or (b) has, or has had within the three most recently completed

financial years before the date hereof, any material interest, direct or indirect, in any transaction that has materially affected or is reasonably expected to materially affect the Company or any of its subsidiaries.

See "*General Development of the Business – ons to the Stockpile Project*."

Key Developments prior to the Offering" for a discussion of certain agreements entered into by the Company with Tembo and RCF.

### **TRANSFER AGENT AND REGISTRAR**

The transfer agent and registrar for the Common Shares is TSX Trust Company, at its principal office in Toronto, Ontario.

### **MATERIAL CONTRACTS**

Except for contracts entered into in the ordinary course of business, set out below are material contracts entered into since January 1, 2021 and material contracts entered into before January 1, 2021 which still remain in effect and material to the Company. Copies of such material contracts will be filed with the Canadian securities regulatory authorities and will be available for review under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com).

- (a) Investor Rights Agreement referred to under "*General Development of the Business – Acquisition of the Cactus Mine (formerly the Sacaton Mine)*";
- (b) Cactus Purchase Agreement referred to under "*General Development of the Business – Acquisition of the Cactus Mine (formerly the Sacaton Mine)*";
- (c) Arcus Agreement (including the R&A Agreement) referred to under "*General Development of the Business – Other Transactions*";
- (d) LKY Agreement referred to under "*General Development of the Business – Other Transactions*";
- (e) 2021 Loan Agreement referred to under "*General Development of the Business – Other Transactions*"; and
- (f) Underwriting Agreement referred to under "*General Development of the Business – Initial Public Offering*".

### **INTERESTS OF EXPERTS**

Information of a scientific or technical nature in respect of the Cactus Project is included in this AIF based upon the Integrated Cactus PEA, dated August 31, 2021, prepared by Mr. Allan Schappert, Mr. Jason Sexauer and Mr. Wilhelm Greuer of Stantec, and Dr. Martin Kuhn of Minerals Advisory Group, who are all independent Qualified Persons. To the best of the Company's knowledge, after reasonable inquiry, as of the date hereof, the aforementioned individuals and their firms do not beneficially own, directly or indirectly, any Common Shares.

PricewaterhouseCoopers LLP, the auditors of the Company, prepared an auditors' report to the shareholders of the Company on the statement of financial position of the Company for the year ended December 31, 2021, and the statements of loss and comprehensive loss, cash flows and changes in shareholders' equity for the year ended December 31, 2021. PricewaterhouseCoopers LLP has advised that it is independent with respect to the Company within the meaning of the rules of Professional Conduct of Chartered Professional Accountants of Ontario.

### **ADDITIONAL INFORMATION**

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans, as applicable, will be contained in the Company's management information circular for the annual meeting of shareholders to be held in 2022, which will be available on SEDAR ([www.sedar.com](http://www.sedar.com)) under ASCU's issuer profile in due course. Additional financial information is provided in the Company's financial statements and management's discussion and analysis for the Company's most recently completed financial year. Additional information relating to the Company may also be found on SEDAR ([www.sedar.com](http://www.sedar.com)) under ASCU's issuer profile.

## **SCHEDULE "A"**

### **AUDIT COMMITTEE CHARTER**

#### **ARIZONA SONORAN COPPER COMPANY INC. AUDIT COMMITTEE CHARTER**

Adopted by the Board of Directors on June 21, 2021.

#### **1. PURPOSE**

The Audit Committee (the "**Committee**") of Arizona Sonoran Copper Company Inc. (the "**Company**") shall have the responsibility of overseeing the accounting and financial reporting processes of the Company and audits of the financial statements of the Company. The Committee shall also be responsible for oversight of the Company's risk management and complaint processes.

#### **2. COMPOSITION**

##### **2.1 Members**

The Committee shall be composed of at least three and not more than five directors (collectively, the "**Members**"). The Board of Directors of the Company (the "**Board**") shall appoint the Members annually, at the Board's first meeting held following the annual general meeting of shareholders of the Company, to hold office for the ensuing year until their successor is appointed, or until they resign, cease to be a director or are removed or replaced by the Board.

##### **2.2 Qualifications**

Each Member of the Committee shall be "**independent**" (as defined in NI 52-110) and "**financially literate**" except to the extent permitted by National Instrument 52-110 – Audit Committees, as it may be amended or replaced from time to time ("**NI 52-110**"), and free from any relationship that, in the view of the Board, could be reasonably expected to interfere with the exercise of his or her independent judgment. Attached hereto as Schedule "A" of this Charter sets forth the definitions of both "**independent**" and "**financially literate**" under NI 52-110 as in effect on the date of the adoption of this Audit Committee Charter.

##### **2.3 Chair**

The Members shall elect the chair of the Committee (the "**Committee Chair**") to hold office for the ensuing year until their successor is elected, or until they resign, cease to be a director or are removed or replaced by the Board or the Committee.

The position description and responsibilities of the Committee Chair are set out in Schedule "B" attached hereto.

##### **2.4 Removal and Replacement**

Any Member of the Committee may be removed or replaced at any time by the Board and shall cease to be a Member of the Committee on ceasing to be a director of the Company. The Board may fill vacancies by appointment from among the Board. If, and whenever, a vacancy shall exist on the Committee, the remaining Members may exercise all of their powers so long as a quorum remains.

#### **3. MEETINGS AND PROCEDURES**

##### **3.1 Meetings**

The Audit Committee shall meet as frequently as required, but at least once per quarter.

### **3.2 Independent Meetings**

The Members may meet in-camera, independently and with only members of the Committee in attendance, following most meetings of the Committee, or as necessary.

### **3.3 Quorum**

Quorum for the transaction of business at any meeting of the Committee shall be a majority of the number of Members.

### **3.4 Notice**

Committee meetings shall be held from time to time and at such place as any member of the Committee shall determine with not be less than twenty-four (24) hours advanced notice. The notice period may be waived by all members of the Committee. Any member of the Committee or the independent auditors of the Company may call a meeting.

### **3.5 Participation**

Members may participate in a meeting of the Committee in person or by means of telephone, web conference or other communication equipment. The Committee may invite such other directors, officers and employees of the Company and such other advisors and persons as is considered advisable to attend any meeting of the Committee. For greater certainty, the Committee shall have the right to determine who shall and who shall not be present at any time during a meeting of the Committee.

### **3.6 Agenda and Minutes**

The Chair of the Committee, with the assistance of the Corporate Secretary, shall develop and set the Committee's agenda, in consultation with other members of the Committee, the Board and management. The agenda and information concerning the business to be conducted at each Committee meeting shall be, to the extent practical, communicated to members of the Committee sufficiently in advance of each meeting to permit meaningful review. The Committee will keep minutes of its meetings which shall be available for review by the Board.

### **3.7 Voting**

Any matter to be determined by the Committee shall be decided by a majority of the votes cast at a meeting of the Committee called for such purpose. Any action of the Committee may also be taken by written resolution signed by all of the members of the Committee and any such action shall be as effective as if it had been decided by a majority of the votes cast at a Committee meeting. In case of an equality of votes, the matter will be referred to the Board for decision. All decisions or recommendations of the Committee shall require the approval of the Board prior to implementation, other than any sole discretion and authority provided under this Charter and as allowed under applicable laws and regulations.

### **3.8 Report to Board**

The Committee shall report regularly to the entire Board. The Chair of the Committee shall report any decisions or significant matters to the Board at a duly called Board meeting.

### **3.9 Assessment of Charter**

The Committee shall review and reassess the adequacy of this Charter annually and recommend any proposed changes to the Board for approval.

## **4. PRIMARY DUTIES, POWERS AND RESPONSIBILITIES**

The Committee shall provide assistance to the Board in fulfilling its oversight responsibilities under applicable laws with respect to (i) the overall integrity of the Company's financial reporting processes, (ii) financial reporting and

disclosure requirements; (ii) the system of internal control over financial reporting that management has established; (iii) the internal (if applicable) and external audit process; (iv) compliance with legal and regulatory requirements; (v) the processes for identifying, evaluating and managing the Company's principal risks impacting financial reporting, and (vi) the independent auditors' qualifications and independence.

#### 4.1 Primary Duties and Responsibilities

The Committee's primary duties and responsibilities are to:

- 4.1.1 conduct such reviews and discussions with management and the external auditors relating to audit and financial reporting as are deemed appropriate by the Committee;
- 4.1.2 assess the integrity of internal controls and financial reporting procedures of the Company and ensure implementation of such controls and procedures;
- 4.1.3 as applicable, review the quarterly and annual financial statements and management's discussion and analysis ("MD&A") of the Company's financial position and operating results and in the case of the annual financial statements and related MD&A, report thereon to the Board for approval of same;
- 4.1.4 select and monitor the independence and performance of the Company's external auditors, including attending private meetings with the external auditors and reviewing and approving all renewals or dismissals of the external auditors and their remuneration; and
- 4.1.5 provide oversight of all disclosure relating to, and information derived from, financial statements, MD&A and information.

#### 4.2 Scope of Authority and Responsibility

- 4.2.1 The Committee shall have the power to conduct or authorize investigations appropriate to its responsibilities, and it may request the external auditors, as well as any officer or employee of the Company, its external legal counsel or external auditor to attend a meeting of the Committee or to meet with any member(s) or advisors of the Committee.
- 4.2.2 Whilst the Committee has the responsibilities and powers set forth in this Charter, it is not the duty of the Committee to plan or conduct audits or to determine that the Company's financial statements are complete and accurate and in accordance with generally accepted accounting principles. Management is responsible for the preparation, presentation and integrity of the Company's financial statements and for the appropriateness of the accounting principles and reporting policies used. The independent auditors are responsible for auditing the Company's financial statements and for reviewing the Company's unaudited interim financial statements.
- 4.2.3 The Committee shall have unrestricted access to the books and records of the Company and has the authority to retain, at the expense of the Company, special legal, accounting, or other consultants or experts to assist in the performance of the Committee's duties.
- 4.2.4 The Committee shall be accountable to the Board. In the course of fulfilling its specific responsibilities hereunder, the Committee shall maintain an open communication between the Company's external auditor and the Board. The responsibilities of a member of the Committee shall be in addition to such member's duties as a member of the Board.
- 4.2.5 The Committee should, where it deems appropriate, resolve disagreements, if any, between management and the external auditor, and review compliance with laws and regulations and the Company's own policies.

- 4.2.6 The Committee will provide the Board with such recommendations and reports with respect to the financial disclosures of the Company, as it deems advisable.
- 4.2.7 In fulfilling its responsibilities, the Committee will carry out the specific duties set out in this Charter.

## **5. SPECIFIC DUTIES, POWERS AND RESPONSIBILITIES**

For the purposes of this Charter, specific accounting, financial and treasury related duties delegated to the Committee by the Board include:

### **5.1 Financial Accounting and Reporting Processes**

- 5.1.1 Prior to such time as the Company publicly discloses the following information, the Committee shall review along with related reports and presentations, discuss with management and auditors as needed, and recommend for approval to the Board the following information:
  - (a) annual audited and interim financial statements and related MD&A to satisfy itself that the financial statements are presented in accordance with applicable accounting principles and in the case of the annual audited financial statements and related MD&A, report thereon and recommend to the Board whether or not same should be approved prior to their being filed with the appropriate regulatory authorities;
  - (b) accounting policies that affect the financial statements; and
  - (c) annual and interim earnings press releases.
- 5.1.2 With respect to the annual audited financial statements, the Committee shall discuss with management and external auditors as it deems appropriate, significant issues regarding accounting principles, practices, and judgments. The Committee shall consider whether the Company's financial disclosures are complete, accurate, prepared in accordance with International Financial Reporting Standards and fairly present the financial position of the Company. The Committee shall also satisfy itself that, in the case of the annual financial statements, the audit function has been effectively carried out by the auditors and, in the case of the interim financial statements that the review function has been effectively carried out.
- 5.1.3 Review the annual report (see "External Audit", below) for consistency with the financial disclosure referenced in the annual financial statements.
- 5.1.4 Be satisfied as to the adequacy of procedures in place for the review of the Company's public disclosure of financial information extracted or derived from the Company's annual and interim financial statements, MD&As, and annual and interim earnings press releases, and periodically assess the adequacy of such procedures.
- 5.1.5 The Committee shall review any press releases containing disclosure regarding financial information that are required to be reviewed by the Committee under any applicable laws or otherwise pursuant to the policies of the Company (including before the Company publicly discloses this information).
- 5.1.6 Review and approve quarterly financial statements, accounting policies that affect the statements, the quarterly MD&A, and associated press releases.
- 5.1.7 Review significant issues affecting financial reports.
- 5.1.8 Review emerging GAAP developments that could affect the Company.

- 5.1.9 Understand how management develops interim financial information and the nature and extent of external audit involvement.
- 5.1.10 In its review of the annual and quarterly financial statements, discuss the quality of the Company's accounting principles, the reasonableness of significant judgments, and the clarity of the disclosures in the financial statements.
- 5.1.11 Review and approve any earnings guidance to be provided by the Company.

## 5.2 **Internal Controls over Financial Reporting and Disclosure Controls and Procedures**

- 5.2.1 Review reports from management and auditors and consider the effectiveness of the Company's internal controls over financial reporting and related information technology, security, and control at least twice annually.
- 5.2.2 Review and approve corporate signing authorities and modifications thereto.
- 5.2.3 Review with the Company's auditors any issues or concerns related to any internal control systems in the process of the audit.
- 5.2.4 Review the plan and scope of the annual audit with respect to planned reliance and testing of controls and major points contained in the auditor's management letter resulting from control evaluation and testing.
- 5.2.5 Establish and maintain complaint procedures regarding accounting, internal accounting controls or auditing matters and the confidential anonymous submission by employees of concerns regarding questionable accounting or auditing matters. Such procedures are appended hereto as Schedule "C".
- 5.2.6 Review with management, external auditors and legal counsel any material litigation claims or other contingencies, including tax assessments and the adequacy of financial provisions, that could materially affect financial reporting.
- 5.2.7 The Committee shall meet no less than annually with the Chief Financial Officer (the "CFO") or, in the absence of a CFO, with the officer of the Company in charge of financial matters, and the Chief Executive Officer, to review accounting practices, the Company's internal controls and procedures, including any significant deficiencies in, or material non-compliance with, such controls and procedures, and such other matters as the Committee deems appropriate.
- 5.2.8 The Committee shall inquire of management and the external auditors about significant financial and internal control risks or exposures and assess the steps management has taken to minimize such risks.
- 5.2.9 Approve all material related party transactions in advance.
- 5.2.10 The Committee shall ensure that management establishes and maintains an appropriate budget process, which shall include the preparation and delivery of periodic reports from the CFO to the Committee comparing actual spending to the budget. The budget shall include assumptions regarding economic parameters that are well supported and shall take into account the risks facing the Company.

## 5.3 **External Audit**

- 5.3.1 Have the authority to communicate directly with the external auditor and the CFO and arrange for the external auditor to be available to the Committee and the Board as needed.

- 5.3.2 Oversee the work of the external auditor engaged for the purpose of preparing or issuing an auditor's report or performing any other audit, review or attest services for the Company, including the resolution of disagreements between management and the external auditor regarding financial reporting.
- 5.3.3 Review and approve the audit plans, scope and proposed audit fees.
- 5.3.4 Annually review the independence of the external auditors by receiving a report from the independent auditor detailing all relationships between them and the Company.
- 5.3.5 Monitor the relationship between management and the external auditor, including reviewing any management letters or other reports of the external auditor, discussing any material differences of opinion between management and the external auditor, any audit problems or difficulties experienced by the external auditor in performing the audit, and resolving disagreements between the external auditor and management.
- 5.3.6 Discuss with the auditors the results of the audit, any changes in accounting policies or practices and their impact on the financials, as well as any items that might significantly impact financial results.
- 5.3.7 Receive a report from the auditors on critical accounting policies and practices to be used, all alternative treatments of financial information within Canadian GAAP and applicable rules and regulations that have been discussed with management, including the ramifications of the use of such alternative treatments, and the treatment preferred by the auditor.
- 5.3.8 Review and discuss with the external auditor all critical accounting policies and practices to be used in the Company's financial statements, all alternative treatments of financial information within generally accepted accounting principles that have been discussed with management, the ramifications of the use of such alternative treatments and the treatment preferred by the external auditor.
- 5.3.9 Review any major issues regarding accounting principles and financial statement presentation with the external auditor and management, including any significant changes in the Company's selection or application of accounting principles and any significant financial reporting issues and judgments made in connection with the preparation of the Company's financial statements.
- 5.3.10 Receive an annual report (the "Annual Report") from the auditors describing the audit firm's internal quality-control procedures, and material issues raised by the most recent internal quality-control review, or peer review, of the firm, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more audits carried out the firm, and any steps taken to deal with any such issues.
- 5.3.11 Ensure regular rotation of the lead partner and reviewing partner.
- 5.3.12 Evaluate the performance of the external auditor and the lead partner annually.
- 5.3.13 Recommend to the Board:
  - (a) the external auditor to be nominated for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company; and
  - (b) the compensation of the external auditor.
- 5.3.14 Meet with the auditors, separately and apart from management, at least once a year.

- 5.3.15 Require, in accordance with applicable law, that the external auditors report directly to the Committee and not to management.
- 5.3.16 Review and discuss on an annual basis with the external auditor all significant relationships they have with the Company, management, the external asset manager or employees that might interfere with the independence of the external auditor.
- 5.3.17 Pre-approve all non-audit services (or delegate such pre-approval, as the Committee may determine and as permitted by applicable securities laws) to be provided by the external auditor.
- 5.3.18 Review the performance of the external auditor and recommend any discharge of the external auditor when the Committee determines that circumstances warrant.
- 5.3.19 Review and approve any proposed hiring of current or former partners or employees of the current (and any former) external auditor of the Company.

#### 5.4 **Non-Audit Services**

- 5.4.1 Pre-approve all allowable non-audit services, as further set out in Schedule "D" to be provided by the external auditor.
- 5.4.2 Review the fees paid by the Company to the external auditors in respect of non-audit services on an annual basis.

#### 5.5 **Risk Management**

- 5.5.1 The Committee shall inquire of management and external auditors about the processes in place to identify and manage the principal risks or exposures that could impact the financial reporting of the Company.
- 5.5.2 Review and report on any directors and officers insurance policy put in place by the Company.
- 5.5.3 Review and approve corporate investment policies.
- 5.5.4 Assess, as part of its internal controls responsibility, the effectiveness of the overall process for identifying principal business risks and report to the Board on such assessments.

#### 5.6 **Other Responsibilities and Matters**

- 5.6.1 Following meetings of the Committee, report through the Committee Chair to the Board.
- 5.6.2 Review annually the adequacy of the Committee Charter and confirm that all responsibilities have been carried out.
- 5.6.3 Evaluate the Committee's and individual Member's performance on a regular basis and report annually to the Board the results of such annual self-assessment.
- 5.6.4 Review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the present and former external auditor of the Company.
- 5.6.5 Discuss the Company's compliance with tax and financial reporting laws and regulation, if and when any such issues arise.
- 5.6.6 Perform any other activities consistent with this Charter and governing law, as the Committee or the Board deems necessary or appropriate.

**6. ADVISORS**

Based on its sole judgment and discretion, and without obtaining prior approval of the Board, the Committee has the authority to engage independent counsel and other advisors as it deems necessary in order to carry out its duties and to set and pay compensation for any advisors employed by the Committee at the cost of the Company. The Committee has the authority to communicate directly with the external auditors of the Company.

## SCHEDULE 1-A

### ARIZONA SONORAN COPPER COMPANY INC. NATIONAL INSTRUMENT 52-110 AUDIT COMMITTEES ("NI 52-110")

#### "1.4 MEANING OF INDEPENDENCE

1. An audit committee member is independent if he or she has no direct or indirect material relationship with the issuer.
2. For the purposes of subsection (1), a "material relationship" is a relationship which could, in the view of the issuer's board of directors, be reasonably expected to interfere with the exercise of a member's independent judgment.
3. Despite subsection (2), the following individuals are considered to have a material relationship with an issuer:
  - (a) an individual who is, or has been within the last three years, an employee or executive officer of the issuer;
  - (b) an individual whose immediate family member is, or has been within the last three years, an executive officer of the issuer;
  - (c) an individual who:
    - (i) is a partner of a firm that is the issuer's internal or external auditor,
    - (ii) is an employee of that firm, or
    - (iii) was within the last three years a partner or employee of that firm and personally worked on the issuer's audit within that time;
  - (d) an individual whose spouse, minor child or stepchild, or child or stepchild who shares a home with the individual:
    - (i) is a partner of a firm that is the issuer's internal or external auditor,
    - (ii) is an employee of that firm and participates in its audit, assurance or tax compliance (but not tax planning) practice, or
    - (iii) was within the last three years a partner or employee of that firm and personally worked on the issuer's audit within that time;
  - (e) an individual who, or whose immediate family member, is or has been within the last three years, an executive officer of an entity if any of the issuer's current executive officers serves or served at that same time on the entity's compensation committee; and
  - (f) an individual who received, or whose immediate family member who is employed as an executive officer of the issuer received, more than \$75,000 in direct compensation from the issuer during any 12-month period within the last three years.
4. Despite subsection (3), an individual will not be considered to have a material relationship with the issuer solely because
  - (a) he or she had a relationship identified in subsection (3) if that relationship ended before March 30, 2004; or

- (b) he or she had a relationship identified in subsection (3) by virtue of subsection (8) if that relationship ended before June 30, 2005.
5. For the purposes of clauses (3)(c) and (3)(d), a partner does not include a fixed income partner whose interest in the firm that is the internal or external auditor is limited to the receipt of fixed amounts of compensation (including deferred compensation) for prior service with that firm if the compensation is not contingent in any way on continued service.
6. For the purposes of clause (3)(f), direct compensation does not include:
- (a) remuneration for acting as a member of the board of directors or of any board committee of the issuer, and
  - (b) the receipt of fixed amounts of compensation under a retirement plan (including deferred compensation) for prior service with the issuer if the compensation is not contingent in any way on continued service.
7. Despite subsection (3), an individual will not be considered to have a material relationship with the issuer solely because the individual or his or her immediate family member
- (a) has previously acted as an interim chief executive officer of the issuer, or
  - (b) acts, or has previously acted, as a chair or vice-chair of the board of directors or of any board committee of the issuer on a part-time basis.
8. For the purpose of section 1.4, an issuer includes a subsidiary entity of the issuer and a parent of the issuer."

## **1.5 ADDITIONAL INDEPENDENCE REQUIREMENTS**

1. Despite any determination made under section 1.4, an individual who:
- (a) accepts, directly or indirectly, any consulting, advisory or other compensatory fee from the issuer or any subsidiary entity of the issuer, other than as remuneration for acting in his or her capacity as a member of the board of directors or any board committee, or as a part-time chair or vice-chair of the board or any board committee; or
  - (b) is an affiliated entity of the issuer or any of its subsidiary entities, is considered to have a material relationship with the issuer.
2. For the purposes of subsection (1), the indirect acceptance by an individual of any consulting, advisory or other compensatory fee includes acceptance of a fee by
- (a) an individual's spouse, minor child or stepchild, or a child or stepchild who shares the individual's home; or
  - (b) an entity in which such individual is a partner, member, an officer such as a managing director occupying a comparable position or executive officer, or occupies a similar position (except limited partners, non-managing members and those occupying similar positions who, in each case, have no active role in providing services to the entity) and which provides accounting, consulting, legal, investment banking or financial advisory services to the issuer or any subsidiary entity of the issuer.
3. For the purposes of subsection (1), compensatory fees do not include the receipt of fixed amounts of compensation under a retirement plan (including deferred compensation) for prior service with the issuer if the compensation is not contingent in any way on continued service.

**1.6 MEANING OF FINANCIAL LITERACY**

For the purposes of this Instrument, an individual is financially literate if he or she has the ability 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 issuer's financial statements."

## SCHEDULE 1-B

### ARIZONA SONORAN COPPER COMPANY INC. POSITION DESCRIPTION FOR THE CHAIRMAN OF THE AUDIT COMMITTEE

#### 1. PURPOSE

The chair (the "Chair") of the Audit Committee (the "Committee") shall be an independent director who is elected by the board of directors (the "Board") or designated by majority vote of the Committee to act as the leader of the Committee in assisting the Board in fulfilling its financial reporting and control responsibilities to the shareholders of Arizona Sonoran Copper Company Inc. (the "Company").

#### 2. WHO MAY BE CHAIR

The Chair will be elected from amongst the independent directors of the Company who have a sufficient level of financial sophistication and experience in dealing with financial issues to ensure the leadership and effectiveness of the Committee.

The Chair will be elected annually at the first meeting of the Board following the annual general meeting of shareholders or designated by majority vote of the Committee.

#### 3. RESPONSIBILITIES

The following are the primary responsibilities of the Chair:

- (a) chair all meetings of the Committee in a manner that promotes meaningful discussion;
- (b) ensure adherence to the Committee's Charter and that the adequacy of the Committee's Charter is reviewed annually;
- (c) provide leadership to the Committee to enhance the Committee's effectiveness, including:
  - (i) act as liaison and maintain communication with the Board to optimize and co-ordinate input from directors, and to optimize the effectiveness of the Committee. This includes ensuring that Committee materials are available to any director upon request and reporting to the Board on all decisions of the Committee at the first meeting of the Board after each Committee meeting and at such other times and in such manner as the Committee considers advisable;
  - (ii) ensure that the Committee works as a cohesive team with open communication, as well as to ensure open lines of communication among the independent auditors, financial and senior management and the Board for financial and control matters;
  - (iii) ensure that the resources available to the Committee are adequate to support its work and to resolve issues in a timely manner;
  - (iv) ensure that the Committee serves as an independent and objective party to monitor the Company's financial reporting process and internal control systems, as well as to monitor the relationship between the Company and the independent auditors to ensure independence;
  - (v) ensure that procedures as determined by the Committee are in place to assess the audit activities of the independent auditor t functions; and

- (vi) ensure that procedures as determined by the Committee are in place to review the Company's public disclosure of financial information and assess the adequacy of such procedures periodically;
- (d) ensure that procedures as determined by the Committee are in place for dealing with complaints received by the Company regarding accounting, internal controls and auditing matters, and for employees to submit confidential anonymous concerns;
- (e) manage the Committee, including:
  - (i) adopt procedures to ensure that the Committee can conduct its work effectively and efficiently, including committee structure and composition, scheduling, and management of meetings;
  - (ii) prepare the agenda of the Committee meetings and ensure pre-meeting material is distributed in a timely manner and is appropriate in terms of relevance, efficient format and detail;
  - (iii) ensure meetings are appropriate in terms of frequency, length and content;
  - (iv) obtain a report from the independent auditors on an annual basis, review the report with the Committee and arrange meetings with the auditors and financial management to review the scope of the proposed audit for the current year, its staffing and the audit procedures to be used;
  - (v) oversee the Committee's participation in the Company's accounting and financial reporting process and the audits of its financial statements;
  - (vi) ensure that the auditor's report directly to the Committee, as representatives of the Company's shareholders;
  - (vii) annually review with the Committee its own performance, report annually to the Board on the role of the Committee and the effectiveness of the Committee in contributing to the effectiveness of the Board;
  - (viii) together with the Board, oversee the structure, composition and membership of, and activities delegated to, the Committee from time to time; and
- (f) perform such other duties as may be delegated from time to time to the Chair by the Board.

## SCHEDULE 1-C

**ARIZONA SONORAN COPPER COMPANY INC.**  
**PROCEDURE FOR THE SUBMISSION OF COMPLAINTS OR CONCERNS REGARDING**  
**ACCOUNTING, INTERNAL ACCOUNTING CONTROLS, OR AUDITING MATTERS**

1. The Company shall forward to the Audit Committee any complaints that it has received regarding accounting, internal accounting controls, or auditing matters.
2. any employee of the Company so desires, he or she may submit any concerns or complaints, on a confidential and anonymous basis, by sending any concerns or complaints in a sealed envelope to:

Attention: Chair of the Audit Committee  
950 W, Elliot Rd., Suite 122  
Tempe, Arizona 85284

The email is to be clearly marked, "To be reviewed by the Audit Committee only."

3. Contact information including a phone number and e-mail address shall be published for the Chair of the Audit Committee on the Company's website for any individuals wishing to contact the Chair directly.
4. At each of its meetings following the receipt of any information pursuant to this Schedule "C", the Audit Committee shall review and consider any such complaints or concerns and take any action it deems appropriate in the circumstances.
5. The Audit Committee shall retain any such complaints or concerns along with the material gathered to support its actions for a period of no less than seven (7) years. Such records will be held on behalf of the Audit Committee by the Chair of the Audit Committee.
6. This Schedule "C" shall appear on the Company's website as part of its Audit Committee Charter.

## SCHEDULE 1-D

### ARIZONA SONORAN COPPER COMPANY INC. PROCEDURES FOR APPROVAL OF NON-AUDIT SERVICES

1. The Company's external auditors shall be prohibited from performing for the Company the following categories of non-audit services:
  - (a) bookkeeping or other services related to the Company's accounting records or financial statements;
  - (b) appraisal or valuation services, fairness opinion or contributions-in-kind reports;
  - (c) actuarial services;
  - (d) internal audit outsourcing services;
  - (e) management functions;
  - (f) human resources;
  - (g) broker or dealer, investment adviser or investment banking services;
  - (h) legal services; and
  - (i) any other service that the Canadian Public Accountability Board or International Accounting Standards Board or other analogous board which may govern the Company's accounting standards, from time to time determines is impermissible
  
2. In the event that the Company wishes to retain the services of the Company's external auditors for tax compliance, tax advice or tax planning, the Chief Financial Officer of the Company shall consult with the Chair of the Committee, who shall have the authority, subject to confirmation that such services will not compromise the independence of the Company's external auditors, to approve or disapprove on behalf of the Committee, such non-audit services. All other non-audit services shall be approved or disapproved by the Committee as a whole.

The Chief Financial Officer of the Company shall maintain a record of non-audit services approved by the Chair of the Committee or the Committee for each fiscal year and provide a report to the Committee no less frequently than on a quarterly basis.

## SCHEDULE "B"

### RECENT DRILLING HIGHLIGHTS

Below are the highlights of the drilling results from the Park / Salyer Project. The technical information provided herein has been reviewed and verified by Mr. Allan Schappert, CPG, who is a qualified person as defined in NI 43-101.

**Table 1 – Drilling Highlights**

Drill Hole	Zone	Metres			Feet			Grade (%)		
		from	to	length	from	to	length	CuT	Tsol	Mo
ECP-045	oxide	343.2	376.1	32.9	1,126.0	1,234.0	108.0	0.89	0.83	0.020
	including	354.8	376.1	21.3	1,164.0	1,234.0	70.0	1.16	1.07	0.019
	<b>enriched</b>	<b>402.3</b>	<b>583.7</b>	<b>181.4</b>	<b>1,320.0</b>	<b>1,915.0</b>	<b>595.0</b>	<b>1.29</b>	<b>1.18</b>	<b>0.018</b>
	including	402.3	434.9	32.6	1,320.0	1,427.0	107.0	1.81	1.71	0.018
	and	501.4	556.3	54.9	1,645.0	1,825.0	180.0	1.68	1.61	0.024
	primary	583.7	648.3	64.6	1,915.0	2,127.0	212.0	0.37	0.02	0.009
ECP-042	oxide	268.5	272.2	3.7	881.0	893.0	12.0	1.00	0.94	0.008
	enriched	332.3	336.9	4.7	1,090.1	1,105.4	15.3	1.06	1.05	0.012
	<b>enriched</b>	<b>360.4</b>	<b>386.6</b>	<b>26.2</b>	<b>1,182.3</b>	<b>1,268.3</b>	<b>86.0</b>	<b>2.26</b>	<b>2.11</b>	<b>0.020</b>
	<b>including</b>	<b>366.7</b>	<b>374.9</b>	<b>8.2</b>	<b>1,203.0</b>	<b>1,230.0</b>	<b>27.0</b>	<b>4.22</b>	<b>3.78</b>	<b>0.019</b>
	enriched	402.9	416.8	13.9	1,322.0	1,367.6	45.6	0.64	0.45	0.008
	enriched	446.2	477.0	30.8	1,464.0	1,565.0	101.0	0.67	0.26	0.022
	primary	477.0	654.2	177.2	1,565.0	2,146.3	581.3	0.42	0.04	0.027
	including	480.1	520.9	40.8	1,575.0	1,709.0	134.0	0.57	0.05	0.038
	and	595.3	607.5	12.2	1,953.0	1,993.0	40.0	0.56	0.04	0.160

**Notes:**

- (1) Intervals are presented in core length; are drilled with vertical dip angles.
- (2) Drill assays assume a mineralized cut-off grade of 0.5% CuT reflecting the potential for heap leaching in the case of Oxide and Enriched based on underground material, or to provide typical average grades in the case of Primary material. Holes were terminated in either Primary mineralization or the basement fault.
- (3) Assay results are not capped. Intercepts are aggregated within geological confines of major mineral zones.
- (4) True widths are not known.

**Table 2 – Drilling Details**

Hole	Easting	Northing	Elevation	Depth	Azimuth	Dip
ECP-042	383750.000	58600.000	1373.537	2151.500	0	-90
ECP-045	384249.114	59511.375	1382.548	2127.000	0	-90