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# Johnson Camp Mine



## NI 43-101 Technical Report

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The effective date of this technical report is March 12, 2025. The issue date of this technical report is March 31, 2025. See Appendix A, Technical Report Contributors and Professional Qualifications, for certificates of qualified persons. These certificates are considered the date and signature page of this technical report in accordance with Form 43-101F1.

JOHNSON CAMP MINE  
FORM 43-101F1 TECHNICAL REPORT

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## LIST OF APPENDICES

APPENDIX	DESCRIPTION
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B	Mineral Claim Detail

## **1 EXECUTIVE SUMMARY**

M3 Engineering & Technology Corporation (M3) was commissioned by Gunnison Copper Corp. (GCC) to prepare a technical report in accordance with the Canadian National Instrument 43-101 (NI 43-101) standards for reporting mineral properties, for the Johnson Camp Mine Heap Leach Project (the “JCM Project” or the “Project”) in Cochise County, Arizona, USA. Gunnison Copper Corp. has restarted mining, heap leaching and processing through solvent extraction-electrowinning (SX-EW) as a result of Nuton’s decision to proceed with and fund an industrial-scale demonstration of its bio-heap leaching technology on primary sulfides (the Nuton Demonstration). Nuton, a Rio Tinto venture, has a portfolio of proprietary nature-based leaching technologies and capabilities that offer the potential to economically unlock copper through bio-heap leaching, including from primary sulfide resources. The plant was upgraded in 2019 and 2020 to treat Pregnant Leach Solutions (PLS) solutions from the Gunnison In-Situ Recovery (ISR) Project located nearby to effect copper recovery by SX-EW, producing salable copper cathodes. For this project, a new leach pad, Pad 5, is presently being constructed. The Nuton Demonstration is expected to include 3 years of mining and 5 years of leaching. Simultaneously, run-of-mine (ROM) material not treated with Nuton™ technologies will be mined and leached on a separate portion of the leach pad. All PLS solutions will be processed at the existing Johnson Camp SX-EW facility.

The Johnson Camp Mine is located about 65 miles east of Tucson, Arizona, on the southeastern flank of the Little Dragoon Mountains in the Cochise Mining District. The property is within the copper porphyry belt of Arizona. The Johnson Camp Mine contains two open pit mines, the Burro pit and the Copper Chief pit, that contain copper oxide, transition, and sulfide mineralization with associated molybdenum (not recovered by heap leaching), in potentially economic concentrations. Mining by a former owner, Nord Resources Corporation (Nord), ceased in 2012.

The Project mine plan includes mining of oxide, transition and sulfide materials from the Burro pit for 3 years and heap leaching for an additional 2 years to produce copper cathode at a capacity of up to 25 million pounds per annum (mppa). Heap leaching of primary sulfide copper using Nuton’s proprietary technology is proposed for a portion of the leach material described in this technical report.

To restart the Johnson Camp Mine, construction of a new heap leach pad, Pad 5, which is fully permitted has been initiated. Leach pad construction is planned to be complete and irrigation started in less than one year. Piping of PLS and raffinate lines from Pad 5 to the JCM ponds also fits within this time frame.

GCC is using a contract miner for all mining-related activities, crushing and agglomerating, and placement of material on the leach pads. GCC is using GCC staff for heap leach management, SX-EW operation, and general site management.

GCC is using RESPEC, Independent Mining Consultants, Call & Nicholas, Clear Creek Associates, and M3 Engineering to prepare this technical report. All consultants have experience with the JCM property and the capability to support the Project.

The costs are based on 1st quarter 2025 U.S. dollars.

### **1.1 KEY DATA**

The key results of this study are as follows.

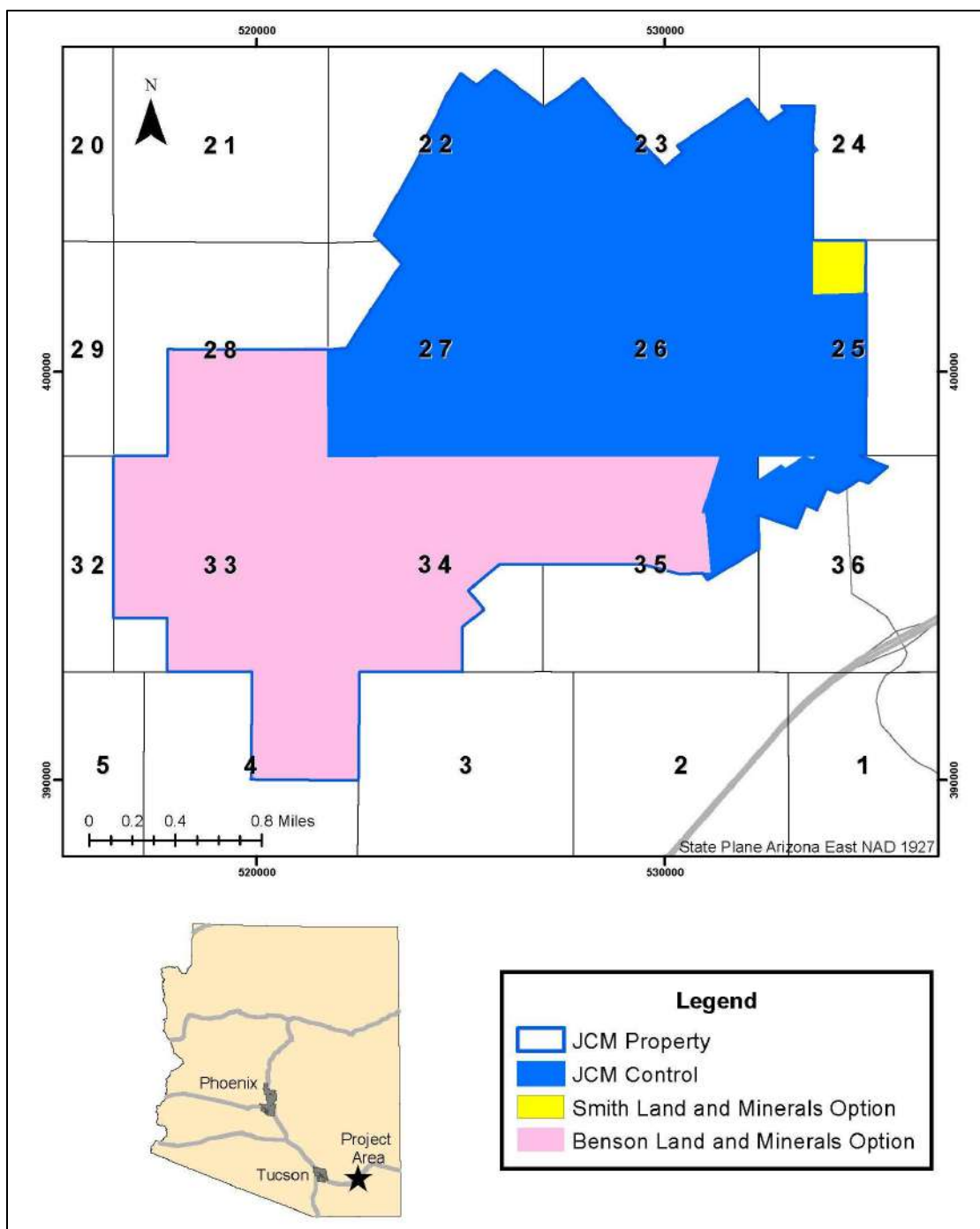
- The Project currently has a pit constrained mineral resource of 101.6 million short tons of measured and indicated material, and 24.6 million short tons of inferred mineral resources with respective total copper grades of 0.34% measured and indicated, and 0.33% inferred.



- Total copper recovery is estimated to be 50.1%, made up of varying recoveries of oxide, transition, and sulfide materials processed as either ROM or crushed and agglomerated products. Recovery of copper is estimated to be 80% of recoverable copper during the first year after placement on the leach pad and the remaining 20% of these estimates during the second year.
- Primary sulfide copper mineralization is mainly chalcopyrite, which typically responds poorly to conventional heap leaching conditions. However, the use of Nuton™ technology will significantly improve extraction.
- Accelerated leaching of sulfide mineral resources will be enhanced by crushing and agglomeration.
- Bacterial oxidation of sulfide minerals will reduce acid consumption for the heap leaching operation.

## **1.2 PROPERTY DESCRIPTION AND LOCATION**

The Project is located in Cochise County, Arizona, approximately 65 miles east of Tucson in the historic Johnson Camp mining district. Figure 1-1 is a general location map and property location near the I-10 freeway.



Source: GCC, 2025

**Figure 1-1: Project Location Map**

The Project is held by GCC through its wholly owned subsidiaries Excelsior Mining Arizona, Inc. (GCAZ) and Excelsior Mining Holdings, Inc. (GCH). Acquisition of the Nord Resources Corporation assets took place through a court-appointed receiver in December 2015.

On July 31, 2023, GCC announced that it had entered into an option agreement (Nuton Option Agreement) with Nuton to further evaluate the use of its Nuton™ copper heap leaching technologies (Nuton™ technologies) at Johnson Camp.

Under the Nuton Option Agreement, GCC remains the operator and Nuton funds GCC's costs associated with a two-stage work program at Johnson Camp.

The Nuton Option Agreement required that if Nuton proceeds to Stage 2, it would make a US\$5 million payment to GCC for the use of existing infrastructure at the Johnson Camp mine for the Stage 2 work program. Nuton is also responsible for funding all of GCC's costs associated with Stage 2. On May 15, 2024, GCC announced that Nuton had elected to proceed to Stage 2 of the existing Nuton Option Agreement.

After the completion of Stage 2, Nuton will have the right to exercise the option to joint venture and form a joint venture with GCU for Johnson Camp per mutually agreeable terms whereby Nuton would hold an initial 49% and GCC an initial 51%. The purpose of the joint venture is to continue the development of the Johnson Camp Mine using Nuton™ technologies. Should Nuton not exercise the option to form a joint venture, Nuton and GCC will discuss in good faith Gunnison's continued use of the Nuton™ technologies at the Johnson Camp Mine subject to certain licensing terms and conditions to be agreed.

### **1.3 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY**

The Project is located in a sparsely populated, flat to slightly undulating ranching and mining area about 65 road miles east of Tucson, Arizona. The Tucson metropolitan area is a major population center (approximately 1,000,000 persons) with a major airport and transportation hub and well-developed infrastructure and services that support the surrounding copper mining and processing industry. The nearby towns of Benson and Wilcox, along with Tucson, can supply sufficient skilled labor for the Project.

Access to the Project is via the Interstate (I-10) freeway from Tucson and Benson to the west or Wilcox to the east. The Johnson Camp Mine can be accessed from the Johnson Road exit along 1.5 miles of improved dirt roads north of I-10.

The elevation on the property ranges from 4,500 to 5,500 feet above mean sea level in the eastern Basin and Range physiographic province of southeastern Arizona. The climate varies with elevation, but in general the summers are hot and dry, and winters are mild.

Vegetation on the property is typical of the upper Sonoran Desert and includes bunch grasses, yucca, mesquite, and cacti.

### **1.4 HISTORY**

Modern mining and leaching operations at the Johnson Camp Mine began in the 1970s by Cyprus Minerals. Successor owners and operators include Arimetco, who mined JCM in the 1980s-early 90s, North Star, Summo Minerals, and Nord Resources Corporation (Nord) who commenced mining in 2009 until 2012. Nord mined fresh material until mid-2010 and maintained leaching operations until late 2015, when the property was purchased by GCC.

### **1.5 GEOLOGICAL SETTING AND MINERALIZATION**

The Johnson Camp Mine is located within the Mexican Highland region of the Basin and Range province, which is characterized by fault-bounded mountain ranges, with large intrusions forming the cores of the ranges. The Project lies on the eastern edge of the Little Dragoon Mountains within the Cochise mining district. The Little Dragoon Mountains are an isolated, fault bounded horst block comprised of rocks spanning from 1.4 billion years ago (Ga) Pinal Group schists to Holocene sediments. The southern portion of the Little Dragoon Mountains consists predominately of the Texas Canyon Quartz Monzonite of Tertiary age, whereas the Pinal Group schists and a sequence of Paleozoic sedimentary units dominate the northern half of the range. At Johnson Camp, the important Paleozoic host is the

Cambrian Abrigo Formation. The Texas Canyon Quartz Monzonite is porphyritic intrusion that crops out to the southwest of the Burro Pit at the Johnson Camp Mine.

Several deformations have occurred in the area with the most recent being the latest Cretaceous-Paleocene Laramide Orogeny compression, followed by Miocene and younger Basin and Range extension that has modified the topography to its current appearance.

The stratigraphy of the Burro pit and Copper Chief pit includes, from lowest to highest, Pioneer shale, diabase sill, Bolsa quartzite, three members of the Abrigo formation, and the Martin dolomite. Most mineralization is hosted in the lower and middle members of the Abrigo formation.

Moderate to intense calc-silicate alteration including garnet, epidote, and diopside are common in various assemblages, most intense calc-silicate alteration in the Lower and Middle Abrigo formations. Pervasive quartz veining occurs in both the Abrigo Formation and underlying Bolsa Quartzite throughout the Johnson Camp Mine area. Quartz vein orientations are typically sub-parallel to the stratigraphic units.

Primary copper mineralization at the Johnson Camp Mine is dominantly found along bedding planes or in veins and replacements as chalcopyrite along with quartz and pyrite, closely associated with skarn and calc-silicate alteration in the rock. The host formations are generally within the Bolsa Quartzite, Diabase Units, Lower and Middle Abrigo Formations. Oxidized mineralization consists of chrysocolla, malachite, copper limonite, and manganiferous wad; decreases with depth; but penetrates faults and stratigraphic contacts. Supergene chalcocite and occasional native copper occur generally below the oxidized zone. Below the supergene zone, the mineralization transitions to primary sulfides with local zones of supergene mineralization.

## **1.6 DEPOSIT TYPES**

The Johnson Camp Mine copper deposit is a type of copper skarn. The copper skarn at Johnson Camp and collectively in the Cochise mining district is presumably related to the Texas Canyon Quartz Monzonite. Copper skarns generally form in calcareous shales, dolomites, and limestones peripheral or adjacent to the margins of diorite to granite intrusions that range from dikes and sills to large stocks or phases of batholithic intrusions, and frequently are associated with mineralized intrusions. Copper mineralization forms along structurally complex and fractured rocks and convert the calcareous shales and limestones to andradite-rich garnet assemblages near the intrusive body, and to pyroxene and wollastonite rich assemblages at areas more distal to the intrusive that are subject to retrograde alteration with mineral hydrated silicate assemblages that overprint earlier garnet and pyroxene.

Mineralization at Johnson Camp occurs approximately 500 ft northeast of known occurrences of the Texas Canyon Quartz Monzonite intrusion as proximal skarn related to a porphyry copper system. This assumption is supported by the high abundance of garnet-epidote alteration in the mineralized zones, and the characterization of the deposits in numerous historical publications.

## **1.7 EXPLORATION**

Open pit mining commenced in 1975 by Cyprus and replaced the underground mining operations following the completion of an exploratory drilling program that defined the reserve of the Burro deposit. Cyprus and Arimetco collectively drilled 254 holes within both the Burro and Copper Chief pits. In 1999, Nord focused drilling exploration efforts on prospective targets outside of the pits that added no copper mineralization could be classified as reserves. GCC completed an exploration drilling program in 2022, and a metallurgical drill program in 2023 and 2024, aimed to define sulfide zones and collect samples of sulfide material for column tests.

## **1.8 DRILLING**

The Johnson Camp Mine database contains 390 drill holes total 135,600 feet of drilling. Several drilling campaigns and operators span the contents of the database. Based on RESPEC's current knowledge, historical operators of the campaigns include Cyprus Mining (187 drill holes), Arimetco (83 drill holes), Nord (31 drill holes), Sumitomo (12 drill holes), and 16 drill holes were completed by an operator unknown to RESPEC. GCC drilled 77 holes. Drilling is concentrated in and immediately around the historically producing open pits.

Table 1-1 is a breakdown of the drilling and operators in the Johnson Camp Mine area.

**Table 1-1: Summary of Johnson Camp Drilling**

<b>Operator</b>	<b>Year</b>	<b>Holes</b>	<b>Feet</b>
Cyprus Mining	1960 – 1986	171	59,818
Arimetco	1989 - 1997	83	24,637.5
Summo USA Corp.	1998	12	5,800
Nord Resources Corp.	2008-2010	31	14,368
GCC	2022 - 2024	77	29,377.5
Unknown		16	1,599
<b>Totals</b>		<b>390</b>	<b>135,600</b>

The drilling sampling procedures provided samples that are representative and of sufficient quality for use in the resource estimations discussed in Section 14. The QP is unaware of any sampling or recovery factors that materially impact the mineral resources discussed in Section 14.

There is a general lack of down-hole deviation survey data for the historical holes in the Johnson Camp Mine area. The paucity of such data is not unusual for drilling done prior to the 1990s, the lack of deviation data contributes a level of uncertainty as to the exact locations of drill samples at depth. However, these uncertainties are mitigated to a significant extent by the vertical orientation of nearly all drill holes, and the open-pit nature of any potential future mining operation that is based in part on data derived from the historical holes.

## **1.9 SAMPLE PREPARATION, ANALYSIS AND SECURITY**

All of the historical drilling, sample preparation and analysis of the samples presented in this technical report was under the control of the previous property owners. GCC drilled seventy-seven holes between 2022 and 2024 and conducted core-duplicate sampling in 2016 and 2017.

The laboratory sample preparation and analysis procedures used by the previous owners of the deposits are unknown; however, major commercial laboratories using best practices at the time completed the majority of analyses. Additionally, most of the historical data were generated by well-known mining companies.

The data, information, samples, and core from the deposits have been under the control and security of AzTech Minerals since November 2006 and then GCC since October 2010. The original Information and samples are stored at GCC's core storage facility in Casa Grande, with numerous copies held by GCC at its Phoenix, Arizona office.

The certification status of some of the historical analytical laboratories is not known. Southwestern Assayers and Chemists is the predecessor to Skyline. Mr. Bickel believes the historical labs were independent commercial laboratories that were widely recognized and used by the mining industry at that time.

Documentation of the methods and procedures used for historical sample preparation, analyses, and sample security, as well as for quality assurance/quality control procedures and results, is incomplete and in many cases not available. Despite this, some of the historical assay certificates have been preserved and GCC was able to reasonably duplicate the original results (described in 12.2.4). The QP is satisfied that the historical analytical data are adequate to support the current resources, interpretations, conclusions, and recommendations summarized in this technical report.

GCC's sample preparation and analyses were performed at a well-known certified laboratory, and the sample security and QA/QC procedures are adequate to support the current resources, interpretations, conclusions, and recommendations summarized in this technical report.

#### **1.10 DATA VERIFICATION**

Data verification, the process of confirming that data has been generated with proper procedures, has been accurately transcribed from the original source and is suitable to be used, has been performed by Mr. Bickel through reviews of original data and certificates, drill core, a site visit, and audits and analyses of GCC's drill-hole database. As a part of the verification of historical assays, RESPEC also analyzed core-duplicate data generated by GCC in 2016 and 2017 and compared the results to historical assays. The results are discussed in Section 12. There were no limitations on, or failure to conduct, the data verification for this technical report other than those discussed in this technical report. Mr. Bickel has verified that the Project data are adequate as used in this technical report, most significantly to support the estimation and classification of the mineral resources reported herein.

#### **1.11 MINERAL PROCESSING AND METALLURGICAL TESTING**

Metallurgical testwork has been conducted in numerous campaigns by previous operators and owners including Superior Oil, Quintana Minerals, Phelps Dodge, Magma Copper, Arimetco, and Nord Resources. Testwork included many rounds of bottle roll and column testing. Early test programs indicated that total sulfuric acid consumption (before the electrowinning credit) will be approximately 9 lb H<sub>2</sub>SO<sub>4</sub>/lb of copper dissolved, that average PLS grade will be as high as 1.5 gpl Cu, and that about 65% of the total copper will dissolve, while as much as 95% of the ASCu could dissolve after sufficient contact time. This prior test work did not include augmented sulfide and transitional mineral leaching.

Nord Resources conducted eight column tests in 2011 on crushed and agglomerated material and 35 column tests in 2012 on crushed material minus 1" and minus 6". Of these columns, 23 provided useful results to determine copper recovery and acid consumption. The column testing programs are described in Section 13.2.1. The results of some of the column tests produced ambiguous results regarding acid consumption (higher with a 6" crush than a 1" crush).

Lacking recent laboratory testing and comparison of results with current heap performance, a precise estimation of near-term operating results requires further test work. However, for the purpose of this study it is not unreasonable to expect up to 86% ASCu extraction, up to 76% CNCu extraction. Net acid consumptions in pounds per ton of mineralized ROM material are expected to be as follows: Upper Abrigo, 70; Middle Abrigo, 70; Lower Abrigo, 26, and Bolsa Quartzite, 22. For minus 1-inch crushed and agglomerated heap feed, the net acid consumption will be about 35% higher for each lithology.

GCC management, in collaboration with an industry-leading organization that is developing heap leaching applications to primary copper sulfide mineralization, have launched a sampling and metallurgical column testing program for material from the Burro pit, focusing on sulfide and mixed sulfide/transition/oxide mineralization. As the JCM pits deepen and non-ASCu copper minerals begin to overtake predominantly non-sulfide species, total copper extraction will decline, and the rate of extraction will diminish. Biologically-augmented heap leaching at elevated temperatures is designed to counteract this effect.

## 1.12 MINERAL RESOURCE ESTIMATE

The mineral resource estimation for the Johnson Camp Mine was completed for disclosure in accordance with NI 43-101 with an effective date of November 05, 2024. The Johnson Camp Mine mineral resources are classified in order of increasing geological and quantitative confidence into Inferred, Indicated, and Measured categories in accordance with the “CIM Definition Standards - For Mineral Resources and Mineral Reserves” (2014). All mineral resources in this estimate are classified as Inferred. A full description of the Johnson Camp mineral resource estimation methodology is presented in Section 14.

The Johnson Camp Mine copper resources were modeled and estimated using information provided by GCC. The information is derived from historical core holes drilled by Cyprus Mining, Arimetco, Summo USA Corp., and Nord Resources Corp. The drill hole database also includes analyses performed by GCC on the historical core.

Mineral domains were modeled by RESPEC to respect the lithologic and structural interpretations of the deposit. Following statistical evaluation of the drillhole data, mineral domains were modeled on cross sections for total copper (“TCu”). Low-, mid-, and high-grade domains were modeled for total copper and were numbered 100, 200, and 300, respectively. Grade domains were interpreted based on copper grade domains that ideally correspond to the underlying geology. The grade domain ranges are shown in Table 1-2 below:

**Table 1-2: Grade Domain Ranges**

Domain	Total Copper (%)
100	~0.025 to ~0.15
200	~0.15 to 0.7
300	> ~0.7

Soluble copper ratios were estimated within the total copper domains and lithologic units and used to calculate a soluble copper grade. A full description of the soluble copper estimate is in Section 14.6.2.

Mineral resources were estimated for total copper (“TCu”), acid-soluble copper (“ASCu”), cyanide-soluble copper (“CNCu”), and sulfide copper (“CuS”). Once the final estimate was complete, a pit optimization using the inputs described in Section 14.10 were applied to the resource to evaluate if it has reasonable prospects for economic extraction. The contained resources within the cut-off grade defined by the pit optimization are given in Table 1-3.

**Table 1-3: Johnson Camp Mineral Resources**  
(0.12% TCu cut-off)

Classification	Tons	% TCu	% ASCu	% CNCu	% CuS	lbs TCu	lbs ASCu	lbs CNCu	lbs CuS
Measured	31,493,000	0.36	0.15	0.07	0.08	226,707,000	94,697,000	46,007,000	49,075,000
Indicated	69,720,000	0.34	0.15	0.06	0.05	467,732,000	214,921,000	77,380,000	76,624,000
Inferred	24,968,000	0.32	0.15	0.05	0.05	162,130,000	75,406,000	24,895,000	24,295,000

1. The Effective Date of the mineral resources is November 05, 2024.
2. The Project mineral resources are shown in bold and are comprised of all model blocks at a 0.12 % TCu cut-off that lie within optimized resource pits.
3. Mineral resources that are not mineral reserves do not have demonstrated economic viability.
4. The estimate of mineral resources may be materially affected by geology, environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.
5. Rounding as required by reporting guidelines may result in apparent discrepancies between tons, grade, and contained metal content.

Table 1-4 provides a breakdown of tons and grade of the JCM mineral resources by oxidation groups defined in modeling at a cut-off grade of 0.12% TCu that fit within the simulated economic pit shell.



**Table 1-4: Johnson Camp Mineral Resources by Oxidation Group**  
(0.12% TCu cut-off)

Classification	Oxidation Group	tons	% TCu	% ASCu	% CNCu	% CuS	lbs TCu	lbs ASCu	lbs CNCu	lbs CuS
Measured	Sulfide	3,640,000	0.48	0.04	0.08	0.36	35,076,000	3,136,000	5,926,000	26,014,000
Indicated		3,085,000	0.41	0.06	0.07	0.27	24,997,000	3,755,000	4,595,000	16,646,000
Inferred		86,000	0.40	0.08	0.08	0.24	694,000	145,000	136,000	414,000
Measured	Transition	5,614,000	0.43	0.14	0.20	0.09	48,338,000	15,554,000	22,818,000	9,965,000
Indicated		6,514,000	0.36	0.12	0.16	0.08	47,119,000	15,196,000	21,027,000	10,896,000
Inferred		773,000	0.32	0.07	0.20	0.04	4,921,000	1,159,000	3,101,000	661,000
Measured	Mixed	6,519,000	0.32	0.15	0.06	0.10	41,445,000	19,994,000	8,355,000	13,096,000
Indicated		19,573,000	0.36	0.16	0.08	0.13	141,277,000	61,532,000	30,664,000	49,081,000
Inferred		9,148,000	0.36	0.15	0.08	0.13	65,792,000	28,232,000	14,340,000	23,220,000
Measured	Oxide	9,943,000	0.34	0.22	0.03	0.00	67,284,000	43,527,000	6,366,000	-
Indicated		23,854,000	0.34	0.21	0.03	0.00	161,602,000	99,039,000	13,325,000	-
Inferred		7,255,000	0.35	0.22	0.03	0.00	50,240,000	31,404,000	3,978,000	-
Measured	Iron-rich oxide	5,776,000	0.30	0.11	0.02	0.00	34,564,000	12,485,000	2,542,000	-
Indicated		16,694,000	0.28	0.11	0.02	0.00	92,737,000	35,399,000	7,769,000	-
Inferred		7,707,000	0.26	0.09	0.02	0.00	40,484,000	14,467,000	3,340,000	-

Future drilling, exploration, and resource definition at Johnson Camp Mine should focus on increasing the understanding of the distribution of cyanide soluble copper mineralization. Infill drilling in key areas to increase drill density, and drill-testing of the unconstrained limits of the deposit, particularly down-dip from known mineralization, should be prioritized.

### 1.13 MINERAL RESERVE ESTIMATE

No mineral reserves are reported in this technical report. The Author cautions that GCC has decided to commence construction and proceed to production at the Project. GCC did not base this production decision on any feasibility study of Mineral Reserves demonstrating economic and technical viability of the mines. As a result, there may be increased uncertainty and risks of achieving any level of recovery of minerals from the mine at the Project or the costs of such recovery. As the Project does not have established Mineral Reserves, GCC faces higher risks that anticipated rates of production and production costs will not be achieved, each of which risks could have a material adverse impact on GCC's ability to continue to generate anticipated revenues and cash flows to fund operations from the Project and ultimately the profitability of the operation.

### 1.14 MINING METHOD

Mining of the Johnson Camp (JCM) deposit for the Nuton Demonstration is planned to be accomplished using conventional open pit hard rock mining methods. The 3-year mine plan was developed to produce sulfide material for the Nuton Demonstration as quickly as possible. Mining of the deposit is expected to be accomplished with front end loaders and 70-100 ton haul trucks. Mining is planned on 20-ft and 30-ft bench heights. Mining will be performed by a contract miner.



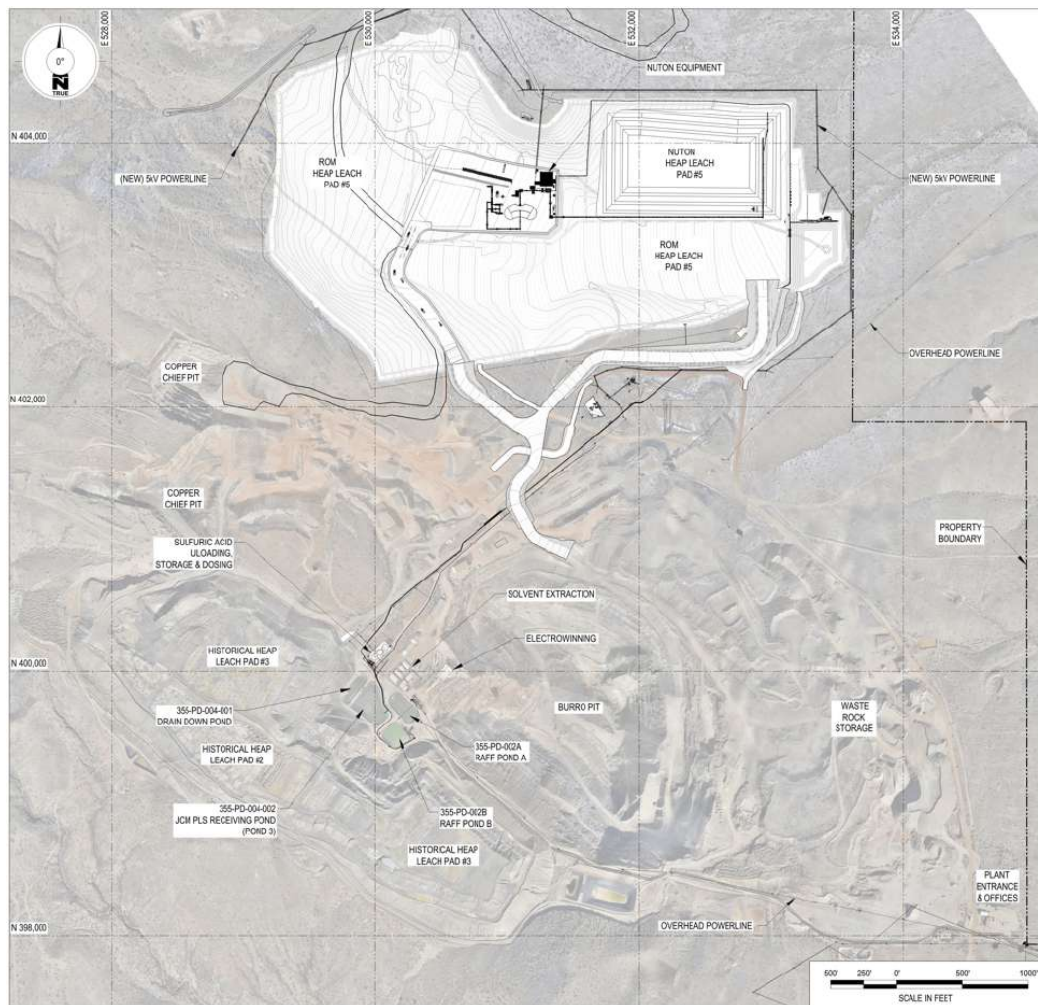
## 1.15 RECOVERY METHODS

The Johnson Camp Mine has a fully working SX-EW plant capable of producing 25 million lbs of cathode copper per year when fully operating. For the Nuton Demonstration, a new heap leach pad, designated Pad 5, is under construction. The leach pad will host both ROM and crushed and agglomerated material separated by a dividing berm. Most of the new equipment will be located on top of Pad 5 with leach material transported to the pad by haul truck. The crushed and agglomerated material will be stacked with conveyors into an engineered heap. This material will be aerated and irrigated by a series of blowers and perforated piping.

PLS flows from the crushed and ROM sections of the pad will be measured and sampled independently before reporting to the existing PLS pond via a new pipeline. The PLS will be treated in the JCM SX-EW facility.

## 1.16 PROJECT INFRASTRUCTURE

The Johnson Camp Mine is an existing and operating copper hydrometallurgical plant. The site includes two open pits, waste dumps, SX-EW plant facilities and mine infrastructure that will be used when mine operations in the Burro Pit resumes. A new heap leach pad is in construction for the placement of newly mined material (Figure 1-2).



Source: M3, 2024

Figure 1-2: Site Plan of the Johnson Camp Mine showing the location of new leach pad, Pad 5

Water is supplied by two wells on site that produce 266 gpm of process make-up water. Additional water will be available from hydraulic control wells from the Gunnison wellfield and from pit dewatering.

#### **1.16.1 Power**

An existing 69 kV power line runs to the JCM substation where power is stepped down to 5 kV for distribution around the JCM mine site. Power distribution to the equipment located on Pad 5 will be fed with power stepped up to 13.8 kV from the main JCM substation. The average power consumption for the JCM project is estimated to be 7.1 kW with a demand load of 10.7 kW.

#### **1.17 MARKET STUDIES AND CONTRACTS**

GCC and Nuton have agreed that Nuton will receive 100% of the revenue generated from the sale of copper cathode production from JCM until Nuton recoups its Stage 2 funding and then GCC will retain 100% of the revenue until a joint venture is formed or the Nuton Option Agreement is terminated. Nuton also has the right to market 100% of the copper cathode production from JCM until Nuton recoups its Stage 2 funding and will enter into off-take agreements for such purpose.

Please refer to Section 19 of this technical report for other relevant Market Studies and Contracts.

#### **1.18 ENVIRONMENTAL AND PERMITTING**

The Johnson Camp Mine (JCM) is an active open pit mine. A processing (SX-EW) plant and associated ponds located at JCM are used to process pregnant leach solutions (PLS) from JCM. JCM has resumed mining of the open pit and will resume the heap leaching process using the mineralized material that will be placed on a new heap leach pad. Existing permits have been modified to address resumption of mining at JCM. Section 20 of this technical report describes the environmental permits that have been obtained for JCM.

#### **1.19 CAPITAL AND OPERATING COSTS**

A capital cost estimate has been prepared to put the Johnson Camp Mine back into service for the Nuton Demonstration. This cost estimate includes:

- Earthworks and lining of new heap leach pad, Pad 5
- Haul roads and access roads
- Water diversions and emergency runoff ponds
- Process equipment and piping upgrades
- Electrical distribution upgrades
- Indirect & Owners costs
- Contingency

Through the end of December 2024, GCC has spent \$36,925 towards the JCM Restart and Nuton Demonstration, which expenses have been funded by Nuton.

Operating costs for the restart of the JCM operation have been built up from the following sources:

- Historical plant operating costs,
- New detailed contractor mining costs,
- Updated sulfuric acid and reagent consumptions and costs,

- Updated power loads and utility costs,
- Comparative labor costs from other recent SX-EW projects,
- Historical estimate factors for maintenance and services.

G&A costs have been updated from historical G&A costs from JCM.

The cost for reclamation and closure for Pad 5 and the JCM operation as of December 31, 2024 is \$7,281.757.

## **1.20 ECONOMIC ANALYSIS**

There are no current estimates of Mineral Reserves on the Project. While the Project has a current Mineral Resource Estimate, the future production forecast is not based on that Mineral Resource Estimate. GCC made decisions to commence construction and enter production at the Project without having completed final feasibility studies. Accordingly, GCC did not base its construction and production decisions on any feasibility studies of Mineral Reserves demonstrating economic and technical viability of the Project, with positive cash flow. As a result, there is increased uncertainty and risks of achieving any level of recovery of minerals from the Project or the costs of such recovery. As the Project does not have established Mineral Reserves, GCC faces higher risks that the anticipated rates of production and production costs, such as those provided in this technical report, will not be achieved. These risks could have a material adverse impact on GCC's ability to continue to generate anticipated revenues and cash flows to fund operations from and ultimately achieve or maintain profitable operations at the Project.

The Mineral Resource Estimate on the Project includes inferred resources. Inferred Mineral Resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. In addition, NI 43-101 prohibits the disclosure of the results of an economic analysis that includes or is based on inferred Mineral Resources. As a result, the Author has determined that it is not permitted to provide an economic analysis of the Project.

## **1.21 ADJACENT PROPERTIES**

There are no relevant adjacent properties that are not controlled by GCC.

## **1.22 INTERPRETATION AND CONCLUSIONS**

The JCM SX-EW plant was upgraded in 2019 and 2020, and JCM ponds are fully operational.

The full capital cost for restarting the JCM heap leaching operation includes mining pre-production, first fills/Owners costs, leach pad construction, crusher and agglomerator refurbishment, new leach pad stackers and haul road construction. This project is an opportunity to exploit existing mineral resources with considerable upside if long-term copper prices and sulfuric acid prices remain favorable.

## **1.23 RECOMMENDATIONS**

GCC management launched a sampling and metallurgical testing program to evaluate the leaching strategy proposed in this study. The sampling and testwork program will assess the metallurgical zonation within the pits to estimate copper recoveries more accurately from each zone including testing the solubility of sulfide species. This program will help determine the long-term outlook for open pit mining and heap leaching at JCM.

The current Nuton Demonstration mine plan includes contract crushing and agglomeration with conveying and stacking the agglomerated material on the leach pad. In the future, GCC will look at replacing the contract crushing with its own equipment. GCC should refine the cost to reactivate the crushing-agglomerating plant, design the conveyor system, and the stacking plan for the life of the mine.

## 2 INTRODUCTION

The Johnson Camp Mine (JCM) has historically been an open pit, heap leach operation since Cyprus Minerals opened the property in the 1970s. The operation included two open pits, a two-stage crushing-agglomerating circuit, a fully functioning SX-EW plant capable of producing 25 million pounds of cathode copper per year, a complete set of PLS and raffinate ponds, and full infrastructure (ancillary facilities, access, power, water, and communications).

The JCM was operated on and off by three companies: Cyprus Minerals, Arimetco, and Nord Resources (Nord) before Gunnison Copper Corporation or GCC purchased the property in 2015. GCC refurbished and used the JCM SX-EW plant and ponds for the first stage development of the Gunnison In-Situ Recovery (ISR) operation in 2020. At that time, GCC made numerous upgrades to the JCM SX-EW plant and ponds to accommodate the initial PLS flows from the Gunnison in-situ wellfield. Those improvements included the addition of sulfuric acid storage tanks, the installation of a third electrolyte filter, and various electrical upgrades to the SX-EW transformers and EW transformer-rectifiers.

The JCM open pits have not been operated since 2012 when Nord's contract miner ceased operations. No new material has been placed on the existing leach pads since then. Three adjacent heap leach pads, known as Pad 123 continued with residual leaching through 2017 and drain down from the heaps continues today. Pad 123 are now in the process of closure with occasional draindown after rainstorms.

In 2006, Nord commissioned a series of studies to build a new heap leach pad called Pad 5. A feasibility study was prepared by Bikerman Engineering and Technology Associates (BETA, 2007) that was followed by a detailed engineering design package for Pad 5 by Glasgow Engineering of Littleton, Colorado (2010), and an updated feasibility study to re-open JCM by Curtis Associates (2011). The plan for Pad 5 included building the new leach pad so that one side of it was to be used for higher grade crushed agglomerated material and the other side for lower grade run-of-mine (ROM) heap leach material. Pad 5 was never constructed due to Nord's sinking financial condition.

In 2023, GCC signed the Nuton Option Agreement with Nuton, a Rio Tinto venture. Together, they are conducting a commercial scale demonstration, fully funded by Nuton, of Nuton's enhanced sulfide heap leaching technology on a portion of Pad 5. The Nuton Demonstration which will run for five years of leaching will include aeration and bacterial leaching to oxidize sulfides to increase the leach kinetics and improve leach recoveries of sulfide copper resources.

The current plan will re-open the Burro pit to commence open pit mining. Pad 5 is presently in construction, and new power infrastructure and piping has been designed as part of the new development. Mining will be performed by a mining contractor. Initial material that will be placed on Pad 5 will be Run-of-Mine (ROM) oxide and transition material from the Burro Pit, followed by crushed and agglomerated of sulfide material under Nuton™ conditions.

GCC retained several consultants, including M3, to provide a review of prior work on the Project and to prepare technical and cost information to support this technical report in accordance with the Canadian NI 43-101 reporting standards. Mr. John Woodson of M3 is the principal author and Qualified Person responsible for the preparation of this technical report, as well as for the process plant infrastructure, development of the capital and operating costs and economic analysis. Mr. Woodson has not visited the JCM property. As the other Qualified Persons have visited the site, including colleagues from M3, Mr. Woodson has determined that a formal site visit to the JCM property was not required.

Other contributing authors and Qualified Persons responsible for preparing sections of this technical report include Abyl Sydykov of M3 for recovery methods; Dr. Terence McNulty, metallurgical consultant; Douglas Bartlett of Clear Creek Associates (CCA) for hydrology and environmental/social/permitting topics; Jacob Richey of Independent Mining Consultants, Inc. (IMC) for mining methods and mine costs; Thomas M. Ryan of Call & Nicholas, Inc. (CNI) for pit slope angles; and Jeffrey Bickel of RESPEC Company LLC (RESPEC) for geology, drilling and the estimation of JCM resources.

R. Douglas Bartlett, CPG, of Clear Creek Associates (CCA), is responsible for the preparation of Section 16.9 - Mining Methods and Section 20– Environmental Studies, Permitting, and Social Impact. Mr. Bartlett visited the site May 15, 2019.

Dr. Terence P. McNulty is responsible for reviewing the historical metallurgical testing programs for the Johnson Camp heap leach evaluation. Dr. McNulty is responsible for the preparation of Section 13 – Mineral Processing and Metallurgical Testing. Dr. McNulty visited the Johnson Camp Site in 1990s. Dr. McNulty has worked extensively on copper hydrometallurgical projects in the US and elsewhere.

This technical report covers the current status of the Johnson Camp Mine as it returns to commercial production.

## 2.1 LIST OF QUALIFIED PERSONS

Site visits and areas of responsibility are summarized in Table 2-1 for the Qualified Persons.

**Table 2-1: Dates of Site Visits and Areas of Responsibility**

Author	Company	Designation	Site Visit Date	Section Responsibility
John Woodson	M3 Engineering & Technology Corp. – Tucson, AZ	P.E. SME-RM	N/A	Sections 1 (except 1.2 through 1.15, 1.18, 1.21), 2, 3, 18, 19, 21 (except 21.1.1 and 21.2.1), 22, 24, 25, 26, and 27
Jeffrey Bickel	RESPEC Company LLC	CPG	December 5, 2024	Sections 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.12, 1.20, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, and 23
Dr. Abyl Sydykov	M3 Engineering & Technology Corp. – Tucson, AZ	P.E.	March 27, 2025	Sections 1.15 and 17
Dr. Terence P. McNulty	T.P. McNulty & Associates	PE, DSc	Johnson Camp Site in 1990s	Sections 1.11 and 13
R. Douglas Bartlett	Clear Creek Associates	CPG	May 15, 2019	Sections 1.18, 16.9, and 20
Jacob Richey	Independent Mining Consultants, Inc.	P.E.	February 14, 2025	Sections 1.13, 1.14, 15, 16 (except 16.2 and 16.9), 21.1.1 and 21.2.1
Tom Ryan	Call & Nicholas, Inc.	P.E.	October 18, 2023	Section 16.2

## 2.2 DEFINITIONS OF TERMS USED IN THIS TECHNICAL REPORT

- **Lixiviant:** Aqueous media, in this case, sulfuric acid, to extract copper from the oxide copper mineralization.
- **Pregnant Leach Solution (PLS):** Lixiviant after it is loaded with dissolved copper. PLS is stripped of copper in the solvent extraction process.
- **Raffinate:** Lixiviant after it has been stripped of copper in the solvent extraction process. Raffinate is re-acidified and pumped back to the wellfield to dissolve more copper.
- **Diluent:** Organic medium in which solvent extract takes place in the SX settlers.



- **Extractant:** Organic chemical that is used to extract copper from PLS into the diluent and then transfer the copper from the diluent to the electrolyte.
- **Electrolyte:** The aqueous solution carrying concentrated copper in solution which is pumped into the EW Tankhouse to electroplate copper onto steel blank sheets. The depleted electrolyte is recirculated to the SX circuit to load more copper.
- **Sulfuric acid:** A dense, colorless liquid chemical ( $H_2SO_4$ ) used extensively to leach oxide copper ores.

## 2.3 UNITS AND ABBREVIATIONS

This technical report is in English units. Tons are short tons and ktons mean 1,000 short tons. Copper grades are in percentage by weight. All tonnages reported in this document are in dry tons. Lengths are in feet (except where noted) and currency is in U.S. dollars (except if noted otherwise).

**Table 2-2: Units, Terms and Abbreviations**

Abbreviation	Unit or Term
%	percent
°	degree (degrees)
°C	degrees Centigrade
\$M	million dollars
μ	micron or microns, micrometer, or micrometers
A	Ampere
a/m <sup>2</sup>	amperes per square meter
AA	atomic absorption
ADEQ	Arizona Department of Environmental Quality
ADWR	Arizona Department of Water Resources
APP	Aquifer Protection Permit
AQL	Aquifer Quality Limit
ASCu	Acid soluble copper
AzTech	AzTech Minerals, Inc.
BADCT	Best Available Demonstrated Control Technology
BLM	US Department of the Interior, Bureau of Land Management
cfm	cubic feet per minute
cm	Centimeter
cm <sup>2</sup>	square centimeter
cm <sup>3</sup>	cubic centimeter
CoG	cut-off grade
CNCu	Cyanide soluble copper
Cu	Copper
CuS	Copper sulfide
dia.	Diameter

**JOHNSON CAMP MINE**  
**FORM 43-101F1 TECHNICAL REPORT**

<b>Abbreviation</b>	<b>Unit or Term</b>
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
FA	fire assay
famsl	feet above mean sea level
FS	Feasibility Study
ft	foot (feet)
ft <sup>2</sup>	square foot (feet)
ft <sup>3</sup>	cubic foot (feet)
ft <sup>3</sup> /st	cubic foot (feet) per short ton
g	gram
g/L	gram per liter
g/st	grams per short ton
GA	General Arrangement
gal	gallon
GCAZ	Excelsior Mining Arizona Inc.
GCC	Gunnison Copper Corporation
GCH	Excelsior Mining Holdings Inc.
g-mol	gram-mole
gpl	gram per liter
gpm	gallons per minute
Ha	hectares
HDPE	High Density Polyethylene
hp	horsepower
IMC	Independent Mining Consultants
in	inch
IRR	Internal Rate of Return
ISR	In-Situ Recovery
JCM	Johnson Camp Mine
kg	kilograms
km	kilometer
km <sup>2</sup>	square kilometer
ktons	thousand short tons/ kilotons
kst/d	thousand short tons per day
kst/y	thousand short tons per year
kV	kilovolt
kW	kilowatt
kWh	kilowatt-hour

**JOHNSON CAMP MINE**  
**FORM 43-101F1 TECHNICAL REPORT**

<b>Abbreviation</b>	<b>Unit or Term</b>
kWh/st	kilowatt-hour per short ton
L	liter
L/sec	liters per second
lb	pound
LHD	Load-Haul-Dump truck
LoM	Life-of-Mine
M	meter
m.y.	million years
m <sup>2</sup>	square meter
m <sup>3</sup>	cubic meter
M3	M3 Engineering & Technology Corp.
Ma	million years ago
mg/L	milligrams/liter
mi	mile
mi <sup>2</sup>	square mile
MIW	Mine-influenced water
MM lb	million pounds
mm	millimeter
mm <sup>2</sup>	square millimeter
mm <sup>3</sup>	cubic millimeter
mppa	million pounds per annum (year)
Mst	million short tons
Mst/y	million short tons per year
MVA	megavolt ampere
MW	million watts
NI 43-101	Canadian National Instrument 43-101
NPV	Net Present Value
PAST	Professional Archeological Services of Tucson
PEA	Preliminary Economic Assessment
PFS	Pre-Feasibility Study
PLS	Pregnant Leach Solution
PMF	probable maximum flood
POO	Plan of Operations
ppb	parts per billion
ppm	parts per million
psi	pounds per square inch
QA/QC	Quality Assurance/Quality Control
RC	reverse circulation drilling



<b>Abbreviation</b>	<b>Unit or Term</b>
RQD	Rock Quality Description
RT	Reverse takeover
SEC	U.S. Securities & Exchange Commission
sec	second
SG	specific gravity
st	short ton (2,000 pounds)
stpd	short tons per day
st/h	short tons per hour
st/y	short tons per year
SX-EW	Solvent Extraction (SX) - Electrowinning (EW)
t	tonne (metric ton) (2,204.6 pounds)
TCu	Total copper
TSF	Tailings Storage Facility
TSP	total suspended particulates
UIC	Underground Injection Control
USEPA	United States Environmental Protection Agency
V	volts
VFD	variable frequency drive
W	watt
WTP	Water treatment plant
XRD	x-ray diffraction
yd <sup>2</sup>	square yard
yd <sup>3</sup>	cubic yard
yr	year

### **3 RELIANCE ON OTHER EXPERTS**

The authors, as qualified persons, have examined the historical data for the Johnson Camp Mine provided by GCC, and have relied upon the basic data to support the statements and opinions presented in this technical report. In the opinion of the authors, the Johnson Camp Mine historical data, in conjunction with borehole assays conducted by GCC, are present in sufficient detail to prepare this technical report and are generally correlative, credible, and verifiable. The Project data are a reasonable representation of the Johnson Camp Mine. Any statements in this technical report related to deficiency of information are directed at information that, in opinion of the authors, is recommended by the authors to be acquired.

The authors relied on reports by John C. Lacy of the law firm, DeConcini, McDonald, Yetwin, & Lacy, for legal determination of lands on the Johnson Camp side of the property. GCC also obtained an ALTA Title Insurance Policy from First American Title Insurance Company for the patented mining claims and fee lands of the Johnson Camp property which was reviewed and is being relied on by the authors.

Clear Creek Associates (CCA) reviewed and updated the environmental report for the Johnson Camp Mine from the Phase I Site Assessment by Golder (2015) that documented the environmental condition of the Johnson Camp Mine. A new environmental section is provided in Section 20 for the Johnson Camp Mine heap leach operation. CCA has relied on information provided by GCC operations personnel and reports filed with agencies since the commencement of Stage 1 mining activities at the Gunnison Project in 2020 (Johnson Camp Mine).

#### 4 PROPERTY DESCRIPTION AND LOCATION

The Property is held by GCC through its wholly owned subsidiaries Excelsior Mining Arizona, Inc. (GCAZ) and Excelsior Mining Holdings, Inc. (GCH). In December 2015, GCAZ purchased all assets of Nord Resources Corporation, as they relate to the JCM Property, through a court-appointed receiver.

The Property is located in Cochise County, Arizona, approximately 65 miles east of Tucson. Figure 4-1 is a general location map and property location near the I-10 freeway. The Project includes portions of Section 22, 23, 24, 25, 26, 27, 28, 33, 34, 35 and 36 T15S R22E, Sections 4, T16S R22E, and is centered at 32° 05' 59" N latitude and 110° 04' 05" W longitude. Total area of the Project is approximately 4,495 acres (1,820 Ha).

Figure 4-2 shows the claim status for the JCM Property as of January 2025. Table 4-1 contains a summary of the land packages that constitute the JCM Property. Following the table is brief descriptions of the claims, permits and land holdings. Appendix B contains a detailed list of all the mining claims and land packages.

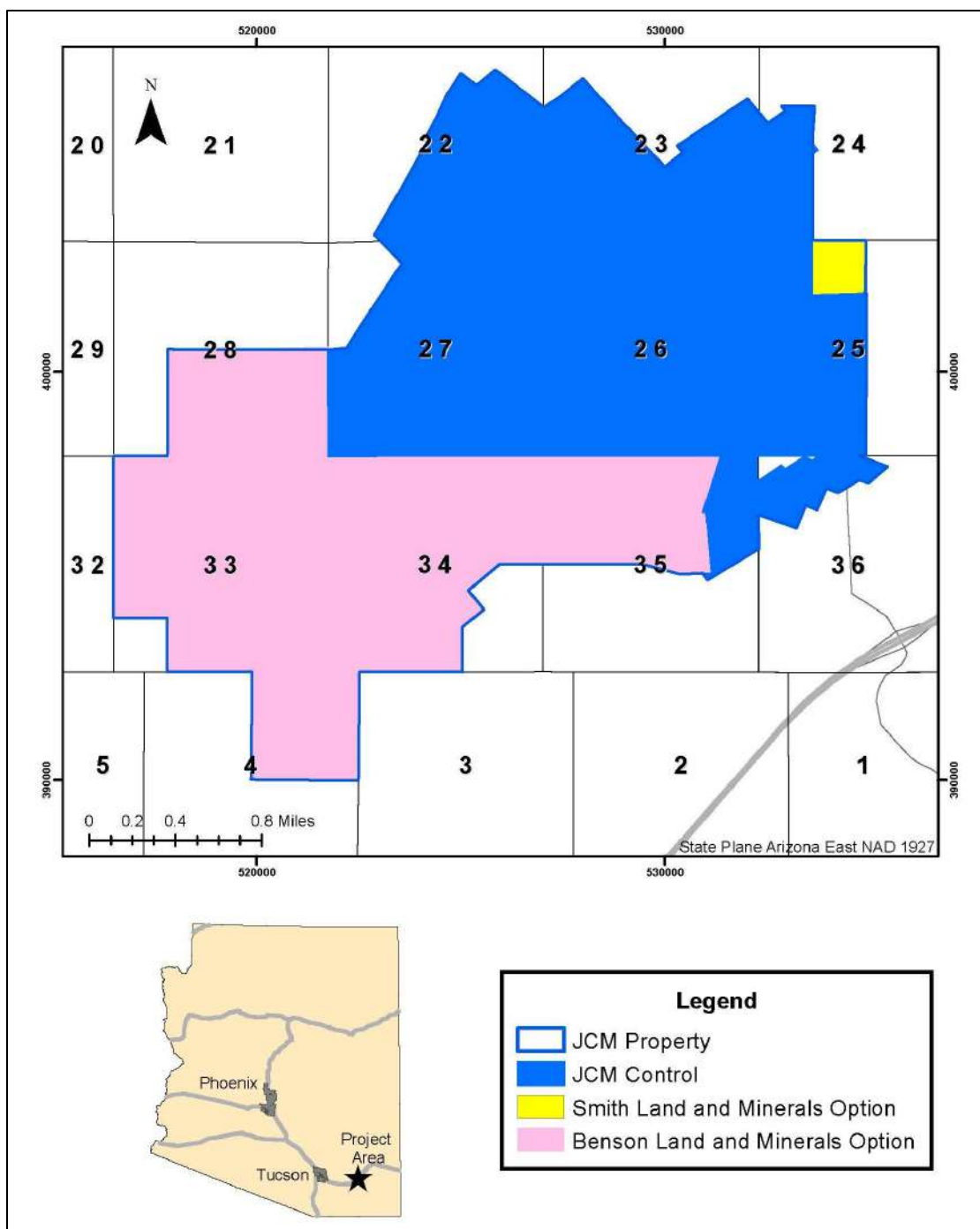
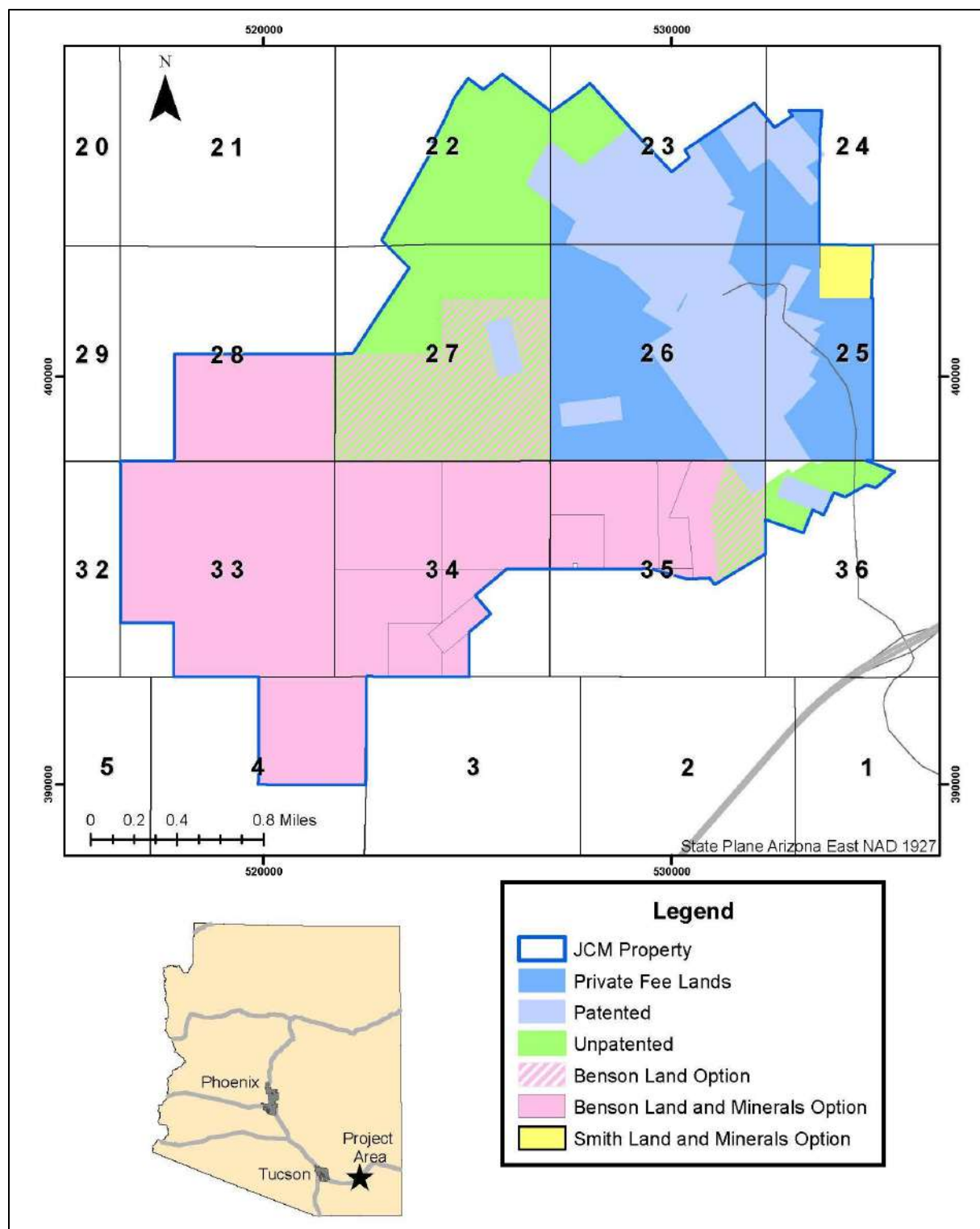


Figure 4-1: Location of the JCM Property – January 2025



Source: GCC, 2025

Figure 4-2: Property Mineral Rights by Claim Type – January 2025

**Table 4-1: Summary of Land Packages that Constitute the Johnson Camp Property**

Claim Type	# of Claims	Approximate Area	Approximate Holding Costs	Surface Rights
Federal Patented Lode Mining Claims	53	759 acres 307 hectares	Annual \$1,450.64	Controlled by GCAZ
Federal Unpatented Mining Claims	83	1,293 acres 524 hectares	Annual \$16,600.00	Subject to US mining law
Fee Simple Lands	4	617 acres 250 hectares	Annual \$1,060.40	Controlled by GCAZ
Benson Option	14	1786 acres 723 hectares	Nil	Subject to Benson Option (see below)
Smith Option	1	40 acres 16 hectares	Nil	Subject to Smith Option (see below)
<b>Total</b>	<b>155</b>	<b>4,495 acres 1,820 hectares</b>	<b>Annual \$19,111.04</b>	

Ownership of the unpatented mining claims is in the name of the holder (locator), subject to the paramount title of the United States of America, under the administration of the U.S. Bureau of Land Management (“BLM”). Under the Mining Law of 1872, which governs the location of unpatented mining claims on federal lands, the locator has the right to explore, develop, and mine minerals on unpatented mining claims without payments of production royalties to the U.S. government, subject to the surface management regulation of the BLM. As of the effective date, annual claim-maintenance fees are the only federal payments related to unpatented mining claims, and GCC represents these fees have been paid in full to August 31, 2025. The current annual holding costs for JCM is estimated at \$19,111.04, including the county recording fees.

GCC has the right to use the surface of the Project in the form of patented mining claims and fee land parcels. The federal unpatented claims grant surface access but do not provide for surface ownership. Unpatented mining claims give the owner the right to develop and exploit valuable minerals contained within the claim, so long as the claim is properly located and validly maintained. There are sufficient surface rights held by GCC to conduct mining operations at the JCM Property.

#### **4.1 PATENTED MINING CLAIMS**

There are 53 patented mining claims held in the name of GCAZ totaling 759 acres (307 ha). A complete list of the claims is provided in Appendix B. The claims include all surface and mineral rights. The claims are located on the ground and have no expiration dates.

#### **4.2 UNPATENTED MINING CLAIMS**

There are 83 unpatented mining claims held by GCC in the name of GCAZ and GCH totaling 1,293 acres (524 ha). A complete list of the claims is provided in Appendix B. The unpatented claims are for minerals only, with no surface ownership. The BLM requires that all unpatented claims use a rental year from September 1 through August 31; claims for which fees are not paid by August 31st are automatically forfeited. The claims otherwise have no expiration dates and under current mining law can be held indefinitely if properly maintained. The claims are located on the ground and the location descriptions are filed with the BLM.

#### **4.3 FEE SIMPLE LAND**

The JCM Property acquired by GCAZ includes Fee Simple Lands. There are four parcels of Fee Simple Lands all situated in Township 15S, Range 22E. Parcel 1 is situated on Section 26 and covers approximately 139 acres. Parcel 2 is situated on Section 26 and covers approximately 1 acre. Parcel 3 is situated on Sections 24 and 25 and covers approximately 53.44 acres. Parcel 4 is situated on Sections 23, 24, 25, and 26 and covers approximately 423.47 acres.

GCAZ has entered into an option agreement with certain landowners that provide GCAZ the right to acquire approximately 2,563.05 acres of Fee Simple Lands that are referred to as the “Smith Option”. The terms of the Smith Option agreement commenced in September 2022 and require an upfront fee of \$40,000 and an annual fee of \$30,000. GCAZ has a period of seven years to exercise the option at a price that starts at \$3,500/acre in Year 1 and increases over the seven-year term at \$500 per year to \$6,500/acre in Year 7.

GCAZ has entered into an option agreement with certain landowners that provide GCAZ the right to acquire approximately 3898.14 acres of Fee Simple Lands that are referred to as the “Benson Option”. The terms of the Benson Option agreement commenced on November 12, 2024 and require an upfront fee of \$1,000,000 and an annual fee of \$250,000 in years two, three, four, five and six. GCAZ has a period of six years to exercise the option at a price that starts at \$28,000,000 in Year 1 (with the \$1 million credited against the purchase price) and increases over the six-year term at a rate of \$2,000,000 per year (plus the \$250,000 annual fee which is credited against the purchase price), to \$37,000,000 in Year 6.

#### **4.4 ADDITIONAL ROYALTIES**

##### **4.4.1 Greenstone Royalty and Triple Flag Royalty and Stream**

**Greenstone Royalty:** Greenstone Excelsior Holdings L.P. (“Greenstone”) holds a 1.5% gross revenue royalty over the JCM Property. The gross revenue royalty is defined as royalty percentage times receipts, which is the sum of physical product receipts and deemed receipts. The Greenstone royalty applies to the entirety of the JCM Property and production therefrom.

**Triple Flag Royalty:** Triple Flag USA Royalties Ltd. (“Triple Flag Royalties”) holds a 1.5% gross revenue royalty over the JCM Property. The gross revenue royalty is defined as royalty percentage times receipts, which is the sum of physical product receipts and deemed receipts. The Triple Flag Royalties royalty applies to the entirety of the JCM Property and production therefrom.

The JCM Property is also subject to a Metal Stream Agreement with Triple Flag Mining Finance Bermuda Ltd. (“Triple Flag”) that is applicable to all oxide minerals production from the parts of the Project located in the “Stream Area”. The Metal Stream Agreement is summarized in Table 4-2.

**Table 4-2: Triple Flag Metal Stream Agreement for the JCM Property**

<b>Stream Deliveries</b>	Excelsior Mining Arizona Inc. (“ <b>Seller</b> ”) is required to deliver Grade A Copper Cathodes in an amount equal to the “ <b>Payable Copper</b> ”. The amount of Payable Copper is calculated based on a percentage of the amount of copper that is sold and delivered to Offtakers under the terms of Offtake Agreements (for percentages see heading – <b>Payable Copper</b> ).														
<b>Payment</b>	The Buyer pays to the Seller a price for copper equal to 25% of the daily official LME Grade A Settlement quotation for copper quoted in U.S. Dollars, as published in the Metal Bulletin.														
<b>Payable Copper</b>	<p>“<b>Payable Copper</b>” means a percentage of the Reference Copper equal to:</p> <table border="1"> <thead> <tr> <th>Scenario</th><th>Stage 1 (25 mppa)</th><th>Stage 2 (75 mppa)</th><th>Stage 3 (125 mppa)</th></tr> </thead> <tbody> <tr> <td>Upfront Deposit</td><td>16.5%</td><td>5.75%</td><td>3.5%</td></tr> <tr> <td>Upfront Deposit + Expansion Option</td><td>16.5%</td><td>11.0%</td><td>6.0%</td></tr> </tbody> </table> <p>At the current stage of the Project, the Buyer has made the initial Upfront Deposit (\$65 million) and the Seller is ramping up to 25 mppa. The “<b>Expansion Option</b>” provides Buyer the option to invest an additional \$65 million in the event Seller approves an expansion to at least 50 mppa.</p>			Scenario	Stage 1 (25 mppa)	Stage 2 (75 mppa)	Stage 3 (125 mppa)	Upfront Deposit	16.5%	5.75%	3.5%	Upfront Deposit + Expansion Option	16.5%	11.0%	6.0%
Scenario	Stage 1 (25 mppa)	Stage 2 (75 mppa)	Stage 3 (125 mppa)												
Upfront Deposit	16.5%	5.75%	3.5%												
Upfront Deposit + Expansion Option	16.5%	11.0%	6.0%												

#### 4.4.2 Other Royalties and Production Payments

RG Royalties, LLC holds a 2.5% net smelter returns (“NSR”) royalty interest in minerals produced and sold from the 15 patented claims. These 15 patented claims are also subject to the terms of a “Royalty Deed and Assignment of Royalty,” recorded with the Cochise County Recorder’s Office on June 19, 2009, at No. 2009-14847, and the “Grant of Production Payment” recorded with the Cochise County Recorder’s Office on June 10, 1999, at No. 1999-18419, as modified by a certain “Assignment of Production Payment” between Arimetco, Inc. and Styx Partners, L.P. (collectively, the “Production Payment Agreements”). The Production Payment Agreements provide for a non-participating payment of \$0.02 per pound out of production during the calendar month in which copper produced from the 15 patented claims. The production payment is only payable when copper prices are in excess of \$1.00 per pound and is capped at an aggregate of \$1,000,000, of which \$456,486 has been paid and/or accrued as of December 31, 2024.

#### 4.5 NUTON AGREEMENT

On July 31, 2023, GCC announced that it had entered into an option to joint venture agreement (Nuton Option Agreement) with Nuton to further evaluate the use of its Nuton™ copper heap leaching technologies (Nuton™ technologies) at Johnson Camp. Under the Nuton Option Agreement, GCC remains the operator and Nuton funds GCC’s direct and indirect costs associated with a two-stage work program at Johnson Camp with Nuton having discretion to exit after Stage 1 and at certain defined milestones during Stage 2. Nuton provided a US\$3 million pre-payment to GCC for Stage 1 costs and a payment of US\$2 million for an exclusive option to form a joint venture with GCC over the Johnson Camp Mine after the completion of Stage 2.

The Nuton Option Agreement required that if Nuton proceeded to Stage 2, it would make a US\$5 million payment to GCC for the use of existing infrastructure at the Johnson Camp mine for the Stage 2 work program. Nuton is also responsible for funding all of GCC’s direct and indirect costs associated with Stage 2 subject to full recoupment from sales of copper generated at JCM during Stage 2. The full Stage 2 work program is anticipated to take up to five years but will proceed based on milestones related to engineering and mobilization, infrastructure and construction, mining, leaching, copper production and post-leach rinsing. The completion of all milestones would result in full scale commercial production over several years at Johnson Camp utilizing Nuton™ technologies. Revenue from operations will first be used to pay back Stage 2 funding to Nuton, which also includes Nuton’s direct and indirect Stage 2 costs, and will then be credited to GCC’s account until a joint venture is formed or the Nuton Option Agreement is terminated.



On May 15, 2024, GCC announced that Nuton had elected to proceed to Stage 2 of the existing Nuton Option Agreement.

After the completion of Stage 2, Nuton will have the right to exercise the option and form a joint venture on Johnson Camp per mutually agreeable terms whereby Nuton will hold an initial 49% and GCC an initial 51%. The purpose of the joint venture is to continue the development of the Johnson Camp Mine using Nuton™ technologies. Should Nuton not exercise the option, Nuton and GCC will discuss in good faith Gunnison's continued use of the Nuton™ technologies at the Johnson Camp Mine subject to negotiated licensing terms and conditions.

#### **4.6 ADDITIONAL PROPERTY TAXES**

The JCM Property is subject to an annual property tax from Cochise County based on the full cash value of the deposit. The total property taxes for 2024 were \$583,546.

#### **4.7 ENVIRONMENT AND PERMITTING**

JCM operates under an Aquifer Protection Permit (APP), Air Quality Permit (AQP), a Resource Conservation and Recovery Act (RCRA) site specific ID number. All of these permits are issued and administered by the Arizona Department of Environmental Quality (ADEQ). The on-site septic system is grandfathered under the APP regulations and therefore does not require a permit. These permits have been amended as required to address the restart of open pit mining and construction of a new heap leach pad. JCM has a site wide Reclamation Plan approved by Arizona State Mine Inspector (ASMI).

Existing closure liabilities at the JCM are covered under the APP and the ASMI Reclamation Plan. These include closure of the existing ponds, the leach pad, and all other disturbed grounds. There are existing bonds in place to cover all closure obligations. The amended APP includes a compliance schedule item for updating closure costs and subsequent bonding of the leach pad closure in ten years from issuance of the amended APP.

#### **4.8 OTHER SIGNIFICANT RISK FACTORS**

There are no other known significant factors or risks that may affect access, title, or the right or ability to perform work on the property.

## **5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY**

The Johnson Camp Mine (JCM) is located in a sparsely populated, slightly undulating ranching and mining area about 65 road miles east of Tucson, Arizona. The Tucson metropolitan area is a major population center (approximately 1,000,000 persons) with a major airport and transportation hub including well developed infrastructure (highways and rail) and services that support the surrounding copper mining industry. The nearby towns of Benson and Wilcox, along with Tucson, can supply sufficient skilled labor for the Project.

Access to JCM is via the Interstate10 (I-10) freeway from Tucson and Benson in the west or Wilcox in the east. JCM can be accessed from the Johnson Road exit along 1.5 miles of improved dirt roads north of I-10.

JCM encompasses approximately 4,495 acres within Cochise County, Arizona and includes patented claims, unpatented mining claims, and Fee Simple private land. Unpatented mining claims give the Owner exclusive right to possess the ground (surface rights) covered by the claim, as well as the right to develop and exploit valuable minerals contained within the claim, so long as the claim is properly located and validly maintained.

The Project has existing, well-developed infrastructure sufficient for copper exploitation. JCM has an existing complete SX-EW plant, process ponds, 69 kV power line, fresh water supply wells, a complete road network, and an assortment of ancillary buildings that can be used for administration, maintenance, laboratory, warehousing, and safety.

The main Union Pacific Southern Pacific railway runs 6 miles south of JCM.

The existing 69 kV electrical power line enters the eastern border of the property and lands at the main JCM substation.

Freshwater supply will be provided from existing wells and mine adits located on or near the JCM Property. There are sufficient water resources on the Property to satisfy freshwater make-up for the SX, leach pad irrigation, losses from evaporation and transpiration from the leach pad and ponds, the SX circuit, EW tankhouse operations, and reagent mixing as well as potable water supply for human consumption.

The elevation on the property ranges from 4,500 to 5,500 feet above mean sea level in terrain of the eastern Basin and Range physiographic province of southeastern Arizona. The climate varies with elevation, but in general the summers are hot and dry, and winters are mild.

The area experiences two rain seasons in general, one during the winter months of December to March and a second summer season from July through mid-September. The summer rains are typical afternoon thunderstorms that can be locally heavy. Average annual rainfall for Dragoon is 13.2 inches and the average highs range from 58°F in January to 94°F in June. Occasional light snow falls at higher elevations in the winter months. Exploration programs and mining activities operate year-round in the region.

Vegetation on the property is typical of the upper Sonoran Desert and includes bunchgrasses, yucca, mesquite, and cacti (Figure 5-1). The original leach pad can be seen in the background of this figure.



**Figure 5-1: Typical Vegetation and Topography below the Johnson Camp Mine**

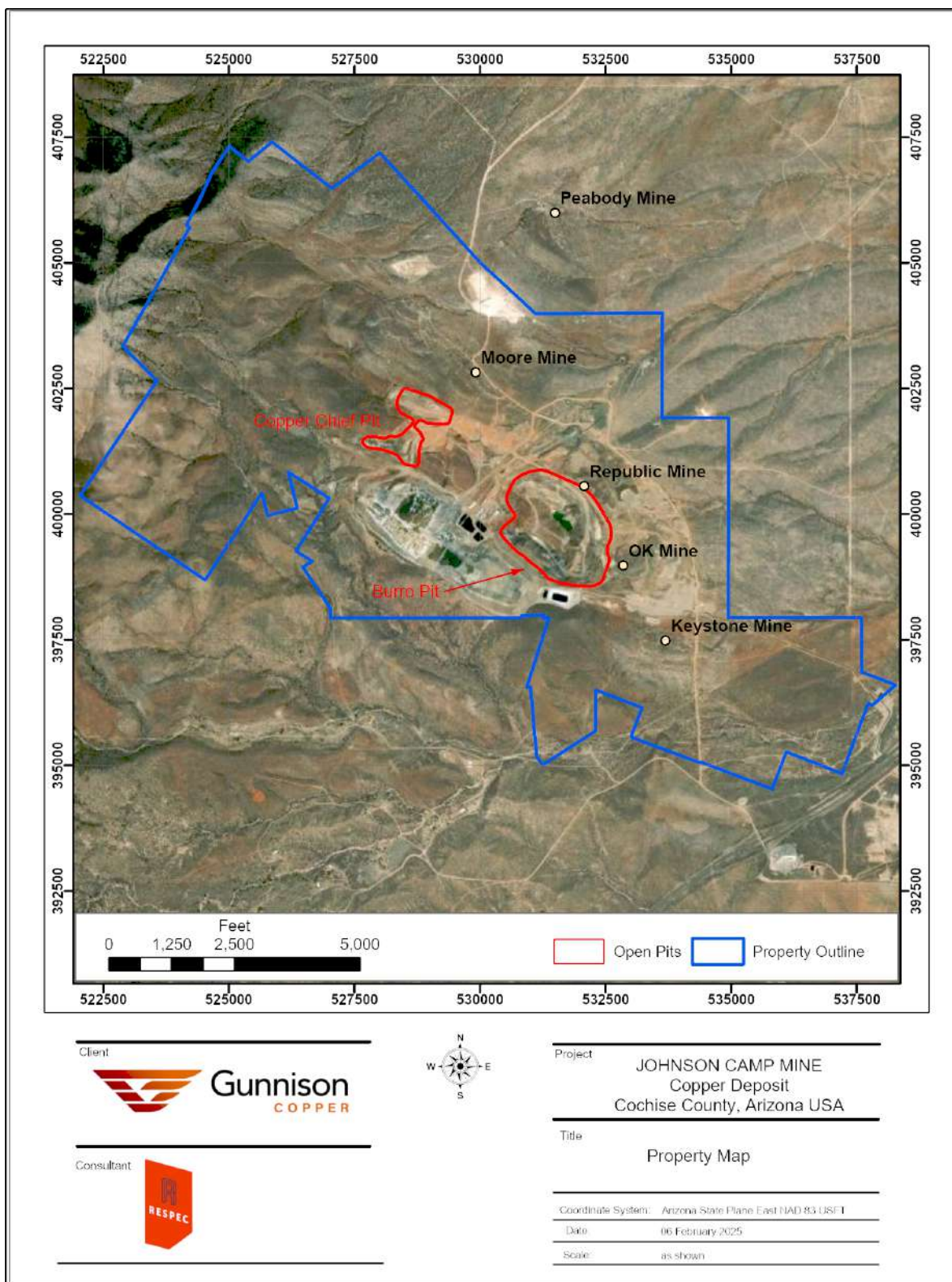
## **6 HISTORY**

The information summarized in this section has been extracted and modified to a significant extent from (Zimmerman et al., 2017), sources therein, unpublished company files, as well as other sources as cited. The authors have reviewed this information and believe this information is suitable for inclusion in this technical report.

### **6.1 DISTRICT EXPLORATION HISTORY**

The Cochise district has seen considerable copper, zinc, silver, and tungsten mining beginning in the 1880s and extending to the present day. Prior to the 1880s, miners are said to have worked copper deposits cropping south of the JCM area. Between 1882 and 1981, the district produced 12 million tons of material containing 146 million pounds of copper, 94 million pounds of zinc, 1.3 million pounds of lead, 720 thousand ounces of silver, and minor quantities of gold (Keith et al., 1983). Much of the historical production came from small-scale underground copper-zinc mines located on what is now the Johnson Camp property controlled by GCC. The most significant of these producers were the Republic and Moore mines illustrated in Figure 6-1. From 1904-1940, material from these mines reportedly contained 4 to 4.5 percent copper and 0.5-0.75 ounces of silver per ton (Cooper et al., 1964). The zinc content for this period was not reported. After 1940, the material contained 1.5 to 3 percent copper, 5 to 10 percent zinc, and about 0.3 ounces of silver per ton. The Republic mine was the site of the historical concentrating plant in the district. Smaller underground mines in the area, such as the Peabody, reportedly yielded very high-grade mineralized material which averaged 7.5 percent copper, 4 ounces of silver per ton, and contained as much as 44 percent zinc (Cooper et al., 1964).

Copper-oxide mineralization has been mined at the Johnson Camp open-pit operation since 1975, most recently by Nord Resources Corporation from 2008 until 2010. Mining consisted of two open pits (Burro Pit and Copper Chief Pit), which are separated by roughly 2,000 feet along strike. The operation mined copper and processed the material via heap-leach and SX-EW. Previous operators include Cyprus Mines, Arimetco, and Nord Resources. This property is now controlled by GCC. Overall, approximately 39 million tons of material and 187 million pounds of copper have been produced out of the Johnson Camp open pits.



Source: GCC, December 2025

Figure 6-1: Historical Mines Near Johnson Camp with Historical Boundary



## 6.2 JOHNSON CAMP PROPERTY HISTORY

The information summarized in this section has been extracted and modified from various historical reports and records. The authors have reviewed this information and believe this summary is materially accurate.

In the 1880s, a rail line was constructed approximately four miles south of what is now the JCM area and was the catalyst to the growth of the underground mining operations and processing of copper sulfide, copper oxide, silver, and zinc. By the 1900s, production surged, however, the surge was met with the decrease in copper prices, which eventually led to the forced closure of the Moore, Peabody, and Republic mine shown in Figure 6-1. The following summarizes the historical mining and exploratory operations by company that have taken place at the JCM area in ascending order.

**Cyprus Mines Corporation (Cyprus) 1942 – 1986** With the abandonment and forced closure of the Republic mine in the early 1900's, the 20-year vacancy resulted in flooding of the mine. In 1942, Cyprus reopened the mine and began mitigating the flooding and the construction of a mill. As the copper prices rose and fell, Cyprus converted the underground mining operations to an open pit mine with the discovery of the Burro deposit in 1975, that hosted an estimated 22-million-ton reserve. In 1986 operations ceased with the declining economic value of copper. Within that period, Cyprus mined over 100 million pounds of copper bearing material with 51 percent total copper (% TCu) (Curtis Associates, 2011).

**Arimetco 1989-1998** With the purchase of the Johnson Camp property, Arimetco continued mining the Burro deposit (now known as the Burro Pit). Advancements during Arimetco's ownership included expanding leach pads, construction of a crushing plant for better recovery, and open pit mining at the Copper Chief pit. Within the 10 years, Arimetco mined over 50 million pounds with 43% TCu. The property was eventually sold to Nord Resources Corporation (Curtis Associates, 2011).

**Nord Resources Corporation (Nord) 1999 – 2015** Nord continued open pit mining at the Johnson Camp property until the fall of copper pricing occurred in 2003. Production ramped up in 2007 after Nord introduced better processing techniques via a new crushing and conveyor system, as well as expanding and upgrading the JCM. Again, production ceased due to economics, however, during the 11 years the Johnson Camp property was owned and operated by Nord, over 25 million tons were produced with an approximate 30% TCu recorded in the years of 2009 and 2010 (Curtis Associates, 2011).

**Gunnison Copper Corporation (GCC) 2015-Present** GCC purchased all assets of Nord Resources as they related to the Johnson Camp Mine, through a court appointed receiver, in December of 2015 (Zimmerman et. al, 2017). No production at the Johnson Camp Mine has occurred since GCC purchased the property in 2015 to December 2024. Processing facilities have been upgraded.

## 6.3 HISTORICAL MINERAL RESOURCE AND RESERVE ESTIMATES

A number of estimations of mineralized materials at the Johnson Camp Mine were carried out by historical operators, only a few of which are summarized herein.

The classification terminology is presented as described in the original references. It is not known if this terminology conforms to the meanings ascribed to the Measured, Indicated, and Inferred mineral resource classifications, or the Proven and Probable reserve classifications of the Canadian Institute of Mining, Metallurgy and Petroleum's "CIM Definition Standards - For Mineral Resources and Reserves, Definitions and Guidelines" ("CIM Standards"). The presentation of the historic mineral resources and mineral reserves does not imply that these are current or that there is a mineral reserve at Johnson Camp. The term 'ore' is used in the historic sense only.

In March 2000, the Winters Company prepared a Feasibility Study for Nord Copper Corporation (subsequently Nord Resources Corporation). The mineral resources were summarized in the report at various cut-off grades for both the Burro and Copper Chief pits. At a 0.2% total copper cut-off, the Burro Pit deposit was estimated to contain 67.2 million tons of material at a grade 0.397% total copper equating to 532.8 million pounds of contained copper. According to the report, 59% of the contained copper pounds were classified as measured, 29% of the contained copper pounds were classified as indicated, and 12% of the contained copper pounds were classified as inferred at the Burro Pit. At Copper Chief, the mineral resources reported at a 0.2% total copper cut-off were 68.9 million tons at a grade of 0.344% total copper equating to 474.1 million pounds of contained copper. The Copper Chief mineral resources were classified as follows: 35% of contained copper pounds were classified as measured, 18% of the contained copper pounds were classified as indicated, and 47% of the contained copper pounds were classified as inferred. The estimate was summarized from a block model containing 50-foot by 50-foot by 20-foot-high blocks. The block grades were estimated in two distinct methods, according to the report: a nearest neighbor estimation for any blocks pierced by drill holes and a kriged estimate for all other blocks. The kriging consisted of five separate runs constrained by rock type. The feasibility study reported a proven and probable ore reserve for both pits of 33.3 million tons at a total copper grade of 0.426%.

In October of 2005, Winters, Dorsey & Company, LLC prepared a Feasibility Study for Nord Resources Corporation. According to the report, the Feasibility Study used the same resource estimate as presented in the 2000 Feasibility Study. The study reported a proven and probable ore reserve for both pits of 35.1 million tons at a total copper grade of 0.393%.

Another feasibility study was prepared in September of 2007 by Bikerman Engineering & Technology Associates, Inc. ("BETA") for Nord Resources Corporation. The report indicated that the resources were summarized from the study and estimation by the Winters Company in March of 2000. BETA used the mineral resource estimation to report proven and probable mineral reserve estimates based on total copper assays and recoveries for the Burro and Copper Chief deposits. From the historical data available, BETA concluded the reserve estimates to be conceptual in nature in that the reported ore reserves would reflect an over-estimation based on the use of total copper assays rather than acid soluble copper assays. The total of proven and probable reserves based on the methodology and approach of BETA was 73.4 million tons of ore with a total copper grade of 0.335%. Also noted by [Bikerman et al., 2007] was historical estimates for the JCM Burro copper oxide deposit reported by Cyprus, as a 22-million-ton mineral reserve with a total copper grade of 0.85%. The mineral reserve was defined from a drilling program that led to open pit mining in 1975.

In 2010, Mincom, Inc generated a resource estimate for Nord Resources. According to the associated report, the new estimate was intended to address the problem of calculated acid soluble copper assays influencing previous estimates. It is unclear to the author if the estimate was ever released into the public domain. The existing internal technical report for the estimate provides several tabulations of resources with various estimation methods and sources of data.

In 2011, Curtis Associates updated the mineral reserves previously reported by BETA in 2007. The new approach for defining the mineral reserves was based on acid soluble copper instead of total copper. This method generated a proven and probable reserve of 111.3 million tons at a total copper grade of 0.29%. The report does not provide the acid soluble grade in the mineral reserve. The report does mention that the new reserve estimate contained 17% less recoverable acid soluble copper pounds than what was originally reported by BETA in 2007.

These historical estimates are relevant only for historical completeness and are not considered reliable. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. GCC is not treating these historical estimates as current mineral resources or mineral reserves. All of these historical estimates are superseded by the mineral resource estimates presented in Section 14 of this technical report and are not to be relied upon; they are presented here only for ease of reference and historical completeness.

#### 6.4 COCHISE DISTRICT PAST PRODUCTION

Production from the Johnson Camp Mine, as summarized by Curtis Associates (2011) for Cyprus, Arimetco, and Nord, is given below in Table 6-1 through Table 6-3, respectively.

**Table 6-1: Cyprus Production at Johnson Camp by Year**

(modified from Curtis Associates, 2011)

Year	Ore to Pad	Contained ASCu (%)	Contained ASCu	Lbs of Cu Shipped
1975	2,132,260	0.496	21,152,019	6,143,024
1976	1,821,476	0.357	13,005,339	10,059,807
1977	1,563,030	0.399	12,472,979	10,327,424
1978	1,202,500	0.426	10,245,300	10,205,142
1979	1,588,400	0.522	16,582,896	10,032,003
1980	1,499,600	0.411	12,326,712	10,320,407
1981	1,551,500	0.470	14,584,100	10,693,485
1982	1,894,700	0.322	12,201,868	9,702,272
1983	1,962,600	0.504	19,783,008	9,717,616
1984	52,100	0.713	742,946	8,803,361
1985	0	0	0	6,200,836
1986	0	0	0	4,854,796
<b>Sub</b>	<b>15,268,166</b>	<b>0.436</b>	<b>133,097,167</b>	<b>107,060,173</b>

**Table 6-2: Arimetco Production at Johnson Camp by Year**

(modified from Curtis Associates, 2011)

Year	Ore to Pad	Contained TCu (%)	Contained TCu	Lbs of Cu Shipped
1991	750,100	0.340	5,100,680	5,549,725
1992	2,516,320	0.480	24,156,672	8,156,435
1993	3,259,320	0.340	22,163,376	7,386,504
1994	2,719,690	0.290	15,774,202	5,618,012
1995	2,995,592	0.290	17,374,434	6,345,518
1996	3,084,254	0.350	21,589,778	9,921,576
1997	1,254,971	0.379	9,286,785	4,747,995
1998	0	0	0	2,181,304
<b>Sub</b>	<b>16,580,247</b>	<b>0.348</b>	<b>115,445,927</b>	<b>49,907,069</b>



**Table 6-3: Nord Production at Johnson Camp by Year**

(modified from Curtis Associates, 2011)

Year	Tons of Ore to Pad	Contained ASCu (%)	Contained ASCu	Lbs of Cu Shipped	Estimated Accum. ASCu Recovery % - New Ore Incl. Inventory
1999	0	---	---	672,004	---
2000	0	---	---	1,632,245	---
2001	0	---	---	1,133,914	---
2002	0	---	---	495,494	---
2003	0	---	---	556,388	---
2004-2007	0	---	---	0	---
2008	0	---	---	2,436,588	---
2009	4,553,275*	0.154	14,000,000	8,407,421	75%
2010	2,344,762*	0.160	7,500,000	9,338,000	84%
2011 (6 mths)	0	---	---	2,083,196	90%
<b>Sub</b>	<b>6,898,037</b>	<b>0.157 avg.</b>		<b>26,755,250</b>	
*Ore Crushed to -1 inch					

The Johnson Camp Mine lies within the Cochise mining district. Production by mine for the entire district is summarized in Table 6-4 with data from [Cooper et al., 1964], [Curtis Associates, 2011], and [Zimmerman, 2017] for the years 1902-2010.

**Table 6-4: Historical Copper and Zinc Production, Cochise Mining District**

Operation Name	Production Period	ktons of Ore	Commodity
Johnson Camp Mine	1975-2010	39,000	Copper
Moore Mine	1951-1954	250	Copper, Zinc
Republic/Mammoth Mine	1882-1952	550	Copper, Zinc
Copper Chief Mine	1905-1919	24.1	Copper, Silver
Peabody Mine	1907-1918	14.2	Copper, Silver
Black Prince Mine	1902-1918	1.4	Copper, Silver
Keystone Mine	1916-1937	1.8	Copper
Centurion Mine	1908-1944	1.5	Copper, Silver, Gold
Texas Arizona Mine	1910-1928	0.7	Copper, Lead, Silver, Gold
<b>Total</b>	<b>1902-2010</b>	<b>39,844</b>	

Note: Data for 1902 through 2010 compiled from Cooper and Silver (1964), Curtis Associates (2011) and Zimmerman (2017).

In addition to the operations listed in Table 6-4, several small-scale production operations with poorly preserved production records existed in the district in the late 1800s to early 1900s. This included tungsten production from vein systems in the Texas Canyon Quartz Monzonite (Cooper et al., 1964).

## 7 GEOLOGICAL SETTING AND MINERALIZATION

The information presented in this section of the report is derived from multiple sources, as cited. Mr. Bickel has reviewed this information and has determined this summary accurately represents the Johnson Camp Mine area geology and mineralization as it is presently understood.

### 7.1 REGIONAL GEOLOGIC SETTING

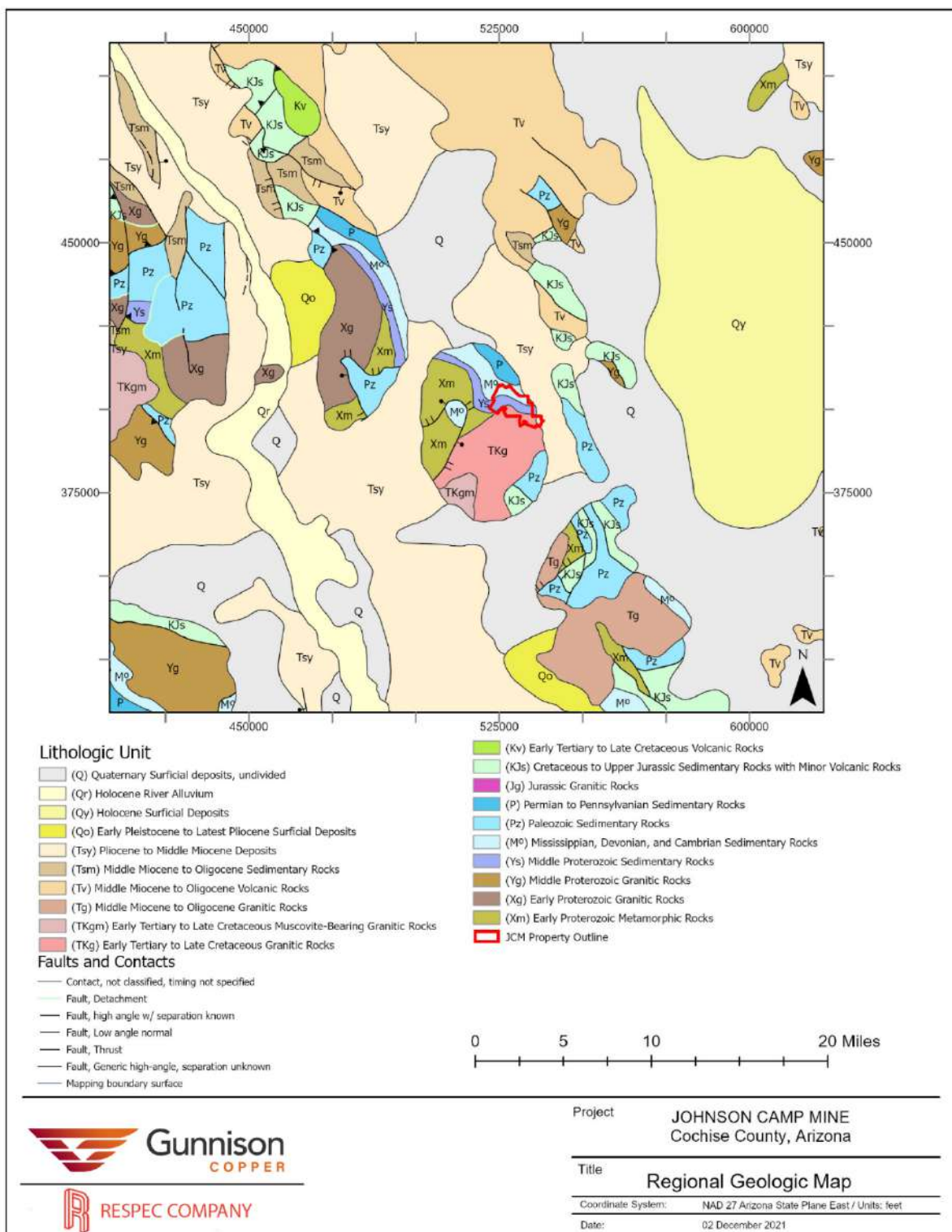
The Johnson Camp Mine is located within the Mexican Highland region of the Basin and Range province. The region is characterized by fault-bounded mountain ranges, typically with large intrusions forming the cores of the ranges. The ranges are separated by extensional grabens containing thick sequences of Tertiary and Quaternary volcanic and alluvial deposits that overlie a basement of Precambrian through Mesozoic rocks.

The project lies on the eastern edge of the Little Dragoon Mountains shown in Figure 7-1 within the Cochise mining district. The Little Dragoon Mountains are an isolated, fault bounded horst block comprised of rocks spanning from 1.4 billion years ago (Ga) Pinal Group schists to Holocene sediments. The southern portion of the Little Dragoon Mountains consists predominately of the Texas Canyon Quartz Monzonite of Tertiary age, whereas the Pinal Group schists and a sequence of Paleozoic sedimentary units dominate the northern half of the range.

The oldest rocks in the area, the Pinal Group schists, are composed of sandstones, shales and volcanic flows that have been metamorphosed to greenschist and amphibolite facies. The Precambrian Apache Group unconformably overlies the Pinal Group schists and is composed of conglomerates, shales and quartzite that were subsequently intruded by diabase sills. The Apache Group is then unconformably overlain by Paleozoic rocks that host most of the mineralization in the district. At Johnson Camp, the important Paleozoic host is the Cambrian Abrigo Formation.

The Texas Canyon Quartz Monzonite is porphyritic with large potassium feldspar phenocrysts from 1 to 10 cm in length. Livingston et. al. [1967] determined the age to be  $50.3 \pm 2.5$  Ma (not recalculated to current decay constants). Reynolds et. al. [1986] listed eight determinations ranging from 49.5 to 55.0 Ma. The intrusion crops out to the southwest of the Burro Pit at the Johnson Camp Mine.

Several deformations have occurred in the area with the most recent being the latest Cretaceous-Paleocene Laramide Orogeny compression, followed by Miocene and younger Basin and Range extension that has modified the topography to its current appearance. Proterozoic, pre-Apache Group deformation of the Pinal Schist Group included isoclinal folding with steep to overturned fold axes with a general northeastern structural trend. Minor deformations took place in late Precambrian and post-Paleozoic but pre-Cretaceous times. The post Paleozoic-pre-Cretaceous deformation is characterized by steep northeast to easterly striking faults with displacements up to hundreds of feet.



(modified from Richard et al., 2000)  
**Figure 7-1: Regional Geology Little Dagoon Mountains with Historical Boundary**

The Laramide deformation produced structures striking in a northwesterly direction and was more or less perpendicular to the Pre-Apache Group deformation. Pre-late Cretaceous faults were reactivated and modified, and folds and thrust faults are common features of the Laramide.

Two episodes of block faulting have created the Basin and Range topography that dominates the current landscape and postdates the mineralization in the region.

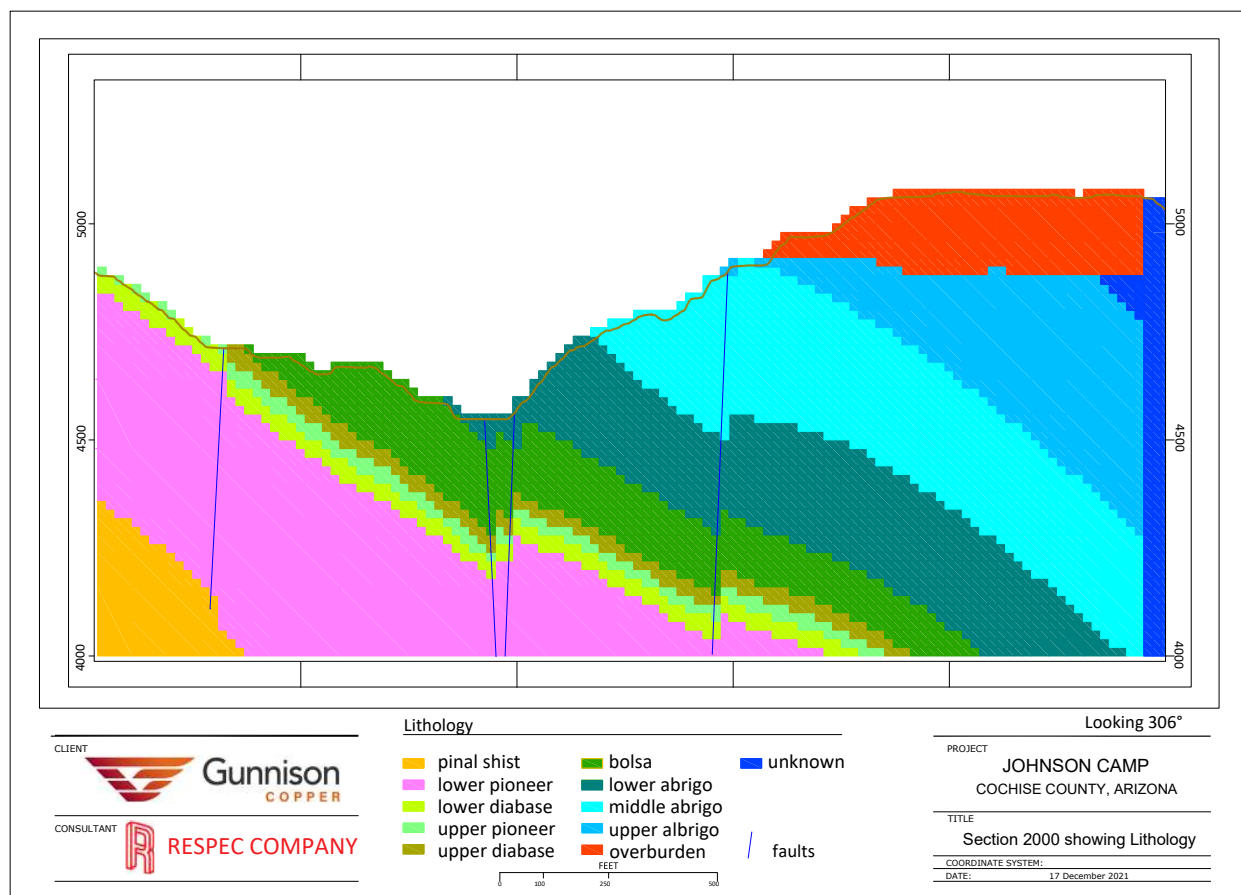
## 7.2 PROPERTY AND DEPOSIT GEOLOGY

The Johnson Camp property's geology is characterized by a package of upper Precambrian and lower Paleozoic rocks striking to the northwest and dipping moderately to the northeast. Copper mineralization is hosted throughout the geologic section although it is most abundant in the Cambrian Abrigo formation, which is sub-divided into upper, middle, and lower units at the property. The Abrigo formation is underlain by the Cambrian Bolsa quartzite and finally the Apache Group rocks of the upper Precambrian, specifically the Precambrian diabase and Pioneer Shale which are underlain by Precambrian Pinal Schist. A description of relevant geological units is given in Table 7-1. Note that the Bolsa quartzite at the Johnson Camp property is inappropriately applied to the formation directly below it, the Dripping Springs quartzite, which is part of the Precambrian Apache Group. There is no angular discordance between the two formations, however the basal unit of the Dripping Springs quartzite, the Barnes Conglomerate, can be easily identified in the open pits at Johnson Camp. Despite some subtleties, the two units are largely indistinguishable and historical operators at Johnson Camp lumped them together. For the purposes of this technical report, the "Bolsa quartzite" will refer also to the Dripping Springs quartzite and Barnes Conglomerate.

**Table 7-1: Geologic Descriptions of Relevant Johnson Camp Mine Formations**

Rock or Formation	Age	Approximate Thickness	Geologic Description
Upper Abrigo formation	Upper Cambrian	150 feet	Thin sandy dolomite beds with minor quartzite altered to white and green calc-silicate hornfels
Middle Abrigo formation	Upper Cambrian	300 feet	Thin bedded crenulated limestone with minor shale altered to distinct brown garnet-rich skarn
Lower Abrigo formation	Upper Cambrian	250 feet	Shale with interbedded limestone and dolomite altered to a dark grey/black calc-silicate hornfels
Bolsa Quartzite/ Dripping Springs Quartzite	Middle Cambrian/ Upper Precambrian	200 feet	Quartzite with minor shale beds altered to calc-silicate hornfels. Distinct red-brown color A 10-foot-thick conglomerate (Barnes Conglomerate) marks the base of the unit
Diabase	Upper Precambrian	30 feet	Thin sills of metadiabase intruding the Pioneer Shale. Two distinct sills (upper and lower) and defined in the Johnson Camp area
Pioneer Shale (Apache Group)	Upper Precambrian	150 feet	Shale with quartzite interbeds. Distinct purple-maroon and white color and reduction marks throughout with cubic pyrite.

The stratigraphic package is rotated generally thirty degrees to the northeast. Figure 7-2 shows a cross section of the Johnson Camp Mine geology through the Burro Pit area.



**Figure 7-2: Cross Section Through the Burro Pit at the Johnson Camp Mine**

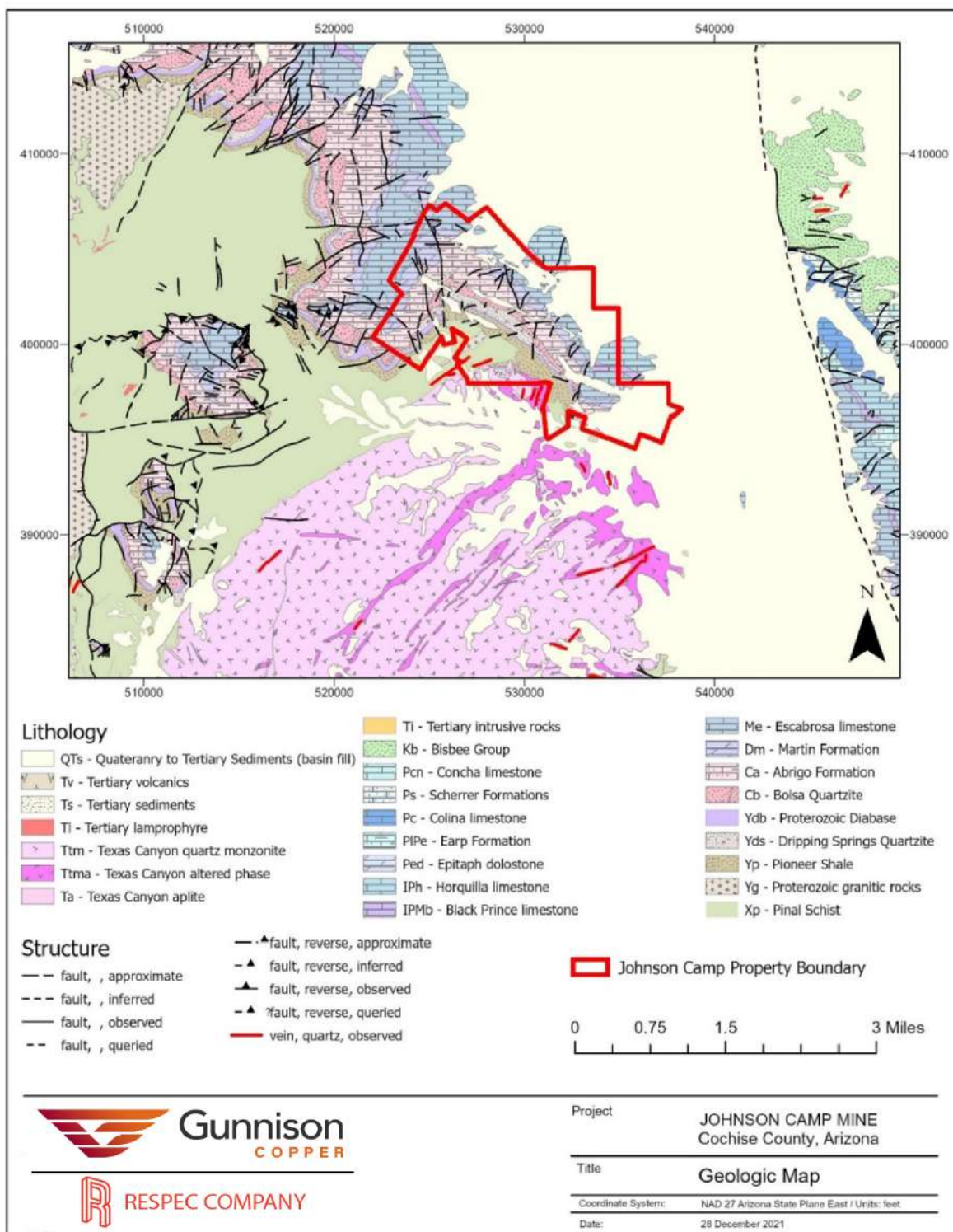
To the southwest of the property, the surface geology is dominated by outcrops of Precambrian Pinal schist and the Tertiary Texas Canyon quartz monzonite stock, as mapped by Cooper. To the northeast of the property, the Devonian Martin formation and Mississippian Escabrosa limestone overlie the Abrigo formation. The Texas Canyon quartz monzonite stock is thought to be the source of metallization in the district and at Johnson Camp. Roughly 750 feet to the southwest of the Burro Pit, the “altered phase” of the stock (as mapped by Cooper) crops out in a road cut on the south end of the old leach pad and the unit continues to the south and west of the property. The altered phase in this area and generally district-wide contains cm-scale quartz or quartz-orthoclase veins with coarse muscovite halos. These vein sets can be followed in a south-southwesterly direction from the outcrop where weak mineralization can be observed in and around the veins. No quartz monzonite is recognized in the Burro or Copper Chief pit nor recognized in any drilling at Johnson Camp. However, similar styles of veining observed in the stock can be identified at the Johnson Camp property.

According to historical interpretations, three sets of faults are recognized at Johnson Camp: north-northeast striking faults with apparent right-lateral displacement and steep dips usually to the southeast, east-northeast striking faults with apparent right-lateral displacement and moderate to steep dips to the south-southeast, and northwest-striking faults with apparent reverse or normal displacement and steep dips variably to either the northeast or southwest. It is likely that the northwest-striking set covers two separate tectonic events but is grouped together for the sake of this technical report. In all sets of faults, displacements are relatively minor (usually less than 200 feet of vertical or lateral displacement). Immediately to the south of the property, the Keystone fault, which is another north-northeast-striking fault with right-lateral displacement, shows significant throw juxtaposing the Mississippian section against the



**JOHNSON CAMP MINE**  
**FORM 43-101F1 TECHNICAL REPORT**

Cambrian. None of the faults in the Johnson Camp area, however, show displacement close to the magnitude of the Keystone Fault.



Source: GCC, December 2021

**Figure 7-3: Property Geologic Setting for the Johnson Camp Mine with Historical Boundary**

### **7.3 ALTERATION**

Moderate to intense calc-silicate alteration of the stratigraphic units at Johnson Camp is widespread throughout the property, especially in the Cambrian Abrigo formation. Calc-silicate minerals including garnet, epidote, and diopside are common in various assemblages which are primarily controlled by protolith mineralogy and secondarily controlled by proximity to structures. The Middle and Lower sub-units of the Abrigo formation contain the most intense calc-silicate alteration in the area. In the Middle Abrigo Formation, brown-tan garnet and epidote alteration is consistent and diagnostic of the unit. In the Lower Abrigo Formation, the rock is dominantly altered to dark grey to black hornfels with interbedded sub-units containing diopside-rich and/or garnet-epidote lenses similar to alteration in the Middle Abrigo Formation. Pervasive quartz veining occurs in both the Abrigo Formation and underlying Bolsa Quartzite throughout the Johnson Camp Mine area. Quartz vein orientations are typically sub-parallel to the stratigraphic units. Distinctive vein halos containing coarse muscovite can be observed in certain areas of the property, especially in the Bolsa Quartzite at the Copper Chief Pit.

### **7.4 MINERALIZATION**

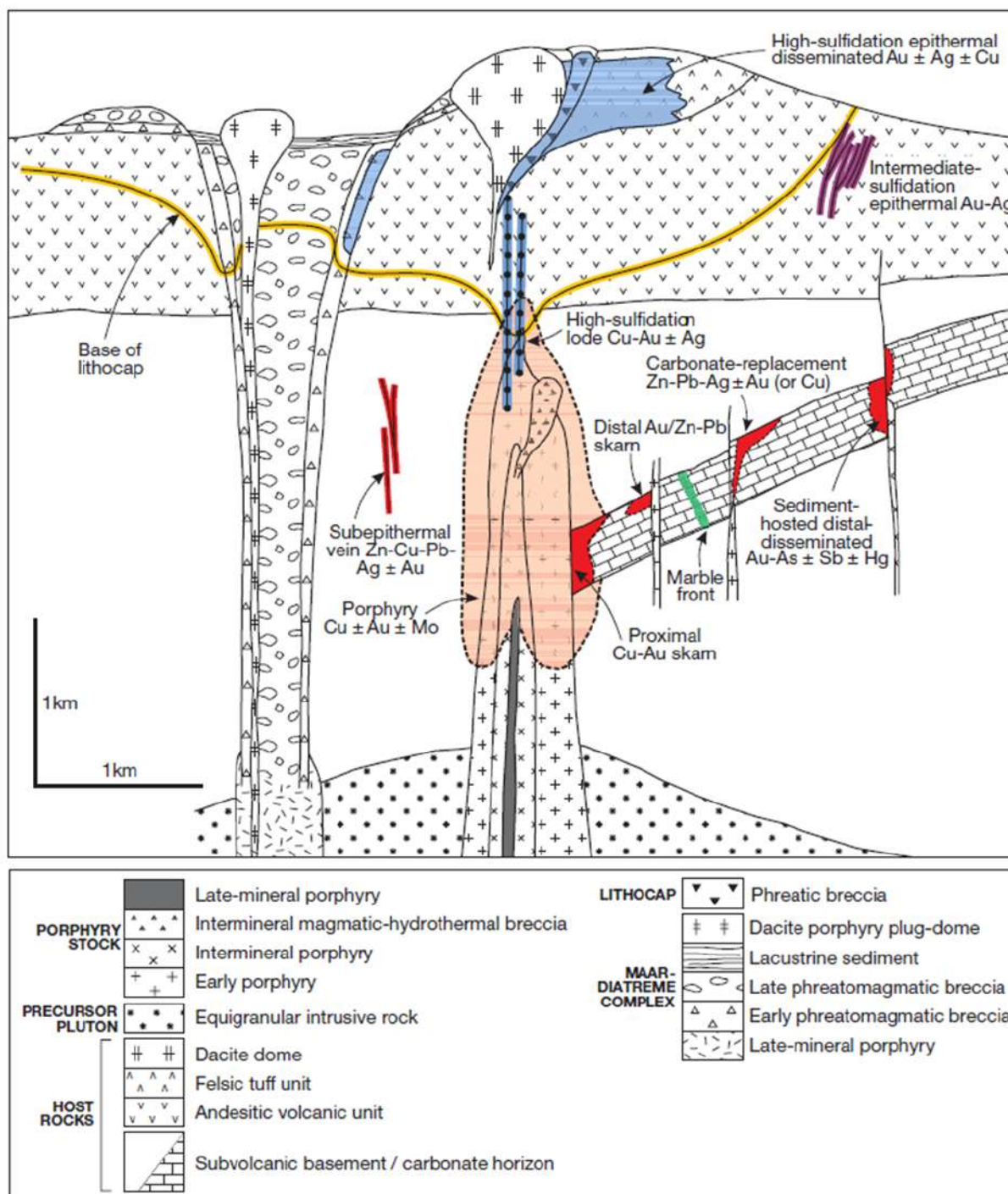
Primary copper mineralization at Johnson Camp is dominantly found along bedding planes or in veins and replacements as chalcopyrite along with quartz and pyrite, closely associated with skarn and calc-silicate alteration in the rock. The presence of copper mineralization at JCM is generally within the Bolsa Quartzite, Diabase Units, Lower and Middle Abrigo Formations. The deposit has been oxidized variably and oxidation is strongly controlled by structural features such as faults and stratigraphic contacts, as well as general depth profiles. Oxide copper consists primarily of chrysocolla, malachite, copper limonite, and manganiferous wad. Supergene chalcocite and occasional native copper occur generally in transitional zones between the oxide and primary sulfide mineralization. Transitional zones void of significant supergene chalcocite are categorized as mixed at JCM. Primary copper mineralization is dominated by chalcopyrite mineralogy. North-northwest and north-northeast fault sets appear to have had some influence on mineralizing fluids although the structural zones themselves are not significant in terms of bulk mineralization. Locally in the diabase sills and Bolsa quartzite, copper has been observed as exotic accumulations on fractures, presumably derived from dissolution of copper in the immediately overlying lower Abrigo Formation. This is especially apparent in the Copper Chief pit, where mobilized and precipitated copper oxides can be easily observed on joint planes and fractures (Curtis Associates, 2011).

## 8 DEPOSIT TYPES

The Johnson Camp Mine (JCM) copper deposit is a sub-type of or related to a classic copper skarn (Einaudi et al., 1980) and (Meinert et al., 2005). Skarn deposits range in size from a few million to 500 million tonnes and are globally significant, particularly in the southwestern US. They can be stand-alone copper skarns, which are generally small, or can be spatially and temporally closely associated with porphyry copper deposits, in which case they tend to be very large. The skarn at JCM and collectively in the Cochise mining district is presumably related to the Texas Canyon Quartz Monzonite, despite the intrusive itself hosting very little-known economic mineralization. Mineralization in the quartz monzonite would require more specialized conditions involving the metal and volatile content of the magma, depth of emplacement, or other factors (Burt, 1977).

Copper skarns generally form in calcareous shales, dolomites, and limestones peripheral or adjacent to the margins of diorite to granite intrusions that range from dikes and sills to large stocks or phases of batholithic intrusions, and frequently are associated with mineralized intrusions. Copper mineralizing hydrothermal fluids are focused along structurally complex and fractured rocks and convert the calcareous shales and limestones to andradite-rich garnet assemblages near the intrusive body, and to pyroxene and wollastonite rich assemblages at areas more distal to the intrusive. Retrograde evolution of the hydrothermal fluids produces actinolite-tremolite-talc-quartz-epidote-chlorite assemblages that overprint earlier garnet and pyroxene. Mineralization at JCM occurs approximately 500 ft northeast of known occurrences of the Texas Canyon Quartz Monzonite intrusion in the Cochise mining district, which is thought to be the source of mineralizing hydrothermal fluids. Therefore, JCM can be sub-categorized as proximal skarn related to a porphyry copper system. This assumption is supported by the high abundance of garnet-epidote alteration in the mineralized zones, and the characterization of the deposits in numerous historical publications. The anatomy of a telescoped porphyry copper system model illustrated in Figure 8-1 by (Sillitoe, 2010) can be used as a conceptual model to understand the spatial relationship of proximal skarns in the district.





Source: Sillitoe, 2010

Figure 8-1: Schematic Model

## **9 EXPLORATION**

This section summarizes the exploration work carried out at the Johnson Camp Mine. Mr. Bickel has reviewed the information and has determined it is suitable for disclosure in this technical report.

### **9.1 HISTORICAL EXPLORATION**

Exploration in the JCM area has taken place since the late 1800s and during that time, mining at JCM was considered archaic (Curtis Associates, 2011). Open pit mining commenced in 1975 by Cyprus and replaced the underground mining operations following the completion of an exploratory drilling program that defined the reserve of the Burro deposit. Cyprus and Arimetco collectively drilled 254 holes within both the Burro and Copper Chief pits. In 1999, Nord focused drilling exploration efforts on prospective targets outside of the pits such as the North and Keystone-Walnut areas. As a result of the four-phase exploration drilling program, 43 holes were drilled in the North area and 17 in the Keystone-Walnut area. Of the 60 drillholes, it was determined that no copper mineralization could be classified as reserves (Curtis Associates, 2011). Geological mapping was conducted by Nord in 2005 throughout the Burro and Copper Chief pit areas to identify and update existing geological maps. In 2008, Nord completed 25 drillholes that were placed at the extents of the Burro and Copper Chief pits to further delineate the resource. The drillholes confirmed mineralization to the north and south of the respective pits. An additional 6 drillholes were completed in 2010 by Nord that confirmed the geological and mineralogical continuity between the Burro and Copper Chief pits. The exploration programs carried out by Nord further defined the copper resources at the Burro and Copper Chief pits, along with indicating potential target areas for future development.

### **9.2 GCC EXPLORATION**

From 2016-2017, GCC catalogued and evaluated all data, drill core, pulp, and coarse reject material in the core shed inherited from Nord and subsequently commenced a re-logging and re-sampling program focused on soluble copper mineralization and assays.

In 2018, RESPEC began evaluating data provided by GCC for the purposes of building a new database to eventually create a new mineral resource estimate. These activities included:

- Review of historical documentation prepared by GCC that discuss the overall project geology, details on historical soluble-copper analyses, and historical modeling of total copper and soluble copper.
- Review of the Nord “10a” total copper and soluble copper resource modeling methodologies.
- Detailed statistical analysis of historical data vs GCC results from 2016 and 2017 resampling of historical drill core and re-analyses of historical pulps.
- Implementation of the transformation of certain project data from original mine-grid coordinates (JCM Grid) into NAD1927 State Plane Arizona East FIPS coordinates using a 2-point rotation determined in 2016 by Darling Geomatics.
- The re-creation of a version of the Nord “10a” block model in the new project coordinates.
- Creation of project topography by contouring DEM, topography, and USGS 10 m NED data.
- Creation of a RESPEC project drill-hole database.

In 2022-2024, GCC completed several drilling programs at JCM in which 77 drill holes were completed totaling 29,377.5 feet.

- In 2022, GCC completed a drilling program at JCM in which 44 drill holes were completed totaling 15,313 feet.

- In 2023, GCC completed a drilling program at JCM in which 21 drill holes were completed totaling 11,872 feet.
- In 2024, GCC completed a drilling program at JCM in which 12 drill holes were completed totaling 2,192.5 feet.

## 10 DRILLING

All of the drilling summarized in this section was conducted by historical operators from the 1960s through 2010. GCC completed a drilling program in 2022 to 2024 at the property focused on the Burro pit area.

This section summarizes the historical drilling and the drilling completed by GCC and the information presented in this section of the technical report is derived from multiple sources, as cited. The QP has reviewed this information and believe this summary accurately represents drilling done at the Johnson Camp Mine.

### 10.1 SUMMARY

The Johnson Camp Mine database contains 390 drill holes total 135,600 feet of drilling. Several drilling campaigns and operators span the contents of the database. Based on RESPEC's current knowledge, historical operators of the campaigns include Cyprus Mining (171 drill holes), Arimetco (83 drill holes), Nord (31 drill holes), Sumitomo (12 drill holes), and 16 drill holes were completed by an operator unknown to RESPEC. GCC completed 77 drill holes in 2022 to 2024. Drilling is concentrated in and immediately around the historically producing open pits. Figure 10-1 below shows the collar locations for the drill holes in the database, and Table 10-1 is a breakdown of the drilling and operators in the Johnson Camp Mine area.

**Table 10-1: Summary of Johnson Camp Drilling**

Operator	Year	Holes	Feet
Cyprus Mining	1960 – 1986	171	59,818
Arimetco	1989 - 1997	83	24,637.5
Summo USA Corp.	1998	12	5,800
Nord Resources Corp.	2008-2010	31	14,368
GCC	2022 - 2024	77	29,377.5
Unknown		16	1,599
<b>Totals</b>		<b>390</b>	<b>135,600</b>





Figure 10-1: Map of Johnson Camp Drill Holes

## 10.2 1960-1986 HISTORICAL DRILLING BY CYPRUS MINING

Cyprus Mining ("Cyprus") drilled a total of 61,417 feet in 187 holes, of which 10 were drilled vertically and 3 were angle holes. These holes were drilled generally in the period of 1960-1986, although exact dates of each hole are not known to RESPEC. The drilling was done on approximately 100-foot centers (Curtis Associates, 2013). Cyprus drilled NQ size (1.8-inch core diameter) holes. No information is available regarding the drill contractor(s), rig type(s) or methods and procedures for collar and down-hole surveys, if any were conducted. The current drill hole database does not include downhole surveys for the holes.

## 10.3 1989-1997 HISTORICAL DRILLING BY ARIMETCO

Arimetco drilled a total of 24,638 feet in 83 holes, of which 180 were drilled vertically and 7 were angle holes. These holes were drilled generally in the mid-1990s (Curtis Associates, 2013). Exact drilling dates of each hole are not known to RESPEC. Arimetco drilled primarily reverse circulation holes with some core drilling (Bikerman et al., 2007). No information is available regarding the drill contractor(s), rig type(s) or methods and procedures for collar and down-hole surveys, if any were conducted. The current drill hole database does not include downhole surveys for the holes.

#### **10.4 1998 HISTORICAL DRILLING BY SUMMO USA CORP.**

Summo USA Corp. (“Summo”) drilled a total of 5,800 feet in 12 holes, of which 7 were drilled vertically and 5 were angle holes. These holes were drilled in 1998. Summo drilled them all by reverse circulation methods. No information is available regarding the drill contractor(s), rig type(s) or methods and procedures for collar and down-hole surveys, if any were conducted. The current drill hole database does not include downhole surveys for the holes.

#### **10.5 2008-2010 HISTORICAL DRILLING BY NORD RESOURCES CORP.**

Nord Resources Corp. (“Nord”) drilled a total of 14,368 feet in 31 holes, of which 27 were drilled vertically and 4 were angle holes. Twenty-five of these holes were drilled in 2008 and the remainder were drilled in 2010. Nord drilled by reverse circulation methods. No information is available regarding the drill contractor(s), rig type(s) or methods and procedures for collar and down-hole surveys, if any were conducted. The current drill hole database does not include downhole surveys for the holes.

#### **10.6 2022-2024 DRILLING BY GCC**

The drill contractor for the 2022 - 2024 program was Godbe Drilling, using both LF70 and LF90 drill rigs. Godbe drilling set steel casing through the first five feet of bedrock, or through backfill in the pit and first five feet of bedrock. Downhole surveys were completed by Godbe drilling upon completion of drill hole using directional survey methods. Godbe drilling abandoned holes with mud and a grout cap. All GCC drillhole collars have been surveyed by Darling Geomatics using a Trimble GPS, which can be accurate to 0.05 ft horizontally and 0.2 ft vertically. GCC completed an infill and metallurgical core drilling program in the Burro pit area. 36 HQ core size (2.5-inch core diameter) infill holes and 8 PQ core size (3.3-inch core diameter) metallurgical holes were completed. Downhole surveys were conducted on all but 10 core holes of which two of the holes were redrilled with the original hole lacking a survey. In 2023, GCC completed metallurgical holes, 14 PQ core size and 1 PQ/HQ core size holes, and 6 condemnation holes, 2 PQ/HQ core size and 4 HQ core size holes. Downhole surveys were conducted on all, three of the drill holes were redrilled. In 2024, GCC completed 12 metallurgical holes, all of which were PQ core size. Downhole surveys were conducted on 4 of 12 drill holes, two of the drill holes were redrilled. Figure 10-1 above shows the collar locations for the drill holes in the database, with the blue holes illustrating the drillholes completed by GCC during the 2022 – 2024 drill programs.

#### **10.7 SUMMARY STATEMENT**

Mr. Bickel has determined that the drilling sampling procedures provided samples of drill intercepts that are representative of significant copper mineralization at JCM and of sufficient quality for use in the interpretations herein, and for the resource estimations discussed in Section 14. The QP is unaware of any sampling or recovery factors that materially impact the mineral resources discussed in Section 14. Figure 14-1 through Figure 14-6 show representative drill sections through the mineral deposit for lithology, oxidation, and mineralization.

There is a general lack of down-hole deviation survey data for the historical holes in the Johnson Camp Mine area. While the paucity of such data is not unusual for drilling done prior to the 1990s, the lack of deviation data contributes a level of uncertainty as to the exact locations of drill samples at depth. However, these uncertainties are mitigated to a significant extent by the vertical orientation of nearly all drill holes, and the open-pit nature of any potential future mining operation that is based in part on data derived from the historical holes.

## 11 SAMPLE PREPARATION, ANALYSES AND SECURITY

This section summarizes all information known to Mr. Bickel relating to sample preparation, analysis, and security, as well as quality assurance/quality control procedures and results, which pertain to the Johnson Camp Mine. The information has either been compiled by Mr. Bickel from historical records as cited or provided by GCC.

### 11.1 HISTORICAL SAMPLE PREPARATION AND ANALYSIS

Mr. Bickel is unaware of any information on the methods and procedures used by Nord for the preparation of their drilling samples. Incomplete records indicate that all samples were analyzed for copper and some were analyzed for soluble copper, but the analytical methods are not known.

According to Bikerman et al. (1974), all Cyprus drilling was NQ size, and general procedures involved delivering the core from the rig to a core facility on site where it was marked and split by geologists. Core splitting was completed on a concrete pad to avoid contamination, and that the samples were shipped to a certified independent certified lab. The samples were subject to QA/QC standards, and Cyprus did perform check assays through multiple labs. Cyprus also used performed a QA/QC procedure of compositing sample pulps of a given intersection and comparing the composited assay to the original analyses (Bikerman et al., 2007). Based on copies of assay certificates provided by GCC, the majority of the samples submitted by Cyprus were assayed at Southwestern Assayers and Chemists ("SWAC") in Tucson, Arizona. The samples were analyzed for total copper and soluble copper. The author has no information on the analytical methods and procedures used. The author infers that SWAC was independent of Cyprus.

Arimetco drilling, which was primarily by reverse-circulation methods, was sampled using a sample cone and Jones splitter (Bikerman et al., 2007). Arimetco use certified labs to perform the analyses. No information is available on the methods and procedures used for sample preparation and analysis.

Samples from the Summo USA Corp drill-holes were analyzed by Actlabs-Skyline, another predecessor to what Skyline Assayers and Laboratories is now. Samples were analyzed for total copper and sequential analysis of acid-soluble and cyanide-soluble copper. No information is available on the methods and procedures used for sample preparation and analysis.

Nord samples from their 2008 and 2010 drilling campaigns were analyzed by Skyline Assayers and Laboratories. Samples were analyzed for total copper and sequential analysis of acid-soluble and cyanide-soluble copper. No information is available on the methods and procedures used for sample preparation and analysis.

### 11.2 GCC RESAMPLING PROCEDURES

Following GCC's purchase of the Johnson Camp Mine, a detailed inventory of historical drill core and sample pulp from the existing storage site near at the mine was undertaken. The core and pulp material at the Johnson Camp core shed was found to be well-organized. However, the physical state of the core shed itself was in poor condition. The facility had been exposed on one side by a broken bay door, and some core boxes and pulp containers were dilapidated or destroyed by rodents. GCC salvaged what material remained in-tact and transported it to their core facility in Casa Grande. Drill core and pulp remaining from historical drilling was inspected and selected intervals were re-sampled by GCC in 2016 and 2017. The core was logged, photographed, and inspected by GCC staff. Samples were selected based on criteria developed by GCC for the purposes of data investigations. The criteria were limited by core and pulp availability. Samples existed as half core (originally split by historical operators). These samples were split to ¼ core. Pulps were transferred into new bags, shaken up, and a minimum of 20 grams was separated for re-sample. All core samples were mechanically split and placed in bags. Internal QA/QC samples (standards, blanks, and ¼ core duplicates) were inserted approximately every tenth sample in the sequence.

The GCC samples were prepared and analyzed at Skyline Laboratories (“Skyline”) in Tucson, Arizona. Skyline is an independent commercial laboratory that holds ISO 9001:2015 and ISO/IEC 17025:2017 accreditations.

The samples were crushed to plus 75% passing -10 mesh, then split and pulverized with standard steel to plus 95% passing -150 mesh.

The analytical methods for the assays are as follows:

**Total Cu (TCu) analyses:** Samples are digested in a mixture of hydrochloric, nitric and perchloric acids. This solution is heated and taken to dryness. The contents are treated with concentrated hydrochloric acid and the solution is brought to a final volume of 200 mL with de-ionized water. This solution is read by Atomic Absorption using Standard Reference Materials made up in 5% hydrochloric acid.

**Sequential Analysis of Acid-Soluble Cu (ASCu) and Cyanide-Soluble Cu (CNCu) analyses:** Samples are digested in 5% sulfuric acid and supernatant solution is diluted to 100 mL with de-ionized water. The residue is digested in 10% sodium-cyanide solution and diluted to 100 mL. The ASCu samples are read on Atomic Absorption units using 0.5% H<sub>2</sub>SO<sub>4</sub> calibration standards. The CNCu samples are read on Atomic Absorption units using 1% NaCN calibration standards.

### 11.3 GCC 2022-2024 SAMPLE PREPARATION AND ANALYSIS

From 2022 to 2024, GCC completed an infill and metallurgical core drilling program. The core was logged, photographed, and inspected by GCC staff and contractors. Samples were selected based on a suggested 10-foot length with flexibility to sample on geologic contacts and mineralization boundaries. All core samples were split using diamond blade saws and placed in bags. Internal QA/QC samples (standards, blanks, and ¼ core duplicates) were inserted approximately every tenth sample in the sequence. Metallurgical holes were sampled for assay by cutting an approximately 1/8 core slice down the core’s long axis for each interval. Slice locations were chosen by the logging geologist to ensure representative mineralization from the core was selected for each slice.

The GCC samples were prepared and analyzed for ASCu and CNCu analyses (described in Section 11.2) at Skyline Laboratories (“Skyline”) in Tucson, Arizona. Skyline is an independent commercial laboratory that holds ISO 9001:2015 and ISO/IEC 17025:2017 accreditations.

### 11.4 SAMPLE SECURITY

The authors have no information on the sample security methods and procedures used by historical operators. Drill core remaining from the historical drill campaigns has been stored at the GCC core facility in Casa Grande, AZ. GCC’s samples were selected and stored in bags at the GCC core facility. The bags were placed into large mobile bins and made available for direct pickup by Skyline labs. Upon pickup by Skyline, Chain of Custody sheets were filled out and signed by GCC and Skyline.

For the 2022 to 2024 drilling program, drill core was temporarily stored at the GCC core facility at the Johnson Camp Mine for sample preparation; after sample preparation was complete, it was moved to the GCC core facility in Casa Grande, AZ. GCC’s samples were collected and stored in bags at the GCC core facility. The bags were placed into large mobile bins and made available for direct pickup by Skyline labs or were delivered to Skyline Labs by FCC staff. Upon pickup by Skyline or delivery to Skyline, Chain of Custody sheets were filled out and signed by GCC and Skyline.



## 11.5 QUALITY ASSURANCE/QUALITY CONTROL

### 11.5.1 Historical QA/QC Results

Little information is provided in the historical records pertaining to the results of historical QA/QC programs. According to Bikerman et al., (2007), a QA/QC procedure whereby Cyprus composited sample pulps and re-submitted the composite for assay as a comparison to the composite grade of original assays was practiced during exploration of the property. Some original assay certificates for this procedure are available, and those that exist compare assays from Southwestern Assayers and Chemists to Union. Others compare results from Hazen labs to an unknown source of assays.

### 11.5.2 GCC 2016-2017 Drilling QA/QC Methods and Results

CRMs for Resampling Program. GCC purchased commercial certified reference materials (“CRMs”) for use in the 2016-2017 resampling program. The CRMs were inserted into the re-sample stream and analyzed with the core samples for total copper. The results were used to evaluate the analytical accuracy and precision of the analyses in GCC’s samples.

In the case of normally distributed data, 95% of the CRM analyses are expected to lie within the two standard-deviation limits of the certified value, while only 0.3% of the analyses are expected to lie outside of the three standard-deviation limits. Note, however, that most assay datasets from metal deposits are positively skewed. Samples outside of the three standard-deviation limits are typically considered to be failures. As it is statistically unlikely that two consecutive analyses of CRMs would lie between the two and three standard-deviation limits, such samples are also considered to be failures unless further investigations suggest otherwise. All potential failures should trigger investigation, possible laboratory notification of potential problems, and possible reanalysis of all samples included with the failed standard result.

Table 11-1 lists the CRMs used by GCC for the 2016-2017 core drilling program.

**Table 11-1: Certified Reference Materials for 2016-2017 Assays**

Reference Material	Certified Value (%Cu)	2 Std Dev (%Cu)	No. of Skyline Analyses
AMIS 0249	0.37	0.01	147
AMIS 0370	0.70	0.05	16

The Skyline copper analyses of the GCC CRMs returned excellent results, with generally good precision and accuracy for both AMIS 0249, shown in Figure 11-1, and AMIS 0370, shown in Figure 11-2. Only one technical ‘failure’ occurred in standard analyses, shown on the chart for AMIS 0370. The value reported from the lab, 0.64, is slightly below the ‘failure’ threshold of 0.6418. GCC considered that the reporting precision from the lab is two decimal places, and that the value is likely within the threshold limits if reported with higher precision. Therefore, the sample was not considered an actual failure. The author considers this conclusion reasonable.

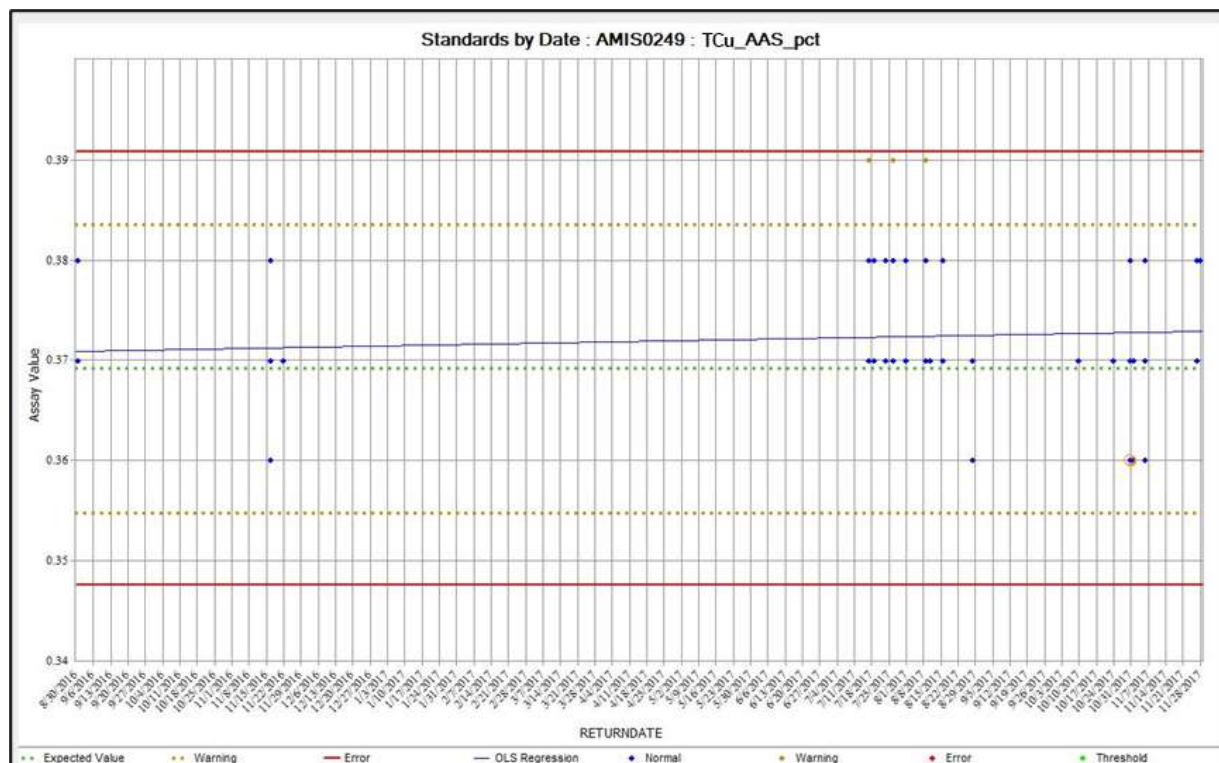


Figure 11-1: 2016 – 2017 AMIS 0249 Total Copper Analyses

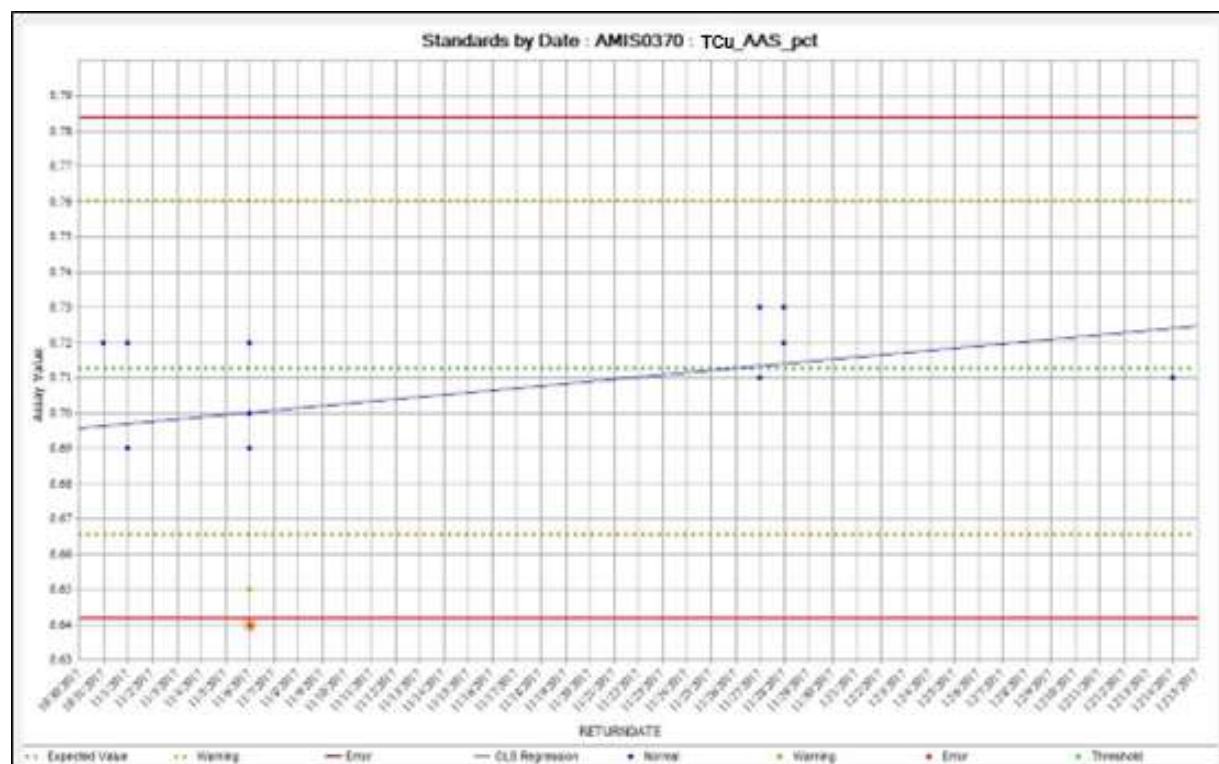
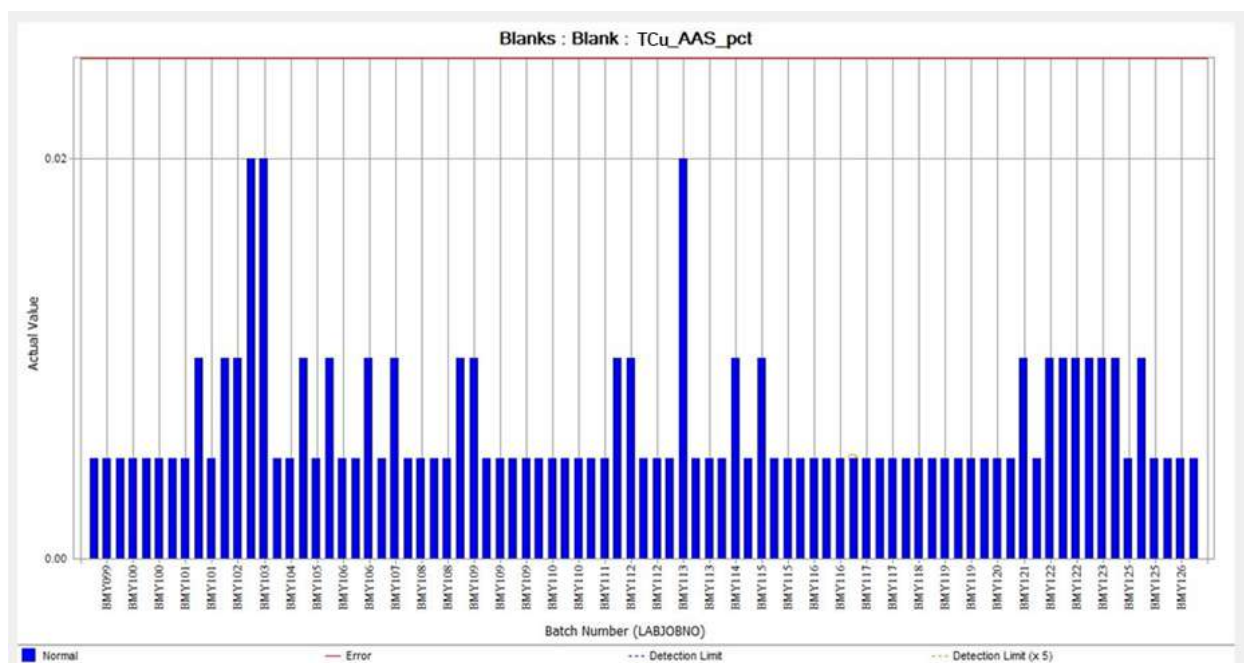


Figure 11-2: 2016 – 2017 AMIS 0370 Total Copper Analyses

Coarse Blanks for Resampling Program. Coarse blanks are samples of barren material that are used to detect possible contamination in the laboratory, which is most common during sample preparation stages. In order for analyses of blanks to be meaningful, they must be sufficiently coarse to require the same crushing and pulverizing stages as the drill samples. It is also important for a significant number of the blanks to be placed in the sample stream within, or immediately following, a set of mineralized samples, which would be the source of most contamination issues. In practice, this is much easier to accomplish with core samples than RC.

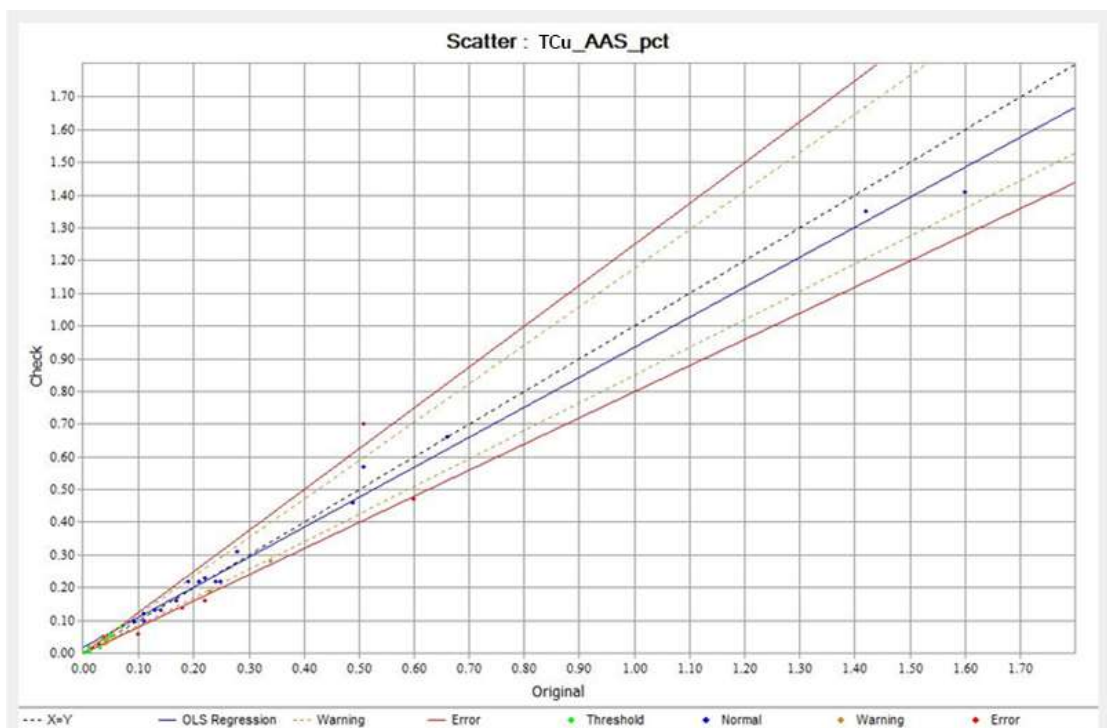
Blank results that are greater than five times the lower detection limit of the relevant analyses are typically considered failures that require further investigation and possible re-assaying of associated drill samples. The detection limit of the Skyline analyses was 0.01% for total copper. Blank samples assaying in excess of five times these detection limits (0.005%) are considered to be failures. A chart of the Skyline analyses of the coarse blanks is shown in Figure 11-3. There were no coarse blank failures among the samples analyzed.



**Figure 11-3: 2016 – 2017 Coarse Blank Copper Values**

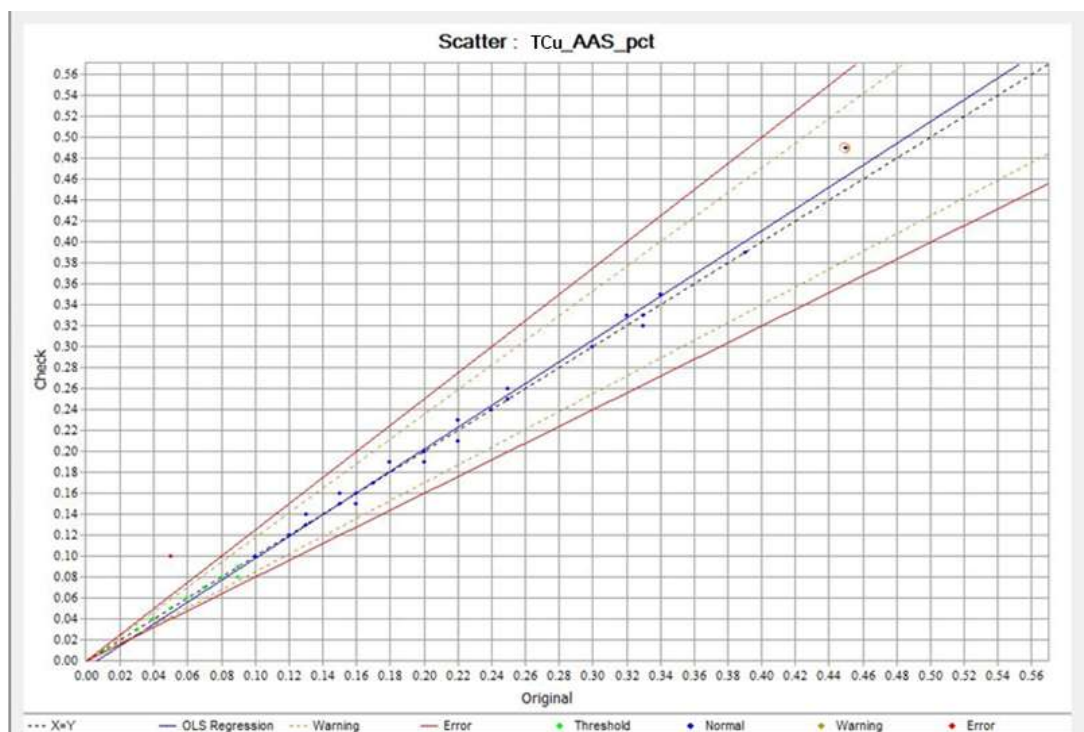
Core-Duplicates for Resampling Program. Core field duplicates are secondary splits of original core samples collected simultaneously with the primary sample splits. One half split core is quartered to create the duplicate. Core duplicates are used to evaluate the total variability introduced by subsampling, including in the laboratory as well as the variability in the analyses. Core-duplicates should therefore be analyzed by the primary analytical laboratory.

GCC's resampling program included a total of 32 pairs of total copper analyses from core-duplicate samples. Figure 11-4 is a scatter plot of the core-duplicate results.



**Figure 11-4: 2016 – 2017 Core-Duplicate Total Copper (“TCu”) Results Relative to Primary Sample Assays**

GCC’s resampling program included a total of 44 pairs of total copper analyses from pulp-duplicate samples. Figure 11-5 is a scatter plot of the pulp-duplicate results.



**Figure 11-5: 2016 – 2017 Pulp-Duplicate Total Copper (“TCu”) Results Relative to Primary Sample Assays**

There is no obvious bias in the duplicate sample results. The average assay duplicate assay values for copper are within 10% of the average original values. No outliers were removed.

### 11.5.3 GCC 2022 Drilling QA/QC Methods and Results

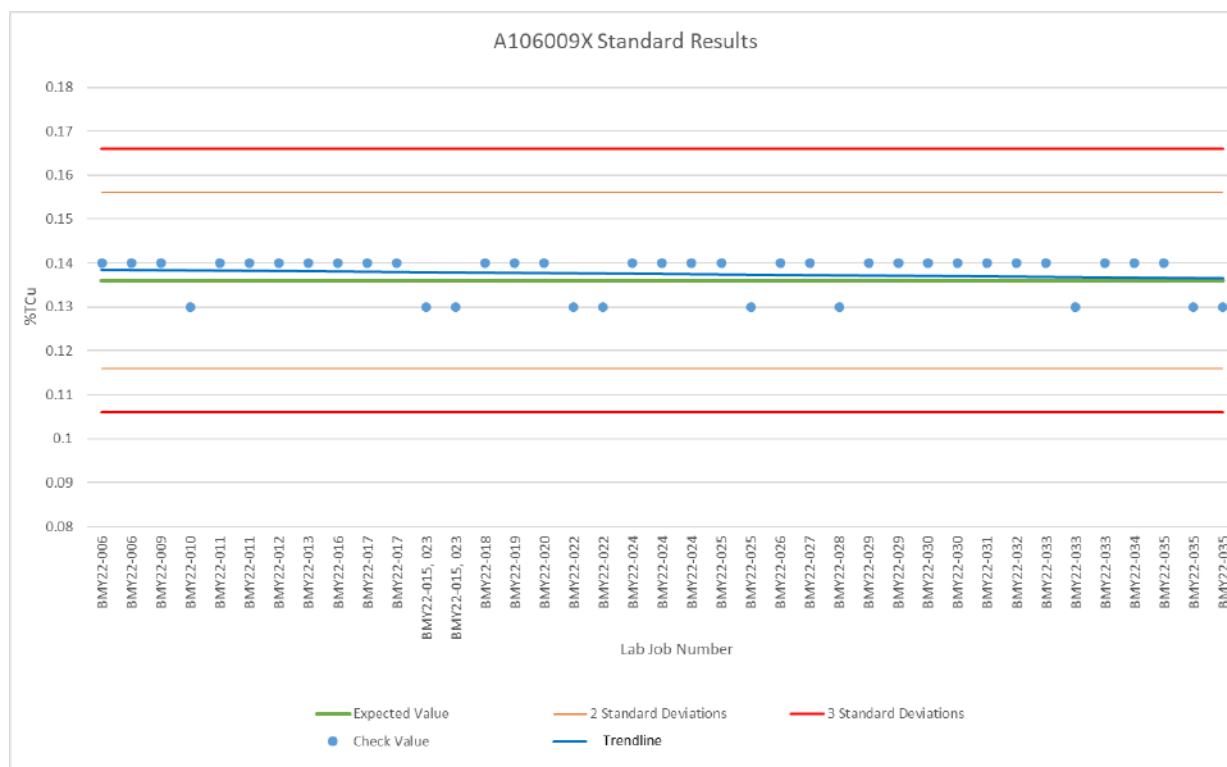
CRMs. GCC purchased commercial certified reference materials (“CRMs”) for use in the 2022 core drilling program. The CRMs were inserted into the sample stream and analyzed with the core samples for total copper. The results were used to evaluate the analytical accuracy and precision of the analyses in GCC’s samples.

Table 11-2 lists the CRMs used by GCC for the 2022 core drilling program.

**Table 11-2: Certified Reference Materials for 2022 Assays**

Reference Material	Certified Value (%Cu)	2 Std Dev (%Cu)	No. of Skyline Analyses
A106009X	0.136	0.02	39
AMIS0358	0.7568	0.0396	4
CDN-ME-2001	1.06	0.04	45

The Skyline copper analyses of the GCC CRMs returned excellent results, with generally good precision and accuracy, shown in Figure 11-6 to Figure 11-8. A106009X and AMIS0358 returned no values outside of 2 standard deviations. CDN-ME-2001 had a slight low bias and returned 5 values below 2 standard deviations.



**Figure 11-6: 2022 A106009X Total Copper Analyses**

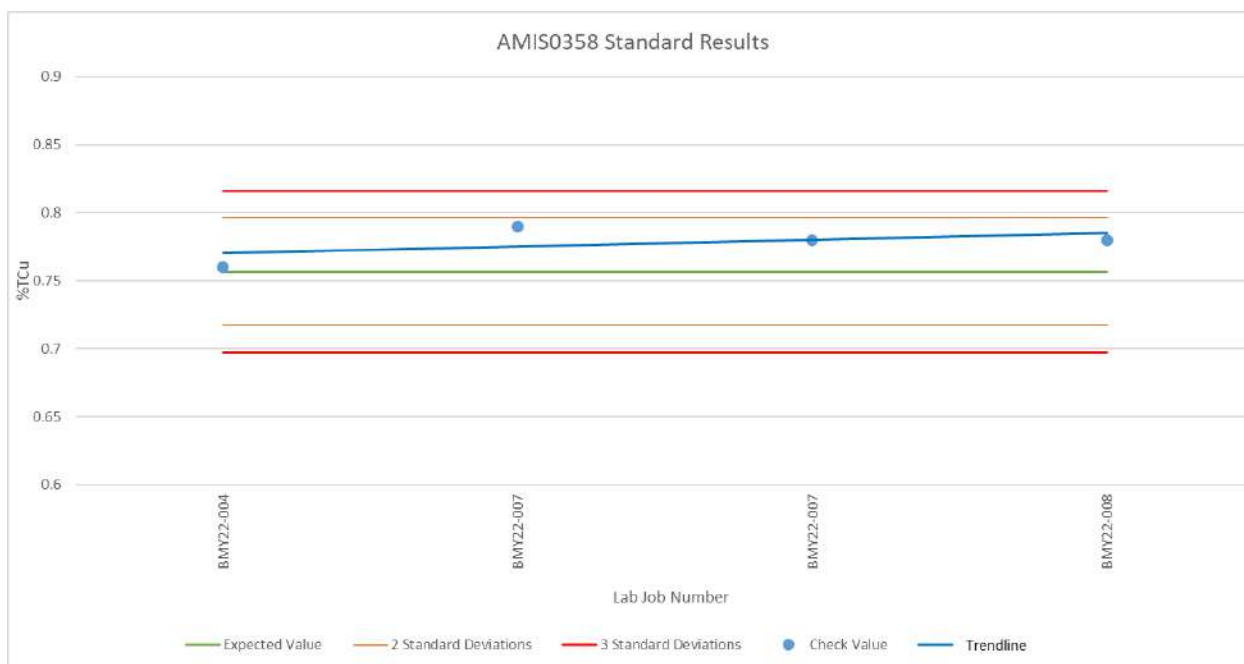


Figure 11-7: 2022 AMIS 0358 Total Copper Analyses

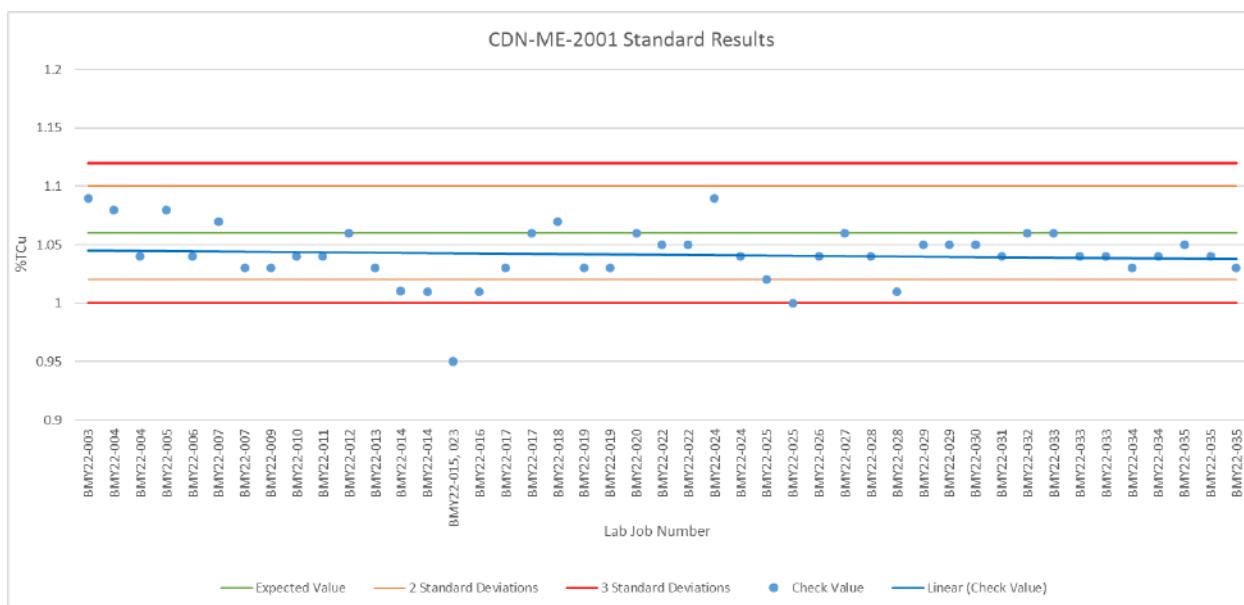


Figure 11-8: 2022 CDN-ME-2001 Total Copper Analyses

Coarse Blanks for 2022 Drilling Program. Blank results that are greater than five times the lower detection limit of the relevant analyses are typically considered failures that require further investigation and possible re-assaying of associated drill samples. The detection limit of the Skyline analyses was 0.01% for total copper. Blank samples assaying in excess of five times these detection limits (0.005%) are considered to be failures. A chart of the Skyline analyses of the coarse blanks are shown in Figure 11-9. There was one blank failure that was determined to be a sample swap. Four samples around the failure were re-run to confirm the swap. The failure was removed from the blank figure below.



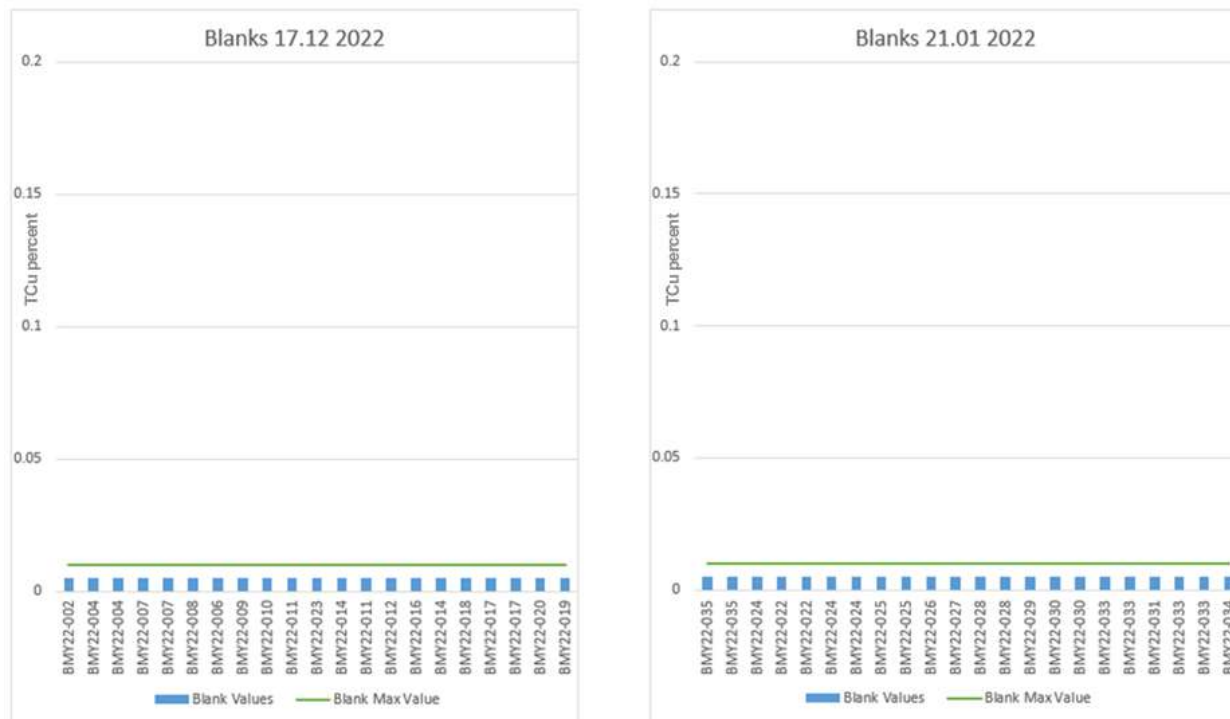


Figure 11-9: 2022 Coarse Blank Copper Values

Core-Duplicates. Field-duplicates are taken by quartering the core and submitting two quarter core samples with different sample numbers and are collected at a rate of approximately 1 in 40 samples. GCC's 2022 core drilling program included a total of 33 pairs of total and acid-soluble copper analyses from core-duplicate samples. Figure 11-10 and Figure 11-11 are scatter plots of the core-duplicate results for TCu and ASCu. If one outlier and the lower grade values below a threshold of 0.9 percent TCu are removed, then there is no bias in the data. If one outlier and the lower grade values below a threshold 0.05 percent ASCu are removed, then there is a 3% bias in ASCu. There is no obvious bias in the field-duplicate sample results. The average assay duplicate assay values for copper are within 10% of the average original values. Assay results for the TCu and ASCu comparisons but are included in the figures below.

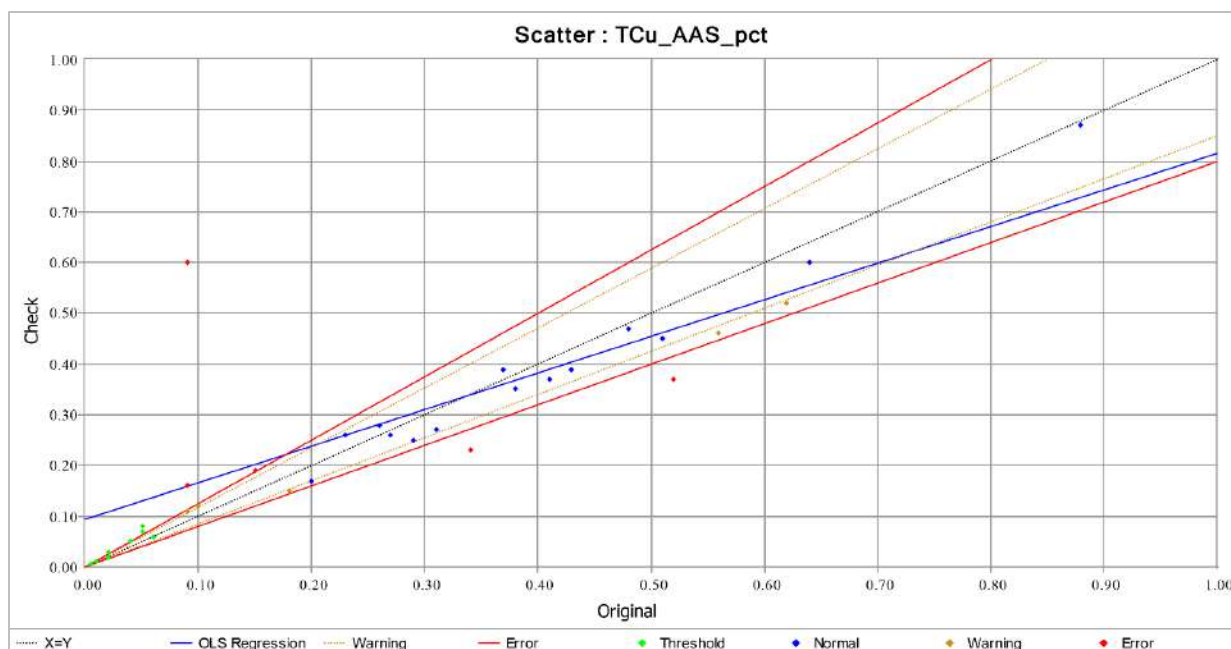


Figure 11-10: 2022 Field-Duplicate Total Copper (“TCu”) Results Relative to Primary Sample Assays



Figure 11-11: 2022 Field-Duplicate Acid-Soluble Copper (“ASCu”) Results Relative to Primary Sample Assays

A crush-duplicate is a split of the reject prior to pulverization and is done by the lab at a rate of approximately 1 in 40 samples.

GCC’s 2022 program included a total of 23 pairs of total and acid-soluble copper analyses from crush-duplicate samples. The results for TCu and ASCu are in Figure 11-12 and Figure 11-13. There is no obvious bias in the crush-duplicate sample results. The average assay duplicate assay values for copper are within 10% of the average original values. No outliers were removed.



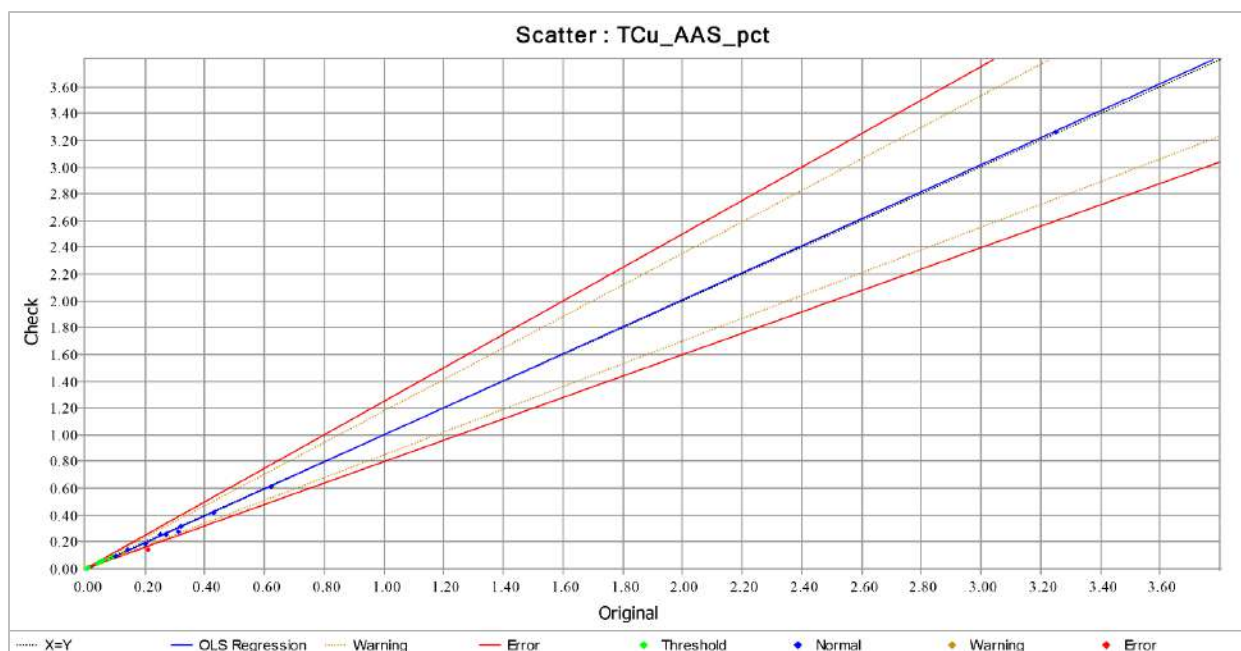


Figure 11-12: 2022 Crush-Duplicate Total Copper (“TCu”) Results Relative to Primary Sample Assays

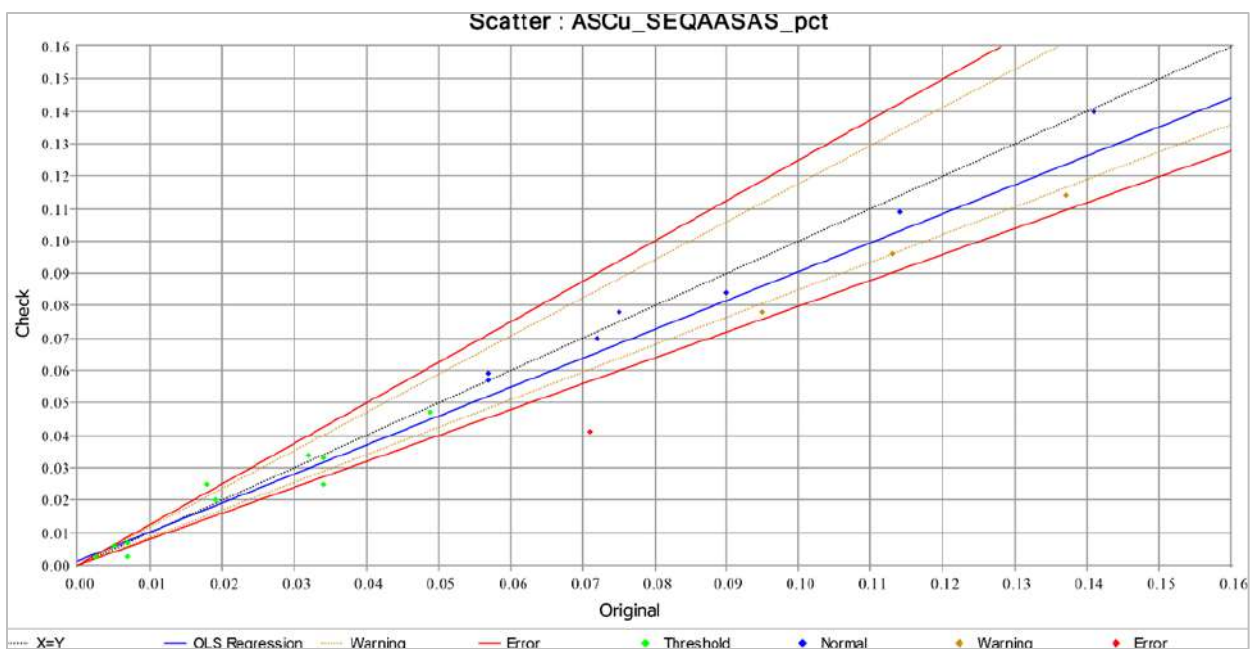


Figure 11-13: 2022 Crush-Duplicate Acid-Soluble Copper (“ASCu”) Results Relative to Primary Sample Assays

A pulp duplicate is collected by the lab by producing two pulps from the sample and is done at a rate of approximately 1 in 20 samples. GCC's 2022 program included a total of 48 pairs of total and acid-soluble copper analyses from pulp-duplicate samples. There is no obvious bias in the pulp-duplicate sample results. The average assay duplicate assay values for copper are within 10% of the average original values. No outliers were removed.

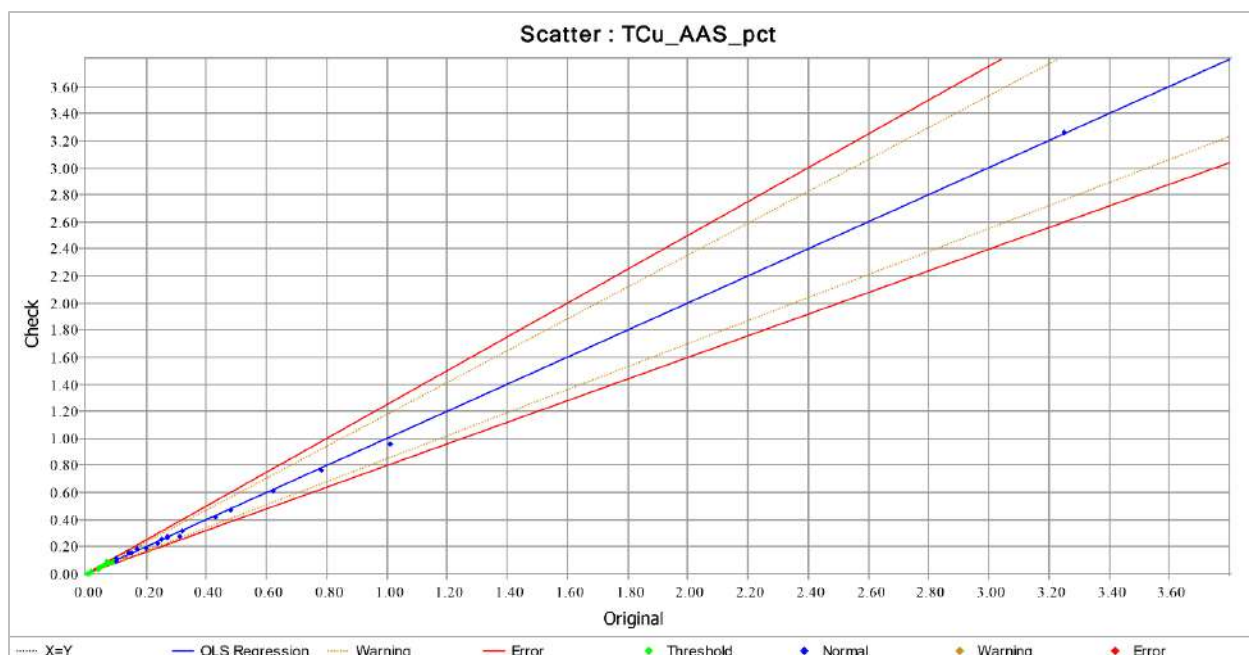


Figure 11-14: 2022 Pulp-Duplicate Total Copper (“TCu”) Results Relative to Primary Sample Assays

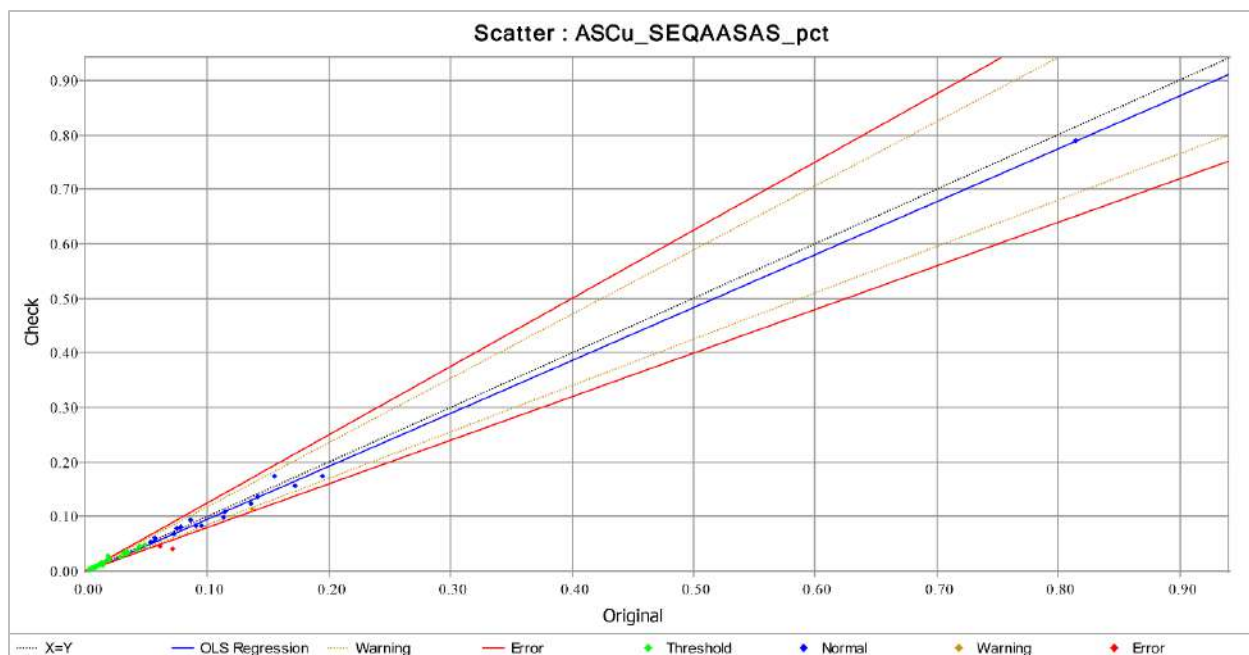


Figure 11-15: 2022 Pulp-Duplicate Acid-Soluble Copper (“ASCu”) Results Relative to Primary Sample Assays

#### 11.5.4 GCC 2023 Drilling QA/QC Methods and Results

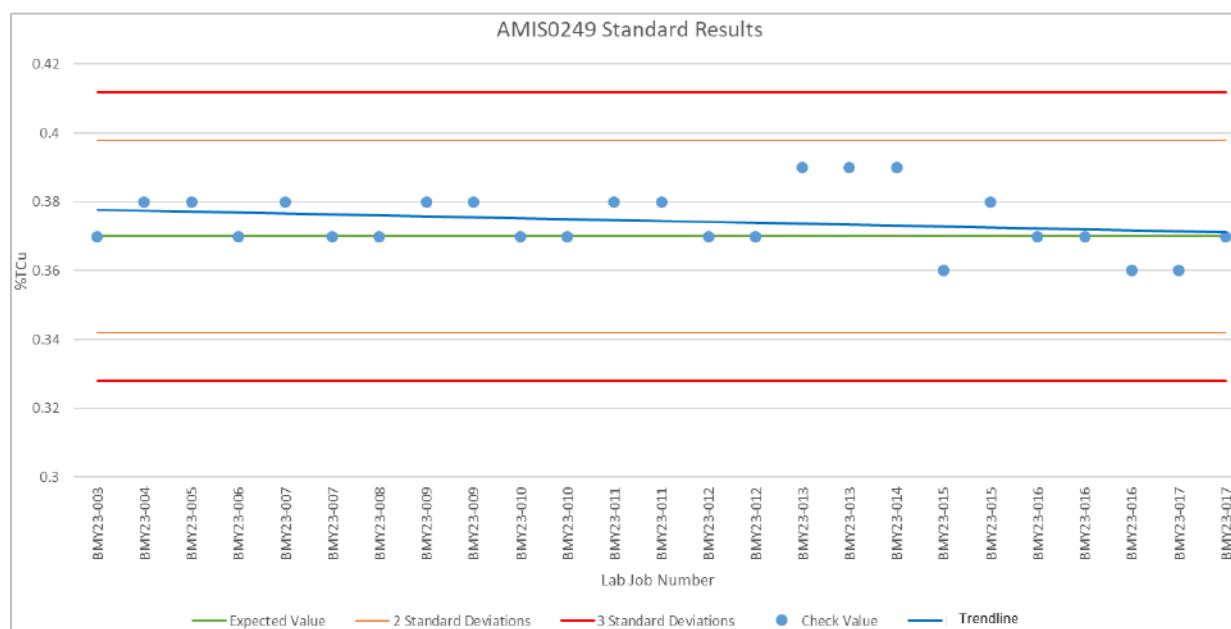
CRMs. GCC purchased commercial certified reference materials (“CRMs”) for use in the 2023 core drilling program. The CRMs were inserted into the sample stream and analyzed with the core samples for total copper. The results were used to evaluate the analytical accuracy and precision of the analyses in GCC’s samples.

Table 11-3 lists the CRMs used by GCC for the 2023 core drilling program.

**Table 11-3: Certified Reference Materials for 2023 Assays**

Reference Material	Certified Value (%Cu)	2 Std Dev (%Cu)	No. of Skyline Analyses
AMIS0249	0.3699	0.028	25
AMIS0370	0.7129	0.0474	10
CDN-ME-2001	0.106	0.04	6

The Skyline copper analyses of the GCC CRMs returned excellent results, with generally good precision and accuracy, shown in Figure 11-16 to Figure 11-18. AMIS0249, AMIS0370 and CDN-ME-2001 returned no values outside of 2 standard deviations.



**Figure 11-16: 2023 AMIS 0249 Total Copper Analyses**

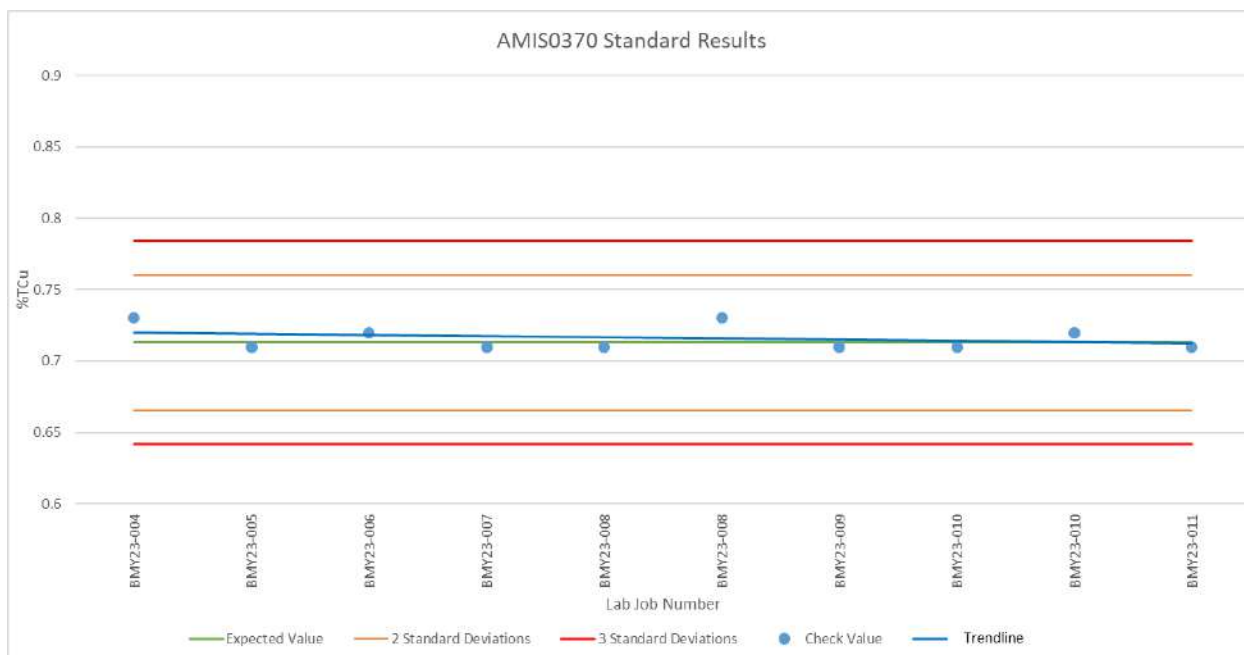


Figure 11-17: 2023 AMIS 0370 Total Copper Analyses

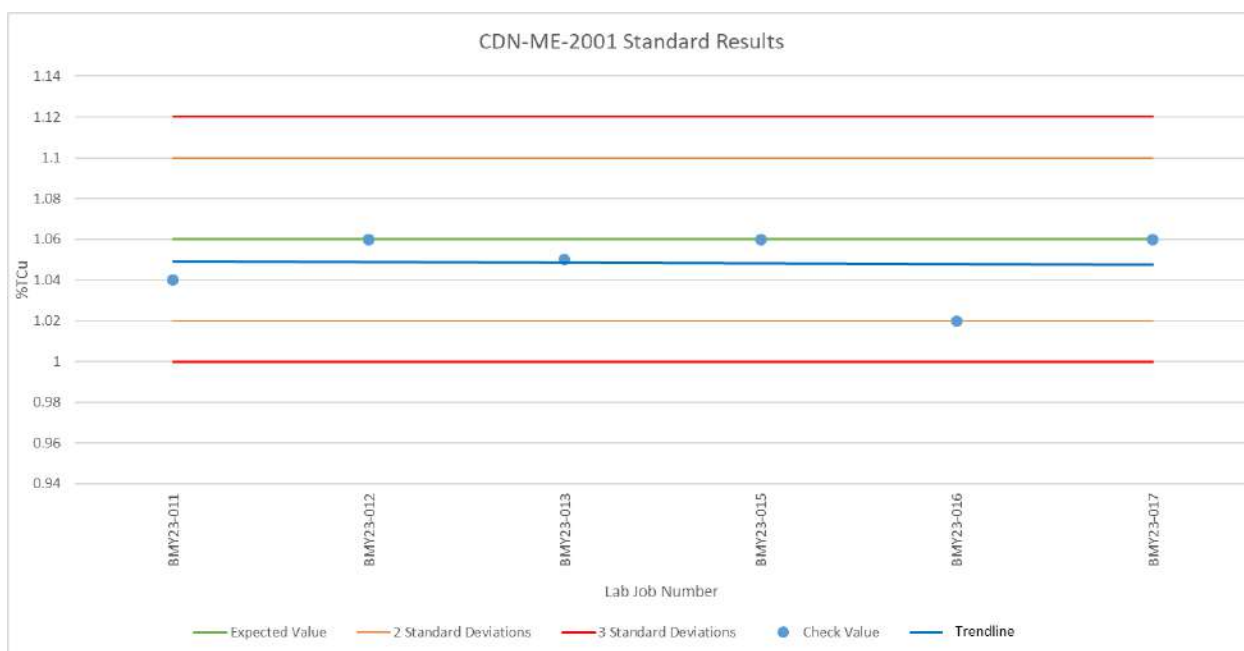
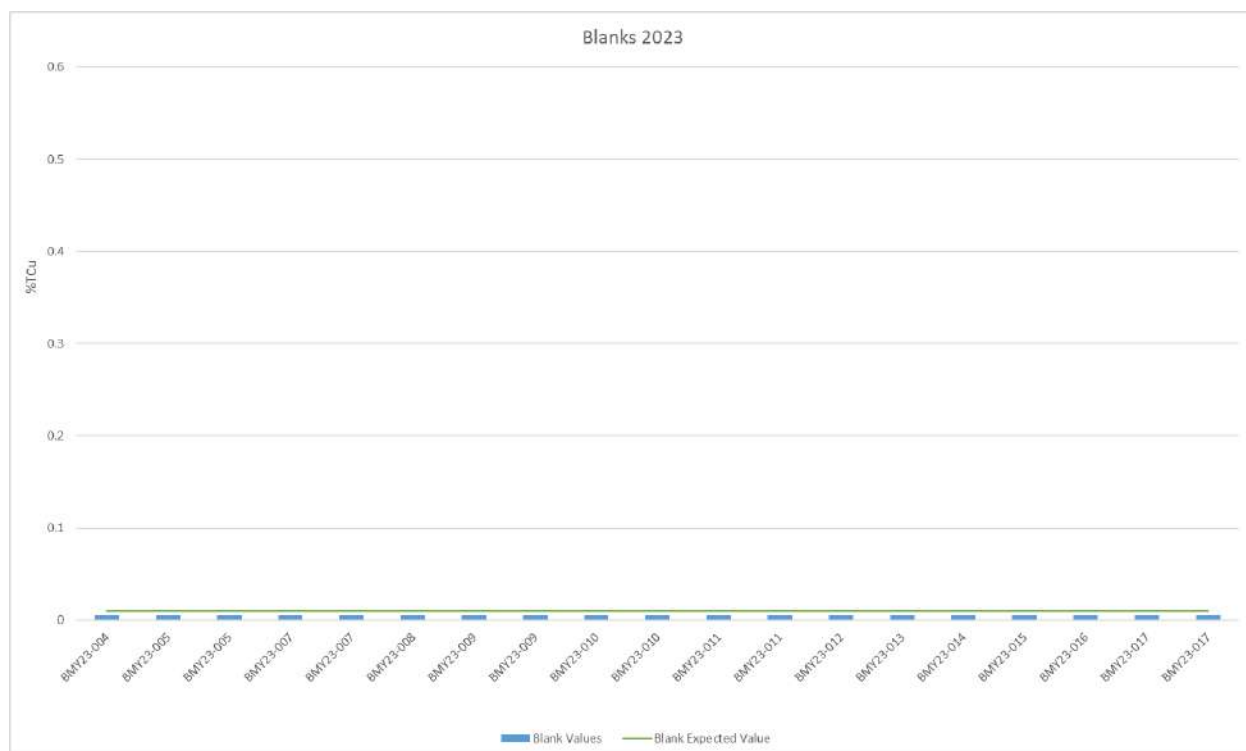


Figure 11-18: 2023 CDN-ME-2001 Total Copper Analyses

Coarse Blanks. For the 2023 drilling program, blank results that are greater than five times the lower detection limit of the relevant analyses are typically considered failures that require further investigation and possible re-assaying of associated drill samples. The detection limit of the Skyline analyses was 0.01% for total copper. Blank samples assaying in excess of five times these detection limits (0.005%) are considered to be failures. A chart of the Skyline analyses of the coarse blanks are shown in Figure 11-19. There were no blank failures for the 2023 drilling.



**Figure 11-19: 2023 Coarse Blank Copper Values**

Core-Duplicates. Field-duplicates are taken by quartering the core and submitting two quarter core samples with different sample numbers and are collected at a rate of approximately 1 in 40 samples. GCC's 2023 core drilling program included a total of 21 pairs of total and acid-soluble copper analyses from core-duplicate samples. Figure 11-20 and Figure 11-21 are scatterplots of the core-duplicate results for TCu and ASCu. The duplicates for TCu, shows good correlation across all grades, with higher variance at the higher grades. There is no obvious bias in the field-duplicate sample results. The average assay duplicate assay values for copper are within 10% of the average original values. Assay results for the TCu and ASCu comparisons are included in the figures below. No outliers were removed.

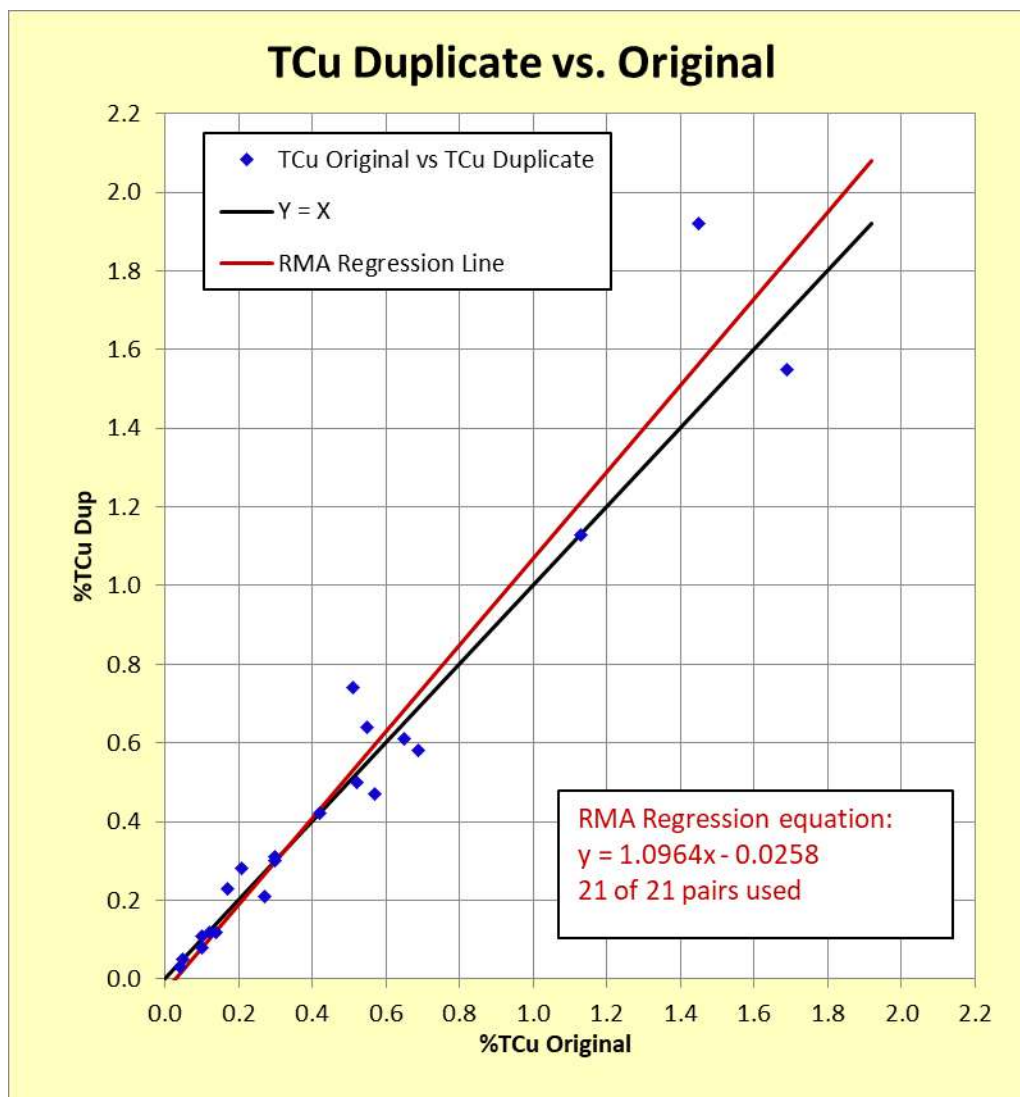
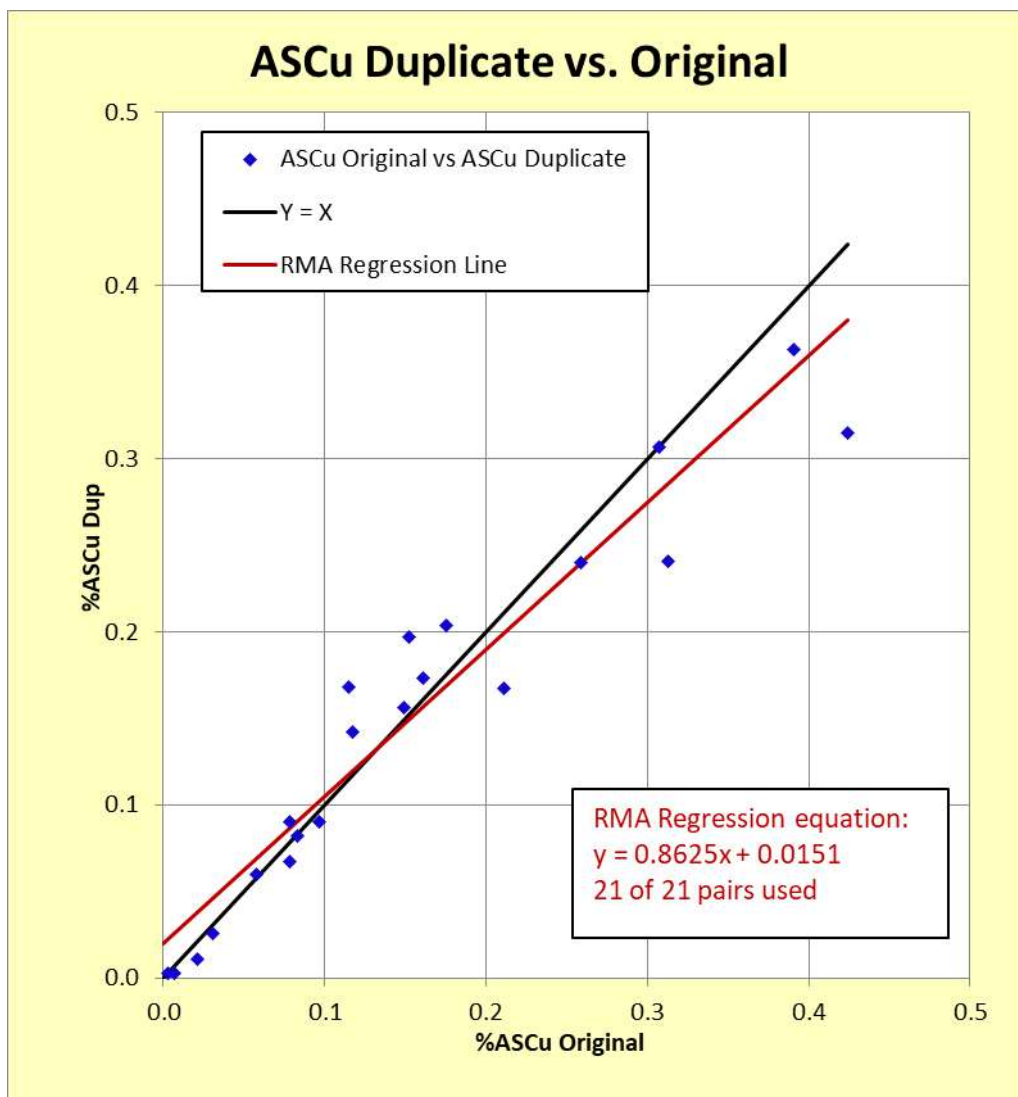


Figure 11-20: 2023 Field-Duplicate Total Copper ("TCu") Results Relative to Primary Sample Assays



**Figure 11-21: 2023 Field-Duplicate Acid-Soluble Copper (“ASCu”) Results Relative to Primary Sample Assays**

A crush-duplicate is a split of the reject prior to pulverization and is done by the lab at a rate of approximately 1 in 40 samples.

GCC’s 2023 program included a total of 18 pairs of total and acid-soluble copper analyses from crush-duplicate samples. The results for TCu and ASCu are in Figure 11-22 and Figure 11-23. There is no obvious bias in the crush-duplicate sample results. The average assay duplicate assay values for copper are within 10% of the average original values. No outliers were removed.



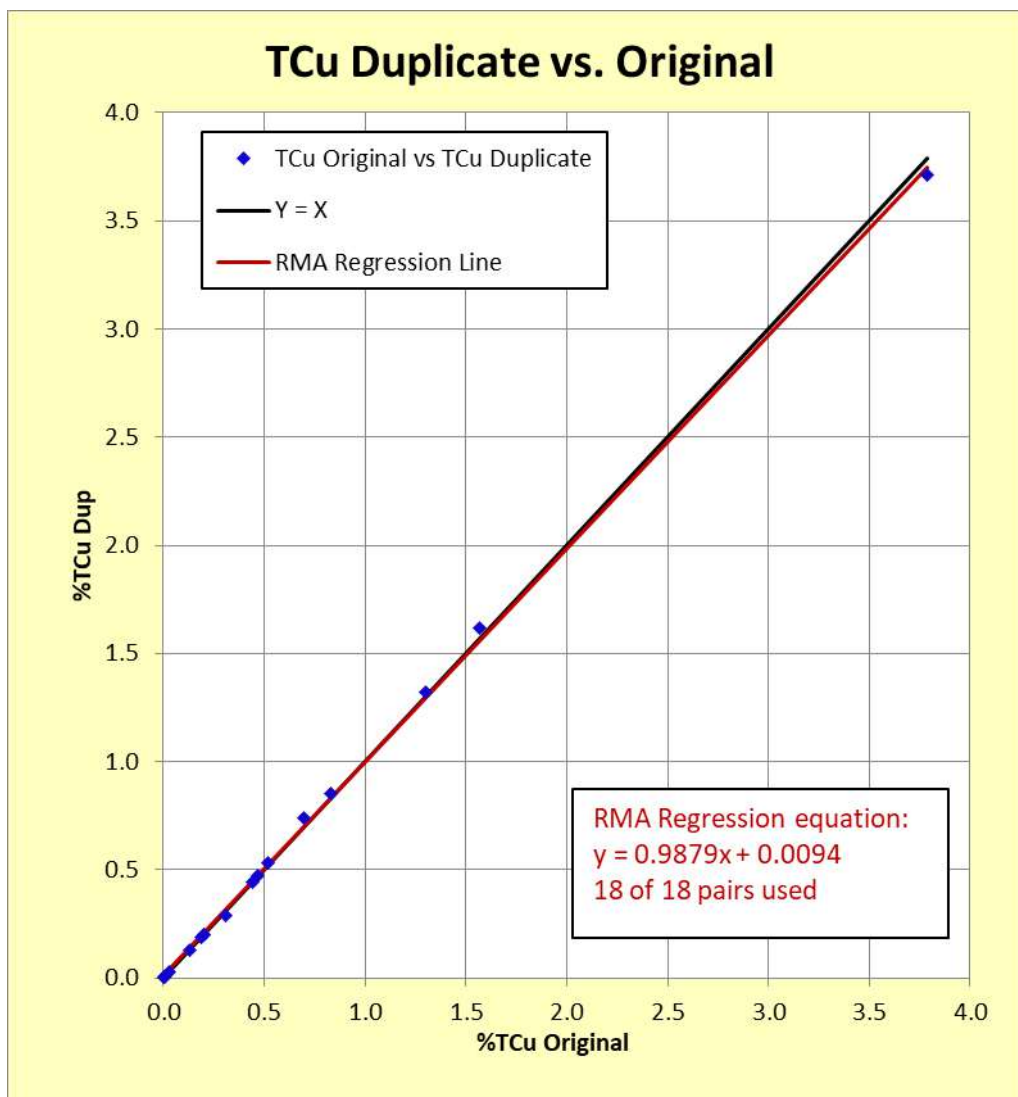
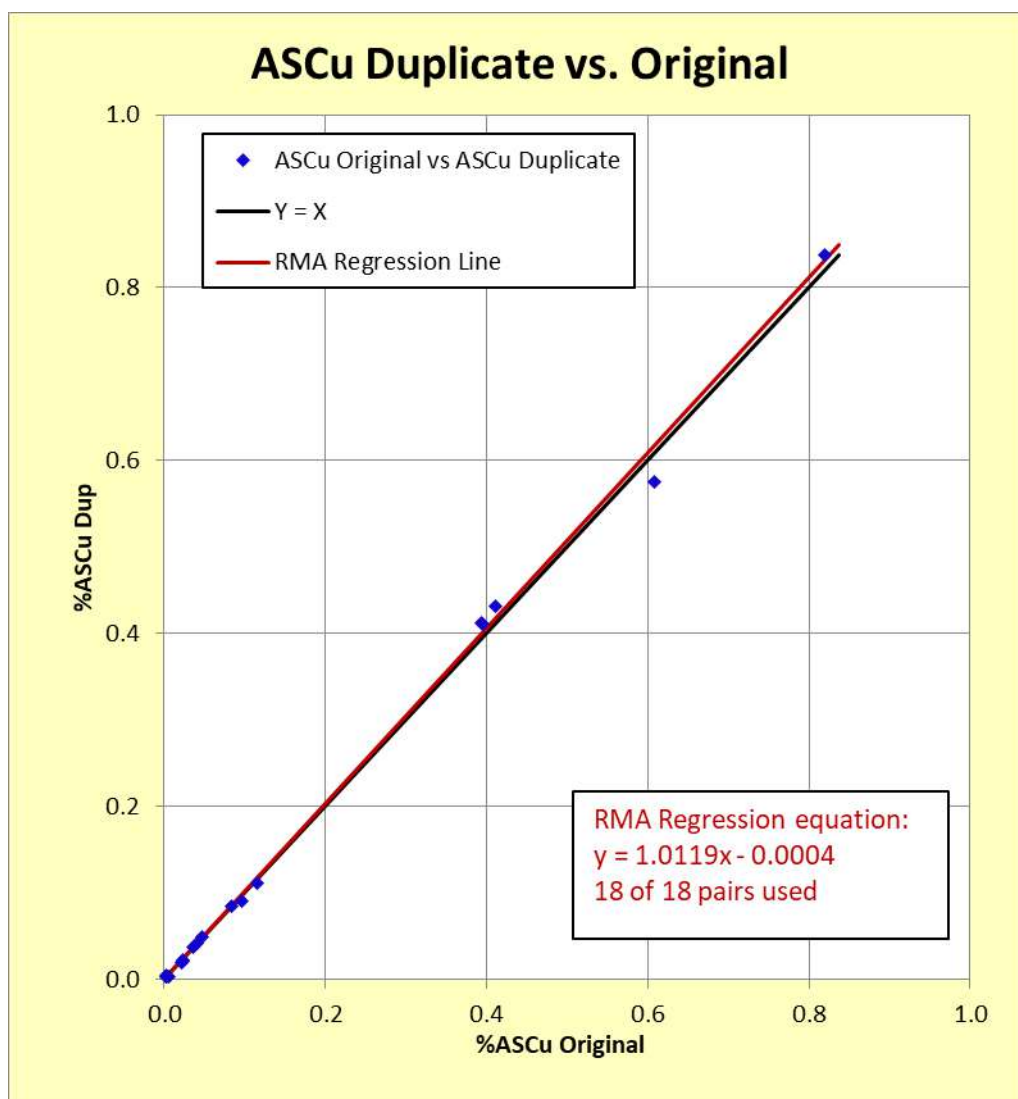


Figure 11-22: 2023 Crush-Duplicate Total Copper ("TCu") Results Relative to Primary Sample Assays



**Figure 11-23: 2023 Crush-Duplicate Acid-Soluble Copper (“ASCu”) Results Relative to Primary Sample Assays**

A pulp duplicate is collected by the lab by producing two pulps from the sample and is done at a rate of approximately 1 in 20 samples. GCC’s 2023 program included a total of 37 pairs of total and acid-soluble copper analyses from pulp-duplicate samples. The results for TCu and ASCu are in Figure 11-24 and Figure 11-25. There is no obvious bias in the pulp-duplicate sample results. The average assay duplicate assay values for copper are within 10% of the average original values. No outliers were removed.

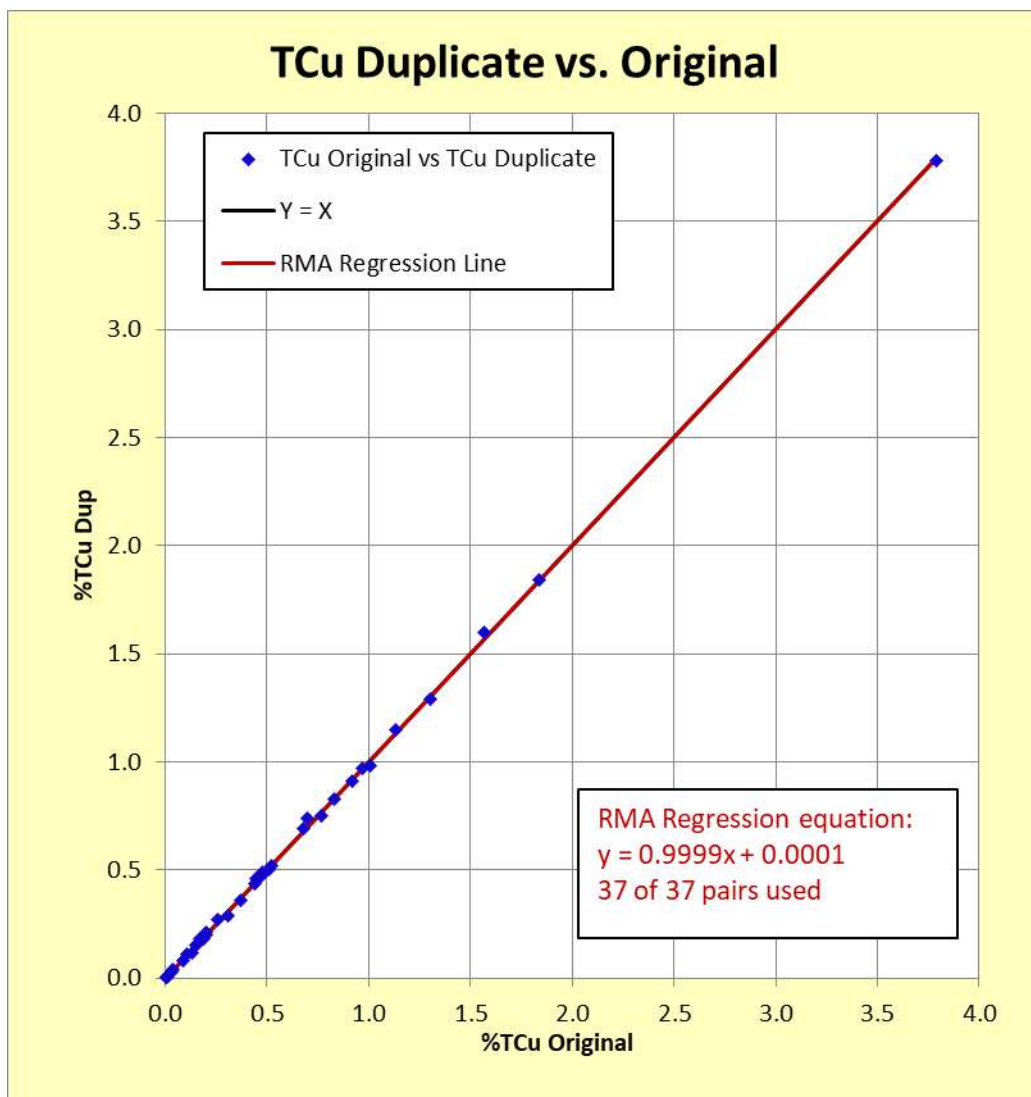


Figure 11-24: 2023 Pulp-Duplicate Total Copper (“TCu”) Results Relative to Primary Sample Assays

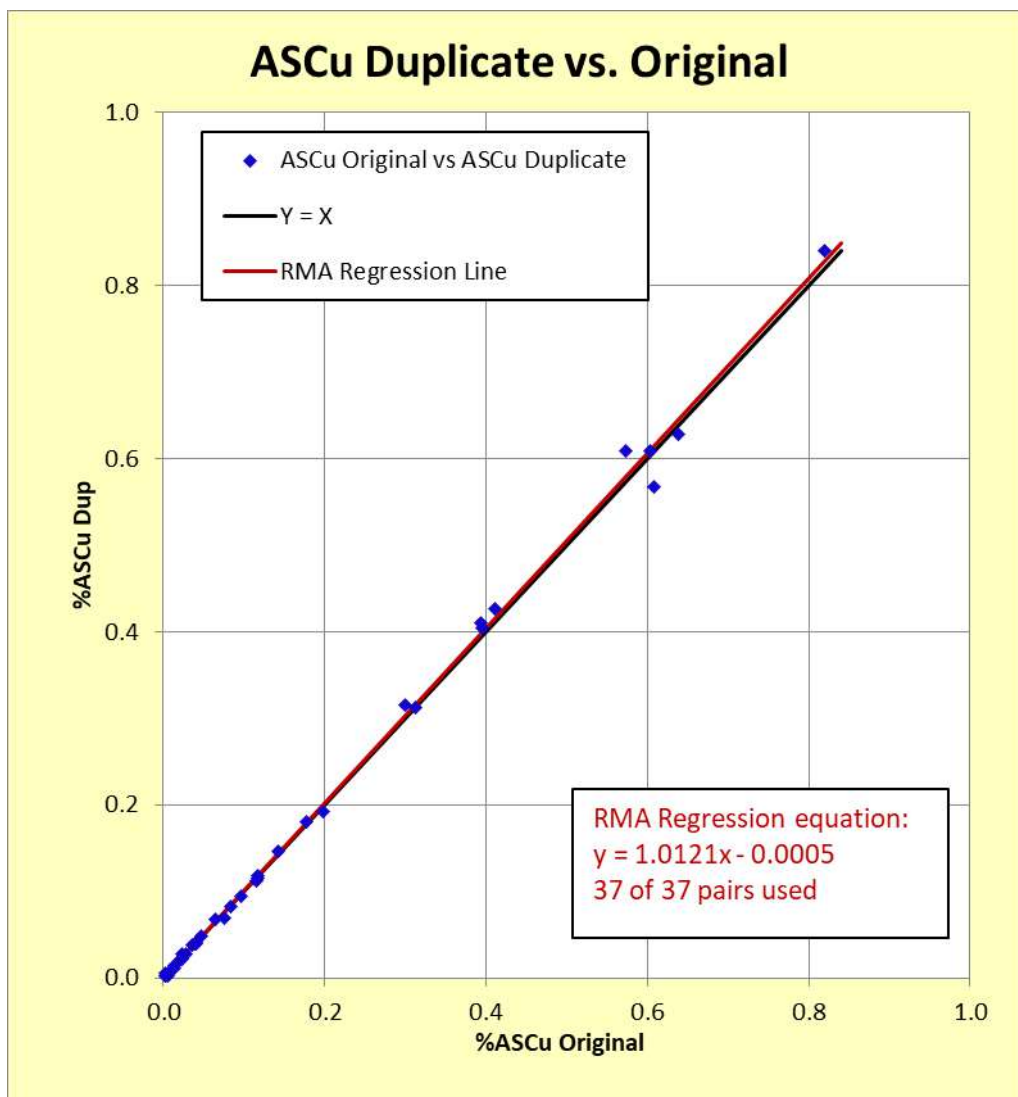


Figure 11-25: 2023 Pulp-Duplicate Acid-Soluble Copper (“ASCu”) Results Relative to Primary Sample Assays

#### 11.5.5 GCC 2024 Drilling QA/QC Methods and Results

CRMs. GCC purchased commercial certified reference materials (“CRMs”) for use in the 2024 core drilling program. The CRMs were inserted into the sample stream and analyzed with the core samples for total copper. CRMs were inserted at a rate of approximately 1 in 20 samples. The results were used to evaluate the analytical accuracy and precision of the analyses in GCC’s samples.

Table 11-4 lists the CRMs used by GCC for the 2024 core drilling program.

**Table 11-4: Certified Reference Materials for 2024 Assays**

Reference Material	Certified Value (%Cu)	2 Std Dev (%Cu)	No. of Skyline Analyses
AMIS0249	0.3699	0.028	11

The Skyline copper analyses of the GCC CRMs returned excellent results, with generally good precision and accuracy, shown in Figure 11-26. AMIS0249 returned no values outside of 2 standard deviations.

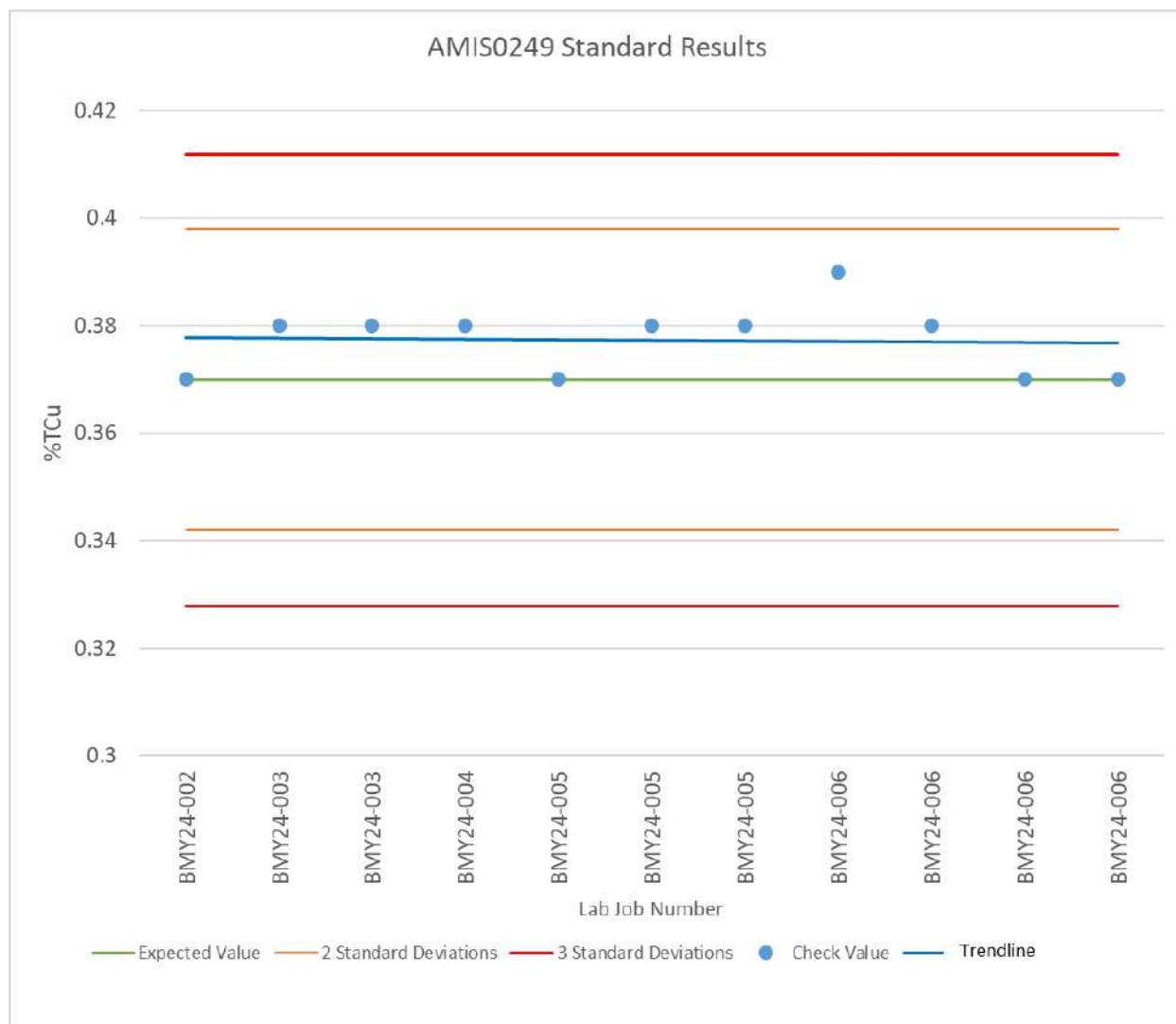
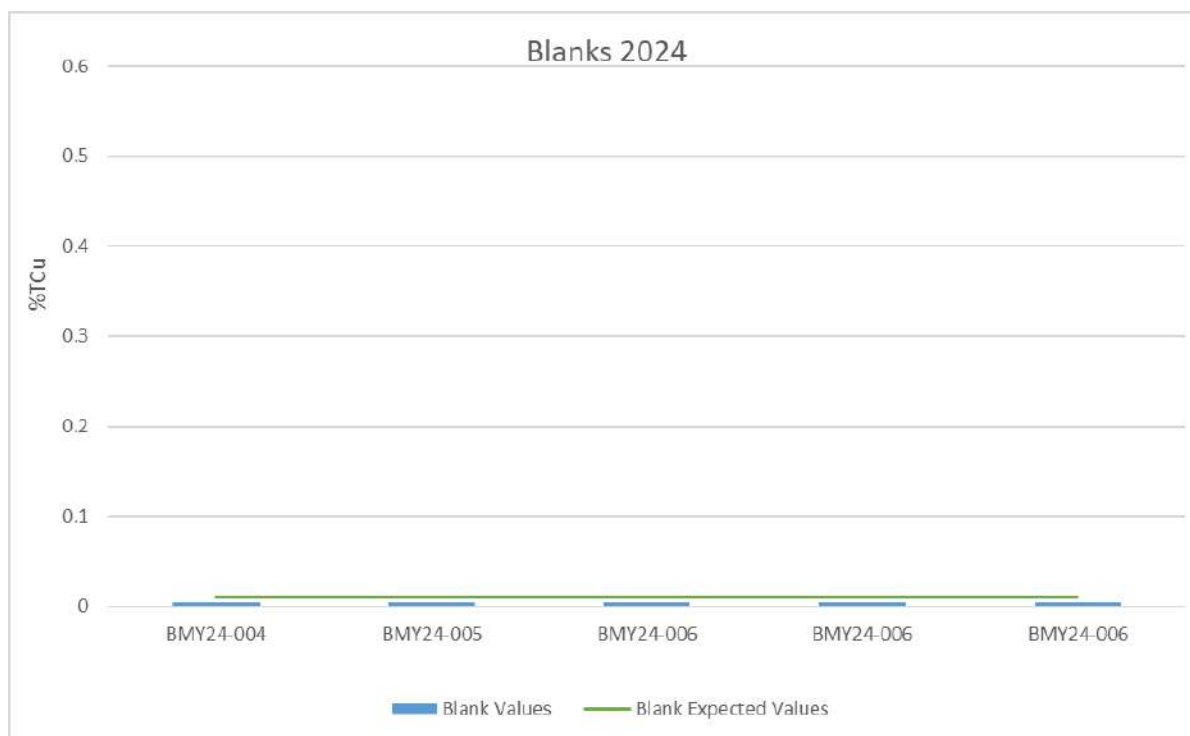


Figure 11-26: 2023 AMIS 0249 Total Copper Analyses

**Coarse Blanks.** For the 2024 drilling program, blank results that are greater than five times the lower detection limit of the relevant analyses are typically considered failures that require further investigation and possible re-assaying of associated drill samples. The detection limit of the Skyline analyses was 0.01% for total copper. Blank samples assaying in excess of five times these detection limits (0.005%) are considered to be failures. A chart of the Skyline analyses of the coarse blanks are shown in Figure 11-27. There were no blank failures for the 2024 drilling. Blanks were inserted at a rate of approximately 1 in 40 samples.



**Figure 11-27: 2024 Coarse Blank Copper Values**

Core-Duplicates. Field-duplicates are taken by quartering the core and submitting two quarter core samples with different sample numbers and are collected at a rate of approximately 1 in 40 samples. GCC's 2024 core drilling program included a total of 6 pairs of total and acid-soluble copper analyses from core-duplicate samples. Figure 11-28 and Figure 11-29 are scatterplots of the core-duplicate results for TCu and ASCu. The duplicates for TCu, shows good correlation across all grades, with higher variance at the higher grades. There is no obvious bias in the field-duplicate sample results. The average assay duplicate assay values for copper are within 13% of the average original values. Assay results for the TCu and ASCu comparisons are included in the figures below. No outliers were removed.



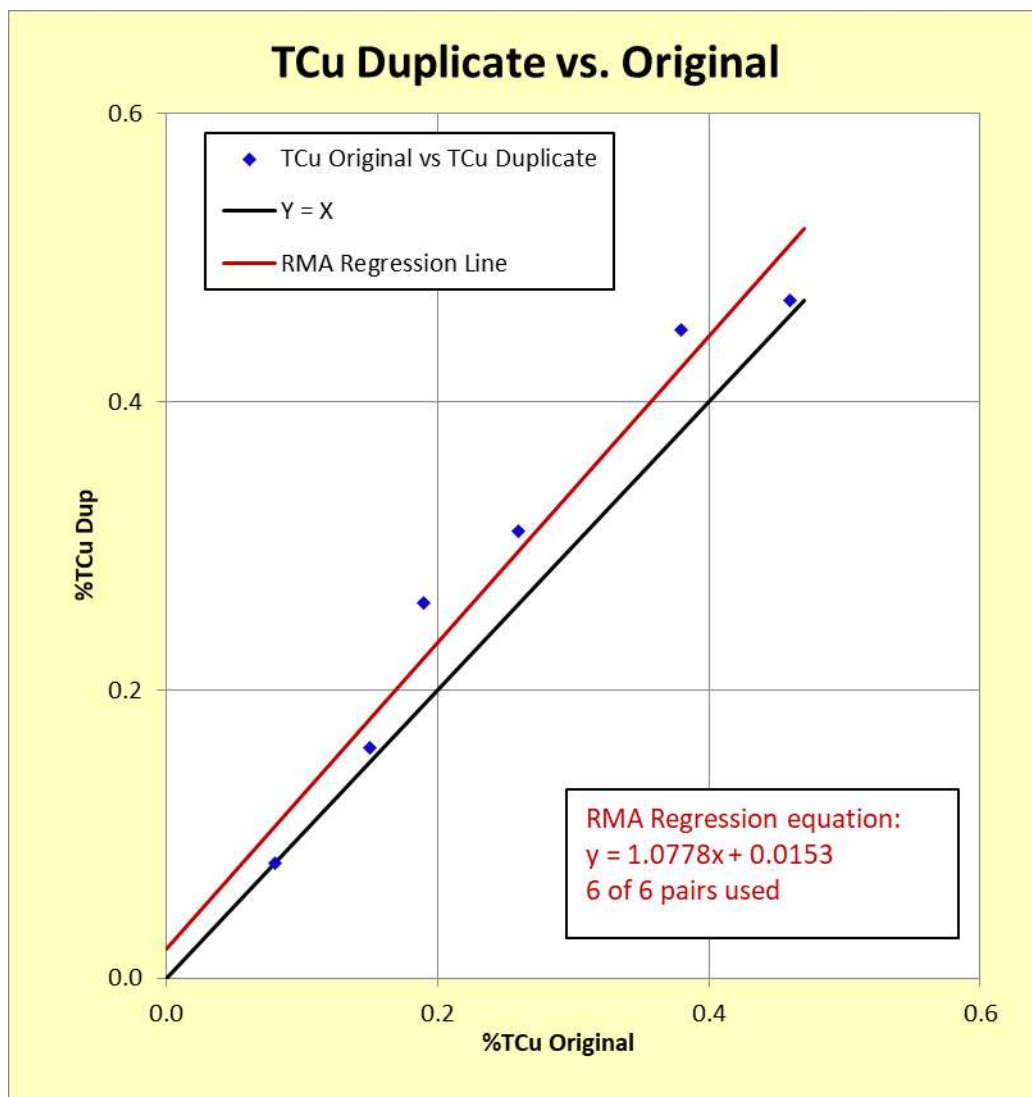
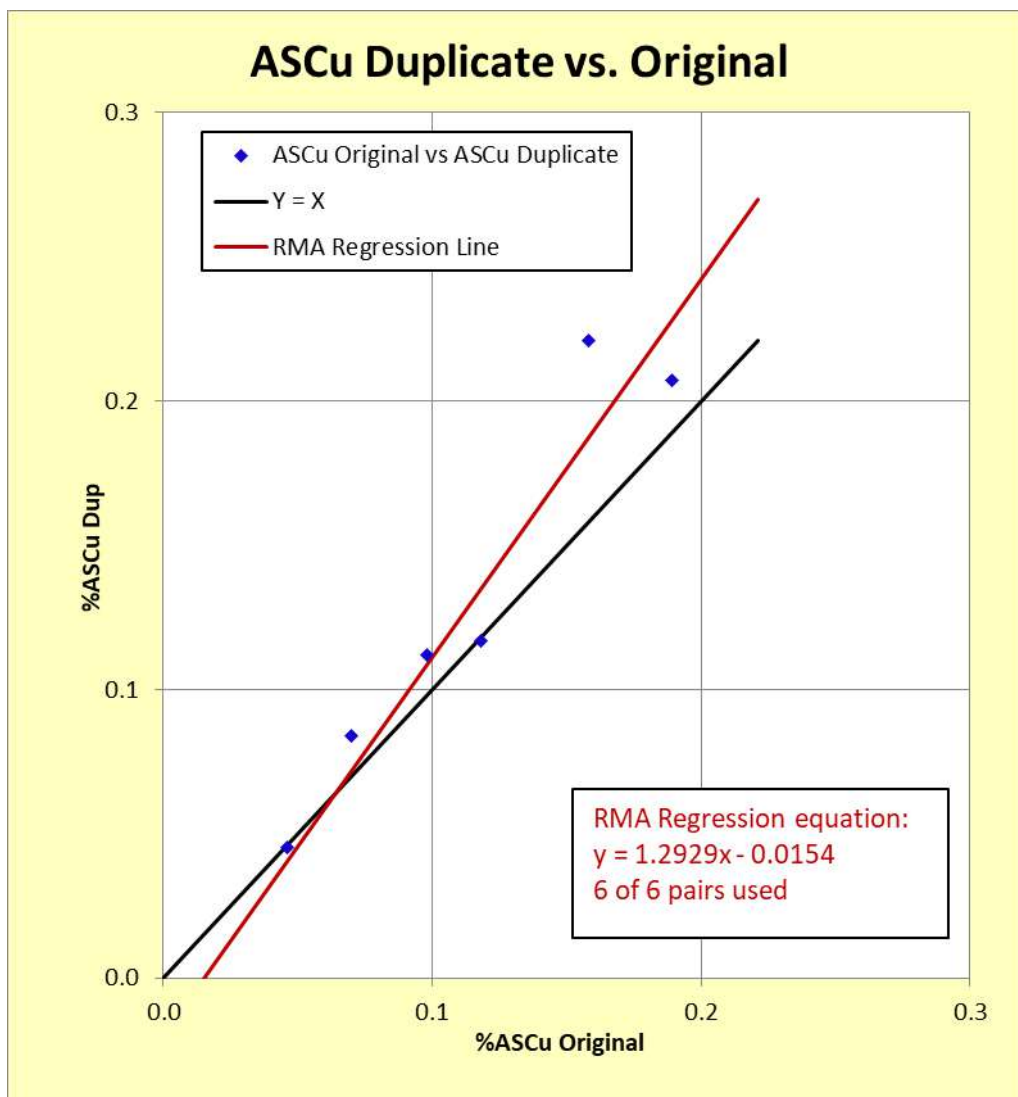


Figure 11-28: 2024 Field-Duplicate Total Copper ("TCu") Results Relative to Primary Sample Assays



**Figure 11-29: 2024 Field-Duplicate Acid-Soluble Copper (“ASCu”) Results Relative to Primary Sample Assays**

A crush-duplicate is a split of the reject prior to pulverization and is done by the lab at a rate of approximately 1 in 40 samples.

GCC’s 2024 program included a total of 5 pairs of total and acid-soluble copper analyses from crush-duplicate samples. The results for TCu and ASCu are in Figure 11-30 and Figure 11-31. There is no obvious bias in the crush-duplicate sample results. The average assay duplicate assay values for copper are within 10% of the average original values. No outliers were removed.

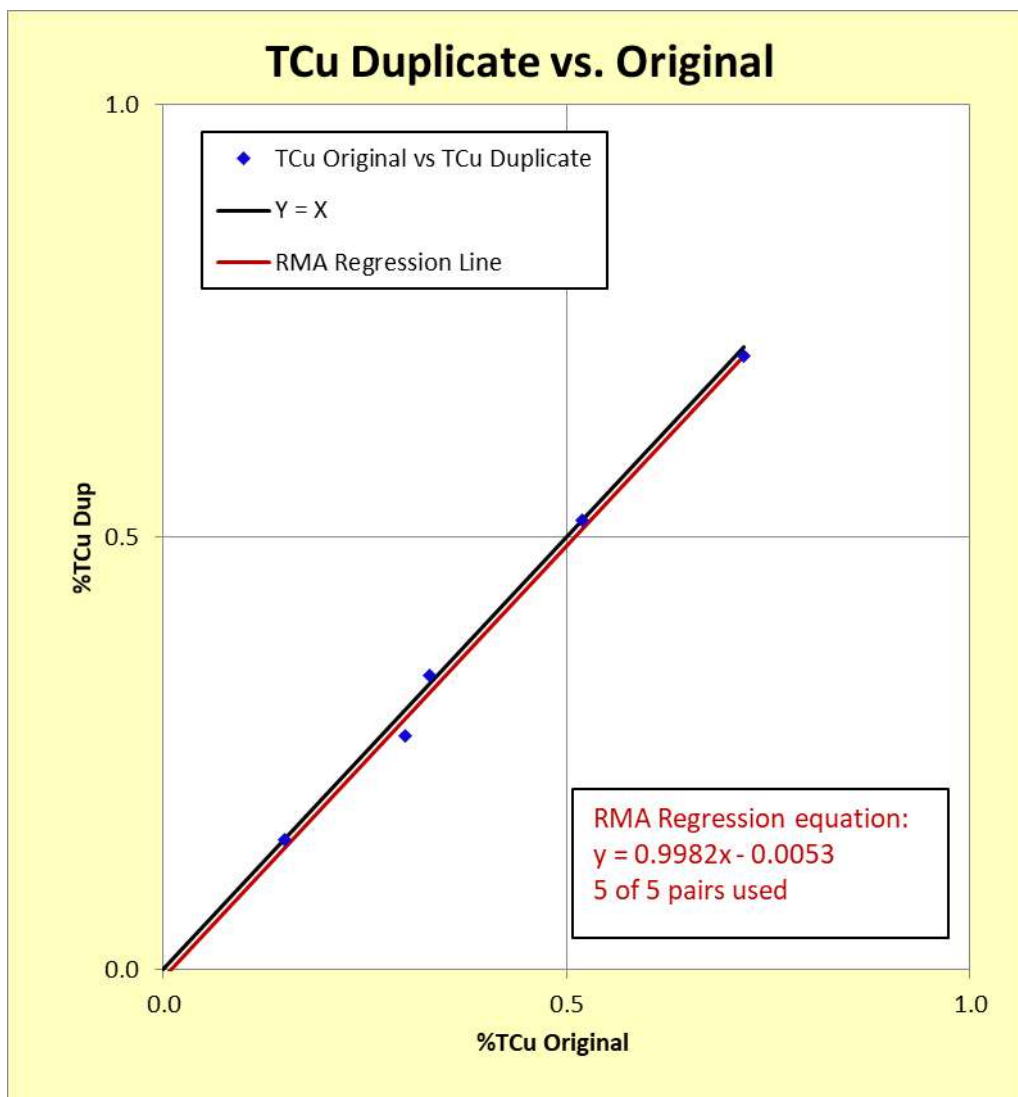
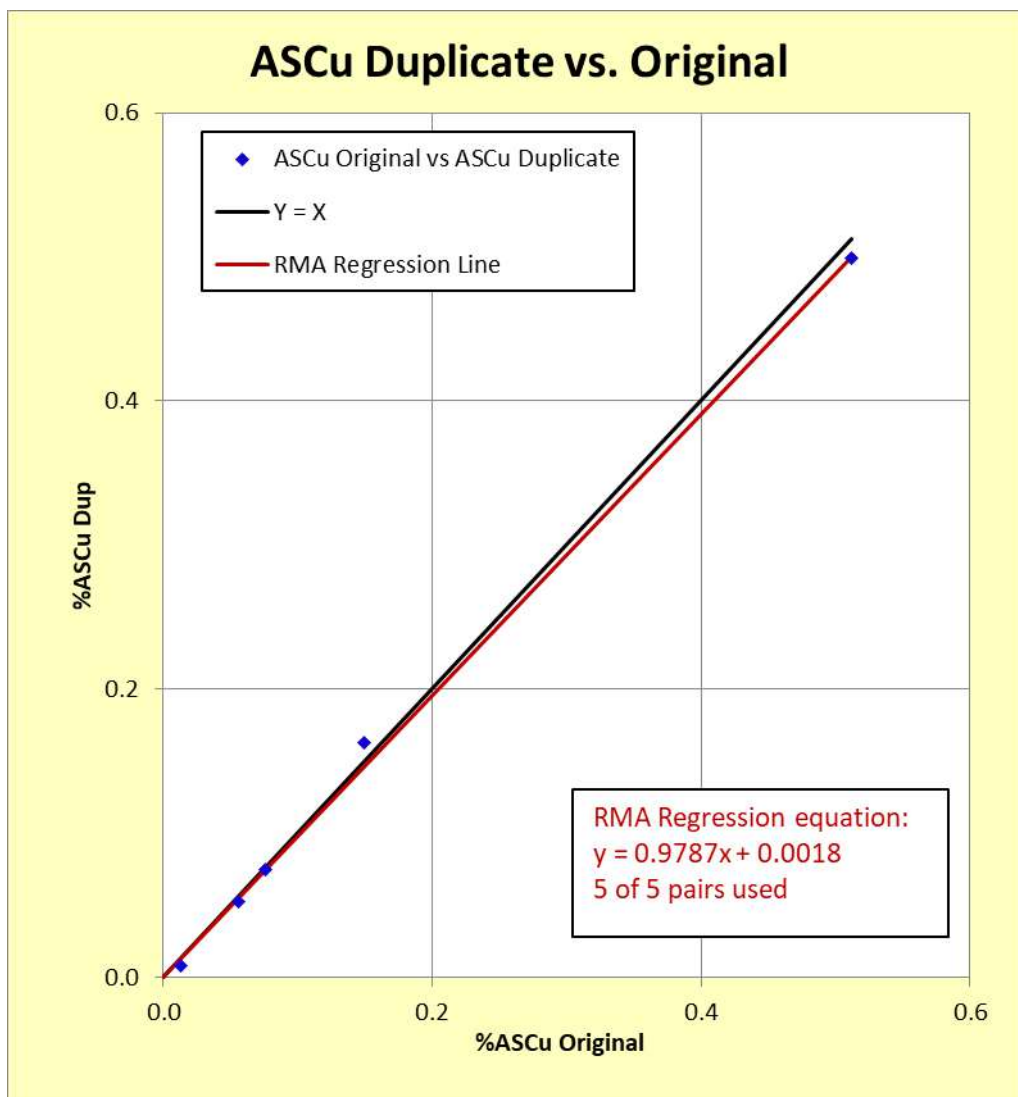


Figure 11-30: 2024 Crush-Duplicate Total Copper ("TCu") Results Relative to Primary Sample Assays



**Figure 11-31: 2024 Crush-Duplicate Acid-Soluble Copper (“ASCu”) Results Relative to Primary Sample Assays**

A pulp duplicate is collected by the lab by producing two pulps from the sample and is done at a rate of approximately 1 in 20 samples. GCC’s 2024 program included a total of 10 pairs of total and acid-soluble copper analyses from pulp-duplicate samples. The results for TCU and ASCu are in Figure 11-32 and Figure 11-33. There is no obvious bias in the pulp-duplicate sample results. The average assay duplicate assay values for copper are within 10% of the average original values. No outliers were removed.

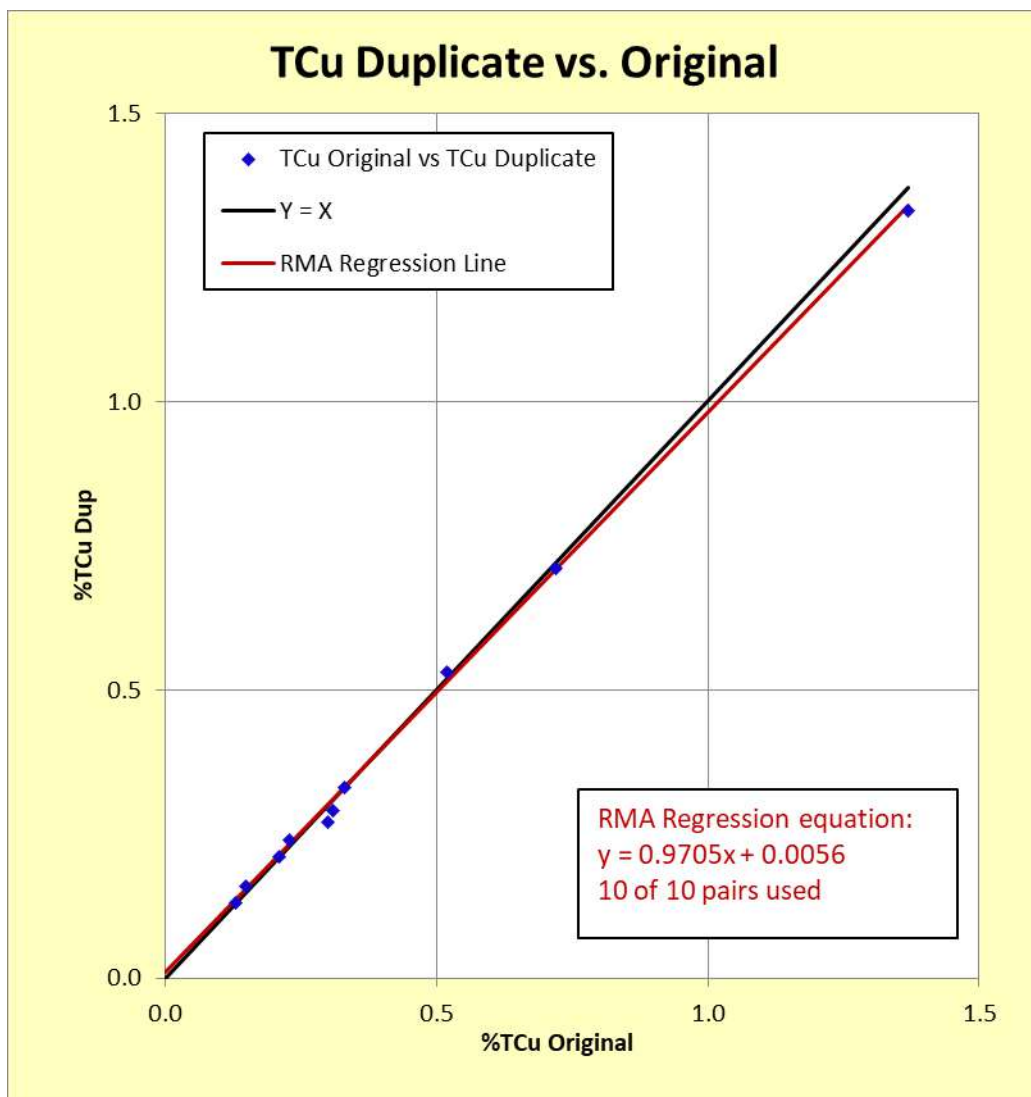


Figure 11-32: 2024 Pulp-Duplicate Total Copper (“TCu”) Results Relative to Primary Sample Assays

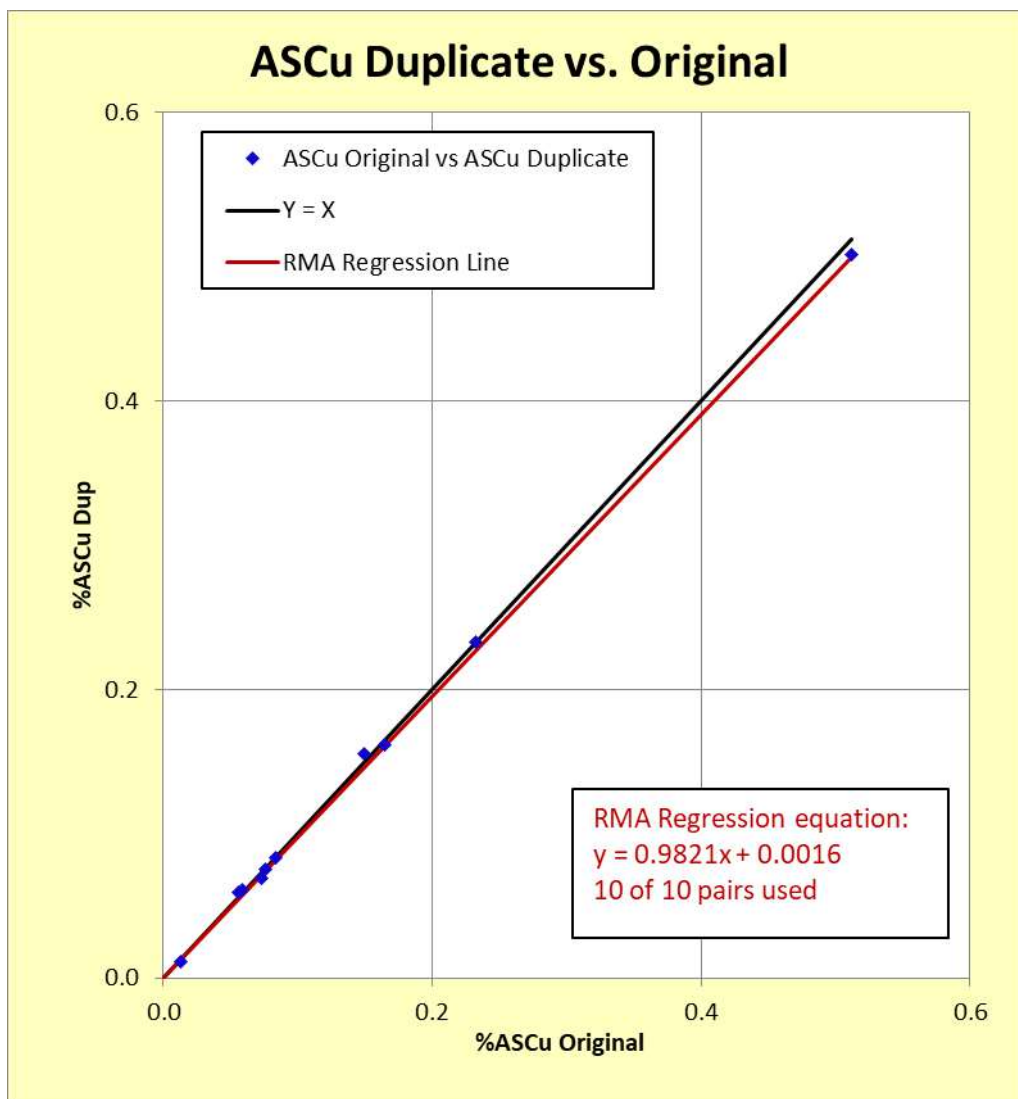


Figure 11-33: 2024 Pulp-Duplicate Acid-Soluble Copper (“ASCu”) Results Relative to Primary Sample Assays

## 11.6 SUMMARY STATEMENT

The certification status of some of the historical analytical laboratories is not known. Southwestern Assayers and Chemists is the predecessor to Skyline. Mr. Bickel believes the historical labs were independent commercial laboratories that were widely recognized and used by the mining industry at that time.

Documentation of the methods and procedures used for historical sample preparation, analyses, and sample security, as well as for quality assurance/quality control procedures and results, is incomplete and in many cases not available. Despite this, some of the historical assay certificates have been preserved and GCC was able to reasonably duplicate and/or verify the original results through resampling of historical core (described in Section 12.2.4) and new drilling. Mr. Bickel is therefore satisfied that the historical analytical data are adequate to support the current resources, interpretations, conclusions, and recommendations summarized in this technical report.

GCC’s sample preparation and analyses were performed at a well-known certified laboratory, and the sample security and QA/QC procedures are adequate to support the current resources, interpretations, conclusions, and recommendations summarized in this technical report.



## **12 DATA VERIFICATION**

Mr. Bickel has verified the Johnson Camp project database and compiled and analyzed available quality QA/QC data collected by GCC. Data verification, as defined in NI 43-101, is the process of confirming that data has been generated with proper procedures, has been accurately transcribed from the original source and is suitable to be used. There were no limitations on, or failure to conduct, the data verification for this technical report other than those discussed later in this section. Additional confirmation on the drill data's suitability for use are the analyses of the Johnson Camp Mine QA/QC procedures and results as described in Section 11.4.

### **12.1 SITE VISIT**

Mr. Bickel visited the Johnson Camp Mine project site on several occasions, most recently on December 5, 2024. During the site visits, Mr. Bickel observed drilling and sampling procedures, reviewed core and logging procedures with GCC staff, inspected the surface geology of the Johnson Camp Mine open pit areas; reviewed historical drill data; and carried out discussions of the current geologic interpretations with GCC personnel.

Mineralization verification procedures were conducted, and core was inspected. Mr. Bickel has also maintained a relatively continual line of communication through telephone calls and emails with GCC personnel in which the project status, procedures, and geologic ideas and concepts have been discussed. The result of the site visits and communications is that the author has no significant concerns with the project procedures.

RESPEC personnel managed and oversaw the initial setup and startup of the standard operating procedures (SOP) for the core drilling and sampling program, and RESPEC is not aware of GCC changing any material aspects of the SOP after GCC took control of management of the program.

### **12.2 DATABASE VERIFICATION**

The current drill-hole database, which supports the resource estimation of the Johnson Camp project area, was provided to RESPEC along with available original historical paper records and reports in the possession of GCC. This drill-hole information was then supplemented with GCC's sampling data and results through May 30, 2024. The historical information was subjected to various verification measures, the primary one consisting of the core re-sampling campaign conducted by GCC in 2016-2017 which was subsequently analyzed and evaluated by RESPEC. Analysis of soluble copper assay data has been a particular focus of RESPEC's analysis. Historical operators of the Johnson Camp Mine have taken multiple approaches with respect to soluble copper assay values in the database including variable analysis methods and calculated soluble copper assay values. RESPEC's analysis isolated only those soluble copper values in the database which could be verified and considered suitable for resource estimation and discarded those that did not meet those criteria. The Johnson Camp Mine has historically produced copper through heap leaching and solvent-extraction/electrowinning processing methods. As such, the reliability of the soluble copper data upon which resource estimates are generated is critical to future mining of the resource. RESPEC's analysis and conclusions are described herein. RESPEC also reviewed the historical cyanide soluble copper assays for use in resource estimation. Historical cyanide soluble copper assays were from the Nord drilling programs completed in 2008 through 2010 and there are assay certificates available to confirm the results. The other two sources of cyanide soluble copper data include the GCC's 2016-2017 resampling program and the 2022 to 2024 drilling programs.

#### **12.2.1 Drill-Collar Verification**

The Johnson Camp Mine database contains 313 historical drill-holes and 77 GCC drill-holes. Based on data availability, historical drill-hole-collar coordinates and hole orientations in the database were compared to original paper documentation in the possession of GCC. The database was found to reasonably match the historical paper documents with the exception of hole BP-50, for which historical coordinates could not be located and location could not be verified. RESPEC excluded hole BP-50 from the resource area as a result of this finding.

All historical drill-holes were transformed from local coordinates to NAD1927 State Plane Arizona East FIPS coordinates using a two-point rotation determined in 2016 by Darling Geomatics, a land surveyor company. Control points used in determining the coordinate transformation included historical collars from Nord Resources Corp drill-holes.

Collar locations for the 2022-2024 drill program were collected by Darling Geomatics using a Trimble Global Positioning System ("GPS"), which can be accurate to 0.05 ft horizontally and 0.2 ft vertically.

### **12.2.2 Down-Hole Survey Verification**

Down-hole deviation data does not exist for any of the historical Johnson Camp Mine drill-holes. All but 19 of the drill-holes (6%) were drilled vertically. Based on the vertical nature of the holes, GCC's recent drilling campaign, and the open-pit mining method planned for the resource, Mr. Bickel considers the lack of down-hole deviation data in historical drilling to be immaterial to the mineral resources reported herein.

Down-hole deviation data was collected on 34 of 44 holes for the 2022 GCC core drilling program, 21 holes for the 2023 GCC core drilling program, and 4 of 12 holes for the 2024 GCC core drilling program. The holes were surveyed using a magnetic deviation survey tool.

### **12.2.3 Assay Database Verification**

Historical Assays: RESPEC completed an analysis of the original drill-hole database provided by GCC containing historical assays and used it to build a 'final' database to be used in RESPEC's resource estimation. The final build excluded some assays from the original based on the judgement of the author.

Historical paper records, including copies of original assay certificates were reviewed and compared to the GCC database under the supervision of Mr. Bickel. Assay data from the original lab certificates were generally available for review. RESPEC conducted an audit on the database using select historical assay certificates and found them to match except for four discrepancies. One error was found for a TCu historical assay, which was corrected in the RESPEC database. Three historical sample intervals were excluded from the RESPEC database due to historical ASCu values that are significantly higher than the associated historical TCu values.

The existence of calculated, "untrusted" soluble copper assays in the original database were known to RESPEC, based on concerns raised from GCC. RESPEC found that a 1,512 of the soluble copper assays were calculated by on a set of linear equations. In the author's opinion, calculated soluble copper values are not appropriate to use in mineral resource estimations. The calculated values were excluded from the RESPEC database.

Arimetco soluble copper data have also been excluded from RESPEC the database due to the high-temperature nature of the analyses, which differs from the ambient temperature of the remaining analyses of soluble copper in the database. These are two distinct methods of analysis and are not appropriate to use mixed together in a resource estimation.

No soluble copper data from the eight Summo holes drilled in the Copper Chief area were accepted in the RESPEC database, due to their anomalously high soluble copper values compared to adjacent holes; the mean of the TCu/ASCu ratios is 0.90 for these holes. The four drilled in the Burro area, which were apparently drilled in a different program and potentially analyzed by different methods, do not appear to have anomalous values compared to adjacent holes and therefore these ASCu results were accepted. Although all Summo ASCu analyses are labelled as "not trusted" in the original database provided by GCC due to suspicious ASCu values, RESPEC could not identify reasons for the label upon further investigation.

GCC Assays: RESPEC received electronic records directly from the assay lab with the results from GCC's 2016-2017 re-sampling program. These data were prioritized in the RESPEC database according to the hierarchy discussed in Section 12.2.4. For the 2022 core drill program, RESPEC received electronic records from the client. 99% of electronic records from the lab were checked against the GCC database. One minor discrepancy was found due to a re-assay, and the GCC accepted result was updated in the database.

#### 12.2.4 GCC 2021 Re-Samples

GCC re-sampled selected intervals of historical drill core and pulp and submitted them to Skyline for analysis. The samples were selected from a spatial distribution of drill holes throughout the deposit, as well as a distribution of drill holes from the various historical operators who originally drilled and explored the property. The program was limited by availability of either core or pulp. GCC was able to make comparisons to Arimetco, Cyprus, and Nord samples based on availability.

Results from the re-sampled intervals of pulps represent pulp-duplicate analyses, and re-sampled intervals of ¼ core represent core-duplicate analyses. Mr. Bickel compared the 2016 and 2017 pulp-duplicate and core-duplicate analyses with the historical analyses by operator in the RESPEC database and conducted a mean of pair ("MOP") analysis for each respective duplicate type by year of re-sample and historical operator.

The MOP analysis for 2017 total copper ("TCu") pulp-duplicate samples in holes drilled by Arimetco is provided in Figure 12-1. A total of 1,449 samples were submitted to Skyline for analysis from 48 Arimetco drill-holes. The average relative difference between the new data and historical data is -1%. No outliers were removed. The assays pair compare well and show expected variability.

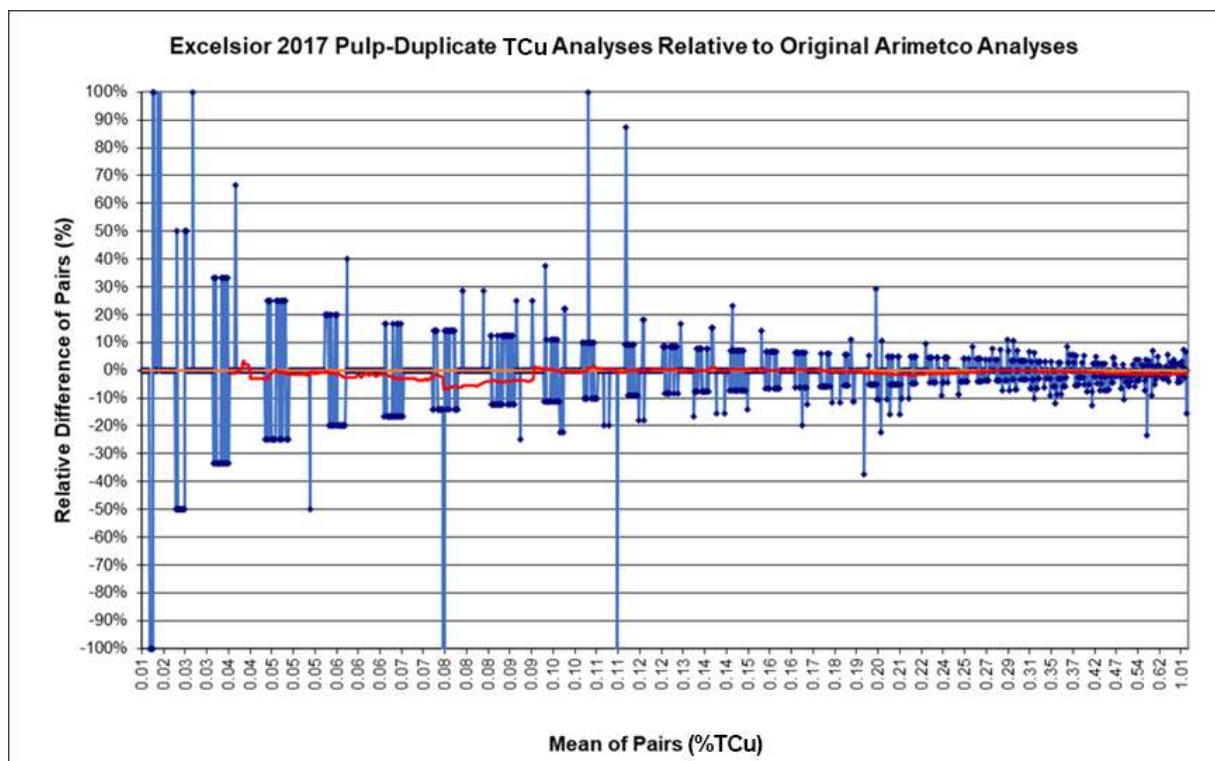
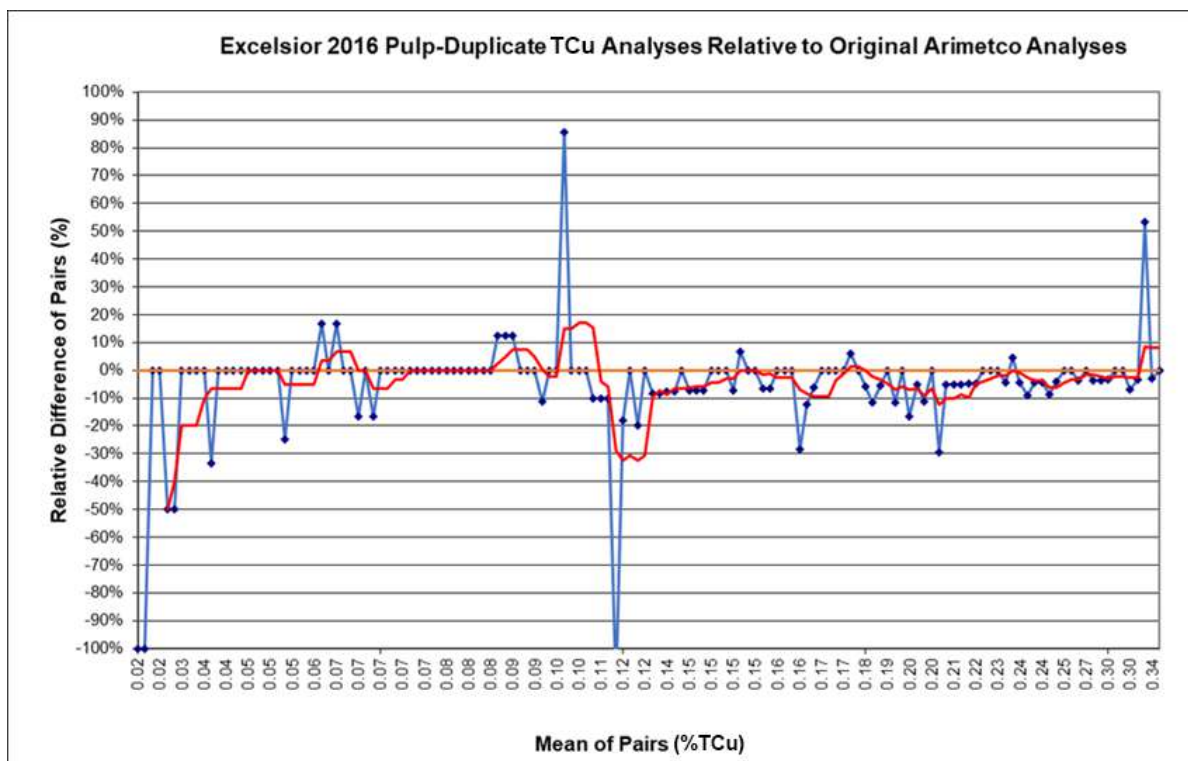


Figure 12-1: 2017 Total Copper ("TCu") Pulp-Duplicate Analyses Relative to Historical Arimetco Analyses

The MOP analysis for 2016 total copper ("TCu") pulp-duplicate samples in holes drilled by Arimetco is provided in Figure 12-2. A total of 150 samples were submitted to Skyline for analysis from 2 Arimetco drill-holes. The average rela

tive difference between the new data and historical data is -5%. No outliers were removed. The assays pair compare reasonably well and perhaps show a slight low bias in the new data versus the old.



**Figure 12-2: 2016 Total Copper (TCu) Pulp-Duplicate Analyses Relative to Historical Arimetco Analyses**

The MOP analysis for 2017 total copper ("TCu") core-duplicate samples in holes drilled by Arimetco is provided in Figure 12-3. A total of 115 samples were submitted to Skyline for analysis from 7 Arimetco drill-holes. The average relative difference between the new data and historical data is -2%. Four outlier pairs were removed. The assays pair compare reasonably well.

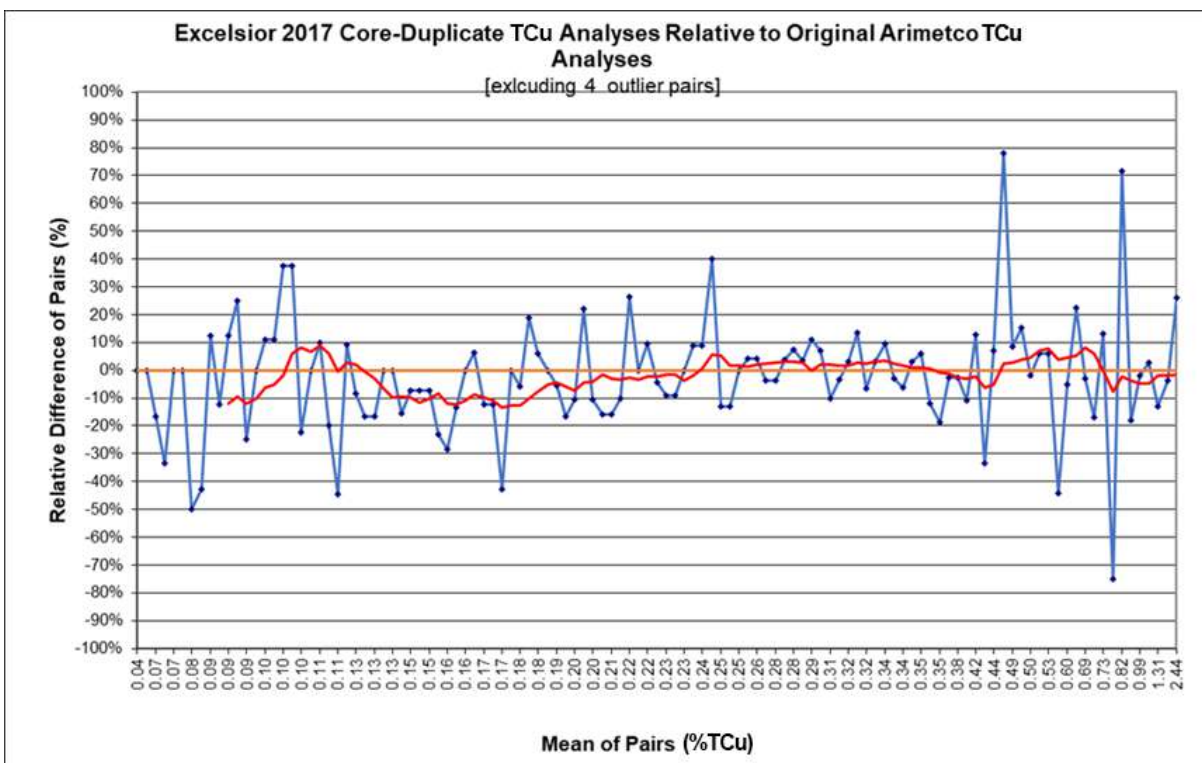
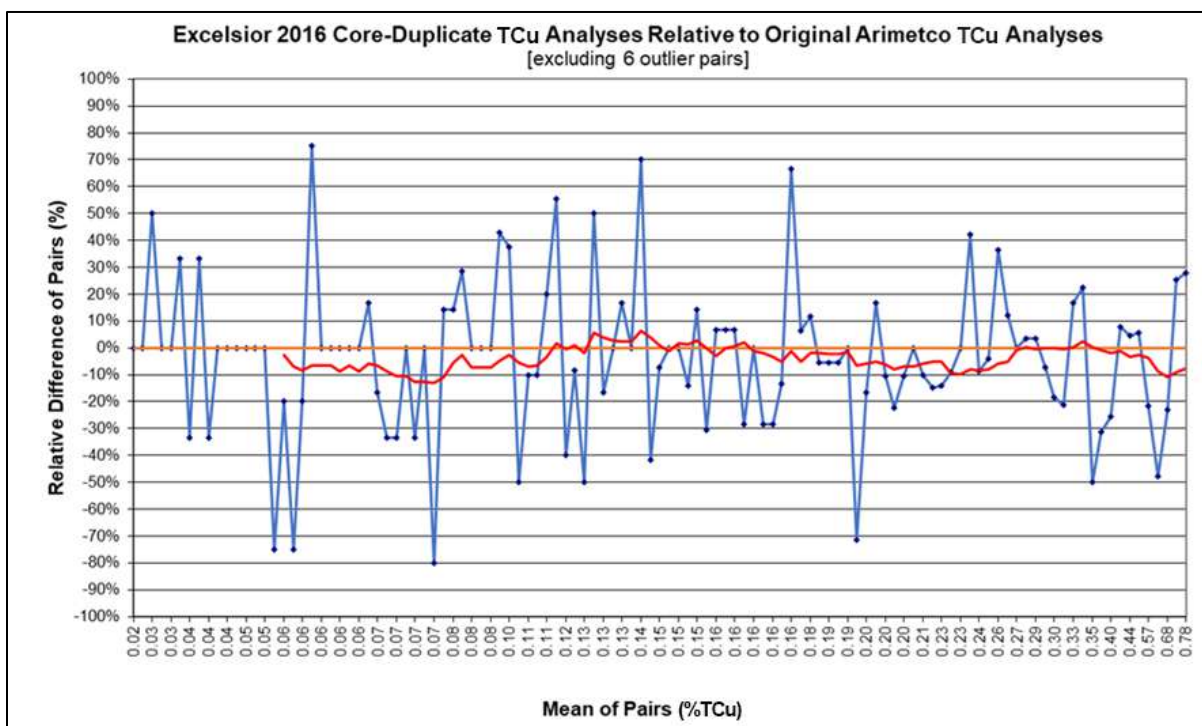


Figure 12-3: 2017 Total Copper (TCu) Core-Duplicate Analyses Relative to Historical Arimetco Analyses

The MOP analysis for 2016 total copper (“TCu”) core-duplicate samples in holes drilled by Arimetco is provided in Figure 12-4. A total of 113 samples were submitted to Skyline for analysis from 2 Arimetco drill-holes. The average relative difference between the new data and historical data is -3%. Six outlier pairs were removed. The assays pair compare reasonably well.



**Figure 12-4: 2016 Total Copper (TCu) Core-Duplicate Analyses Relative to Historical Arimetco Analyses**

Soluble copper assays from the Arimetco drill-holes are not considered appropriate for resource estimation because of the analysis method used to generate the values. This conclusion is discussed in Section 12.2.3. Therefore, no comparison was made to the GCC ASCu values and the Arimetco ASCu values. GCC ASCu analyses for the Arimetco holes have been used in the RESPEC database for the 1,572 samples that were analyzed. For those samples, GCC TCu values also replaced the Arimetco TCu values in the RESPEC database to maintain consistency and ensure that appropriate ratios are used in the estimation.



The MOP analysis for 2017 total copper (TCu) pulp-duplicate samples in holes drilled by Cyprus is provided in Figure 12-5. A total of 127 samples were submitted to Skyline for analysis from 5 Cyprus drill-holes. The average relative difference between the new data and historical data is 2%. Ten outlier pairs were removed. Although the average difference suggest that the assay data pairs compare reasonably well, the author notes that the variability is high for pulp-duplicates. This might be explained by the low-grade nature of the assays showing the most variability.

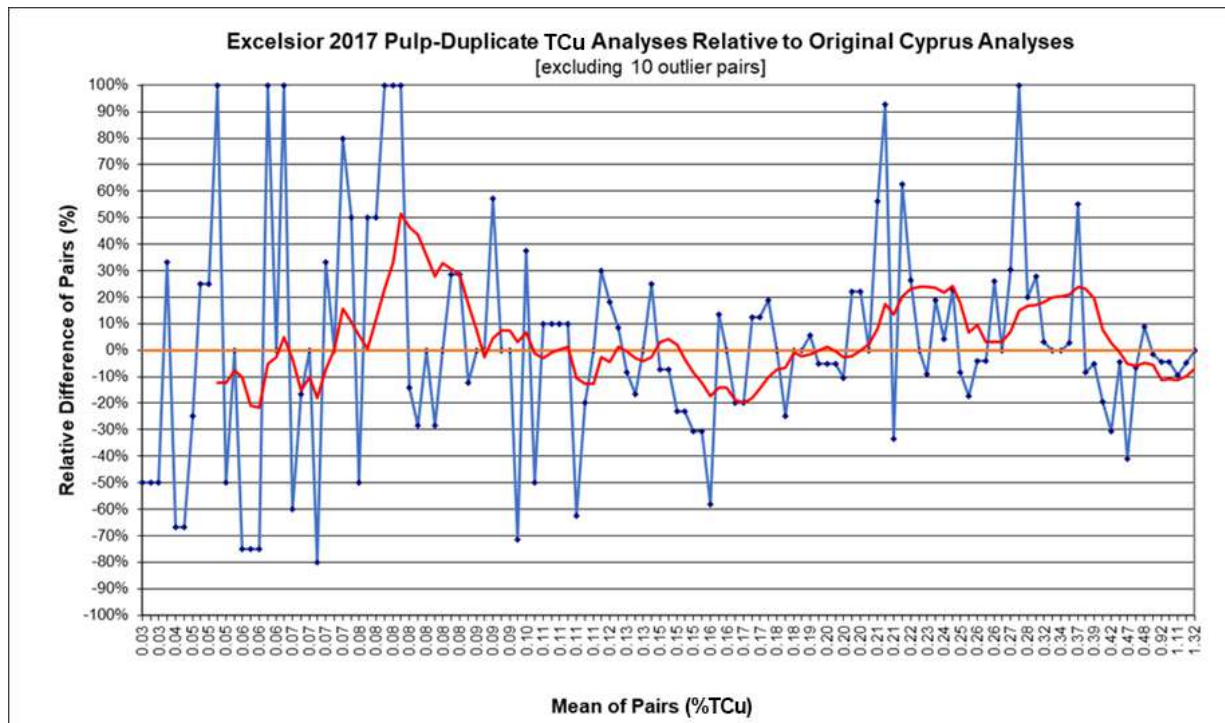


Figure 12-5: 2017 Total Copper (TCu) Pulp-Duplicate Analyses Relative to Historical Cyprus Analyses

The MOP analysis for 2017 total copper (TCu) core-duplicate samples in holes drilled by Cyprus is provided in Figure 12-6. A total of 524 samples were submitted to Skyline for analysis from 17 Cyprus drill-holes. The average relative difference between the new data and historical data is -29%, showing a consistent low bias in the GCC samples compared to the original Cyprus assays. No outlier pairs were removed. The data suggest that significant core loss occurred in the Cyprus drill-holes, which is unsurprising given the age of the core.

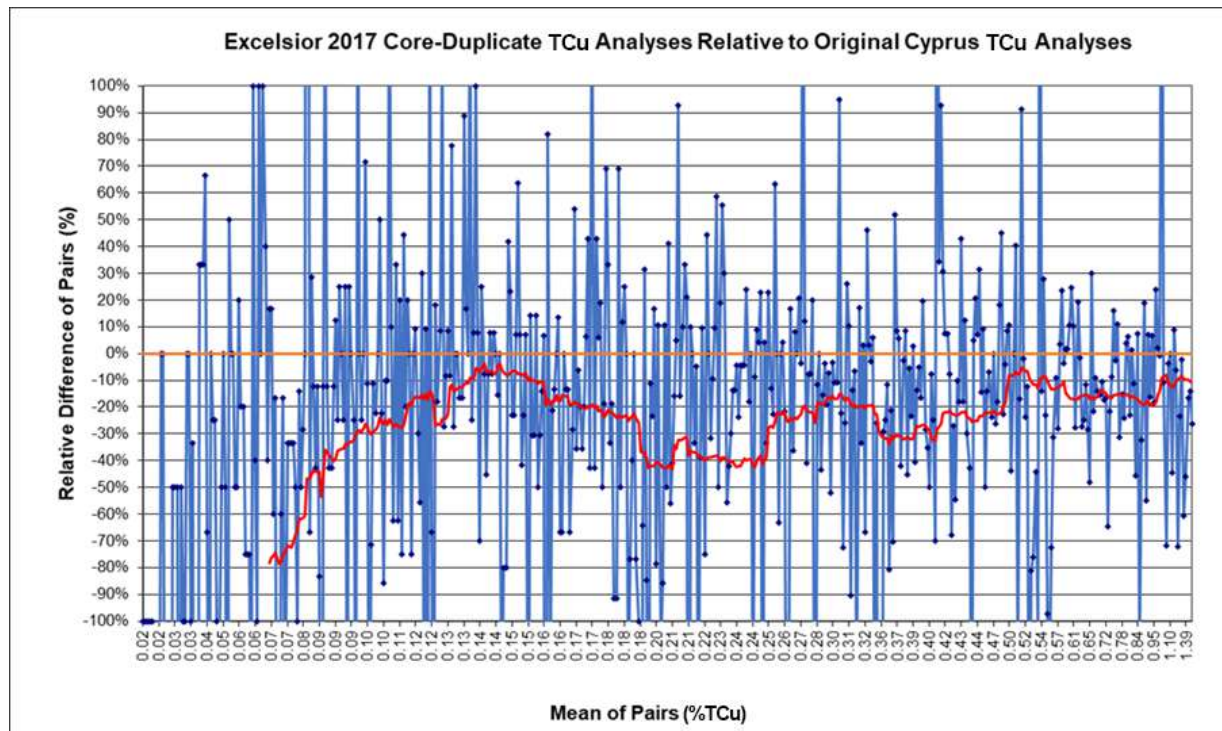


Figure 12-6: 2017 Total Copper (TCu) Core-Duplicate Analyses Relative to Historical Cyprus Analyses

The MOP analysis for 2017 total copper (TCu) core-duplicate samples in holes drilled by Cyprus is provided in Figure 12-7. A total of 114 samples were submitted to Skyline for analysis from 5 Cyprus drill-holes. The average relative difference between the new data and historical data is -122%, showing a consistent low bias in the GCC samples compared to the original Cyprus assays, with variability almost exclusively on the low side. No outlier pairs were removed. The data suggest that significant core loss occurred in the Cyprus drill-holes, which is unsurprising given the age of the core.

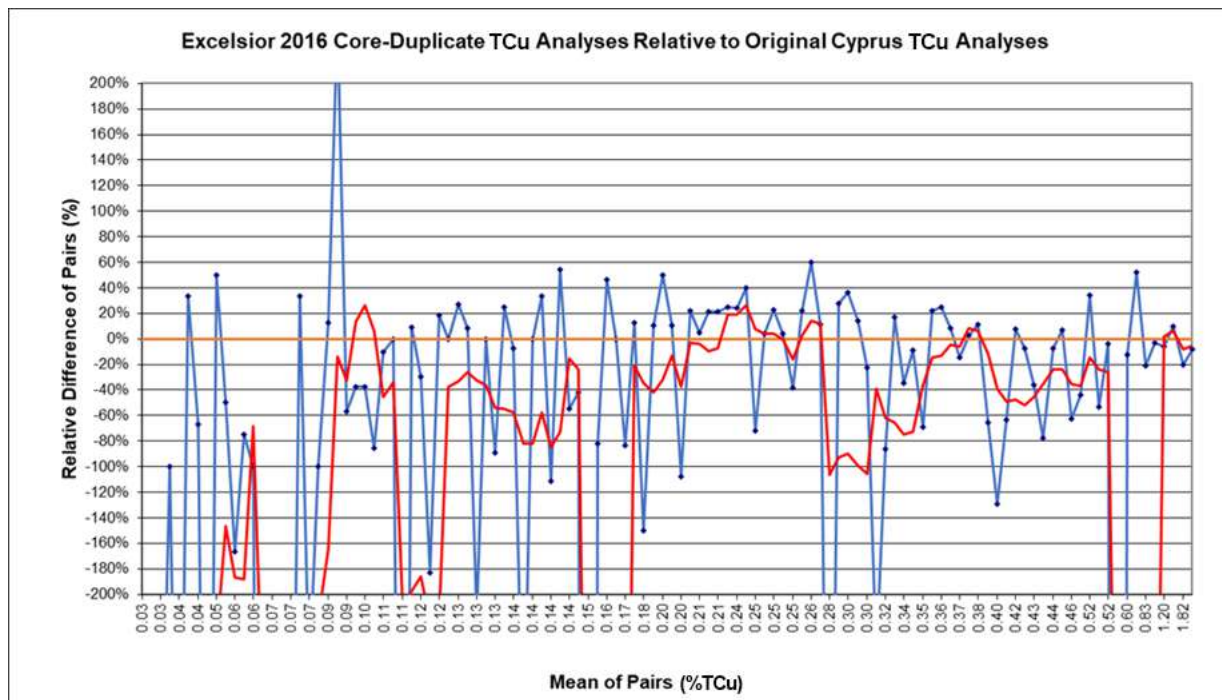


Figure 12-7: 2016 Total Copper (TCu) Core-Duplicate Analyses Relative to Historical Cyprus Analyses

The MOP analysis for 2017 soluble copper (ASCu) core-duplicate samples in holes drilled by Cyprus is provided in Figure 12-8. A total of 124 samples were submitted to Skyline for analysis from 5 Cyprus drill-holes. The average relative difference between the new data and historical data is -155%, showing a consistent low bias in the GCC samples compared to the original Cyprus assays, with variability almost exclusively on the low side. No outlier pairs were removed. The data are consistent with and slightly lower than the total copper core-duplicate data, suggesting that soluble copper was preferentially lost in the Cyprus core.

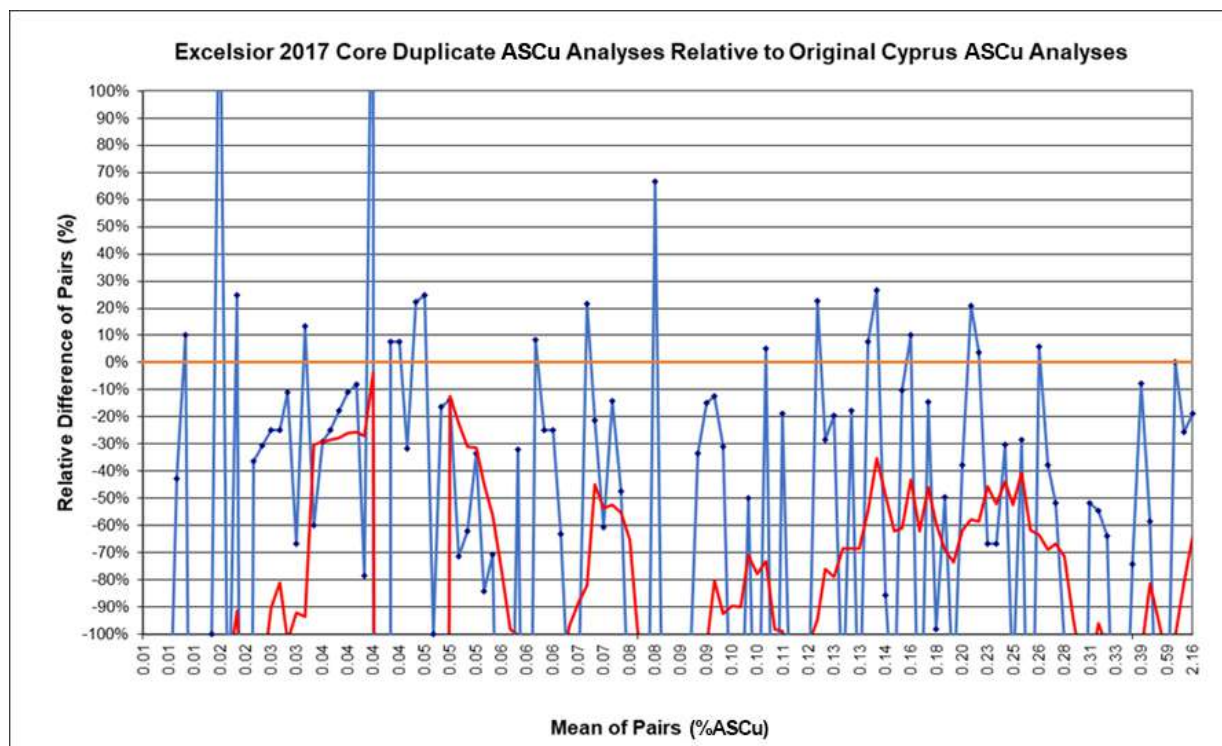


Figure 12-8: 2017 Soluble Copper ("ASCu") Core-Duplicate Analyses Relative to Historical Cyprus Analyses

The MOP analysis for 2016 total copper (TCu) pulp-duplicate samples in holes drilled by Nord is provided in Figure 12-9. A total of 13 samples were submitted to Skyline for analysis from 1 Nord drill-hole. The average relative difference between the new data and historical data is less than 1%. No outlier pairs were removed. The data, while limited, show good reproducibility from the original samples.

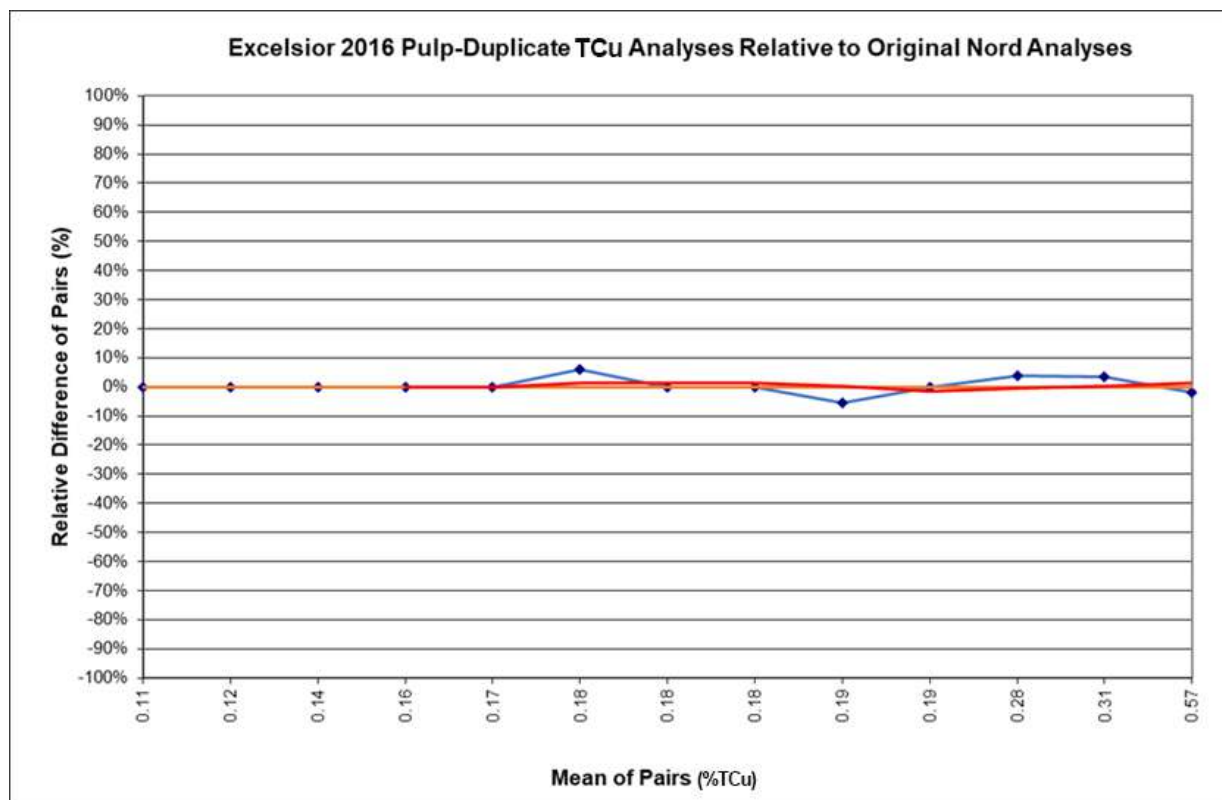


Figure 12-9: 2016 Total Copper ("TCu") Pulp-Duplicate Analyses Relative to Historical Nord Analyses

The MOP analysis for 2016 soluble copper (“ASCu”) pulp-duplicate samples in holes drilled by Nord is provided in Figure 12-10. A total of 13 samples were submitted to Skyline for analysis from 1 Nord drill-hole. The average relative difference between the new data and historical data is less than 1%. No outlier pairs were removed. The data, while limited, show good reproducibility from the original samples.

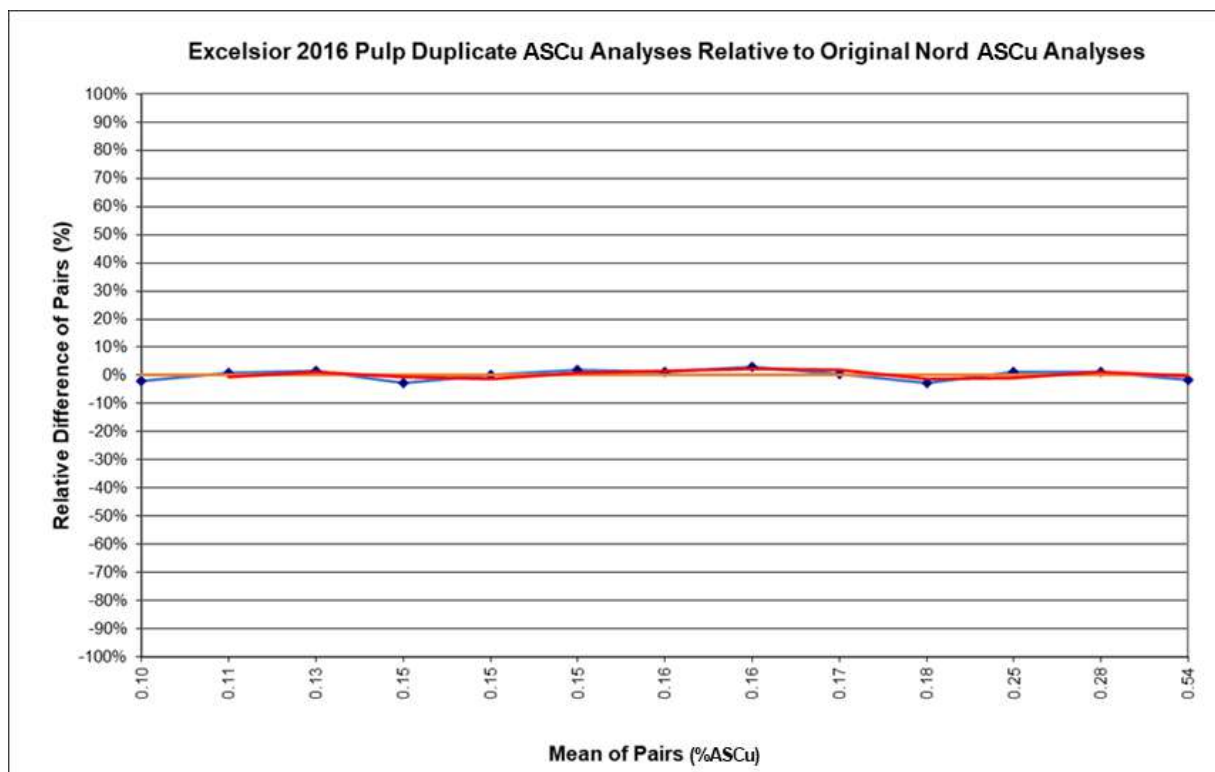


Figure 12-10: 2016 Soluble Copper (“ASCu”) Core-Duplicate Analyses Relative to Historical Nord Analyses

#### Prioritization of GCC Data for Importing into RESPEC Database

When multiple sets of TCu and ASCu are available for any single historical interval, the following hierarchy was followed (from highest to lowest priority):

*2017 pulp checks > 2016 pulp checks > 2017 core resamples > 2016 core resamples*

Pulps were prioritized over core resamples due to the evidence of loss of TCu/ASCu from historical core. The 2017 analyses were chosen over 2016 because (1) there are many more analyses from the 2017 resampling program than from 2016; and (2) the 2016 TCu analyses tend to be lower than those from 2017, and the 2017 TCu and ASCu agree well with matched historical data.

Note that the choice of any prioritization would be very unlikely to lead to significantly different results in a resource estimation. For example, prioritization of pulp over core affects only 119 historical sample intervals (all from Arimetco holes ACC06 and AJ63).

In Mr. Bickel’s opinion, a more important rule to follow is that if a certain ASCu dataset is chosen for use in the project database, the corresponding TCu values from the same set of analyses should also be used.

Table 12-1 summarizes the source of analyses chosen to be included in the RESPEC database, by historical operator.



**Table 12-1: Summary of Analyses in RESPEC Database**

Data	Sample Intervals	Comments
Arimetco TCu	978 Arimetco + 1,572 GCC = 2,550	1,572 GCC values used
Arimetco ASCu	0 Arimetco + 1,572 GCC = 1,572	1,572 GCC values used
Arimetco CNCu	0 Arimetco + 1,572 GCC = 1,572	1,572 GCC values used
Nord TCu	2,325 Nord + 0 GCC = 2,325	13 GCC pulp checks not used and 13 Nord values were not used
Nord ASCu	2,323 Nord + 0 GCC = 2,323	13 GCC pulp checks not used and 13 Nord values were not used
Nord CNCu	2,278 Nord + 0 GCC = 2,278	13 GCC pulp checks not used and 13 Nord values were not used
Cyprus TCu	6,054 Cyprus + 363 GCC = 6,417	1,001 GCC values available
	140 GCC pulp checks	140 GCC values used
	638 GCC core duplicates	0 GCC values used
	223 GCC core samples not sampled by Cyprus	223 GCC values used
Cyprus ASCu	2,888 Cyprus + 363 GCC = 3,251	GCC values used as per TCu
Cyprus CNCu	0 Cyprus + 363 GCC = 363	GCC values used as per TCu
Summo TCu	499 Summo + 0 GCC = 499	0 GCC values used
Summo ASCu	362 Summo + 0 GCC = 362	0 GCC values used
Summo CNCu	0 Summo + 0 GCC = 0	0 GCC values used
Unknown TCu	80 unknown + 0 GCC = 80	Quintana?
Unknown ASCu	0 unknown + 0 GCC = 0	
Unknown CNCu	0 unknown + 0 GCC = 0	
GCC 2022 TCu	1,541 GCC	
GCC 2022 ASCu	1,541 GCC	
GCC 2022 CNCu	1,541 GCC	
GCC 2023 TCu	740 GCC	
GCC 2023 ASCu	740 GCC	
GCC 2023 CNCu	740 GCC	
GCC 2024 TCu	214 GCC	
GCC 2024 ASCu	214 GCC	
GCC 2024 CNCu	214 GCC	
RESPEC DB TCu	9,936 historical + 4,430 GCC = 14,366	
RESPEC DB ASCu	5,573 historical + 4,430 GCC = 10,003	
RESPEC DB CNCu	2,278 historical + 4,430 GCC = 6,708	

### 12.3 INDEPENDENT VERIFICATION OF MINERALIZATION

Verification of mineralization was conducted during Mr. Bickel's visits to GCC's properties in March and May of 2021. During these site visit, drill core was examined pit faces with visible copper were observed at the property. The existence of the Johnson Camp Mine has been widely known in the industry for many years prior to GCC's involvement



and there is a documented production history of the mine from several companies (Cyprus, Arimetco, and Nord) that were well-known and reputable operators.

#### **12.4 SUMMARY STATEMENT ON DATA VERIFICATION**

Mr. Bickel has undertaken extensive verification of the historical data. The core-duplicate analyses performed in 2016-2017, along with the GCC drilling campaign from 2022-2024, allowed Mr. Bickel to verify that the historical assay data in the Johnson Camp Mine database is of sufficient quality for use in the estimations of the current resources.

Explicit modeling of the copper mineralization was the most critical component to the estimation of the project mineral resources. This 'hands-on' approach provided meaningful verification of the historical data, whereby continuity and sensibility of meaningful geological variables, and the assays in the context of those variables, were carefully evaluated and considered.

Mr. Bickel experienced no limitations with respect to data verification activities related to the Johnson Camp Mine other than limited availability of some of the historic data. In consideration of the information summarized in this and other sections of this technical report, Mr. Bickel has verified that the project data are adequate as used in this technical report, most significantly to support the estimation and classification of the mineral resources reported herein.

## 13 MINERAL PROCESSING AND METALLURGICAL TESTING

### 13.1 INTRODUCTION

This technical report focuses on continued heap leaching of the JCM oxide copper zones, supplemented by a new pad on which deeper transition and primary sulfide mineralization will be heap leached with additives and supplemental air (as the oxygen source). Since oxide leaching will continue, this section on Mineral Processing and Metallurgical Testing will be included from past studies. Additional text specific to heap leaching of the deeper resource is presented in Section 13.4.

The Johnson Camp District was an historic producer of copper, gold, silver, lead, zinc, and tungsten beginning in 1881. The current Johnson Camp Mine (JCM) was developed by Cyprus Minerals and commissioned in 1975 at a capital cost of \$3.3 million (in 1975 dollars) for the SX-EW plant<sup>1</sup>. The plant was modeled on the original Cyprus Bagdad, AZ, SX-EW circuit that was built in the early-1970s and is still in operation. JCM was either the third or fourth domestic heap leach/SX-EW operation, after Ranchers Bluebird, AZ and Cyprus Bagdad, and has undergone few changes during its long life. However, the basic design has stood the test of time. The plant was partially modernized in 2019-2020, and modernization is again underway.

The total design PLS flowrate is nominally 3,880 USGPM delivered to two parallel SX circuits comprising 2 extraction stages in series and one strip stage with an SX copper recovery of 92 percent from a PLS grade of approximately 1.6 gpl copper. The electrowinning section was designed with a cathode capacity of 25 million pounds annually and consists of two blocks of polymeric concrete cells with 56 cells in one block and 32 in the second block.

From 1975 through 1984, the operation produced about 100 million pounds of copper from 15 million tons of material assaying 0.8% TCu. A prolonged depression in copper prices forced closure of JCM, as well as most other Arizona copper properties, including Morenci, Bagdad, and Ajo in the early-to-mid 1980s. In 1984, Arimetco acquired the property for \$1 million and began operating JCM in 1991, leaching about 3 million tons of ROM material annually for several years, followed by crushing the material for a 2-year period to improve copper recovery. However, JCM was closed again in 1997 in response to low copper prices. Mineralized material placement on the heap pad by Cyprus and Arimetco totaled 31.8 million tons and yielded 157 million pounds of copper, averaging 4.94 pounds of cathode recovered per ton of material leached.

Nord Resources acquired JCM in 2008 and mined and stacked crushed and ROM material on the original heap leach pad from 2009 through June 2010. Most of this material came from Lower Abrigo and Upper Diabase lithologies mined from both the Copper Chief and Burro pits, although a small amount of Bolsa Quartzite was included in the mixture. Grades averaged 0.32% TCu and 0.15% ASCu by the standard ambient assay procedure. No additional material was mined after 2010.

In 2015, GCC acquired the JCM assets for \$8.4 million. This acquisition provided GCC with a past operating mine and a 25 million pound per year SX-EW facility.

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<sup>1</sup> "Mining Directory 1994/95", Randol International, page 207.

## 13.2 LABORATORY METALLURGICAL TESTS FOR GENERAL LEACHING RESPONSE

### 13.2.1 Column Leaching Tests

#### 13.2.1.1 2010-2012 Column Tests for Nord Resources

Column leaching tests performed between 2010 and 2012 were reported by Dr. Ronald J. Roman. The tests were conducted in 8.5-inch diameter columns for the minus 1-inch sample sizes and 20-inch diameter columns for the minus 6-inch sample sizes. Columns were approximately 20 feet high and used samples from the JCM active mining operation in the Copper Chief Pit ("CC") and Burro Pit ("BP"). Some samples were crushed and screened to minus 1-inch fragment size, blended, agglomerated, cured, and loaded into the columns which were all leached concurrently. Other samples were crushed and screened to minus 6-inch fragment size. These received no curing or agglomeration.

For the minus 1-inch columns, the samples varied significantly in breakage characteristics with the minus 6-mesh fraction ranging from 20 to 47 percent of the total sample weight. Agglomeration of fines and curing of the samples with dilute aqueous sulfuric acid was done by mixing the samples and solution in a portable cement mixer to a target of 8% moisture. The amount of 100% sulfuric acid in the curing solution that was added to the samples varied from 9.8 to 14.3 lb/ton of sample and averaged 12.2 lb/ton. This quantity was added to the eventual net acid consumption estimate.

The 8.5-inch diameter columns were then charged with the minus 1-inch agglomerated and cured samples and the 20-inch diameter columns were charged with the minus 6-inch samples. Both were irrigated with a lixiviant consisting of acidified JCM SX raffinate. The recorded flowrates of approximately 13 liters per day for the 8.5-inch diameter columns and approximately 71 liters per day for the 20-inch diameter columns were somewhat variable and resulted in average solution application rates between 0.0054 and 0.0062 gpm/ft<sup>2</sup>. Head assays were calculated from residue and solution weights or volumes and assays. Acid consumptions were average values at the copper extractions shown in Table 13-1. The assays shown were conducted after hot acid digestion because that procedure gave results that correlated most closely to column copper extractions. However, they overstate the ASCu head assays. GCC uses a more industry-standard ambient acid soluble assay technique. Nord also assayed several columns using an ambient assay technique. ASCu copper extractions for some of the columns using the ambient technique are shown in the far right-hand column in Table 13-1.

**Table 13-1: 2010-2012 Column Leaching Tests**

Column #	Size	Pit	Formation Name	Assayed Head (HOT)		Leach Days	Acid Consumption		Copper Extraction		
				%TCu	%ASCu		lbs/ton	lb/lb	%TCU	%ASCu HOT	%ASCu AMBIENT
1	-1"	CC	Bolsa Quartzite	0.49	0.47	79	19	3.9	67	70	95
2	-1"	CC	Pioneer Shale	1.23	1.21	111	11	2.1	82	84	92
3	-1"	CC	Lower Abrigo	0.24	0.20	70	45	29.6	48	58	177
4	-1"	CC	Diabase	0.47	0.44	102	33	5.9	73	79	233
5	-1"	BP	Pioneer Shale	0.26	0.24	102	24	7.0	74	81	120
6	-1"	BP	Bolsa Quartzite	0.22	0.20	62	15	4.2	76	83	152
8*	-1"	BP	Diabase	0.36	0.33	95	37	6.4	76	82	161
9	-6"	BP	Bolsa Quartzite	0.25	0.16	111	29	18.9	33	52	
10	-6"	BP	Lower Abrigo	0.26	0.24	137	9	8.9	49	53	
11	-6"	CC	Bolsa Quartzite	0.67	0.48	155	29	4.6	71	98	
12	-6"	CC	Diabase	0.51	0.17	155	66	15.9	45	133	
13	-6"	BP	Mid/Up Abrigo 1	0.34	0.32	165	56	18.3	49	51	

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Column #	Size	Pit	Formation Name	Assayed Head (HOT)		Leach Days	Acid Consumption		Copper Extraction		
				%TCu	%ASCu		lbs/ton	lb/lb	%TCU	%ASCu HOT	%ASCu AMBIENT
14	-6"	BP	Lower Abrigo	0.63	0.55	162	44	9.6	43	49	
15	-6"	BP	Mid/Up Abrigo 3	0.31	0.27	74	40	28.0	24	28	
16	-6"	BP	Mid/Up Abrigo 2	0.40	0.37	126	36	13.8	37	40	
17	-1"	BP	Mid/Up Abrigo 1	0.29	0.28	87	43	9.9	48	50	
18	-1"	BP	Lower Abrigo	0.91	0.85	164	77	6.5	58	63	
19	-1"	BP	Mid/Up Abrigo 3	0.24	0.22	87	39	52.1	16	17	
20	-1"	BP	Mid/Up Abrigo 2	0.38	0.37	87	39	9.9	43	44	
21	-1"	CC	Lower Abrigo	0.24	0.20	93	39	30.1	26	34	194
22	-1"	CC	Lower Abrigo	0.24	0.20	93	41	25.6	30	37	245
23	-1"	CC	Lower Abrigo	0.24	0.20	91	43	36.8	24	29	174
24	-1"	CC	Lower Abrigo	0.24	0.20	91	57	47.9	24	30	179

\*Note: Column 7 was discontinued due to plugging

There were 35 tests, but some results were inconclusive, and the laboratory daily reporting sheets are missing for some. Results from the 23 reliable and well-documented tests are summarized in Table 13-1.

It is important to note that the far right-hand column, summarizing results for Column Leaching Tests numbered 1-6, 8\*, 21 and 22, presents ASCu leaching extractions well in excess of 100 percent. This probably is because transitional minerals like chalcocite, which do not report to the ambient ASCu assay technique, will dissolve over a longer period of time, and in the presence of sufficient ferric iron, in a column leach test, thus contributing more extracted copper than indicated by the ambient assay. This interpretation bears directly on Sections 13.3 and 13.4.3 that discuss predicted sulfide leaching extractions.

The data presented in Table 13-1 require a few additional comments and tentative conclusions. Questionable values are highlighted in red. The % ASCu extraction for column number 12 appears suspicious and a likely error was the low ASCu head assay. Also, the acid consumption appears high for diabase and the minus 6-inch fragments surely would not consume more acid than the fine minus 1-inch crushed samples, especially with a shorter leach retention time. Samples of the Abrigo formation show some variability in acid consumption, but the *lb acid/ton* and *lb acid/lb* figures reported for Column 24 appear too high and may have been incorrect calculations.

It is important to note that acid consumptions and copper extractions obtained from column tests do not faithfully predict acid consumptions or copper extractions that will be obtained in commercial heaps, as both will depend on leach cycle time, as well as various factors including care taken during heap construction and operation. Also, the original reports expressed copper recovery, which is misleading. It is more correct to use copper extraction. Copper recovery should apply to commercial cathode production and is always somewhat lower than the leaching extraction during column or heap leaching. For example, this difference can be attributed partially to the residual copper in the acidified raffinate (typically 5-10 percent of the copper in the PLS), which may not be completely recovered in subsequent leaching cycles.

There were only a few comparisons between fine and coarse column feeds, but they do not make a strong case for converting JCM from ROM to crushing and agglomeration. Nonetheless, a minus 6-inch fragment population probably does not represent ROM very faithfully, so it is quite possible that ROM underperforms a finer heap feed sufficiently to justify reactivating the crushing and screening plant.

### 13.3 PREDICTED JCM OXIDE HEAP LEACHING PERFORMANCE

Four column tests were conducted at Johnson Camp in 2022. These heap simulation tests were run on whole core that was nominally minus 3 inches in diameter. The columns were 470 mm (18.5 inches) diameter by 2.5 meters tall. All core was Lower Abrigo lithology and had been logged as weak oxide and transition mineralization. Head assays ranged from 0.38 to 0.49% TCu with 0.02 to 0.27% CNCu and 0.08 to 0.14% ASCu. All four columns were acid-cured, but two were cured with a slow drip of acidic solution, while two were cured quickly and rested for 7 days before application of leaching solution. However, the curing solution was very strong with 200 grams of H<sub>2</sub>SO<sub>4</sub> per liter, which not only dissolved a significant amount of gangue with free acid as low as pH 0.2, but also led to distorted net acid consumptions. Also, the relatively low ASCu head assays suggest either incorrect assays or extraction of most of the total copper. A comprehensive interpretation of the test results is not possible.

Information to date for a minus 1-inch (25 mm) to minus ½-inch (12.5 mm) crush indicates 80% average ASCu extraction for Bolsa Quartz lithology, and 80% for Lower Abrigo. ROM extractions will be approximately 10% lower. Net acid consumptions in pounds per ton of leach pad material will be approximately as follows for ROM: Upper Abrigo, 70; Middle Abrigo, 70; Lower Abrigo, 26; and Bolsa Quartzite, 22. For a minus 1-inch crushed and agglomerated heap feed, the net acid consumption will be about 35% higher for each lithology.

The pit shell design is based on more conservative copper extractions of 55% than the 72% extractions shown in Table 13-2 below that represent column-to-ROM heap adjustments to the QP's interpretation of available data.

**Table 13-2: Pit Shell Assumed Copper Extractions**

Crush Size	Lithology	ASCu Extraction (%)	CNCu Extraction (%)	SCu Extraction (%)	Acid Consumption (lb/ton)
ROM	Bolsa Quartz	72	45	15	22
	Upper/Middle Abrigo	72	45	15	70
	Lower Abrigo	72	45	15	26
Minus 1-inch	Bolsa Quartz	86	76	15	33
	Upper Abrigo	-	-	15	-
	Lower Abrigo	-	-	15	-

### 13.4 AUGMENTED HEAP LEACHING OF CHALCOPYRITIC MINERALIZATION

The first industrial scale demonstration of the Nuton™ technologies is taking place at JCM, which is discussed at the end of this subsection.

#### 13.4.1 Current Process Development by Nuton

The following paragraph is based on information as provided by Rio Tinto/Nuton:

Since 2022, Rio Tinto and its wholly-owned subsidiary, Nuton LLC, have been commercialising their process for enhanced bio-heap leaching of primary copper sulfides, especially, chalcopyrite, referred to as the Nuton™ technologies. At the core of the Nuton™ technologies is a portfolio of proprietary copper leaching technologies and capabilities – the culmination of almost 30 years of research and development. The Nuton™ technologies offer the potential to economically unlock known low-grade copper sulphide resources, copper sulphides with high-amounts of deleterious elements (such as arsenic), and copper-bearing waste and tailings, and also achieve higher copper

recoveries from primary copper sulphide material, allowing for significantly improved copper production. One of the associated advantages of Nuton is the potential to deliver superior environmental performance, including more efficient water usage, lower carbon emissions, and the ability to reclaim mine sites by reprocessing mine waste. The current work is based on studies that were developed at Rio Tinto's Bundoora Technical Development Centre in Australia and at Kennecott Utah Copper. It appears that the degree of augmentation may be increased by reliance on microbes that are unusually tolerant of very high temperatures.

Nuton has collected samples from JCM and is running column testwork on these samples using the Nuton™ technologies. Although the work is not yet complete, some generalizations can be made. With the aid of microorganisms and additives, primary sulfide zone samples in which chalcopyrite dominates the sulfide copper mineralization will result in copper leaching extractions up to 84% as indicated by column testing results. As with essentially all commercial heap leaching operations containing significant sulfide mineralization, there will be inter-lift aeration with low-pressure blowers.

#### 13.4.2 Predicted Heap Leaching Performance from JCM Transition and Sulfide Mineralization

It is the opinion of the QP for this section that the following copper heap leaching results in Table 13-3 can be obtained at Johnson Camp, given reasonable care and adherence to design operating conditions, and with tertiary crushing to a ½-inch (12.5 mm) P<sub>80</sub>. This prediction recognizes the need for conservatism, while assuming that significant near-term progress by Nuton™ will be made on heap leaching of chalcopyrite and other refractory copper minerals. Anticipated sulfuric acid consumptions are 22 lb/ton for Bolsa quartzite and 26 lb/ton for Lower Abrigo under ROM conditions.

**Table 13-3: Predicted ROM Heap Leaching Extractions**

	ASCu	CNCu	SCu*
ROM without augmentation	72%	45%	15%
* SCu denotes chalcopyrite and other refractory sulfides			

#### 13.5 OPPORTUNITIES

Oxidation and leaching of pyrite and copper sulfides, especially chalcopyrite, will generate sulfuric acid, so these reactions will cause the net acid requirement for heap leaching to diminish during the first year of operation.

## 14 MINERAL RESOURCE ESTIMATES

### 14.1 INTRODUCTION

The mineral resource estimation for the Johnson Camp Mine was completed in accordance with NI 43-101 standards. The modeling and estimation of the copper mineral resources were completed in November 2024 under the supervision of Jeffrey Bickel. The effective date of the mineral resource estimate is November 05, 2024. Mr. Bickel is independent of GCC by the definitions and criteria set forth in NI 43-101 as of the effective date of this technical report. There is no affiliation between Mr. Bickel and GCC except that of independent consultant/client relationships. Mr. Bickel is not aware of any unusual environmental, permitting, legal, title, taxation, socio-economic, marketing, or political factors that may materially affect the Johnson Camp Mine mineral resources as of the date of this technical report.

The Johnson Camp Mine mineral resources are classified in order of increasing geological and quantitative confidence into Inferred, Indicated, and Measured categories in accordance with the "CIM Definition Standards - For Mineral Resources and Mineral Reserves" (2014) and therefore NI 43-101. CIM mineral resource definitions are given below, with CIM's explanatory text shown in italics:

#### **Mineral Resource**

*Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.*

A Mineral Resource is 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.

*Material of economic interest refers to diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals.*

*The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of Modifying Factors. The phrase 'reasonable prospects for eventual economic extraction' implies a judgment by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. The Qualified Person should consider and clearly state the basis for determining that the material has reasonable prospects for eventual economic extraction. Assumptions should include estimates of cut-off grade and geological continuity at the selected cut-off, metallurgical recovery, smelter payments, commodity price or product value, mining and processing method and mining, processing, and general and administrative costs. The Qualified Person should state if the assessment is based on any direct evidence and testing.*

*Interpretation of the word 'eventual' in this context may vary depending on the commodity or mineral involved. For example, for some coal, iron, potash deposits and other bulk minerals or commodities, it may be reasonable to envisage 'eventual economic extraction' as covering time periods in excess of 50 years.*



*However, for many gold deposits, application of the concept would normally be restricted to perhaps 10 to 15 years, and frequently to much shorter periods of time.*

### **Inferred Mineral Resource**

An Inferred Mineral Resource is 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.

*An Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings, and drill holes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101.*

*There may be circumstances, where appropriate sampling, testing, and other measurements are sufficient to demonstrate data integrity, geological and grade/quality continuity of a Measured or Indicated Mineral Resource, however, quality assurance and quality control, or other information may not meet all industry norms for the disclosure of an Indicated or Measured Mineral Resource. Under these circumstances, it may be reasonable for the Qualified Person to report an Inferred Mineral Resource if the Qualified Person has taken steps to verify the information meets the requirements of an Inferred Mineral Resource.*

### **Indicated Mineral Resource**

An Indicated Mineral Resource is 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 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.

*Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity, and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Pre-Feasibility Study which can serve as the basis for major development decisions.*

### Measured Mineral Resource

A Measured Mineral Resource is 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.

*Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity, and distribution of data are such that the tonnage and grade or quality of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability of the deposit. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.*

### Modifying Factors

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.

The mineral resources are reported herein at cut-offs that are reasonable for deposits of this nature given anticipated mining methods and plant processing costs, while also considering economic conditions, because of the regulatory requirements that a resource exists “in such form and quantity and of such a grade or quality that it has reasonable prospects for eventual economic extraction”.

## 14.2 DATA

The Johnson Camp Mine copper resources were modeled and estimated using information provided by GCC under Mr. Bickel's supervision. The information is derived from historical core holes drilled by Cyprus Mining, Arimetco, Summo USA Corp., and Nord Resources Corp. GCC completed 65 diamond drill holes in the Burro Pit area and surrounding area in 2022 and 2023. In 2024, GCC completed 12 diamond drill holes in the Burro Pit area. The drill hole database also includes analyses performed by GCC on the historical core. This data, as well as digital topography of the project area, were provided to RESPEC by GCC in a digital database in Arizona State Plane, East Zone coordinates in US Survey feet using the NAD27 datum.

Modeling of the Johnson Camp Mine mineral domains, oxidation models, and estimation of the mineral resources were performed using GEOVIA Surpac mining software as well as proprietary software developed at RESPEC. Lithologic models were built in Leapfrog. The oxidation model was used to constrain the estimation of total copper (TCu), the acid-soluble (ASCu) ratio (ASCu/TCu), and the cyanide-soluble (“CNCu”) copper ratio (CNCu/TCu). The Johnson Camp Mine resource block model extents and dimensions are provided in Table 14-1.

**Table 14-1: Block Model Extents and Dimensions**

In Feet	X	Y	Z
Min Coordinates	532,624	397,419.6	4,000
Max Coordinates	536,624	405,019.6	6,000
Block Size	20	20	20
Rotation	0	-54	0

### 14.3 DEPOSIT GEOLOGY PERTINENT TO RESOURCE BLOCK MODEL

The copper mineralization at the Johnson Camp Mine occurs primarily in lower Paleozoic and upper Precambrian sedimentary units and upper Precambrian intrusive diabase sills. The primary controls on mineralization are (i) favorable stratigraphic units within geologic formations; (ii) diabase sills; (iii) the intersection of favorable units with important structures; and (iv) oxidation of primary mineralization. Geologic factors critical to the grade domain modeling of Johnson Camp copper mineralization therefore include lithology, structure, and oxidation.

### 14.4 GEOLOGIC AND OXIDATION MODELS

RESPEC created three-dimensional geologic and oxidation models. The geologic model interpretations were mainly based on previous models generated by Nord Resources Corp and were updated by RESPEC incorporating new drilling conducted by GCC. The geologic interpretations included solidified wireframes of geologic formations and three-dimensional fault surfaces. Representative cross sections showing the geologic model interpretations for the Burro and Copper Chief areas are shown in Figure 14-1 and Figure 14-2 respectively.

The oxidation model interpretations were based on the acid-soluble and cyanide-soluble to total copper ratios primarily projected along bedding following the geologic model. Where both acid-soluble and cyanide-soluble data were available sulfide copper ratios were also calculated. Visual characterization of core photos in combination with copper ratios were used in the modeling of oxidation. Five oxidation groups were modeled including oxide, iron-rich oxide, mixed, transition, and sulfide. The criteria for the oxidation groups are summarized below in Table 14-2. Representative cross sections showing the oxidation model interpretations for the Burro and Copper Chief areas are shown in Figure 14-3 and Figure 14-4 respectively.

**Table 14-2: Oxidation Group Modeling Criteria**

Oxidation Group	Criteria
Oxide	>50% ASCu/TCu ratio
Iron-rich oxide	>50% CuS/TCu ratio and >10% ASCu/TCu ratio
Mixed	Remaining blocks not populated
Transition	>50% CNCu/TCu ratio
Sulfide	>50% CuS/TCu ratio and ≤10% ASCu/TCu ratio

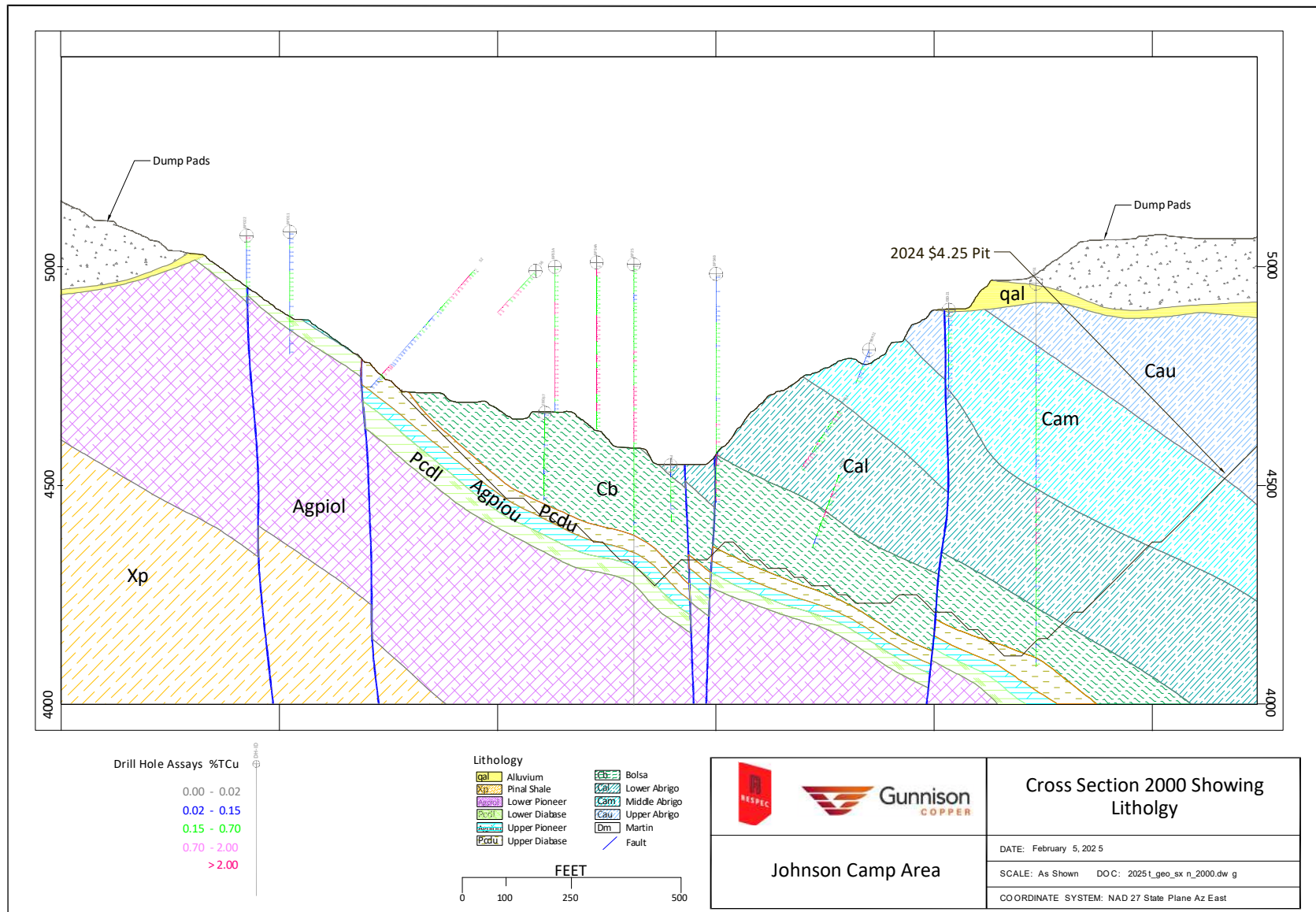


Figure 14-1: Geologic Cross Section with Geologic Model Burro Pit Area

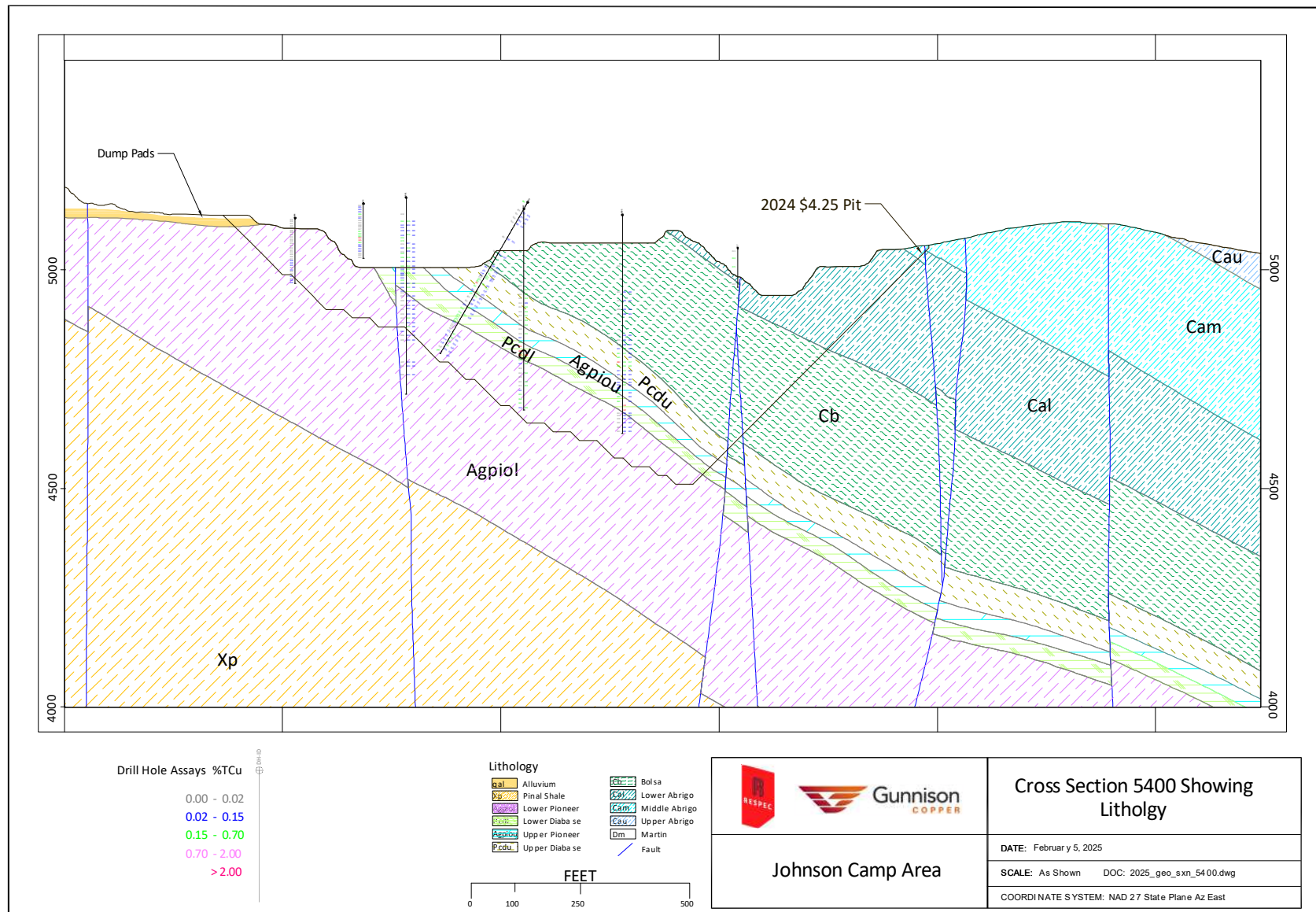


Figure 14-2: Geologic Cross Section with Geologic Model Copper Chief Pit Area

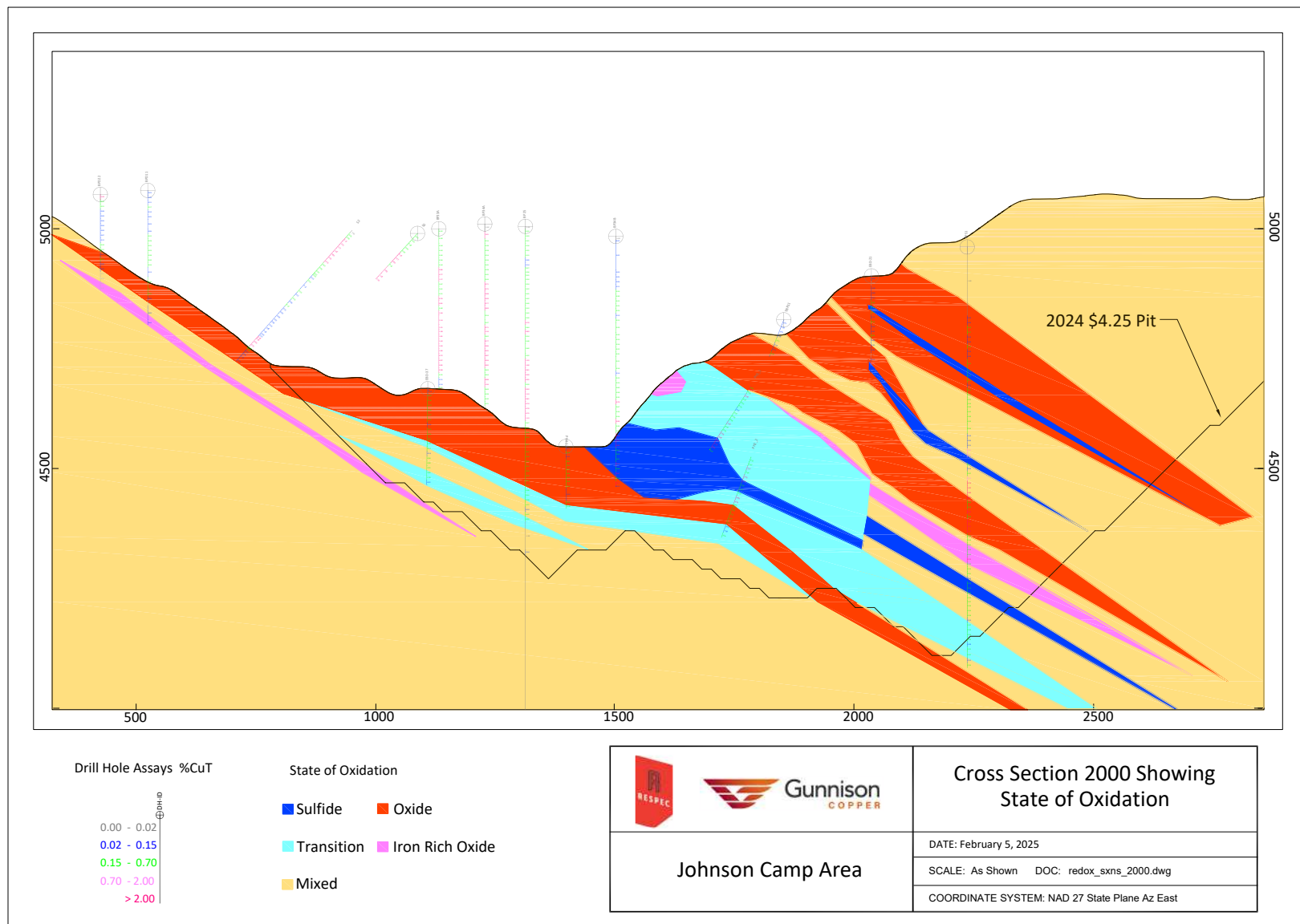


Figure 14-3: Geologic Cross Section with Oxidation Model Burro Pit Area

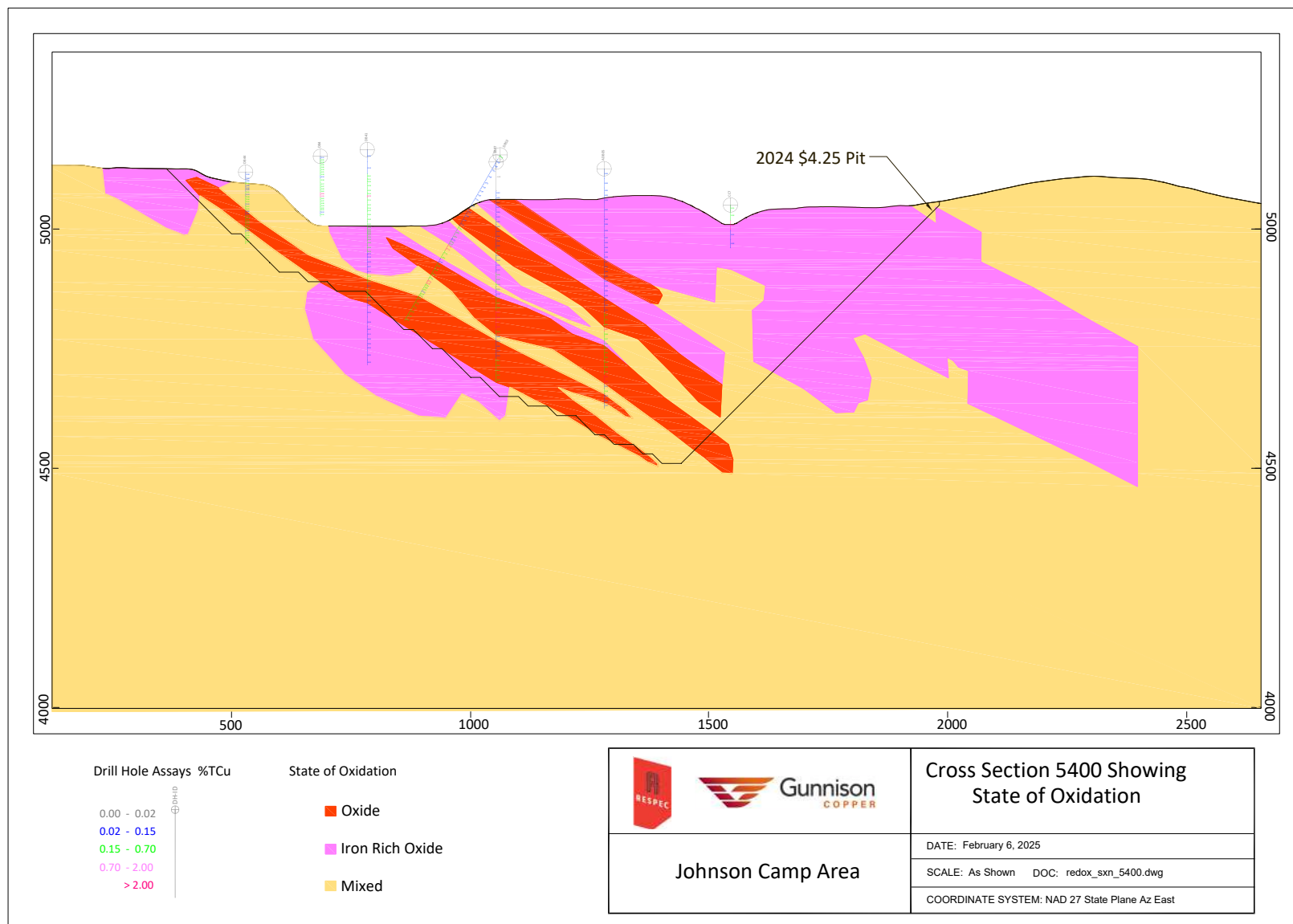


Figure 14-4: Geologic Cross Section with Oxidation Model Copper Chief Pit Area



## 14.5 DENSITY

Density values from previous models by Nord Resources Corp were used to code the RESPEC model. The values were based on bulk test work by previous operators. Additional samples were collected by GCC within the Burro pit area, and the density values were updated and converted to Tonnage Factors to correspond to geologic formations, and oxidation groups for the Upper Abrigo, Middle Abrigo, Lower Abrigo, and Bolsa Quartzite as summarized in Table 14-3.

**Table 14-3: Average Tonnage Factors by Lithology and Oxidation**

Lithologic Unit	Lithologic Code	Oxidation Group	Tonnage Factor – Ft <sup>3</sup> per Ton
Martin Formation	1		12.51
Upper Abrigo	2	Sulfide	11.63
		Transition	11.63
		Mixed	11.55
		Oxide	11.55
		Iron-rich oxide	11.55
Middle Abrigo	3	Sulfide	10.52
		Transition	10.52
		Mixed	10.74
		Oxide	10.57
		Iron-rich oxide	10.57
Lower Abrigo	4	Sulfide	11.44
		Transition	11.85
		Mixed	11.59
		Oxide	11.97
		Iron-rich oxide	11.97
Bolsa Quartzite	5	Sulfide	11.84
		Transition	12.05
		Mixed	12.18
		Oxide	12.18
		Iron-rich oxide	12.18
Upper Diabase	6		11.28
Upper Pioneer Shale	7		12.00
Lower Diabase	8		11.28
Lower Pioneer Shale	9		12.00
Pinal Schist	10		12.51
OB (Alluvium)	11		16.26
Dump	12		16.26

## 14.6 MINERAL DOMAIN MODELING

A mineral domain encompasses a volume of rock that is ideally characterized by a single, natural population of metal grades that occurs within a specific geologic environment. Mineral domains were modeled by RESPEC to respect the lithologic and structural interpretations of the deposit. Following statistical evaluation of the drillhole data, mineral domains were modeled on cross sections for total copper. Low-, mid-, and high-grade domains were modeled for total copper and were numbered 100, 200, and 300, respectively. Material outside the 100, 200, and 300 domains was assigned to the 0 domain. These grade domains were based on assay data populations. Soluble copper and cyanide-soluble domains were not explicitly modeled; instead, the soluble copper to total copper ratio and the cyanide-soluble to total copper ratio was used in the block model to calculate the grade for soluble-copper and cyanide-soluble copper, described in detail below.

### 14.6.1 Copper Domain Modeling

In order to define the mineral domains at the Johnson Camp Mine, the natural populations of total copper grades were identified on population-distribution graphs for all drillhole samples in the deposit area. The analysis led to identification of distinct populations. Ideally each of these populations can be correlated with geologic characteristics which then can be used in conjunction with the grade populations to interpret the bounds of each of the mineral domains. The approximate grade ranges of the domains are listed in Table 14-4.

**Table 14-4: Grade Domain Ranges**

Domain	Total Copper (%)
100	~0.025 to ~0.15
200	~0.15 to 0.7
300	> ~0.7

Using these grade populations in conjunction with lithologic and structural interpretations, grade domains were independently modeled within the Johnson Camp Mine deposit by interpreting mineral domain polygons on a set of 100 ft-spaced cross sections oriented along the approximate direction of dip (036° azimuth). Representative cross sections showing the copper mineral domains in the Burro and Copper Chief areas are shown in Figure 14-5 and Figure 14-6, respectively.

The final cross-sectional mineral-domain polygons were projected horizontally to the drill data in each sectional window, and these three-dimensional polygons were then sliced vertically along 20-foot planes that are orthogonal to the cross sections. These slices, along with similar slices lithologic and structural surfaces, were used to guide the final rectification of the copper mineral domains on the long sections. The 20-foot long-section plane locations coincide with resource-model block centroids along y-axis columns within the rotated model. Long sections were chosen over level plans for rectification purposes due to the generally gently dipping nature of the mineralization. The product of this work is a set of 20-foot-spaced long sectional copper domain polygons that span the full extents of the drilled mineralization.

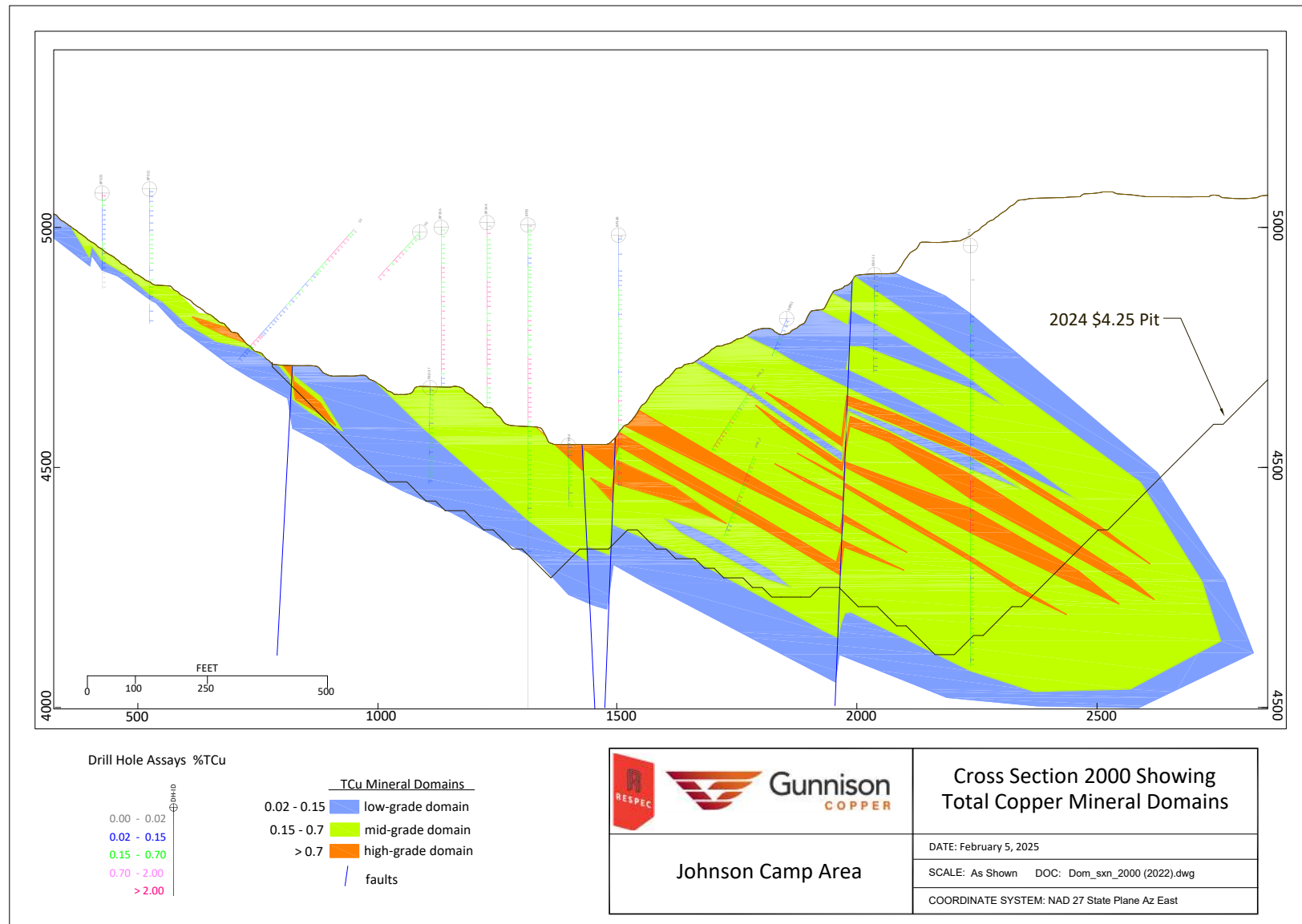


Figure 14-5: Geologic Cross Section with Copper Domains Burro Area Mineralization and \$4.25/lb Cu Pit Shells (December 2022)

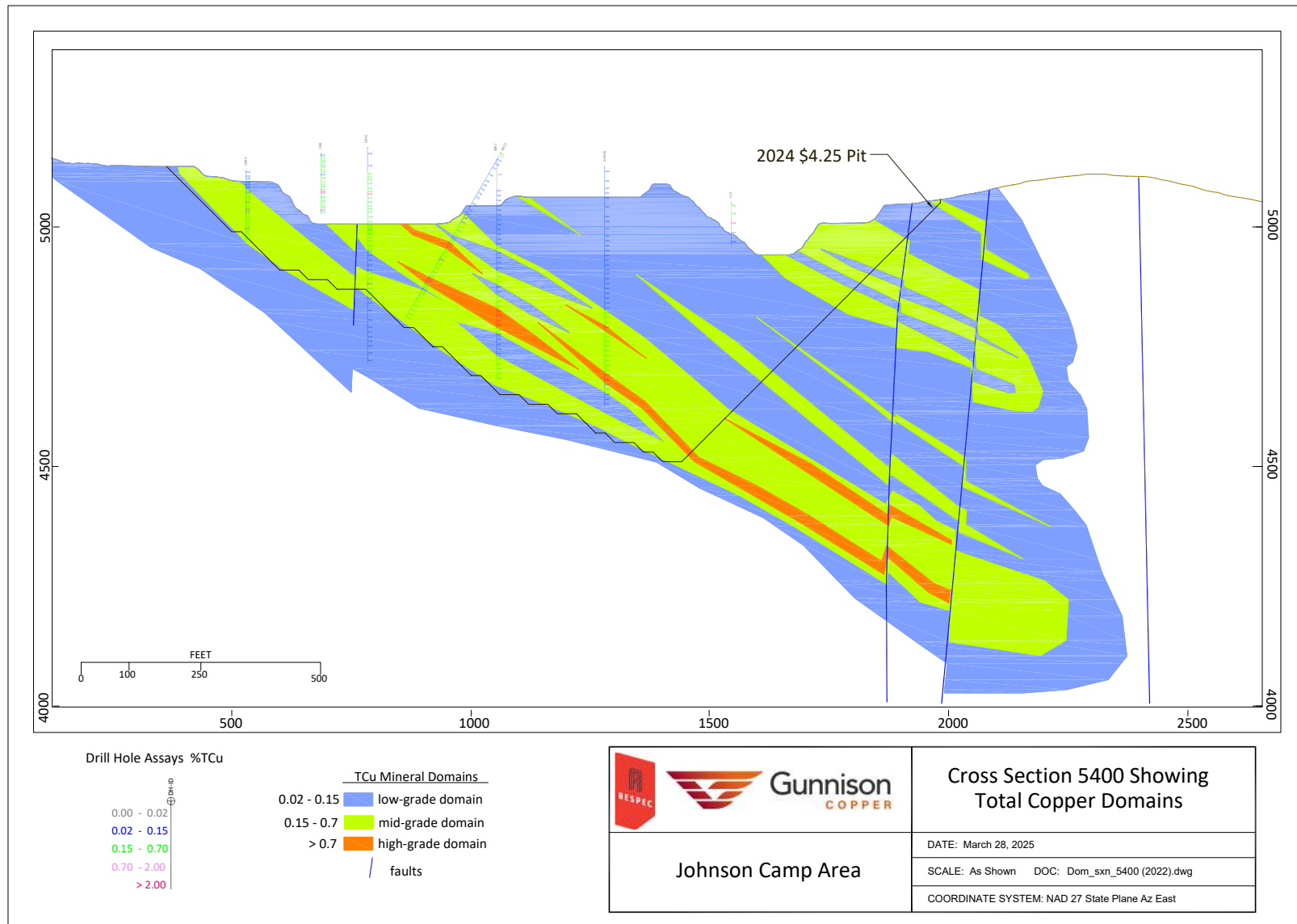


Figure 14-6: Geologic Cross Section with Copper Domains Copper Chief Area Mineralization and \$4.25/lb Cu Pit Shells (December 2022)

#### 14.6.2 Copper Ratios

There are two methods for estimating acid-soluble copper or cyanide-soluble copper: directly, using composites of the soluble copper or cyanide soluble copper analyses from the database; or indirectly, by estimating the acid-soluble copper to total copper ratios ("ASCu Ratio") or the cyanide-soluble copper to total copper ratios ("CNCu Ratio"). In the latter case, the ratios are determined for each drill interval that has both acid-soluble- and total copper analyses or cyanide-soluble and total copper analyses, and these ratios are then coded, composited, and used to estimate the ratios into the model blocks. The estimated acid-soluble copper or cyanide-soluble copper model values are then derived by multiplying the estimated ratio by the estimated copper value in each block.

Remobilization of supergene copper is not ubiquitous at Johnson Camp. It is evident locally, especially in the certain geologic units at the Copper Chief pit where it can be found as exotic accumulations on fractures in the Bolsa Quartzite and diabase sills (Curtis Associates, 2013). Where remobilization does exist, the distance of transport is typically inconsequential, and the remobilized copper has the same geologic controls on mineralization as the primary mineralization (along favorable stratigraphic units). Based on geological and statistical analyses, the author has concluded that the oxidation of copper minerals at Johnson Camp is strongly stratigraphically controlled and does not adhere to more classical oxidation profile that is influenced primarily by elevation as observed in other deposits in the district. As such, the modeled oxidation groups to control the estimate of various copper ratios are mostly influenced by stratigraphy and faulting.

The estimation of ratios for soluble-copper or cyanide-soluble copper can negate possible biases created by intervals that were selectively analyzed for total copper but not acid-soluble copper or cyanide-soluble copper. In the Johnson Camp database, 70% of the total copper samples have acid-soluble copper analyses and 47% of the total copper samples have cyanide-soluble copper analyses.

RESPEC used estimated ratios to code the Johnson Camp block model with acid-soluble copper and cyanide-soluble copper values. The ratio estimation was confined to blocks with estimated total copper values. The ratios for soluble-copper and cyanide-soluble copper were coded to the blocks for the oxidation model and the lithologic units independently.

The sulfide copper (CuS) grade was calculated by taking the total copper grade and subtracting the estimated acid-soluble copper grade and estimated cyanide-soluble copper grade within the sulfide, mixed, and transition zones in the oxidation model. The remaining value is considered the residual sulfide copper grade within the blocks coded as sulfide, mixed, or transition zones. However, residual copper in the oxide and iron-rich oxide zones, can occasionally exist in non-sulfide minerals. Because of this possibility, sulfide grades and ratios were set to zero in the model within the oxide and iron-rich oxide zones.

#### 14.7 ASSAY CODING, CAPPING, AND COMPOSITING

The cross-sectional mineral-domain polygons described in Section 14.6 were used to code drillhole assay intervals to their respective copper mineral domains. The polygons were coded 10 feet either side of the section plane from which they were created. Acid-Soluble copper and cyanide-soluble copper ratios were coded to the oxidation model and the modeled geologic units. Assay caps were determined by domain to identify high-grade outliers that might be appropriate for capping. Visual reviews of the spatial relationships concerning possible outliers and their potential impacts during grade interpolation were also considered in the assay cap definitions. Table 14-5 provides the caps used by each domain for total copper.

**Table 14-5: Grade Caps**

Copper	Cap (% TCu)
0	0.6
100	0.8
200	1.1
300	3.0

Descriptive statistics of the coded assays of capped and uncapped copper analyses are provided in Table 14-6. All soluble copper ratios were capped at 1. Soluble copper ratio statistics are provided in Table 14-7.

**Table 14-6: Coded Total Copper (TCu) Assay Statistics**

Domain	Assays	Count	Mean (%TCu)	Median (%TCu)	Std. Dev.	CV	Min. (%TCu)	Max. (%TCu)
0	TCu	1,034	0.03	0.01	0.08	2.47	0.00	0.86
	TCu Cap	1,034	0.03	0.01	0.07	2.29	0.00	0.60
100	TCu	5,944	0.08	0.07	0.06	0.79	0.00	1.76
	TCu Cap	5,944	0.08	0.07	0.06	0.75	0.00	0.80
200	TCu	6,795	0.30	0.26	0.18	0.58	0.01	4.00
	TCu Cap	6,795	0.30	0.26	0.16	0.52	0.01	1.10
300	TCu	1,256	0.99	0.88	0.52	0.52	0.06	9.58
	TCu Cap	1,256	0.98	0.88	0.43	0.44	0.06	3.00
100+200+300	TCu	13,995	0.28	0.17	0.33	1.18	0.00	9.58
	TCu Cap	13,995	0.28	0.17	0.31	1.12	0.00	3.00

**Table 14-7: Coded Acid-Soluble (ASCu) Copper Ratio and Cyanide-Soluble (CNCu) Ratio Statistics (Capped)**

Domain	Assays	Count	Mean (Ratio)	Median (Ratio)	Std. Dev.	CV	Min. (Ratio)	Max. (Ratio)
Iron-rich oxide	ASCu Ratio Cap	3,215	0.35	0.32	0.18	0.5	0.00	1.00
Oxide		3,079	0.63	0.65	0.22	0.34	0.00	1.00
Sulfide		2,286	0.46	0.44	0.22	0.48	0.00	1.00
Transition		711	0.33	0.3	0.19	0.57	0.00	1.00
Mixed		485	0.12	0.06	0.16	1.32	0.00	1.00
Iron-rich oxide	CNCu Ratio Cap	2,546	0.1	0.07	0.09	0.92	0.00	1.00
Oxide		2,132	0.12	0.06	0.15	1.29	0.00	1.00
Sulfide		1,081	0.19	0.13	0.16	0.88	0.00	1.00
Transition		457	0.5	0.52	0.21	0.42	0.03	1.00
Mixed		371	0.16	0.12	0.11	0.7	0.02	1.00

The capped assays were composited at 10-foot down-hole intervals, respecting the mineral domain boundaries. Descriptive statistics of the composites for each metal are given in Table 14-8.

**Table 14-8: Composite Statistics**

Total Copper Composites by Domain								
Domain	Hole Count	Comp. Count	Mean (%TCu)	Median (%TCu)	Std. Dev.	CV	Min. (%TCu)	Max. (%TCu)
0	118	835	0.029	0.01	0.067	2.31	0	0.6
100	345	4,766	0.082	0.07	0.058	0.72	0	0.8
200	362	5,694	0.303	0.27	0.154	0.51	0.01	1.1
300	193	1,126	0.988	0.89	0.418	0.42	0.06	3
All	381	11,586	0.278	0.177	0.307	1.11	0	3
Soluble Copper Ratio Composites by Oxidation								
Domain	Hole Count	Comp. Count	Mean (Ratio)	Median (Ratio)	Std. Dev.	CV	Min. (Ratio)	Max. (Ratio)
Iron-rich	173	2,347	0.35	0.32	0.17	0.49	0.00	1.00
Oxide	210	2,562	0.63	0.64	0.21	0.34	0.00	1.00
Sulfide	176	2,115	0.46	0.44	0.21	0.47	0.00	1.00
Transition	72	650	0.33	0.29	0.19	0.56	0.00	1.00
Mixed	64	444	0.12	0.06	0.16	1.31	0.00	0.92
Cyanide Soluble Copper Ratio Composites by Oxidation								
Domain	Hole Count	Comp. Count	Mean (Ratio)	Median (Ratio)	Std. Dev.	CV	Min. (Ratio)	Max. (Ratio)
Iron-rich	120	1,644	0.1	0.07	0.08	0.8	0.01	0.58
Oxide	210	2,562	0.63	0.64	0.21	0.34	0.00	1.00
Sulfide	111	831	0.18	0.13	0.14	0.77	0.00	0.79
Transition	51	395	0.5	0.52	0.21	0.41	0.03	1.00
Mixed	47	329	0.16	0.12	0.1	0.66	0.03	1.00

#### 14.7.1 Variography

Using all total copper composites, variogram ranges of 500 feet along the strike of the sedimentary units (305°) and 300 feet in the dip direction (-30° at 125°) were obtained. These ranges were used as a check for reasonableness for the search ellipsoids used in the estimate. Additionally, a kriged estimate was performed purely for the purposes of statistical checking, and the variography was used to define the kriging parameters in the grade interpolations.

#### 14.8 BLOCK MODEL CODING

The 100-foot-spaced cross-sectional mineral-domain polygons were used to code 20 x 20 x 20 (x, y, z)-foot blocks that comprise a digital model rotated to a bearing of 306°. The percentage volume of each mineral domain, as coded directly by the cross-sections, is stored within each block as a “partial percentage”, as is the partial percentage of the block that lies outside of the modeled metal domains (Domain 0). In other words, each block stores the partial percentage of each of the four domains for total copper. The oxidation model was used to domain the acid-soluble copper ratio and cyanide-soluble copper ratio estimates.

The Johnson Camp geologic formations were coded to each block to a single lithology on a ‘majority wins’ basis. The Johnson Camp digital topographic surface was used to code the block model on a partial percentage basis. The tonnage factor values shown in Table 14-3 were assigned to the model blocks based on the geologic formation and oxidation codes in each model block.



The mineralization has a variety of orientations. Wireframe solids were therefore created to encompass model areas with similar mineral domain orientations, and the solids were used to code the model blocks to these areas on a block-in/block-out basis. This coding was then used to control search-ellipse orientations during copper interpolations. The orientations given in Table 14-9 were applied to all domains for total copper, acid-soluble copper and cyanide-soluble ratios.

**Table 14-9: Estimation Area Orientations**

Area	Bearing	Plunge	Tilt
301	306	0	-30
302	306	0	-40

#### 14.9 GRADE INTERPOLATION

Total copper grades, as well as acid-soluble copper and cyanide-soluble copper ratios, were interpolated using inverse distance, ordinary kriging, and nearest-neighbor methods. The mineral resources reported herein were estimated by inverse distance interpolation as this method led to results that most appropriately respected the drill data and geology of the deposit. This is particularly true with respect to the estimation of the lowest-grade areas in the model, where potential overestimation of volumes could materially impact the resource estimation at grades close to potential open-pit mining cut-offs. The nearest-neighbor estimation was completed for the purposes of statistical checking of the various estimation iterations. The parameters applied to the grade estimations at Johnson Camp Mine are summarized in Table 14-10.

**Table 14-10: Estimation Parameters**

Estimation Pass	Search Ranges (feet)			Composite Constraints		
	Major	Semi-Major	Minor	Min	Max	Max/Hole
Pass 1	350	350	175	2	15	3
Pass 2	650	650	325	2	15	3
Pass 3	1000	1000	1000	1	15	3

Grade interpolations were completed using 10-foot composites. The estimation passes were performed independently for each of the mineral domains, so that only composites coded to a particular domain were used to estimate grade into blocks coded to that domain. Blocks coded as having partial percentages of more than one domain had multiple grade interpolations, one for each domain coded into the block. The estimated grades for each of the metal domains 0, 100, 200, and 300 coded to a block were coupled with the coded partial percentages of those domains to enable the calculation of a single volume-weighted grade of each of the metal species for each block. These resource block grades are therefore diluted to the full block volumes using this methodology.

#### 14.10 MINERAL RESOURCES

The Johnson Camp Mine mineral resources have been estimated to reflect potential open-pit extraction and potential processing by heap leaching. To meet the requirement of the resources having reasonable prospects for eventual economic extraction, a pit optimization was completed in 2025 using the parameters summarized in Table 14-11, with expected acid consumption summarized in Table 14-12, and expected recoveries summarized in Table 14-13.

**Table 14-11: Pit Optimization Parameters**

Parameter	Value	Unit
Copper Price	\$4.25	\$/lb Cu sold
Mine Cost In-situ	\$2.25	\$/ton Mined
Mine Cost Loose	\$1.50	\$/ton Mined
Incremental Mining Cost	\$0.01	\$/to/20ft bench below 5000'
Demonstration Processing Cost	\$7.80	\$/ton Processed
G&A Cost	\$0.05	\$/lb Cu Produced
SX-EW Cost	\$0.25	\$/lb Cu Produced
Acid Cost	\$150	\$/ ton
Royalty Acid Sol/ CN Sol	95%	NSR
Royalty Sulfide	95%	NSR
Overall Pit Slope Angle	45 deg	

**Table 14-12: Expected Acid Consumption Parameters by Formation**

Formation	Acid Consumption (lb/ton)	
	Conventional ROM	Conventional 1" Crush
Upper Abrigo	70	
Middle Abrigo	70	
Lower Abrigo	26	
Bolsa Quartzite	22	33
Diabase	50	
Pioneer Shale	20	

**Table 14-13: Expected Copper Recoveries**

Formation	Conventional ROM	Conventional 1" Crush
<b>Acid Soluble Copper</b>		
Upper Abrigo	75%	
Middle Abrigo	75%	
Lower Abrigo	55%	
Bolsa Quartzite	55%	86%
Diabase	80%	
Pioneer Shale	80%	
<b>Cyanide Soluble Copper</b>		
Upper Abrigo	45%	
Middle Abrigo	45%	
Lower Abrigo	45%	
Bolsa Quartzite	45%	76%
Diabase	48%	
Pioneer Shale	48%	
<b>Sulfide Copper</b>		
Upper Abrigo	15%	
Middle Abrigo	15%	
Lower Abrigo	15%	
Bolsa Quartzite	15%	15%
Diabase	15%	
Pioneer Shale	15%	

The pit shells created using these parameters were used to constrain the project mineral resources. The pit shells were limited on the west side of the Burro Pit to prevent from encroaching on the process plant and the leach pad. The pit constrained resources were further constrained by the application of a cut-off of 0.12% TCu to all model blocks within the pit shells.

The current mineral resource consists of a total of 101,213,000 tons with an average total copper grade of 0.34% TCu, average acid soluble copper grade of 0.15% ASCu, average cyanide soluble copper grade of 0.06% CNCu, and average sulfide copper of 0.06% CuS, for 694,439,000 contained pounds of total copper, 309,617,000 contained pounds of acid soluble copper, 123,388,000 contained pounds of cyanide soluble copper, and 125,699,000 contained pounds of sulfide copper shown in Table 14-14.

**Table 14-14: Johnson Camp Mine Pit Constrained Copper Resources**  
(0.12% TCu cut-off)

Tons	% TCu	% ASCu	% CNCu	% CuS	lbs TCu	lbs ASCu	lbs CNCu	lbs CuS
101,213,000	0.34	0.15	0.06	0.06	694,439,000	309,617,000	123,388,000	125,699,000

1. The estimate of mineral resources was done by RESPEC in imperial tons.
2. The project mineral resources are estimated using a cut-off grade of 0.12 % TCu within an optimized pit.
3. Mineral Resources within the optimized pit are block diluted tabulations.
4. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
5. The estimate of mineral resources may be materially affected by geology, environment, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.
6. The effective date of the estimate is November 05, 2024.
7. Rounding may result in apparent discrepancies between tonnes, grade, and contained metal content.

All reported pit constrained resources are classified as Measured, Indicated, or Inferred shown in Table 14-15. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

**Table 14-15: Johnson Camp Pit Constrained Mineral Resources by Classification**  
(0.12% TCu cut-off)

Classification	Tons	% TCu	% ASCu	% CNCu	% CuS	lbs TCu	lbs ASCu	lbs CNCu	lbs CuS
Measured	31,493,000	0.36	0.15	0.07	0.08	226,707,000	94,697,000	46,007,000	49,075,000
Indicated	69,720,000	0.34	0.15	0.06	0.05	467,732,000	214,921,000	77,380,000	76,624,000
M&I	101,213,000	0.34	0.15	0.06	0.06	694,439,000	309,617,000	123,388,000	125,699,000
Inferred	24,968,000	0.32	0.15	0.05	0.05	162,130,000	75,406,000	24,895,000	24,295,000

1. The effective date of the mineral resources is November 05, 2024.
2. The project mineral resources are shown in bold and are comprised of all model blocks at a 0.12% TCu cut-off that lie within optimized resource pits.
3. Mineral resources that are not mineral reserves do not have demonstrated economic viability.
4. The estimate of mineral resources may be materially affected by geology, environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.
5. Rounding as required by reporting guidelines may result in apparent discrepancies between tons, grade, and contained metal content.

#### 14.11 MINERAL RESOURCE CLASSIFICATION

The Johnson Camp mineral resources were classified as Inferred before GCC's 2022-2024 drilling campaigns. New drilling has upgraded a portion of the Burro Pit area to Measured and Indicated, based on new drilling campaign's confirmation of historical data. Measured and Indicated were classified using two drill holes with at least one sample from one GCC hole. Distances chosen for Measured and Indicated were influenced by geological confidence as well as ranges identified in variography. Measured is reported at a distance of 100 feet from two samples with one being from a GCC hole, and Indicated is reported at a distance of 350 feet with one being from a GCC hole. Additional Measured and Indicated resources were classified based on the positive results from the data validation section for the Arimetco drilling campaigns. A similar classification scheme was used as the GCC data with half the distances for Measured and Indicated. Measured is reported at a distance of 50 feet from two samples with one being from an Arimetco hole and Indicated is reported at a distance of 175 feet with one being from an Arimetco hole. A summary of the classification parameters is in Table 14-16.

**Table 14-16: Resource Classification Parameters**

Classification	Criteria
Measured	Minimum of 2 holes contributing composites, including at least 1 drilled by GCC, that lie within an average distance of 100 feet from the block or minimum of 2 holes contributing composites, including at least 1 drilled by Arimetco, that lie within an average distance of 50 feet from the block
Indicated	Minimum of 2 holes contributing composites, including at least 1 drilled by GCC, that lie within an average distance of 350 feet from the block or minimum of 2 holes contributing composites, including at least 1 drilled by Arimetco, that lie within an average distance of 175 feet from the block
Inferred	all other blocks that meet the resource constraints

The Johnson Camp pit constrained resources cover an aerial extent of over 1.2 miles along strike with two distinct spatial areas: The Burro Pit and the Copper Chief Pit. Figure 14-7 is a representative cross section through the block model along section line 2000 in the Burro Pit Area. Figure 14-8 is a representative cross section through the block model along section line 5400 in the Copper Chief Pit area.

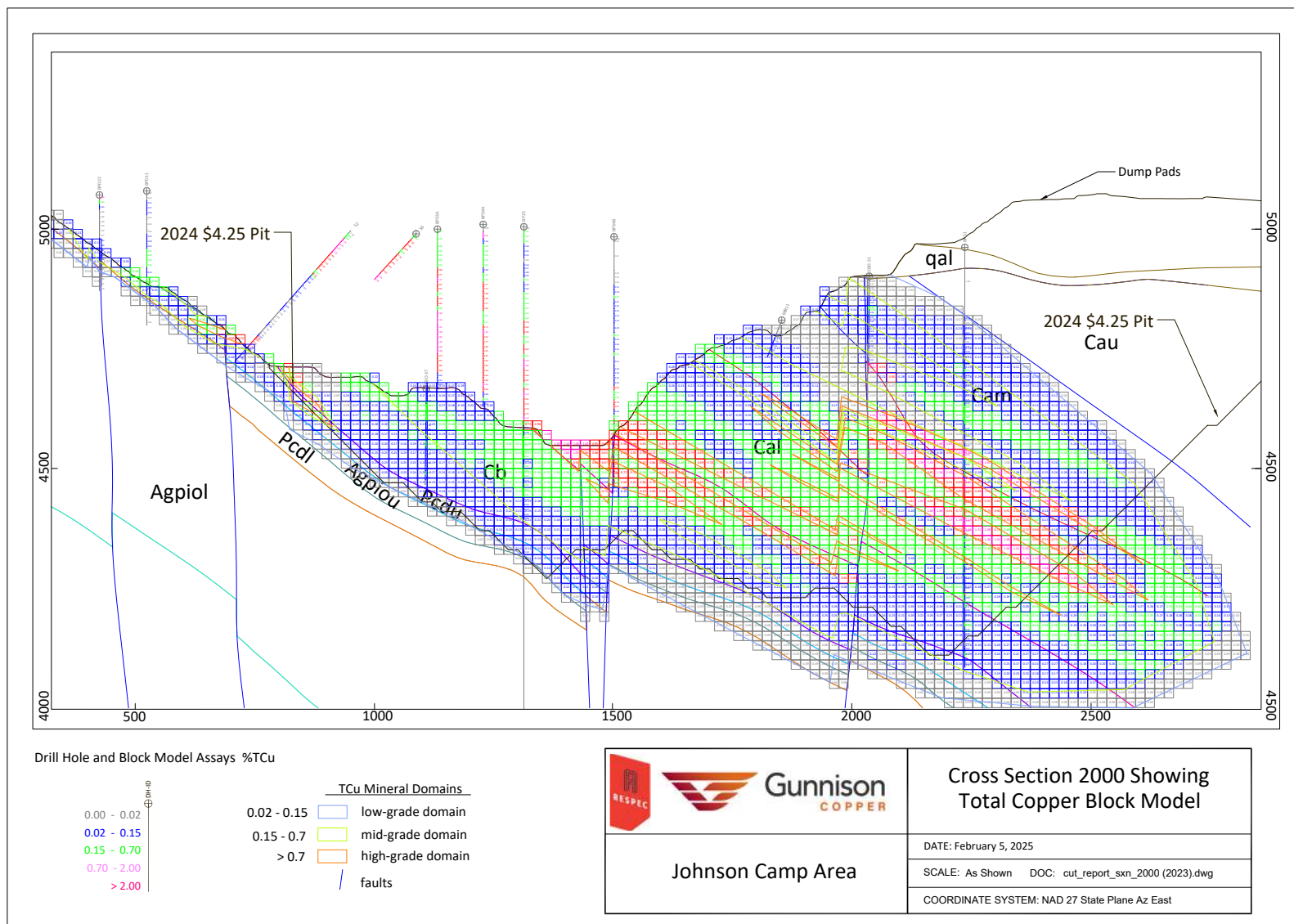


Figure 14-7: Geologic Cross Section 2000 with Total Copper ("TCu") Block Model Grades

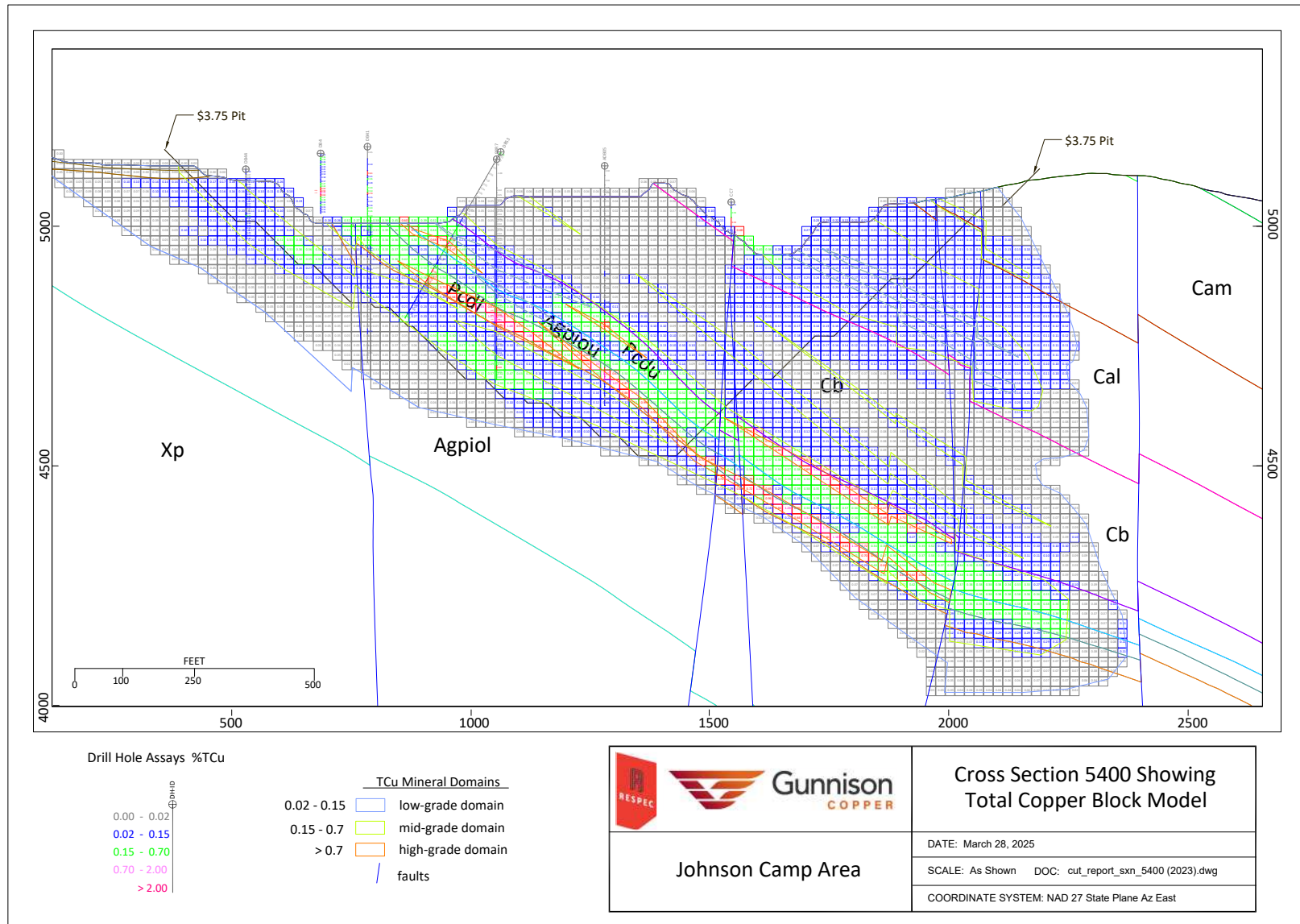


Figure 14-8: Geologic Cross Section 5400 with Total Copper (TCu) Block Model Grades



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Table 14-17 and Table 14-18 provides a breakdown of tons and grade of the JCM mineral resources by pit area and oxidation groups, respectively, defined in modeling at a cut-off grade of 0.12% TCu that fit within the simulated economic pit shell.

**Table 14-17: Johnson Camp Pit-Constrained Resources by Pit Area**  
(0.12% TCu cut-off)

Classification	Pit	tons	% TCu	% ASCu	% CNCu	% CuS	lbs Cu	lbs ASCu	lbs CNCu	lbs CuS
Measured	Burro	31,181,000	0.36	0.15	0.07	0.08	225,050,000	93,712,000	45,932,000	49,050,000
Indicated		52,844,000	0.34	0.15	0.06	0.06	364,259,000	161,431,000	65,894,000	68,269,000
Inferred		11,503,000	0.35	0.16	0.06	0.08	81,530,000	35,786,000	13,412,000	17,473,000
Measured	Copper Chief	312,000	0.27	0.16	0.01	0.00	1,657,000	985,000	75,000	26,000
Indicated		16,876,000	0.31	0.16	0.03	0.02	103,473,000	53,490,000	11,486,000	8,354,000
Inferred		13,465,000	0.30	0.15	0.04	0.03	80,601,000	39,620,000	11,483,000	6,822,000

**Table 14-18: Johnson Camp Pit-Constrained Resources by Oxidation Group**  
(0.12% TCu cut-off)

Classification	Oxidation Group	Tons	% TCu	% ASCu	% CNCu	% CuS	lbs TCu	lbs ASCu	lbs CNCu	lbs CuS
Measured	Sulfide	3,640,000	0.48	0.04	0.08	0.36	35,076,000	3,136,000	5,926,000	26,014,000
Indicated		3,085,000	0.41	0.06	0.07	0.27	24,997,000	3,755,000	4,595,000	16,646,000
Inferred		86,000	0.40	0.08	0.08	0.24	694,000	145,000	136,000	414,000
Measured	Transition	5,614,000	0.43	0.14	0.20	0.09	48,338,000	15,554,000	22,818,000	9,965,000
Indicated		6,514,000	0.36	0.12	0.16	0.08	47,119,000	15,196,000	21,027,000	10,896,000
Inferred		773,000	0.32	0.07	0.20	0.04	4,921,000	1,159,000	3,101,000	661,000
Measured	Mixed	6,519,000	0.32	0.15	0.06	0.10	41,445,000	19,994,000	8,355,000	13,096,000
Indicated		19,573,000	0.36	0.16	0.08	0.13	141,277,000	61,532,000	30,664,000	49,081,000
Inferred		9,148,000	0.36	0.15	0.08	0.13	65,792,000	28,232,000	14,340,000	23,220,000
Measured	Oxide	9,943,000	0.34	0.22	0.03	0.00	67,284,000	43,527,000	6,366,000	-
Indicated		23,854,000	0.34	0.21	0.03	0.00	161,602,000	99,039,000	13,325,000	-
Inferred		7,255,000	0.35	0.22	0.03	0.00	50,240,000	31,404,000	3,978,000	-
Measured	Iron-rich oxide	5,776,000	0.30	0.11	0.02	0.00	34,564,000	12,485,000	2,542,000	-
Indicated		16,694,000	0.28	0.11	0.02	0.00	92,737,000	35,399,000	7,769,000	-
Inferred		7,707,000	0.26	0.09	0.02	0.00	40,484,000	14,467,000	3,340,000	-

Table 14-19 presents the Johnson Camp Mine mineral resources compared to subsets of mineralized material tabulated with increasing cut-off grades. This is presented to provide grade-distribution data that allows for detailed assessment of the project resources. All of the tabulations are constrained as lying within the same optimized pit shells used to constrain the current mineral resources, which means the tabulations at cut-offs higher than the resource cut-off grade of 0.12% TCu represent subsets of the current resources.

**Table 14-19: Johnson Camp Pit-Constrained Resources at Various Cut-offs**

Classification	%TCu Cut-off	Tons	%TCu	%ASCu	%CNCu	%CuS	lbs TCu	lbs ASCu	lbs CNCu	lbs CuS
Measured	0.1	32,990,000	0.35	0.15	0.07	0.07	229,845,000	96,256,000	46,420,000	49,419,000
	<b>0.12</b>	<b>31,493,000</b>	<b>0.36</b>	<b>0.15</b>	<b>0.07</b>	<b>0.08</b>	<b>226,707,000</b>	<b>94,697,000</b>	<b>46,007,000</b>	<b>49,075,000</b>
	0.15	29,691,000	0.37	0.16	0.08	0.08	222,022,000	92,320,000	45,349,000	48,519,000
	0.2	25,906,000	0.40	0.17	0.08	0.09	209,066,000	86,273,000	43,483,000	46,774,000
	0.3	16,569,000	0.49	0.20	0.11	0.12	163,244,000	65,785,000	35,992,000	38,123,000
	0.4	8,794,000	0.63	0.24	0.14	0.17	110,337,000	42,733,000	23,879,000	29,248,000
	0.5	5,311,000	0.75	0.28	0.16	0.22	79,824,000	29,902,000	16,876,000	23,457,000
	0.6	3,727,000	0.84	0.31	0.18	0.27	62,679,000	22,751,000	13,205,000	19,898,000
	0.7	2,657,000	0.92	0.32	0.19	0.32	48,921,000	17,002,000	10,355,000	17,034,000
	0.8	1,868,000	1.00	0.33	0.21	0.38	37,182,000	12,199,000	7,972,000	14,086,000
	0.9	1,192,000	1.08	0.34	0.23	0.44	25,774,000	8,125,000	5,546,000	10,491,000
	1	746,000	1.16	0.34	0.26	0.52	17,364,000	5,035,000	3,816,000	7,711,000
Indicated	0.1	75,008,000	0.32	0.15	0.05	0.05	478,798,000	220,288,000	78,839,000	77,770,000
	<b>0.12</b>	<b>69,720,000</b>	<b>0.34</b>	<b>0.15</b>	<b>0.06</b>	<b>0.05</b>	<b>467,732,000</b>	<b>214,921,000</b>	<b>77,380,000</b>	<b>76,624,000</b>
	0.15	64,624,000	0.35	0.16	0.06	0.06	454,563,000	208,595,000	75,525,000	75,318,000
	0.2	56,409,000	0.38	0.17	0.06	0.06	426,517,000	194,967,000	71,720,000	72,498,000
	0.3	33,205,000	0.47	0.21	0.08	0.09	310,991,000	140,566,000	54,176,000	57,960,000
	0.4	16,227,000	0.60	0.27	0.11	0.12	196,345,000	87,117,000	35,329,000	40,205,000
	0.5	9,320,000	0.73	0.32	0.13	0.16	135,674,000	59,344,000	24,897,000	29,803,000
	0.6	5,799,000	0.84	0.36	0.16	0.20	97,601,000	42,184,000	17,982,000	22,876,000
	0.7	3,726,000	0.95	0.41	0.17	0.23	71,024,000	30,765,000	12,858,000	17,120,000
	0.8	2,515,000	1.06	0.45	0.19	0.27	53,105,000	22,781,000	9,657,000	13,449,000
	0.9	1,674,000	1.16	0.49	0.22	0.31	38,947,000	16,437,000	7,227,000	10,480,000
	1	1,081,000	1.28	0.54	0.25	0.36	27,743,000	11,579,000	5,419,000	7,745,000
Inferred	0.1	28,426,000	0.30	0.14	0.05	0.04	169,349,000	78,898,000	25,951,000	25,326,000
	<b>0.12</b>	<b>24,968,000</b>	<b>0.32</b>	<b>0.15</b>	<b>0.05</b>	<b>0.05</b>	<b>162,130,000</b>	<b>75,406,000</b>	<b>24,895,000</b>	<b>24,295,000</b>
	0.15	22,532,000	0.35	0.16	0.05	0.05	155,824,000	72,610,000	23,902,000	23,544,000
	0.2	19,301,000	0.38	0.18	0.06	0.06	144,827,000	67,809,000	22,471,000	22,484,000
	0.3	10,320,000	0.48	0.23	0.08	0.08	99,865,000	47,060,000	16,045,000	16,771,000
	0.4	4,781,000	0.65	0.31	0.11	0.12	62,424,000	30,114,000	10,555,000	11,949,000
	0.5	2,802,000	0.80	0.39	0.14	0.17	45,089,000	21,653,000	7,740,000	9,441,000
	0.6	1,955,000	0.92	0.44	0.16	0.21	35,936,000	17,064,000	6,402,000	8,204,000
	0.7	1,419,000	1.02	0.48	0.19	0.26	29,063,000	13,599,000	5,347,000	7,260,000
	0.8	1,071,000	1.12	0.51	0.21	0.30	23,897,000	10,930,000	4,511,000	6,408,000
	0.9	795,000	1.21	0.55	0.24	0.34	19,251,000	8,686,000	3,771,000	5,449,000
	1	581,000	1.31	0.57	0.26	0.39	15,220,000	6,660,000	3,055,000	4,589,000

1. The project mineral resources are shown in bold and are comprised of all model blocks at a 0.12% TCu cut-off that lie within optimized resource pits.
2. Tabulations at higher cut-offs than used to define the mineral resources represent subsets of the mineral resource.
3. Mineral resources that are not mineral reserves do not have demonstrated economic viability.
4. Rounding as required by reporting guidelines may result in apparent discrepancies between tons, grade, and contained metal content.

#### 14.12 DISCUSSION OF RESOURCES AND RECOMMENDATIONS

Future drilling, exploration, and resource definition at Johnson Camp Mine should focus on increasing the understanding of the distribution of cyanide soluble and primary sulfide copper mineralization and detailed mineralogical characterization of the various modeled oxidation groups. Though Johnson Camp Mine has a long history of drilling, exploration, and mining, collection of cyanide soluble copper assay data is limited throughout the property and therefore the current understanding of cyanide soluble copper mineralization could be improved. Infill drilling in key areas of lower classification to increase drill density, and drill-testing of the unconstrained limits of the deposit, particularly down-dip from known mineralization, are also notable areas of focus for future development of the property. The author recommends collection of more structural data for the purposes of bolstering current geological understanding of the deposit and mineralization controls. Drilling more angle holes to test structures is recommended for this purpose.

The Johnson Camp copper resources have complex oxidation profile groups. The groups were modeled based on available data, mainly from assay ratios, grades, and lithologies. Continued modeling of these oxidation groups based on new data should be considered in future resource estimate iterations to ensure the best possible estimate of copper ratios into the model and accurate mineralogical characterization of the resources.

Sulfide copper has been estimated based on the residual copper value from total and soluble copper estimates. The author believes that this assumption is valid based on knowledge of deposit mineralogy. Sulfide copper values in the oxide and iron-rich oxide zones have been eliminated from the blocks model to account for copper in silicates and oxides which do not report to the various soluble copper assays. Analytical work, focused on the mineralogy of residual copper in these zones, is recommended to confirm these assumptions and improve the overall mineralogical understanding of various geological and spatial zones in the deposit.

As of the effective date of this technical report, Mr. Bickel is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors not discussed in this technical report that may materially affect the Johnson Camp Mine mineral resources as of the effective date of the report. The impact of taxation was taken into consideration when establishing cut-off grade and further details are provided in Section 22: Economic Analysis.

**15 MINERAL RESERVE ESTIMATES**

No mineral reserves are reported in this technical report.

The Author cautions that GCC has decided to commence construction and proceed production at the Project. GCC did not base this production decision on any feasibility study of Mineral Reserves demonstrating economic and technical viability of the mines. As a result, there may be increased uncertainty and risks of achieving any level of recovery of minerals from the mine at the Project or the costs of such recovery. As the Project does not have established Mineral Reserves, GCC faces higher risks that anticipated rates of production and production costs will not be achieved, each of which risks could have a material adverse impact on GCC's ability to continue to generate anticipated revenues and cash flows to fund operations from the Project and ultimately the profitability of the operation.

## 16 MINING METHODS

Mining of the Johnson Camp (JCM) deposit for the Nuton Demonstration is planned to be accomplished using conventional open pit hard rock mining methods by a contractor miner. The 2.5 year mine plan was developed with the goal of producing sulfide material for the Nuton Demonstration as quickly as possible. Mining of the deposit is expected to be accomplished with front-end loaders and 70-100 ton haul trucks. Mining is planned on 20-ft and 30-ft bench heights.

A monthly mine schedule was developed by GCC which was reviewed and summarized in quarterly detail in this section by IMC. Two types of mineralized leach material are planned to be produced over the mine life:

1. Material for the Nuton Demonstration focuses on primary sulfides.
2. Run of mine (ROM) material.

All mined material will be hauled to Leach Pad 5 where material for the Nuton Demonstration will be crushed, mixed with additives and microorganisms, and placed on an engineered heap. ROM will be dump placed in a separate location on the heap. Waste produced from the mine plan will be placed in a storage facility directly east of the pit.

### 16.1 MINE PHASE DESIGN

The Nuton Demonstration material is planned to be sourced from the Johnson Camp deposit in two phases from the Burro pit.

The initial phase targets the Nuton material (primary sulfides) with the least amount of waste stripping necessary. The top bench of Phase 1 is 4820 ft. This phase has narrow mining widths and is planned to be mined with 9 cubic yard loaders loading 70-ton haul trucks down to the 4460 ft bench.

The second phase starts at the 5060 ft bench and extends the pit deeper to capture additional Nuton Demonstration material. This phase is planned to be mined with 14 cubic yard loaders loading 100-ton trucks.

The parameters used for phase design are provided on Table 16-1. The overall slope angle on the southwest highwall below the historic leach pad was designed to be shallower than 34 degrees and avoids undercutting the pioneer formation.

**Table 16-1: Parameters for Phase Design**

	Parameter	Value
Phase 1	Mining Width	100 ft
	Road Width	65 ft
	Road Grade	11%-12%
Phase 2	Mining Width	180 ft
	Road Width	82 ft
	Road Grade	10%
Both Phases 60 ft Bench Height	Triple Benched or	20 ft x 3
	Double Benched	30ft x 2
	Rock Interramp Angle	50 deg
	Fill Interramp Angle	36 deg

## **16.2 GEOTECHNICAL AND PIT SLOPES**

Call & Nicholas, Inc. (CNI) was engaged by GCC to examine the slopes for the next phase of mining which will primarily be on the north and east walls of the pit within the Abrigo Formation and Bolsa Quartzite. Some mining of an existing unleached stockpile at the top of the northeast highwall will be conducted.

In 2023 and 2024, CNI participated in the geological data collection studies being conducted on the existing pit. The data collection portion of the study included field reconnaissance, review of core drilling, testing of collected rock core samples, and the completion of aerial drone flights. The drone flights were used to survey the achieved bench slopes and to collect geological structure information.

The main objective of the geotechnical pit slope study was to: 1) provide interramp slope angles and geotechnical constraints for mine planning to develop an updated life-of-mine pit shell and for designing new pushbacks, 2) evaluate the pushback designs relative to overall slope height, the rock types exposed in the slope walls, and major structures that could impact slope stability, and 3) provide recommendations for future geotechnical work that can add value and increase the chance of mining success. For this study, the design acceptance criteria for the slope design are an 80 percent bench and interramp slope reliability, and an overall slope factor of safety of 1.2 using two-dimensional limit equilibrium slope analysis.

The Johnson Camp pit is aligned with the sedimentary units that form the mineralized material body. The main sedimentary rock units exposed in the walls are the Abrigo Formation, Bolsa Quartzite, and Pioneer Shale. A large diabase sill occurs within the Pioneer Shale and is parallel with the general orientation of the beds. These sedimentary rocks strike approximately 320° to the northwest and dip ~35° to the northeast. The proposed pit expansion is primarily to the north and east walls. To the west and southwest, the crest of the existing pit is near the toe of a large leach stockpile, and to the northwest, the pit is close to the existing plant facilities. Smaller unleached stockpiles exist to the east and will be re-handled as part of the next pushbacks. The existing pit is 500 feet deep with a pit bottom at the 4560 elevation. The proposed mining will develop a new pit bottom 160-200 feet deeper.

### **16.2.1 North and Northeast Highwalls - Abrigo Formation and Bolsa Quartzite**

The Abrigo Formation and Bolsa Quartzite are generally hard jointed rocks with a GSI of 40 to 60. Bedding dips favorably for stability back into the wall at ~35°. Overall slope analysis in the north and northeast highwalls are all substantially above the DAC (Factor of Safety of 1.2). Therefore, the slope angles in the Bolsa Quartzite and Abrigo Formation are limited by bench configuration and achievable bench slope angles. To evaluate the achievable bench configuration, CNI conducted a pit inspection, did geological structure mapping, and conducted an aerial drone survey to map the existing benches. CNI also visually examined the core from the latest drill campaign and collected samples for rock strength testing.

In the main northeast highwall, the combination of the bedding joints and the cross joints between the bedding controls the achievable bench face angles. These two joint sets create a stepped path that will form the bench faces after blasting and digging. Based on the spacing and length of the two sets from the mapping, CNI estimated that the average bench face angle will be 68 to 72° in these units.

The recommended interramp slope angle in the Bolsa Quartzite and Abrigo Formation is 50°. Either pre-split blasting or controlled blasting with fully relieved trim shots can be used to achieve the 50° angle provided 40-foot high final benches are mined (double stack). Pre-split blasting of a 60-foot triple bench stack could potentially achieve a steeper ISA of 52° in the Bolsa and Abrigo highwall slopes.

### 16.2.2 South and Southwest Highwalls – Pioneer Shale and Diabase

The Pioneer Shale underlies the Dripping Springs/Bolsa Quartzite at the Johnson Camp Mine and is the primary rock type in the south and southwest walls. The Pioneer Shale has a GSI of 30 to 40, is thinly bedded, and is much weaker than the other rock types at the mine. The as-mined slope angle in the shale is 36 to 38°. Bedding in the shale dips unfavorably into the pit on this side of the mine. Over time, the Pioneer Shale benches have eroded, and few benches still remain in the existing slope.

The shale was intruded by two continuous sills of diabase. The diabase is parallel to the shale and is approximately 35 to 40 feet thick. The diabase is exposed in the lowermost section of the southwest wall and runs along the entire strike length of the southwest wall. The diabase is relatively strong and unjointed but is altered and weaker on its margins near the contact with the rocks above and below.

The slope angles for the southwest wall in the shale and diabase are limited by overall slope stability given the weak strength and the unfavorable bedding orientation. Based on the field reconnaissance conducted, CNI recommends that any additional mining in the Pioneer Shale and diabase continue with the existing slope angle of 36°. Piezometers are recommended for this wall to determine if slope dewatering will be needed. Additionally, CNI has recommended that the mine plan avoid daylighting bedding and undercutting of the upper diabase sill (PCDU)/Upper Pioneer Shale (AGIOU) contact.

### 16.2.3 Constructing Slopes in Existing Stockpiles

Only visual inspection has been conducted to date on the existing stockpiles. However, given the general character of the unleached stockpiles, a preliminary slope angle of 27° for the top 20 feet of the stockpile and 36° for the lower slope is recommended. The stockpile materials will be tested in the future and the stability analysis updated to ensure that the piles will be stable long term.

### 16.2.4 Rock Strengths

In 2023 and 2024, laboratory samples were collected at the mine from the Pioneer Shale, diabase, Bolsa Quartzite, and Abrigo Formations. The Abrigo formation samples were separated into three groups based on their position in the stratigraphy: Upper Abrigo, Middle Abrigo, and Lower Abrigo. Boulder samples of the diabase and loose soil-like samples of the diabase contact were also collected for shear strength testing. All testing was conducted at the CNI Rock Mechanics Laboratory in Tucson.

#### Joint Shear Strength Testing

Joint shear testing focused on the Abrigo Formation. Three tests were conducted on the lower Abrigo, five on the middle Abrigo, and five on the upper Abrigo. Joint roughness and shear strength were similar for the three units. One test was conducted on the Pioneer Shale.

**Table 16-2: 2023 Johnson Camp Small Scale Direct Shear Testing Summary**

Rock Unit	Number Tests	Friction Angle (deg)	Cohesion (psi)
Upper Abrigo	3	30.6	2.4
Middle Abrigo	5	24.2	4.1
Lower Abrigo	5	31.7	3.9
All Abrigo	13	28.5	3.4
Pioneer Shale	1	28.8	2.3



### **Intact Rock Strength Testing**

Intact rock strength was investigated by testing core samples in both tension and triaxial compression. Triaxial compression confinements varied from 100 to 1000 psi. Testing was conducted on all the main rock types at the Johnson Camp Pit.

**Table 16-3: 2023 Johnson Camp Intact Rock Strength Testing Summary**

<b>Rock Type</b>	<b>Number Tests</b>	<b>Phi (deg)</b>	<b>C (psi)</b>	<b>Estimated UCS (psi)</b>
Upper Abrigo	5	60.7	1,177.8	9,009.1
Middle Abrigo	6	62.1	1,723.3	13,897.6
Lower Abrigo	4	63.6	2,999.8	25,534.6
All Abrigo	13	56.3	2,797.9	18,449.4
Bolsa Quartzite	4	62.2	2,102.0	17,008.0
Pioneer Shale	5	53.8	456.8	2,792.9
Diabase	4	29.2	2,372.8	8,087.6

**Table 16-4: 2023 Johnson Camp Disc Tension Testing Summary**

<b>Rock Type</b>	<b>Number of Tests</b>	<b>Disc Tension (psi)</b>	<b>Density (pcf)</b>
Upper Abrigo	5	797.3	175.3
Middle Abrigo	6	1054.2	175.1
Lower Abrigo	4	1690.6	171.5
All Abrigo	15	1138.2	174.2
Diabase	3	577.4	170.6

The testing shows that the Abrigo Formation gets stronger at depth. The Pioneer Shale and diabase are weaker in comparison to the Bolsa and Abrigo.

### **16.2.5 Geological Structure**

Exposed structure was mapped by CNI during several site visits. A drone survey was flown to map the achieved bench face angles (BFA) and map geologic structures that form the stable bench face slopes. Slope stability throughout the mine is generally controlled by the bedding structures along with shorter cross joints that occur between the bedding joints. In the southwest wall, the slope is parallel to the bedding resulting in a plane shear condition. The achievable slope angles in the southwest wall are lower than the rest of the mine. In the northeast wall, the bedding is dipping favorably back into the wall and a stepped path along cross joints connected by bedding joints controls slope stability and the bench face angles. In this area, steeper slope angles are achievable.

### **Drone Survey**

A drone flight was conducted in October 2023. The focus of the aerial survey was the north and northeast walls comprised of the Abrigo Formation and Bolsa Quartzite. The drone survey was used to audit the previously achieved bench face angles and review the structures that control bench stability. A stepped path consisting of sliding along cross joints connected by bedding joints is evident in the existing bench faces in the northeast wall.

### **Bench Stability Analysis**

The geological structures mapped via the drone survey were used in a stability analysis of the proposed bench slopes for the expanded pit. CNI used a probabilistic approach to estimate the bench-face angle (BFA) distribution and for estimating the catch bench reliability. This distribution is directly related to the amount of back break estimated from the known joint structures. Back break is defined as the distance behind the crest that a vertical bench sloughs into the pit along daylighted geologic structures, and therefore BFAs calculated in the analysis are defined as the angle from the bench toe to the bench crest after back break has occurred (effective BFA).

For Johnson Camp, the bench face angle distributions have been estimated using stability analysis of plane shear, wedge, and step-path sliding geometries. For the northeast wall where most of the pit expansion will take place, the step-path geometry controls the stable bench face angles. The estimated step-path angle is calculated using the orientation, length, and spacing of the cross joints and bedding joints.

**Table 16-5: Step-Path Angle Calculated for Abrigo Formation in North Wall**

Geological Structure	
Mean length of Master Joint	17.0
Mean Spacing of Master Joint	4.8
Mean Dip of Master Joint	56.3
Mean Dip of Cross Joint	122.0; (58.0)
Percent overlap of Master Joints (0.0-1.0)	0.0
Step-Path Angle	70.4

### **Rock Quality Designation (RQD)**

Geomechanical drill logs provided by GCC include core recovery length and RQD length data for 11,667 feet of core from 22 drillholes. These holes penetrated the Abrigo Formation and the Bolsa Quartzite. The RQD data were analyzed for quality assurance and grouped by rock type. Distributions of RQD were analyzed by rock type and mineralization type. Mean RQD values were used in the calculation of rock-mass strength parameters. The Upper and Middle Abrigo Formations have higher RQD compared to the Lower Abrigo Formation as shown in Table 16-6. Additionally, the oxide and sulfide mineralization types in the lower Abrigo are more broken than the mixed and transitional mineralization types in this geological unit.

**Table 16-6: RQD by Rock Type**

Rock Type	Drilled RQD Length (ft)	Mean RQD (%)
Martin Formation	468	58
Upper Abrigo	632	57
Middle Abrigo	2812	62
Lower Abrigo	6566	37
Bolsa Quartzite	1054	57

## **16.3 MINE PRODUCTION SCHEDULE**

The shift schedule for mining is 1-10 hour shift 6 days per week in 2025 Q1 then 2-12 hour shifts 7 days per week in 2025 Q2 and beyond.

During 2025, Phase 1 is mined as quickly as possible to release primary sulfide Nuton material while stripping overburden from Phase 2.

Measured and Indicated material with net of process greater than \$0.01/ton is scheduled to be sent to the leach pad for processing.

### **16.3.1 Mining of Phase 1**

The upper bench of Phase 1 is 4,820 ft and the bottom of the phase is 4,460 ft. The phase will be drill and blasted on 60ft bench heights with loading and hauling occurring on 20 ft “flitches” down to the 4,600 ft bench. Below the 4,600 ft bench, drilling, blasting, loading, and hauling will all occur on 20 ft benches triple benched to 60 ft benches at the phase extents.

Mining on 20 ft benches and drilling and blasting on 60 ft benches is unconventional which creates a risk that mining of Phase 1 may not progress as quickly as planned. Three blast hole samples per 60 ft blast hole are planned to be taken for mineralized material control.

The phase has two independent mining areas on the southwest side of the pit and on the east side of the pit that join into a united bench at the 4,620 ft bench.

### **16.3.2 Mining of Phase 2**

Phase 2 completes the ultimate pit of the Nuton Demonstration. The upper bench of Phase 2 is 5,060 ft and the bottom of the pit is the 4,360 ft bench. The upper portion of the phase (5,060 ft -4,600 ft) above the Nuton Demonstration material is waste and ROM leach material and will be drill and blasted on 30 ft benches and loaded on 30 ft benches. At the extents of the ultimate pit, 30 ft benches will be double benched to 60 ft bench heights. Below the 4,600 ft bench, drilling and blasting and loading and hauling will all occur on 20 ft benches triple benched to 60ft benches at the extents of the ultimate pit.

### **16.3.3 Cut-off Grade Calculation**

The cut-off grade used for scheduling is \$0.01/t net of process. The calculation of net of process is provided below:

$$\begin{aligned}
 \text{Net Process ROM } \$/\text{ton} = & ASCu\% * ASCurec * \left( \frac{Cupr\$}{lb} * (1 - ASCN \text{ Royalty}) - \frac{GA\$}{lb} - \frac{SXEWS\$}{lb} \right) * \frac{20lb}{\%} \\
 & + CNCu\% * CNCurec * \left( \frac{Cupr\$}{lb} * (1 - ASCN \text{ Royalty}) - \frac{GA\$}{lb} - \frac{SXEWS\$}{lb} \right) * 20lb/\% + CuS\% \\
 & * CuSrec * \left( \frac{Cupr\$}{lb} * (1 - SU \text{ Royalty}) - \frac{GA\$}{lb} - \frac{SXEWS\$}{lb} \right) * 20lb/\% - \text{Acid Cost } \frac{\$}{\text{oreton}} \\
 & - \text{Heap Management } \frac{\$}{\text{oreton}}
 \end{aligned}$$

$$\begin{aligned}
 \text{Net Process NUTON } \$/\text{ton} = & ASCu\% * ASCurec * \left( \frac{Cupr\$}{lb} * (1 - ASCN \text{ Royalty}) - \frac{GA\$}{lb} - \frac{SXEWS\$}{lb} \right) * \frac{20lb}{\%} \\
 & + CNCu\% * CNCurec * \left( \frac{Cupr\$}{lb} * (1 - ASCN \text{ Royalty}) - \frac{GA\$}{lb} - \frac{SXEWS\$}{lb} \right) * \frac{20lb}{\%} + CuS\% \\
 & * CuSrec * \left( \frac{Cupr\$}{lb} * (1 - SU \text{ Royalty}) - \frac{GA\$}{lb} - \frac{SXEWS\$}{lb} \right) * \frac{20lb}{\%} - \text{Acid Cost } \frac{\$}{\text{oreton}} \\
 & - \text{Heap Manage. } \frac{\$}{\text{oreton}} - \text{Crushing } \frac{\$}{\text{oreton}} - \text{Additives } \frac{\$}{\text{oreton}}
 \end{aligned}$$

Five million tons of leach material are planned to be crushed during the Nuton Demonstration.

#### 16.4 PLACEMENT OF LEACH MATERIAL

Crushing and placement of the Nuton Demonstration material will be performed by a Contractor within the footprint of the leach pad.

Placement of ROM leach material will be truck dumped in 15 to 30 ft lifts on the leach pad.

#### 16.5 WASTE STORAGE

The waste storage area is directly east of the pit. The waste dump is planned to be constructed in 40 ft lifts at a deposition angle of 2.5:1. The geometry of the waste dump at the end of the mine plan can be seen in Figure 16-3.

#### 16.6 MINE FLEET

An estimate of equipment requirements for a contractor operated mine fleet to execute the mine production schedule are presented in this section. Mining is planned to be executed using a conventional open pit mining fleet. The reference to specific equipment manufacturers is to illustrate equipment size and is not to be considered a recommendation.

Production drilling is expected to be accomplished with 35,000 pull-down force class drills with mast lengths capable of single pass drilling 30 ft benches. Holes will be loaded with ANFO when dry and an emulsion slurry when wet.

##### Phase 1:

(4820 ft bench – 4600 ft bench)

Drilling and blasting of Phase 1 is planned to be accomplished on 60 ft bench heights. Loading and hauling will be performed on 20 ft “flitches” by 9 cubic yard front end loaders loading 70-ton haul trucks.

(4600 ft bench – 4460 ft bench)

Drilling and blasting of Phase 1 is planned to be accomplished on 20 ft bench heights. Loading and hauling will be performed on 20 ft benches by 9 cubic yard front end loaders loading 70 ton-haul trucks.

##### Phase 2:

(5060 ft bench – 4600 ft bench)

Drilling and blasting of Phase 2 is planned to be accomplished on 30 ft bench heights. Loading and hauling will be performed on 30 ft benches by 14 cubic yard front end loaders loading 100-ton haul trucks.

(4600 ft bench – 4360 ft bench)

Drilling and blasting of Phase 2 is planned to be accomplished on 20 ft bench heights. Loading and hauling will be performed on 20 ft benches by 14 cubic yard front end loaders loading 100-ton haul trucks.

A fleet of auxiliary equipment to support the main operating equipment will be required. This will include 1- 410 hp and 2-300 hp tracked dozers to maintain the waste dump, the placed ROM leached material, and cleanup in the mining phases. There will be 2-8,000 gallon water trucks and 2 motor graders with 14 ft moldboards. There will also be a track drill and an excavator.

An estimate of equipment requirements is provided on Table 16-7. The equipment estimate is based on one 10-hour shift/day, 6 days per week in 2025 Q1, and two 12-hour shifts per day with 20 lost shifts per year for the rest of the mine life following 2025 Q1.

**Table 16-7: Expected Major Mining Equipment**

<b>Equipment Type</b>	<b>2025 Q1</b>	<b>2025 Q2</b>	<b>2025 Q3</b>	<b>2025 Q4</b>	<b>2026 Q1</b>	<b>2026 Q2</b>	<b>2026 Q3</b>	<b>2026 Q4</b>	<b>2027 Q1</b>	<b>2027 Q2</b>
Cat MD6200 Blast Hole Drill	2	3	3	3	2	2	1	1	1	1
9 Cubic Yard Loader	1	1	1	1	1	0	0	0	0	0
14 Cubic Yard Loader	2	2	2	2	2	2	1	1	1	1
100 ton Haul Truck	6	5	7	7	8	8	6	6	5	0
410 hp Track Dozer	1	1	1	1	1	1	1	1	1	1
300 hp Track Dozer	2	2	2	2	2	2	2	2	2	2
Cat 14M Motor Grader	2	2	2	2	1	2	2	1	1	1
70 ton Water Truck 8kgal	2	2	2	2	1	2	2	1	1	1
70 ton Haul Truck	6	4	5	5	3	1	1	1	1	1
Track Drill	1	1	1	1	1	1	1	1	1	1
Cat 336 Excavator	1	1	1	1	1	1	1	1	1	1
<b>TOTAL</b>	<b>26</b>	<b>24</b>	<b>27</b>	<b>27</b>	<b>23</b>	<b>22</b>	<b>18</b>	<b>16</b>	<b>15</b>	<b>10</b>

## 16.7 OWNER STAFF REQUIREMENTS

GCC will maintain a staff of mine supervision and technical services. They will be responsible for engineering, geology, mineralized material control and blast hole sampling.

## 16.8 MINE PLAN DRAWINGS

Figure 16-1 through Figure 16-3 illustrate the pit and waste dump configurations at the end of 2025, 2026 and 2027.

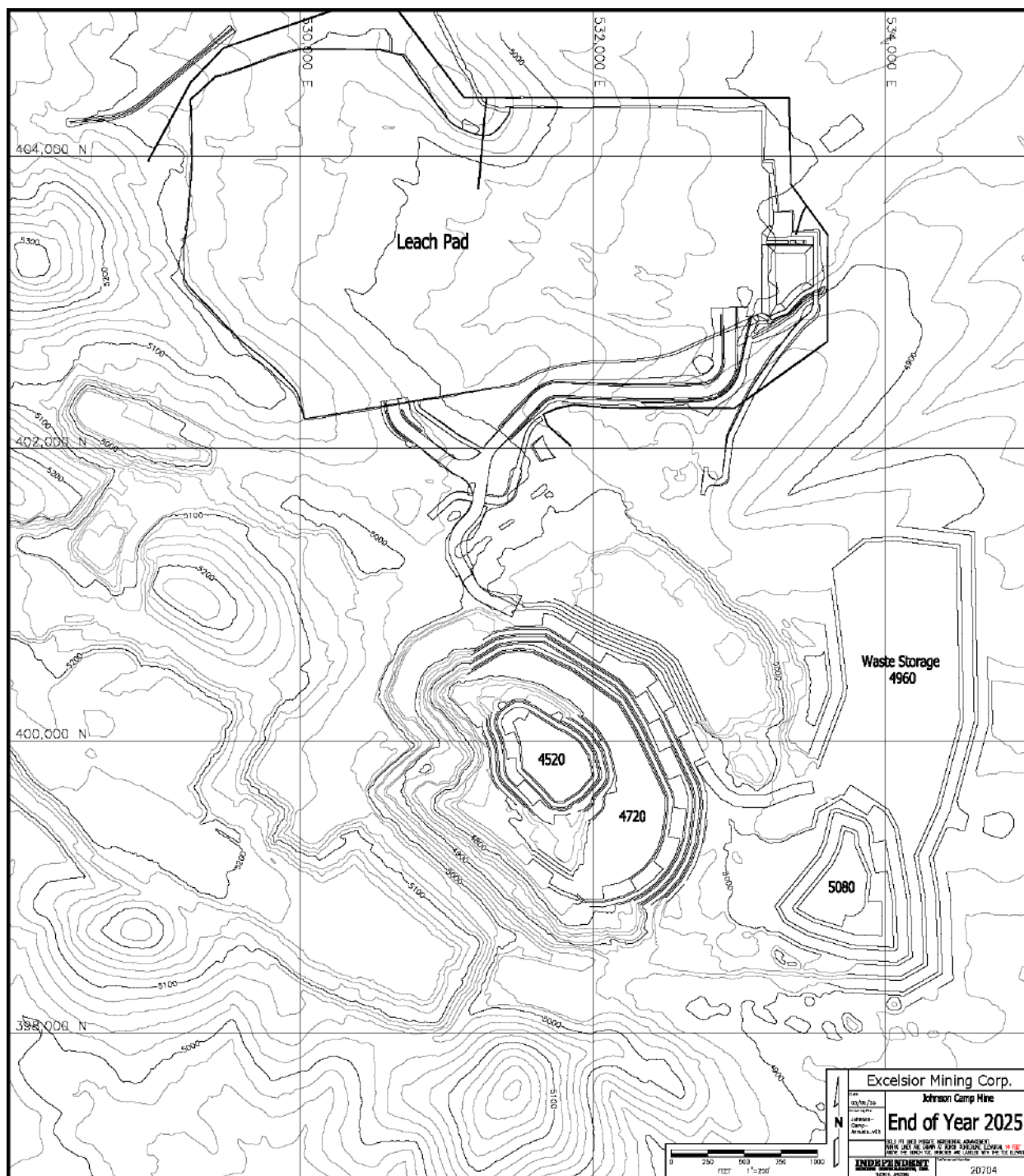


Figure 16-1: Pit and Dump Configuration at the end of 2025



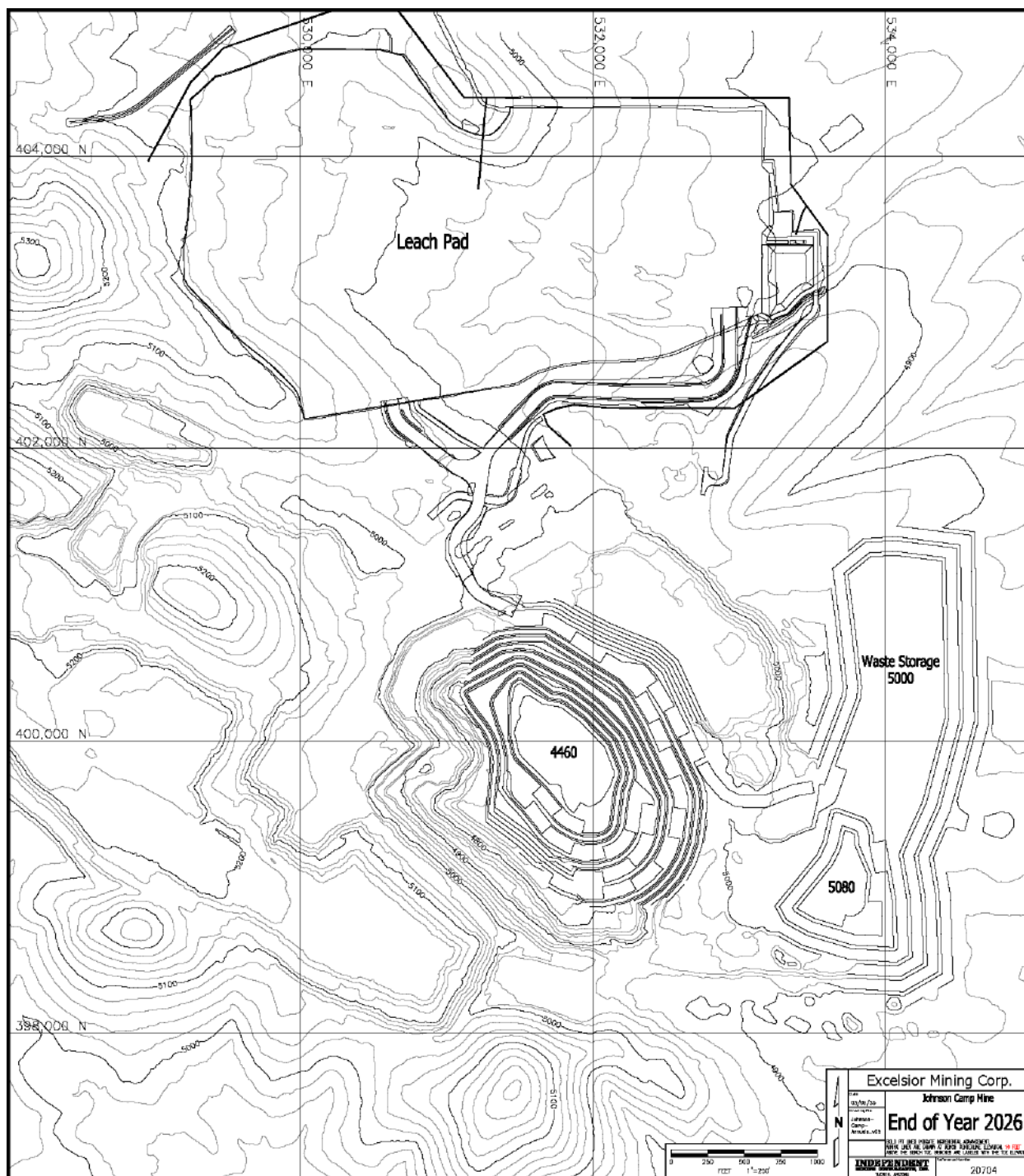


Figure 16-2: Pit and Dump Configuration at the end of 2026



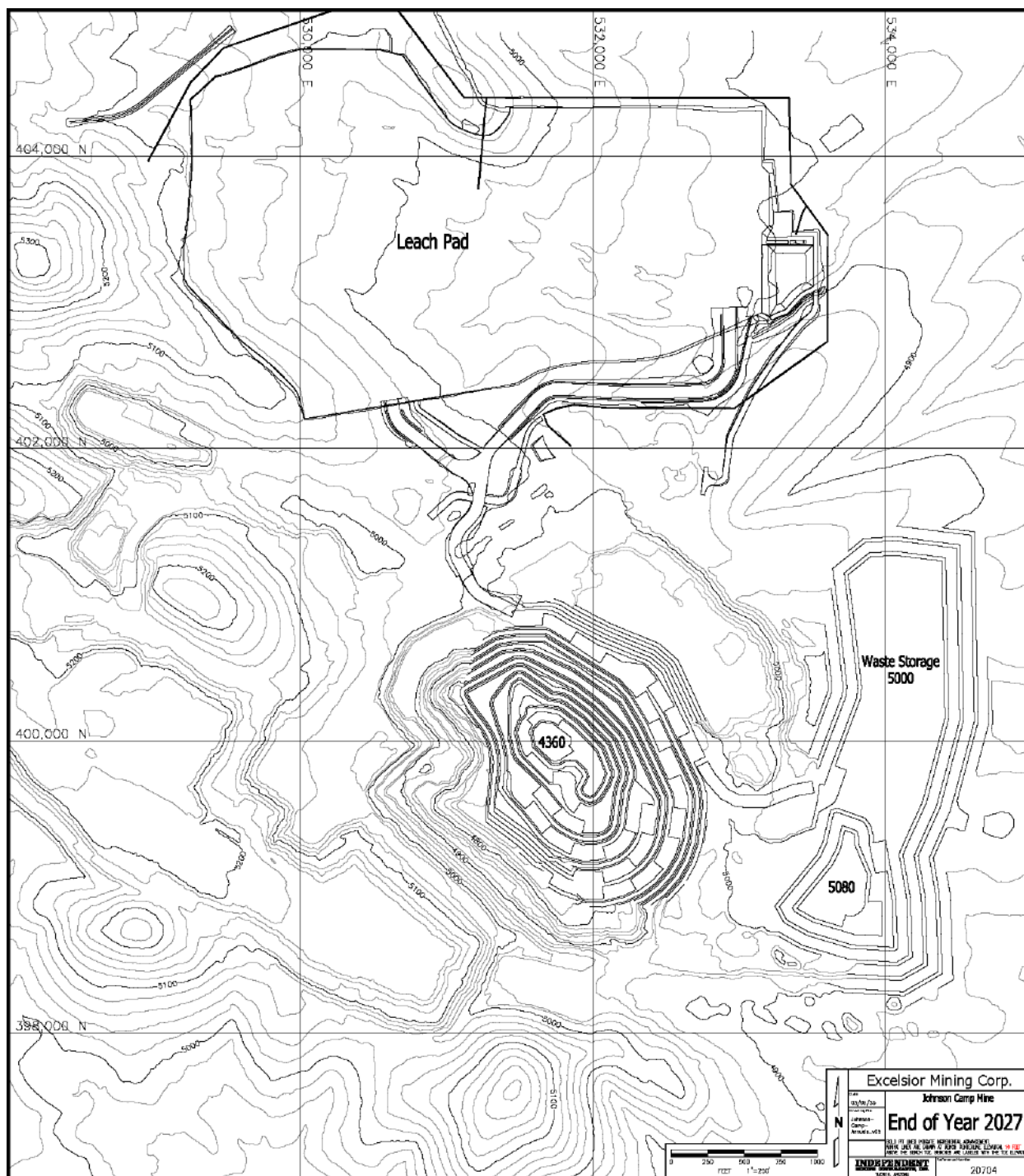


Figure 16-3: Pit and Dump Configuration at the end of 2027

## 16.9 PIT DEWATERING

For the planned three-year initial mining phase from the Burro Pit, the current dewatering rate of 50 gpm is representative of what can be expected during this phase of mining. As the pit is slightly deepened, this may increase to as much as 100 gpm.

## 17 RECOVERY METHODS

### 17.1 SUMMARY

JCM is a conventional open pit, heap leach operation using solvent extraction and electrowinning (SX-EW) to yield Grade A copper cathodes to ship to market. The plant consists of a permanent heap leach pad, solution ponds, the SX circuit, a Tank Farm, the EW Tankhouse including a cathode stripping section, and reagents storage and make-up areas.

The new leach pad area, Pad 5, which is in construction, is located northeast of the existing plant facility and has been designed such that leach solutions will flow by gravity to the combined ILS-PLS (Intermediate Leach Solution and Pregnant Leach Solution from Pad 5) pond located down slope of the new leach pad. The combined ILS-PLS solution will be pumped back to the existing Johnson Camp Mine SX-EW plant. A storm water pond has also been designed to capture contact overflow solutions from Pad 5.



**Figure 17-1: JCM Overall Flowsheet**

## 17.2 DESIGN BASIS

The design basis for the Johnson Camp Mine includes a single SX-EW facility that can produce 25 million lbs of cathode copper per annum. The SX-EW will operate on a 365 day per year basis. Figure 17-2 shows the layout of Pad 5 and the other facilities, mine waste dumps, ponds, and plant area at the Johnson Camp Mine.

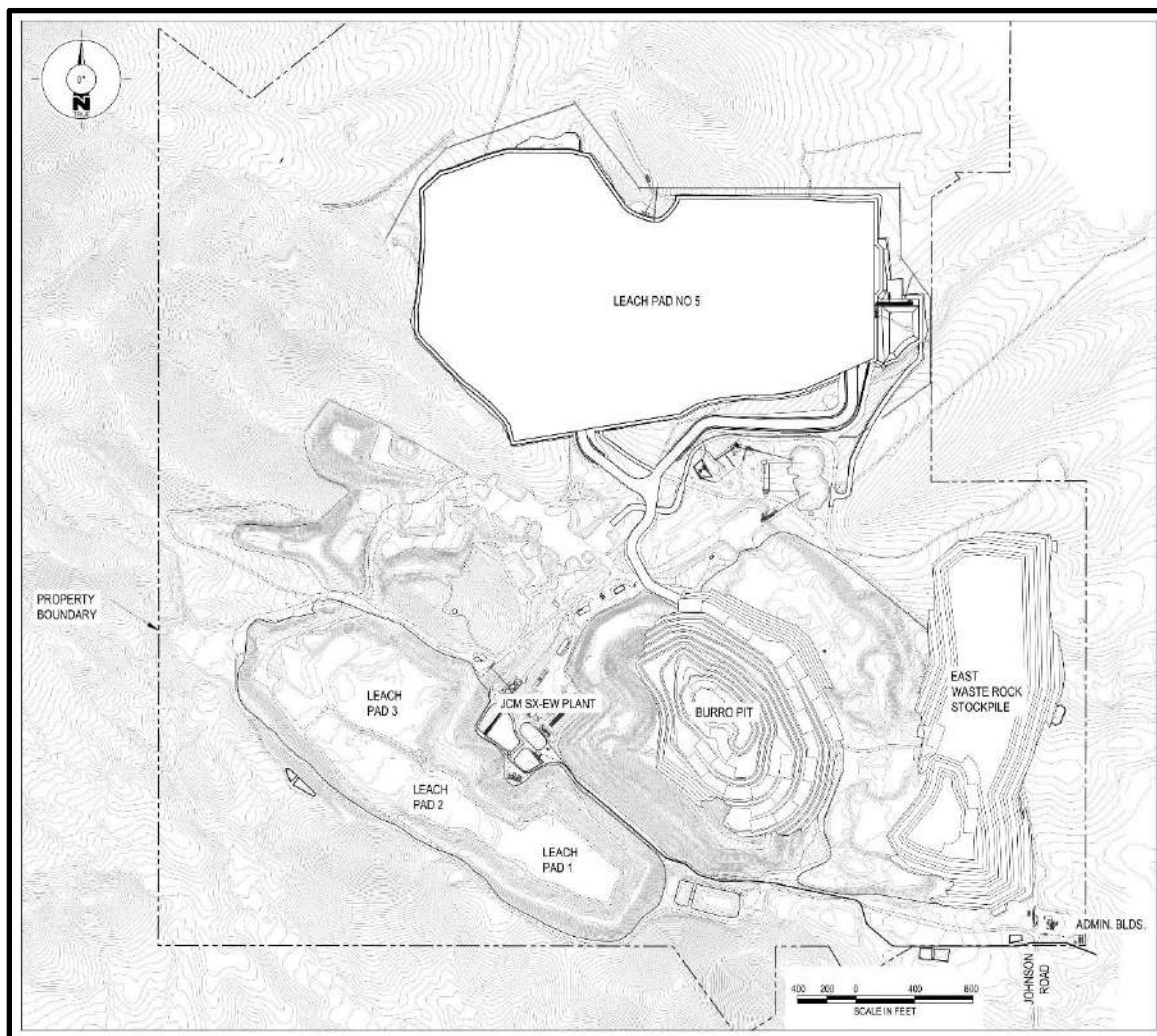


Figure 17-2: Johnson Camp Mine Site Plan for Nuton Demonstration

## 17.3 LEACH PAD 5

The leach Pad 5 was initially designed by Glasgow Engineering, based on an analysis of topographic, geologic, and hydrologic characteristics, and is not within the scope of this study. Pad 5 and ancillary facilities are located in a drainage northeast of the Copper Chief Pit expansion. The leach Pad 5 has been designed in detail by WSP as shown in Figure 17-3 and is currently in construction.

The leach pad design is approximately 8,000,000 ft<sup>2</sup> in area and oriented to match existing topography so that it allows gravity drainage of solutions down to the eastern toe of the pad at 4,900 ft elevation for collection and transport by pumping system back up to the PLS storage pond at approximately 5,030 ft elevation. The fully contained pad will include: soil liner, HDPE geomembrane liner, containment berms, leachate collection pipe system, and appropriate

overliner material with sufficient bearing strength and capacity to stack up to 48,000,000 tons of leachable material. The current design includes a capacity to hold 44,000,000 tons of leachable material.

Pad 5 will be developed in four phases: Phase 1 will host Run-of-Mine (ROM) oxide and transition materials in the initial phase of mining (see Figure 17-3). Phase 2 will host primary sulfides, the Nuton leach material. Phase 3 will be built to host the crushing, agglomerating, and other equipment used for the Nuton Demonstration. Ultimately, Phase 3 will be used for ROM material after the completion of the Nuton Demonstration. Phase 4 will be used for ROM material. All of these phases will be developed in the first year (Year -1) of the mine plan.



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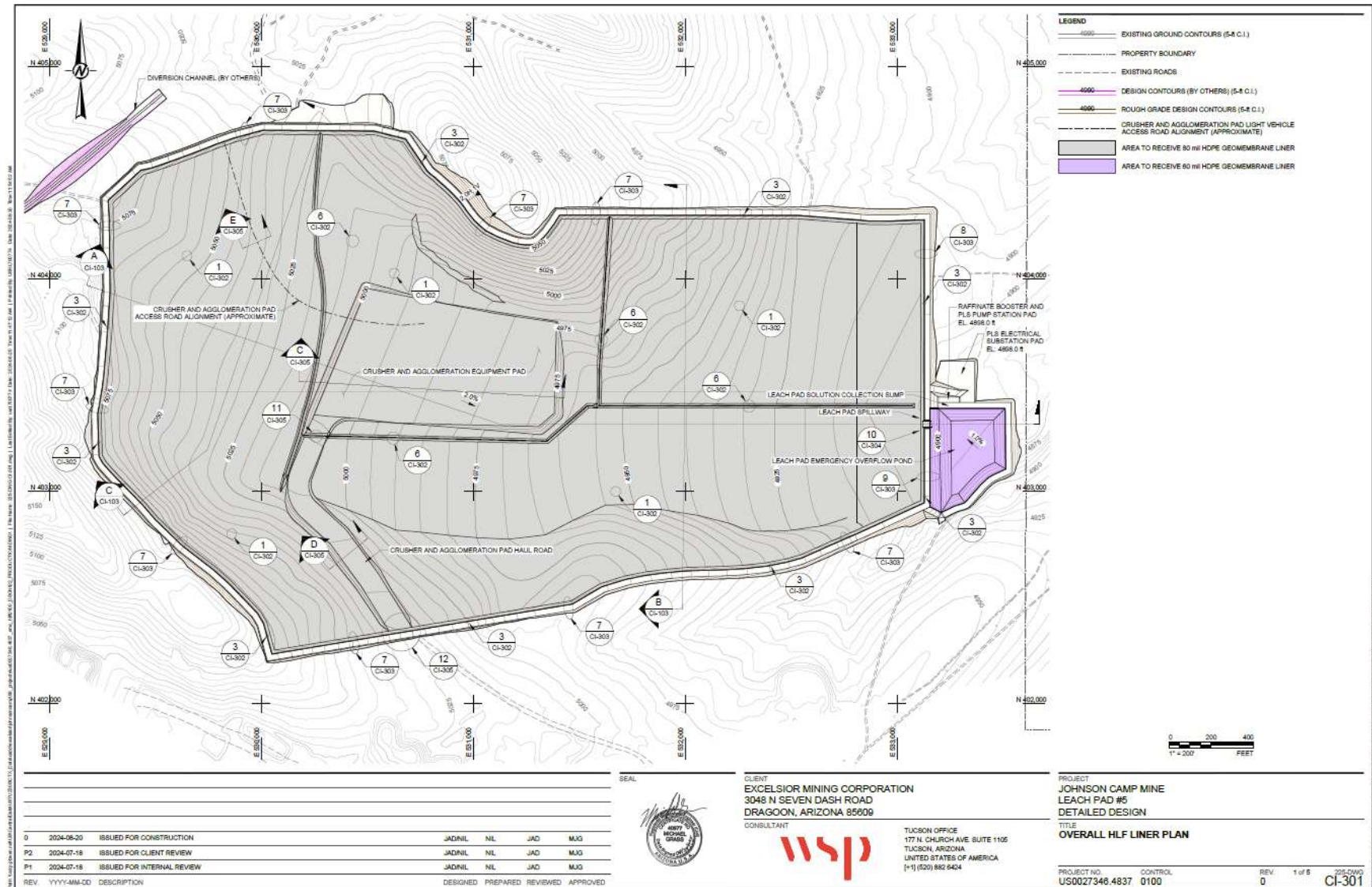


Figure 17-3: Pad 5 Footprint showing Phases and Emergency Runoff Pond

The pad is being constructed on a prepared base that has been cut from within the pad area and filled with borrow materials from within the pad or from elsewhere on the mine site. It is anticipated that cut and fill volumes will be approximately 542,000 yd<sup>3</sup> net. About 275,000 yd<sup>3</sup> of soil liner (a clayey alluvial material) will be taken from within the pad perimeter and shall be screened then graded to form a 12-inch layer beneath the HDPE liner. After installing an HDPE liner over the entire pad, a system of perforated leachate collection pipes will be installed upon the liner (and in some cases upon a pipe bedding material).



**Figure 17-4: Liner Installation on Pad 5**

The collection pipe system will be buried in a course of overliner material consisting of minus 1 ½" to plus ¾" material (also referred to as Liner Protection material). This material will be placed to a depth of not more than 36 inches above the HDPE liner. It is anticipated that this material, totalling approximately 527,000 yd<sup>3</sup>, will be taken from on-site stockpiles of Bolsa Quartzite and crushed using the mine's existing crushing facilities. The overliner will meet standard specifications for hydraulic conductivity.

#### **17.3.1 Containment System**

An estimated 13,000,000 gallon lined overflow pond for non-storm water and emergency solution outflow in compliance with prescriptive BADCT guidelines, and a 3,400 ft lined containment trench in which to route all process piping, as shown in purple in Figure 17-3.

#### **17.3.2 Pumps/Solution Management System**

A pumping system is sufficient to transport up to 5,000 gallons per minute (gpm) of raffinate (2,500 gpm for ROM and 2,500 gpm for crushed mineralized material) and 5,000 gallons of pregnant leachate solution between the pad and the SX plant. The flowrate during the first phase of leaching during the Nuton Demonstration is approximately 2,500 gpm total. The system will be redundant and designed to deliver raffinate to the upper lifts of Pad 5 leach heaps at 40 psi.

Based on historical column test work reports described in Section 13.2, the material to be leached ranges in sulfuric acid consumption from 20 lbs/ton for the Pioneer Shale to 70 lbs/ton for the Upper Abrigo formation. The average acid consumption for the mineral resources in the mine plan is approximately 40 lb/ton of material.

### **17.4 NUTON DEMONSTRATION**

The Nuton Demonstration is an industrial- scale, engineered sulfide heap leach operation using Nuton's proprietary suite of technologies. Nuton is a nature-based bioleaching technology that uses an elevated temperature biological leach process using naturally occurring bacteria to accelerate the leaching process and enhance recoveries. Fresh sulfide material will be mined and stacked for three years and leached for five years to test Nuton in an industrial-scale demonstration.





**Figure 17-5: Pad 5 Showing Location of Nuton Portion of Leach Pad**

Sulfide mineral resources will be crushed, agglomerated and treated under Nuton™ conditions before stacking mechanically using grasshopper conveyors on a separate portion of Pad 5 (See Figure 17-5). To accomplish the recovery of sulfide copper, the sulfides must be oxidized. The process requires aeration of the Nuton leach pad to provide the oxygen necessary for the oxidation process. Additional testing of transition and sulfide materials from JCM is planned to test the efficacy of this method and refine the parameters of the design and the associated copper recovery kinetics.

The PLS from the Nuton Demonstration will report to a sump which will be comingled with PLS from the ROM leach pad after sampling and measuring.

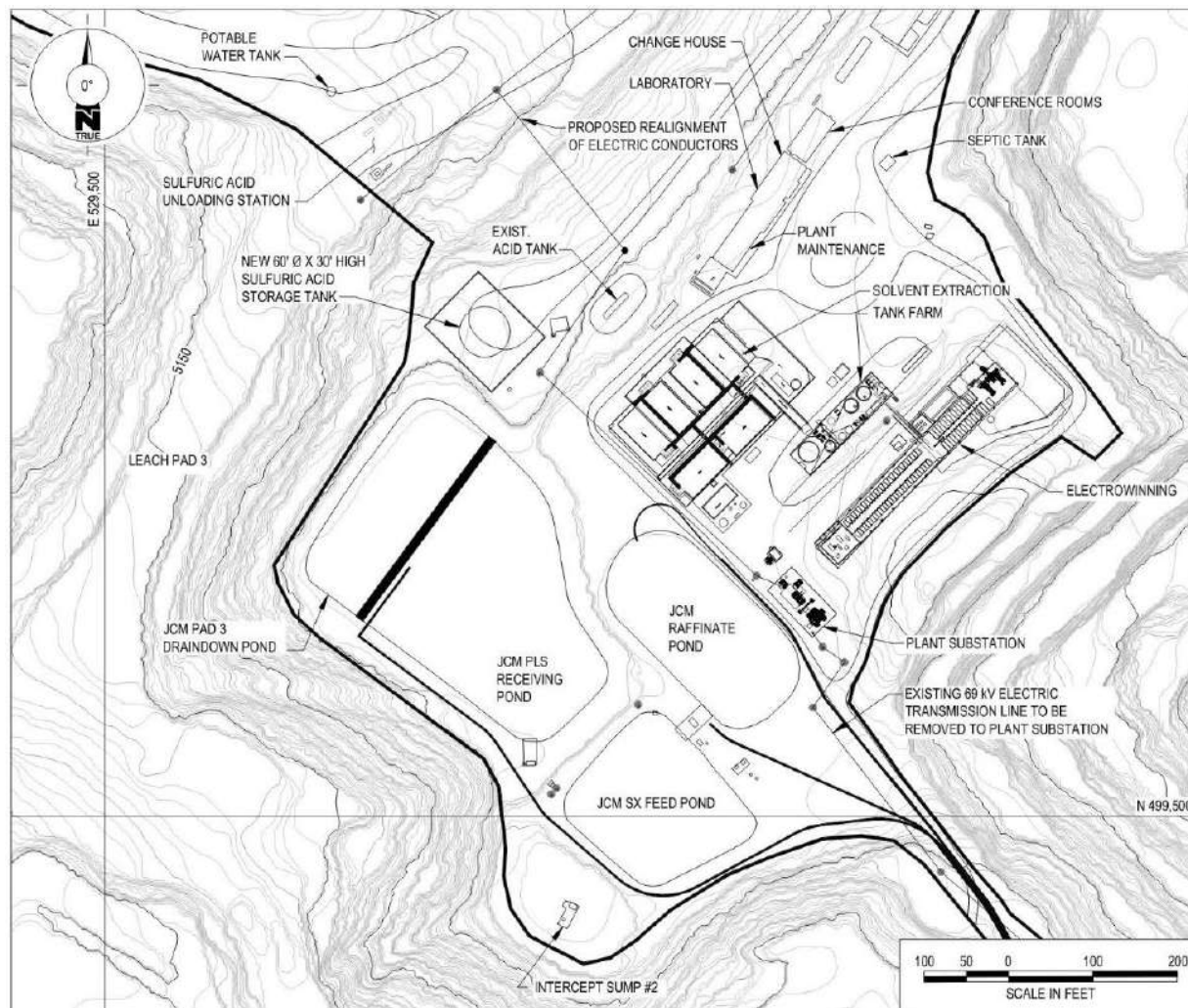
The presence of abundant pyrite in the sulfide-bearing leach materials is projected to enhance the oxidation of copper in the form of chalcopyrite, as suggested in Section 13.4. The oxidation of pyrite will generate ferric iron to enhance the oxidation of copper sulfides.

To achieve maximum metal extraction, several leaching parameters must be optimized in concert, based on an appropriate testing program. These include the irrigation rate, acid concentration, bacteria, and leach cycle time. The irrigation system will be laid out on the heap surface and the drip lines should be fairly closely spaced in order to wet the entire lift of material.

The PLS coming from various leach cells will be measured and sampled before comingling and being pumped to the existing JCM PLS pond. This mixing will help maintain a uniform PLS grade going to the solvent extraction plant. The PLS pond will promote settling of any solids entrained in the PLS due to a precipitation event or a broken leach line. However, it may be advantageous to settle solids or to filter them at the Pad 5 collection sump prior to pumping solution down to the JCM PLS pond, which is not included in the current plans.

## 17.5 SOLUTION PONDS

Figure 17-6: shows the JCM ponds as they are configured next to the JCM SX-EW plant. HDPE piping from the PLS sump at Pad 5 has a design capacity of 5,000 gpm to the PLS Pond. Three 400 HP Raffinate vertical turbine pumps (2 operating, 1 standby), shown in Figure 17-7, circulate acidified raffinate back to the leach pad.



Source: M3, 2024

**Figure 17-6: Solution Ponds at JCM**



Figure 17-7: Raffinate Pumps at JCM

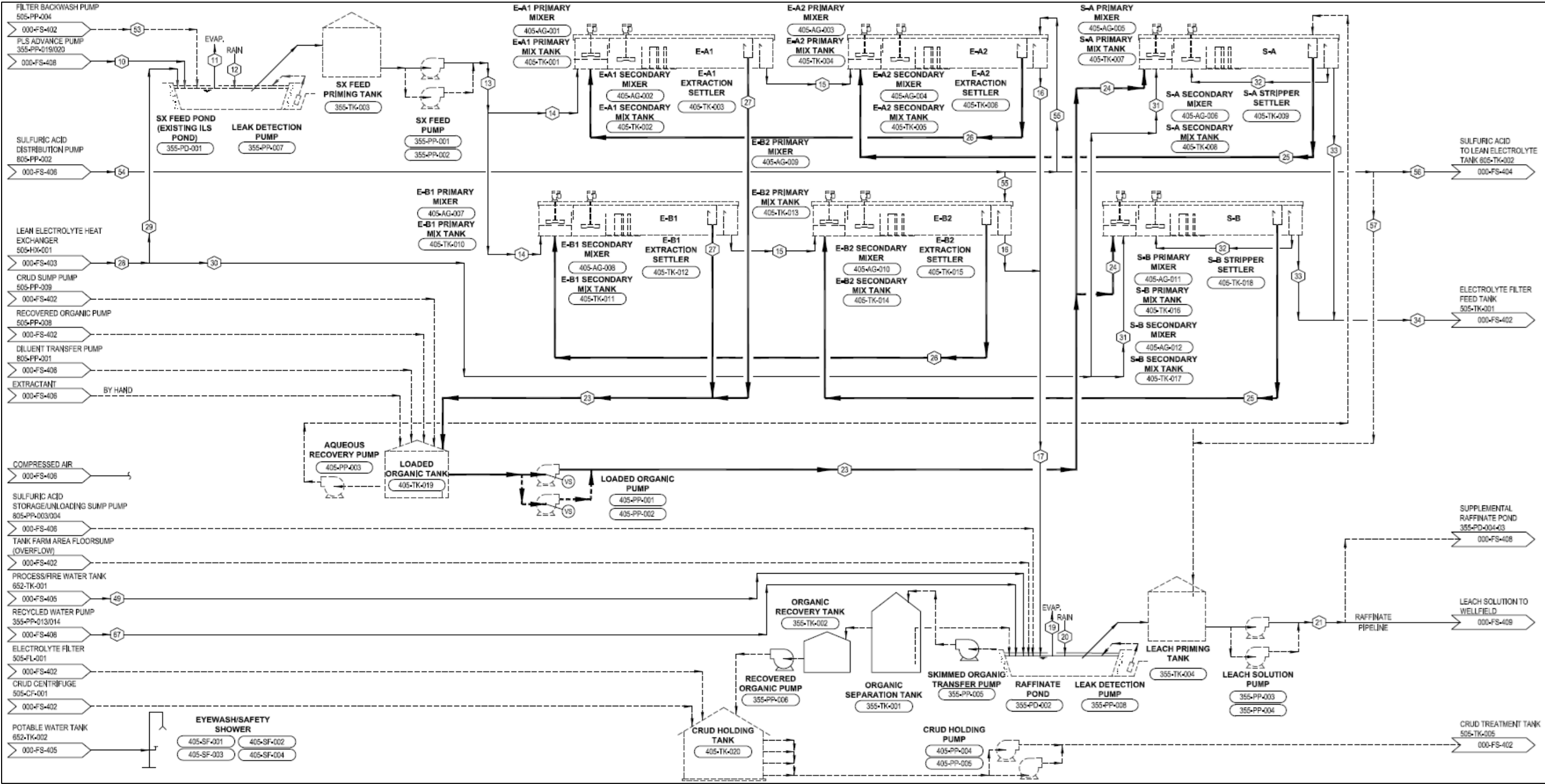
## 17.6 SOLVENT EXTRACTION

The existing JCM SX circuit consists of two trains of mixer-settlers that strip copper from the PLS and transfer it to the lean electrolyte solution. Each train has two extraction settlers and one strip settler. The extraction settlers use an extractant dissolved in a petroleum-based diluent (collectively called the “organic”) to extract copper from the aqueous phase. The strip settlers (one in each train) use a high-acid solution (lean electrolyte) to strip copper from the organic phase. The aqueous phase (strong electrolyte) is then pumped to the existing JCM tankhouse for recovery by electrowinning. Figure 17-8 is a flowsheet of the JCM solvent extraction (SX) circuit.

The SX trains for the JCM plant are operated in series such that the entire PLS flow through each train passes through both extraction settlers in the train (Figure 17-9). The organic passes counter-current through both extraction settlers, transferring copper from the PLS and becoming “loaded organic”. The copper-bearing loaded organic is mixed with lean electrolyte in the strip pumper mixers to transfer the copper from the extractant in the organic phase to the aqueous electrolyte solution. The strip settler allows the immiscible liquids to separate in laminar flow. The rich electrolyte then flows to the Electrolyte Filter Feed Tank.

Stripped organic is sent to the extraction pumper mixers where intimate contact between the organic and PLS solutions promotes exchange of copper ions by the extractant in the organic phase. The extraction settlers allow the immiscible liquids to separate in laminar flow so that the aqueous phase (raffinate) and organic phase can be collected in separate launders at the end of the settler. Raffinate is re-acidified in the aqueous launder of the second extraction settler and flows by gravity to the Raffinate Pond. The partially loaded organic from the second extraction settler flows to the pumper mixers of the first extraction settler and exchanges copper from the other half of the PLS stream. Fully loaded organic from the first extraction settler flows to the Loaded Organic Tank. The SX process is designed to extract 92% of the copper contained within the PLS at an incoming copper grade of up to 2.6 grams per liter (g/L).





Source: M3, 2016

Figure 17-8: Flowsheet showing Solvent Extraction Circuit at JCM



**Figure 17-9: Solvent Extraction Settlers**

## 17.7 ELECTROWINNING

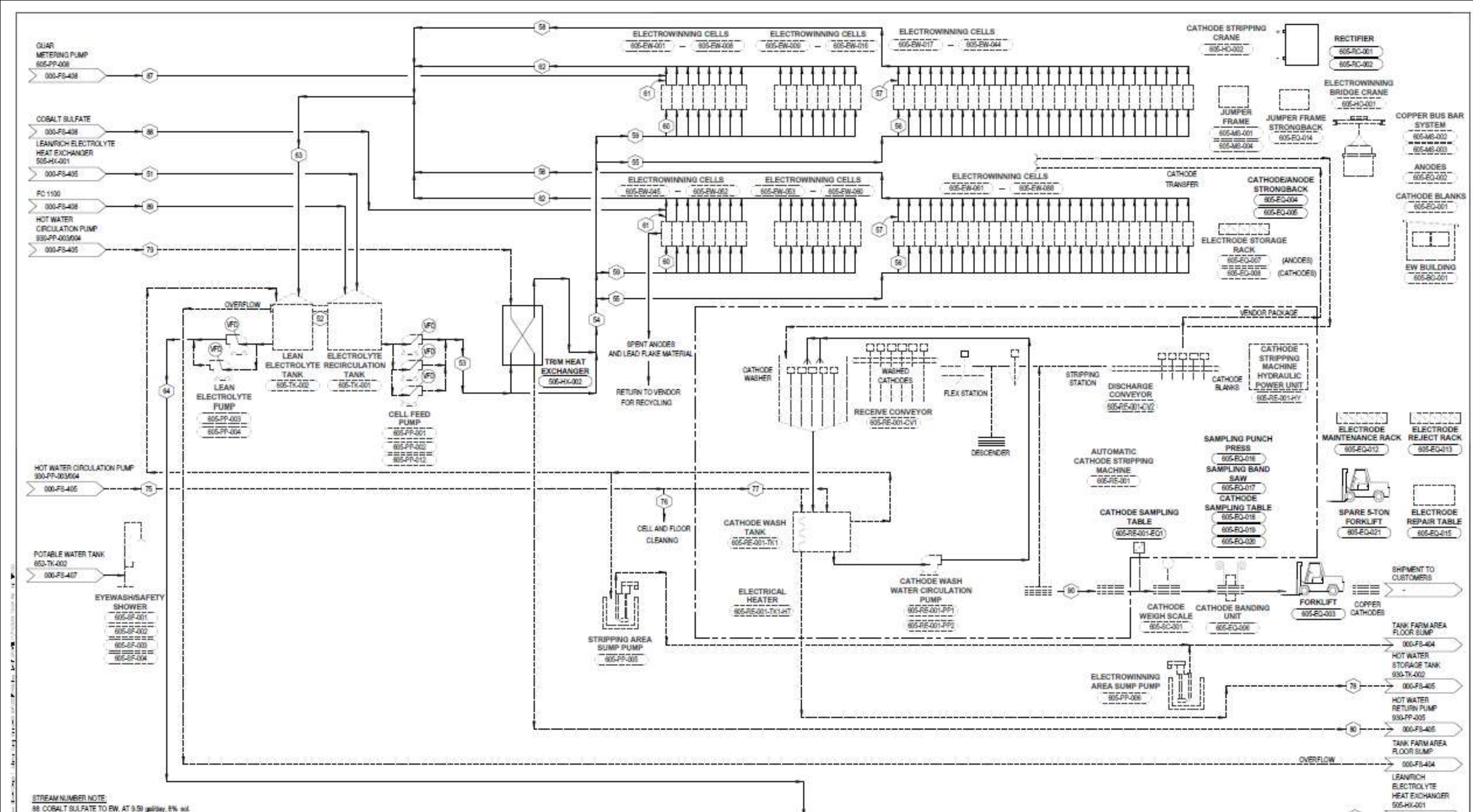
Rich electrolyte solution advances from the solvent extraction area and flows by gravity to the Electrolyte Filter Feed Tank. Electrolyte is pumped from this tank through two electrolyte filters to remove entrained organic emulsion and particulates from electrolyte prior to electrowinning. The filters are backwashed periodically with water (or lean electrolyte solution) and air from a blower.

Filtered electrolyte solution is pumped to an electrolyte recirculation tank through the electrolyte heat exchangers. The filtered rich electrolyte flows through one heat exchanger and is warmed by lean electrolyte returning to solvent extraction from electrowinning. Rich electrolyte is heated in the trim heater, when required, with supplemental heat from a hot water heating system to the final temperature, typically 45°C, for electrowinning. When supplemental heat is not required, lean electrolyte flows through the trim heater, countercurrent to the flow of rich electrolyte being heated.

After returning by gravity from the SX stripper to the rich electrolyte tank, rich electrolyte is pumped through a series of three filters and heat exchangers to the commercial electrolyte recirculation tank. The commercial solution, a blend of the rich and lean electrolyte solution, is pumped to the EW cells. The solution exits the cells overflowing by gravity to the Lean Electrolyte Tank. A portion of the lean electrolyte is pumped back to the strip stages in the SX for copper recovery with the balance of lean electrolyte overflowing through a cross-connection pipe into the commercial tank.

Copper is plated onto stainless steel cathode blanks in the EW cells. Figure 17-10 is a flowsheet of the JCM EW Tankhouse. Figure 17-11 shows interior and exterior photos of the JCM EW Tankhouse. The copper cathodes are harvested on a weekly basis. The tankhouse has an overhead bridge crane for transporting cathodes (and anodes) to and from the cells using a lifting “strongback” frame. Harvested cathodes are washed in the Cathode Wash Tanks using circulation pumps. Washed cathodes are removed from the stainless-steel blanks, sampled, weighed, and banded using a semi-automatic stripping machine. Copper produced by this process is LME Grade A for sale on the world market in 2-to-3-ton packages.





Source: M3, 2016

Figure 17-10: Electrowinning Flowsheet at JCM



**Figure 17-11: JCM EW Tankhouse Interior and Exterior**

The electrowinning operation will also require small electrolyte bleeds to control the buildup of impurities. This bleed stream can either be returned to the extraction stage or to the Raffinate pond.

## **17.8 TANK FARM**

The tank farm contains tanks, pumps, and filters for handling solutions needed for the SX-EW process. The primary process function of the tank farm is storage and transfer of solutions. However, there are two process functions that take place in the tank farm: electrolyte filtration and crud treatment.

Three electrolyte filters in the tank farm remove impurities from the rich electrolyte returning from SX to prevent contamination of the tankhouse and electrolyte system (Figure 17-12). Rich electrolyte flows by gravity to the Electrolyte Filter Feed Tank and is pumped through one or more anthracite-garnet filters to remove entrained organic and particulates that could interfere with electrowinning. Filtered rich electrolyte flows to the Electrolyte Recirculation Tank. The filters are periodically backwashed to remove impurities and to maintain design flow rates through the filter media.





**Figure 17-12: JCM Tank Farm**

Crud is a mixture of solids, organic liquid, and aqueous solution that (a) accumulates at the organic/aqueous interface in the settlers or (b) may be any mixture of aqueous and organic liquids that requires separation. Crud is removed by suction from the settlers and needs to be treated to separate the three phases for reuse in the process or, in the case of the solids, for disposal. Crud also comes from the mixture of aqueous, organic, and solids that accumulates in the electrolyte filters. The crud treatment system consists of the following major equipment:

- Crud Holding Tank
- Crud Treatment Tank
- Crud Centrifuge ("Tri-canter")
- Recovered Organic Tank

Crud from the Crud Holding Tank will be pumped to the Crud Treatment Tank, an agitated, cone-bottom tank. Amendments including clay and diatomaceous earth can be added to the Crud Treatment Tank to assist in separation of the phases. The Crud Centrifuge is a horizontal-axis centrifuge that separates the crud into its three component phases, allowing aqueous and organic liquids to be returned to the process, while solids are collected in a container for offsite disposal.

#### **17.9 ACID STORAGE AND REAGENTS MAKE-UP**

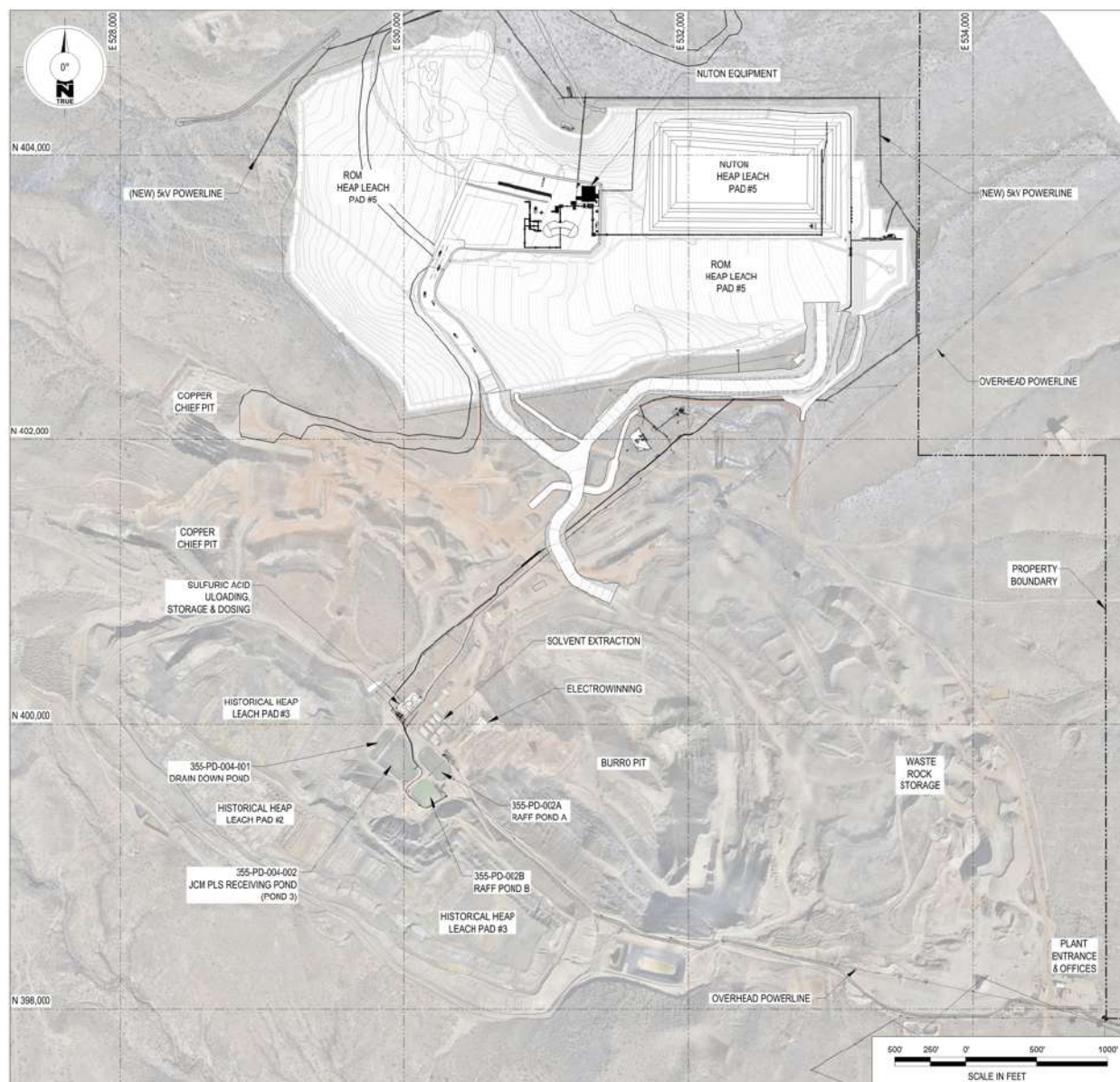
JCM has three 2,500 ton sulfuric acid storage tanks that were installed in 2019. Figure 17-13 shows the arrangement of these tanks in the background behind the SX facility at JCM.



Figure 17-13: JCM Sulfuric Acid Tanks

## 18 PROJECT INFRASTRUCTURE

The Johnson Camp Mine is an existing and operating copper hydrometallurgical plant. Figure 18-1 shows the location of the open pit, waste dumps, SX-EW plant facilities and mine.



Source: M3, 2024

**Figure 18-1: Johnson Camp Mine Facilities**

### 18.1 ACCESS

The JCM site is accessed from the North Johnson Road exit from the I-10 freeway, by traveling approximately 1 mile north. The Stage 1 JCM plant area is approximately 1.6 miles from the main entrance.

Inert waste rock will be deposited on the east and southeast waste rock stockpiles. Waste rock samples will be tested to confirm their inert behavior at regular production rate intervals.

## **18.2 DIVERSIONS**

Natural drainage around the new project location naturally travels from the northwest end of the proposed heap leach pad to the southeast end where it continues through the property boundary. Much of this natural drainage is captured and routed north of the heap leach pad by means of a large channel, with a bottom width of 10 ft and a linear length of 1,370 ft. The remaining natural drainage from the northwest is routed along the west perimeter of the heap leach pad, where it is routed by means of 5 – 36" culverts under the haul road ramp on the west end of the south side of the pad.

The discharge from those culverts is combined with drainage flowing away from the south side of the heap leach pad between the two haul road ramps, is routed through 2 – 48" culverts under the east haul road ramp where it discharges to the east. The drainage from the east haul road ramp culverts is discharged into a new large channel that continues east along the pad, with sides consisting of the south edge of the new event pond and the north edge of the new light duty road that travels east of the heap leach pad perimeter. The drainage from the channel crosses beneath this new light duty road by means of 2 – 48" culverts, where it continues through the property boundary.

The new haul road near the existing Burro Pit crosses a natural drainage flow that runs from west to east. To allow the natural drainage to travel undisrupted, 2 – 36" culverts were placed under the new haul road. The embankments of some portions of the new haul roads were armored with shotcrete to be used as the sides swales to help route drainage along them.

## **18.3 ROADS**

Haul roads and light duty roads were added to the site to keep light duty traffic and haul road traffic separated for safety purposes. New haul road from the existing Burro Pit to the new heap leach pad connect at opposite ends of the south side of the pad. Light duty roads were added to allow traffic to cross new haul roads, travel along the east and north perimeter of the pad, and to the new acid unloading storage tanks to the north of the pad.

## **18.4 POWER**

JCM's main substation by the JCM Administration Building is powered by an existing 69 kV power line that is fed from the south of the property. The 69 kV power line is owned by the Sulfur Springs Valley Electric Cooperative Inc. located in Willcox, Arizona. JCM substation is located near the SW-EW plant and has a 7.5/9.975 MVA, 69kV-4.16/2.4kV main transformer. An existing outdoor HV bus bar structure in the main substation has gang operated disconnect switches that distribute power in 4.16 kV circuits to the existing SX-EW plant, PLS pumps, Raffinate pumps, acid storage, and ancillary buildings. All process areas have their own substation with step-down transformers and electrical equipment to feed the equipment and loads.

The JCM Restart project has added process areas that are fed electrically by different substations and all of them powered by a new 13.8 kV power line that will run from a new 5/6.25MVA 4.16kV-13.8 kV step-up transformer. The step-up transformer will be installed as an extension of the existing main substation. The new 13.8 kV power line will also feed all the existing water wells system in the mine.

The estimated new connected electrical load is 5.1 kW, which includes the areas in the following Table 18-1.



**Table 18-1: Johnson Camp Mine Electrical Loads**

Johnson Camp Mine Electrical Loads	Connected Load		Demand Load		Operating Load	
Existing Loads	kW	kVA	kW	kVA	kW	kVA
Ancillary Buildings	244	273	181	203	102	115
SX-EW Plant	4,904	5,425	3,927	4,329	2,935	3,236
Ponds	1,288	1,483	1,288	1,483	570	662
<b>Total Existing Electrical Loads</b>	<b>6,436</b>	<b>7,181</b>	<b>5,396</b>	<b>6,015</b>	<b>3,607</b>	<b>4,013</b>
New Loads	kW	kVA	kW	kVA	kW	kVA
Water Wells	283	326	213	248	160	186
Crushing, Agglomeration & Conveying	2,904	3,369	3,358	2,828	2,037	2,438
Sulfuric Acid & Reagents	1,147	1,349	1,014	1,200	754	889
Solution Management	1,235	1,434	686	827	555	666
<b>Total New Electrical Loads</b>	<b>5,569</b>	<b>6,478</b>	<b>5,271</b>	<b>5,103</b>	<b>3,506</b>	<b>4,179</b>
<b>Total JCM Electrical Loads</b>	<b>12,005</b>	<b>13,659</b>	<b>10,667</b>	<b>11,118</b>	<b>7,113</b>	<b>8,192</b>

The JCM Restart project operating load will exceed the base capacity of the existing 7.5/9.975 MVA power transformer at the main substation. It is recommended that GCC conduct maintenance and upgrade the main transformer and outdoor power buses at the main substation to meet the increased demand.

The current design includes five 200-HP blower units. In future years additional blowers will be added. The main substation will require an upgrade to handle the new loads. One improvement would be to install a capacitor bank to compensate the power factor and help the main transformer to operate with a higher electrical load at lower power. Additional blowers will require a new distribution substation to feed them.

The existing harmonic filter bank at the main substation should be re-connected as part of the JCM Restart Project. A review of the existing harmonic filter equipment will be required to confirm the correct capacity of the filters.

## 18.5 WATER SUPPLY & DISTRIBUTION

Fresh water is supplied from three existing wells on the JCM Property and pumped to an existing process/fire water storage tank. The lower portion of the storage tank is reserved for fire water. Process water for plant use is taken from the storage tank above the fire water reserve level. Potable water for the JCM site is provided by the existing Section 19 well, chlorinator building, and potable water tank.

The nominal plant water balance requires 56 m<sup>3</sup>/hr (247 gpm). The design plant water balance requires 108 m<sup>3</sup>/hr (476 gpm). The site will have adequate water resources to supply water to the plant processes.

**Table 18-2: Johnson Camp Water Balance**

<b>Johnson Camp Water Balance (Design)</b>					
<b>Water In</b>	<b>m<sup>3</sup>/hr</b>	<b>gpm</b>	<b>Water Out</b>	<b>m<sup>3</sup>/hr</b>	<b>gpm</b>
Hydraulic Control Wells	7.5	33	Raffinate to Pond	0.6	3
Rain to Raffinate Pond	0.1	0	Reagents Make-up Water	7	31
Fresh Water Make-up	60	266	Leach Pad Moisture	72	315
ROM Mineralized Material to Leach Pad	20	88	Leach Pad Evaporation	29	128
Other Leach Pad Solutions	20	88			
<b>Total Water In</b>	<b>108</b>	<b>476</b>	<b>Total Water Out</b>	<b>108</b>	<b>476</b>
<b>Johnson Camp Water Balance (Nominal)</b>					
<b>Water In</b>	<b>m<sup>3</sup>/hr</b>	<b>gpm</b>	<b>Water Out</b>	<b>m<sup>3</sup>/hr</b>	<b>gpm</b>
Hydraulic Control Wells	7.5	33	Raffinate to Pond	0.6	3
Rain to Raffinate Pond	0.1	0	Reagents Make-up Water	7	31
Fresh Water Make-up	25	112	Leach Pad Moisture	35	154
ROM Mineralized Material to Leach Pad	7	31	Leach Pad Evaporation	14	59
Other Leach Pad Solutions	16	71			
<b>Total Water In</b>	<b>56</b>	<b>247</b>	<b>Total Water Out</b>	<b>56</b>	<b>247</b>

Mine dewatering will also make a contribution to water supply. The estimated water available as make-up water is approximately 45 m<sup>3</sup>/hr (200 gpm) and will increase to 90 m<sup>3</sup>/hr (400 gpm) later in the mine life. This mine water will be available for continued heap leaching water make-up.

## 18.6 SANITARY WASTE DISPOSAL

Sanitary wastes from sinks, lavatories, toilets, and showers are handled by septic systems that are dedicated to individual buildings or groups of ancillary facilities that share a septic tank or leach field. The septic systems have been designed and permitted in accordance with Cochise County regulations.

Sinks and drains in areas where chemical handling operations occur will either direct waste to the tank farm sump, eventually discharging to the Raffinate Pond, or to a dedicated chemical containment tank. Containment tanks are serviced by licensed hazardous materials handling contractors in accordance with federal, state, and local regulations.

## 18.7 WASTE MANAGEMENT

Solid wastes are collected in approved containers, removed from site by a solid waste contractor, and disposed in accordance with federal, state, and local regulations. Excess construction materials and construction debris will be removed from site by the generating contractor.

Recyclable materials that are non-hazardous, such as scrap metal, paper, used oil, batteries, wood products, etc., will be collected in suitable containers and recycled with appropriate vendors.

Hazardous materials, such as contaminated greases, chemicals, paint, and reagents, will be collected and recycled, whenever possible, or shipped off-site for destruction, treatment, or disposal.

## 19 MARKET STUDIES AND CONTRACTS

### 19.1 MARKET STUDIES

#### 19.1.1 Copper price

The long-term fundamentals for copper remain strong, with demand projected to increase significantly in the coming decades. Various industry reports, including those from Wood Mackenzie and S&P Global, forecast a 75% increase in copper demand by 2050, driven by urbanization, population growth, increased living standards, and the global energy transition. The anticipated near-term demand for copper cathode is not easily determined but for the purpose of this technical report, it has been assumed that markets for this product will remain steady.

Pursuant to the terms of the Nuton Option Agreement (see Section 4), GCC and Nuton have agreed that Nuton will receive 100% of the revenue generated from the sale of copper cathode production from JCM until Nuton has recouped its Stage 2 funding. Nuton also has the right to market 100% of the copper cathode production from JCM and will enter into off-take agreements for such purpose.

The use of consensus prices obtained by collating the prices used by industry analysts can be used for reports of this nature. This methodology is recognized by the Canadian Institute of Mining and Metallurgy (CIM) and has the advantage of providing prices that are acceptable to a wide body of industry professionals (peers). These prices are generally acceptable for most common commodities, major industrial minerals, and some minor minerals.

GCC reviewed the latest available analyst consensus pricing for copper, compiled by CIBC on February 5, 2025, and determined these prices are appropriate for JCM. The prices by year are listed below in Table 19-1.

**Table 19-1: Copper Prices**

Source	Date		2025	2026	2027	2028	LT
Consensus Median	2/5/2025	\$/lb	4.29	4.50	4.50	4.50	4.25

#### 19.1.2 Sulfuric Acid Price

Sulfuric acid is the largest single consumable in the Johnson Camp Mine. Three sulfuric acid storage tanks will have a storage capacity of 30+ days although the tanks will likely be refilled more frequently. There are several peer comparable projects in southern Arizona that have recently published technical reports containing long term price projections for sulfuric acid purchases, including Hudbay's Copper World, Arizona Sonoran Copper's Cactus Project, and Florence Copper's in-situ copper leach project which is in construction. The average of these price data points is \$150.00 per short ton of acid delivered and is determined by GCC to be an appropriate LT acid price for JCM. The 2025 price is based on actual contracted pricing for 2025 deliveries to JCM. The 2026 to LT price curve is based on an analysis of historical acid price cycles and the difference between the 2025 price and the LT price.

**Table 19-2: Sulfuric Acid Prices**

Source	Date		2025	2026	2027	2028	LT
GCC Analysis	2/5/2025	\$/ton	218.0	200.0	200.0	175.0	150.0

#### 19.1.3 Diesel Pricing

The JCM operation will use a mining contractor, and red dyed off-road diesel ("diesel") will be the primary fuel used by the JCM mining heavy fleet and ancillary equipment. GCC will provide diesel to the mining contractor. The price of diesel in all localities is highly correlated to the West Texas Intermediate crude (WTI) benchmark as WTI is the primary



type of crude oil refined in the United States. WTI is forecast by a range of reputable banks and oil analysts resulting in a widely accepted consensus price forecast. The consensus price forecast compiled by CIBC on February 5, 2025 is shown in Table 19-3 below. The weighted average actual diesel price realized for deliveries to the JCM site during Q4 2024 was \$2.74/gallon. The diesel price projections shown in Table 19-3 below are calculated based on a regression analysis of actual past delivered diesel prices to WTI benchmark past prices for the corresponding past time periods and projected into the future based on the WTI consensus forecast.

**Table 19-3: Diesel Prices**

Source	Date		2025	2026	2027	2028	LT
Analyst Consensus - WTI Oil	2/5/2025	\$/bbl	71.6	70.3	69.7	69.0	66.7
Diesel Regressed to WTI Forecast		\$/lb	2.75	2.70	2.68	2.66	2.60

## **19.2 CONTRACTS**

Principal activities for GCC are construction, operations, and community relations, activities that support the development of JCM. During this period, contracting activities will continue to be driven by the need to acquire specialists and professional services firms to assist GCC with these various activities.

A number of contracts will need to be put into place in order to complete the Stage 2 work program. Some are already in place and others are still proposed.

These include:

- Mining Contract,
- Blasting Services,
- Crushing and Agglomerating Contract,
- Drilling services,
- Sulfuric acid contract, and
- Consulting services for:
  - Groundwater hydrology and permitting
  - Environmental services
  - Geotechnical analysis related to mining and heap leach activities.

Contractors have been and will be pre-qualified by GCC on the basis of their:

- Safety record,
- Previous experience on this and similar projects,
- Quality of workmanship on previous projects,
- Quality/experience of on-site management,
- Local availability in region,
- Previous schedule performance,
- Financial stability, and
- Cost competitiveness.

Areas with clearly defined scopes of work will be required as unit price or lump sum contracts.

## 20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

### 20.1 INTRODUCTION

The Johnson Camp Mine (JCM) is an open pit mine. A processing (SX-EW) plant and associated ponds located at JCM are used to process pregnant leach solutions (PLS) from JCM. JCM has commenced construction with the plan to resume mining of the open pit with plans to process the material in a new heap leach pad. Existing permits have been modified to address resumption of mining at JCM. Any future facility additions or modifications will require modification/amendment of these permits.

### 20.2 ENVIRONMENTAL STUDIES AND PERMITTING

This section identifies applicable key environmental permits. Federal, state, and local government existing environmental permits are listed in Table 20-1.

**Table 20-1: JCM Environmental Permits**

Agency	Permit	Description	Citation	When Required/ Permit No.
<b>Federal</b>				
US Fish & Wildlife Service (USFW)	Incidental Take Permit	Mining activities that may affect species listed as endangered or threatened need to conduct studies to identify any targeted species and to apply for a permit to conduct their activities. Any identified threatened or endangered species identified in pre-mining surveys would need to be mitigated before mining could proceed.	50 CFR Sections 7 and 10	None previously identified. New studies may be required prior to disturbing new ground.
<b>State of Arizona</b>				
Arizona Department of Environmental Quality (ADEQ)				
Air Quality Division	Air Quality Control Permit	Ensures air pollutants from any source do not exceed the National Ambient Air Quality Standards	ARS §49-402	AQP-71633; covers the Gunnison Project and JCM
Groundwater Section	Aquifer Protection Permit	Covers surface impoundments, solid waste disposal facilities, mine tailings piles and ponds, heap leaching operations. This permit requires designs for the proper management of process facilities, ponds, tailings impoundments, and includes monitoring requirements to ensure compliance with the permit.	AAC R18-9 Articles 1 – 4	P-100514; JCM has amended the APP to include a new leach pad. It may require an amendment at a later date for expansion.
	APP Closure Plan and Bonding for APP Facilities	Closure strategy and estimated cost of closure, post closure monitoring, and surety bond. Bonding estimate must be approved by the agencies and the bond must be posted prior to commencement of construction.	AAC R18-9 Articles 1 – 4	Closure costs for the new leach pad have been provided with the APP amendment application.
Waste Management Division	EPA ID Number	Generators of hazardous waste must have an EPA ID prior to offering the waste for shipment.	ARS §49-922	Covers JCM
	Pollution Prevention Plan	Plan identifying opportunities to reduce waste.	ARS §49-961 thru 973	Report to be submitted annually
	Toxic Release Inventory	Submit Form R for quantity of copper in waste rock.	40 CFR 372	Report to be submitted annually
Arizona State Mine Inspector	Mined Land Reclamation Plan and Bond	Exploration and mining activities on private land with greater than 5 acres disturbance. Does not include facilities covered in Aquifer Protection Permit.	AAC R11-2-101 thru 822	Approved April 2018; may require updating for future modifications.
Arizona Department of Agriculture	Notice of Intent to Clear Land	Ensures enforcement of Arizona Native Plant Laws	ARS §3-904	60 days prior to new disturbance
Arizona Game and Fish Department		Ascertain whether or not the mining operation would endanger fish and game habitat, etc.	AAC Title 12	No T&E Species identified. Additional plans may be required

### 20.2.1 Aquifer Protection Permit Amendment

The Arizona Department of Environmental Quality (ADEQ) grants and administers Aquifer Protection Permits (APPs). ADEQ adheres to licensing timeframes for the review and approval of permit applications.

An APP is required for facilities that have the potential to discharge and impact groundwater quality. APP-regulated surface activities related to open pit mining operations include, but are not limited to, heap leach pads, ponds, stockpiles, and tailing facilities. The Johnson Camp Mine is currently covered under permit P-100514. The currently permitted facilities include four (4) leach pads, two (2) solution ponds, an intercept sump, a raffinate pond, an ILS pond, four (4) non-stormwater ponds, two (2) secondary containment ponds, and an emergency overflow pond associated with Leach Pad 5.

### 20.3 WATER MANAGEMENT

Future actions include construction of a new, lined heap leach pad with associated ponds and pipelines. Other future actions may include the construction of additional ponds at JCM. These facilities will be designed to meet prescriptive Best Available Demonstrated Control Technologies (BADCT) which identifies design requirements for stability, liner specifications, capacities, freeboard, leak detection, operations, monitoring, and closure.

### 20.4 CLOSURE AND RECLAMATION COSTS

GCC maintains surety bonds, posted with ADEQ for APP-regulated facilities, and Arizona State Mine Inspector (ASMI) for non-APP facilities. The closure (APP) and reclamation (ASMI) plans include cost estimates and financial assurance for implementing the plans. The Closure/Reclamation Plans and surety bonds will be updated to reflect any changes in the regulated facilities.

APP-regulated facilities must be closed at the end of operations and post-closure monitoring must be conducted according to the permit. Closure of APP facilities will be conducted according to the most recently approved closure plan. The solution ponds will be emptied and cleaned. Liners will be inspected for signs of leakage. The soils beneath prospective defects will be investigated and remediated as necessary. After clearance, the liner materials will be folded into the bottom of the pond for burial in place. Perimeter berms above the natural land surface will be pushed into the pond to cover the liner, contoured, and revegetated to shed surface runoff and minimize infiltration. The APP for JCM does not require that closure costs be updated until 2026. The cost for closure of any new APP-regulated facilities will be added to the total closure costs and bonded of \$7,281,757.

Non-APP facilities, such as buildings and infrastructure, will be reclaimed in accordance with the approved Mined Land Reclamation Program overseen by ASMI. The Reclamation Plan ensures safe and stable post-mining land use. Re-grading and resurfacing needs, if any, will be completed with good engineering practices minimizing unwanted surface disturbances.

### 20.5 COMMUNITY RELATIONS

GCC has worked extensively to build sustainable partnerships and bring value to the community. GCC's approach to community relations reinforces its core values and provides guidelines for making decisions on a variety of issues, ranging from charitable giving to resource development. To that end, GCC maintains a broad-based community relations and stakeholder outreach program. Various levels of activity and outreach occur as a function of the development of the Project from prefeasibility and feasibility studies, through Project construction and operations, to closure and rehabilitation. Elements of this program include:

- Targeted stakeholder outreach to government, community, business, non-profit and special interest groups, and leaders at the local, county and state level.

- Development of community relation and communication tools and resources (e.g., Project website, Project e-newsletter, and presentation materials);
- Public open houses, site tours and technical briefings when appropriate.

Crucial elements of GCC's community relations efforts will involve ensuring consistent and ongoing communication with stakeholders and providing opportunities for meaningful two-way dialogue and active public involvement. GCC will focus on ensuring the public benefits related to JCM, such as employment opportunities, supplier services, infrastructure development and community investment are optimized for the local community.

## 21 CAPITAL AND OPERATING COSTS

The JCM Mineral Resource Estimate includes inferred resources. Inferred Mineral Resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. In addition, NI 43-101 prohibits the disclosure of the results of an economic analysis that includes or is based on Inferred Mineral Resources. As a result, the Author has determined that it is not permitted to provide forecasts of future capital or operating costs. As a result, the disclosure in this section is limited to a description of the capital and operating costs, and disclosure of historical amounts.

### 21.1 CAPITAL COSTS

The total capital cost requirements to restart the JCM heap leach operation include mining cost (pre-stripping and waste dump relocation), the development of Leach Pad 5, new piping and pumping for solutions, upgrades to the electrical power distribution infrastructure, and minor Owners costs.

#### 21.1.1 Mine Capital Costs

Since mining for the Nuton Demonstration will be performed by a contractor, mine capital costs are minimal. The mine capital costs consist of an estimate of contractor mobilization and demobilization costs and contractor mining costs incurred as pre-stripping costs (Q1 and Q2 of 2025).

#### 21.1.2 Plant Capital Costs

The Johnson Camp Mine SX-EW plant was upgraded in 2019 and 2020 as part of the Stage 1 execution of the Gunnison ISR Copper Project. Upgrades included the replacement of the Raffinate pumps, the addition of three sulfuric acid tanks, and the addition of a third electrolyte filter in the Tank Farm. There are no upgrades to the JCM SX-EW plant or ponds planned for the JCM heap leach operation.

#### 21.1.3 Capital Costs Incurred

The summary categories of expenditures to build Pad 5 for the Nuton Demonstration are listed below.

- Direct costs
  - Pad 5 Development (Earthworks & Liner)
  - Site Infrastructure (Roads, Diversions)
  - Plant Upgrades (Ponds/Piping/Equipment/Reagents)
  - Electrical Infrastructure Upgrades
  - Freight
- Indirect Costs
  - Contractor indirect costs
  - EPCM
  - Vendor Services/Commissioning
  - Spares
- Owners Costs / First fills
- Contingency

The capital cost incurred through December 31, 2024 is \$36,925.

## 21.2 OPERATING COSTS

The plant operating cost includes labor, crushing/agglomerating, stacking, heap leach operation, and SX-EW costs. The plant operating costs exclude some of the direct costs specific to the Nuton Demonstration process and reagents, which are proprietary.

### 21.2.1 Mine Operating Costs

The mine plan is being mined by a mining contractor. Copper production is not expected to be achieved until the end of Q2 2025. The categories of mine operating costs are listed below.

- Contractor Costs
  - Drill
  - Blast
  - Load/Haul
- Auxiliary
- Diesel
- Indirect Mining
  - Tech Services/ Supervision
  - Assay Costs

The contractor quoted rates cover drilling, blasting, loading and hauling with production equipment and maintaining the mine site with additional auxiliary equipment.

### 21.2.2 Plant Operating Cost

The plant operating cost includes the management and irrigation of Pad 5, acid addition to raffinate sent back to the leach pad or added in agglomeration, and the operation of the JCM SX-EW plant. The plant operating cost categories by the process area are listed below.

- Heap Leach Operating Cost
- SX-EW Operating Cost
- G & A
- Treatment & Refining Charges

### 21.2.3 General and Administrative Operating Costs

General and Administrative (G&A) costs include labor and fringe benefits for administration and support personnel and other support expenses are based on the 2025 JCM budget provided by GCC. G&A costs are generally fixed costs and only G&A labor partially scales with increased or decreased production.

### 21.2.4 Reclamation and Closure Cost

Reclamation and closure costs for the JCM Project include reclamation of the leach pads, stockpiles, and waste dumps, closure of the JCM plant site and ponds, the JCM heaps and stockpiles and demolition of the ancillary buildings. Reclamation activities will be spread over three years sometime after the cessation of operations. The Closure Bond for these activities is \$7,281,757.



## 22 ECONOMIC ANALYSIS

There are no current estimates of Mineral Reserves on the Project. While the Project has a current Mineral Resource Estimate, the future production forecast is not based on that Mineral Resource Estimate. GCC made decisions to commence construction and enter production at the Project without having completed final feasibility studies. Accordingly, GCC did not base its construction and production decisions on any feasibility studies of Mineral Reserves demonstrating economic and technical viability of the Project, with positive cash flow. As a result, there is increased uncertainty and risks of achieving any level of recovery of minerals from the Project or the costs of such recovery. As the Project does not have established Mineral Reserves, GCC faces higher risks that anticipated rates of production and production costs, such as those provided in this technical report, will not be achieved. These risks could have a material adverse impact on GCC's ability to continue to generate anticipated revenues and cash flows to fund operations from and ultimately achieve or maintain profitable operations at the Project.

The Mineral Resource Estimate on the Project includes inferred resources. Inferred Mineral Resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. In addition, NI 43-101 prohibits the disclosure of the results of an economic analysis that includes or is based on inferred Mineral Resources. As a result, the Author has determined that it is not permitted to provide an economic analysis of the Project.

Information regarding taxation and historical production has been provided in this Section.

### 22.1 TAXES

A Tax Partnership Agreement was formed between GCC and Nuton LLC through which all taxes filings related to the Johnson Camp Mine will be filed. The Tax Partnership is a flow through entity with tax attributes distributed to GCC and Nuton LLC on a pro-rata basis.

Income, property and severance taxes are applicable to the JCM operation. Taxable income for income tax purposes is defined as metal revenues minus operating expenses, royalty, property and severance taxes, reclamation and closure expense, depreciation, and depletion. The combined federal and state corporate income tax rate in Arizona is 24.9 percent, after accounting for the deductibility of state tax from federal taxable income, and is applied to 'taxable income' derived from the Johnson Camp Mine within the Tax Partnership Agreement. Severance taxes are calculated as 2.5% of 50% of the tax basis (EBITDA minus tax depreciation). Property tax is based on the cost approach.

### 22.2 HISTORICAL PRODUCTION

The JCM open pits have not been operated since 2012 when Nord's contract miner ceased operations. No new material has been placed on the existing leach pads since then. Three adjacent heap leach pads, known as Pad 123 continued with residual leaching through 2017 and drain down from the heaps continues today. Pad 123 are now in the process of closure with occasional draindown after rainstorms. During the 12-month period ending December 31, 2024, a total of 308,341 lbs of copper cathode was produced. This production is solely from the existing material on the leach pad.

## 23 ADJACENT PROPERTIES

JCM lies within the porphyry copper metallogenic province of the southwestern United States. It is located in the Cochise Mining District, which is dominated by Cu-Zn skarns. With the acquisition of the Johnson Camp Mine, GCC now controls a majority of historical producing properties in the district. Tungsten and minor lead-silver-gold have been produced in adjacent properties in the district (Cooper and Silver, 1964). Tungsten has been historically produced in the area southwest of JCM in the northern half of the Texas Canyon quartz monzonite stock before and during World War I. Lead-silver was also historically produced from Paleozoic limestones in the Gunnison Hills southeast of the JCM in the early 1900s (Cooper and Silver, 1964). Mineralization on adjacent properties is not necessarily indicative of the mineralization on the JCM. The author has relied on reports by others (as referenced) for the information presented in this section and has been unable to verify the information.

**24 OTHER RELEVANT DATA AND INFORMATION**

This section is not applicable for this technical report.

## 25 INTERPRETATION AND CONCLUSIONS

Restarting the Burro pit at Johnson Camp has been investigated by Nord Resources and by others since Nord closed the mine in 2012. Mineral resources remained unmined in both pits by Nord because it was unable to arrange financing to build Pad 5. GCC has identified the opportunity to mine additional mineral resources at the currently higher copper prices.

The JCM plant has already been upgraded and JCM ponds are already operational.

The capital cost for restarting the JCM heap leaching operation includes mining pre-production, first fills/Owners costs, leach pad construction, and other upgrades exclusive of equipment specific to the Nuton Demonstration. Staffing for the JCM Project is in place and some new hires will be needed to augment the staff that is already engaged by GCC.

Based on the current pit shell, mineral resources for the Burro pit is 84.0 million tons of M&I and 11.5 million tons of Inferred with a grade of 0.35% TCu at a cut-off grade of 0.12% TCu. The Copper Chief mineral resources total 17.2 million tons of M&I and 13.5 million tons of Inferred material at an average grade of 0.31% TCu at a 0.12% TCu cut-off grade.

### 25.1 JCM OPPORTUNITIES

1. Additional infill and step-out drilling, including drilling focused on deeper sulfides, could yield increased tonnage and/or grade in some areas within the mineral resource.
2. Detailed mine planning and scheduling may result in higher production rates and reduced mining unit costs. Mine plan optimization could bring higher grade material closer to start for better initial cash flow and could reduce waste tons.
3. Conduct metallurgical test work on sulfides and transitional mineralization, which could generate higher recoveries or lower acid consumptions that presently estimated.
4. Testing may also demonstrate that less crushing is required to achieve the estimated copper recoveries resulting in reduced capital and operating costs.
5. More detailed mine design and planning focused on bringing higher-grade mineralization forward in the mine schedule or delaying/reducing waste stripping, which could result in improved economics.
6. Relocating the existing waste rock stockpile could be performed with smaller, cheaper equipment as well as timed later in the mine schedule to increase near-term revenue.
7. Demonstration of successful leaching of sulfide and transitional material could provide opportunities for mining additional satellite deposits that are known to exist in the Johnson Camp District, including the Strong and Harris and Gunnison deposits.
8. Integration of planning efforts for the Johnson Camp, Strong and Harris, and Gunnison deposits could reveal synergies or development strategies for improving financial returns and increasing the mine life of the Johnson Camp operation.

### 25.2 JCM RISKS

1. The cost of sulfuric acid in the recent past spiked to over \$230/ton. This cost is considered to be an outlier since the recent historic acid price is between \$95/ton to \$125/ton over the previous six years. For the Nuton Demonstration, an average sulfuric acid price above \$200/ton has been anticipated. The acid price could spike in the short term, as it did in 2022 and 2023 and could increase the operating cost of heap leaching.
2. Other reagent costs, principally diluent and extractant could increase materially, increasing SX-EW operating costs.
3. The cost of power in Cochise County has been affordable over the last several years. For this study, the cost of power has been approximately \$0.079/kWh. The current increased price of natural gas which is used by the local generating company could impact the long-term cost of power needed for the Project.

4. Increased lead times for construction could materially delay the start of leaching and generation of revenue.

## **26 RECOMMENDATIONS**

### **26.1 GEOLOGY AND MINERAL RESOURCES**

- Continue to improve geology and estimation models acquired through continued mining development.
- Continue to investigate and improve geochemical signature modeling, as a geological reconciliation of visual alteration logging, to test the oxidation zonation with the Burro pit.
- Incorporate additional data density variability samples into sample workflow and update current density estimation procedures.
- Update the geologic model using current software, modeling practices, and geologic understanding in alignment with the more recent block model update. While this is not expected to result in any material changes to the mineral resource estimate, it is good practice to maintain consistency between models at the site.

### **26.2 MINING METHOD**

- Additional detail should be given to the construction and irrigation schedule of the stacked ROM leach material and also the Nuton Demonstration leach material on the leach pad. This will likely necessitate a refinement of the mine schedule.
- Consideration should be given to the synergies between the Gunnison open pit and the Johnson Camp open pit for future planning work looking at mining beyond the Nuton Demonstration schedule. This could include: reduced streaming royalties on a % of price basis, shared acid production costs, shared SX-EW capacity.

### **26.3 MINERAL PROCESSING**

- Continue with laboratory assessment of different reagent and additive parameters to further optimize the recovery and operating costs, as well as pre-empt potential anomalies.
- Pursue remedies for decrepitation of carbonate-bearing mineralized materials that could blind off heap leaching.
- Continue validation of bench testing methods for calibration to actual plant performance.
- Design crushing-agglomerating system that is fit for service with respect to crush sizes and throughput.



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**APPENDIX A: TECHNICAL REPORT CONTRIBUTORS AND PROFESSIONAL QUALIFICATIONS**

## CERTIFICATE OF QUALIFIED PERSON

**John Woodson**

I, John Woodson, P.E., SME-RM do hereby certify that:

1. I am employed as Chief Financial Officer, Senior Vice President, Project Manager and Project Sponsor of:  
M3 Engineering & Technology Corporation  
2051 W. Sunset Road, Ste. 101  
Tucson, Arizona 85704
2. I graduated with a Bachelor of Science in Civil Engineering from the University of Arizona in 2003 and a Master of Science in Civil Engineering from the University of Arizona in 2008.
3. I am a registered professional engineer in good standing in the State of Arizona in the area of Structural Engineering (No. 47714). I am also registered as a professional engineer in the states of California (No. 73405), Nevada (No. 029163) and Michigan (No. 6201057625).
4. I have worked as an engineer for a total of 21 years. My experience includes 19 years at M3 Engineering and Technology Corporation working on all aspects of mine plant development for base and precious metals projects with a specific focus on plant layout, infrastructure, estimating and scheduling. As Project Manager and Sponsor, I have been involved with studies as well as full engineering, procurement, and construction management (EPCM) projects.
5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
6. I am a contributing author for the preparation of the technical report titled "Johnson Camp Mine NI 43-101 Technical Report" ("Technical Report") dated effective March 12, 2025, prepared for Gunnison Copper Corp.; and am responsible for Sections 1 (except 1.2 through 1.15, 1.18, 1.21), 2, 3, 18, 19, 21 (except 21.1.1 and 21.2.1), 22, 24, 25, 26, and 27. I have not visited the project site.
7. I have not had prior involvement with the property that is the subject of the Technical Report.
8. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
9. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Signed and dated this 31<sup>st</sup> day of March 2025.

(Signed and Sealed) "John W. Woodson"

John W. Woodson, P.E., SME-RM





## CERTIFICATE OF QUALIFIED PERSON

I, Jeffrey Bickel, C.P.G. (AIPG) and Registered Geologist (Arizona), do hereby certify that:

1. I am currently employed as a Senior Geologist at RESPEC Company LLC (formerly Mine Development Associates, Inc.) ("RESPEC"), at 210 South Rock Blvd, Reno, Nevada, 89502.
2. This certificate applies to the technical report titled "Johnson Camp Mine NI 43-101 Technical Report" ("Technical Report") dated effective March 12, 2025.
3. I graduated with a Bachelor of Science degree in Geological Sciences from Arizona State University in 2010. I am a Certified Professional Geologist (#12050) with the American Institute of Professional Geologists. I am also a Registered Geologist in the state of Arizona (#60863).
4. I have worked as a geologist continuously for over 14 years since graduation from university. During that time, I have previously explored, drilled, evaluated, and modelled copper deposits similar to Johnson Camp in Arizona and elsewhere and have estimated the mineral resources for such deposits.
5. I have read the definition of "qualified person" set out in National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
6. I have visited the Johnson Camp Mine site on multiple occasions, most recently on December 5, 2024.
7. I worked as a geologist for the issuer from 2010-2020. I also co-authored three prior technical reports for the issuer, most recently the technical report dated effective February 1, 2023 and titled "NI 43-101 Technical Report Gunnison Copper Project Prefeasibility Study Update and JCM Heap Leach Preliminary Economic Assessment."
8. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.
9. I am responsible for sections 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.12, 1.20, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, and 23 of the Technical Report.
10. I have read National Instrument 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance with that instrument and form.
11. As of the Effective Date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 31<sup>st</sup> day of March 2025.

(Signed and Sealed) "Jeffrey Bickel"

Jeffrey Bickel, C.P.G. (#12050)

210 South Rock Boulevard  
Reno, NV 89502  
775.856.5700

## CERTIFICATE OF QUALIFIED PERSON

**Abyl Sydykov, PhD, PE**

I, Abyl Sydykov, PhD, PE, do hereby certify that:

1. I am employed as Process Engineer and Project Manager of:  
M3 Engineering & Technology Corporation  
2051 W. Sunset Road, Ste. 101  
Tucson, Arizona 85704
2. I graduated with a degree in Non-Ferrous Metallurgy from the National University of Science and Technology "MISIS" (Moscow, Russia) in 1992, and a PhD in Metallurgy from the RWTH Aachen University (Germany) in 2004.
3. I am a registered professional engineer in good standing in the State of Arizona in the area of Mining and Mineral Processing (No. 80378).
4. I have worked in metallurgical and mineral processing operations, research, consulting, and engineering for a total of 29 years. My experience includes 3 years at M3 Engineering and Technology Corporation working on process engineering and project management. As Process Engineer, I have been involved in studies and engineering processing plants for copper, lead, zinc, gold and silver mining projects.
5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
6. I am a contributing author for the preparation of the technical report titled "Johnson Camp Mine NI 43-101 Technical Report" ("Technical Report") dated effective March 12, 2025, prepared for Gunnison Copper Corp.; and am responsible for Sections 1.15 and 17.
7. I visited the Johnson Camp property on March 27, 2025.
8. I have not had prior involvement with the property that is the subject of the Technical Report.
9. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
10. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.
11. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
12. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Signed and dated this 31<sup>st</sup> day of March 2025.

(Signed and Sealed) "Abyl Sydykov"

Abyl Sydykov, PhD, PE

## CERTIFICATE OF QUALIFIED PERSON

**Dr. Terence P. McNulty, PE, DSc**

I, Dr. Terence P. McNulty, PE, DSc, do hereby certify that:

1. I am President of:  
T, P, McNulty and Associates, Inc,  
4321 North Camino de Carrillo, Tucson, AZ 85750
2. I graduated with a BS in Chemical Engineering from Stanford University in 1960 and earned an MS in Metallurgical Engineering from Montana School of Mines in 1963 and a doctorate (DSc) from Colorado School of Mines in 1966.
3. I am a Registered Professional Engineer in Colorado with reciprocity in most states. My registration is current (No. 24789) and I am in good standing.
4. I have worked as a metallurgical engineer for a total of over 55 years since completion of post-graduate studies. My experience includes serving as a Research Engineer, Mill Superintendent, Supervisor of Process Engineering, and Director of Corporate R&D for The Anaconda Company, VP-Technical Operations for Kerr-McGee Chemical Corp., President of Hazen Research, Inc., and President of T. P. McNulty and Associates, Inc. for the last 33 years.
5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
6. I am responsible for Sections 1.11 and 13 of the Technical Report "Johnson Camp Mine NI 43-101 Technical Report" ("Technical Report") dated effective March 12, 2025, prepared for Gunnison Copper Corp.
7. I visited the Johnson Camp Site in the 1990s when it was owned by Cyprus Minerals.
8. I had prior involvement with the property that is the subject of the Technical Report. I was responsible for the Sections 13 (except 13.2.3.1), 24.13 of the technical report titled "Gunnison Copper Project, NI 43-101 Technical Report, Gunnison Copper Project Prefeasibility Study Update and JCM Heap Leach Preliminary Economic Assessment" (the "Technical Report") dated effective February 1, 2023.
9. Except as disclosed in paragraph 8 of this certificate, I have not provided consulting services to, or otherwise been involved with, the project owner prior to the current assignment.
10. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
11. I am independent of the issuer by applying all of the tests in Section 1.5 of National Instrument 43-101.
12. I have read National Instrument 43-101 and Form 43-101F, and the Technical Report has been prepared in compliance with that instrument and form.
13. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Signed and dated this 31<sup>st</sup> day of March 2025.

(Signed and Sealed) "Dr. Terence P. McNulty"  
Dr. Terence P. McNulty, PE, DSc

## **CERTIFICATE of QUALIFIED PERSON**

**R. Douglas Bartlett, C.P.G.**

I, R. Douglas Bartlett, do hereby certify that:

1. I am currently employed as a Hydrogeologist by:

Clear Creek Associates, a subsidiary of Geo-Logic Associates  
8777 N. Gainey Center Dr., Suite 250  
Scottsdale, Arizona, 85258

2. I am a graduate of Colorado State University

3. I am a:

- Certified Professional Geologist with the American Institute of Professional Geologists
- Registered Geologist in the States of Arizona, California, Oregon, Washington, and Alaska

4. I have practiced geology and hydrogeology since 1977 at: Dames & Moore in Denver and Phoenix; Anaconda Minerals in Denver, Colorado; and Clear Creek Associates (Geo-Logic Associates) in Scottsdale, Arizona. My expertise includes mining-related hydrogeologic investigations and groundwater modeling.

5. I have read the definition of “qualified person” set out in National instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.

6. I am responsible for Sections 1.18, 16.9, and 20 of the technical report titled “Johnson Camp Mine NI 43-101 Technical Report” (“Technical Report”) dated effective March 12, 2025 prepared for Gunnison Copper Corp.

7. I had prior involvement with the property that is the subject of the Technical Report. I was responsible for Sections 16, 20, and 24.20 of the technical report titled “Gunnison Copper Project Prefeasibility Study Update and JCM Heap Leach Preliminary Economic Assessment” (“Technical Report”) dated effective March 11, 2022. I was also responsible for Sections 16, 20, 24.16.5, and 24.20 of the technical report titled “Gunnison Copper Project Prefeasibility Study Update and JCM Heap Leach Preliminary Economic Assessment” dated effective February 1, 2023.

8. I last visited the Johnson Camp Mine site on May 15, 2019.

9. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information required to be disclosed to make the report not misleading.

10. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.

11. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Signed and dated this 31<sup>st</sup> day of March 2025

(Signed and Sealed) “R. Douglas Bartlett”

R. Douglas Bartlett, C.P.G.

## CERTIFICATE OF QUALIFIED PERSON

I, Jacob W. Richey, P.E. do hereby certify that:

1. I am currently employed as a Senior Mining Engineer by:

Independent Mining Consultants, Inc.  
3560 E. Gas Road  
Tucson, Arizona, USA 85714

2. I graduated with the following degrees from the Colorado School of Mines.  
Bachelors of Science, Mining Engineering – 2009
3. I am a Registered Professional Mining Engineer in the State of Arizona USA.  
Registration # 64139
4. I have worked as a mining engineer for more than 14 years. I have been involved with the preparation of mineral resources, mineral reserves, and mine plans for multiple hard rock metal projects over that time.
5. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI43-101.
6. I am responsible for sections 1.13, 1.14, 15, 16 (except 16.2 and 16.9), 21.1.1 and 21.2.1 of the Technical Report titled “Johnson Camp Mine NI 43-101 Technical Report”, with the effective date of March 12, 2025 prepared for Gunnison Copper Corp.
7. I last visited the Johnson Camp Mine property on February 14, 2025.
8. I have previously been involved with engineering work on the Johnson Camp Project since 2021.
9. As of the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
10. I am independent of the issuer applying the definition in Section 1.5 of NI 43-101.
11. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
12. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated: 31 March 2025

(Signed and Sealed) “Jacob W. Richey”

Jacob W. Richey  
Professional Mining Engineer AZ #64139

## CERTIFICATE OF QUALIFIED PERSON

**Thomas M. Ryan, P.E.**

I, Thomas M. Ryan, P.E., do hereby certify that:

1. I am a Principal Engineer of:  
  
Call & Nicholas, Inc.  
2475 N. Coyote Drive Tucson AZ 85745
2. I am a graduate of the University of Arizona having received a Bachelor of Science in Geological Engineering in 1986 and Master of Science in 1987.
3. I am a registered Professional Engineer in good standing in Arizona (27693), New Mexico (14166) and Utah (11106129).
4. I have worked as an Engineer for a total of 38 years. My experience includes 30 years in Geotechnical Engineering as it applies to rock slope and underground stability for mine design.
5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
6. I am a contributing author for the preparation of the technical report titled "Johnson Camp Mine NI 43-101 Technical Report" ("Technical Report") dated effective March 12, 2025, prepared for Gunnison Copper Corp.; and am responsible for Section 16.2. I visited the project site on October 18, 2023.
7. I have prior involvement with the property that is the subject of the Technical Report as a technical advisor during the period of 1999 to 2008.
8. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
9. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Signed and dated this 31<sup>st</sup> day of March 2025.

(Signed and Sealed) "Thomas M. Ryan"

Thomas M. Ryan, P.E.



## APPENDIX B: MINERAL CLAIM DETAIL

### Patented Mining Claims

#### Parcel 1

Arizona, Blue Grass, Puzzle, Enough, and Carlton patented lode mining claims, Mineral Survey No. 4340

#### Parcel 2

Afterthought, Burro, Burro No. 3, Coronado, Coronado No. 2, and Mason No. 1 patented lode mining claims, Mineral Survey No. 4571

#### Parcel 3

St. George patented lode mining claim, Mineral Survey No. 1966

#### Parcel 4

Mayflower (aka May Flower) patented lode mining claim, Mineral Survey No. 2764

#### Parcel 5

Acorn, A-Number One, A-Number Two, Chicago, Cochise, Copper Thread, Johnson, Little Johnnie, Rough Rider, Tenderfoot, and United Fraction patented lode mining claims, Mineral Survey No. 4314

#### Parcel 6

Blue Lead, North Star, Little Bush, Copper Chief, Southern Cross, Blue Lead Extension, Dwarf, and Esmeralda patented lode mining claims, Mineral Survey No. 3242 Anaconda, and Sara patented lode mining claims, Mineral Survey No. 1525

#### Parcel 8

Southern patented lode mining claim, Lot 45, Mineral Survey No. 327

#### Parcel 9

Mi-an-te-no-mah patented lode mining claim, Lot 48, Mineral Survey No. 330

#### Parcel 10

Peabody patented lode mining claim, Lot 39, Mineral Survey No. 286

#### Parcel 11

Donna Anna patented lode mining claim, Lot 40, Mineral Survey No. 287

#### Parcel 12

Highland Mary patented lode mining claim, Lot 37, Mineral Survey No. 284

#### Parcel 13

Copper King patented lode mining claim Lot 38, Mineral Survey No. 285 382681 v2

#### Parcel 14

Golden Shield patented lode mining claim, Lot 43, Mineral Survey No. 325

#### Parcel 15

Republic patented lode mining claim, Lot 42, Mineral Survey No. 324

#### Parcel 16

Chicora patented lode mining claim, Lot 44, Mineral Survey No. 326

#### Parcel 17

Tycoon patented lode mining claim, Lot 47, Mineral Survey No. 329

#### Parcel 18

Mammoth patented lode mining claim, Lot 49, Mineral Survey No. 331

#### Parcel 19

Keystone, Copper Bell, Dewey, True Blue, and Ross patented lode mining claims, Mineral Survey No. 1717

#### Parcel 20

382681 v2 Hillside and Pittsburg patented lode mining claims, Mineral Survey No. 3306

#### Parcel 21

San Jacinto patented lode mining claim, Lot 46, Mineral Survey No. 328

**JOHNSON CAMP MINE**  
**FORM 43-101F1 TECHNICAL REPORT**

**BLM Claims**

CLAIM NAME AND NUMBER	BLM SERIAL # (AMC #)	TOWNSHIP, RANGE, SECTION*	MAINTENANCE COSTS	AREA
		Mr Twn Rng Sec		
ADDIE R	403667	14 0150S 0220E 023	\$200.00	Johnson Camp
ALAMOSA	403668	14 0150S 0220E 023	\$200.00	Johnson Camp
BONANZA	403676	14 0150S 0220E 022	\$200.00	Johnson Camp
BURRO L	403678	14 0150S 0220E 035	\$200.00	Johnson Camp
BURRO 4	403679	14 0150S 0220E 035	\$200.00	Johnson Camp
BURRO 5	403680	14 0150S 0220E 035	\$200.00	Johnson Camp
BURRO 6	403681	14 0150S 0220E 035	\$200.00	Johnson Camp
BURRO 7	403682	14 0150S 0220E 035	\$200.00	Johnson Camp
BURRO 8	403683	14 0150S 0220E 035	\$200.00	Johnson Camp
BURRO NO 9	403684	14 0150S 0220E 035	\$200.00	Johnson Camp
BURRO 19	403685	14 0150S 0220E 027	\$200.00	Johnson Camp
CALUMET	403686	14 0150S 0220E 036	\$200.00	Johnson Camp
CHELSIE FRACTION	403688	14 0150S 0220E 022	\$200.00	Johnson Camp
COLORADO	403689	14 0150S 0220E 022	\$200.00	Johnson Camp
DEFENDER	403690	14 0150S 0220E 022	\$200.00	Johnson Camp
ELLENOR	403698	14 0150S 0220E 027	\$200.00	Johnson Camp
ERICKA	403699	14 0150S 0220E 036	\$200.00	Johnson Camp
EULA BELLE	403701	14 0150S 0220E 027	\$200.00	Johnson Camp
GLADYS R	403702	14 0150S 0220E 036	\$200.00	Johnson Camp
HAGERMAN	403704	14 0150S 0220E 036	\$200.00	Johnson Camp
IMOGENE	403705	14 0150S 0220E 027	\$200.00	Johnson Camp
INDICATOR	403707	14 0150S 0220E 022	\$200.00	Johnson Camp
KATIE	403708	14 0150S 0220E 022	\$200.00	Johnson Camp
KENTUCKY	403709	14 0150S 0220E 023	\$200.00	Johnson Camp
LAST CHANCE	403710	14 0150S 0220E 027	\$200.00	Johnson Camp
LIME NO 1	403712	14 0150S 0220E 022	\$200.00	Johnson Camp
LIME NO 2	403713	14 0150S 0220E 022	\$200.00	Johnson Camp
LIME NO 3	403714	14 0150S 0220E 022	\$200.00	Johnson Camp
LIME NO 4	403715	14 0150S 0220E 022	\$200.00	Johnson Camp
LINDA SUE	403716	14 0150S 0220E 027	\$200.00	Johnson Camp
MARY EILENE	403719	14 0150S 0220E 027	\$200.00	Johnson Camp
MASON	403720	14 0150S 0220E 027	\$200.00	Johnson Camp
MESCAL NO 5	403721	14 0150S 0220E 027	\$200.00	Johnson Camp
MILLINGTON	403722	14 0150S 0220E 023	\$200.00	Johnson Camp
MIRIAM	403723	14 0150S 0220E 022	\$200.00	Johnson Camp
MOORE #1	403724	14 0150S 0220E 022	\$200.00	Johnson Camp
MOORE #2	403725	14 0150S 0220E 022	\$200.00	Johnson Camp
MOORE #3	403726	14 0150S 0220E 022	\$200.00	Johnson Camp
NELDA LANE	403727	14 0150S 0220E 027	\$200.00	Johnson Camp
PUZZLE NO 2	403731	14 0150S 0220E 022	\$200.00	Johnson Camp
SHARIE LYNN	403742	14 0150S 0220E 027	\$200.00	Johnson Camp
SHIRLEY LOUISE	403743	14 0150S 0220E 027	\$200.00	Johnson Camp
BRENDA KAYE	405106	14 0150S 0220E 027	\$200.00	Johnson Camp
BURRO A	405107	14 0150S 0220E 026	\$200.00	Johnson Camp
BURRO B	405108	14 0150S 0220E 027	\$200.00	Johnson Camp
BURRO 17	405121	14 0150S 0220E 027	\$200.00	Johnson Camp
BURRO 18	405122	14 0150S 0220E 027	\$200.00	Johnson Camp

**JOHNSON CAMP MINE**  
**FORM 43-101F1 TECHNICAL REPORT**

CLAIM NAME AND NUMBER	BLM SERIAL # (AMC #)	TOWNSHIP, RANGE, SECTION*	MAINTENANCE COSTS	AREA
BURRO 20	405123	14 0150S 0220E 027	\$200.00	Johnson Camp
CHARLENE	405124	14 0150S 0220E 027	\$200.00	Johnson Camp
FRANCINE	405126	14 0150S 0220E 027	\$200.00	Johnson Camp
JANE RAE	405127	14 0150S 0220E 027	\$200.00	Johnson Camp
BURRO C	408182	14 0150S 0220E 026	\$200.00	Johnson Camp
BURRO D	408183	14 0150S 0220E 026	\$200.00	Johnson Camp
BURRO E	408184	14 0150S 0220E 026	\$200.00	Johnson Camp
BURRO G	408185	14 0150S 0220E 026	\$200.00	Johnson Camp
BURRO H	408186	14 0150S 0220E 026	\$200.00	Johnson Camp
BURRO I	408187	14 0150S 0220E 026	\$200.00	Johnson Camp
BURRO 11	408188	14 0150S 0220E 026	\$200.00	Johnson Camp
BURRO 12	408189	14 0150S 0220E 026	\$200.00	Johnson Camp
BURRO 13	408190	14 0150S 0220E 026	\$200.00	Johnson Camp
BURRO 14	408191	14 0150S 0220E 026	\$200.00	Johnson Camp
BURRO 15	408192	14 0150S 0220E 026	\$200.00	Johnson Camp
BURRO 16	408193	14 0150S 0220E 026	\$200.00	Johnson Camp
CORNADO NO 1	408194	14 0150S 0220E 026	\$200.00	Johnson Camp
ROSIE R	408195	14 0150S 0220E 026	\$200.00	Johnson Camp
J SULLY #14	408917	14 0150S 0220E 036	\$200.00	Johnson Camp
J SULLY #15	408918	14 0150S 0220E 036	\$200.00	Johnson Camp
GUNNY 21	AZ105799835	14 0150S 0220E 027	\$200.00	Johnson Camp
GUNNY 22	AZ105799836	14 0150S 0220E 027	\$200.00	Johnson Camp
GUNNY 23	AZ105799837	14 0150S 0220E 027	\$200.00	Johnson Camp
GUNNY 24	AZ105799838	14 0150S 0220E 027	\$200.00	Johnson Camp
GUNNY 25	AZ105799839	14 0150S 0220E 027	\$200.00	Johnson Camp
GUNNY 26	AZ105799840	14 0150S 0220E 027	\$200.00	Johnson Camp
GUNNY 27	AZ105799841	14 0150S 0220E 027	\$200.00	Johnson Camp
GUNNY 28	AZ105799842	14 0150S 0220E 027	\$200.00	Johnson Camp
GUNNY 29	AZ105799843	14 0150S 0220E 027	\$200.00	Johnson Camp
GUNNY 30	AZ105799844	14 0150S 0220E 027	\$200.00	Johnson Camp
GUNNY 31	AZ105799845	14 0150S 0220E 027	\$200.00	Johnson Camp
GUNNY 32	AZ105799846	14 0150S 0220E 027	\$200.00	Johnson Camp
GUNNY 33	AZ105799847	14 0150S 0220E 027	\$200.00	Johnson Camp
GUNNY 34	AZ105799848	14 0150S 0220E 027	\$200.00	Johnson Camp
GUNNY 35	AZ105799849	14 0150S 0220E 027	\$200.00	Johnson Camp
GUNNY 36	AZ105799850	14 0150S 0220E 027	\$200.00	Johnson Camp
*Some claims may extend into adjacent Townships, Ranges or Sections				
			<b>ANNUAL COST</b>	<b>TOTAL # OF CLAIMS</b>
<b>TOTAL CLAIMS</b>			<b>\$16,600.00</b>	<b>83</b>

## **JOHNSON CAMP FEE LANDS**

The following parcels of fee land are all situated in Township 15 South, Range 22 East, G&SRB&M, Cochise County, Arizona

### **Parcel 1**

Section 26: Lots 8, 9, 10, and 11 EXCEPT all coal and other minerals as reserved in the patent from the United States of America, containing 139.00 acres, more or less.

### **Parcel 2**

Section 26: Those portions of the King and Wolfrime Queen patented lode mining claims lying within the Southeast Quarter (SE1/4) as shown on Mineral Survey No. 1800, U.S. Patent No. 40087, recorded in the records of Cochise County at Book 26, Deeds of Mines, Page 251, containing 1.00 acres, more or less.

### **Parcel 3**

Section 24: Lot 16

Section 25: Lots 11, 13, 14, 16, 17, 18, 20, and 21 382681 v2 EXCEPT any portion of Section 25 lying in the Southeast Quarter of the Northwest Quarter and the Northeast Quarter of the Southwest Quarter of Section 25, Township 15 South, Range 22 East, G&SRB&M, conveyed by Special Warranty Deed dated January 26, 1987 from Cyprus Mines Corporation, Grantor, to David A. Rae, Grantee, recorded in the Cochise County records as Document No. 870102364. EXCEPT a right-of-way for ditches and canals constructed by the authority of the United States as reserved in the patent from the United States of America.

Containing 53.444 acres, more or less.

### **Parcel 4**

Section 23: Lots 11, 12, 13, 15, and 16

Section 24: Lots 11, 12, and 13 EXCEPT any portion lying within the South Half of the Southeast Quarter of the Northwest Quarter (S1/2SE1/4NW1/4) and the East Half of the Southwest Quarter (E1/2SW1/4) of Section 24, Township 15 South, Range 22 East, G&SRB&M conveyed by Special Warranty Deed dated January 26, 1987 from Cyprus Mines Corporation, Grantor, to David A. Rae, Grantee, recorded in the Cochise County records as Document No. 870102364.

Section 25: Lot 12 EXCEPT any portion lying within the Southeast Quarter of the Northwest Quarter (SE1/4NW1/4) and the Northeast Quarter of the Southwest Quarter (NE1/4SW1/4) of Section 25, Township 15 South, Range 22 East, G&SRB&M, conveyed by Special Warranty Deed dated January 26, 1987, from Cyprus Mines Corporation, Grantor, to David A. Rae, Grantee, recorded in the Cochise County records as Document No. 870102364.

Section 26: Lots 4, 14, 15, 16, 17, 18, and 19; Southwest Quarter of the Northwest Quarter (SW1/4NW1/4) EXCEPT a right-of-way for ditches and canals constructed by the authority of the United States as reserved in the patent from the United States of America. Containing 307.47 acres, more or less.

Section 25: Lot 15 consisting of 37.53 acres, more or less; and Lot 16 consisting of 38.26 acres, more or less; and Lot 19 consisting of 40 acres, more or less, subject to ownership of those portions of unpatented claims Gladys R and Erika that lie North of the Southern boundary of Lot 19; and

Those portions of Lots 20 and 21 that lie East of the survey line dated April 23, 1989 completed by H.W. Smith, Registered Land Surveyor; and Those portions of the Cochise Lode Claim and the United Fraction Lode Claim that lie East of the survey line dated April 23, 1989 completed by H.W. Smith, Registered Land Surveyor; and That portion of

**JOHNSON CAMP MINE**  
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the Highland Mary Lode Claim lying East of the survey line dated April 23, 1989 completed by 382681 v2 H.W. Smith, Registered Land Surveyor. All described lands, in sum, containing 116.267 acres, more or less.