National Instrument 43-101 Technical Exploration Report, Yuma King Copper Project, La Paz County, Arizona, USA

Report Date: December 1, 2024
Effective Date: December 1, 2024

Prepared for:

CuQuest Resources, Inc.
1055 W. Georgia St., Suite 1500
Vancouver, BC
V6E4N7

Prepared by Qualified Person:
Dr. Jan C. Rasmussen
Arizona R.G. 15664
SME-RM (No. 3526300RM)
P. O. Box 36971
Tucson, AZ 85740

IMPORTANT NOTICE

This report was prepared as a National Instrument 43-101 Technical Report for CuQuest Resources Inc. by Dr. Jan C. Rasmussen, Consulting Geologist and Qualified Person (QP). The quality of information, conclusions, and estimates contained herein is consistent with the scope of the QP's services based on:

i) information available at the time of preparation,

ii) data supplied by outside sources, and

iii) the assumptions, conditions, and qualifications set forth in this report.

This report is intended for use by CuQuest Resources Inc. subject to the terms and conditions of their contract with MagmaChem Exploration, Inc., which permits CuQuest to file this report with Canadian Securities Regulatory Authorities pursuant to National Instrument 43-101, Standards of Disclosure for Mineral Projects. Except for the purposes legislated under provincial securities law, any other use of this report by any third party is at that party's sole risk.

CERTIFICATE OF QUALIFIED PERSONS

I, Jan C. Rasmussen, R.G., SME-RM, do hereby certify that:

1. I am currently a Consulting Geologist at P.O. Box 36971, Tucson, Arizona 85740 U.S.A.
2. I am a graduate of the University of Arizona, Tucson, Arizona with a B.S. in Geology in 1965, an M.S. in Geology in 1969, and a Ph.D. in Economic Geology in 1993 and have practiced my profession since 1968.
3. I am a Registered Member of the Society of Mining and Metallurgy and Exploration (No. 3526300RM) and a licensed Professional Geologist in the State of Arizona (RG-15664).
4. I have worked as a Geologist for 53 years (as a Resource Geologist for 8 years as an employee of a state mining/geology agencies, for 33 years as an independent consultant, and for 12 years as an employee of various consulting firms with experience in mineral exploration and environmental permitting of base metal deposits).
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 the preparation of this report, titled "*National Instrument 43-101 Technical Report, Yuma King Copper Project, La Paz County, Arizona, USA*", dated October 1, 2024, with an effective date of October 1, 2024.
7. I personally inspected the Yuma King Copper Project on September 21-23, 2011, and October 18-19, 2024, and was previously involved in preparation of the "*NI 43-101 Technical Exploration Report – Yuma King Project, La Paz County, Arizona, USA"*, with an effective date of October 1, 2011. I prepared this current "*National Instrument 43-101 Technical Report, Yuma King Copper Project, La Paz County, Arizona, USA*", dated November 26, 2024.
8. As of the date of this certificate and 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.
9. I am independent of the Issuer, vendor, and property applying all of the tests in section 1.5 of NI 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1 and submit that this Technical Report has been prepared in accordance with that instrument and form.

Dated this 1st day of December, 2024

Jan C. Rasmussen

Signature of Qualified Person

Jan C. Rasmussen, Ph.D., SME-RM
Printed name of Qualified Person

EXECUTIVE SUMMARY

Introduction

CuQuest Resource, Inc. is a mineral exploration company headquartered in Vancouver, Canada, incorporated on March 11, 2024.

The Yuma King Copper Project (the "Project") is an historically productive copper mine located in La Paz County, Arizona. The Yuma King Copper Project was previously mined by various producers, producing in excess of 8,619 short tons of ore from underground workings between 1940 and 1963, producing 461,686 lb. Cu, 2,700 lb. lead, 261 troy oz. gold and 5,371 oz. Ag (Rasmussen and Keith, 2024).

The results of ongoing exploration at the Yuma King project indicate that copper mineralization with mineable potential exists at the site. Using Arizona Department of Mines and Mineral Resources assay data from a report by Coupal (1944, 1950), Russell (2005) calculated an historical inferred (non-NI-43-101 compliant) combined oxide and sulfide copper resource estimate of 550,485 tons from an estimated ore thickness of 80 ft at 3.03% Cu. Rhenium is locally elevated in skarn molybdenite and averages 0.034%.

This report was prepared in accordance with the requirements and guidelines set forth in NI 43-101 Companion Policy 43-101CP and Form 43-101F1 (June 2011), and the mineral resources presented herein are classified according to Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards.

Property Description and Ownership

The Yuma King project is an advanced, porphyry copper-molybdenum-gold exploration project located in west-central Arizona in the Ellsworth mining district in the Granite Wash Mountains, La Paz County. It is approximately 95 miles (153 km) west of Phoenix and is 40 miles (mi) southeast of Parker. The center of the property is approximately latitude 33º50' N and longitude 113º45' W, with cadastral location of Sections 19, 20, 29, and 30, Township 6 North (T6N), Range 14 West (R14W), and Sections 24 and 25, T6N, R15W, Gila and Salt River Meridians.

The Yuma King project consists of 515 unpatented mining claims staked by Merrill Palmer and leased to CuQuest Resources, Inc. Their lease/purchase agreement includes 6 mining claims at the historic Yuma mine staked by the Fiddes family and purchased by Merrill Palmer.

Geology and Mineralization

The geology of the Granite Wash Mountains is complicated by numerous thrust faults and igneous intrusions ranging in age from Jurassic through Cretaceous. The skarn/replacement copper-gold mineralization at the historic Yuma mine is cut off at the base by the Yuma mine thrust and at the top by the Black Jack thrust. Other folding and thrust faults have repeated the skarn/replacement horizon in the Paleozoic limestones and dolomites of the Kaibab, Redwall, and Martin formations.

The copper-gold-silver-molybdenum (rhenium) mineralization is related to an Early Jurassic intrusive complex dated at 191 Ma. This complex includes monzodiorite porphyry/aplite sills and skarn mineralization associated with magnetite and strong magnetic anomalies at the historic Yuma mine and in the drilling. The quartz monzonite porphyry of the Jurassic intrusive complex is related to copper-gold molybdenum porphyry mineralization.

Supergene enrichment of these pre-thrust mineralized areas resulted in a copper oxide mineralized target with silver chloride stringers. The oxide mineralization includes azurite, malachite, chrysocolla, and tenorite at the historic Yuma mine adit.

A post-thrust, sheared, quartz-gold-pyrite event consists of pyritic gold mineralization emplaced as disseminations and high-grade pyritic, low-angle vein zones within shears at the contact between Cambrian quartzite (Bolsa Quartzite) and Abrigo Formation and associated with microdiorite dikes). The Devonian-

Mississippian carbonate section has been inverted and hosts the copper-bearing magnetite skarns.

Additional mineralization includes thrust fault-shear-zone hosted tungsten, such as at the historic Three Musketeers and Jewel Anne mines, and greisen tungsten mineralization associated with a Late Cretaceous-Early Tertiary muscovite aplogranite stock. Tungsten occurs as high grade scheelite in quartz veins, veinlets, and greisens stockworks in these historic mines.

Kyanite mineralization is associated with quartzitic rocks to the south of the Yuma mine and has been prospected by bull dozer cuts. The kyanite mineralization is associated with rutile and is probably related to the Late Cretaceous prograde metamorphism associated with thrust burial and peraluminous magmatism. The related sillimanite is an overprint on the Early Jurassic skarn mineralization at the Yuma Mine.

Gold mineralization associated with local high grade zones in or near microdiorite intrusive dikes and a few sills is of Miocene age and has been persistently prospected and locally mined since the late 1800s.

Exploration Status

Exploration since 2003 has been conducted by MagmaChem Exploration, Inc. for Rubicon Minerals, by Big Bar Gold, by VANE Minerals, by Rare Green, by Cash Capital, and now by CuQuest. A total of 21 diamond drill holes from seven drill sites were drilled to between 119 and 1935 feet depths for a total of 12,809 ft drilling. Each of the drill assays (except for the southernmost drill hole AV2) intersected 30 to 120 feet (ft) of the skarn mineralization with gold values between 60 and 4500 parts per billion (ppb), copper values between 0.2 and 4.8%, and molybdenum values between 20 and 500 parts per million (ppm).

The quartz monzonite porphyry and alaskite feldspar porphyry intersected in the drill holes generally contained copper values that exceeded 0.02% copper, which is higher than the highest background value of 50 ppm copper in other rocks. Other rock types, such as schist, quartzite, volcaniclastics, and monzodiorite returned assays that were generally below background values.

Historic Mineral Resource Estimate

The copper-magnetite skarn mineralization yielded intermittent production at the underground Yuma mine between 1940 and 1963. Copper grades averaged 2.65% over 8,728 short tons with 0.03 oz/ton gold, and 0.62 oz/ton silver. An historic resource estimate of the skarn/oxide replacement mineralization at the historic underground Yuma mine was calculated for a NI-43-101 report. Russell (2004) estimated that the historic Yuma mine contains an inferred oxide copper resource estimated to be between 357,560 and 536,985 short tons of 3.03% copper, depending upon estimated average thickness of mineralization within the mineralized, altered limestone horizon.

There is no current NI 43-101 compliant mineral resource or mineral reserve estimate for the Yuma King project, based on the drilling from 2006-2024. The historical production stated in Section 6.0 (History) should not be relied upon as they have not been verified or classified according to CIM or SME resource/reserve categories by a Qualified Person.

Mining Methods, Processing, Economics

No mining methods have yet been delineated, as this is an exploration project.

Conclusions

The exploration concept of CuQuest Resources, Inc. is appropriate for the Yuma King property. The concept for a potential buried copper-gold-molybdenum porphyry deposit has been developed based on an interpretation of the available geological, structural, geochemical, and drill assay data, the compilation of mineralization and zonation observations made by Stanley B. Keith and others from geological mapping, drilling and geophysical surveys.

The compilation of available data has been conducted in accordance with acceptable industry procedures. The presence of skarn/replacement copper-gold deposits has been documented at the Yuma King property. The results of the assays at 20 drill holes drilled between 2006 and 2011 confirm the presence of the skarn/replacement mineralization and indicate the potential for porphyry copper-gold-molybdenum mineralization.

Recommendations

Recommended tasks that should be completed in order to advance the Project and to prepare for development and operations include additional core drilling and geophysical surveys. A data compilation phase should be conducted to enter all information into databases, such as Excel and Access, and 3-dimensional geological modeling software, such as Leapfrog or Vulcan. Data should be entered into computer spreadsheet programs, to produce a GIS model of the district.

A Phase 3 exploration program is recommended with a budget of US$ 3,100,000 be conducted to advance the exploration program at the Yuma King property. A minimum of core drill holes with 15,000 ft of HX/HQ core is recommended for 13 to 16 drill holes. The purpose of that drilling and exploration is to confirm, extend and discover copper resources in and contiguous to the current underground workings of the historic Yuma Mine. Additional drilling should be conducted to confirm and extend the stockwork molybdenite-copper mineralization. Drilling the updip oxide mineralization south of drill site 1 is recommended. Also, underground drilling is recommended east of the Yuma mine dike to extend known oxide mineralization in the underground.

Additional geophysical surveys, particularly an IP line, should be conducted in the northern part of the Yuma King property. This IP survey may locate a possible extension of the porphyry copper-gold mineralization near an outcrop of altered quartz monzonite porphyry.

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1. INTRODUCTION

1.1 Issuer and Terms of Reference

CuQuest Resources, Inc. (CuQuest), of Vancouver, BC, has engaged Dr. Jan C. Rasmussen to prepare this technical report in anticipation of raising funds for the exploration program and future work. CuQuest requested that an independent corporation prepare a technical report that complies with the standards of a Canadian National Instrument (NI) 43-101 Technical Report.

The QP prepared this Technical Report in accordance with industry accepted CIM "Best Practices and Reporting Guidelines," the revised regulations in NI 43-101 (2014, Standards of Disclosure For Mineral Projects) and Companion Policy 43-101CP of the Canadian Securities Administrators, and CIM Definition Standards for Mineral Resources and Mineral Reserves (CIM, April 2011). The report is also designed to follow guidance established by the United States Securities and Exchange Commission (SEC), which regulates the reporting of exploration results, resources and reserves by organizations, individuals or companies ("entities") subject to the filing and reporting requirements of the SEC. "Decisions as to when and what information should be publicly reported are the sole responsibility of the entity owning the information, and are subject to SEC rules and regulations (SME, 2007)." Guidance on reporting exploration results, resources, and reserves per requirements of the SEC are summarized in the 2007 SME Guide (SME, 2007).

This report was prepared in accordance with the requirements and guidelines set forth in NI 43-101 Companion Policy 43-101CP and Form 43-101F1 (June 2011), and the mineral resources presented herein are classified according to Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards – For Mineral Resources and Mineral Reserves, prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council on November 29, 2019.

1.2 Purpose of the Report

This Technical Report provides a:

(1) review of the historical data and the previous exploration and mining activities conducted in the Yuma King copper project area,

(2) discussion of the geology of the potential ore deposit and the deposit model, and

(3) presentation of the recommendations by the QP to explore for mineral resources that are compliant with Canadian NI 43-101 and SEC guidelines.

1.3 Sources of Information

A large portion of the information and technical data for this study was obtained from the following previously prepared NI 43-101 Technical Reports:

- Russell, R.H., 2005, Technical report for the Yuma King property in the Ellsworth mining district, La Paz County, Arizona, USA: Canadian NI 43-101 report for Big Bar Gold Corporation, 41 p. plus appendices.
- SRK, 2011, NI 43-101 Technical exploration report, Yuma King project, Arizona: Canadian NI 43-101 style report for Rare Green Inc., October 1, 2011, 119 p.

The information contained in current report Sections 3 through 8 was largely previously presented in, and in some cases is excerpted directly from, the technical reports listed above. The QP has reviewed this material in detail, and finds the information contained herein to be factual and appropriate with regard to guidance provided by NI 43-101 and associated Form NI 43-101.

Additional information was requested from and provided by Merrill Palmer and Stanley Keith. With respect to Sections 9 through 13 of this report, the author has sourced information in part from historical documents, including exploration reports, technical papers, sample descriptions, assay results, and maps and drill logs generated by previous operators and associated third party consultants. Historical documents and data sources used during the preparation of this report are cited in the text as appropriate and are listed in the References in Section 17.

1.4 Qualified Persons and Personal Inspection

This report is endorsed by the following Qualified Person, as defined by NI 43-101: Dr. Jan C. Rasmussen, Ph.D., P.G., SME-RM. The examination of the Yuma King data files and writing the report on the Yuma King project property was performed by the QP. The author is a Qualified Person that is independent of CuQuest, per requirements of Section 1.4 of NI 43-101.

Jan C. Rasmussen, R.G., Ph.D., RM SME

Dr. Jan C. Rasmussen is a Senior Consulting Geologist, with over 50 years of experience in mineral and energy resource exploration, environmental management, and project recommendations and reports, including more than 19 years of experience with the geology of precious and base metals, industrial minerals, energy resources, and uranium exploration. She has earned a Ph.D. in Economic Geology, is a Registered Geologist in Arizona and an SME Registered Professional Member. She is a Qualified Person for this Technical Report and is responsible for writing the report.

1.5 Details of Inspection

Dr. Jan C. Rasmussen, the Qualified Person signatory to this Technical Report, and Stanley B. Keith visited the property September 21-23, 2011 and October 18-19, 2024. A tour was made of the Yuma King project area, located in the Ellsworth mining district, and the core storage facilities in Parker, Arizona.

Historically, gold mineralization cropped out at the surface at numerous localities in the Ellsworth district, and historic shafts, adits, and open pits are abundant in the district. The more important of these historic structures and one underground working were examined, as were historic mine dumps, recent trenches, and the client's Yuma King project area. The site visit permitted examination of accessible and representative outcrops, pits, adits, and mine dumps with exposures of mineralized rock, as well as project samples.

1.6 Reliance on Other Experts

The author, as a Qualified Person, has examined exploration data from Mr. Stanley B. Keith (designated as Keith) of MagmaChem Exploration, Inc., Sonoita, Arizona, for the Yuma King project; previous NI 43-101 documents on the Yuma King project (Russell, 2005 and SRK, 2011); publications by State and Federal geological surveys; published and unpublished articles and theses; or file data. The author has relied on that basic data to support the statements and opinions presented in this Technical Report.

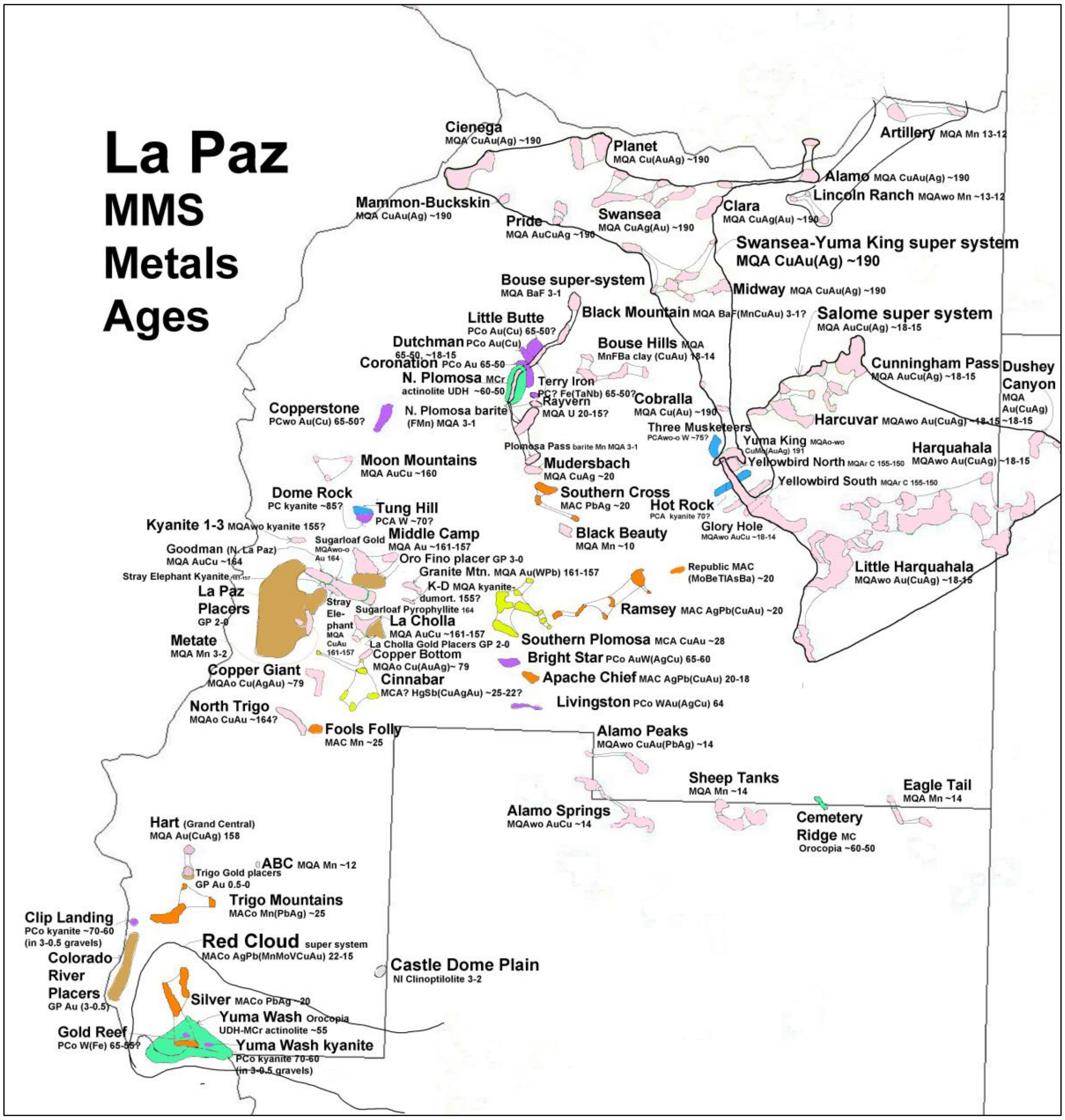
In the opinion of the author, the available data are present in sufficient detail to prepare this exploration technical report and are generally correlative, credible, and verifiable. The project data are a reasonable representation of the Yuma King project. Any statements in this report related to deficiency of information are directed at information that, in the opinion of the author, has been lost during transfer of property files, or is information that is recommended to be acquired.

The author has relied upon the land status information from Keith and the owner/lessor, Mr. Merrill Palmer of Oxbow, Oregon, for the land tenure and land title in Arizona with reference to the ownership and current land status (Section 4) of the Yuma King project. The QP has relied upon Keith and Merrill Palmer for this information.

1.6.1 Nearby Properties

The Copperstone Mine, approximately 30 miles west of Yuma King property in La Paz County, Arizona, had historic open pit production from 1987 through 1993 by Cyprus of approximately 514,000 oz of gold from 6,173,000 tons of mill feed grading 0.089 oz/ton Au. In 2012, American Bonanza Gold Corp. started underground mining at the Copperstone mine from two declines that were developed in the bottom of the open pit. From January 2012 to July 2013, American Bonanza produced approximately 16,900 oz of gold from 163,000 tons of mill feed grading 0.104 oz/ton. Exploration and development activity continues at the Copperstone Mine. A recent NI 43-101 report estimated the measured plus indicated mineral resources were 1,330,000 tons containing 300,000 troy oz of gold at an average grade of 0.226 troy oz/short ton (7.74 grams/Tonne) on February 15, 2023 (Hard Rock Consulting, 2023).

Other mineralized areas in the region (Figure 1-1) continue to experience active exploration. Areas under active exploration include those in the Plomosa Mountains about 15 to 20 miles west-northwest of the Yuma King area (Bouse, Little Butte and Coronation).



Source: Rasmussen and Keith (2024)

Figure 1-1 Mineral districts in La Paz County showing type of system, metals and age in Ma

1.7 Sources of Information and Extent of Reliance

This report is based on the following information:

- Personal inspection of Yuma King data on the project and surrounding areas;
- Updated land ownership and other information was provided by Keith, Daniel Laux and Merrill Palmer;
- Digital databases, images, MapInfo maps, and unpublished reports provided by Dan Laux, Merrill Palmer and Keith; and

- Additional publicly available information, such as previous NI 43-101 reports, obtained from public domain sources.

The author is not an insider, associate, or affiliate of CuQuest. The results of this Technical Report are not dependent upon any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings between CuQuest and the author. The QP will be paid a fee for the work in accordance with normal professional consulting practice.

The author's statements and conclusions in this report are based on the information available at the time of the report. It is to be expected that new data and test results may change some interpretations, conclusions, and recommendations going forward.

Numerous sources of information were used in the preparation of this Technical Report. These include numerous historical documents in digital, scanned, or hard-copy format obtained from Keith, the Arizona Geological Survey, or downloaded from the Internet. Other sources of information were from the authors' personal libraries, the Science Library at the University of Arizona, and files at the Arizona Department of Mines and Mineral Resources (now the Arizona Geological Survey) in Phoenix. The documents are enumerated in Section 17 (References) and in the various chapters where they are cited.

The date of this report is October 21, 2024. The effective date is November 1, 2024. The undersigned prepared the report entitled "NI 43-101 Technical Exploration Report, Yuma King Copper Project, Arizona". The format and content of the report is intended to conform to Form 43-101F1 of the National Instrument of the Canadian Securities Administrators.

Signed and sealed

Jan C. Rasmussen, Ph.D., RG, RM SME, expires 31 December, 2025.

1.8 Units of Measure

Unless otherwise stated, all measurements reported herein are U.S. customary, and currencies are expressed in constant 2024 U.S. dollars. Gold grades are presented in troy ounces per short ton ("oz/ton", "oz/T", or "opt"), unless otherwise indicated.

The following list of conversions is provided for the convenience of readers more familiar with the metric system. All dollar amounts used in this report are US$.

LINEAR MEASURE

1 foot (ft) = 0.3048 meters

1 mile (mi) = 5,280 ft = 1.6093 kilometers

AREA MEASURE

1 acre = 0.4047 hectares

1 square mile = 640 acres = 259 hectares

WEIGHT

1 short ton (T) = 2000 pounds (lb) = 0.9072 metric tons (tonnes (t))

1 pound (lb) = 16 ounces (oz) = 0.4536 kilograms (kg) = 14.583 troy ounces

ANALYTICAL VALUES

gram/tonne = 1.0 ppm = 0.02917 oz

Troy/short ton = 0.03215 oz Troy/tonne

oz Troy/tonne (oz/t) = 31.1035 grams/tonne (g/t)

oz Troy/short ton (oz/T) = 34.2857 grams/tonne (g/t)

1.9 Acronyms and Technical Terms

Acronyms and technical terms are provided in the Glossary in Appendix A.

2. PROPERTY DESCRIPTION AND LOCATION

This section describes the property and the property location.

2.1 Project Location

Yuma King is an advanced, porphyry copper-molybdenum-gold, exploration project located in west-central Arizona in the Ellsworth mining district (Figure 2-1 and Figure 2-2).

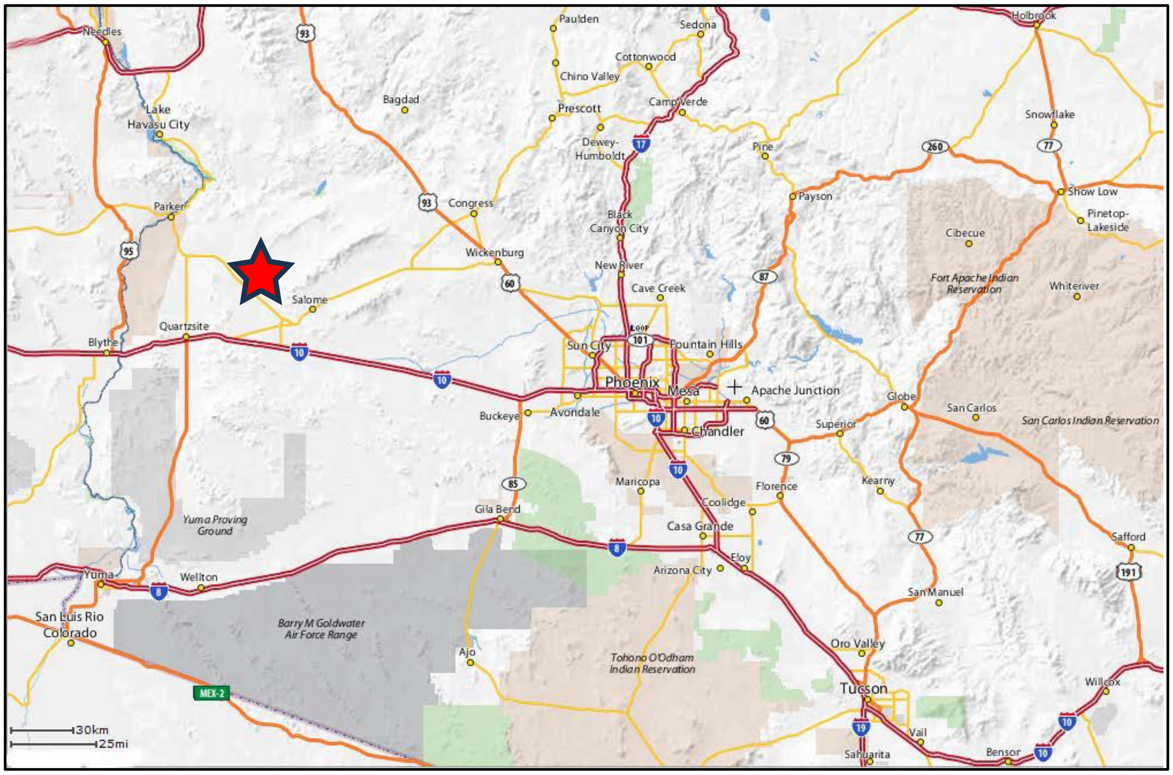


Figure 2-1 General location of Yuma King project area, La Paz County, Arizona

The Yuma King project is located in west central Arizona, in the Granite Wash Mountains, La Paz County. It is approximately 95 miles (153 km) west of Phoenix, is 40 mi (64 km) southeast of Parker and is 6.5 mi (10 km) northwest of Salome (Figure 2-1). The center point of the property is approximately latitude 33º50’ N and longitude 113º45’ W, with cadastral location of Sections 19, 20, 29, and 30, Township 6 North (T6N), Range 14 West (R14W), and Sections 24 and 25, T6N, R15W, Gila and Salt River Meridians.

The Yuma King project area is on the East of Utting and Harcuvar, U. S. Geological Survey (USGS) 7 1/2-minute quadrangles. The larger Granite Wash Mountains area is approximately bounded by meridians 113º 40’W and 113°47.5’ W, and parallels 33º45’ and 33º55’N.

The Yuma King project may be reached from Phoenix via Interstate Highway 10 to Exit 81, then northwest on the Buckeye-Salome Road to Salome, then west on U.S. Highway 60 to Hope, then turn northwest on Arizona State Highway 72, and then turn northeast on the Yuma mine Road into the Granite Wash Mountains. A simplified map of the area of interest is shown on Figure 2-2.

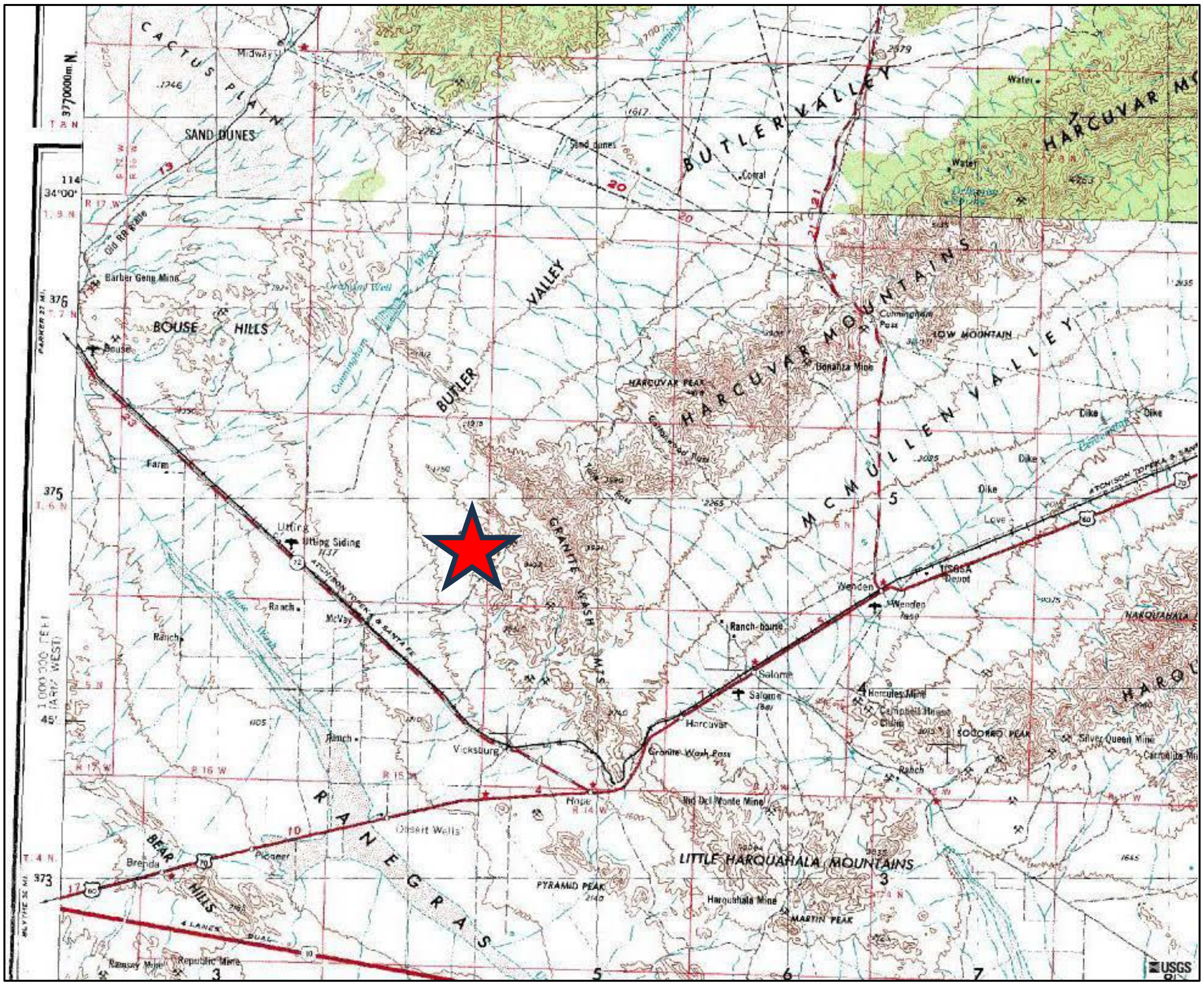


Figure 2-2 Road to Yuma King copper project area

2.2 Mineral Titles

Mineral exploration rights are currently held by CuQuest under lease from Merrill Palmer of Oxbow, Oregon. Six unpatented claims in the historic Yuma mine land position were originally acquired by the Candace and Robert Fiddes of Yuma, Arizona, and were purchased by Merrill Palmer on January 7, 2012. Palmer has staked additional claims since 2003 and recently staked 20 unpatented federal lode mining claims called the Green Dragon claims and recorded them in 2024 (Table 2-1).

Since 2011, Mr. Palmer dropped the following claims: Yuma 98-100, Yuma 24-25, Yuma 29-30, Yuma 41-44, Yuma 70-75; North Yuma #1-10, North Yuma #15-24; Northwest Yuma #1-42; SE Yuma #1, SE Yuma #25-30, SE Yuma #39-45, SE Yuma #50-52, SE Yuma #110-113. Merrill added SE Yuma #114-123, SE Yuma #130-149, G#1-246, Green Dragon 1-7, and Green Dragon 12-24.

The property currently consists of 515 unpatented lode mining claims covering approximately 8,000 acres (3,200 hectares) in the Ellsworth mining district (various documents from Palmer). Palmer laid out the claims so as to be approximately 1,450 ft long by 600 ft wide, so as to be slightly less than 20 acres. Palmer marked the claims with seven posts each, with four corner posts, two end line center posts, and a location post containing the location papers that was placed on the center line inside the claim boundaries. The claims were recorded at the La Paz County courthouse and the Bureau of Land Management (BLM) in Phoenix.

CuQuest holds the property rights through a Lease/Purchase Agreement of July 2024 with Merrill Palmer, the owner. This agreement includes a separate agreement with Stanley Keith, of Sonoita, Arizona, for access to the data. Current land status maps and Figure 2-4) indicate that the area of interest is administered by the BLM (2011).

Table 2-1 Yuma King property list of unpatented mining claims and locations

Unpatented Claims	BLM # UMC number	Section, Township, Range	Locator
Four or More #1-6 (formerly Fiddes Claims #1 - #6)	349474-349479	30, 19, T6N, R14W	Fiddes (purchased by Merrill Palmer)
MKB MP #1-#2	357503-357504	10, T6N, R14W; 24, T6N, R15W	Merrill Palmer
MKB MP #3-#4	357542-357543	24, R6N, R15W	Merrill Palmer
MKB MP #5-#23	358943-358961	30, T6N, R14W; 25, T6N, R15W	Merrill Palmer
MKB King #1-#5	357198-357202	30, T6N, R14W	Merrill Palmer
MKB King #6-#7	357505-357506	19 and 30, T6N, R14W	Merrill Palmer
MKB King #8-#15	358962-358969	19, T6N, R14W	Merrill Palmer
MKB Black Jack #1	356883	30, T6N, R14W	Merrill Palmer
MKB Black Jack #2	356909	29, T6N, R14W	Merrill Palmer
MKB Black Jack #3	357117	29, T6N, R14W	Merrill Palmer
MKB Black Jack #4	357118	29, T6N, R14W	Merrill Palmer
MKB Black Jack #5	358943	29, T6N, R14W	Merrill Palmer
BJ #6-8	360012-360014	29, T6N, R14W	Merrill Palmer
Yuma 108-126	369846-369864	30, T6N, R14W; 29, T6N, R14W	Merrill Palmer
Yuma 1-23	369865-369887	20, T6N, R14W; 19, T6N, R14W	Merrill Palmer
Yuma 101-107	369783-369793	23, T6N, R15W; 25, T6N, R15W; 30, T6N, R14W	Merrill Palmer
Yuma 26-69	369794-369845	19, T6N, R14W; 23, 24, 25, 26, T6N, R15W	Merrill Palmer
North Yuma #11-14	371321-371344	17, 18, 19, 20, T6N, R14W	Merrill Palmer
SE Yuma #18-24	378854-378860	30, T6N, R14W	Merrill Palmer
SE Yuma #31-38	378867-378874	30, T6N, R14W	Merrill Palmer
SE Yuma #46-49	435476-435479	30, 31, T6N, R14W	Merrill Palmer
SE Yuma #53-56	378889-378892	30, T6N, R14W	Merrill Palmer
SE Yuma #57-66	435106-435115	30, T6N, R14W	Merrill Palmer
SE Yuma #67-109	378903-435127	29, 30, T5N, R14W	Merrill Palmer
SE Yuma #114-123	435128-465137	28, 29, 30, T5N, R14W	Merrill Palmer
SE Yuma #130-149	435481-435499	29, 30, T5N, R14W	Merrill Palmer
G#1-246	447363-448586	T6N; 3, 4, 5, 6, 7, 8, 9, T5N, R14W; 1, 10, 11, 12, T5N, R15W	Merrill Palmer
Green Dragon 1-7	AZ 106359533-	18, 6N, 14W	Merrill Palmer

Unpatented Claims	BLM # UMC number	Section, Township, Range	Locator
	106359539		
Green Dragon 12-24	AZ 106359540-106359552	17, 18, T6N, R14W	Merrill Palmer

Source: Merrill Palmer's receipt from the Bureau of Land Management on claim maintenance fees paid. Locations shown on Figure 2-3

Following page:
Source: Merrill Palmer and Dan Laux, Sept. 2024
Figure 2-3. Location of claims in 2024, Yuma King project


N
EAST OF UTTING QUADRANGLE
ARIZONA-LA PAZ CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
GRANITE WASH
GRANITE WASH MOUNTAINS
Big Granite Wash
Salome Peak
Tank Pass
Yuma King Claims
La Paz County, Arizona
September 9, 2024

Claims on the Yuma King project have been located under the General Mining Laws of the United States on Bureau of Land Management (BLM)-managed lands. The Yuma King claims are administered by the Lake Havasu City office of the BLM. The BLM manages the public lands under the mandate to encourage development of mineral resources consistent with national objectives to maintain an adequate supply of minerals, as well as an optimum use of lands while preventing resource damage and assuring appropriate rehabilitation (BLM,). The Yuma King claims, as supplied by Merrill Palmer and as verified on the BLM website, are summarized in Table 2-1 and are current through August 2025.

It is outside the scope of this report to review the status of all mining claims and mineral titles. This information is not required to complete the recommended next step, which is an exploration assessment and suggestions for further exploration.

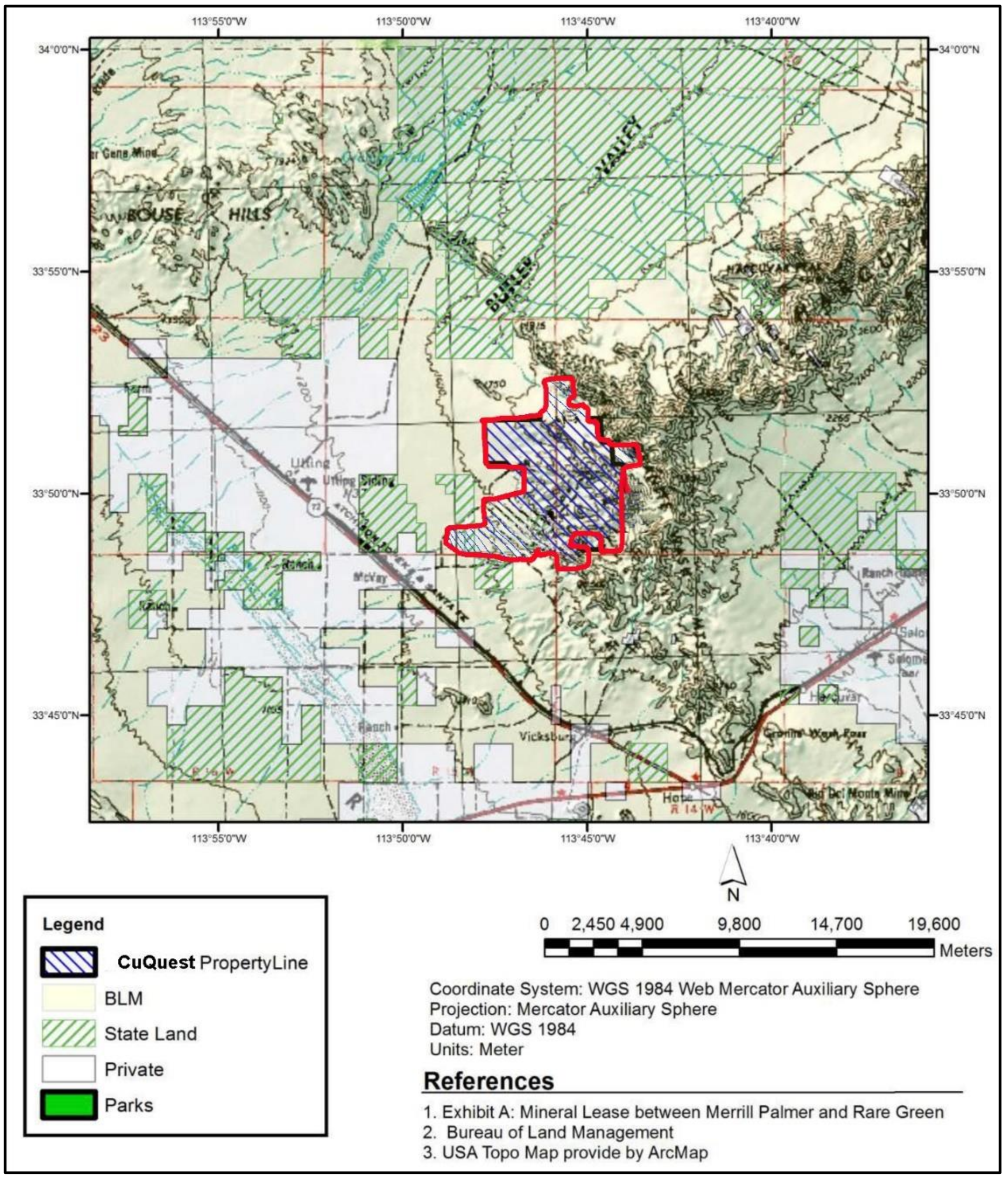


Figure 2-4. Land status map of Granite Wash Mountains and approximate Yuma King area

2.2.1 Mineral Rights in Arizona

Unpatented claims are located by the General Mining Law on Federal lands administered by the BLM. Ownership of unpatented mining claims on BLM-administered mineral lands is in the name of the holder (locator), with ownership of the minerals belonging to the United States of America, under the administration of the BLM. Under the General Mining Law, the locator has the right to explore, develop, and mine minerals on unpatented mining claims without payments of production royalties to the Federal government (ADMMR, 2011).

It should also be noted that in recent years there have been U.S. Congressional efforts to change the mining law to include the provision of Federal production royalties. However, currently annual claim maintenance fees are the only Federal encumbrance to unpatented mining claims. Location fees on or after September 1, 2024, are $49 per claim, plus a location fee of $25 per claim. The yearly maintenance fee is $200 per lode mining claim, mill site or tunnel site. Additional fees may be charged by the Recorder's Office in the county. Information regarding recorded unpatented mining claims on file with the BLM can be searched on-line at http://www.blm.gov/lr2000/ (BLM, 2011).

Federal lands that were patented under the Stock Raising Homestead Act and in which the surface is owned by private citizens are available for location of mining claims by other parties under the General Mining Law. However, they are subject to certain formal notification requirements by the BLM (details are listed in 43 CFR 3838 and 43 CFR 3814). These private surface – Federal minerals land require a formal notification procedure to the surface owners and the BLM prior to entry.

2.2.2 Requirement to Maintain the Claims in Good Standing

Unpatented Federal lode mining claims in Arizona are located in the field with four corner posts, two end-center posts, and a location monument. The authors did not seek to verify all claim posts in the field, which are typically 2 in. x 2 in. by 4 ft. (substantial) wooden posts.

Unpatented claims on Federal land are administered by the BLM. To maintain unpatented claims in good standing, the claim holder must pay a $200-per-claim annual maintenance fee to the BLM, in lieu of annual assessment work, plus a $10.00-per-claim recording fee to La Paz County where the claims are located. [Note: Initial BLM claim fees and filing costs for new claims total $200 per claim; that total includes an initial $34.00 claim location fee the first year, plus the annual maintenance fee of $200 and a process fee of $15.] The BLM requires that all claims use an assessment year from September 1 through August 31.

The unpatented claims on the Yuma King property were located with Global Positioning System (GPS), but have not been legally surveyed. No legal land survey is required to hold the unpatented claims. The staked property consists of 515 United States Federal unpatented mining claims. Each individual claim is slightly less than 1,500 feet (457 meters) long by 600 feet (182 meters) wide with four corner posts and one location monument. All the claims were located by 2-inch x 2-inch (5.1 x 5.1-centimeter) wooden monuments about 4.5 feet (1.4 meters) high, properly marked.

The Yuma King claims were recorded as appropriate in La Paz County, Arizona, and were filed with the BLM Arizona State Office in Phoenix, along with the payment of the appropriate fees. The claims are held by payment of annual rental fees to the BLM before September 1 of each year and by the filing of a Notice of Intent to Hold Mining Claims in La Paz County.

2.2.3 Nature and Extent of Issuer's Interest

Merrill Palmer holds 515 unpatented mining claims, which are under lease to CuQuest. CuQuest represents that all unpatented claim filings are current and that the claims are valid until August 31, 2025, when the next annual maintenance fee payments and filings are due.

2.3 Royalties, Agreements and Encumbrances

The six Fiddes claims (Four & More) were paid off and a quit claim deed assigned them to Merrill Palmer on February 22, 2012. The Fiddes' retain a 1% net smelter return on those six claims. There are no additional royalty agreements or encumbrances on these Federal mining claims (Merrill Palmer, personal communication, September 2011).

CuQuest holds 515 claims through a Purchase Agreement of March 12, 2024, with Merrill Palmer ("the Owner") of Oxbow, Oregon.

The author has not independently verified the validity of the mining claims, their ownership, or the history of the land tenure in years past, as this is beyond the scope of the NI 43-101 technical exploration report.

2.4 Environmental Liabilities and Permitting

This section addresses environmental liabilities and applicable permits relevant to this exploration project. A Mining Permitting Guide (ADMMR/AZGS, 2011) offers a summary of the required permits.

2.4.1 Environmental Liabilities

Existing environmental liabilities are not described in the project files. The brief site visit indicated the presence of prospect pits, mine shafts, adits, and drill sites. No waste disposal issues were noted on the site. A more detailed survey may identify the presence of additional open shafts, prospect pits, or adits. Access roads and open mine shafts and adits were largely left un-reclaimed in the Ellsworth district, which was the standard industry practice at the time the mines were abandoned. These are not considered to be environmental liabilities.

No environmental hazards were observed, and the BLM has not made any declaration of environmental liability for any area on or adjacent to the claim block. The Yuma King claims are not adjacent to any Wilderness Study Area, Wilderness Area, Wildlife Refuge, or any State of Arizona or federally mandated protection area. The Yuma King project is approximately 20 miles (32 kilometers) southwest of the western boundary of the Harcuvar Mountains Wilderness Area and is approximately the same distance west-northwest of the northwest boundary of the Harquahala Mountains Wilderness Area (Russell, 2005).

2.4.2 Required Permits

Permits to conduct drilling in Arizona are administered by the Arizona Department of Water Resources (ADWR). The filing fee for a Notice of Intent to Drill is $150 and the average processing time is 15 days. The drilling company must be licensed with the Arizona Registrar of Contractors and ADWR.

Permits to conduct exploration drilling on BLM lands require either a Notice of Intent or a Plan of Operations, depending upon the amount of new surface disturbance that is planned. A Notice of Intent is for planned surface activities that anticipate less than 5.0 acres of surface disturbance, and usually can be obtained within a 30 to 60 day time period.

A Plan of Operations will be required if there is greater than 5.0 acres of new surface disturbance involved with the planned exploration work. A Plan of Operations can take several months or more to be approved, depending on the nature of the intended work, the level of reclamation bonding required, the need for cultural resource surveys, and other factors as may be determined by the BLM. No other permits are required for exploration drilling. Depending on the activities proposed, an assessment for cultural resources and protected native plant clearances may be required.

Prior to commencement of any additional surface disturbance, CuQuest must obtain documents from the Lake Havasu City BLM field office, which permits exploration activities such as trenching, drilling, or construction of new roads. CuQuest must also post a reclamation bond prior to performing any additional surface disturbance on the property. Generally, a period of two months should be allowed for permit application, preparation and approval. No difficulties in permitting drilling or other exploration activities are anticipated, as long no additional roads are constructed. No Environmental Impact Statement (EIS) or Environmental Assessment (EA) is needed to conduct such work in the area in which the property is located, provided no additional roads are constructed.

The amount of acres of drill roads and pads already in place at the Yuma King project is nearing the 5-acre limitation on surface disturbance. Additional roads and drill pads will require negotiation with the BLM to allow concurrent reclamation of the existing roads while constructing additional drill roads and pads, in order to stay under the 5-acre limitation on surface disturbance.

It is outside the scope of this report to review the status of all applicable agreements and permits. These permits are not required to complete the QP-recommended next step, which is an exploration assessment and preparation of a related budget.

2.5 Other Significant Factors and Risks

The Yuma King property and nearby areas have been favorite sites for hobbyists collecting mineral trespassing signs and other warning signs from the Arizona State Mine Inspector’s Office. The opening of the historic Yuma mine adit was secured by a steel gate with a lock within a steel box, but the door was blasted open by vandals and is no longer secure. A new steel gate should be installed.

Threatened and/or endangered plant or animal species may potentially be present on the site. Cultural resources or historic artifacts may be present on the site that may require mitigation if present. These factors were outside the scope of this report to review.

2.6 Property Ownership, Mineral Tenure, Agreements and Encumbrances

The Yuma King Property is wholly owned by Merrill Palmer and is currently under a 3-year lease contract with an option to purchase with CuQuest, which holds a 100 percent leasehold interest in the Yuma King Copper Project.

2.7 Permits and Environmental Liabilities

In 2006, Big Bar posted a reclamation bond of $28.000 for the road work for the drill road to drill sites 2, 3, 4, and 6. The drill road was reconditioned and built to Site 1 and has since been reclaimed and the bond refunded. The road to the AZ #1 drill site was reconditioned, but not reclaimed as it was an existing, historic road.

The Project is not currently subject to any other known environmental liabilities, and the QP knows of no other existing or potential future significant factors or risks (permitting, environmental, or otherwise) that might affect access, title, or the right or ability to perform work on the Project. Previous drill hole reclamation was conducted by the drilling contractors.

3. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

This section discusses the physical conditions of the project site, specifically the accessibility, climate, local resources, infrastructure, and physiography of the Yuma King area. None of these characteristics are likely to negatively impact the Yuma King exploration project as proposed. The project location in south central Arizona has good infrastructure and accessibility, with access to exploration and development service companies in the state that currently support active mining operations.

3.1 Topography, Elevation and Vegetation

The Yuma King property is located in the Basin and Range Province. The Basin and Range Province is characterized by generally long, narrow mountain ranges separated by desert plains underlain by deep basins. The mountain ranges trend generally north to northwest and are composed of igneous, sedimentary, and volcanic units ranging in age from Precambrian to Tertiary. Mountain peaks have elevations greater than 9,000 ft and often rise more than 5,000 above the adjacent valleys. The basins are composed of thick sequences (more than 1,000 to 10,000 ft) of generally unconsolidated sand, gravel, clay, and evaporites. Major drainages, which are ephemeral, are cut into the valleys and flow westward to the Colorado River.

The Yuma King project is in the Granite Wash Mountains and is northwest of the town of Salome in an area of rugged hills (Figure 3-1). The Yuma Mine, a shaft in the Yuma King project area, is at an elevation of about 2,200 ft (671 m) above mean sea level (amsl). Salome Peak, at 3,991 feet (1,217 meters) is the highest point in the north-trending Granite Wash Mountains.

The range is immediately west of the northeast-trending Harcuvar Mountains and is separated from the Harcuvar Mountains by Tank Pass. The terrain in the western part of the Harcuvar Mountains is very rugged and serrated, reaching 4,618 feet (1,408 meters) in elevation at Harcuvar Peak. The rugged mountains are formed and defined by the indentations of numerous, irregular washes. The relatively narrow range is cut by several saddles or passes, including Tank Pass. To the south, the Granite Wash Mountains are separated from the Little Harquahala Mountains by Granite Wash Pass, which opens into McMullen Valley through which U.S. Highway 60 and the railroad line run (Stanton Keith, 1978). (*Stanton B. Keith is cited with both first and last names. Stanley B. Keith is cited as Keith.)*

Ridges and many slopes show abundant bedrock exposures and other slopes and valleys are typically covered by varieties of weathered bedrock and alluvium. Various species of cactus variably cover slopes throughout the claim area, and the gullies and stream beds are dry and gravel-filled. The vegetation in the Ellsworth mining district is characteristic of the intermediate elevations of southern Arizona.

The elevation is low enough to be favorable for cacti and is below that favorable to forest trees, so that cacti and desert shrubs predominate. The foothill slopes and pediments contain cat claw and creosote, together with some mesquite and ocotillo in dense thickets. As rock type and slope-facing direction are also as important as elevation in determining vegetation zones, the rocky slopes generally contain ocotillo, prickly pear cactus, mescal, grasses, and occasional agave and yucca.

Trees are not common in the area, although mesquite, palo verde, and walnut grow along gulches and arroyos. No trees in the district are suitable for mine use. Drill sites and roads exhibit slow regrowth of vegetation.

3.2 Sufficiency of Surface Rights

Surface rights to the Yuma King project are Federal surface and Federal mineral (Palmer, personal communication, 2011, 2024). Unpatented Federal mining claims that were likely lapsed as there are no claim stakes remaining, such as the Glory Hole claims, were overstaked, but patented mining claims were not overstaked.

3.3 Accessibility and Transportation to the Property

General access to the vicinity of the Yuma King Copper Project is provided by Interstate I-10 west from Phoenix, Arizona, then north towards Salome via U.S. Highway 60 (Figure 3-2).

Figure 3-1 Topography of the Yuma King project, looking southeast from Drill Site 2

The Yuma King project is located in west-central Arizona in an area with an established infrastructure of roads. U. S. Highway 60 passes to the south-southwest of the Yuma King property. Salome, the nearest town to the Yuma King project, has railroad access. The nearest larger town is Parker, which is approximately 40 miles (64 km) to the northwest. Parker is a community of approximately 3,000 permanent residents and contains retail and service suppliers, a small airport, golf course, hospital, police and other facilities. Quartzsite is approximately 25 miles southwest of the Yuma King project area.

The Ellsworth mining district is accessible via dirt roads from the paved Arizona state highway 72. The Yuma King project may be reached from Phoenix via Interstate Highway 10 to Exit 81, then northwest on the Buckeye-Salome Road to Salome, then west on U.S. Highway 60 to Hope, then northwest on Arizona State Highway 72, and then northeast on the Yuma Mine Road into the Granite Wash Mountains.

Train lines and a network of interstate highways provide excellent transportation infrastructure throughout the state. The Phoenix International Airport is about 95 miles east of the Yuma King project. The Parker Airport is 1 mile to the east of Parker and has a 6,250-foot, asphalt air strip with fuel, hangars, and tie-downs (http://www.airnav.com/airport/P200).

Access to the Yuma King claims is by four-wheel drive vehicles along graded dirt roads (Figure 3-2) off of Arizona state highway 72. More remote locations in the Granite Wash Mountains require four-wheel drive or all-terrain vehicles. Travel along old mine roads is feasible and provides access throughout the district.

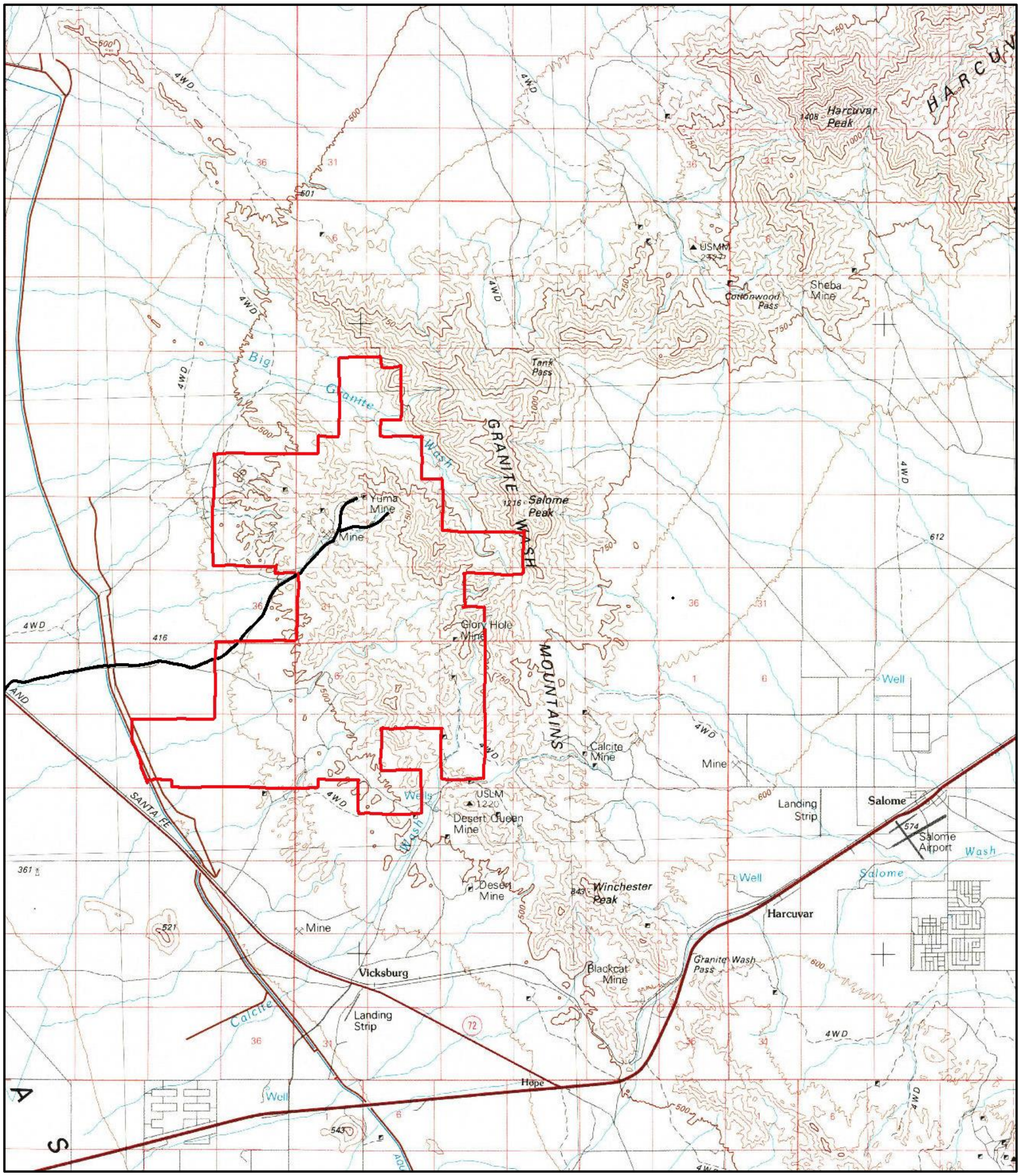


Figure 3-2 Detailed access by 4-wheel drive roads to the Yuma King Copper Project

3.4 Climate and Length of Operating Season

The local climate at the Yuma King project is typical of a hot desert, with mild to warm "winter" weather occurring from November to March, and hot to extremely hot summer temperatures for the remainder of the year. The climate of the Yuma King project area is typical of an arid area, with the region receiving occasional late summer thunderstorms, with heavy rain from time to time during otherwise very hot and dry summers. In winter, access is generally not hindered by climatic conditions. Maintenance of roads off paved roads is sporadic.

Summer temperatures usually consist of many consecutive days of over 100ºF. and temperatures often reach as high as 115ºF. to 120 ºF. Winter temperatures usually consist of many consecutive days ranging from as cool as 37ºF. to usually 40º to 60ºF., or even higher in some years (Arizona State Climate Office, 2011).

Flood conditions occur infrequently, although heavy thunderstorms during July and August at times cause floods that do considerable local damage. High winds accompanying heavy thunderstorms during July and August sometimes reach peak gusts of about 100 miles per hour in local areas, while tornadoes are reported on the average of about once a year. Snow may fall from November through March, but generally it averages less than 1 inch in a month and accumulations rarely last more than a few days. At Quartzsite, precipitation averages just ~3.5 inches annually, most of which occurs as rainfall during late summer and early winter months.

3.5 Local Resources and Infrastructure

The U.S. Census Bureau (2020) reports a population of 1,162 people in Salome in 2020 and 3,417 in Parker in 2020. Services at Salome are not adequate to support the requirements of a mining exploration and development project, but other nearby towns have services that are more able to support the project. Other western Arizona towns can supply drilling contractors, equipment rental and services, engineering services, and a labor force.

Parker, the county seat of La Paz County, is located about 40 miles to the northeast and Quartzsite is located about 25 miles to the southwest of the Yuma King copper project area. Parker and Quartzsite offer standard municipal amenities, such as lodging and services, as well as modest supplies of food and hardware. Major supply centers and ample skilled and unskilled labor are available in Phoenix, 125 miles to the east of Quartzsite, and in Yuma, roughly 80 miles south of Quartzsite on U.S. Highway 95. Access to the Sante Fe rail line is available in Parker, and international air service and railway access (Union Pacific and BNSF) are both available in Phoenix.

3.5.1 Power

Electrical power is not available at the property, but modern power transmission lines are available nearby at Salome. Gas and diesel stations are located in Salome, and major fuel supply stations are 15 miles away along Interstate 10.

3.5.2 Water

The Central Arizona Project (CAP) water canal is present to the immediate west of the Yuma King area along Bouse Wash.

No perennial streams are present in the district, though water runs in steep-sided gulches or arroyos during short-lived, torrential floods during the summer monsoon season. These streams generally drain westward to the Colorado River. Water is intersected at an elevation of 1,890 feet above mean sea level in the historic Yuma mine. This underground mine water was used in previous drilling at the Yuma King project. The water table did not lower during that water usage (Stanley Keith, personal communication, 2024).

Surface water is scarce and groundwater supplies are regulated and may be somewhat limited. A definitive groundwater resources investigation of the region by earlier mining companies is not known to exist. Published studies by the U.S. Geological Survey or the Arizona Department of Water Resources have not been conducted.

Water supplies for development and mining would come from groundwater sources in the area or by contract from the adjacent CAP canal. USGS records for La Paz County indicate the water table is generally shallow, from 12 feet to 400 feet below ground surface.

3.5.3 Mining Personnel

Skilled mine workers and technical staff are available in the state. Workers with experience in past mining operations and canal and road construction are available in the country.

3.5.4 Potential Areas

The Yuma King project is an advanced stage exploration project and has not defined potential tailings storage areas, waste disposal areas, heap leach pad areas, or processing plant sites.

3.6 Physiography

The Yuma King Copper Project lies in the southern part of the Basin and Range physiographic province, which is typified by east-northeast trending mountain ranges separated by broad, flat, alluvium filled valleys. The Project is situated at the northern end of the Granite Wash Mountains and is surrounded by a natural desert scrub environment. Vegetation is sparse and consists primarily of ground hugging shrubs and cacti (Figure 3-3).

Ridges and many slopes show abundant bedrock exposures and other slopes and valleys are typically covered by varieties of weathered bedrock and alluvium. Varieties of cacti occur sporadically on slopes throughout the claim area, and the gullies and stream beds are dry and gravel-filled. The vegetation in the Ellsworth mining district is characteristic of the intermediate elevations of southern Arizona.

The elevation is low enough to be favorable for cacti and is below that favorable to forest trees, so that cacti and desert shrubs predominate. The foothill slopes and pediments contain cat claw and creosote, together with some mesquite and ocotillo in dense thickets. As rock type and slope-facing direction are also as important as elevation in determining vegetation zones, the rocky slopes generally contain ocotillo, prickly pear cactus, mescal, sparse grasses, and occasional agave and yucca. Trees are not common in the area, although mesquite, palo verde, and walnut grow along gulches and arroyos. No trees in the district are suitable for mine use. Drill sites and roads exhibit slow regrowth of vegetation.

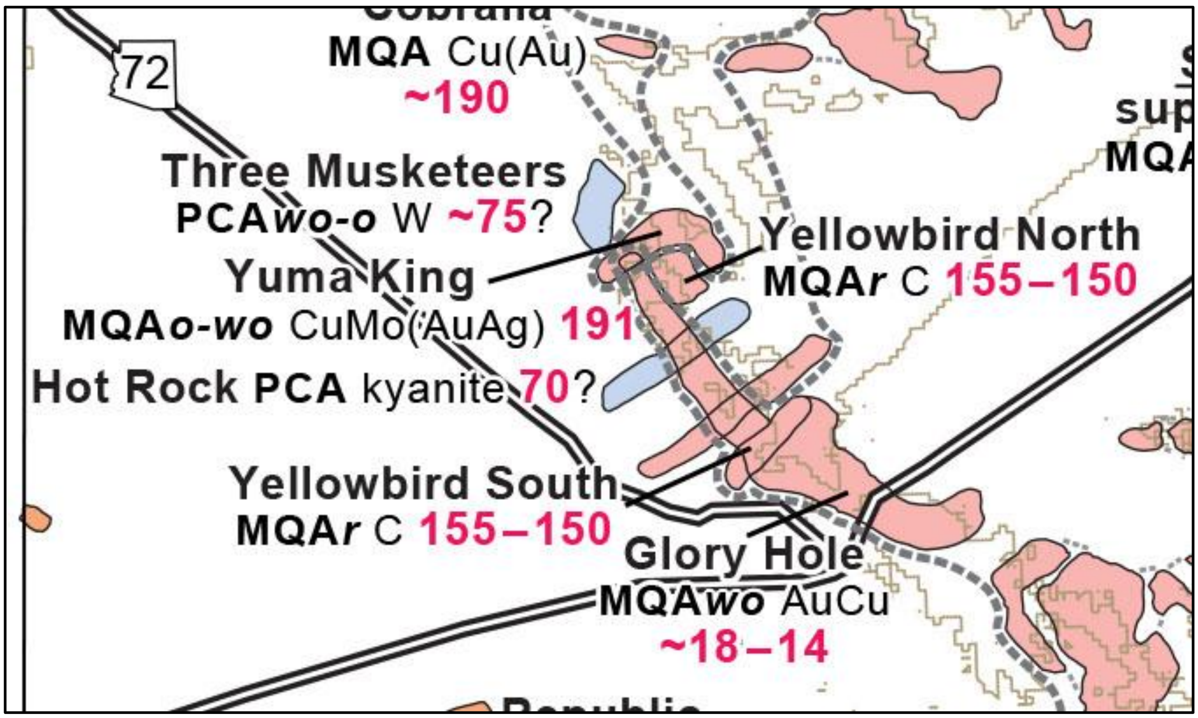
Figure 3-3 Typical Yuma King project topography, looking west from Drill Site 2

4. HISTORY

The first discoveries were made in the Ellsworth mining district in the 1860s, but only minor prospecting and small placer operations continued in the early 1900s with a few spectacular free gold strikes, such as the Salome strike at the Glory Hole mine in 1909.

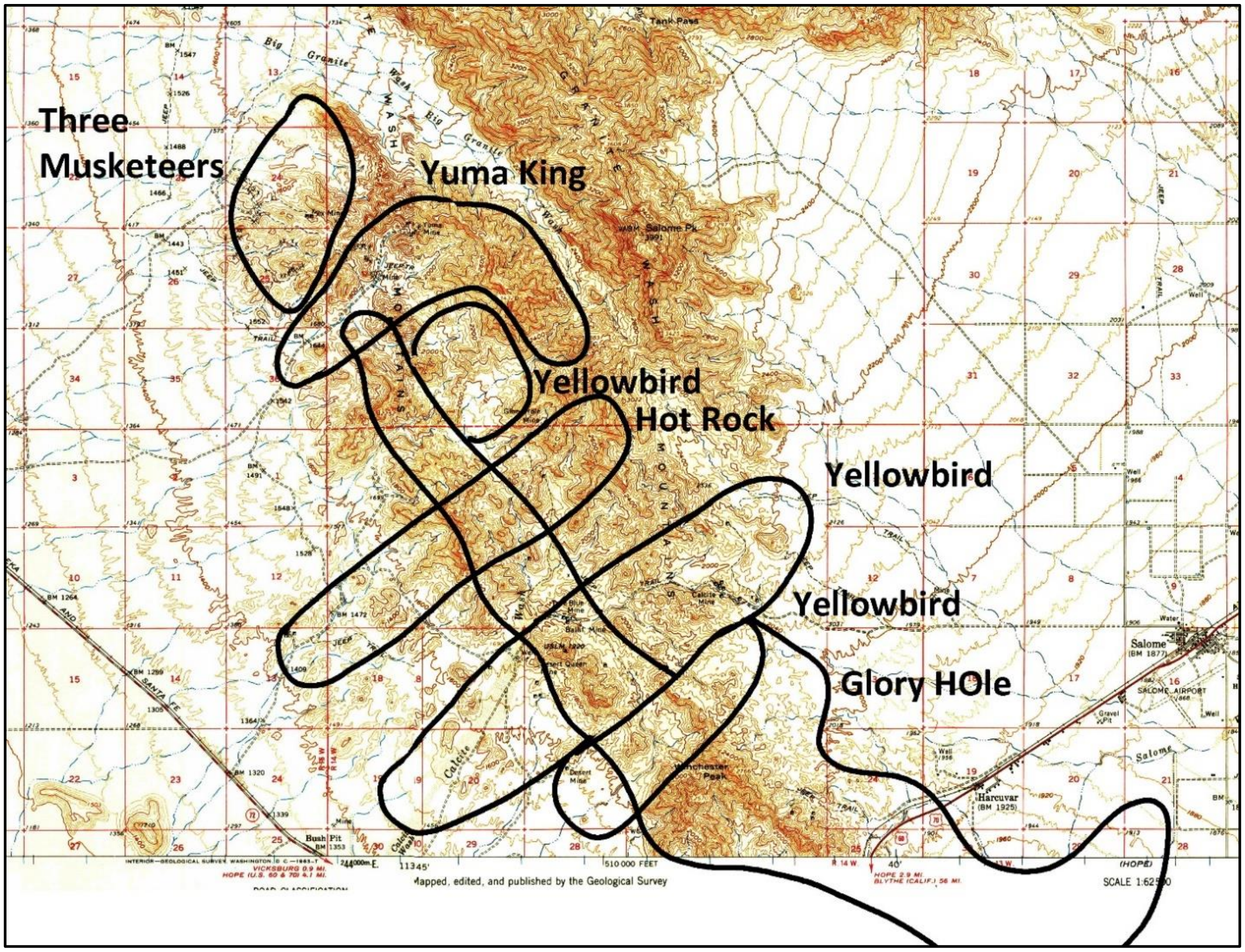
4.1 Historical Ownership and Development

There are several different geological types of mineral deposits in the Granite Wash Mountains in the Ellsworth mining district. These different deposit types have been reclassified as geologically distinct mineral districts as shown on Figure 4-1 and Figure 4-2 , along with the magma-metal series class, principal metals and age dates (Rasmussen and Keith, 2024).



Source: Rasmussen and Keith (2024). A more accurate geographic portrayal of these districts is in the Composite Commodity map (Figure 5-17).

Figure 4-1 Approximate location of mineral districts in the Granite Wash Mountains of eastern La Paz County showing the magma-metal series class, major metals and age dates in Ma



Source: Rasmussen and Keith (2024)

Figure 4-2 Mineral districts in Granite Wash Mountains (formerly part of Ellsworth Mining District)

4.1.1 Pre-2000 History

Although discovered in the 1860s, little mining was done until the completion of the Parker cut-off of the Arizona & California Railroad in 1905-1907. Some spectacular free gold strikes were made in the early 1900s, such as the Salome strike at the Glory Hole mine in 1909.

At about the same time, copper prospecting was conducted around Harcuvar Peak, in Cottonwood Pass and in Tank Pass, by shallow shafts, tunnels, and drilling. Some small, high-grade pockets and streaks of oxidized copper ore with gold and silver values were found, but the average grade and size of the deposits was not sufficient to produce economic shipping ore. Intermittently, some mining by fifteen to twenty operators has produced small, handpicked shipments of copper and gold ore and some lead and zinc, particularly during war years with high prices, but the total tonnage has been low (Stanton B. Keith, 1978).

Early Jurassic (190 Ma) Yuma King Mineral District

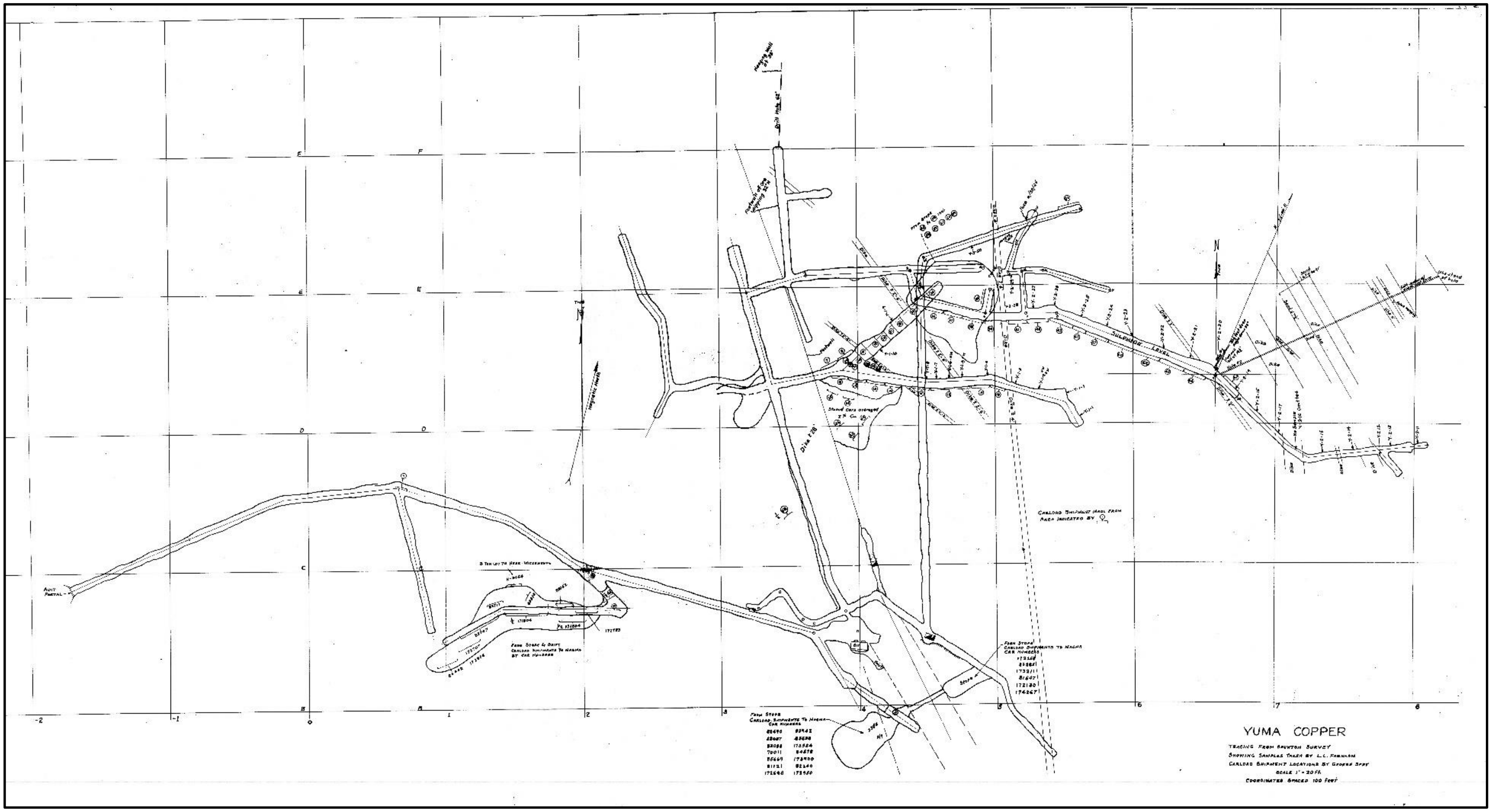
The Early Jurassic (~190 Ma) porphyry copper-molybdenum (gold-silver) skarns, replacements and stockworks are associated with the Yuma mine composite plutonic sequence (alaskite of Reynolds et al., 1989).

Note: Stryker fault occupies the hanging wall of the adit entrance and truncates the inclined, deformed magnetite skarn on the right side of the photograph.

Figure 4-3 Historic Yuma mine adit around 2006

The Yuma mine (Figure 4-3) was formerly owned by Ironwood & Arizona Development Co., Yuma Copper Co., Spry, Liberator Mines Co., Snyder, Minerals Corp. of America, So. Calif. Chemical Co. and is located at protracted R14W, SE ¼ of Sec. 19 and NE ¼ of Sec. 30 (Stanton Keith, 1978). Mineralization consists mostly of oxidized copper in contact metamorphosed limestone bed in metamorphosed sediments intruded by granite and cut by acidic and basic dikes. There are strong iron gossans from primary magnetite and pyrite, with quartz stringers, calcite, and contact metamorphic minerals. Wall rocks are fractured and strongly chloritized and epidotized. Workings consisted of shaft, tunnel and open cuts.

The Yuma Mine area was prospected and mined intermittently, but mainly from 1942 through 1963. A map of the underground workings in 1945 and locations of some ore shipments are shown on Figure 4-4. Estimated total production consisted of about 8,600 tons of ore averaging about 2.3% Cu, 0.3 oz. Ag/T, and 0.03 oz. Au/T (Copper Handbook, 1909; Bancroft, 1911, p. 95-97; Stanton Keith, 1978).



Source: Arizona Department of Mines and Mineral Resources (ADMMR, now AZGS) files

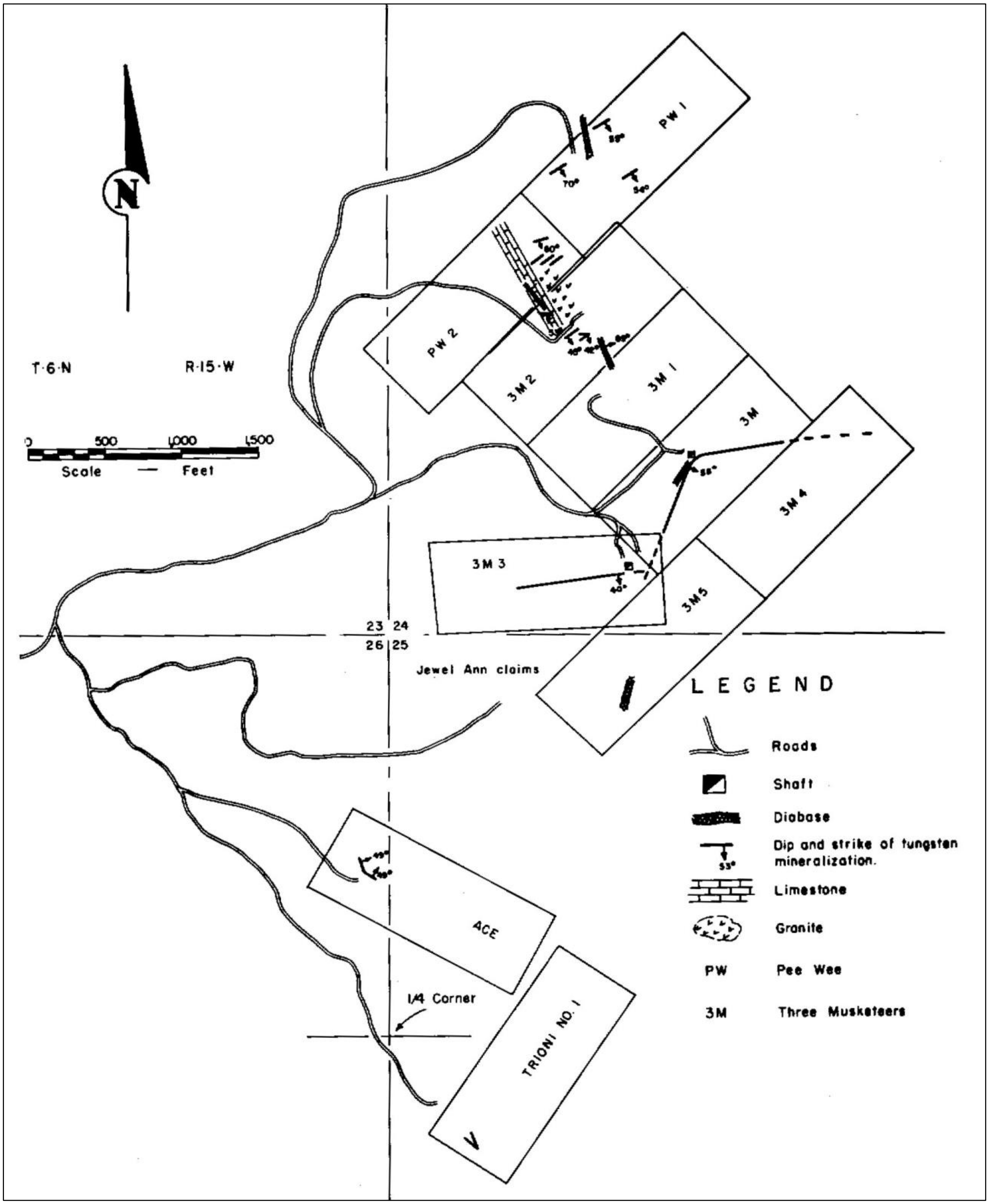
Figure 4-4 Map of underground workings in 1945 of Yuma Mine

Some unpatented claims were located at the Yuma mine area in the early 1890s and the major development was done before 1900. After many years of idleness, the property was leased and an R.F.C. loan was obtained to dewater and examine the property. The Liberator Mines Company was formed in 1944 to operate the Yuma mine property and they shipped about 8,000 tons of ore. About 400 tons of this ore was oxidized ore, averaging 9% Cu and the remainder was sulfide ore, averaging about 1.7% Cu and $1.00 plus in Au (1940s values). The sulfide ore needed concentration to be economic, but no mill was constructed (Coupal, 1950).

By 1950, the major developments were on a lode that strikes N78˚W, dipping 30˚N. Developments at that time consisted of a vertical shaft that intersected mineralization at 75 ft depth (Figure 4-4). Levels were driven to the southeast and west and an inclined shaft followed the footwall of the mineralization and levels were driven eastward on the 140-ft level, another on the 350-ft level, and another on the 415-ft level. Two stopes were made in oxidized ores from the adit level: one on the 140-ft level and another to the west of the inclined shaft at the 350-ft level and another to the east of the inclined winze. The ore on the 415-ft level was higher in grade than the ore on the 350-ft level (Coupal, 1950).

Late Cretaceous (~70 Ma) Three Musketeers Tungsten Mineral District

The Three Musketeers tungsten mineral district consists of unpatented claims of the Jewel Anne mine group, Three Musketeers Mine, Pee Wee mine group, Squaw T Mine, Ace claims and Trioni claims (Figure 4-5).



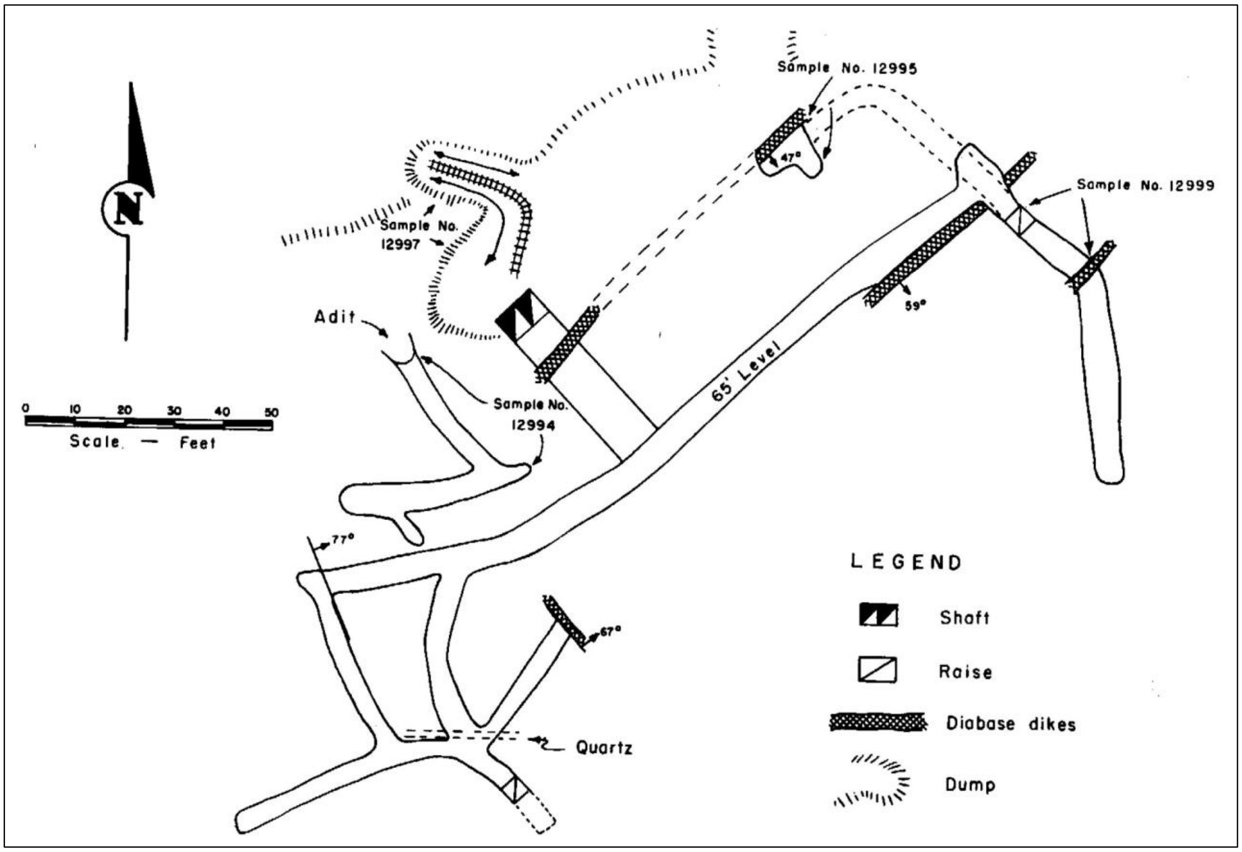
Source: Dale, 1959

Figure 4-5. Unpatented claim map of Jewel Anne and Three Musketeers areas, La Paz County

The Jewel Anne (also called Jewel Ann) unpatented mine group was located in September 1953 by Lucas L. Contreras, Everett V. Cohoe and Richard Rowland. The Jewel Ann No. 4 was located in April 1956 by Contreras and Cohoe and was owned in 1958 by Cohoe. The Jewel Ann mine is located at T6N, R15W, NW ¼ of Sec. 25. It contains disseminated blebs and pockets of scheelite with quartz, siderite, barite, iron oxide and copper staining in small narrow stringers in silicified Paleozoic marble. The workings consist of an open cut about 50 ft long by 15 ft wide and 20 ft deep, a 25-ft long adit, two small shallow open cuts and several small prospect holes and trenches. The Jewel Ann produced some 100 or more tons of 0.5 to 0.7% WO_3 since the mid-1950s (Dale, 1959, p. 17; Stanton Keith, 1978).

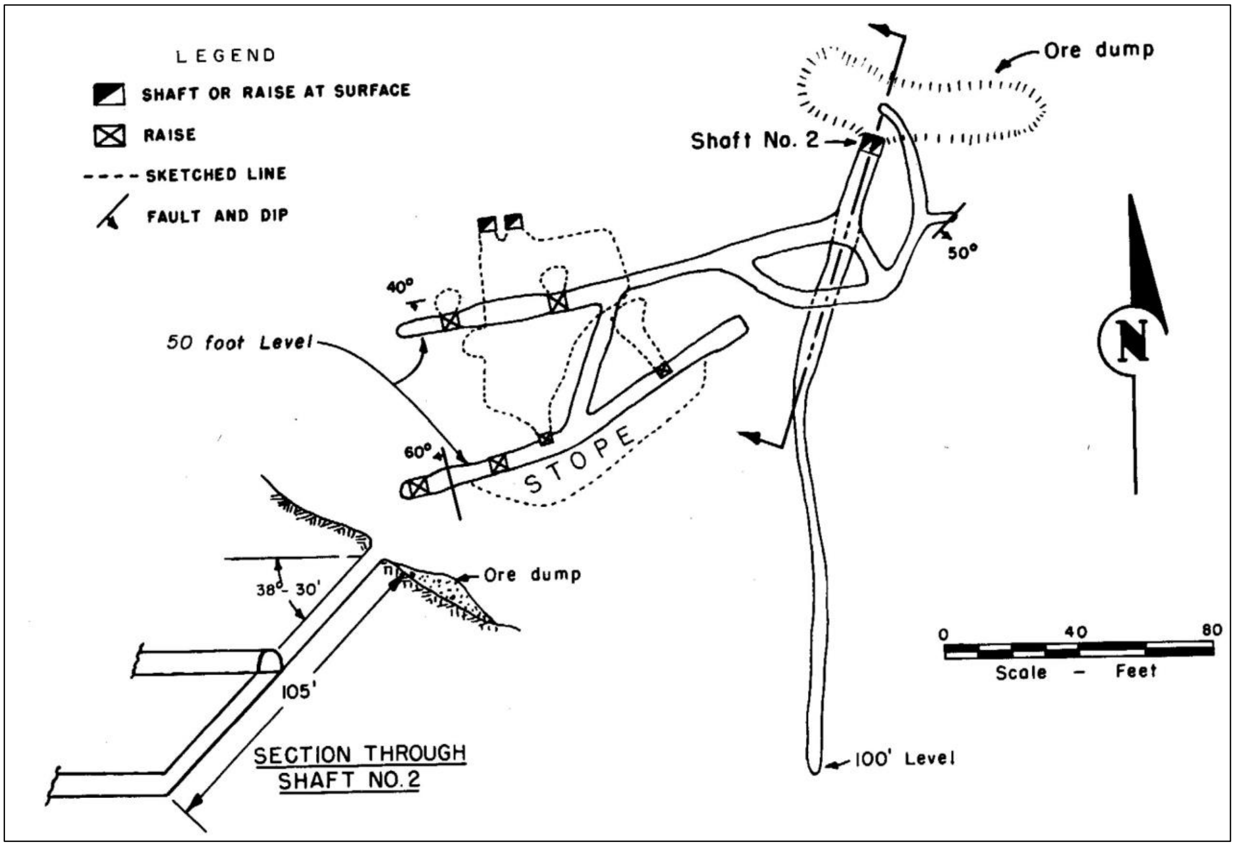
The Pee Wee mine group of two unpatented mining claims was located originally in 1952 by the McVay Mining Co. as the Oliver claims. The ground became delinquent in 1955 and L.C. Huthmacher and James Dilts staked out the two Pee Wee claims over some of the better tungsten showings. The Pee Wee mine group is located at T6N, R15W, SW ¼ of Sec. 24. Mineralization consists of sparse, sporadic scheelite grains, pods and crystals in narrow quartz veinlets in a granitic intrusion underlying schist and marble. Some iron oxide, willemite, sphalerite and traces of other minerals were noted. The mine group was worked from three shallow shafts less than 20 ft deep, two adits about 30 ft long, and numerous small open cuts and trenches. Production by Huthmacher in the mid- and late 1950s to 1958 was about 3,237 pounds of tungsten concentrates averaging about 71.56% WO_3 (Dale, 1959, p. 15-16; Stanton Keith, 1978).

The Three Musketeers mine was found and owned by John Brusco, John Wood and L.C. Huthmacher. In February 1952, the owners leased the Three Musketeers No. 3 claim to L.A. Aplington. In May 1952, Aplington assigned his lease to A.R. Floreen & Associates of Chicago. Floreen sank Shaft 1 to an inclined depth of 65 ft and Shaft 2 to about 110 ft. Considerable drifting, raising, and stoping were done from these tow shafts (Figure 4-6 and Figure 4-7). In 1954 or 1955, Huthmacher sold his interest in the property to Floreen (Dale, 1959, p. 11). The Three Musketeers mine was located at T6N, R15W, SW ¼ of Sec. 24. Mineralization consists of small grains and pods of scheelite in discontinuous quartz lenses in Mesozoic calcareous schist and in quartz-fissure veins in a granitic intrusive. The Three Musketeers was worked from shafts, adits, pits, tunnels and open cuts from 1951 to the 1970s and produced some 1200 tons of ore yielding about 600 units of WO_3 (Dale, 1959, p. 11-17; Stanton Keith, 1978).



Source: Dale, 1959, p. 13

Figure 4-6. Plan of 65 foot level, Shaft 1, Three Musketeers mine



Source: Dale, 1959, p. 14

Figure 4-7. Plan of 50- and 100-foot levels, Shaft 2, Three Musketeers Mine

The Ace unpatented lode claim is about ¼ mile southwest of the Three Musketeers group and was originally the Pacho No. 2 claim located by Merrill, Merrill and Merrill in 1952 and later part of a group controlled by the McVay Mining Company. The claim was relocated in October 1955 by Glenn Bolieu and T.B. Bolieu of Bouse, Arizona. The Ace claim is in T6N, R15W, Sec. 25 and 26 and consists of two shallow prospect holes. Nine short-ton units of WO_3 were produced in 1955 and 1956 (Dale, 1959, p. 17 and 18).

The Trioni group of two unpatented claims is about 0.4 miles south of the Three Musketeers group. The claims were originally located by William Snyder, who gave them to L.B. Irwin of Wenden. The claims must have been forfeited because in October 1953, L.B. Irwin, D.M. Irwin, and George W. Campbell, Jr., relocated the claims. A 20-ft shaft and two shallow open cuts were on the property in the late 1950s. Campbell produced about 40 short ton units of scheelite concentrates from the Trioni Group in January 1958. The enriched zones of sheelite were removed and only low-grade material remained in 1959 (Dale, 1959).

The Squaw T mine was located in 1952 and three other unpatented claims were located in March 1956 by Lewis Elmer of Quartzsite. The Squaw T mine is located in the extreme northwest end of the Granite Wash Mountains at T7N, R15W, north central part of Sec. 27. Mineralization consisted of sparse, sporadic scheelite in pocketa and pods near the contact of micaceous and calcareous schist and marbilized limestone overlying granite. Workings consisted of shallow cuts and pits. The mine was worked sporadically in the early and middle 1950s and produced some 125 units of WO_3 (Dale, 1959, p. 18-19; Stanton Keith, 1978).

Mid-Tertiary (18-14 Ma) Glory Hole Mineral District

The mid-Tertiary aged Glory Hole mine (also known as Arizona Northern, Salome Strike, and owned by Glory Hole Bonanza Mines Co.) is located at protracted T5N, R14W, SW ¼ of Sec. 33 and T6N, R14W, NW ¼ of Sec. 4. Mineralization is in a wide fissure or shear zone and consists of numerous, irregular, contorted, and discontinuous quartz veins and large masses of quartz. Some veins had high-grade gold pockets and gangue of siderite, iron oxides, and some manganese oxides with some chalcopyrite and galena in metamorphosed sediments. Total production was probably less than about 450 oz Au with some silver and copper (Stanton B. Keith, 1978).

The True Blue mine group (also called the Golden Orbit, formerly owned by Ballif; Gray, True Blue Mg. Syndicate, Verdugo Mines Co.) was located at T5N, R14 W. Mineralization consisted of pockety gold with silver and small lenses of copper carbonates, oxides and sulfides associated with quartz seams in a northwest-striking, brecciated zone in interbedded limestone, shale, argillites, and quartzites of probably Mesozoic age. Workings consisted of shaft, tunnel, and open cut workings developed from 1917 and mainly from 1931 through 1949. Total production was about 200 tons of ore averaging about 0.7 oz. Au/T, 0.6 oz. Ag/T and 1% Cu (Arizona Bureau of Mines data, Stanton B. Keith, 1978).

4.1.2 Post-2000 Ownership History

Six of the original Yuma mine unpatented claims were relocated by Candace and Robert Fiddes of Yuma, Arizona, prior to prospecting activity by Merrill Palmer in 2002. By 2002, Mr. Palmer had staked 52 lode mining claims and made a lease/purchase agreement for 6 lode Federal mining claims from Robert and Candace Fiddes with a 1% NSR (net smelter return) on any large mine production.

In 2002, Palmer arranged an exploration agreement leasing this 52 lode claim group to Rubicon Minerals, a British Columbia-Canadian mining company. Palmer staked additional ground (46 claims) in 2003 – 2005. Rubicon Minerals actively explored the Yuma King area from 2003 to 2005. Stanley B. Keith authored an evaluation report of the Yuma King project in May 2003 for Rubicon. Rubicon held the claims until May 2005, when Rubicon founders split the company's assets. In this time of uncertainty, Palmer asked Rubicon to drop the lease and Rubicon terminated their interest in May 2005.

On August 5, 2005, Palmer signed a new lease with Big Bar Resources Corp. The Yuma King property was brought to Big Bar by Mr. Keith. Following the results of a detailed magnetic survey in November 2005, Big Bar contracted Palmer to stake an additional 105 claims that were filed in February 2006. To protect a portion of the Yuma King magnetic anomaly, Palmer staked an additional 24 North Yuma claims in April 2006. He staked additional claims in the northwest Yuma King area and in the southeast Yuma King area in December 2006. The land position in 2007 amounted to 320 unpatented claims on Federal lands administered by the BLM. The lease agreement between Big Bar Gold was dropped in 2008 due to financial collapse and a major downturn in the mining economic world.

In September 2008, a lease/purchase agreement was arranged between Palmer and VANE Minerals PLC (VANE). In January 2009, VANE signed a lease agreement with Palmer for the Yuma King property (MEG, 2011). The lease agreement was in place from 2009-2011, but was dropped in July 2011.

A quit claim deed from Candace Fiddes and Robert Fiddes of Yuma, Arizona, for 6 BLM lode mining claims in T6N, R14W, Sections 19, 20, 28, and 30 (Four or More #1-6: AMC349474, AMC349475, AMC349476, AMC349476, AMC349477, AMC349478, and AMC349479) was granted to Merrill Palmer on January 7, 2012.

On August 1, 2011, a lease/purchase agreement covering the 320 Yuma King claims was signed between Merrill Palmer and Rare Green, which was a small American start up mining company. Rare Green had an informal exploration program with Freeport-McMoRan covering about 12 months from September 2012 to August 2013. Due to financial issues on the oil side of the company, Freeport-McMoran withdrew from a formal lease offer in late 2013. Rare Green was affected by the downturn in the mining industry and was forced by lack of capital to terminate their lease in the spring of 2014.

From spring of 2014 to spring of 2015, the property was held by Merrill Palmer with financial help from Keith (35%) and Monte Swan (5%), with Merrill Palmer retaining primary ownership of the property.

From 2015 to 2018, Robert Wilson of Cash Capital made a two-year lease/purchase agreement with Merrill Palmer to lease 193 lode Federal mining claims. Following the identification of graphite-graphene mineralization to the south, a two-year, southward expansion, claim staking program in November 2017 was instituted that resulted in an expanded claim package of 495 Federal lode claims in January of 2018.

A letter agreement effective November 14, 2021, was signed between Constantine Metal Resources Ltd. (Constantine) of Vancouver, British Columbia, Canada, and Merrill Palmer for a part of the claim position (leased only 295 Federal lode claims) in La Paz County. This letter agreement was terminated by Constantine on November 14, 2022.

XL Mining, Inc. had a lease agreement with Merrill Palmer, but XL failed to make the March 15, 2023 lease payment. A letter from Mr. James Zeeb, Mr. Palmer’s attorney, terminated the lease on June 15, 2024.

1844247 Alberta Limited (“Alberta”) of Calgary, Alberta, Canada, entered into a Mining Claim Lease Agreement and Option to Purchase on June 28, 2023. Alberta did not pay the lease payment, making Alberta in default under the Mining Lease Agreement, which was therefore terminated as of January 18, 2024.

A Mineral Lease with Purchase Option Agreement was made on March 12, 2024, between CuQuest Resources Corp. and Merrill Palmer. The agreement was signed for 495 claims. 20 Green Dragon claims were added for a current total of 515 claims (copies of documents from Merrill Palmer). The maintenance fees were paid before September 1, 2024, so all claims are currently valid and CuQuest has also paid the storage fees for the core and sample storage in Parker, Arizona.

4.2 Historical Exploration and Development

The Yuma King project is located in the Ellsworth mining district (Stanton B. Keith, 1978; Stanley B. Keith et al., 1983a, 1983b), which historically had approximately 70 named mines and prospects, including placer gold prospects (MinDat.org, 2011). An additional 57 mines and prospects are listed in the literature from the Ellsworth mining district or in what are now the nearby Cunningham Pass, Harcuvar, and Little Harquahala districts. Some of the mines and prospects produced minor amounts of ore containing copper, gold, silver, lead, zinc and other metals (Russell, 2005). The Ellsworth district was separated from the original Harcuvar mining district after 1866 (Lacy, 1987).

4.2.1 Early (Pre-2000) History and Development

The historic underground Yuma mine developed a significant tonnage of combined oxide and sulfide copper mineralization. In a company report (Yuma Copper Property – formerly I. & A.) issued in March 1910, the total development at the end of 1909 was claimed to be 1,022 ft, of which 543 ft was in shaft sinking and the rest in drifts, crosscuts, and surface trenching (Bancroft, 1911).

An ADMMR report by E.B. Holt on a visit in February 1943 to the Yuma Copper mine showed the mine being operated with a crew of 8 men with ore being extracted and shipped to smelters. Workings at that time consisted of a 135 ft-deep vertical shaft and east and west drifts, with the shaft continuing at an inclination of 36˚ in the footwall of the zone to the 500-ft level of the mine. On the 135-ft level, drifts were run 160 ft west and 165 ft east in oxidized ore. A winze west of the shaft was sunk to 390 ft, but water stood in the winze 215 ft below the 135-ft level. Water flow in a west drift came in at 50 gallons per minute, so the company abandoned that level. Another drift was driven from 50 ft higher, from which several diamond drill holes were drilled for sulfide ore. The oxide ore was present from the surface down to 180 ft below the 135-ft level; te sulfide ore was present from 240 ft below the 135-ft level (Holt, 1943 in ADMMR-AZGS file data).

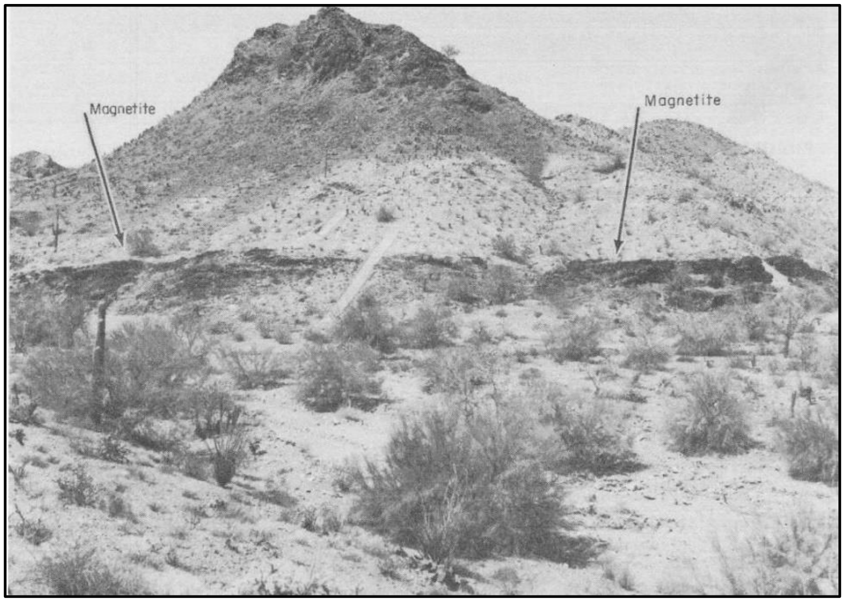
Liberator Mines Company had approximate production in 1945 of 126,150 lbs copper development ore (ADMMR file data). In August 1950, the owner, G. Haskell, estimated they had 500,00 to 800,000 tons of ore available with an average assay of about 1.7% Cu and $1.00 in gold that was too low grade to ship and needed a mill to be economic and a mill was never built.

After 1945 (probably around 1947), the 140 Drift was extended to the east.

Harrer (1964) examined the Yuma mine area for iron resources because of the prominent magnetite ledge. Cupreous magnetite occurs as a contact metamorphic replacement on the Yuma Copper and Iron Dike group of unpatented claims developed prior to 1964 by C. King and T. H. Crawford, approximately in Secs. 24, 25, 29, and 30, T6N, R15W, in the rugged Granite Wash Mountains. The deposit is 5.5 miles northeast of McVay and 6.5 miles north of Vicksburg.

The Yuma mine deposit in 1960 had been developed for copper by several small cuts, pits, shallow shafts and an adit level. In 1961, underground exploration by King and Crawford indicated a cupriferous pyrrhotite-magnetite deposit, estimated to contain 50% Fe, 0.75-1.6% Cu, and 0.04 oz Au/ton (Harrer, 1964; Bancroft, 1911, p. 95-96).

Magnetite partly replaces a bed of yellow, crystalline limestone in a complex of metamorphosed sediments, sedimentary schist and granite gneiss-schist and quartz monzonite intrusives. The magnetite is associated with copper sulfides and their oxidation products, pyrrhotite, pyrite, garnet, actinolite, calcite and quartz. The magnetite can be traced as masses and disseminations as much as 50 ft thick, for several thousand feet, striking north and dipping 15˚ to 35˚W (Figure 4-8 and Figure 4-9). A sample contained 58.4% Fe, 0.2% titanium, 0.3% Mn, 0.13% P, 0.14% S, and 12.2% Si.

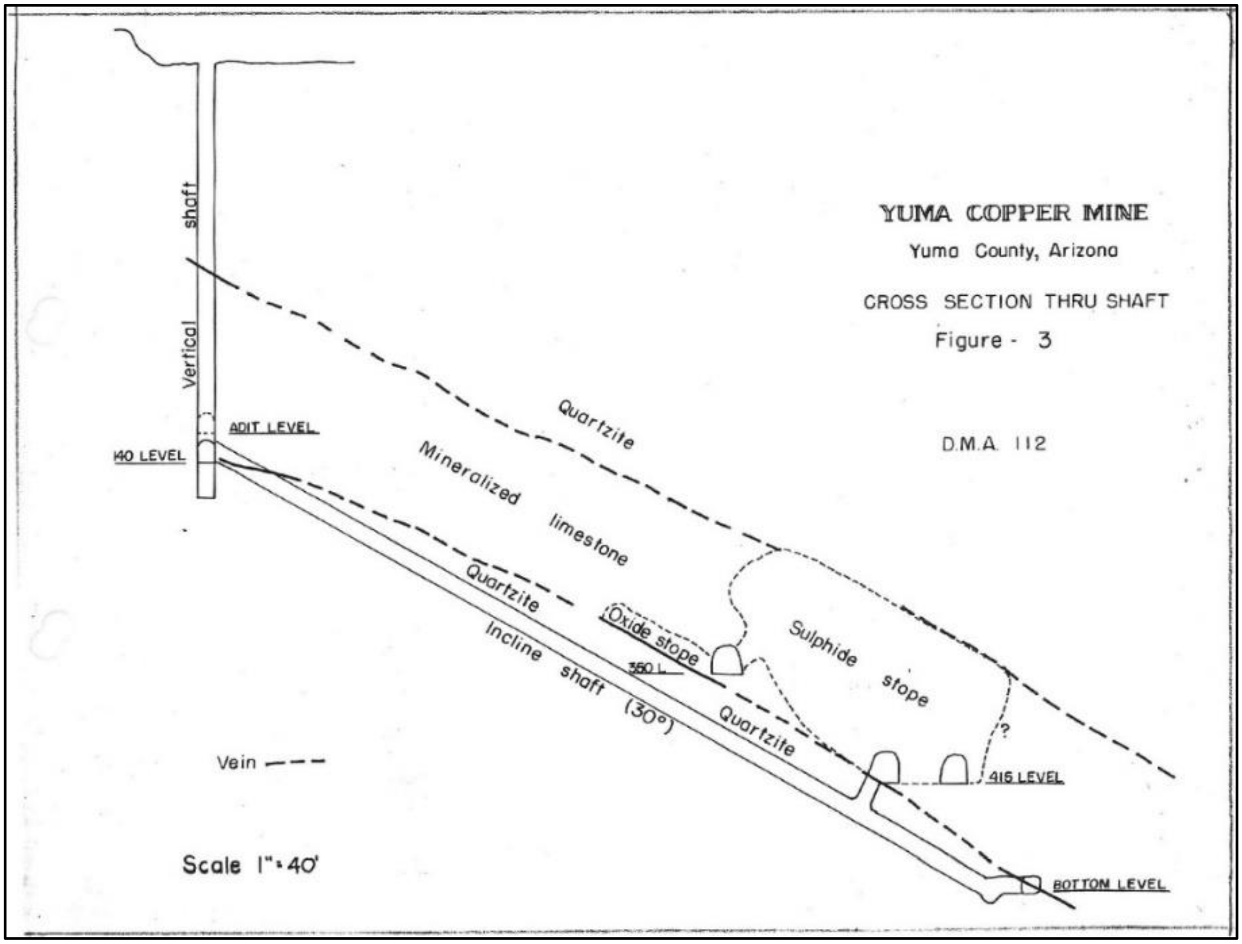


Source: Harrer, 1964

Figure 4-8 Cupreous magnetite outcrop, Yuma Copper Co., T6N, R14W, La Paz County, Arizona

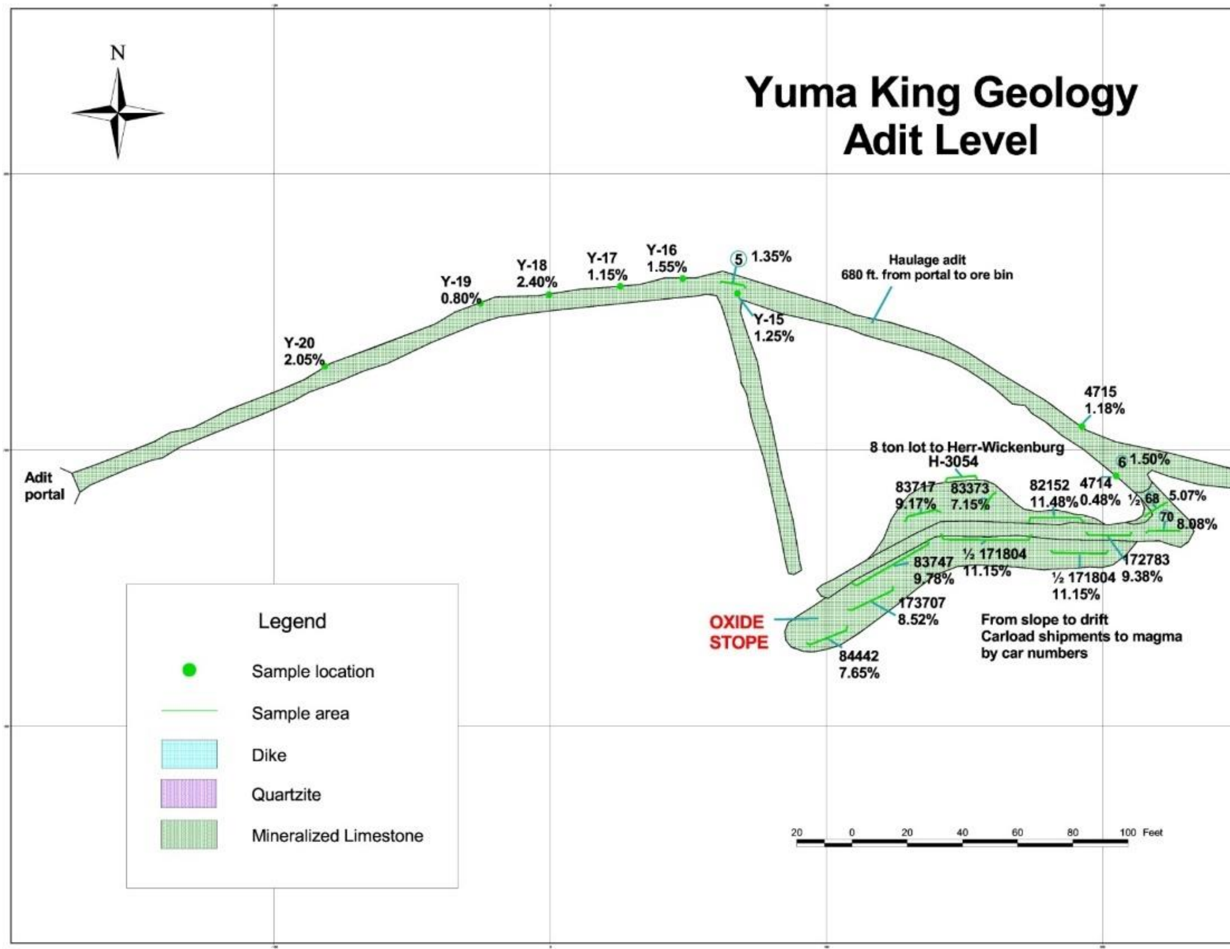
The klippe above the Black Jack thrust fault occupies the cliffs in the upper part of the picture (Figure 4-8). The Yuma mine thrust is the footwall of the magnetite zone.

A weekly report by the Arizona Department of Mines and Mineral Resources (ADMMR) on Februay 18, 1961, by Travis Lane indicated that diamond drilling was in progress from the 425 ft level at the Yuma Copper mine operated by Crawford and King. Additional ADMMR notes from field visits indicate that the property was active in 1959, 1960, October 1961 and February 1962.



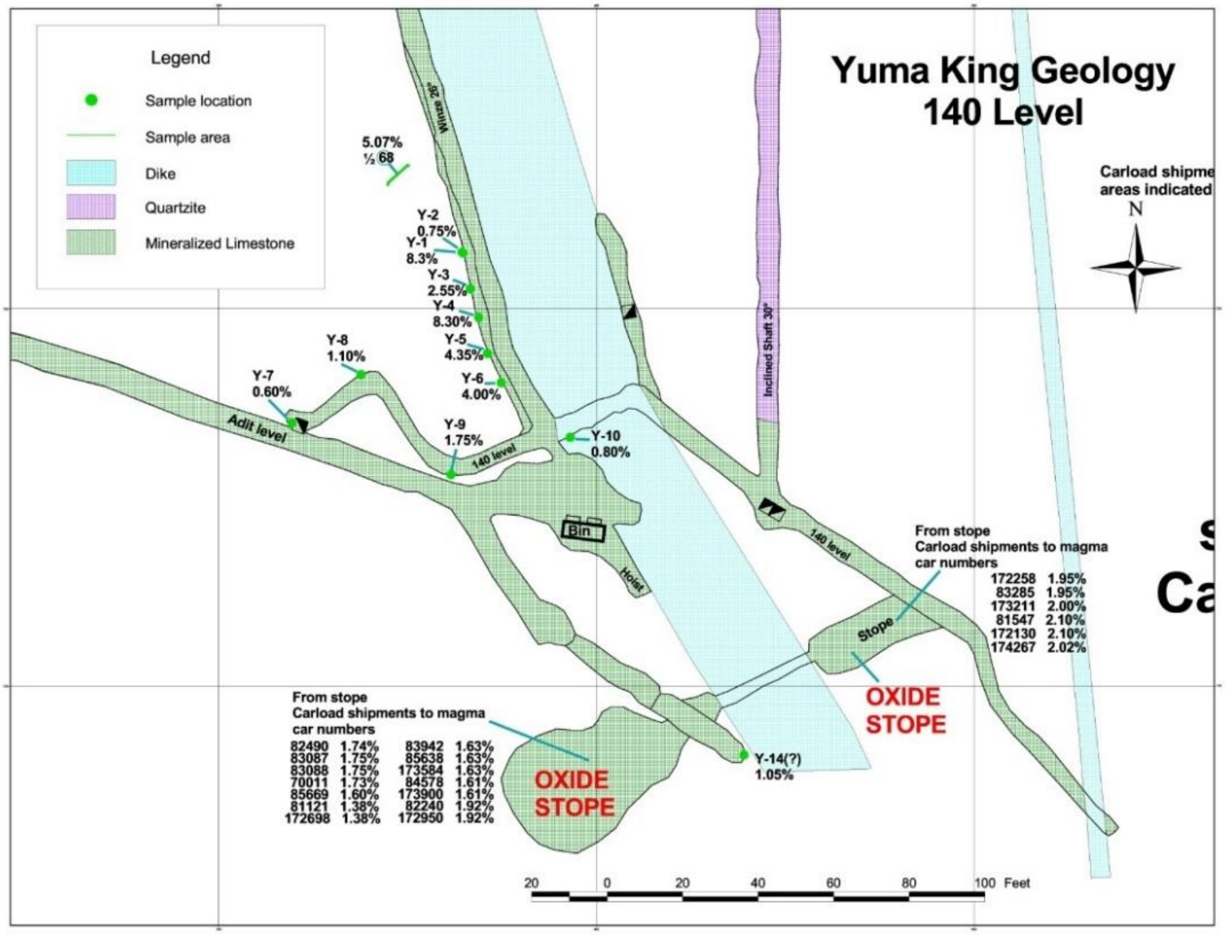
Source: ADMMR/AZGS file data (Harrer, 1964, U.S. Bureau of Mines I.C. 8236)

Figure 4-9 Cross section of Yuma Copper Mine, 1961



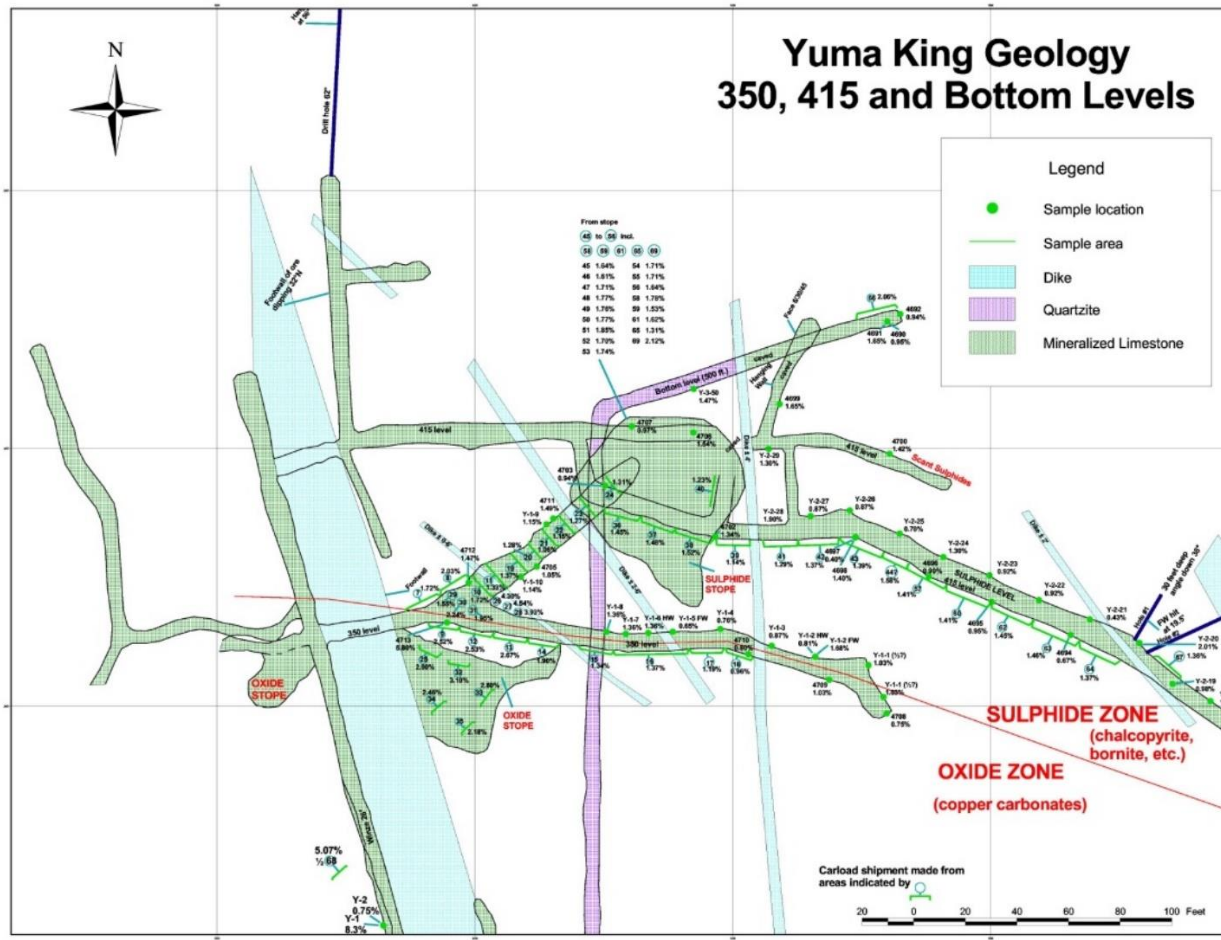
Source: Keith, 2005 power point for Rubicon

Figure 4-10 Yuma King copper grades, adit level



Source: Keith, 2005 power point for Rubicon

Figure 4-11 Yuma King copper grades, 140-ft level



Source: Keith, 2005 power point for Rubicon

Figure 4-12 Yuma King copper grades, 350-ft, 415-ft and bottom levels

The Yuma Copper mine was reportedly owned in 1967 by ACM Corp. (Aguila Reduction Plant), headed by Dan S. King of La Habra, California (ADMMR file data). A visit by ADMMR to the Yuma Copper mine on June 28, 1972, indicated that a drill rig was rumored to have drilled a 900 ft. deep core hole.

From February through April of 1979, Don Nelson, Frank Aubel, and Art Morin developed an azurite vein and shipped some jewelry grade azurite to Wards Scientific. The unpatented claim group consisted of 6 Golden Eagle claims and 19 Four or More claims (ADMMR file data).

During the 1960s and 1970s, Bear Creek and Tenneco are rumored to have examined the Yuma Copper mine and may have drilled a hole or two in its vicinity (Corn and Ahern, 1989, ADMMR files).

Oliver Kilroy held a major land position in the northwestern Granite Wash Mountains area for almost 20 years (1970-1990), conducted extensive geophysical surveys, and drilled 15 holes for copper mineralization with negative results (Corn and Ahern, 1989, ADMMR files).

Gold exploration during the 1980s included dozing and trenching by Bill Baker at the True Blue mine and by Charles Willmore at the Pandora's Box and Dandy prospects in T5N, R14W, Sec. 6 and 7. The Dona Kay prospect in T5N, R15W, Sec. 12 and 13 was drilled by Baroque Resources and Weaco in 1985 and 5 or 6 rotary drill holes were drilled on the major low-angle fault associated with the veins at the Three

Musketeers tungsten property (Corn and Ahern, 1989, ADMMR files).

In 1988 and 1989, Russell Corn and Richard Ahern located 83 unpatented Vay lode claims in T6N, R14W and R15W, but these claims are assumed to have lapsed as there is no current evidence of their claim stakes on the ground (Merrill Palmer, personal communication 2024). The sample logs from an extensive sampling program (Corn and Ahern, ADMMR files) indicate only gold and silver were analyzed.

4.2.2 Post-2000 Exploration

In 2005, Rubicon Minerals hired MagmaChem Exploration, Inc. to identify possible porphyry copper-molybdenum-gold drill targets. In 2006, Rubicon began the first phase of exploration at the Yuma King project. The targets were based on extensive geologic mapping, rock sampling and geochemical analysis (Keith, 2003).

In 2007, Big Bar commissioned an ultra-light aeromagnetic geophysical study, drilled 19 core drill holes, produced a Canadian NI 43-101 technical report by Rick Russell on the historical mined and expandable resource in the immediate mine area, and expanded the claim group to 336 Federal lode mining claims. The drilling consisted of 3,300 meters drilled in 19 core holes from five sites. The program successfully tested the down-dip and strike extensions of the carbonate-hosted replacement copper target (Metals Economics Group [MEG], 2011).

In 2007, Big Bar contracted Zonge to fly high-resolution aeromagnetic surveys. These aeromagnetic surveys indicated a cluster of magnetic highs over several square km. The south end of the largest magnetic anomaly was below the copper replacement target. Two drill holes, which are north from the replacement copper target toward the higher part of the magnetic anomaly, intersected porphyry copper-molybdenum mineralization on the edge of a large porphyry target (MEG, 2011).

In May 2007, Big Bar Gold reported results from the re-analysis of drill core. The results showed that significant by-product potential exists for molybdenum in two target areas: the skarn replacement target area that had previously been known and a newly identified porphyry copper target area. The best molybdenum assays included 0.52% Mo over 3.5 m and 3 m grading 0.19% Mo (MEG, 2011).

In 2008, Big Bar extended exploration for tungsten to the northwestern part of the Yuma King property at the Three Musketeers and Jewel Ann historic mines. Potential was identified for high-grade tungsten veins and lower-grade porphyry tungsten deposits. The tungsten exploration consisted of geologic mapping and geochemical sampling.

In September 2008, VANE signed an agreement to option the Yuma King property from the claim owner, Merrill Palmer. By March 2011, VANE had secured exploration drilling permits at Yuma King. An initial two-hole, 300 to 600 m program began in April 2011. However, VANE decided to drop their interest in the Yuma King property in order to pursue other properties (MEG, 2011). According to Keith (2011), the VANE drilling confirmed that the porphyry copper-gold target, the molybdenum-copper target, and the high-grade skarn target extend at least 1000 feet to the north of the phase 1 drilling program.

In 2011, Rare Green contracted with SRK Consulting to produce another NI 43-101 report to incorporate all the core drilling done to date. Rare Green also conducted additional surface sampling of the oxide zone in the copper skarn target. In September 2012 to August 2013, Rare Green entered an informal lease program with Freeport McMoran to conduct about $120,000 worth of electrical geophysics and core re-logging of the VANE AZ11-01 drillhole. The electrical geophysics identified an easterly extension of the known copper resources and the north end of the Yellowbird graphite-graphene deposit (Keith, 2012; 2013).

From 2013 to 2014, various companies toured the Yuma King project area. Jonathan Boswell of Anglo-American in the spring of 2014 sampled a molybdenum-rich interval from the Big Bar drilling and obtained a Re-Os radiometric date of 190.65 ± 0.95 Ma on molybdenite. This age date proves that the Yuma King deposit formed nearly at the same time as the Bisbee porphyry copper deposit, one of Arizona's other early Jurassic-age porphyry copper-gold systems.

In the spring and summer of 2015, Robert Wilson of Cash Capital contracted geochemical sampling and Raman spectrometry work on the graphite-bearing interval in the VANE AZ11-02 drillhole of the Yellowbird deposit area. This work confirmed the presence of graphite and that there was a significant amount of graphene present.

In June through August of 2016, an approximately 4,000-foot drill program was distributed over 4 additional core drill holes for reconnaissance and to confirm the extent of the graphite-graphite body. The drilling was coupled with an extensive expansion of the 2013 Zonge geophysical study to quantify the extent of the graphite-graphene body, and was accompanied by geologic core logging, continued lab geochemical assays, mineralogic studies, and reconnaissance field sampling. These studies established a southward extension of the northerly Yellowbird graphite/graphene deposit and identified other graphite-graphene bearing schist bodies in the Yellowbird black shale formation to the south (Keith et al., 2019).

The combined work from 2003 through July 2024 had been funded at the approximately $4.5 million level and had identified potential for copper replacement deposits. The work also identified additional potential for molybdenum, silver, tungsten, magnetite, graphene and kyanite within the overall Yuma King land position (Keith, 2011).

4.3 Historic Mineral Resource and Reserve Estimates

The following statements are mentioned for historic reference only and do not imply that the QP agrees with the reliability or accuracy of the statements estimating the tonnage of copper mineralization remaining in the historic Yuma Mine.

Russell (2005) found no historic resource estimates for the historic Yuma Mine, although Coupal (1944, 1950) mentioned that "approximately 300,000 tons" was likely to occur between the 350 and 415 levels". Coupal's map suggested that there was an average thickness of 70 feet, a length of 400 feet, and the measured slope depth in sulfides of approximately 130 feet, which equals 3,220,000 cubic feet or approximately 300,000 tons (Russell, 2005). Russell estimated an inferred copper resource for the Yuma mine using standard methods as per NI 43-101 guidelines at the time, using information regarding distribution and grade of copper mineralization underground at the Yuma mine based on data provided by Big Bar Gold Corporation. Keith and Palmer (2003) took confirmation samples in and around the historic Yuma mine (Russell, 2005). Table 4-1 presents the historical inferred resource estimate for a 40-, 50- and 60-foot (12-, 15- and 18-meter) thickness of the mineralized altered limestone unit (Russell, 2005).

A resource estimate on the remaining underground potential was reported by Russell (2005). This mineralization is associated with a skarn-replacement deposit in the footwall of a probable Jurassic intrusive complex (Keith, 2011). CuQuest does not treat the historical estimates as current resources.

Table 4-1 Historic Yuma mine inferred copper resource (historical estimate)

Level	Short tons 40-ft thick	Short tons 50-ft thick	Short tons 60-ft thick	Grade % Cu
Adit Level	150,545	188,180	220,635	4.82
140 Level	69,270	86,590	102,985	1.92
350 Level	59,900	74,870	89,850	2.46
415 Level	70,980	88,730	106,470	1.35
500 Level	20,365	25,455	30,550	1.45
Subtotal	371,060	463,825	550,385	3.03
Estimated Tons extracted	(13,500)	(13,500)	(13,500)	Unknown
Net Totals	357,560	450,325	635,985	3.03

Source: Russell (2005)

Russell (2005) believed that the resource potential of the historic Yuma mine is significant, based on his examination of the geology along strike to the east of the Yuma Mine, as well as a field examination of the areas covered in the Keith (2003) preliminary geologic assessment report.

Surface sampling and the analysis of the underground maps of the Yuma mine indicate that a zone of greater than 1.5% Cu trends west-northwest for at least 3,400 feet (over 1 km). The zone, which starts at the Yuma mine adit portal, continues to the east-southeast beneath a thrust fault slice. This zone is about 500 feet (150 meters) wide and is associated with strong magnetite skarn (with subordinate garnet, epidote and actinolitic amphibole). Where the zone has been mined in the metasomatized Devonian and Mississippian carbonates, it was at least 50 ft (15 m) thick and may be as thick as 80 ft (24 m) in some areas. The copper zone was intersected at 140 ft (43 m) in depth and has been mined down a 30º decline for about 320 ft (97.5 m) to the bottom level (Keith, 2003).

Russell went underground at the Yuma mine on October 31, 2005, and was able to confirm that copper mineralization on the Adit, 140, 350, and 415 ft (43, 107, and 127 meter) levels is continuous along the drifts and exposed faces as well as on the ribs of the stopes and accessible raises and winzes. He was not able to gain access to the 500-ft (152-meter) level due to high water in those workings. Based on what was observed underground, the thickness of the mineralized zone was estimated to be at least consistently over 40 feet and as much as 80 feet thick in areas of the mine where raises and winzes expose mineralization (Russell, 2005).

Russell (2005) constructed polygonal blocks with the distribution and orientation generally based on copper contour maps prepared by Rubicon (2004). A cutoff grade of 0.90% copper was used, which appears to be a natural cutoff grade, based on observation only (no statistical analysis) of the sample grades in the underground workings. This cutoff grade was also based on copper prices of US$ 1.70 to $1.80 per pound of refined copper. Of the 34 blocks constructed, 29 contained at least one assay sample. The assay data for 131 samples represented in the data and on the mine maps consisted of ore car assays, panel sample and grab sample assays. Five polygonal blocks were constructed that contained no sample data and were a projection and/or extension of sampled mineralization, usually higher grade, in one or more adjoining blocks. A grade of 1.00% was assigned to each of those five blocks.

In Russell's historic resource estimate of the underground Yuma Mine, the average grade of each block containing sample information was the average of all the samples falling within a particular block. No grades were capped, because the sample grades in any given area or block did not seem to spike. The high-grade samples (greater than 3.5% copper) seemed to cluster and were generally relatively consistent within a high-grade area. The height or thickness of each block was estimated at three different thicknesses, 40 feet, 50 feet and 60 feet (12, 15 and 18 meters). All three thickness estimates fit well within the average 80-foot (24-meter) thickness of the altered limestone. The resource estimate was presented in short tons (Table 4-1). A density factor of 11 cubic feet per short ton was used in the estimate (Russell, 2005).

Russell (2005) concluded that:

- The historic Yuma mine contains an inferred copper resource estimated to be between 357,560 and 536,985 short tons of 3.03% copper, depending upon estimated average thickness of mineralization within the mineralized, altered limestone horizon.
- The copper-magnetite zone averages at least 50 feet in thickness, as observed in the underground workings of the historic Yuma mine. It was observed at three separate locations to be approximately 70 to 80 feet thick.
- The copper-magnetite skarn unit can be traced to the north-northwest for at least 3,400 ft (over 1 km) and to the east-southeast where it appears to continue beneath cover. This zone of highly anomalous copper is about 500 feet (150 meters) wide and is associated with strong magnetite skarn.

- Gold-pyrite mineralization, related to a post-thrust, dike-related event, occurs within thin shears in the Bolsa Quartzite (Cambrian in age) that has been thrust over a Devonian-Mississippian carbonate section that hosts the copper-bearing magnetite skarns. The gold-pyrite mineralization consists of pyritic gold mineralization emplaced as disseminations and high-grade pyrite in low-angle vein zones.
- Additional work is warranted and recommended to define the full extent of the copper mineralization in and around the historic Yuma mine and to determine its economic significance.
- Additional work should also be conducted at some point to determine the extent and economic significance of the gold-pyrite mineralization.

Keith (2011) used pre-existing mine and prospect descriptions for mines and prospects in the vicinity of the Yuma King property (Stanton B. Keith, 1978; Bancroft, 1911; Harrer, 1964; Reynolds et al., 1989, 1991), as well as geologic mapping, geophysical surveys, and drill intercepts to make the following general predictions:

- A 10 million ton, oxidized replacement body may be present in and southeast of the Yuma Mine.
- At least two, >50 million ton, copper-molybdenum-gold-silver skarn/replacement bodies with greater than 0.6% copper and 0.2 ppm gold may be present in the footwall of (beneath) the syenodiorite intrusions. The syenodiorite intrusions correspond to a Stage 2 release of hydrothermal fluids from the quartz alkalic class of the magma-metal classification (Keith, 2003, 2004).
- A >500 million ton porphyry copper-molybdenum-gold may be present in or near a quartz monzonite porphyry intrusion. The quartz monzonite porphyry is a Stage 3 release of hydrothermal fluids from the quartz alkalic class of the magma-metal classification (Keith, 2003, 2004) and may have an average grade between 0.08 to 4 wt. % copper, >0.15 ppm gold, >0.01 wt % molybdenum.
- A >50 million ton molybdenum-copper-gold deposit may be present in or near a late quartz syenite/latite intrusion. The syenite/latite intrusion is a Stage 4 release of hydrothermal fluids from the quartz alkalic class of the magma-metal classification (Keith 2003, 2004) and may have 0.03 wt. % Mo, +0.3 wt.% Cu, +0.1 ppm Au.
- Small pods of high grade silver chloride may be associated with the overlying modern stream channel; and
- Tungsten deposits were originally mined in the 1950s, such as the moderately dipping vein at the Three Musketeers and Jewel Anne historic workings (referenced in Section 5).

There is no current NI 43-101 compliant mineral resource or mineral reserve estimate for the Yuma King project. The historical resource estimates and production stated in this section should not be relied upon as they have not been verified or classified according to current CIM or SME resource/reserve categories by a Qualified Person.

While the current QP considers the historical information in this Technical Report to be relevant information, the QP is not reporting a current NI-43-101-compliant mineral resource or mineral reserve for the Yuma King property.

4.4 Historic Ellsworth Mining District Production

Intermittent mining in the Ellsworth district by 15 to 20 different operators produced small, handpicked shipments of copper and gold ore and some lead and zinc, particularly during war years with high prices. Total production in the Ellsworth district has been low, however. The Ellsworth mining district included several geologically distinct mineral districts in the Harcuvar and Harquahala mountains, as well as the Granite Wash Mountains.

Stanton B. Keith (1978) estimated total recorded production of base and precious metals from mines in the Ellsworth mining district from 1940-1963 at some 14,000 tons containing about 386 tons of copper, 14,700 ounces of silver, 2,395 ounces of gold, 12 tons of lead, and 4.5 tons of zinc. Only about 300 ounces of gold with minor silver was produced from placer operations.

Tungsten was recognized but not mined until the 1950s when premium prices were paid under the government buying program. Some production continued intermittently, with some 1,000 short ton units of WO3 produced through 1974. A few carloads of barite produced from hand picking operations were shipped from the district (Stanton B. Keith, 1978).

4.4.1 Jurassic (191 Ma) Yuma King Mineral District

At the historic Yuma mine (Figure 4-3 and Figure 4-13), copper and precious metals were produced from 8,728 short tons of mineralized magnetite skarn mined underground between 1940 and 1963. A summary of the production is provided in Table 4-2 (Keith, 2003). Copper grades averaged 2.65%, gold grades averaged 0.03 oz/ton and silver averaged 0.62 oz/ton. Based on available data for the historic Yuma mine, the metals listed in Table 4-2 all seem to have been produced from the copper-magnetite skarn mineralization.

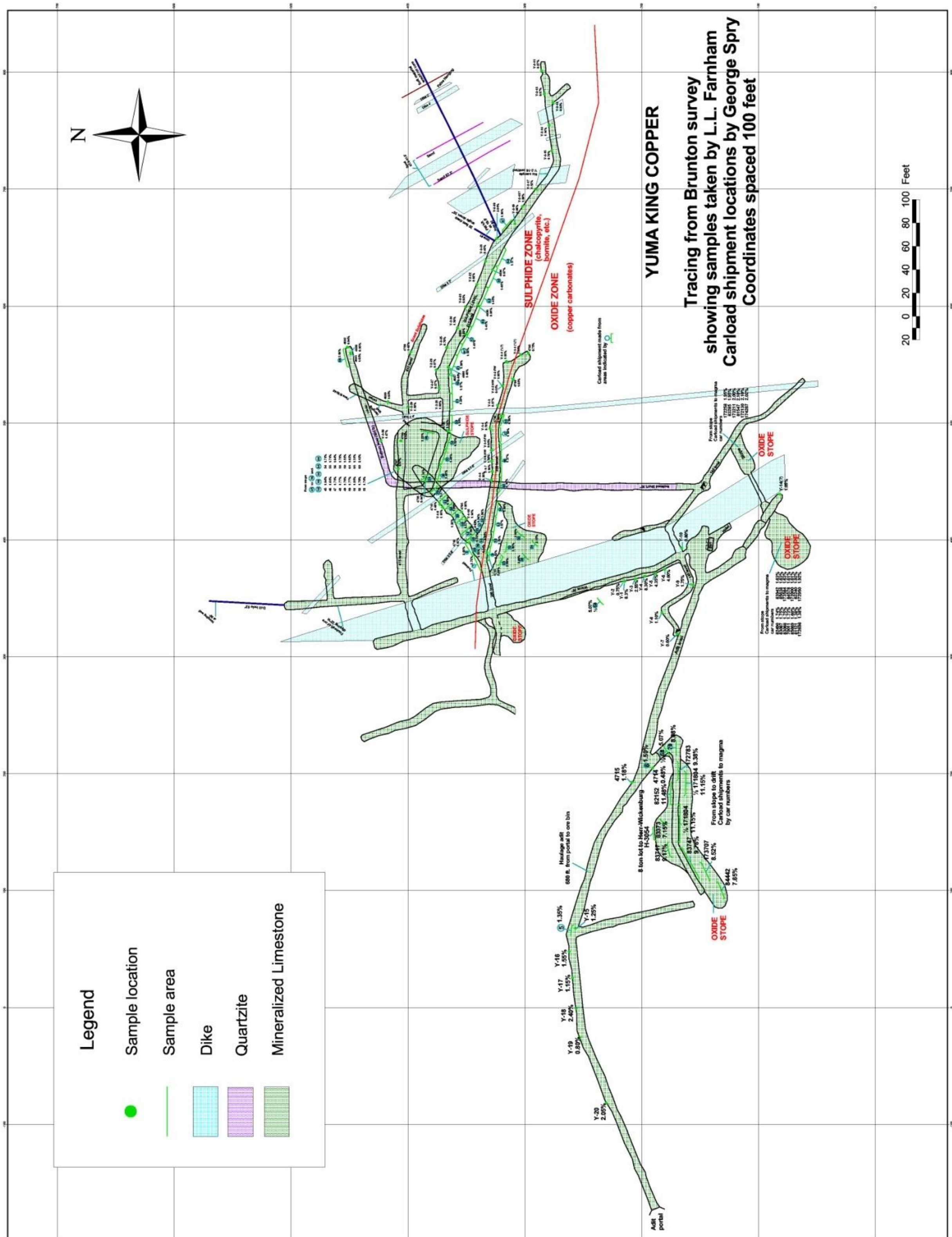
Within the Yuma King property, no production has been reported from the younger pyritic gold mineralization event. Elsewhere in the Ellsworth district, production from the B & B Group, Desert Queen, Glory Hole, March, and True Blue mines (and possibly the Oro Fino Mine) displays metal compositions that suggest that this production is also related to a second, dike-related, pyritic gold mineralization (Stanley B. Keith, 2003).

Table 4-2 Production from the historic Yuma Mine, 1940-1963

Year	Ore type	Ore (short tons)	Cu (lb)	Pb (lb)	Ag (oz)	Au (oz)
1940	NG	12	0		156	14
1941	NL	6	0		37	0
1942	NC	185	17,930		51	3
1943	NC	190	10,167		50	4
1944	NG	2,839	101,470		699	66
1945	NC	3,616	118,200		990	109
1946	NC	1,131	59,500		309	55
1947	NC	189	30,660		65	4
1948	NC	49	6,788		10	1
1949	NC	24	4,352		0	0
1952	NC	2	119		1	0
1953	NS	118	700		2,981	105
1956	NG	58	2,500		22	2
1960	MCP	16	16,300		0	0
1962	MCP	93	79,000		0	0
1963	NC	200	14,000		0	0
Total		8,728	461,686	2,700	5,371	261

Mine operators: Miller and others; Yuma Copper mines; Christopherson; Bill Snyder; Minerals Corp. of George Spry; Southern California Corp.; Liberator mines.

Notes: NG = gold mill ore; NL = lead mill ore; NS = silver mill ore; NC = copper mill ore; MCP = copper precipitated as cathodes; Source: Keith et al. (1982). Probably produced from the copper-magnetite skarn mineralization.



Source: Stanley B. Keith, 2004, Rubicon Minerals presentation

Figure 4-13 Map of underground sampling and historic production, Yuma Mine

4.4.2 Late Cretaceous Three Musketeers Mineral District

The Three Musketeers scheelite deposit was found originally in November 1951 by John Brusco, John Wood, and L. C. Huthmacher. The three partners worked the claims approximately 5 months, mining over $7,000 worth of tungsten ore. The concentrates sold by them are shown in Table 4-3. The ore was milled in a small plant consisting of a crusher, a ball mill, and a concentrating table. Tungsten production is a minimum estimate. Years of tungsten concentrates production were from 1967-1978. The Three Musketeers mine was the main producer.

Table 4-3 Tungsten concentrates sold from Three Musketeers deposit, December 1951-April 1952

Shipment	Date	Ore (tons)	Concentrate (lb)	WO3 %	Net value ($)
1	12/4/1951	1	570	73.6	1,191.77
2	-	-	-	-	1,900.00
3	-	10	1,523	61.4	2,688.84
4	4/2/1952	90	870.5	65.2	1,632.31
Total	**-**	**-**	**-**	**-**	**7,412.82**

Source: Dale (1959, Table 1)

Table 4-4 Historic production from Three Musketeers mineral district

Mine	Years	Ore	% WO_3	WO_3	WO_3 lb
Jewel Anne	1955	100 tons	0.5-0.7		1,204
Pee Wee	1955-1958		71.56	3,237 lbs of 71.56% WO_3	2,316
Squaw T	Early and middle 1950s			125 stu WO_3	
Three Musketeers	1951-	1200 tons		600 stu WO_3	1,200,000
Trioni	To Jan. 1958			40 stu of concentrates	
Total	**1951-1978**				**1,203,516**

Source: Dale (1959); Stanton Keith (1978). Stu = short ton unit; a stu of WO_3 is 20 lb of WO_3, which contains 15.86 lbs (7.19 kg) of tungsten

4.4.3 Mid-Tertiary Glory Hole Mineral District

A surface pocket of high-grade gold ore in 1909 started a short-lived boom, but subsequent exploration failed to develop much additional ore. Total production was less than 450 oz Au with some Ag and Cu (Stanton Keith, 1978, p. 148). Review of more recent data indicates total reported production from the Glory Hole mineral district (Table 4-5) was 1,068 oz Au (Rasmussen and Keith, 2024).

Table 4-5 Production from Glory Hole mineral district

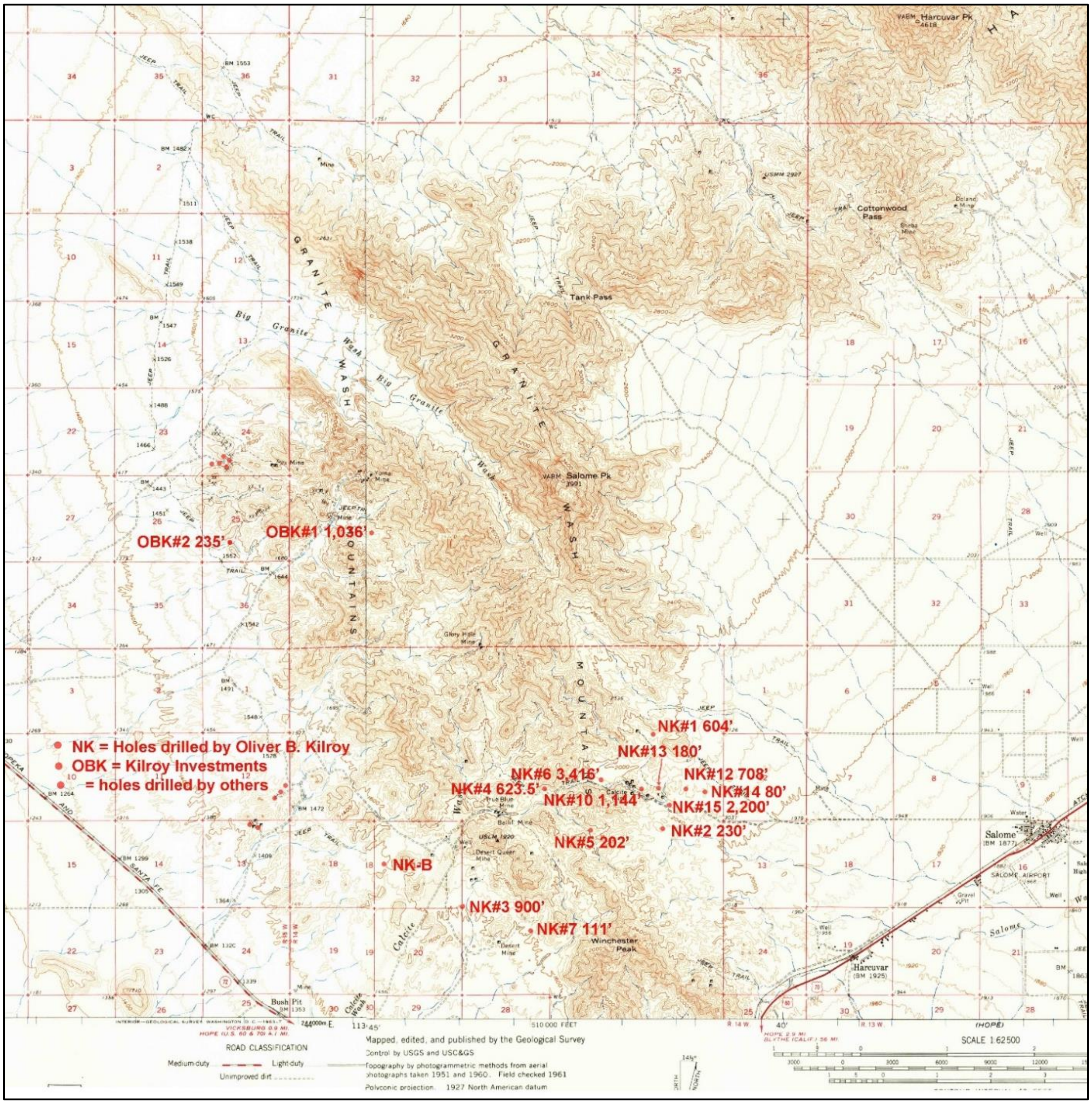
Mine Name	Year	Ore (Sh. Tons)	Cu mill & DSO (lb)	Cu (lb)	Pb (lb)	Au (Tr. oz)	Ag (Tr. oz)
B + B Group	1925 - 1941	139	1,538	1,538	0	79	72
Bell Crown	1910 - 1919	167	19,516	19,516	0	124	25
Blue Bird	1901 - 1942	197	12,134	12,134	0	111	856
Carmelita	1940	4	0	0	0	2	2
Cupa de Oro	1952	3	77	77	200	1	1
Desert Queen	1911 - 1950	1,092	39,409	39,409	2,160	271	4,343
Dona Kay	1956	105	1,700	1,700	0	3	79
Dream	1915	52	7,779	7,779	0	7	18
Ewar	1936	29	26	26	0	14	5
Gold King	1948	1	0	0	259	3	6
Ipex	1909 - 1939	390	28,243	28,243	0	244	139
Malina	1941	6	500	500	0	3	0
March	1936 - 1945	47	117	117	12	39	110
Minnezona + Black Cat	1926 - 1930	44	132	132	6,367	26	60
Oro Fino	1937 - 1940	67	3,727	3,727	0	30	51
True Blue	1917 - 1941	182	4,603	4,603	0	99	117
Waters	1916	30	2,300	2,300	0	12	27
Total	**1901 - 1956**	**2,555**	**121,801**	**121,801**	**8,998**	**1,068**	**5,911**

Source: Keith et al. (1981) in Rasmussen and Keith (2024)

4.5 Historical Drilling

4.5.1 Pre-2000 Drilling

Oliver Kilroy's drill hole OBK #1 was located 3,000 ft southeast of the magnetite replacement deposit (Figure 4-14) and intersected a 20-ft interval at a depth of 85 ft that averaged approximately 1 ppm gold in shale and quartzite with moderate pyrite (Corn and Ahern, 1989, ADMMR files).



Source: modified from Corn and Ahern, 1989, ADMMR files

Figure 4-14 Locations of some pre-2000 drill holes in western Granite Mountains

Drilling exploration has been conducted at the Yuma King Copper Project in various campaigns. Details of the pre-2000 drilling were not found. Drilling carried out by previous operators since 2005 is summarized in Table 4-6.

Table 4-6 Drilling conducted by previous operators since 2000

Company	Year	No. of Holes Drilled	Drilled Footage	Drilling Method
Big Bar	2006	19	~10,827 ft	Core
VANE	2011	2	1,831	Core
Cash Capitol (graphene)	2016	4	~4,000 ft	Core

4.5.2 Big Bar 2006

In April through July 2006, Big Bar drilled 3,300 m in 19 core holes from 5 sites. The program successfully tested the down-dip and strike extensions of the carbonate-hosted replacement copper target (Metals Economics Group [MEG], 2011).

4.5.3 VANE 2011

In April of 2011, VANE drilled AZ11-01 and intersected a mineralized skarn about 1,000 ft to the north of Drill Site 2, which expanded the porphyry-related skarn potential that is yet to be pursued. AZ11-02 was drilled in May of 2011 and intersected a graphite zone that was at least several hundred feet thick, but did not show any copper values.

4.5.4 Freeport Relogging of VANE core

In September 2012 to August 2013, Rare Green entered an informal lease program with Freeport McMoran Copper and Gold to conduct about $120,000 worth of electrical geophysics and core re-logging of the VANE AZ11-01 drill hole.

4.5.5 Cash Capital (Robert Wilson) – Graphene Drilling 2016

In June through August of 2016, an approximately 4,000-foot drill program was distributed over 4 additional core drill holes for reconnaissance to confirm the extent of the graphite-graphite body.

5. GEOLOGICAL SETTING AND MINERALIZATION

The geology of southwestern Arizona, the Ellsworth mining district, and the Yuma King property are discussed in this section. The geology at the Yuma King project is very complex, with numerous episodes of thrust faulting, folding, and intrusions. These structural events deform several of the intrusive events that are associated with mineralization (Reynolds et al., 1989).

The main mineralization-related intrusive events consist of a Jurassic alaskite intrusive complex that is associated with copper-magnetite skarn and porphyry copper-gold-molybdenum mineralization. A second set of numerous gabbro-diorite-granodiorite dikes are present that may be related to later mid-Tertiary gold mineralization event (Keith, 2003).

5.1 Regional, Local and Property Geology

The geologic setting of southern Arizona can best be understood in the context of the plate tectonic setting of the southwestern United States. Numerous orogenic (mountain building) episodes that brought mineralization (Table 5-1) were driven by the position of the area on the leading edge of a continent. In this position, western North America was subjected to volcanism and plutonism that rose from the plate that was being subducted under the advancing continent.

5.1.1 Historical Geologic Studies

Before the 1980s, the geology of the Ellsworth district had only been geologically mapped in a reconnaissance manner and was not well defined or understood (Stanton B. Keith, 1978). Lee (1908), in a brief description of the geology, considered the rocks to be Precambrian granite, gneiss, and metamorphic sediments. Bancroft (1911) also considered the region to be largely made up of Precambrian gneiss and schist, with included metamorphosed sediments, into which masses and dikes of probable Mesozoic granitic rocks and some basic rocks were intruded. Bancroft's interpretation of the geology was used by Ross (1922, 1923), with the addition of mapping the Harcuvar Peak intrusive. Darton (1925) noted that the limestone within the metamorphic sediments in various places in the Granite Wash Mountains might be Paleozoic and that great thicknesses of shale, schist, and phyllite occurred in those mountains (Stanton Keith, 1978).

The 1924 Geologic Map of Arizona, based largely on Darton's reconnaissance mapping, shows several outcrops of Carboniferous sediments in the Precambrian complex in the northern part of the Granite Wash Mountains but did not show the Harcuvar Peak granitic intrusive. Wilson's reconnaissance mapping for the Geologic Map of Yuma County, Arizona (Wilson, 1960) and for the 1969 Geologic Map of Arizona (Wilson et al., 1969), made several revisions in the regional geology of the district. Wilson restricted the Precambrian granitic-gneissic-schist complex to the Harcuvar Mountains and to the low northwest-trending prong of the Granite Wash Mountains. The shale, schist, and phyllites noted by Darton in the southern part of the Granite Wash Mountains were called Mesozoic by Wilson, and a thrust block of undifferentiated Paleozoic-Mesozoic shale, quartzite, and limestone was mapped on the northwestern edge of the range. The intrusive mass between the Harcuvar and Granite Wash mountains and some smaller outcrops to the south were considered by Wilson as Laramide, while others along the east side and in the Granite Wash Pass area were classed as Mesozoic (Stanton Keith, 1978).

The first comprehensive geologic investigation was the mapping of Reynolds et al. (1989, 1991) between 1982 and 1988 as part of the U.S. Geological Survey/Arizona Geological Survey Cooperative Geologic Mapping Program. The Granite Wash Mountains were mapped at a scale of 1:24,000 by Reynolds and Spencer, with additional, generally more detailed mapping in the central (Laubach et al., 1989; Laubach, 1986), northern (Cunningham), and northwestern (Richard) parts of the range. Detailed structural study and petrographic analysis of samples from key localities were conducted in addition to the mapping (Reynolds et al., 1989, 1991). These newer studies were incorporated in the geologic map of Arizona (Richard et al., 2000; Richard, 2002).

Table 5-1 Geologic events in southwestern Arizona

Orogeny	Phase	Phase Name	Age (Ma)	Sediments	Magmatism	MC	Structures	Resources
San Andreas		Transverse	13-0	Clastics, salines in grabens	alkaline anhydrous basaltic volcanism		N-S trending horsts & grabens, bounded by steep normal faults	sand & gravel, salt, zeolites, cinders, gypsum
Galiuro	Late	Whipple	18-13	Coarse to fine clastics, megabreccia	alkalic hydrous volcanics & local epizonal stocks	MQA	low-angle normal detachment faults, SSE-trending folds, NW striking thrusts & reverse faults	Cu-Au-Ag in veins, replacement lenses & in detachment faults, epithermal Au-Ag veins, hotspring Mn & U
	Middle	Datil facies	28-18	Local clastics interfinger with volcanics	alkali-calcic hydrous ignimbritic volcanics & epizonal plutons	MAC	broad NW-trending folds; NW- and NE-trending dikes	Pb-Zn-Ag +/- F in veins, replacements, epithermal Ag, hotspring Mn
	Middle	South Mountain facies	30-22	Local clastics interfinger with volcanics	calc-alkalic hydrous volcanics & epizonal plutons	MCA	broad NW-trending folds, NW-trending dikes, minor NE-trending dikes	Au +/- Cu-W veins & disseminated deposits
	Early	Mineta	38-28	Coarse & fine clastics & salines in lake beds	rare volcanics, mostly within 'volcanic gap"		local broad basins; possibly with WNW trend; reverse faults	U, clay, exotic Cu
Laramide	Late	Wilderness	55-43	None	widespread, 2-mica, garnet-muscovite granitoid stocks, batholithic sills, aplopegmatite	PCA	SW-directed, low-angle thrusts widespread, shallowly dipping mylonitic zones, general SW shear	mesothermal, Pb-Zn-Ag veins, minor Cu-Au veins, Au in quartz veins, kyanite, tungsten

Orogeny	Phase	Phase Name	Age (Ma)	Sediments	Magmatism	MC	Structures	Resources
					dikes, peraluminous, calc-alkalic			
	Middle	Morenci	65-56	None	calc-alkalic hydrous, numerous epizonal stocks & small batholiths, local sporadically preserved volcanics, widespread regional NE to ENE-striking dike swarms	MCA	widespread NE- to ENE-striking regional dike swarms between E-W to ENE striking structural elements of the Texas Zone that moved in left-slip	large disseminated porphyry Cu systems, locally containing skarns & veins; Cu-Zn-Ag veins; Pb-Zn-Ag veins, skarns or replacement marginal to plutons; Cu-Zn skarns adjacent to epizonal porphyritic plutons; composite, epigenetic, mesothermal, zoned disseminated porphyry Cu systems, with several zones in a large system
	Early	Tombstone	85-65	Continental clastics; large exotic blocks interbedded with volcaniclastics	alkali-calcic, hydrous plutonism & pyroclastics, volcanism, some epizonal quartz monzonite porphyritic stocks; lower= andesite dacite breccia; upper= dacite-rhyolite ignimbrite flows & ash flows	MAC	NW-striking, NE-directed folds & thrusts with 1-10 km shortening	mesothermal, Pb-Zn-Ag veins & replacement deposits
	Earliest	Hillsboro	89-85	coarse continental	quartz alkalic hydrous,	MQA	E-W block uplifts; E-W to WNW-ESE	Cu-Au porphyry deposits

Orogeny	Phase	Phase Name	Age (Ma)	Sediments	Magmatism	MC	Structures	Resources
				clastics; lack volcanics; accumulated in E-W-trending basins adjacent to block uplifts	volcanics 7 small stocks, small volcanic centers, small epizonal porphyritic stocks; volcanics highly brecciated; latites & monzonites		striking highangle reverse faults (60 degrees) with shortening 5-7 km vertical throw, 1-3 km horizontal throw; bidirectional transport N- or S-directed or NNE= or SSW-directed either side of block uplifts	
Sevier	Late		105-89	McCoy Mountains Fm. regression	None		NE-directed thrust faults	
	Middle		120-105	McCoy Mountains Fm. limestone	None		gentle NE-striking basin for transgressive seaway	
	Early		145-120		Volcanic pause			
Nevadan	Late		160-145		Jurassic volcanic & volcaniclastic; later muscovite granitic pegmatites	M? volc., PC	Late major SW-directed thrust faults, Early WNW Texas zones as shear zones	
	Middle		205-160	Vampire Fm.; Eolian ss intercalated with volcanics	Canelo Hills volcanics; plutonic rocks	MQA	WNW-striking Texas zones as grabens	porphyry Cu-Au at Bisbee
	Early		230-205	Buckskin Fm. continental red beds (ss, sh)				
Passive Margin			542-205	marine limestone, sandstone, shale, dolomite	none	none	Broad basins and transgressive seaways	Limestone Source: Keith

Source: Keith and Wilt (1985, 1986), Rasmussen and Keith (2024)

5.2 Regional Geology

The ages of rocks in the Granite Wash Mountains range from Proterozoic (Late Precambrian about 1750 million years ago [Ma]) to Quaternary. These rocks consist of schist, granite, limestone, dolomite, shale, sandstone, and conglomerate of Precambrian through Mesozoic age, and younger granodiorite, tuff, rhyolite, andesite, valley fill alluvium, and basalt (Reynolds, 1980; Reynolds et al., 1991; Richard et al., 2023). Keith (2003 - 2011) mapped the detailed geology of the Yuma King area.

The geology of the Granite Wash Mountains is dominated by:

- a series of major, gently dipping thrust faults that cut Mesozoic, Paleozoic, and Proterozoic rocks,
- two major, post-thrusting, Late Cretaceous plutons, the Tank Pass Granite and Granite Wash Granodiorite,
- a later (Paleocene) aplitic leucogranite complex in the northwestern part of the Granite Wash Mountains and in the nearby Harcuvar Mountains, and
- widespread, early to mid-Miocene-aged, dominantly northwest-trending, mafic to felsic dike swarms.

5.2.1 Precambrian (1,800 - 542 Ma)

The oldest rocks in the region are Proterozoic gneiss, schist, amphibolite, and dioritic to granitic rocks. These rocks are depositionally overlain by a 3,300-foot (1.0 km) thick sequence of Paleozoic carbonate and clastic rocks (Russell, 2005).

The oldest Precambrian rocks in southwestern Arizona are represented by fine-grained Yavapai Schist (approximately 1,700 Ma) and unnamed granitic rocks (1,625 Ma or 1,400 Ma). Throughout southwestern Arizona, the Yavapai Schist was intruded by a granodiorite of the Mazatzal orogeny, which was active between 1,675 and 1,625 Ma (Conway and Silver, 1989).

The earlier Precambrian rocks of Arizona were intruded by granites that are usually described as “anorogenic” (Anderson, 1989), although they probably result from a northeast-trending, flat subduction zone along the west margin of North America (Swan and Keith, 1986). These granites are characterized by large K-feldspar (orthoclase) crystals in a porphyritic texture. After a long period of erosion, both the Yavapai Schist and Precambrian granitic rocks were buried beneath the Bolsa Quartzite of Cambrian age.

5.2.2 Paleozoic Passive Margin (542-251.5 Ma)

Individual Paleozoic formations maintain their distinctive characteristics, even where they are metamorphosed and greatly attenuated (Stone et al., 1983). These formations are useful for deciphering the complex structure (Russell, 2005).

Arizona was on the trailing edge of the North American continent during the Paleozoic, and therefore experienced passive margin or miogeoclinal sedimentation of sandstone, shale, and limestone. The plate tectonic regime during the Paleozoic involved the North American plate moving eastward over a westward-subducting plate in at least three main orogenies with active volcanism along the east coast. These included the Taconic orogeny (490-445 Ma), the Acadian (or Caledonian) orogeny (410-380 Ma), and the Alleghenian (or Ouachita) orogeny (325-220 Ma) (Janke, 2010).

The principal effect of these orogenies on southern Arizona was in the nature of the sediments being shed from the continental areas in the east and the incursions of shallow seaways from the west, which resulted in the deposition of limestone. Characteristics of Paleozoic formations are summarized in Bryant (1968). Limestone is generally reactive to hydrothermal solutions and, in the Granite Wash Mountains, was instrumental in trapping mineralized solutions.

The Bolsa Quartzite (Middle Cambrian [~521-499 Ma]) crops out in the Yuma King property. The Bolsa Quartzite is pale orange (fresh surface) to light brown (weathered surface). It unconformably overlies the Pinal Schist and the Precambrian granitic rock. The major part of the unit consists of thick- to very thick-bedded, medium- to very coarse-grained, slightly cross-bedded quartzite. The Abrigo Formation (Middle to Upper Cambrian [~515-488 Ma]) overlies the Bolsa Quartzite.

The Abrigo Formation is notable for its grayish olive-green to dark greenish gray limestone with worm borings and conspicuous thin beds of conglomerates. The Abrigo appears as a greenish schistose rock in the eastern part of the drilled area of the Yuma King property.

The Martin Formation (Late Devonian [~386-375 Ma]) overlies the Abrigo. The rocks are typically dark gray to brownish black and consist of chert, dolomite, limestone, sandstone, and shale. The upper and lower surfaces are disconformities and the upper contact with the Redwall Limestone is arbitrarily placed where the color changes from dark gray to light gray. In the drilled area of the Yuma King property, the Martin Formation contains more magnesium than the Redwall Limestone, as shown by the geochemical results.

The Redwall Limestone (Early Mississippian [~353-340 Ma]) is a major cliff-former. The massive lower beds commonly form prominent cliffs and the higher beds typically form dip slopes. Fossil crinoid fragments, corals, and brachiopods are abundant.

The Supai Group, Coconino Sandstone, and Kaibab Limestone (Pennsylvanian - Permian) crop out in the Granite Wash Mountains but are indicated on the geologic map as undifferentiated Paleozoic sedimentary rocks (Reynolds et al., 1989, 1991). The Supai Group consists of thin-bedded, blue-gray limestones alternating with thin beds of red shale and sandstone.

The Coconino Sandstone is a white cross-bedded sandstone and the Kaibab Limestone consists of light gray, cherty limestone. In the Yuma King project area, the Coconino Sandstone has been metamorphosed to quartzite and appears as small, rectangular, white, fine-grained quartzite chips, in contrast to the coarser, more brownish and larger float blocks of the Bolsa Quartzite.

The uppermost Paleozoic unit in the project area is represented by the Kaibab Limestone, which has been metamorphosed to marble and calc-silicate skarns in the Yuma King copper project area. Interbedded chert components are present as recrystallized silica. The unit is a major host for magnetite replacement deposits in the central and western part of the property.

After the major continent-continent collision of North America, Europe, and Africa created the supercontinent Pangea and the Appalachian-Ouachita Mountains, the tectonic plates were forced to reorganize in the early Mesozoic. As Pangea began to split apart, separating the eastern North American plate apart from Africa, the western coast of North America became the leading edge of the northwestward moving North American continent. The resulting subduction of the northeast dipping Farallon oceanic plate under the North American plate caused volcanism and accompanying mineralization throughout the western U.S.

5.2.3 Jurassic Nevadan Orogeny (205-145 Ma)

The first sedimentary and volcanic rocks of the Jurassic Nevadan orogeny were deposited in western Arizona at approximately 205 Ma (Tosdal et al., 1989). In southern Arizona, plutonic rocks of quartz alkalic magma chemistry are known from Bisbee (Warren mining district) (Rasmussen and Keith, 2023), the Granite Wash Mountains and the central Dome Rock Mountains (Rasmussen and Keith, 2024).

Mesozoic sedimentary and volcanic rocks in the Granite Wash Mountains can be subdivided into the following four units in ascending stratigraphic order (Reynolds et al., 1989):

[1] The Buckskin Formation of Early Triassic age (Reynolds and Spencer, 1989) is a sequence of variably calcareous silici-clastic rocks and phyllite, with local conglomeratic, feldspathic,

and evaporitic intervals. This unit depositionally overlies Permian Kaibab Formation and largely correlates with Triassic Moenkopi Formation of the Colorado Plateau (Reynolds et al., 1987).

[2] The Vampire Formation of Late Triassic or Jurassic age (Reynolds and Spencer, 1989) consists of impure quartzose sandstone and quartzite, with conglomerate at the base and locally higher in the section. The basal conglomerate unconformably overlies a variety of older rock units, a major episode of Late Triassic or Early Jurassic uplift (Reynolds et al., 1989). The formation probably correlates with the Jurassic Glen Canyon Group of the Colorado Plateau (Reynolds et al., 1987).

[3] Intermediate to silicic volcanic and volcaniclastic rocks of Jurassic age are dated at about 160 Ma (Reynolds et al., 1987). This unit largely consists of feldspar- and quartz-phyric ashflow tuffs, hypabyssal intrusions, volcaniclastic rocks, and schistose, metamorphosed equivalents. The volcanic sequence is locally accompanied by contemporaneous granitoid plutons (Reynolds et al., 1989).

[4] Several stages/phases of an intrusive complex of probable Jurassic age (approximately 190 Ma) are also present. Three mineral-related intrusive events in this complex consist of:

- a monzodiorite porphyry/aplite that may be related to the copper-magnetite-gold-silver-molybdenum skarn mineralization (Stage 2),
- a monzonite to quartz monzonite porphyry intrusive complex that may be associated with a copper-gold-molybdenum porphyry (Stage 3), and
- a differentiated silicified aplo-latite that contains abundant molybdenite quartz veinlets (Stage 4) (Stanley Keith, 2011).

No confirmed Jurassic age structures have been identified in the Granite Wash Mountains. However, east-directed thrusting in association with 165 Ma to 158 Ma intrusions and mineralization has been documented in the nearby central Dome Rock Mountains (Keith, personal communication, 2011; and at Boyer Gap between the northern Dome Rock Mountains and the Moon Mountains (Boettcher et al., 2002).

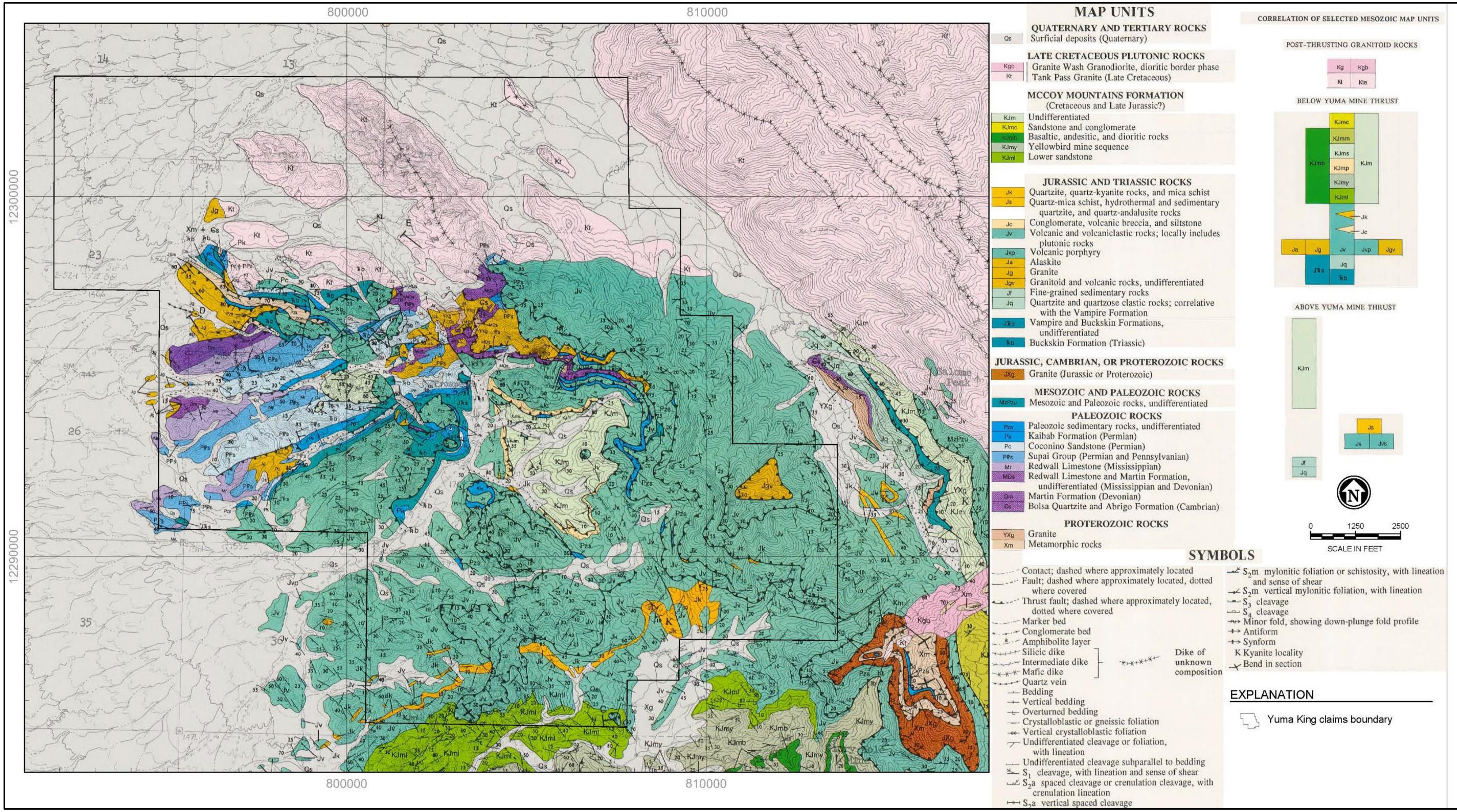


Figure 5-1 Geologic map of northern Granite Wash Mountains, showing outline of Yuma King claims in 2011 (SRK, 2011)

5.2.4 Cretaceous Sevier Orogeny (140-89 Ma)

The stable (non-migrating and non-flattening) magmatic arc of the Sevier orogeny was located in California, with back arc basins located in Arizona and similar regions east of the magmatic arc (Keith, 1981). The McCoy Mountains Formation was probably deposited in such a basin.

The McCoy Mountains Formation consists of a sequence of dominantly clastic rocks of Cretaceous age (Harding and Coney, 1985; Stone et al., 1983, 1987; Tosdal and Stone, 1994). In several western Arizona mountain ranges, the McCoy Mountains Formation is 3.0 to 4.5 miles (5.0 to 7.0 km) thick and has been subdivided into six different members (Reynolds et al., 1989).

The McCoy Mountains unit is generally correlated with the Bisbee Group, whose fossils date the center member as Aptian-Albion stage at about 100 Ma. The lower Bisbee Group in the Chiricahua and Huachuca Mountains is Jurassic.

The McCoy Mountains Formation in the Granite Wash Mountains (Reynolds et al., 1989; Tosdal and Stone, 2011) includes seven units that are, from bottom to top:

- Lower sandstone (well-bedded, light gray to dark gray sandstone, with brown to tan desert varnish);
- Yellowbird sedimentary rocks (mudstone, thin discontinuous beds of marble, siltstone, fine-grained sandstone, and conglomerate) (Jurassic-Cretaceous);
- Polymict conglomerate (containing distinctive clasts of quartzite, siltstone, sandstone, mudstone, marble, and porphyritic volcanic clasts);
- Lithic sandstone unit (ledge-forming, medium-to fine-grained sandstone, interbedded mudstone and polymict conglomerate);
- Mudstone unit (siliceous gray shale [phyllite-slate] with thin layers of fine-grained calcareous silici-clastic rock, calcareous feldspathic siltstone, lithic-feldspathic sandstone and conglomerate);
- Sandstone and conglomerate unit (greenish-gray, quartz-feldspar-lithic sandstone, medium to coarse grained, poorly sorted, and thin to medium bedded); and
- Mafic igneous rocks interlayered with sedimentary strata (mafic sills, dikes, and flows and coarser grained dioritic intrusions).

Zircon from volcanics in the lower McCoy Mountains Formation yielded a 154.4 ± 2.1 Ma age date in the New Water Mountains near the Ramsey mine (Spencer et al., 2011). The same unit is in the Yellowbird unit of the lower McCoy Mountains Formation on the Yuma King property.

Sevier Orogeny Structures (D1)

Thrust faults associated with the Sevier orogeny are generally southeast-vergent and affect the rocks of the McCoy Mountains Formation, but do not affect the younger Tank Pass granite or Granite Wash Granodiorite. The thrusting event correlates with D1 deformation in the Granite Wash Mountains as described by Reynolds et al. (1989).

At the Yuma King property, a significant multi-phased thrusting event occurred in the Sevier orogeny in the Late Cretaceous. One of these thrust faults, the Yuma mine thrust (D1) is the structural floor of the mineralized system. The roof of the mineralization is the Black Jack thrust (D2). The original stratigraphic sequence and metal zonation geometries have been flipped upside down by the thrust faulting (Stanley Keith, 2011).

Late Cretaceous-Early Tertiary deformation and metamorphism were concentrated in the east-west-trending Maria Fold and Thrust Belt, which extends from the Palen and Coxcomb Mountains of southeastern California to the Harquahala and Eagle Tail Mountains of west-central Arizona (Reynolds et al., 1986, 1988, 1989; Hoisch et al., 1988). This thrust belt is characterized by generally southeast-, south- and southwest-vergent structures, including large recumbent to upright folds and major ductile and brittle thrust faults. The folds are associated with extreme attenuation of Paleozoic and Mesozoic sections and involve the underlying Proterozoic crystalline basement.

The larger thrust plates (Figure 5-3) include tectonic slices of Jurassic or Proterozoic crystalline rocks that commonly juxtapose thrust plates with Mesozoic sequences and histories (Reynolds et al., 1989).

The bottom of the mineralization of interest is sharply truncated by the Yuma mine thrust, which was originally mapped by Reynolds et al. (1989). The package of mineralized rocks then is bounded at its top by the Black Jack thrust (D2) and at its base by the Yuma mine thrust (D1). The thrust plate between these two faults has been named the Yuma mine plate and is the main focus of exploration attention at the Yuma King property. Much of the mineralization in the Yuma mine plate has been intricately deformed by SE-vergent folding at the hand scale, outcrop scale, and hillside scale (Figure 5-9).

In addition, a major east-striking, steeply north-dipping fault named the Stryker fault appears to at least partially truncate the replacement mineralization. This fault displays post-mineral, right-oblique, reverse-slip kinematic indicators at its exposure at the portal of the Yuma mine adit. These slip indicators are kinematically consistent with the southeast-directed folding and thrusting (D1) described above.

Both the Yuma mine thrust, the Yuma mine plate, and the Black Rock thrust are intruded by the Tank Pass Granite/Quartz Monzonite, which was emplaced circa 80 Ma. This intrusive rock provides an upper age limit on the southeast-directed thrusting and related folding. The replacement mineralization and related calc-silicate skarn mineralization is also intruded by the Tank Pass intrusion.

5.2.5 Cretaceous-Tertiary Laramide Orogeny (89-65 Ma)

Because the subduction zone became flatter throughout the Laramide orogeny (89 – 43 Ma), the magmatic arc migrated eastward through geologic time. The flattening style of subduction of the Farallon plate that characterizes Laramide orogenic phases has been contrasted by Keith (1978) with the constant dip character of the Sevier orogenic episode discussed above. Thus, later magmatism and mineralization overprinted the earlier Jurassic (Nevadan orogeny) and early to Late Cretaceous (Sevier orogeny) episodes. The Laramide orogeny has been subdivided into three phases: the early, middle, and late phases (Keith and Wilt, 1986).

The earliest phase of the Laramide orogeny (called the Hillsboro Assemblage - 85-80 Ma) in southern Arizona is represented by copper-gold deposits, small stocks of quartz alkalic chemistry, generally latites and monzonites with small volcanic centers. Examples are the Copper Flat stock at Hillsboro in New Mexico and others in western Arizona. The major intrusive rocks in the Granite Wash Mountains include the Granite Wash Granodiorite, which is intruded by the Tank Pass Granite, dated between 80 and 85 Ma by rubidium-strontium (Reynolds et al., 1989).

The early Laramide phase is represented by lead-zinc-silver mineralization associated with the caldera development of alkali-calcic volcanism and plutonism in southern Arizona in the Cretaceous from 79-67 Ma. This phase was called the Tombstone Assemblage by Keith and Wilt (1986). Rocks of this phase have been identified in the Granite Wash Mountains as the Tank Pass Granite, which was emplaced about 80 Ma and is probably metaluminous alkali-calcic in the magma-metal series classification. However, the north-northeast-vergent deformation typical of this early Laramide phase has not been identified in the Granite Mountains. This deformation is estimated to have been formed between 76 and 70 Ma, based on dating of the north-northeast-directed Mule Mountain thrust to the southwest in the southern Dome Rock Mountains and in the Mule Mountains south of Blythe, California by Tosdal et al. (1989).

The middle Laramide phase (66-55 Ma) is represented by porphyry copper deposits associated with porphyritic stocks of quartz diorite to granodiorite composition of calc-alkalic magma chemistry in southern

Arizona. This phase was called the Morenci Assemblage by Keith and Wilt (1986). Numerous age dates on these porphyry copper deposits show that the deposits are also younger in the east than in the west. This indicates the calc-alkalic portion of arc magmatism moved eastward through time, as the subducting Farallon plate became shallower. Morenci Assemblage magmatism in northwestern Arizona is 75 to 70 Ma, in the Morenci area is 62 to 51 Ma, in eastern Arizona and New Mexico is 60 to 52 Ma. Mineralization of the Morenci Assemblage consists of the porphyry copper deposits that are the major source of historic Cu production in Arizona. These are large, disseminated, mesothermal, annular zones of Cu-Mo mineralization in or adjacent to porphyritic, epizonal, calc-alkalic stocks. Rocks of this age have been identified in the Granite Wash Mountains as the Granite Wash Pass Granodiorite. Based on hornblende geobarometry, this pluton was emplaced below 10 km. Despite its favorable petrochemistry, it was intruded deeper than that for overlying porphyry copper mineralization which typically is emplaced between 5 and 2 km depth (Keith, personal communication, 2011).

The latest Laramide phase (54-43 Ma) in southern Arizona is represented by tungsten or quartz vein deposits associated with garnet-muscovite granitoid stocks and pegmatite dikes of peraluminous, two-mica granite, magma chemistry. This phase was called the Wilderness Assemblage by Keith and Wilt (1986). There are no sedimentary or volcanic rocks in the Wilderness Assemblage. Instead, there are large volumes of peraluminous, muscovite- and garnet-bearing granitic intrusions that commonly contain late alaskitic pegmatite sills and later cross-cutting dikes. Many Wilderness Assemblage plutons are associated with well-developed mylonitic fabrics in or adjacent to the plutons and appear to be synkinematically intruded into southwest-directed mylonitic shear zones. This may represent a widespread southwest-directed thrust system caused by under thrusting the Farallon plate toward the northeast under the Colorado Plateau, thus raising the area to be eroded into the Eocene erosion surface. The Wilderness Assemblage plutons and pegmatitic dikes and quartz veins intrude the earlier porphyry copper-related plutons and are generally younger to the east. This indicates the peraluminous portion of arc magmatism moved eastward through time, as the subducting Farallon plate became so shallow that it was nearly flat. The age dates on the peraluminous plutons in the Coyote Mountains in southwestern Arizona is 58 Ma, and age dates on the Wilderness Granite in the Santa Catalina Mountains are 44-50 Ma.

Laramide Orogeny Structures (D2)

Major Laramide thrust faults at the Yuma King property are southwest-vergent. Laramide thrust faults may include the McVay thrust, which displays southwest-directed, penetrative fold fabrics in the wash below the 2006 drilling sites (Figure 5-4).

Foliation fabrics throughout the project area commonly display a northeast-trending lineation that infrequently is associated with southwest-directed S-C fabric. The lineation is similar in orientation to, and kinematically similar to, mylonitic fabrics that cut and in part are coeval with the 70 Ma Cottonwood Pass aplogranite in the west-central Harcuvar Mountains (Michelle Buttram, personal communication to Stanley Keith). As such, southwest-directed thrusting, as it is associated with other Wilderness assemblage plutons, may be associated with emplacement of circa 70 Ma aplo-granites in the Harcuvar-Granite Wash area.

Laramide Orogeny Metamorphism

In the Granite Wash Mountains, Late Cretaceous granitoid plutons and dikes intruded earlier rocks and structures after thrusting and were accompanied by deformation and kyanite-facies metamorphism. These intrusions are also present in the Harcuvar and Harquahala Mountains (Rehrig and Reynolds, 1980; DeWitt et al., 1988).

The Three Musketeers aplogranite in the northwestern part of the Yuma King area is a member of the latest Laramide Wilderness assemblage. The Three Musketeers aplogranite is petrographically similar to the Cottonwood Pass muscovite aplogranite complex in the west-central Harcuvar Mountain. The Cottonwood Pass aplogranite has been dated at 70 Ma by U-Pb techniques (Isachsen et al., 1999). The Three Musketeers aplogranite complex is associated with quartz-tungsten vein mineralization in the Three

Musketeers shear zone. The Three Musketeers shear zone has been interpreted as a southeast tilted, southwest-directed thrust zone and can be regionally assigned to the D4 deformation event in west-central Arizona (Keith, personal communication, 2011).

A major episode of Late Cretaceous to early Tertiary regional uplift followed plutonism and metamorphism. The regional uplift is indicated by:

- widespread 70 to 45 Ma K-Ar cooling ages on a variety of rock types,
- the relatively deep-level character of exposed Late Cretaceous and early Tertiary granitoids, and
- the absence of Upper Cretaceous and lower Tertiary supracrustal rocks (Reynolds et al., 1986, 1988, 1989, 1991).

5.2.6 Galiuro (Mid-Tertiary) Orogeny (43-15 Ma)

The Galiuro orogeny of middle Tertiary age was subdivided into three phases as the subducting slab became steeper and the magmatic arc moved from the east to the west, in the reverse pattern from the Laramide (Keith and Wilt, 1985).

[1] The early phase of the Galiuro orogeny was deposited in local basins containing minor volcanics, local conglomerates and lacustrine deposits of carbonates and gypsum and clay, with minor uranium, secondary copper, and industrial mineral deposits.

[2] The middle phase of the Galiuro orogeny consists of widespread volcanism and stocks of calc-alkalic and later alkali-calcic chemistry. The earlier calc-alkalic phase contains epithermal gold-copper veins associated with microdiorite dike swarms. The later alkali-calcic phase contains lead-zinc-silver skarns and replacements in contact zones of stocks and small batholiths, associated with large caldera systems.

[3] The late phase of the mid-Tertiary orogeny consists of coarse clastics and local volcanics and stocks of quartz-alkalic magma chemistry, associated with large, low-angle, normal detachment faults. Mineral resources consist of copper-gold-silver specularite replacement lenses and veins and disseminations in low-angle faults, although these may represent Mesozoic mineralization and structures that were remobilized in the mid-Tertiary.

The Middle Tertiary history of the region included widespread volcanism, dike emplacement, and sedimentation that was commonly synchronous with normal faulting and fault-block rotation. Repeated normal faulting with minor transport on formerly high-angle faults (Nickerson et al., 2010) has produced gently dipping surfaces formerly called detachment faults (Reynolds and Spencer, 1985; Spencer and Reynolds, 1989).

A set of high-potassium, syeno-gabbro to syenodiorite (microdiorite) dikes that may be related to a later gold mineralization event is widespread throughout the Yuma King project. No detachment faulting has been documented in the Granite Wash Mountains (Reynolds et al., 1989). However, the weak extension (2 to 5 %) indicated by the microdiorite dike emplacements may represent a small amount of extension in the basement beneath the inferred projections of the Harquahala-Harcuvar- Buckskin detachment fault.

5.2.7 San Andreas Orogeny (Basin and Range Disturbance) (14-0 Ma)

The San Andreas orogeny, formerly called the Basin and Range Disturbance, is the result of the subducting Farallon slab being cut off by strike-slip action on the San Andreas fault/transform boundary. The underlying slab continued to descend and was cut off and missing in places. Where the underlying support was missing, the overlying slab foundered and parts sank along steep normal faults that created the Basin and Range topographic province. This break-up allowed the intrusion of mantle basalt, which is largely devoid of mineralization, although some industrial minerals were deposited in the basins.

The San Andreas orogeny was defined by Keith and Wilt (1985) and was divided into two major assemblages based on whether a given area was being affected by transpression or extension. Rocks and structures in areas affected by transpression were assigned by Keith and Wilt (1985) to the Transverse Range assemblage. Rocks and structures formed in extensional strain domains were assigned to the Basin and Range assemblage by Keith and Wilt (1985).

The Granite Wash Mountains occur in a transition zone between a transpressional domain and an extensional domain. The transpressional domain is occupied by the northeast-trending Harcuvar, Harquahala, and Buckskin Mountains. The extensional domain is defined by the Plomosa and Dome Rock mountains and intervening valleys.

Late Tertiary and Quaternary events in the Granite Wash Mountains included:

- minor Basin and Range normal faulting that blocked out some present basins;
- movement on northwest-trending, strike-slip, reverse, and normal faults within the ranges;
- eruption of basaltic lavas;
- deposition of nonmarine clastic rocks and the Pliocene Bouse Formation; and
- integration of previously internal drainage systems with accompanying sediment deposition in alluvial fans and along stream channels (Russell, 2005).

Bedrock exposures of the Granite Wash Mountains are surrounded by unconsolidated to weakly consolidated alluvium that is probably mostly Holocene to middle Pleistocene in age. Additional small areas of alluvium are present within the range, generally in valleys and in small patches of talus flanking hills.

Holocene alluvium is present in modern channels and in low terraces flanking these channels. It is most widespread along Big Granite Wash, where it forms a wide swath of braided channels with low interfluvial areas. Older alluvium, probably of late and middle Pleistocene age, forms higher terraces that are variably associated with desert pavement, well-developed petrocalcic horizons, and reddish, clay-rich soils (Reynolds et al., 1989).

5.3 Structural Geology in the Granite Wash Mountains

The rocks in the Granite Wash Mountains have been affected by multiple episodes of deformation. The two major structural episodes that affect the mineralization are the D1 and D2 phases of deformation. The complex folding and thrusting events have affected (attenuated, doubled or tripled) the mineralized zones, so an understanding of the structural geology is important to the economics of the deposit.

Reynolds et al. (1989) recognized six phases of deformation, but these can be simplified by considering the later deformation phases as late phases of the two main phases, D1 and D2.

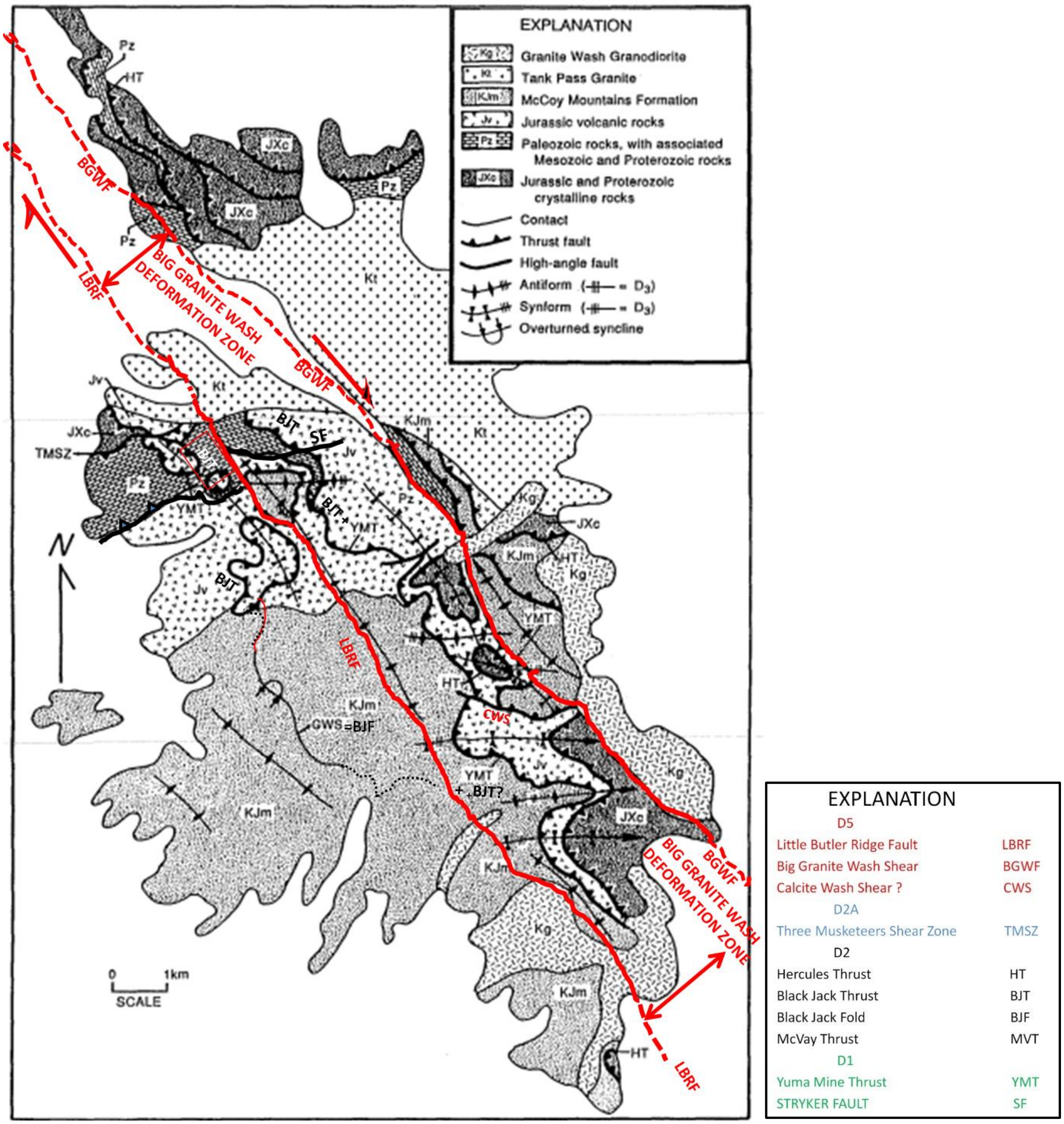
The Hercules thrust fault (D2) extends north-northwest along the entire length of the Granite Wash Mountains. The Hercules thrust fault is marked by the thickest zone of penetrative deformation, and everywhere carries Proterozoic and Jurassic crystalline rocks in its hanging wall.

Below the Hercules thrust fault, the Yuma mine thrust fault (D1) interleaves Mesozoic, Paleozoic, and Proterozoic rocks.

The McVay thrust fault (D2) is the structurally lowest thrust fault and cuts mostly Mesozoic rocks. The McVay thrust displays southwest-directed, penetrative fold fabrics in the wash below the 2006 drilling sites (Figure 5-4). The McVay thrust places Cretaceous McCoy Mountains Formation rocks structurally overlain by Jurassic volcanics. The Jurassic volcanics consist of a distinctive stretched-pebble conglomerate with light-colored volcanic clasts and Paleozoic and Triassic rocks. The McVay thrust fault is exposed only in a small window in the center of the range and is inferred to underlie the rest of the Granite Wash

Mountains.

Below the McVay thrust fault, the structurally lowest rocks in the range are exposed within a small structural window along McVay Wash, located south of the historic Yuma mine in the west-central part of the range. This structural plate underlies the McVay thrust fault and consists of quartzo-feldspathic and lithic clastic rocks that correlate with the McCoy Mountains Formation.

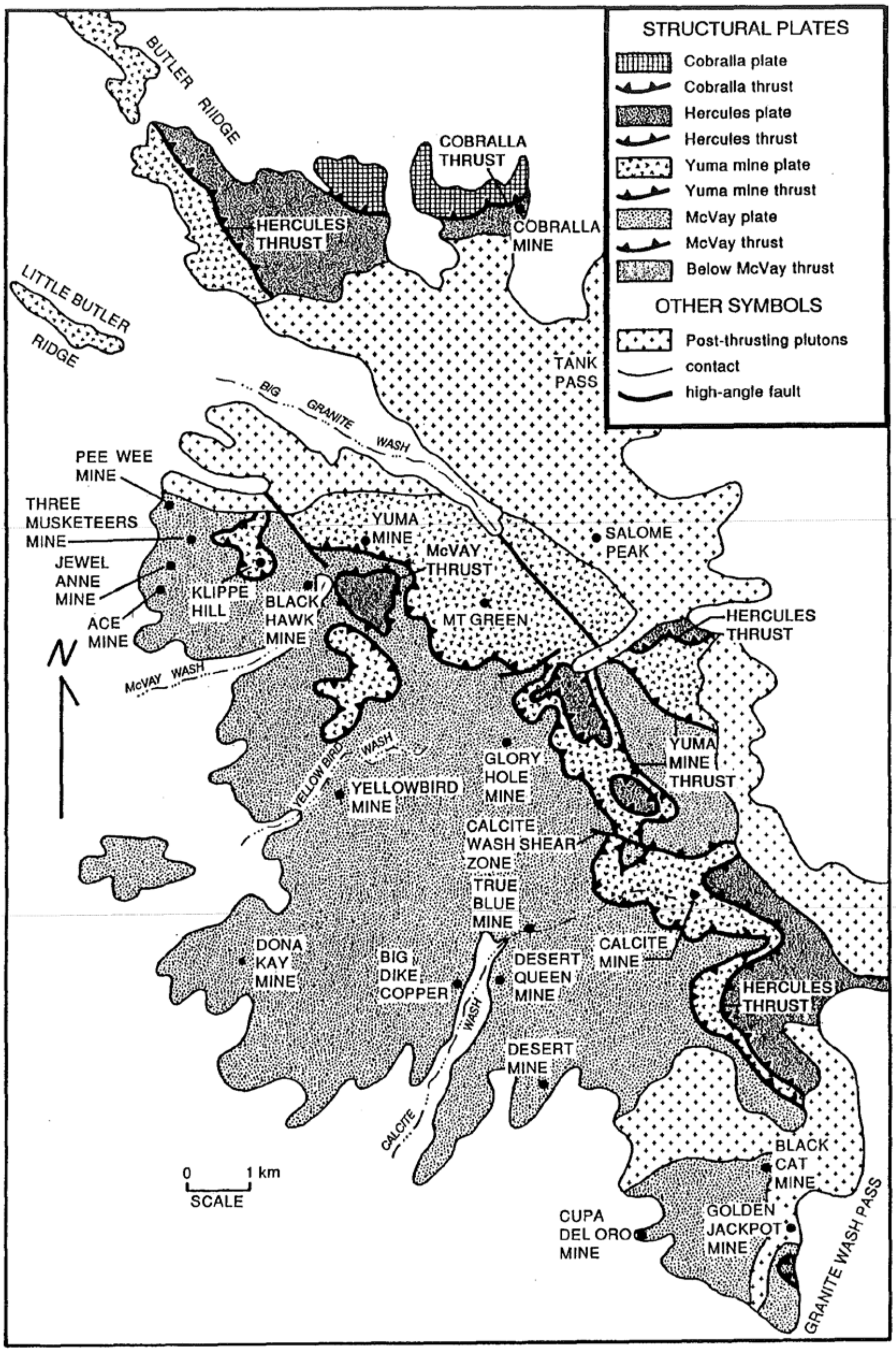


Source: modified from Reynolds et al. (1989) Figure 2. GWS=Granite Wash syncline, HT=Hercules thrust; TMSZ=Three Musketeers shear zone; YMT=Yuma mine thrust

Figure 5-2 Generalized structural map of the Granite Wash Mountains showing major folds and faults

The deformation episodes are summarized in more detail below, beginning with the D1, the oldest Mesozoic thrusting and concluding with the most recent tectonic event (D5), the San Andreas orogeny (Keith and Wilt, 1985).

The sequence of folds and thrust faults at the Yuma King property is shown in Figure 5-3. The folding and overturning of the magnetite-copper replacement horizons repeats the horizons of mineralization within a short vertical distance.



Source: modified from Reynolds et al. (1989, Figure 1)

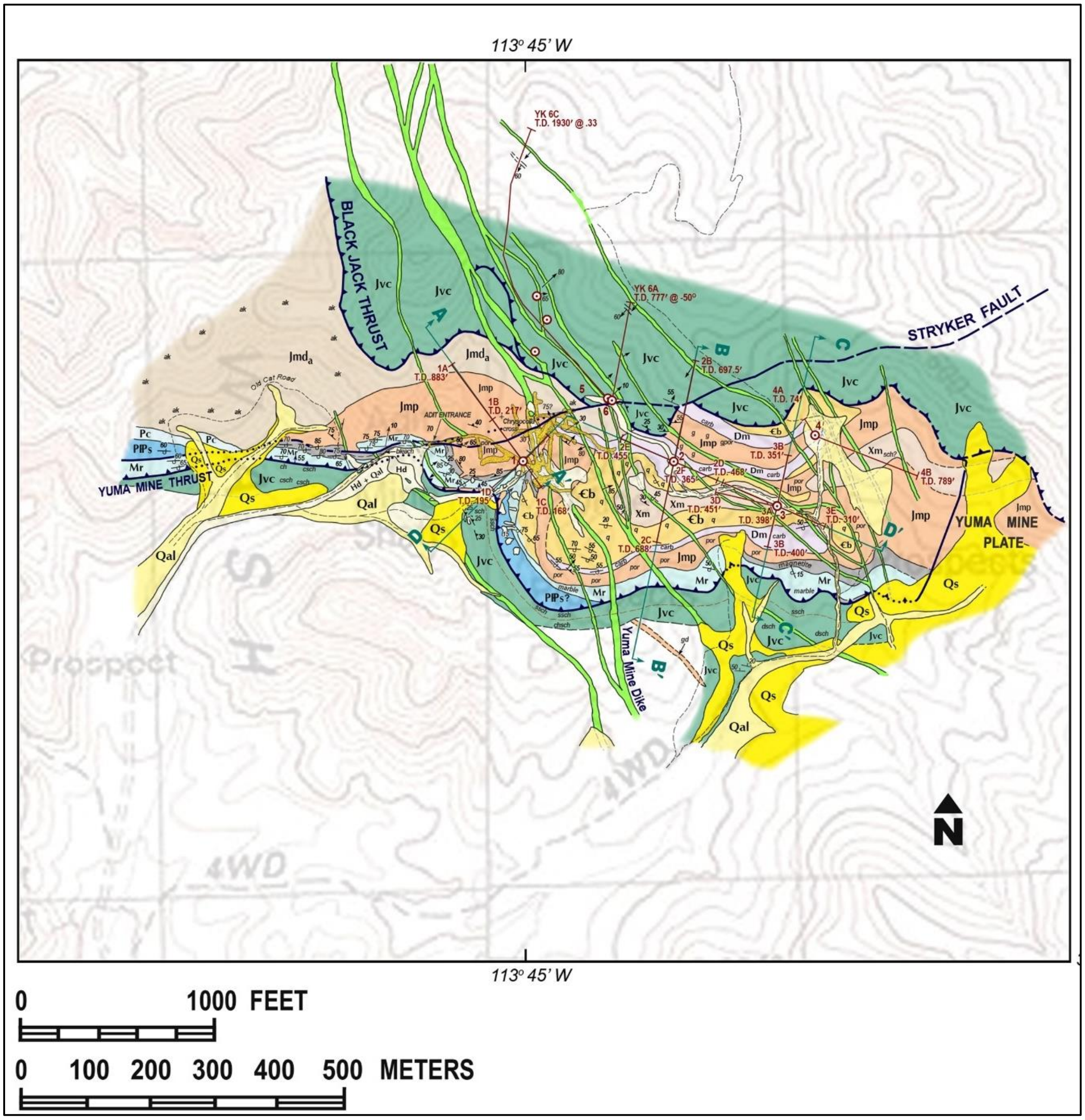
Figure 5-3 Major thrust plates, geographic features, and mines of the Granite Wash Mountains

5.3.1 Copper-Gold Mineralization Predates the D1 and D2 Deformation

Copper mineralization predates both the D1 (Sevier orogeny [~155-89 Ma]) and D2 (Laramide orogeny [~89-43 Ma]) deformations. The mineralization predates a major episode of southeast-directed folding and thrusting (D1). The southeast-directed thrusting has been recognized by all recent workers in the area to be the oldest thrust-related deformation event in the western Harquahala and Granite Wash Mountains (Reynolds et al., 1989). The copper skarn/porphyry mineralization occurs in the footwall of an alaskitic intrusion assigned a Jurassic age by Reynolds et al. (1989). The Jurassic age assignment has now been confirmed by a Re-Os radiometric date on molybdenite of 190.6 Ma (Figure 5-28).

Relative age evidence that the mineralization occurred before the thrusting includes:

- Strong, crenulate lineation occurs in the copper-magnetite skarn on the BJ-1 claim.
- The alaskite sill complex has been affected by the east-northeast-trending lineation.
- The copper-magnetite skarn has been overridden by a ‘barren’ upper plate composed of Bolsa Quartzite containing no copper mineralization.
- Northeast-directed fold features deform the skarn near the adit portal of the Yuma Mine.
- Brittle S-C fabrics are kinematically consistent with northeast-directed thrusting observed in the adit at the Yuma Mine.



Source: Keith (2006)

GEOLOGIC UNITS

CENOZOIC
- Qal — Quaternary alluvium
- Qs — Quaternary terrace gravels
- Td — Tertiary hornblende/biotite syanodiorite dike (18-13 m.a.?)

MESOZOIC
- Jvc — Jurassic volcaniclastic metasedimentary rocks (200-160 m.a.?
- Jmp — Jurassic monzonite porphyry (variably foliated)
- Jmd_a — Jurassic syenodiorite (aplitic)

PALEOZOIC
- Pc — Permian Coconino Quartzite
- IPPs — Pennsylvanian-Permian Supai Group
- Mr — Mississippian Redwall Limestone (mainly tectonite marble)
- Dm — Devonian Martin Formation (± Redwall Limestone)
- €b — Cambrian Bolsa Quartzite (includes Abrigo Formation)

PRECAMBRIAN
- Xm — Proterozoic metamorphics (Yavapai Schist)

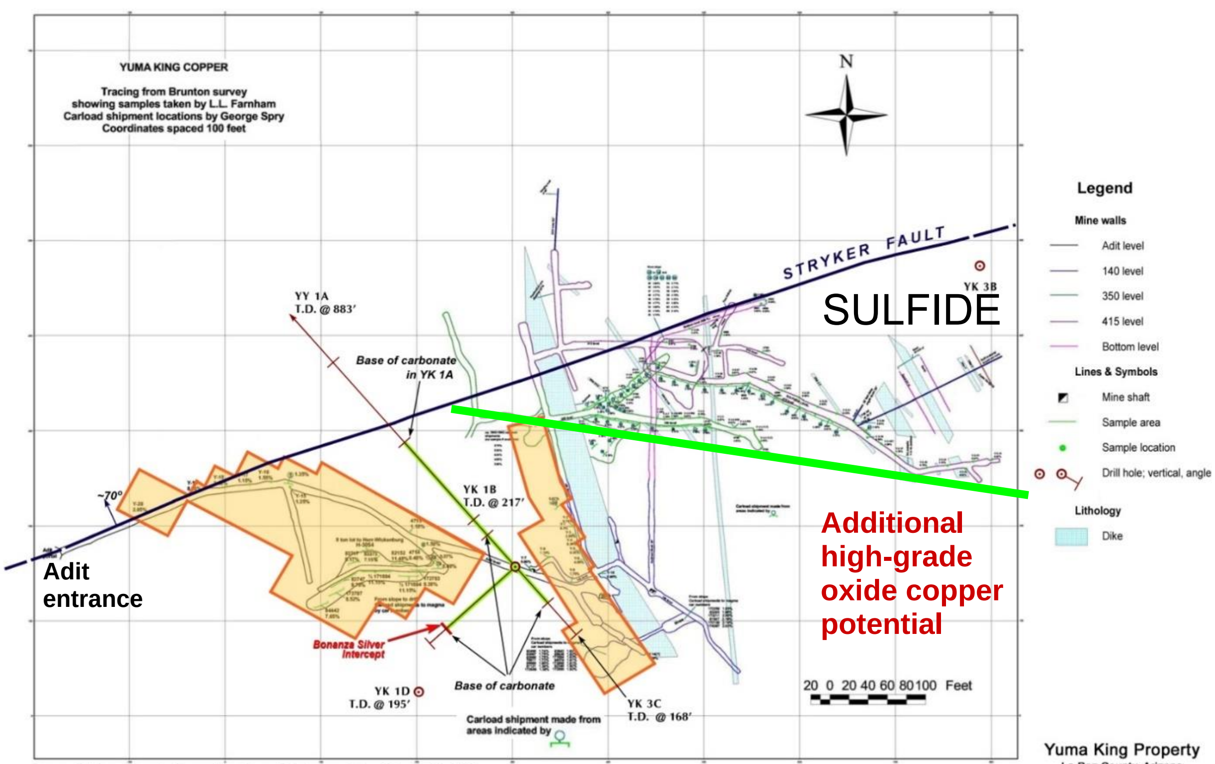
- Dump and road fill
- Underground workings, projected to surface
- Normal fault; dashed where inferred
- Thrust fault; barbs on allochthonous plate, dashed where inferred
- Contact; normal, gradational

Figure 5-4 Geologic map of the Yuma mine area showing the Stryker fault and its influence on exploration targets

Stryker Fault

The Stryker fault is one of the main structural controls (Figure 5-4) for copper-molybdenum-gold mineralization at the Yuma mine. There are at least two periods and possibly three periods of movement on the Stryker fault, which are both pre- and post-mineralization (Keith, 2006). There may have been a more cryptic early stage (pre-D1) period of movement that influenced the emplacement of the copper-molybdenum related Yuma King intrusive suite. Indirect kinematic evidence for the early movement is described below in the description of the stages of magmatism.

With respect to the Yuma mine workings, the Stryker fault truncates the down-dip projection of both the oxide and sulfide skarn mineralization. Historical drilling has showed a thickness of 100 ft and continuity of the oxide mineral resource between the underground blocks. Drilling and geologic mapping showed the Stryker fault cuts off the historically mined orebody and probably offsets the mineralization to the east. (Figure 5-5).



Source: Rubicon Minerals Corporation, Power Point presentation, October 26, 2004

Figure 3. Map of underground workings at Yuma King showing resource blocks of copper oxide mineralization (see 43-101 report dated November 7, 2005 for details) compared with drill hole locations from Site YK 01 (red bars along drill hole traces indicate where drill hole intersected copper oxide mineralization in the carbonate section.

Source: Keith (2006) modified from Russell (2005)

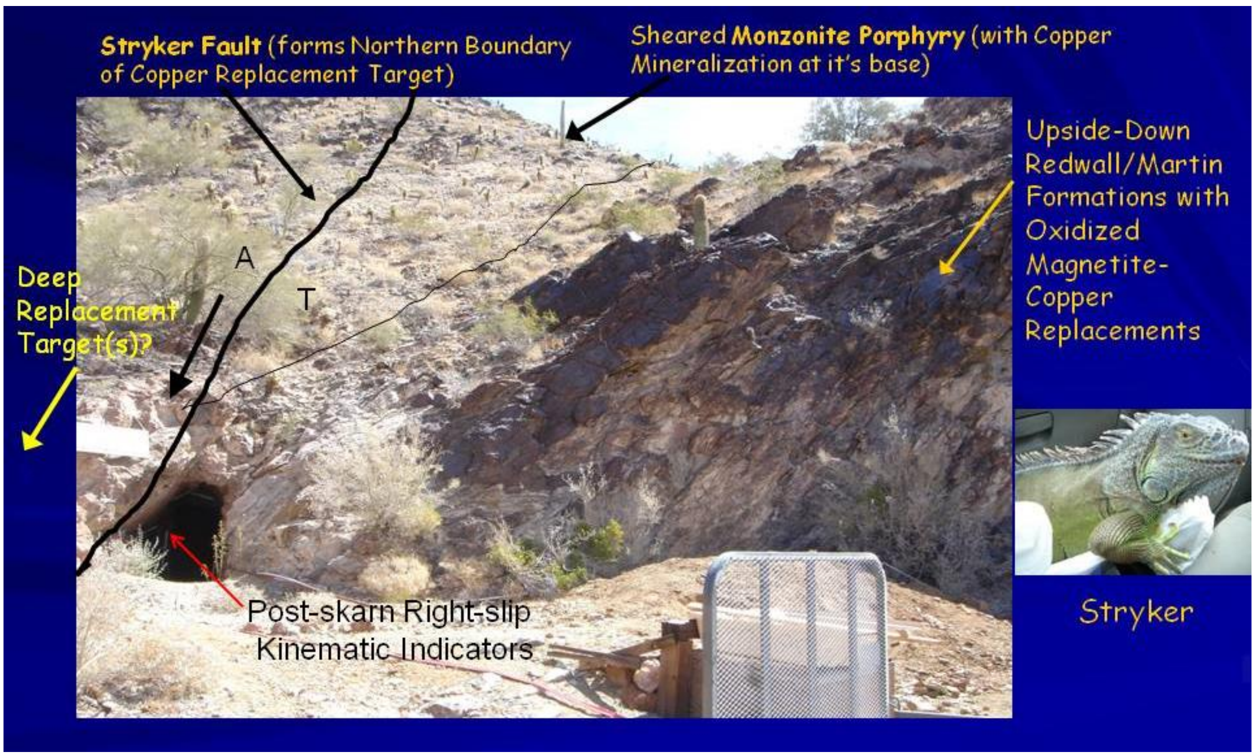
Figure 5-5 Map of the Yuma mine workings showing the location of the Stryker fault and adit entrance (photo of adit at Figure 4-3)

The Stryker fault is well exposed at the entrance to the adit level (Figure 4-3). The Stryker fault is exposed in the hanging wall of the Yuma mine adit where it dips about 70 north and cuts off the magnetite skarn shown on the right side of the photograph. Immediately within the adit entrance, well-developed shear fabrics indicate a strong right-slip component.

About 150 ft to the east in the adit where the adit bends to the east-southeast, high-angle slickensides indicate a component of what may be late dip slip. The Stryker fault appears to truncate the orebodies in the area of the mine workings. A penetration of the Stryker fault by drill hole 1A failed to find any downthrown skarn orebody, so considerable vertical throw probably exists on the fault.

To the west of the mine workings, the attenuated Paleozoic section stands nearly vertical for at least 1 km to the west. This vertical upturning may be related to the westward projection of the Stryker fault. To the east of the main mine workings, the Stryker appears to only slightly offset the Black Jack thrust fault.

Hence it is inferred that the Black Jack thrust southwest-directed motion occurred largely after the right-slip movement (s) on the Stryker fault. Drilling to date indicates that the skarn orebodies have been offset about ½ km to the east in a right-lateral sense. This right-lateral displacement is consistent with D1 deformation, which produced the underlying, district-scale, Yuma mine thrust fault. The Yuma mine thrust is also significant in that it provides the structural base of the entire Yuma Mine mineralized plate as shown in various cross sections (Figure 7-2 and following cross sections).



Source: Keith (2012)

Figure 5-6 Northern boundary of Yuma King copper mine adit where it is cut off by the Stryker fault at the Yuma mine adit portal (looking east)

The geographic distribution of the 3-stage petrography of the Yuma mine intrusive suite indicates that the more mafic phases of the Yuma mine suite (Stage 2 monzo-diorite) occur to the north and west of the Stryker fault. These mafic phases are associated with magnetite, actinolite, epidote, verde antique, skarns with minor copper.

The Stage 3 quartz monzonite porphyry occurs to the south and east of the monzo-diorite and in part, the Stryker fault separates the mafic and felsic portions of the Yuma mine intrusive suite. This phase is associated with the more productive copper-molybdenum-gold skarn that features an andradite garnet-magnetite-chalcopyrite assemblage.

The Stage 4 latite porphyry is associated with a molybdenite-copper-stockwork mineralization and occurs to the east of the main Yuma mine workings, north east of drill site 2 and south of the Stryker fault.

In summary, magmatism of the Yuma King differentiation sequence appears to have migrated to the southeast and then east in a crude geographic relationship to the Stryker fault. If the Stryker fault influenced the left-hooking differentiation trajectory of the Yuma King differentiation sequence, it may have had a component of left slip. However, direct kinematic evidence for this has been obliterated by the D1 and D2 deformation events.

Available evidence indicates at least a three-fold movement history on the Stryker fault. The first phase of movement would be a cryptic left slip that influenced the emplacement of the Yuma King copper-molybdenum-gold-iron mineralization. The initial left slip on the Stryker fault was followed by a post mineral right-slip movement of about ½ km, which offset the skarn ore bodies to the northeast. After the skarns were tectonically covered and buried by the southwest-directed D2 deformation, a minor amount of normal dip-slip occurred that offset the Black Jack thrust down to the north about 100 ft. The late normal slip could be late Laramide or younger and is compatible with late east-northeast transtension resulting in ENE- faults.

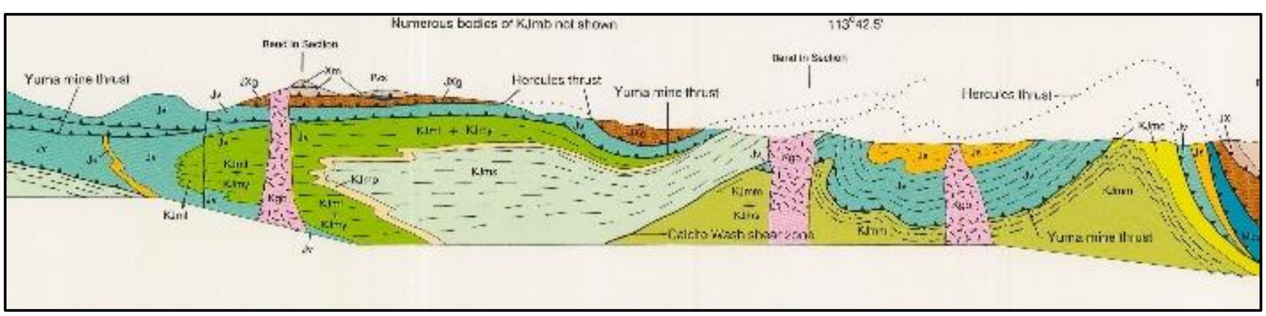
5.3.2 D1 – Late Sevier Orogeny (90-80 Ma), Southeast-Directed Thrust Faults and Overturned Folds

The earliest episode of deformation (D1 [Sevier orogeny]) was characterized by tectonic transport to the southeast or south. Characteristics of this D1 deformation include:

- Southeast-vergent thrusting, formation of thrust duplexes, and section attenuation;
- Major structures are marked by zones of strongly developed mylonitic fabric and cleavage;
- Southeast- to south-vergent folding of earlier thrusts and attenuated sections, accompanied by formation of an axial planar slaty cleavage in rocks of appropriate composition; and
- The map-scale drag of Paleozoic and Mesozoic units to the south and southwest beneath the Yuma mine and Hercules thrusts.

Examples of D1 structures are:

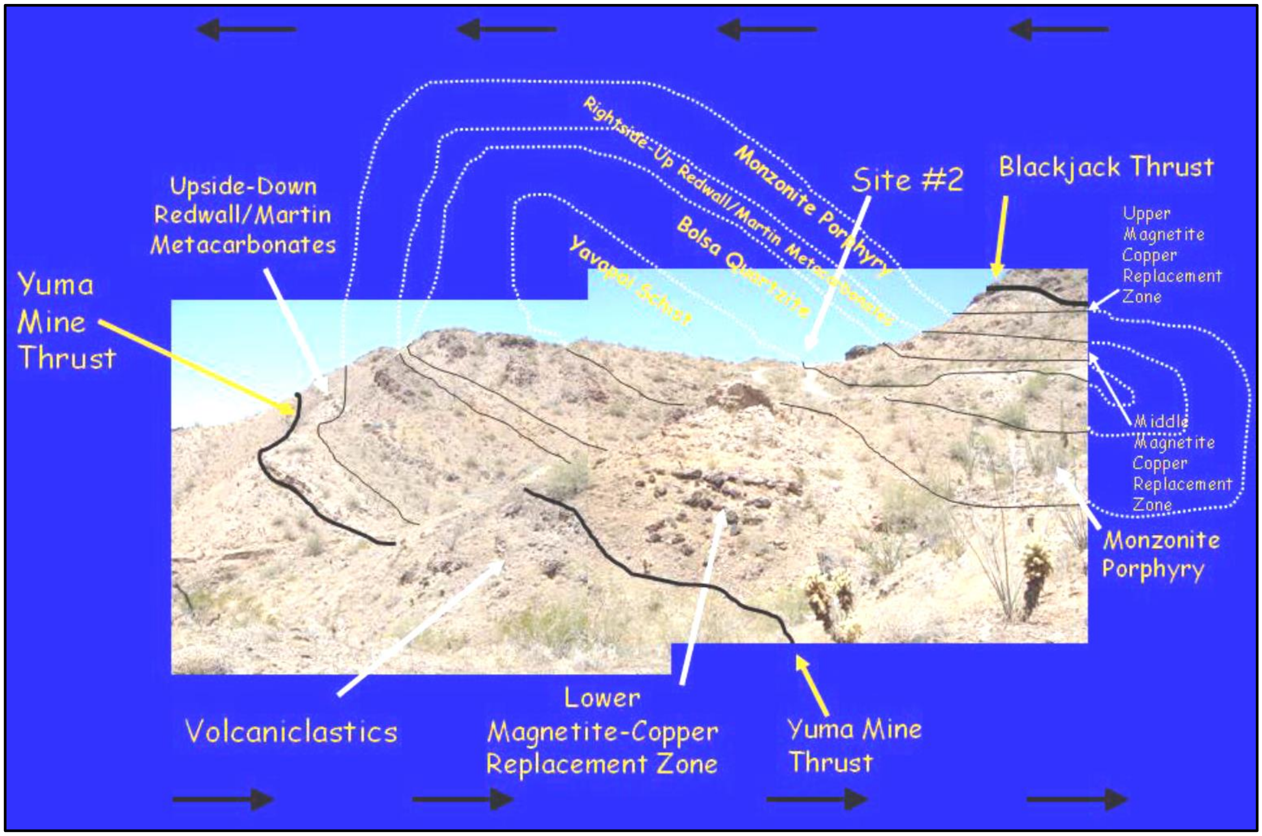
- the Yuma mine thrust (YMT) (Figure 5-2 and Figure 5-8),
- overturned recumbent nappe-sized folds (Figure 5-7),



Source: modified from Reynolds et al. (1991)

Figure 5-7 Longitudinal cross-section of Granite Wash Mountains showing D1 nappe-scale folding

- folding (overturned to recumbent) of ore bodies (Figure 5-8),
- the Stryker fault at the Yuma mine adit with right-slip (D1) movement.



Source: Keith (2011); arrows show stress directions that created the fold

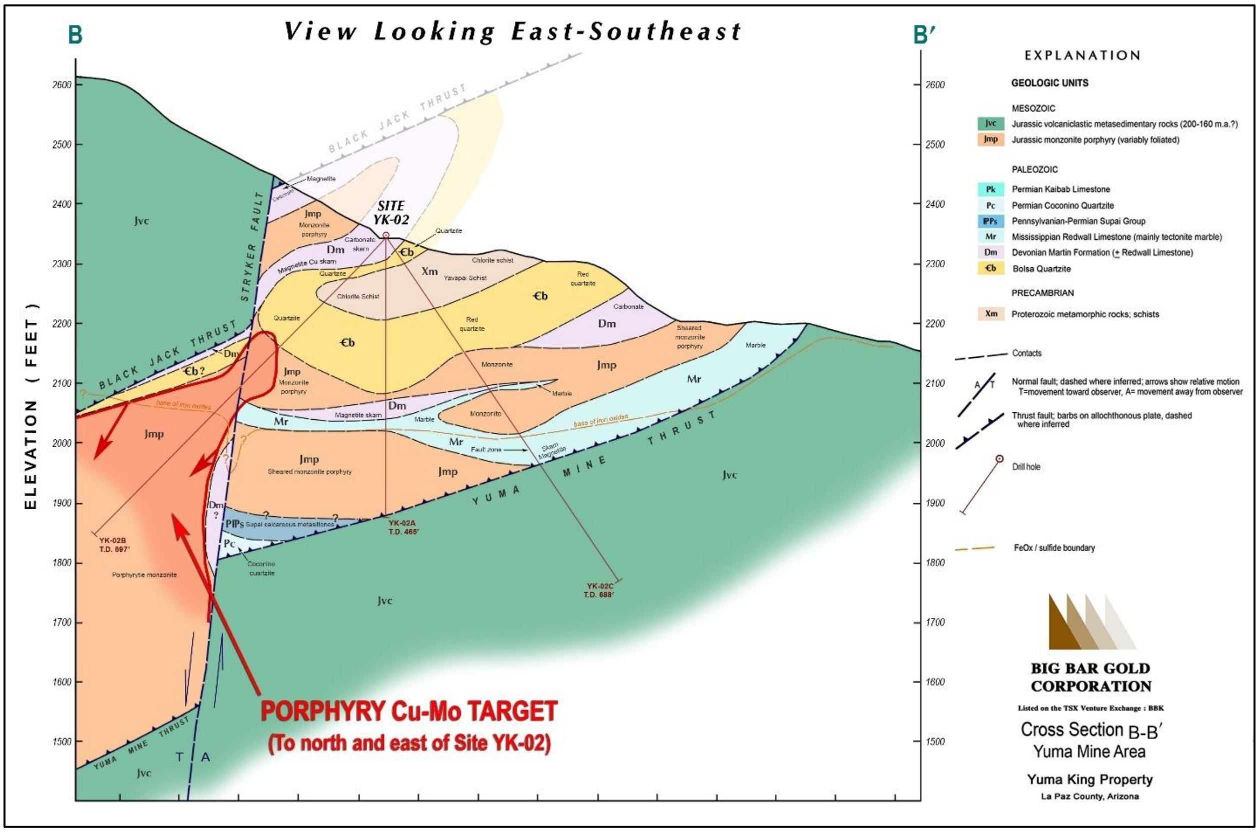
Figure 5-8 Sequence of D1 folding and thrust faults at Yuma King property

The overturned southeast-directed folds in the Yuma mine area have been additionally deformed by southwest-directed motion on the Black Jack thrust fault. This motion resulted in a counter-clockwise D2 rotation axis of about 180˚ around a northwest-trending rotation axis. The rotational 'flipping' of the D1 folds with their included magnetite-copper skarns is attributed to rotational shear in the footwall of the southwest-directed Black Jack thrust fault. This thrusting would have produced a rotational axis that trends northwestward perpendicular to the transport direction of the Black Jack thrust.

The combined 'flipping' of the originally Jurassic age ore body has resulted in a three-fold repetition of the magnetite-copper skarn ore bodies in current outcrop exposures immediately east of the Yuma mine. This repetition is shown in drill-constrained cross sections. This repetition of the mineralized section has important implications for the known outcropping skarn mineralization but also for the skarn concealed beneath the Black Jack thrust fault. This repeated skarn mineralization constitutes a major exploration target.

All of the following cross sections show that the mineralization does not extend below the Yuma King thrust.

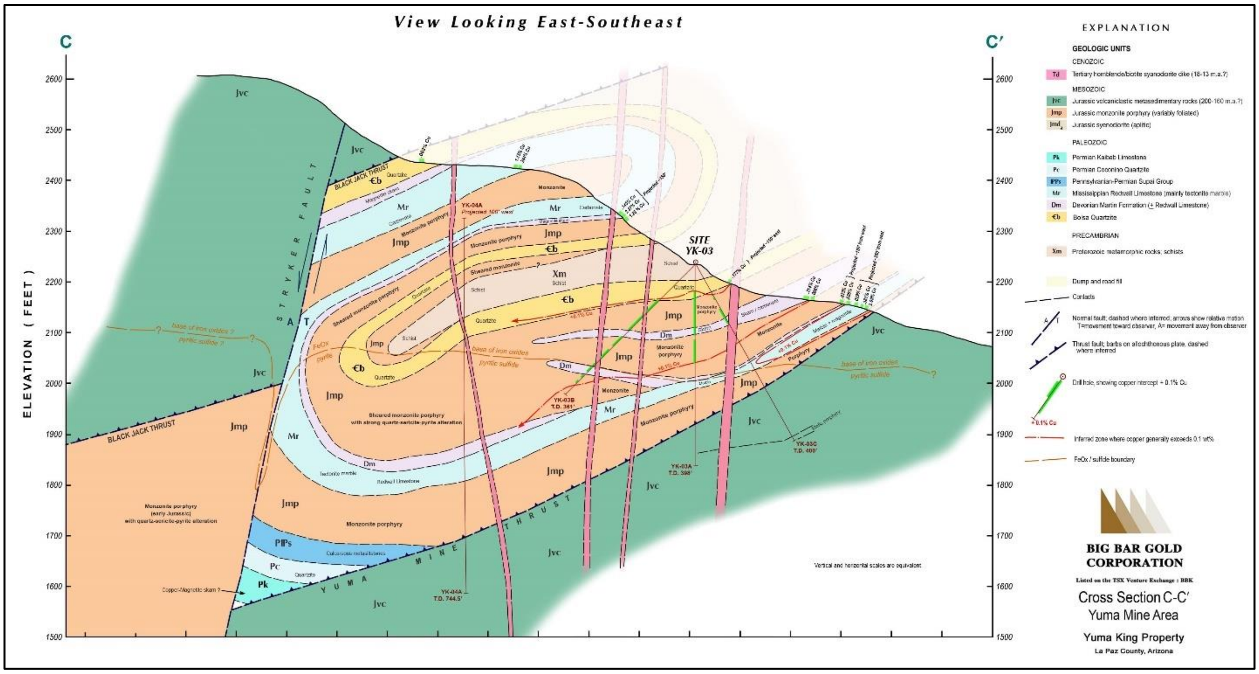
Cross section line B-B’ (Figure 5-9) (trends north-northeast and looks east) shows drilling from site YK-02, which intersected copper mineralization in the Jurassic monzonite porphyry. According to Keith (2011), this cross section shows the location of a potential copper resource where copper exceeds 0.1% Cu.



Source: Keith (2011) lines on Figure 5-4

Figure 5-9 Cross section B-B’ looking southeast and showing three-fold repetition of the mineralized horizons in drill holes from Drill Site 2

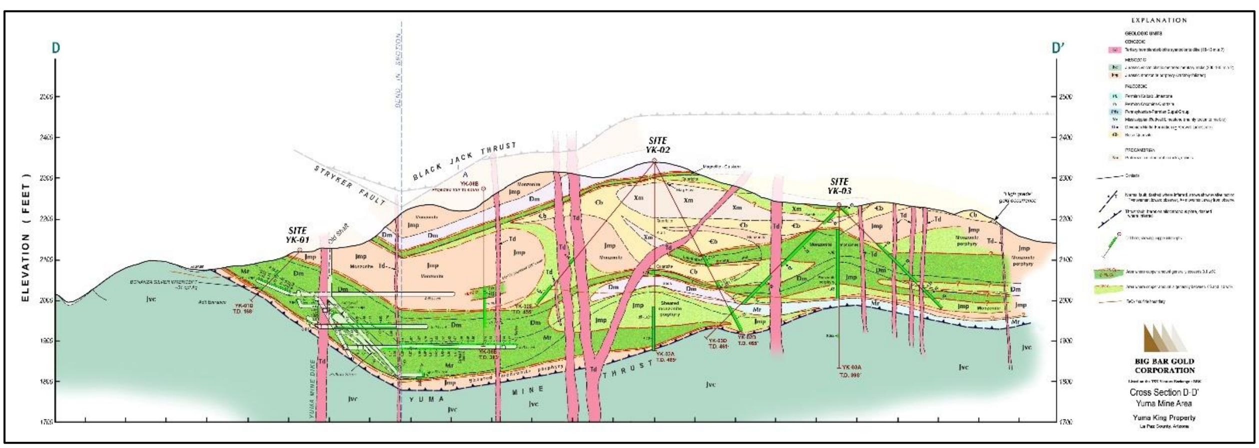
Cross section C-C’ (Figure 5-10) has the same orientation as B-B’ but is farther east. Cross section C-C’ shows the drill holes at site YK-03 with several Tertiary hornblende syenodiorite dikes and copper concentrations in the Jurassic volcaniclastic metasedimentary rocks. Note the repetition of the mineralized layers (orange) caused by the overturned folds.



Source: Keith (2011); line shown on Figure 5-4; green bars indicate mineralized intercepts of > 0.1% copper

Figure 5-10 Cross section C-C', looking southeast, showing copper intercepts from drill hole YK-03

Cross section D-D' (Figure 5-11) intersects cross section A'A', but trends from northeast to southwest and looks northwest. Cross section D-D' intersects drill holes YK-01, YK-02, and YK- 03, as well as the historic underground workings of the Yuma mine. Note the repetition of the mineralized layers (orange) caused by the overturned folds.



Source: Keith (2011); line shown on Figure 5-4; green bars indicate mineralized intercepts of > 0.1% Cu

Figure 5-11 Longitudinal cross section D-D' looking northwest showing drill sites YK-02 and YK-03 and Yuma Mine underground and the geology

The copper skarn-replacement system extends eastward and an overlying porphyry copper system is hosted in a monzonite porphyry intrusive complex (Keith, 2011). This section also shows the cross-cutting nature of the late mafic monzodiorite dikes, especially the dike on the left side of the cross section.

This mafic dikes cuts the skarn mineralization in the underground on the adit level.

The above cross sections prepared by Keith (2011) to support the Big Bar exploration program indicated that the skarn and hanging wall porphyry copper mineralization continues to the north and east under the tectonic cover provided by the Black Jack thrust. A later, vertical, Phase 2 drill hole AV1-11 performed by VANE tested this concept in April 2011 and validated the geologic model. An example of the magnetite-chalcopyrite-bearing skarn is shown on Figure 5-13.

5.3.3 D2 – Late Laramide Orogeny, Southwest-Directed Thrust Faults and Folds

D2 (Laramide orogeny) was a major, southwest-vergent deformation that formed the Hercules thrust fault, McVay thrust fault and associated widespread cleavage, mylonitic foliation, and small- and large-scale folds (Reynolds et al., 1989). The Granite Wash Syncline (GWS on Figure 5-2) is a large, nappe-sized, overturned, SW-directed fold (Laubach, 1986; Laubach et al., 1989) related to the southward extension of the Black Jack thrust (Stanley Keith, personal communication 2024).

The main D2 thrust faults in the Granite Wash Mountains are southwest-vergent and are, from top to bottom:

- The (D2) Hercules Thrust (HT) to the east and structurally higher and truncates the Black Jack thrust,
- the (D2) Black Jack Thrust (BJT) is the top,
- the (D2) McVay Thrust (MVT) is the bottom, and
- the (D2) Three Musketeers shear zone/thrust (TMSZ) is to the northwest (Reynolds et al., 1989, 1991).

The sequence of folds and thrust faults at the Yuma King property is shown in Figure 5-8 and Figure 5-3. The Stryker right-slip fault (D1) is important in the Yuma mine area, but also has later dip-slip movement. The Stryker fault truncates the mineralization in the mine workings on the 140 level and is exposed at the entrance on the adit level and also the lower workings (Stanley Keith, 2024, personal communication).

A southwest sense of transport during D2 (Reynolds et al., 1989) is indicated by:

- Southwest-directed S-C fabrics and asymmetrical feldspar porphyroclasts along the Hercules, Black Jack and McVay thrust faults in the main part of the Granite Wash Mountains and along the Hercules thrust on Butler Ridge;
- Observed offsets on small-scale D2 shear zones; and
- Southwest-vergent minor folds with their associated northeast-dipping cleavage.

5.3.4 D4 – Galiuro Orogeny (26-13 Ma), NW-striking Dikes

These N30W-trending, down-to-the-west, faults are frequently intruded by mafic dikes that are associated with the pyritic gold veins that are a major component of mineralization in the Glory Hole mineral district. At the Desert Queen Mine, the entire sequence from some felsic dikes to mostly mafic dikes, is present. In the Yuma mine area, the mafic dikes show the most consistent geographic proximity to the gold-quartz veins.

On a more regional basis, the Galiuro orogeny is marked by major uplift and denudation of the underlying thrust-faulted basement formed during D1 (Sevier) and D2 (Laramide). The Plomosa low-angle fault in the adjacent Plomosa Mountains experienced major normal slip down-to-the northeast movement between 26 to 18 Ma. In the Yuma mine area, denudation tectonics has not yet been observed. The lack of denudation tectonics allows a much clearer look at the underlying Sevier and Laramide thrust tectonics, which has been severely overprinted by denudation tectonics in nearby mountain ranges (Plomosa, Rawhide, Buckskin mountains).

5.3.5 D5 – San Andreas Orogeny (13-0 Ma), East-West Transpressional Folds and Faults

The San Andreas orogeny (also called the Basin and Range Disturbance [13-0 Ma]) produced the current physiography of the region. The Transverse Assemblage of the San Andreas is marked by east-west to east-northeast-trending mountain ranges of western Arizona and southern California. These broad to open anticlines and synclines are commonly arranged in en echelon patterns, as in those from the Harquahala to Parker region of western Arizona. Other smaller analogs to the large mountain range orientations are present as smaller-scale folds throughout the mapped area (Keith and Wilt, 1985).

Another transverse structural element is the northwest-trending faults with right slip movement in areas of NE-SW-trending folding. In the Yuma mine area, two major elements of the San Andreas orogeny are present: the Little Butler Ridge fault (LBRF) and the Big Granite Wash fault (BGWF). In between the LBRF and BGWF is a series of E-W folds that were identified in Reynolds et al. (1989). Also, the Calcite Mine shear zone is an east-west, south-directed thrust fault that may be related to the east-west transverse folding. These structures are inferred to be transverse tectonic elements that formed in response to transcurrent tectonics induced by right-slip motion on the LBRF and BGWF.

Together, all of the above structural features are referred to as the Big Granite Wash deformation zone. The Big Granite Wash deformation zone, in turn, can be viewed as a transitional zone that separates the large-scale ENE-trending transverse ranges, such as the Harcuvar Mountains from the north-south trending, Basin and Range style mountain ranges and valleys on the west, such as the Dome Rock and Plomosa mountains.

The Little Butler Ridge fault was mapped by Reynolds and others (1991) as a fault in the Black Hawk mine area that left the Yuma mine block as an upthrown feature. This fault offsets all of the D2 and D1 thrust faults down to the west several hundred feet and probably offsets the thrust faults to the southeast on the west side of the LBRF. In other words, the LBRF appears to have moved in oblique right slip.

5.4 Local Igneous Geology

5.4.1 Early or Middle Proterozoic Granite

The unit mapped as YXg on the Granite Wash Mountains geologic map (Figure 5-1) includes several different types of granitic rocks known or interpreted to be Proterozoic. The most widespread granite varies from coarse- to medium-grained, porphyritic, biotite granite to medium-grained, nonporphyritic to porphyritic biotite granodiorite. Phenocrysts in the pluton include K-feldspar as long as 2 cm and bluish-gray quartz and as wide as 3 to 6 mm in diameter (Reynolds et al., 1989, 1991).

Where the granite is overlain by Cambrian quartzite, its upper 1 to 2 m is particularly micaceous and has pronounced quartz eyes, possibly due to weathering of feldspar prior to burial. A single whole-rock Rb-Sr isotope analysis indicates a Proterozoic age for the granite (Reynolds et al., 1989).

A coarser grained granite underlies Cambrian quartzite and Mesozoic sandstone and conglomerate in Big Granite Wash and is mapped in tectonic slivers along the Yuma mine thrust fault near the Yuma mine (Reynolds et al., 1989, 1991).

5.4.2 Jurassic Alaskite and Granite (193-190 Ma)

Alaskite and leucocratic granite have intruded Paleozoic and Proterozoic rocks. These intrusive rocks are Jurassic in age (Nevadan orogeny), based on the Re-Os mineralization age of 190 Ma on molybdenite at Yuma King. The alaskite was nowhere observed to be in intrusive contact with the volcanic and volcaniclastic rocks or McCoy Mountains Formation, so the alaskite is earlier than the McCoy Mountains Formation.

The alaskite and leucocratic granite are typically fine- to medium-grained and equigranular and commonly have an aplitic texture. They locally contain minor biotite and are widely deformed, altered, and limonitic and were mapped as an inferred Jurassic-age alaskite (Reynolds et al., 1989, 1991).

The alaskite multiphase complex is inferred to be the source of multistage copper-gold-molybdenum mineralization in the northern Granite Wash Mountains. Similar appearing intrusions are widespread throughout the Rawhide and Buckskin Mountains and may be the source of much of the copper mineralization in the Swansea-Yuma King supersystem (Rasmussen and Keith, 2024).

The granite generally consists of medium- to coarse-grained biotite granite but includes several texturally discrete granitic bodies. The small, irregularly shaped body of granite that intrudes the west end of the central Paleozoic strike belt is medium-grained, light-gray with rounded feldspar and quartz phenocrysts as large as 4 cm and 5 mm, respectively. The feldspar phenocrysts locally compose 15% of the rock. The granite also contains about 3% altered biotite and hornblende (Reynolds et al., 1989, 1991).

The granitic body within the steep shear zone north of the Paleozoic strike belt is medium to coarse grained and contains potassium-feldspar phenocrysts 1 to 4 cm long. This granite grades laterally into a fine- to medium-grained hypabyssal(?) quartzo-feldspathic rock that resembles some components of the Jurassic volcanic unit (Reynolds et al., 1989, 1991).

The monzodiorites are associated with the magnetite-epidote-minor copper skarns (Stage 2) and the monzodiorites contain actinolite and epidote. The quartz monzonites (Stage 3) are associated with the andradite-copper-molybdenum-rhenium skarns and porphyry copper molybdenum mineralization hosted in the quartz monzonite. The latitic alaskites (Stage 4) are associated with molybdenum-copper (rhenium) mineralization.

5.4.3 Late Cretaceous Tank Pass Granite (85-78 Ma)

The Tank Pass Granite, named for its type locality at Tank Pass between the Granite Wash and Harcuvar Mountains, forms a large pluton that underlies most of the northeastern part of the Granite Wash Mountains. The pluton has been informally referred to as the granite of Tank Pass (Rehrig and Reynolds, 1980; Shafiqullah et al., 1980) and Tank Pass granite (Reynolds, 1980; Reynolds et al., 1986; Richard et al., 2023).

This granite is generally light colored, medium grained, and equigranular to slightly porphyritic. It contains about 1 to 3 % biotite and local sphene crystals as long as 1 mm. Porphyritic outcrops contain scattered K-feldspar phenocrysts 0.5 to 2 cm. long (Reynolds et al., 1989). Aplite and pegmatite dikes of the Harcuvar leucogranite suite within the granite generally contain minor reddish-brown garnet and rare muscovite.

The Tank Pass granite in the western Harcuvar Mountains has a U-Pb zircon date of 80-78 Ma (Bryant and Wooden, 2008; Wong et al., 2023; DeWitt and Reynolds, 1990). This granite is probably 85 to 78 Ma, because it:

- is intruded by the Granite Wash Granodiorite, which is no younger than 79 Ma;
- yielded an approximately 85 Ma Rb-Sr granite-aplite by whole-rock isochron (S. Reynolds and Y. Asmerom, unpublished data); and
- is no younger than 79 Ma based on U-Pb analyses of a single zircon size fraction (E. DeWitt, oral communication to Stanley Keith, 1980s).

5.4.4 Late Cretaceous Granite Wash Granodiorite, Main Phase (80-75 Ma)

The Granite Wash Granodiorite intrudes the Tank Pass Granite in the east central part of the Granite Wash Mountains. The Granite Wash Granodiorite, named for the Granite Wash Mountains, forms several separate bodies that range in size from thick dikes to larger masses covering several square kilometers. The type locality of the granodiorite is located in Granite Wash Pass at the southern end of the Granite Wash

Mountains.

The pluton has been informally referred to as the granodiorite of Granite Wash Pass (Rehrig and Reynolds, 1980; Shafiqullah et al., 1980; Reynolds et al., 1980; Reynolds and Spencer, 1993) and the Granite Wash granodiorite (Reynolds et al., 1985; 1986). Two phases of the pluton are present, a main granodioritic phase and a border phase that is typically dioritic. Larger apophyses of the pluton consist mostly of the main granodioritic phases with less abundant dioritic rocks adjacent to the country rocks. Smaller bodies are commonly composed exclusively of the dioritic border phase (Reynolds et al., 1989).

The main phase of the Granite Wash Granodiorite pluton generally consists of medium-grained, equigranular granodiorite with 3 to 10 % biotite, several percent hornblende, and about 30 % quartz. Biotite generally forms discrete books 1 mm in diameter and 0.1 to 0.5 mm thick. Sphene and epidote are also present. Many exposures contain dioritic inclusions that are 2 to 10 cm in diameter. Exposures southeast of Winchester Peak locally display repetitive, 1- to 5-cm-wide bands defined by subtle variations in mineralogy and grain size phase (Reynolds et al., 1989).

The emplacement age of the Granite Wash Granodiorite is about 80 Ma based on K-Ar biotite cooling ages of 66.5 and 71 Ma, a 79 Ma Ar-Ar hornblende date (S. Richard, unpublished data), and correlations to dated rocks elsewhere in the region (Reynolds et al., 1986). The pluton intrudes and is younger than the Tank Pass Granite, which is older than 79 Ma based on a hornblende incremental release K-Ar date (Richard, 1988; Reynolds et al., 1989).

Late Cretaceous Granite Wash Granodiorite, Border Phase

The border phase of the main granodioritic phases comprises most of the smaller apophyses and contains more hornblende than biotite. In contrast to the main phase, the border phase is characterized by lithologic diversity from outcrop to outcrop. This border phase includes five rock types:

(1) medium-grained, equigranular to slightly porphyritic granodiorite with 10 to 20% hornblende (some as 0.5 to 2 cm long phenocrysts) and biotite;

(2) medium- to coarse-grained diorite or tonalite with 15 to 40% hornblende;

(3) fine- to medium-grained porphyritic diorite with several percent hornblende phenocrysts that give the rock a spotted appearance;

(4) hornblendite with less than 15 % plagioclase; and

(5) fine-grained microdiorite mostly composed of plagioclase and hornblende.

Near the Calcite Mine, the rock contains abundant epidote and is locally limonitic and sericitic (Reynolds et al., 1989).

5.4.5 Harcuvar Leucogranite Suite (72-60 Ma)

Leucogranite units (commonly with two-micas ± garnet) are found primarily as small plutons and sills in the Buckskin‑Rawhide footwall and as large sill-like bodies and plutons in the Harcuvar footwall that intrude the Tank Pass granite. Extensive U-Pb dating by Wong et al., (2023) on 12 leucogranite samples from various places in the Harcuvar Mountains have dates ranging from 73-54 Ma, with a modal peak between 70 and 68 Ma. Hence, the leucogranites are a separate, younger event that radiometrically post-dates the Granite Wash Granodiorite and the Tank Pass Granite. These young leucogranites are assigned to the Harcuvar leucogranite suite.

The Three Musketeers leucogranite that crops out north of the Three Musketeers mine in the northwestern Granite Wash Mountains is likely associated with the tungsten mineralization. The Three Musketeers leucogranite probably correlates with the Harcuvar Leucogranite suite in the Harcuvar Mountains.

The Harcuvar leucogranite suite consists of numerous medium-grained, two-mica (biotite-muscovite) granite bodies that are commonly associated with pegmatite and aplite. The Harcuvar leucogranites contain approximately 1-3% biotite and 1-2% slightly greenish muscovite with about 1% reddish garnet (Reynolds and Spencer, 1993). Leucogranite units (commonly two-mica ± garnet) are found primarily as small plutons and sills in the Buckskin‑Rawhide footwall and as large sill-like bodies and plutons in the Harcuvar footwall that intrude the Tank Pass granite.

Extensive U-Pb dating by Wong et al., (2023) on 12 leucogranite samples from various places in the Harcuvar Mountains have dates ranging from 74-54 Ma, with a modal peak between 70 and 68 Ma. Late Cretaceous leucogranites that were emplaced in the Harcuvar Mountains have now been well dated by the U-Pb technique in 13 samples that range from circa 74 Ma to 54 Ma (Wong et al., 2023; Isachsen et al., 1999). A leucogranite dike in the Cunningham Pass area of the Harcuvar Mountains is 5 to 30 cm thick and cuts mylonitic gneiss. Sample Har-55 was dated at 54.4 ± 0.7 Ma (Wong et al., 2023).

In the central Harcuvar Mountains, a major mylonitic event probably coincided with the peak metamorphism (circa 70 Ma). The mylonitization is not likely to be mid-Tertiary in age, as commonly inferred in the geologic literature. The mylonitic deformation in both the Harcuvar Mountains and much of the Granite Wash Mountains is assigned a late D2 age.

The leucogranites make up substantial portions of the Harcuvar Mountains footwall as stocks and sills intruded into other footwall units. Rare pegmatite and leucogranite dikes cut the mylonitic foliation at high angles and are weakly deformed. Wong et al. (2023) interprets the leucogranite dikes as synkinematic intrusions that were emplaced toward the end of mylonitization.

Light-colored dikes of alaskite, aplite, and pegmatite are locally associated with the Tank Pass Granite.in the western Harcuvar Mountains (e.g., Bryant and Wooden, 2008; Wong et al., 2023). These dikes are generally composed of quartz and predominantly alkali feldspar, with muscovite, biotite, and trace garnet. Some aplitic dikes have garnetiferous and pegmatitic bands parallel to their margins. Most of the dikes are likely younger than, and unrelated to, the Tank Pass granite (Reynolds et al., 1989).

Thus, the microstructural, thermochronologic and geochronologic results in the Harcuvar Mountains provide strong evidence that amphibolite-facies mylonitization occurred during a discrete event in the Late Cretaceous to Early Paleogene (Late Laramide) (Wong et al., 2023). The leucogranites are a separate, younger event that radiometrically post-dates the Granite Wash Granodiorite and the Tank Pass Granite. The leucogranites in the Granite Wash Mountains are thus assigned to the Harcuvar leucogranite suite.

5.4.6 Glory Hole Igneous Suite (18-14 Ma)

The northwest-trending, alkaline, microdiorite dikes of the Glory Hole mineral district are common in the mountain ranges near the Granite Wash Mountains and are a portion of the 22-14 Ma Salome supersystem (Rasmussen and Keith, 2024). Gold quartz veins with minor copper mineralization are spatially associated with gabbro to syenodiorite or microdiorite, mafic dikes. The N30-50˚W, high-angle, mafic dikes cross-cut Jurassic age, Cu-Mo skarn/porphyry metallization with irregular, contorted and discontinuous quartz veins and large masses of quartz.

Middle Tertiary Mafic Intrusive Rocks

Middle Tertiary mafic intrusive rocks occur primarily as dikes and are widespread throughout the range. The mafic dikes are easiest to detect and map where they cut homogeneous, light-colored rocks. Most dikes are finely crystalline rocks of probable dioritic composition and are similar to microdiorite dikes elsewhere in the region (Rehrig and Reynolds, 1980).

Most dikes consist of hornblende laths in a plagioclase matrix, and some contain biotite. Some mafic dikes are flanked by or are associated with chrysocolla-hematite ± pyrite ± chalcopyrite mineralization (Reynolds et al., 1989). Mafic dikes on Butler Ridge and Little Butler Ridge are light to medium gray and silicic to intermediate. They contain poorly developed books of biotite 0.5 to 2 mm in diameter and acicular needles of hornblende 1 to 4 mm long (Reynolds et al., 1989, 1991).

Middle Tertiary Felsic Intrusive Rocks

Middle Tertiary felsic dikes and sills are locally abundant in the southern part of the range and are very widespread in the Desert Queen mine area. Moderately dipping, irregular felsic dikes and sills near the Desert Queen mine in the southwestern Granite Wash Mountains are cream colored.

Mineralogically, the felsic dikes contain sparse plagioclase (2 to 4 mm in diameter) and quartz (1 mm in diameter) with several percent quartz eyes. The felsic dikes have an aphanitic groundmass and the matrix has a sugary texture and contains limonite-filled cubes, which imply the former presence of pyrite. Some dikes are associated with quartz veins, chrysocolla, and hematite (Reynolds et al., 1989, 1991).

5.5 Late Cretaceous Metamorphism

The Harcuvar leucogranite suite is associated with a widespread, typically alumino-metasomatic event that has affected much of the Harcuvar-Granite Wash Mountains region. The most noticeable mineralogical manifestation of the Late Cretaceous metamorphism is the presence of kyanite and sillimanite.

5.5.1 Regional Metamorphism at Yuma King

Regional metamorphism strongly affected the rocks at Yuma King based on the following indications:

- Broken grains,
- Recrystallization of quartz,
- Widespread kyanite,
- Contorted laminae in schist,
- Boudinaged grains, and
- Pressure shadows on porphyroblasts (Hansley, 2011).

Regional metamorphism continued after potassic and phyllic hydrothermal alteration processes finished, as shown by laminae of biotite, sericite and microcrystalline silica that are wavy, contorted, and broken (Hansley, 2011).

In the Yuma mine area, the copper skarn deposits of Jurassic age have been overprinted by sillimanite and kyanite metamorphism, as reported in petrographic studies of the Yuma mine skarn metallization for VANE (Hansley, 2011). This overprint is probably related to tectonic burial between 76 to 70 Ma. Peak metamorphism was probably 70 to 67 Ma based on U-Pb dates for 13 leucogranites in the adjacent Harcuvar Mountains (Wong et al., 2023).

The Late Cretaceous Tank Pass Granite in the western Harcuvar Mountains contains amphibolite-facies mylonites that are spatially associated with voluminous and variably deformed footwall leucogranites. The leucogranites were emplaced syn-kinematically from circa 74 to 64 Ma (DeWitt and Reynolds, 1990; Wong et al., 2023). The pegmatite and leucogranite dikes cut the mylonitic foliation at high angles. Four dates on pelitic black schist mixed with leucogranite yielded dates of 75 to 65 Ma. The 70 Ma age date on monazite in kyanite schist indicates the maximum (peak) burial was at about 70 Ma (Wong et al., 2023).

The pegmatite and leucogranite dikes were interpreted as synkinematic intrusions that were emplaced toward the end of mylonitization (Wong et al., 2023). Amphibolite-facies mylonitization has top-to-the-northeast kinematics and occurred during the Late Cretaceous to early Paleogene. A late kinematic (circa 63 Ma), relatively undeformed dike indicates this phase of mylonitization had mostly waned by the early Paleogene.

Walsh et al. (2016) reported thermobarometry and monazite geochronology on rare pelitic garnet ± kyanite schists from the Harcuvar footwall. These data suggest that Late Cretaceous (76 to 70 Ma) garnet growth and metamorphism occurred at 6 to 10 kbar pressures at 76 to 70 Ma (Walsh et al., 2016). Decompression occurred during that time from pressures as high as ∼10 kbar to pressures as low as ∼4 kbar (Wong et al., 2023). These data suggest a major exhumation of ∼4 to 6 kbar occurred during the Late Cretaceous.

This uplift and cooling has been interpreted to record erosion (Knapp and Heizler, 1990) or refrigeration from flat slab subduction (Dumitru et al., 1991). The flat subduction has driven epeiric uplift to create regional scale altiplanos, such as the Eocene erosion surface (Chapin and Cather, 1981; Keith and Wilt, 1986; Chapman et al., 2021).

5.5.2 Redefined D3 (Latest Laramide) Uplift Cooling

Several K-Ar cooling ages of 53 to 45 Ma have been reported on various rocks on or near the Yuma King property (Shafiqullah et al., 1980; Richard et al., 2023). Thermochronology suggests that, outside of local zones of Miocene reheating in the Buckskin-Rawhide footwall, the footwall had cooled below amphibolite-facies conditions no later than about 43 Ma and mostly before 65‑60 Ma. These results strongly suggest that amphibolite-facies mylonites predate Miocene deformation and instead formed during a discrete event that predated the circa 65‑60 Ma $^{40}Ar/^{39}Ar$ hornblende cooling ages (Wong et al., 2023).

Monazite from the schists in the nearby Harquahala Mountains all yield Late Cretaceous U-Pb ages (mean age is approximately 72 Ma by LA-ICP-MS), whether located in the matrix or included in garnet or kyanite. Older (~76–70 Ma), low Y and HREE monazite cores were interpreted to record garnet growth during uplift, constraining significant decompression of ~4–6 kb in the Late Cretaceous. Younger (~70–63 Ma), higher Y and HREE rims suggest growth during garnet breakdown. These new results indicate significant burial and then exhumation during the Late Cretaceous–early Tertiary and support a model of Late Cretaceous crustal thickening and partial melting (Wong et al., 2023) with accompanying regional scale uplift.

In the Salome region of west central Arizona, the uplift cooling reflects the ultimate effect of flat subduction. The flat subduction produced epeirogenic uplift that culminated during the Eocene and produced widespread cooling ages and resetting of K-Ar clocks. In effect, the flat subduction produced a continent-scale altiplano that predates more local rapid uplift in the areas of anticlinal arching during the mid-Tertiary Galiuro orogeny. In the Yuma mine area, other than the reset K-Ar ages, no structural effect relatable to D3 are apparent.

5.5.3 High Temperature Metamorphism at Yuma King

High temperature metamorphism may have accompanied regional metamorphism, as clear, fresh patches of microcline are found in altered primary plagioclase in many Yuma King samples. Microcline may have formed during high-temperature metamorphic (granulite?) facies processes, as their freshness strongly suggests they formed late in the paragenetic sequence. The presence of sillimanite and the kyanite in the drill cores at Yuma King suggests that temperatures of at least 500˚C. were reached (Hansley, 2011). Mineralogy related to this high-temperature metamorphism appears in the paragenetic chart shown on Figure 5-12 (Hansley, 2011).

The high temperature metamorphism is attributed to tectonic burial related to a combination of D1 and D2 thrust loading discussed in 5.3. The widespread presence of sillimanite in the Yuma mine skarns attests to the burial of the entire Yuma mine porphyry system beneath mainly D2 thrusts. The sillimanite should not be confused with similar skarn minerals, such as tremolite, that would permissibly be related to the Jurassic skarn. Rather than being genetically related to the skarn, the sillimanite represents an overprint that is related to aluminum metasomatism produced by well-documented, widespread peraluminous magmatism that appears in the area about 70 Ma (Wong et al., 2023; Keith, personal communication).

Paragenesis

Hydrothermal Alteration

	Potassic	Phyllic	Propylitic	Skarn Metasom.	Reg. Metam. High Temp.	Low T.
Biotite	---------					
Adularia	?------?				?-------?	
Quartz		-------		----	-------	
Pyrite	-------------------------					
Sericite		-------				
Albite			-----------------------?			
Paragonite(?)				?-------?		
Chlorite			---------	------		
Pyrophyllite(?)					--------	
Ankerite			----------			
Epidote			---------------------			
Sphene			-----------?			
Diopside				----------		
Magnesite(?)				?-----?		
Allanite				?-----?		
Sillimanite					--------	
Specular hematite					----------	
Microcline					?-------?	
Kyanite					--------	
Magnetite				---------		
Chalcopyrite	-----------------?			?------?		
Covellite						----
Molybdenite				?-------?		
Vermiculite						------
Calcite			-------			------
Gypsum						------
Iron oxides						-----

Source: Hansley (2011)

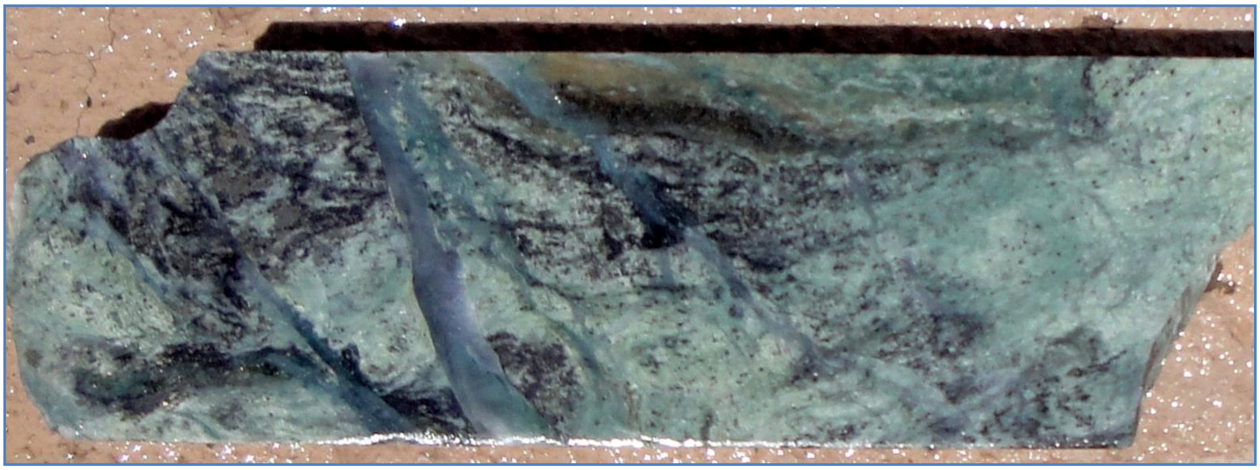
Figure 5-12 Paragenesis of minerals found in thin sections of Yuma King core

5.6 Property Geology

The Yuma King property is situated in a region of complex geology involving numerous episodes of thrust deformation and folding, plus several events of intrusive activity. Two economic mineralization-related intrusive events consist of an Early Jurassic intrusive complex that is probably associated with copper-magnetite skarn mineralization, and a set of numerous gabbro-diorite-granodiorite dikes that may be related to a later (probably mid-Tertiary) gold mineralization event. Petrochemical data were obtained from these mineralization-related intrusions (Keith, 2003).

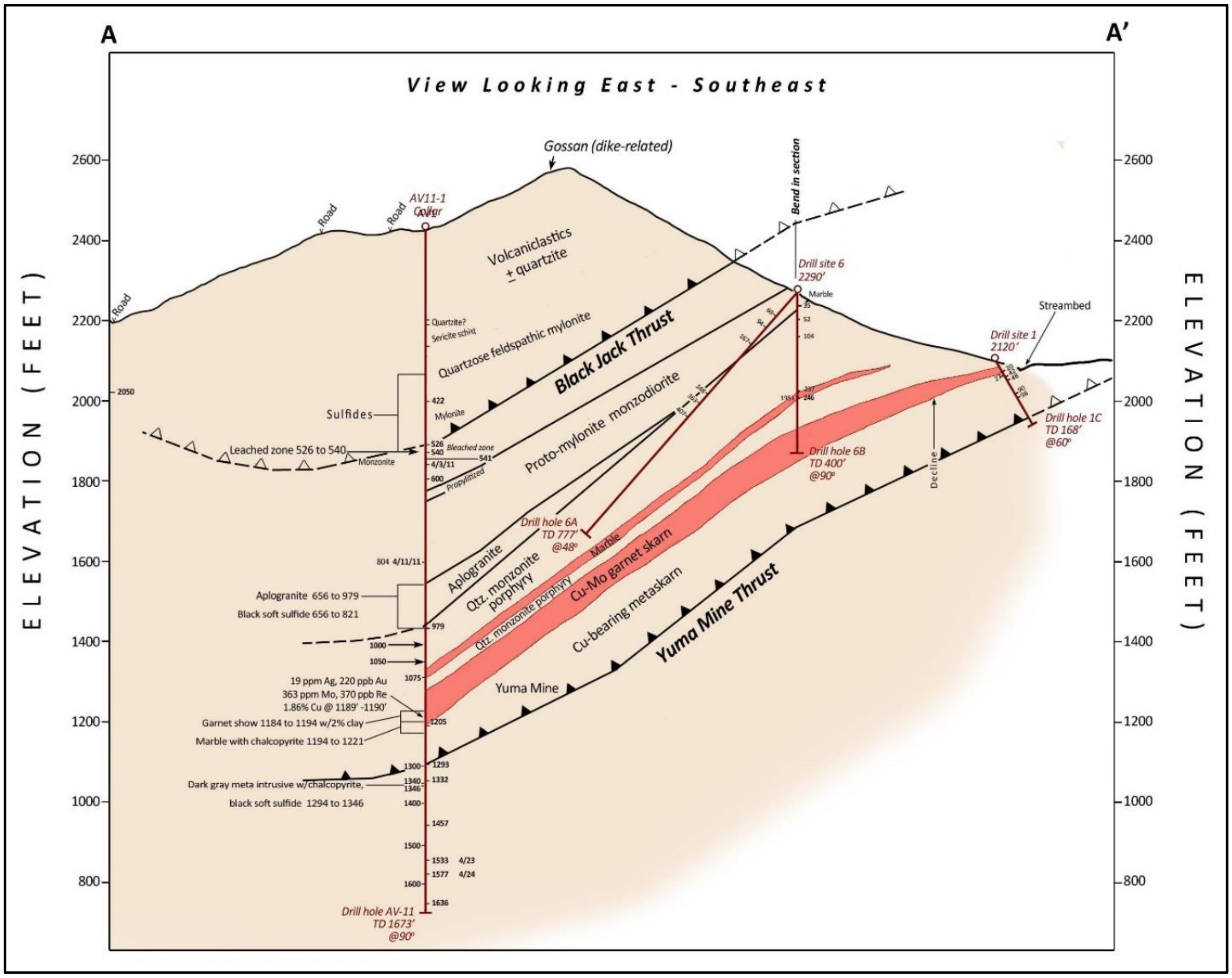
The geological map of the Yuma King property (Figure 5-4) shows the complexity of the thrust fault systems and the sedimentary rock units. The sedimentary formations are enclosed within a thrust plate between the Yuma King thrust (overlying the Jurassic volcaniclastic metasedimentary rocks [green on the map]) and the Black Jack thrust (south of the Jurassic volcaniclastic metasedimentary rocks). The lines of the cross sections are shown on this map.

Using data from the AV1-11 drill hole, Al Edwards prepared a cross section (Figure 5-14 and Figure 5-15) that was a 1,000 ft step out to the north from the known mineralization intersected during the Big Bar drilling program. The AV1-11 drill hole intersected the same skarn section as that intercepted in drill hole YK05B of the Big Bar drill program. The mineralized section was intersected at about 30 degrees downdip at about 1140 ft.



Source: Keith (2011)

Figure 5-13 Molybdenite-bearing quartz vein cross cutting earlier deformed magnetite-chalcopyrite-bearing skar at 1159.5 ft in drill hole AV1-11



Source: S.B. Keith modified from Al Edwards of VANE (2010) cross section. Assay data is shown on Table 8.6 and location of cross section is shown on Figure 5-15.

Figure 5-14 Cross section of the AV1-11 drill hole illustrating the northern extension of the Yuma King porphyry copper-gold-molybdenum system found by VANE drilling

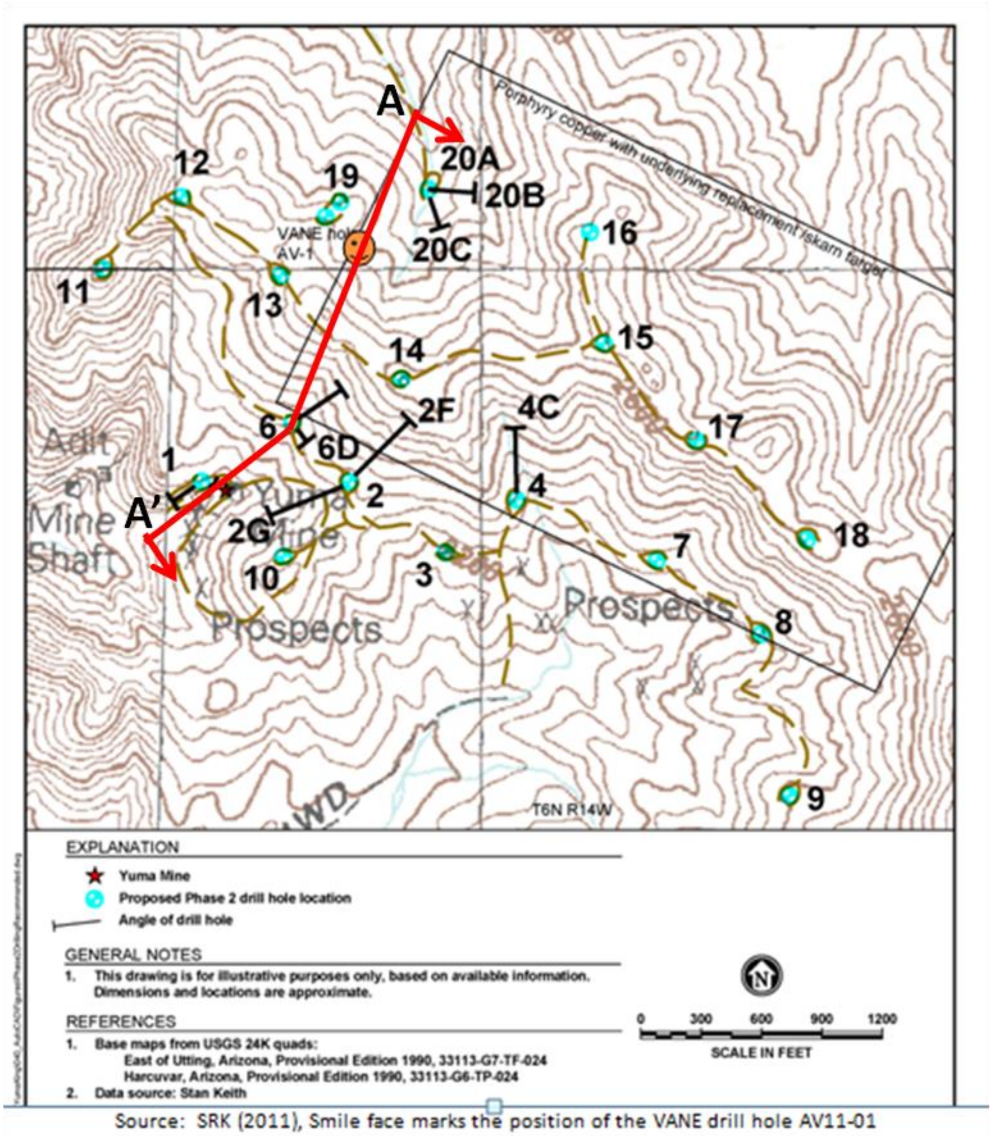


Figure 5-15. Location of cross section A-A' (Figure 5-14), looking southeast

5.7 Mineralization Zones/Stages

The geology and mineralization history of the Yuma King area are highly complex (Figure 5-16), with several different ages and types of mineralization (Figure 5-17). In this report, these mineralization events are separated into major and minor mineralization events.

The major mineralization events on the Yuma King property are phases of a copper-gold-molybdenum-magnetite mineralization of Jurassic age that were pre-thrust fault (Yuma King mineral district) (Figure 5-16). The major Jurassic mineralization event consisted of the following three stages or types of deposits:

1) skarn-hosted gold-copper (silver, rhenium) mineralization (Stage 2),

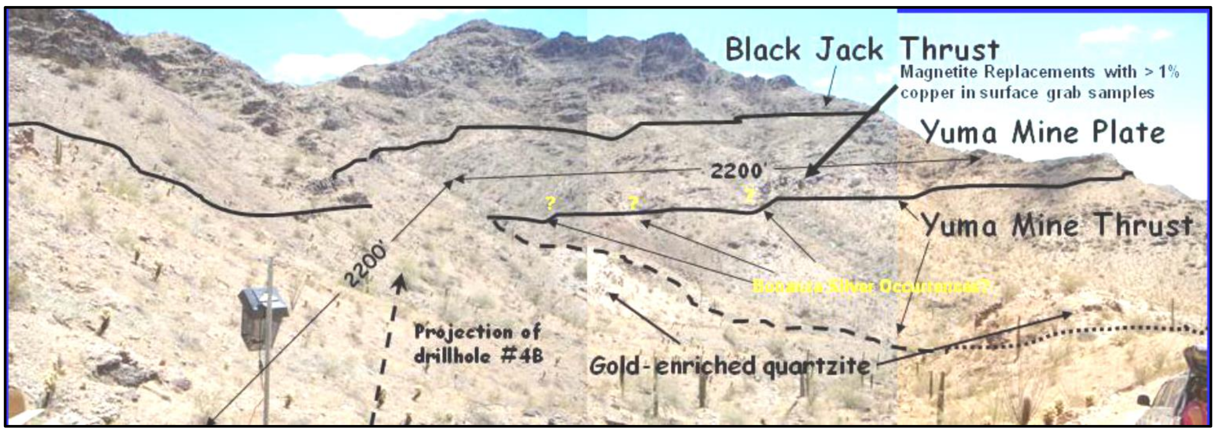
2) porphyry copper-molybdenum (silver, rhenium) style mineralization (Stage 3),
3) porphyry molybdenum-copper mineralization (drill site 2, drill hole 4) (Stage 4), and
4) supergene enrichment of the above deposits with azurite, chrysocolla and turquoise.

Other later mineralization events on the Yuma King property that had past production include:

5) a shear zone-greisen tungsten mineralization associated with a Late Cretaceous-Early Tertiary muscovite aplogranite (leucogranite) stock (Three Musketeers mineral district).
6) a post-thrust fault (mid-Tertiary), dike-related, gold-pyrite mineralization (yellow label in Figure 5-16) (Glory Hole mineral district) (Stanley Keith, 2003).

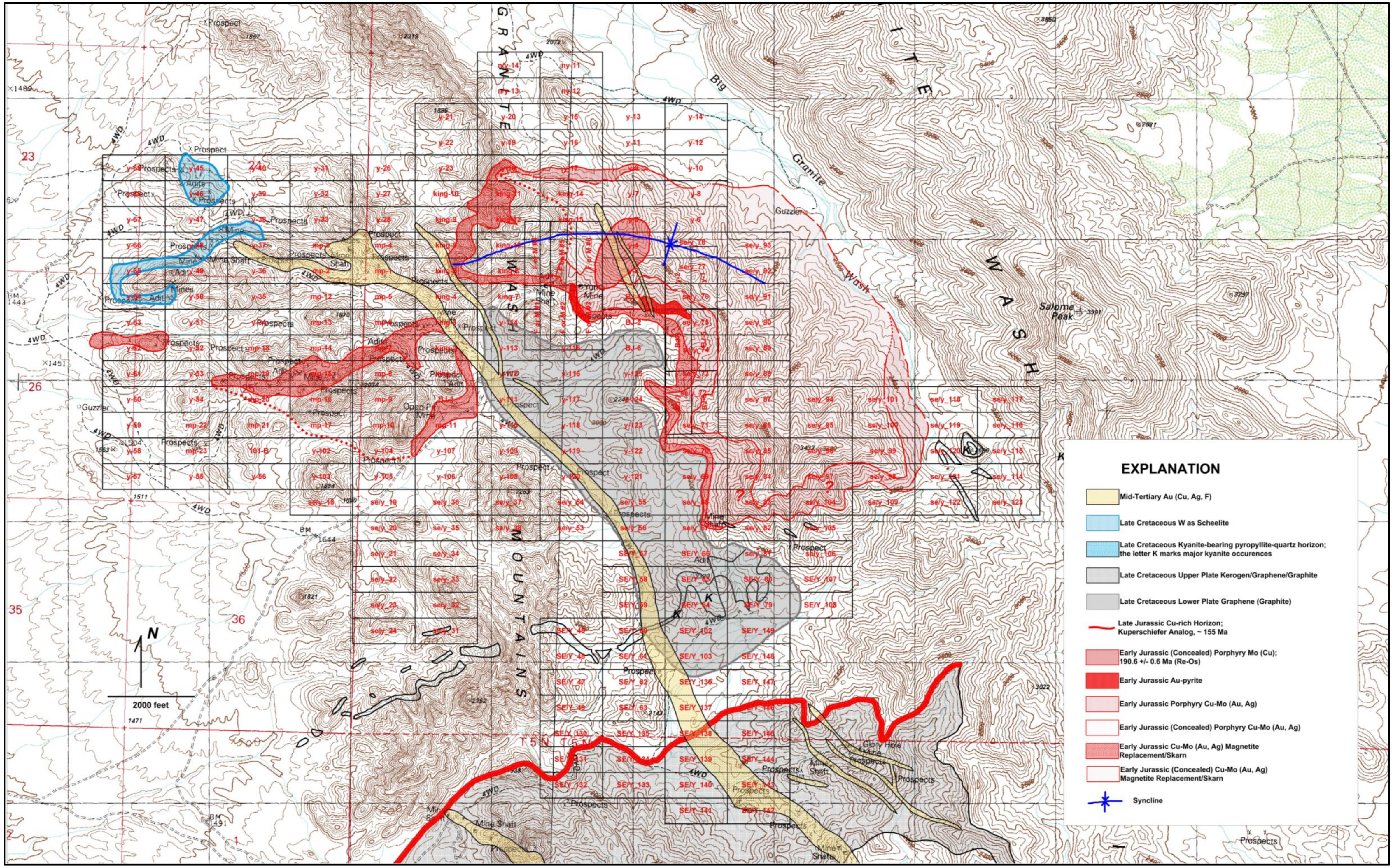
Other mineralization events on the Yuma King property without past production include:

7) a thin, Late Jurassic, Cu-rich horizon (Kupferschiefer analog ~155 Ma),
8) Late Cretaceous, kyanite-bearing pyrophyllite-quartz horizons, and
9) Late Cretaceous, kerogen-graphene-graphite associated with metamorphosed black shales of the McCoy Mountains Formation.



Source: Keith (2011)

Figure 5-16 Location of magnetite replacements looking southeast from historic Yuma mine adit



Source: Keith composite commodity map (not showing recently staked mining claims)

Figure 5-17 Yuma King property composite commodity map

Several phases of the probable Jurassic intrusive complex are important to understanding the associated mineralization (Keith, 2011). The hydrothermal fluids are released in stages as the plutonic complex differentiates and each stage is characterized by a slightly different type of mineral deposit. These stages are more fully described in Section 5.7.1.

5.7.1 Stages of Porphyry Copper-Gold Intrusions (MQAwo)

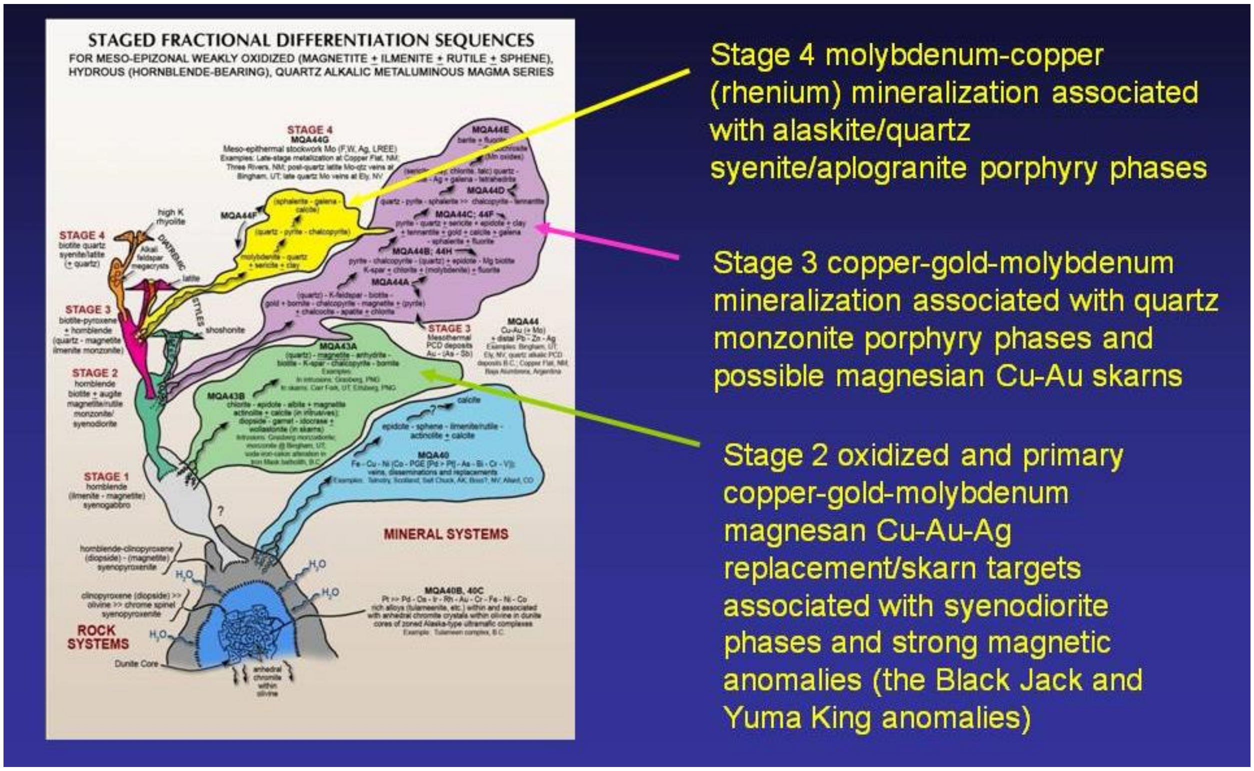
The differentiation process is a stepped or punctuated process of hydrolysis or devolatilization steps in the upper crust (Keith and Swan, 1996; Keith, 1983, rev. 2003; and various power points about the Yuma King Mine, Keith, 2006, 2007). This multiple hydrolysis process is influenced by elements of the Texas Zone that provided deep-seated pathways for emplacement of the porphyry copper-gold deposits. Continued intrusions and movements on the main zones of weakness influenced fractionation of the mafic diorite to granodiorite magmas into increasingly more felsic, quartz monzonitic and granitic plutons.

Whether fluid release events from the intrusions triggered movement along the faults or whether tectonically induced left-slip movements on the Texas Zone conduits triggered depressurization and subsequent fluid release from the intrusions is a classic “which came first - ‘chicken or egg’ question”. The process probably was a function of both tectonics and fluid releases from the intrusions.

Hydrothermal mineral zoning in porphyry copper-gold systems is rarely related to a single event that concentrically zoned alteration and mineralization, as portrayed in the classic Lowell and Guilbert (1970) model. Rather, each igneous rock system exhibits its own hydrothermal fluid release sequence that is systematically and consistently cross-cut by other compositionally distinct and younger rock and hydrothermal systems. Fluid release from each rock system induces partial crystallization. The magmas are hydrous, contain hornblende, and crystallize at depths of 3-5 km.

The generic magmato-hydrothermal, fractionation/unmixing sequence of porphyry copper-gold systems (MQA) has been studied in many case histories in North and South America. Continued intrusions and movements on the main zone of weakness influenced fractionation of the mafic (magnesium- and iron-rich) diorite to granodiorite magmas into increasingly more felsic (sodium feldspar and silica-rich) quartz monzonite and granitic plutons.

The stages in a typical porphyry copper-gold system of metaluminous quartz alkalic (MQA) magma chemistry are shown on Figure 5-18 with more detail on Figure 5-21. The igneous rock of the stage is shown on the left side of the figure and the hydrothermal fluid and minerals that were emitted from it are shown on the right side.



Source: Keith, 2011, power point presentation

Figure 5-18 Application of MQAwo (Bingham type) magma-hydrothermal fractionation sequence to the Yuma King deposit

5.7.2 Early Jurassic (190 Ma) Copper-Molybdenum Porphyry Mineralization

Porphyry Cu-Mo (Au Ag) skarns, replacements and stockworks are associated with the Jurassic -age Yuma mine composite plutonic sequence (alaskite of Reynolds et al., 1989, 1991). Cu, Ag, Au, Fe, azurite and chrysocolla related to supergene enrichment of these deposits are commonly collected for lapidary use.

The three mineralization-related intrusive events in the Jurassic intrusive complex are shown on Figure 5-20 and consist of:

1) a monzodiorite porphyry/aplite that may be related to the copper-magnetite-gold-silver-molybdenum skarn mineralization associated with magnetite and strong magnetic anomalies (Stage 2 release of hydrothermal fluids from the metaluminous quartz alkalic class);

2) a monzonite to quartz monzonite porphyry intrusive complex that may be associated with a copper-gold-molybdenum porphyry (Stage 3 release of hydrothermal fluids from the metaluminous quartz alkalic class of the magma-metal classification); and

3) a late, fine-grained, alaskite/quartz syenite porphyry intrusion that is associated with a stockwork molybdenum-copper zone (a late Stage 4 release of hydrothermal fluids from the quartz alkalic class of the magma-metal classification).

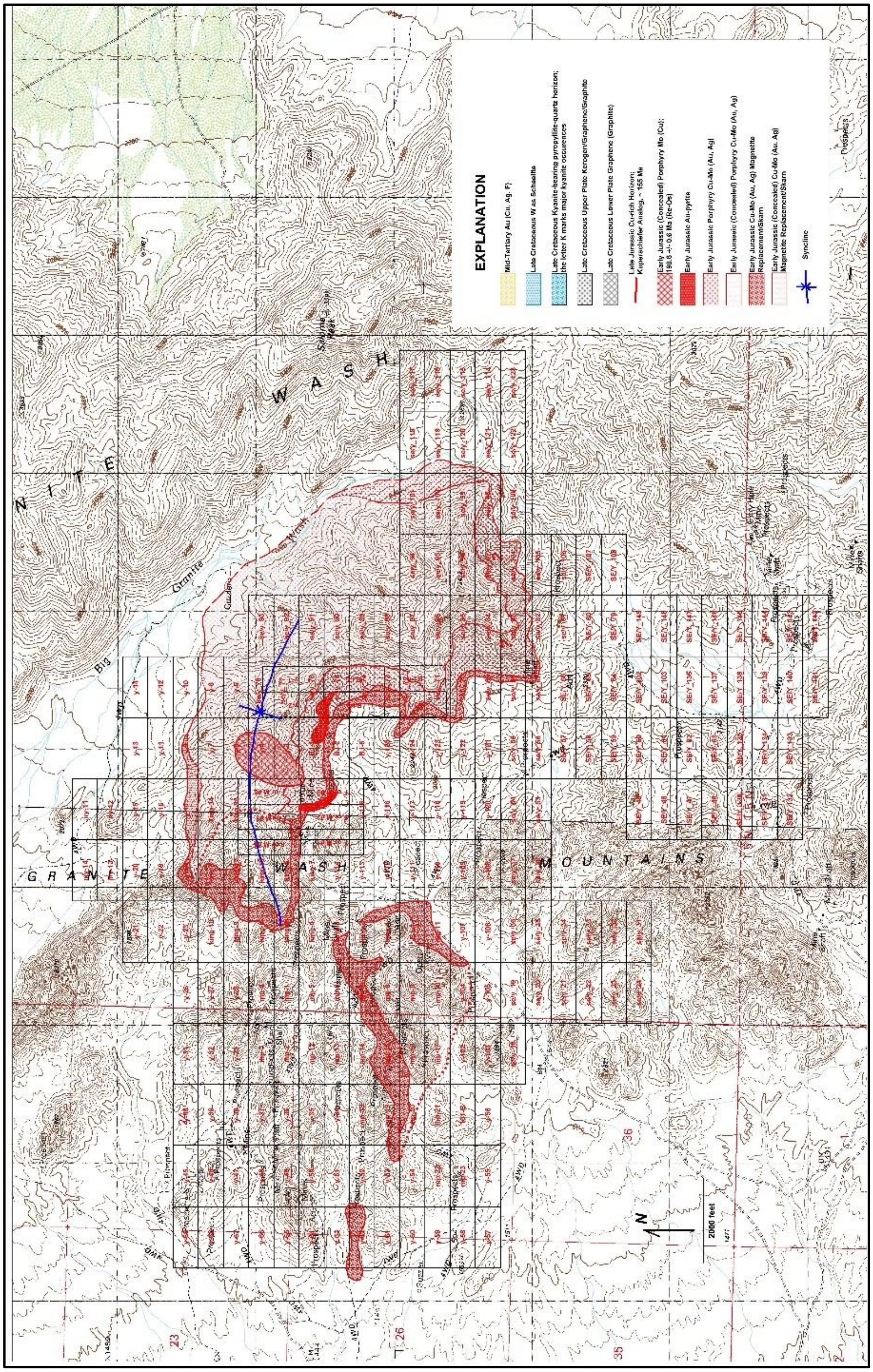
Banded chalcopyrite-pyrite-magnetite hypogene mineralization is interbedded with light-colored marble from the 315 level at sample site YT-3 (Figure 5-19). An off-cut of this sample ran 0.49% Cu, 23.2

gpt Ag and 0.82 gpt gold (Keith, 2011). This type of sulfide mineralization is the main target type within the Yuma King magnetic anomalies. The sulfide mineralization has been folded by deformation related to the thrust events.

Source: Keith (2011), Hamsley (2011) from the 325 ft level, Yuma Mine underground

Figure 5-19 Chalcopyrite-pyrite-magnetite primary sulfide replacement mineralization (Stage 3) associated with quartz monzonite and overprinted by sillimanite in the center

The quartz monzonite porphyry sample (Figure 5-23) is from the road cut near the old shaft site and has been affected by chloritization of the biotite. More economic types of alteration associated with the copper replacement bodies are represented by quartz-sericite-pyrite with minor chalcopyrite in the immediate hanging wall of the replacement bodies. Petrochemistry on this rock plotted in the same magma-metal series field as the Bingham Canyon, Utah samples.



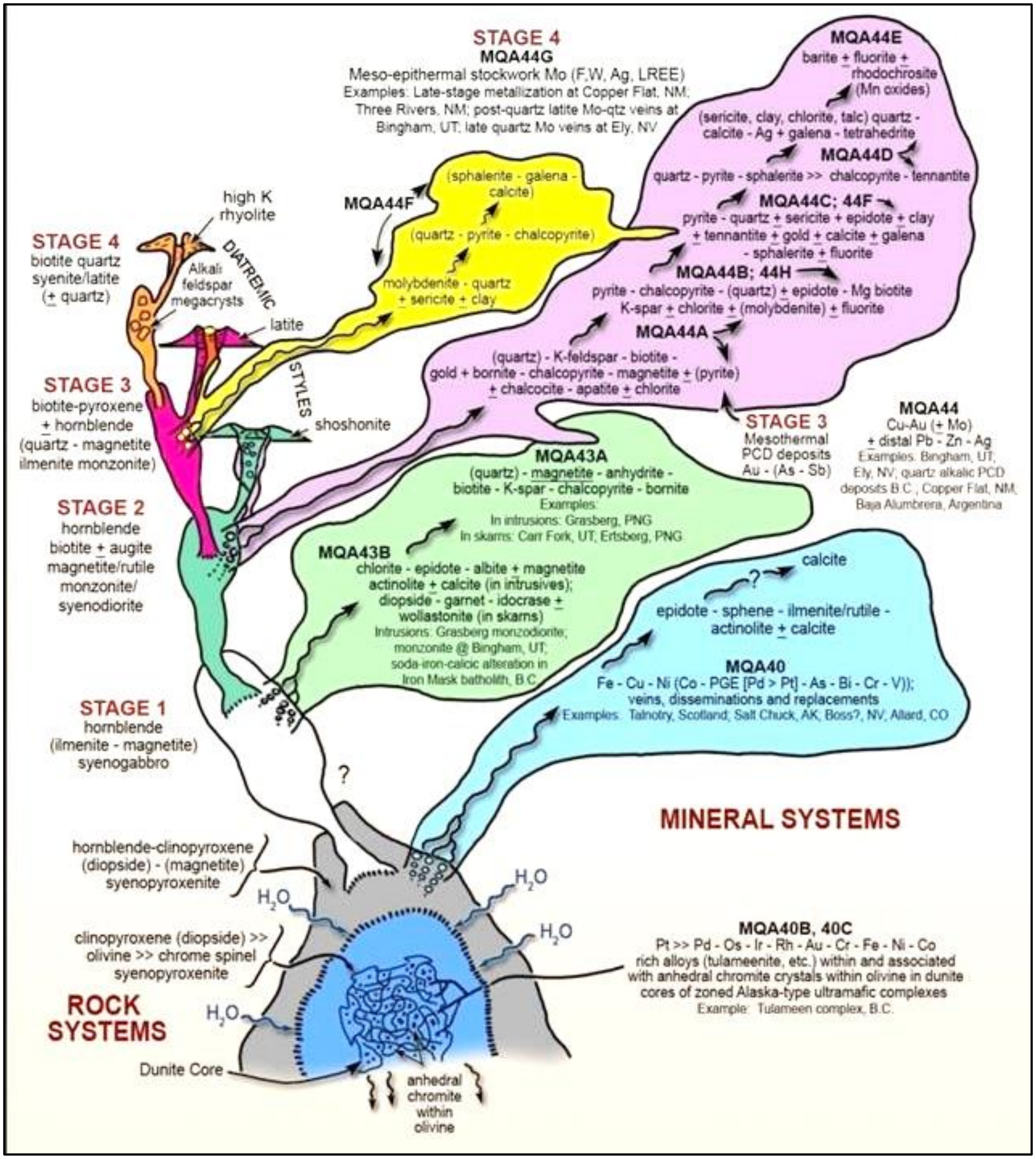
Source: Keith (2011) (current claim boundaries are not shown)

Figure 5-20 Location of Early Jurassic mineralization (skarn, porphyry copper-molybdenum)

5.7.3 Initial Hornblende Syenopyroxenite Magma

The initial MQA magma is typically a syenopyroxenite containing clinopyroxene (diopside), which is much more abundant than chrome spinel, and also a syenopyroxenite containing hornblende-clinopyroxene (diopside) – magnetite (Figure 5-21). The initial magma partially crystallizes at depth and may manifest a magnetic anomaly. The initial magma exsolves a slightly less dense, less mafic magma (hornblende syenogabbro composition) and a hydrothermal fluid.

The hydrothermal fluid exsolved from the initial hornblende syenopyroxenite magma contains iron, copper, nickel, with minor cobalt, Platinum Group Elements (PGE with palladium greater than platinum), arsenic, bismuth, chrome, and vanadium. These elements occur in veins, disseminations, and replacements. Examples are Talnotry, Scotland; Salt Chuck, AK; and Allard, CO. Alteration minerals are epidote, titanite (sphene), ilmenite/rutile, actinolite ± calcite.

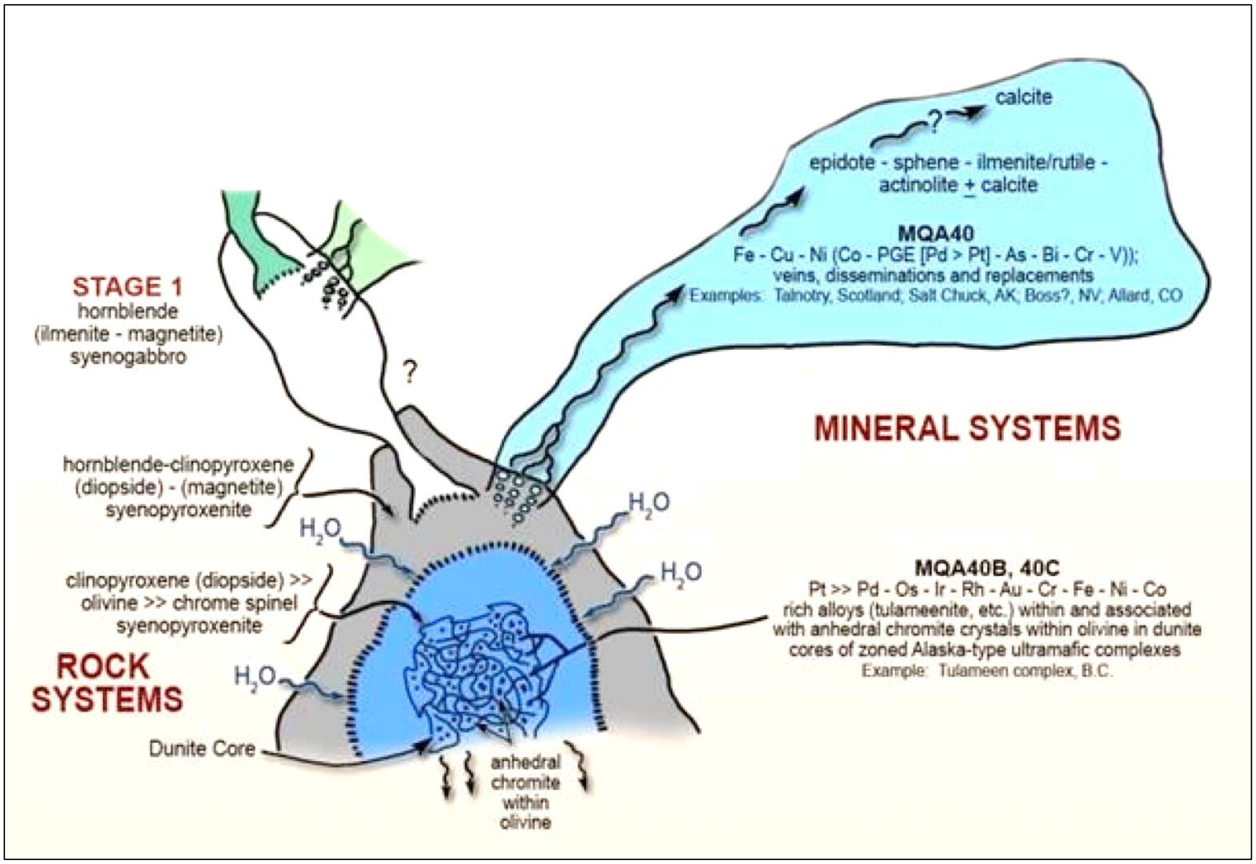


Source: Stanley Keith, 2011

Figure 5-21. Fractionation chart for stages in the evolution of a porphyry copper-gold system associated with a metaluminous, quartz alkalic, weakly oxidized, hydrous, magma-metal series (MQAwoh) system

5.7.4 Stage 1 – Hornblende Syenogabbro Magma

Stage 1 hornblende (ilmenite – magnetite) syenogabbro unmixes to a less mafic Stage 2 magma (hornblende, biotite, ± augite, magnetite/rutile) monzonite/syenodiorite (Figure 5-22).



Source: Keith (2011)

Figure 5-22. Initial magma and fractionation of Stage 1 magma and hydrothermal system

Partial crystallization of the Stage 1 syenogabbro pluton exsolves Stage 2 [Fe(Cu)] hydrothermal fluid that forms proximal Fe-Cu skarns and widespread peripheral propylitic alteration (Figure 5-29).

The primary copper-gold-molybdenum sulfide mineralization is associated with the quartz monzonite porphyry intrusive complex (Figure 5-23, Figure 5-24). This rock has been intersected in drill holes and shows chalcopyrite and molybdenite (Figure 5-25).

Source: Keith (2007)

Figure 5-23 Sheared, chlorite-altered, quartz monzonite porphyry associated with Stage 3 copper-gold-molybdenum porphyry mineralization

Source: Keith, 2011

Figure 5-24 Core box showing drill intercept of copper-bearing monzonite porphyry in drill hole YK-02B that is host to most of the Cu-Mo mineralization at Yuma King

Source: SRK (2011)

Figure 5-25 Molybdenite (gray line) and chalcopyrite (Stage 4) in Yuma King drill core

Copper and molybdenum assays for the Yuma King Stage 3 quartz monzonite porphyry are summarized in Table 5-1. The concentrations of copper and molybdenum appear to increase toward the north and east (Stanley Keith, 2011). In Table 5-1 the upper highlighted interval between 254 to 347 ft and lower intervals between 632 to 706 ft represent Stage 3 copper-molybdenum mineralization in sheared quartz monzonite porphyry.

Table 5-1 Copper and molybdenum assays from selected drill intercepts

Drill Hole (Dip; Length Ft, Bearing)	Generic Rock Type and depth (ft)	Intercept From – To (Ft) (*selected higher grade Cu intervals*)	Intercept Thickness (Ft)	Approximate True Thickness (Ft)	% Copper	*Molybdenum Ppm ****
(-90°;744.5) *(Including)* **Including**	*quartzite 213-241* *monzonite porphyry 241-267* *sheared monzonite porphyry 267-416*	*208.0 to 416.0** *(258.5 to 294.0)* *(264.0 to 267.0)* *(258.5 to 277.5)* 254.0 to 347.0 (347.0 to 352.5)	*208.0** *(35.5)* *(3.0)* *(19.0)* 93.0 (5.5)	*130.** *(25.0)* *(2.1)* *(12.0)* 90.0 (3.5)	- (0.152) (0.099) (0.157) 0.151 (0.056)	*170 ppm** *(305 ppm)* *(1110 ppm)* *(416 ppm)* *226 ppm* *(666 ppm)*
	sheared monzonite porphyry	*435.0 to 437.0*	*2.0*		-	*106 ppm*
	dolomite skarn	*475.0 to 487.0*	*12.0*	*11.4*	-	*138 ppm*
YK04-B (-45°;786;S80°E)	*monzonite porphyry*	*326.0 to 361.0*	*35.0*	*21.0*	0.064	*94 ppm*
	monzonite porphyry	*374.0 to 400.0*	*26.0*	*15.6*	-	*86 ppm*
	monzonite porphyry	*407.0 to 416.0*	*9.0*	*5.4*	0.082	*240 ppm*
Including	*monzonite porphyry 431-574* *dolomite skarn 574-579*	*431.0 to 579.0* 534.0 to 561.0 (544.0 to 548.0)	*148.0* 27.0 (4.0)	*91.0* 16.0 (2.4)	0.054 0.108 (0.069)	*158 ppm* *200 ppm* *(485 ppm)*
	dolomite skarn	574.0 to 584.0	10.0	6.0	0.108	-
Including	*monzonite porphyry*	*588.0 to 627.0* 596.5 to 614.0	*39.0* 17.5	*24.0* 11.0	0.068 0.099	*123 ppm* *131 ppm*
Including	dolomite skarn 632-675 monzonite porphyry 675-706	632.0 to 706.0 637.0 to 646.0 *646.0 to 653.0* 642.0 to 644.0 653.0 to 657.5 666.5 to 672.0 669.0 to 672.0 *682.0 to 706.0* *(700.5 to 703.0)*	74.0 9.0 *7.0* 2.0 2.5 5.5 3.0 *24.0* *(2.5)*	35.0 4.4 *4.2* *15.0* *(1.6)*	0.214 0.442 0.170 0.744 0.449 0.576 0.633 0.141 (0.126)	- - *101 ppm* - - - - *329 ppm* *(571 ppm)*

From Big Bar Press Release

Source: Keith (2011)

Chalcopyrite is the main primary copper mineral in the cores at Yuma King and is closely associated with secondary magnetite when they are in the same sample. Smaller amounts of molybdenite are also present in the cores. Chalcopyrite and molybdenite occur most commonly with strong sodium metasomatism and with minerals, such as secondary magnetite, in a skarn. The paragenesis is shown on Figure 5-12 (Hansley, 2011).

As described in Section 5.7.1 of this report, the porphyry and skarn mineralization of Hansley's observations were mainly Stage 3, although some of the thin sections were on Stage 4 molybdenum. This mineralization occurred between about 195 to 190 Ma. The late stage, high temperature metamorphism identified by Hansley is related to the thrust burial and peak metamorphism described in Section 5.5 that ranges from about 73 to about 68 Ma.

Mineralization consists mostly of copper carbonates and oxides in overturned Paleozoic marble interleaved with metamorphosed Mesozoic sedimentary rocks. The marble is overlain by Jurassic alaskite, mylonitic (originally porphyritic) quartz monzonite, granite, and Cambrian Bolsa Quartzite above the Yuma mine thrust. The rocks are intruded on the north by post-mineral Cretaceous Tank Pass Granite and by mid-Tertiary mafic and felsic dikes.

Yuma mine file data (ADMMR files on AZGS website) report strong iron gossans from primary magnetite and pyrite, with quartz stringers, calcite, and contact-metamorphic minerals. The wall-rocks are fractured and strongly chloritized and epidotized, but most deformational features preserved in surface exposures are ductile in character and deform the orebody.

File data also indicate that:

(1) the lode generally strikes N78˚W and dips 30˚N,

(2) some shipments averaged 1.7 % Cu,

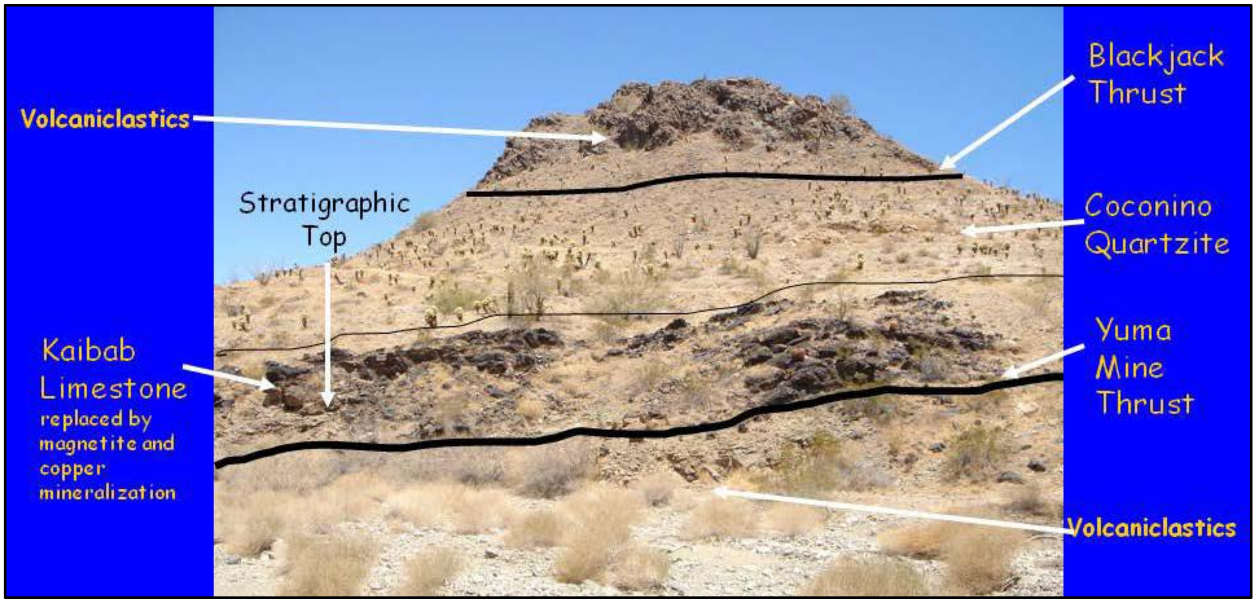
(3) the shaft encountered mineralization at 75 to 140 feet depths, and

(4) the oxidized zone extends 90 feet or more below the adit.

A mafic dike exposed in the shaft and dump is vertical and post-mineralization and does not displace the ore body (Stanley Keith).

5.7.5 Early Jurassic (190 Ma) Copper-Magnetite Skarn Mineralization

The copper-magnetite skarn mineralization (Figure 5-26) occurs in the footwall of an alaskitic intrusion assigned a Jurassic age by Reynolds et al. (1989, 1991). In terms of age and chemical affinity, the copper-magnetite mineralization is believed to be related to the emplacement of the alaskite sill complex. The alaskite sill complex has also been affected by the east-northeast-trending lineation event described above. This lineation is also widespread throughout the map area (see lineation data posted on the map of Reynolds et al., 1989, 1991).



Source: Keith (2011)

Figure 5-26 Magnetite copper skarn (black) (Stage 2) in Kaibab Limestone overlying Yuma King thrust at Black Jack area

Within the Yuma mine area, significant thrust movement occurred as the copper-magnetite skarn assemblage appears to have been overridden by a 'barren' upper plate composed of Jurassic-Triassic(?) quartzite-schist. The Jurassic quartzite-schist shows no evidence of copper mineralization. It has subsequently been mineralized by the minor, mafic dike-related, mid-Tertiary gold mineralization.

Analysis of outcrop and underground workings indicates that the main skarn zone may have a north and/or east trend and plunges beneath the alaskite intrusion complex that mainly crops out in and to the west-northwest of the Yuma mine area.

Within the underground mine workings, the mineralization is truncated and/or offset by the Stryker fault at depth and to the east, as well as up-dip into an oxide zone south of the workings. Careful inspection of the grade distribution suggests that near some of the cross-cutting dikes, grades are increased. One explanation for this feature is that the dike contacts focused downward migration of supergene fluids along dike contacts, which produced supergene enrichment of the primary ore near the dike contacts (Stanley Keith, 2003).

The copper-magnetite skarn mineralization was explored underground in detail and yielded intermittent production at the Yuma mine between 1940 and 1963. A summary of the production is provided as Table 4-2. Copper grades averaged 2.65% over 8,728 short tons with 0.03 oz/ton gold, and 0.62 oz/ton silver. Based on available data, the produced metals from the historic Yuma mine were produced from the Jurassic copper-magnetite skarn mineralization.

A pre-thrust, sheared, quartz-gold-pyrite event consists of pyritic gold mineralization emplaced as disseminations and high-grade pyritic, low-angle vein zones within shears in a Cambrian quartzite unit (the Bolsa Quartzite) that had been thrust over a Devonian-Mississippian carbonate section that hosts the copper-bearing magnetite skarns. Because the gold mineralization evidently is pre-thrust-related shearing, it is interpreted as a zoning or fractionation feature of the copper-gold-molybdenum porphyry/replacement system. In addition, both the skarn mineralization and the thrust deformation are cut by dioritic to granodioritic dikes, which display no evidence of deformation. Alteration related to the gold mineralization does affect the dikes (Stanley Keith, 2003).

Copper and molybdenum assays for intercepts of copper-molybdenum skarn mineralization in the eastern part of the Yuma mine are shown in Table 5-2. The drill hole intersected a cave (presumably an unmapped mine working) and the hole was lost in the high grade zone (Keith, 2011).

Table 5-2 Molybdenum and copper assays from replaced dolo-limestone near Stage 4 alaskite

Drill Hole (Dip; Length Ft, Bearing)	Intercept From – To (Ft) (*selected higher grade Cu intervals*)	Intercept Thickness (Ft)	Approximate True Thickness (Ft)	% Copper*	*Molybdenum ppm*
YK06-B (-90°;388)	*208.0 to 213.0*	*5.0*	*4.4*	-	*133 ppm*
	242.5 to 293.0	*50.5*	*45.0*	0.070	*119 ppm*
	303.0 to 383.0	*80.0*	*72.0*	0.213	*593 ppm*
	312.0 to 383.0	71.0	62.5	0.235	*645 ppm*
	338.0 to 345.0	7.0	6.2	0.602	*110 ppm*
Including	345.0 to 348.0	3.0	2.6	0.410	*373 ppm*

Source: Keith (2011)

The Early Jurassic age inference for the copper deposits is confirmed by a direct date on the copper deposits themselves (Figure 5-27). At the Yuma King copper deposit (Yuma Mine) in the northern Granite Wash Mountains, exploratory drilling circa 2004-2006 intersected a copper-molybdenum porphyry that yielded a 190.65 Ma age by Re-Os dating on a molybdenite sample from YK-02B at 592 ft depth. Results: Total Rhenium: 586.36 ppm, 187 Rhenium: 368.6 ppm; 187 Osmium: 1172.75 ppb; Molybdenite age: 190.65 ± 0.95 Ma (Jonathan Boswell, email communication, fall 2018). Figure 5-27 is a photo of the core interval that provided the Re-Os sample for dating.

Source: Photograph by Keith, 2014

Figure 5-27 Alaskite-hosted molybdenite (chalcopyrite-pyrite) metallization in diamond drillhole YK-02B in the Yuma mine area showing location of age-date sample

The Early Jurassic age for the copper-iron (silver-gold) metallization is confirmed by recent U-Pb dating for detrital zircons obtained from the quartzite dominated Vampire Formation. Maximum depositional ages recently obtained for the Vampire Formation are about 200 Ma (e-mail communication, early October 2023). These ages provide an even tighter maximum age for the epigenetic iron (copper) mineralization in the upper Vampire Formation and is now confidently correlated with the directly dated molybdenite mineralization at the Yuma mine dated at 191 Ma.

5.7.6 Early Jurassic (190 Ma) Stockwork Molybdenum-Copper Mineralization

A large stockwork molybdenum (copper) target is associated with a late stage, aplitic, alaskite/latite intrusive (Figure 5-28). Significant intercepts of plus 300 ppm molybdenum and 0.1% Cu were intersected (Table 5-3) at Drill Site 2 during phase 1 drilling by Big Bar. The same molybdenum-bearing intrusive rock was intersected 1000 feet to the north of Drill Site 2 (Stanley Keith, 2011).

Table 5-3 Copper and molybdenum assays from the late stage alaskite/latite porphyry (Stage 4)

Drill Hole (Dip; Length Ft, Bearing)	Generic Rock Type and depth (ft)	Intercept From – To (Ft) (*selected higher grade Cu intervals*)	Intercept Thickness (Ft)	Approximate True Thickness (Ft)	% Copper	*Molybdenum Ppm* ***
YK02-B (-45°;697;N10°E)	dolomite	53.0 to 63.0	10.0	10.0	0.138	-
Including	monzonite porphyry	319.0 to 413.0 354.0 to 367.0 370.0 to 374.0	94.0 13.0 4.0	92.0 12.6 3.9	0.098 0.135 0.241	- - -
	monzonite porphyry	*393.0 to 453.0* 423.0 to 433.0	*60.0* 10.0	*58.2* 9.8	- 0.088	*154 ppm* -
	silicified alaskite feldspar porphyry	499.0 to 643.0	144.0	140.0	0.095	-
(Including)	*silicified alaskite feldspar porphyry*	*509.0 to 528.0* *538.0 to 697.5* *(568.0 to 573.0)* *(628.0 to 631.5)* *(649.5 to 697.5)* *(668.0 to 678.0)*	*19.0* *159.5* *(5.0)* *(3.5)* *(48.0)* *(10.0)*	*18.4* *154.7* *(4.8)* *(3.3)* *(47.0)* *(9.5)*	0.121 0.087 (0.076) (0.067) (0.093) (0.090)	*135 ppm* *308 ppm* *(583 ppm)* *(601 ppm)* *(463 ppm)* *(657 ppm)*

Source: Keith (2011)

A photograph of the core box showing the molybdenite-bearing quartz veins cutting the silicified alaskite porphyry unit in drill hole YK02-B is shown on Figure 5-28. Molybdenum from this interval assayed 524 ppm Mo.

Source: Keith (2011)

Figure 5-28 Mo-Cu mineralization associated of Stage 4, syenite/alaskite porphyry

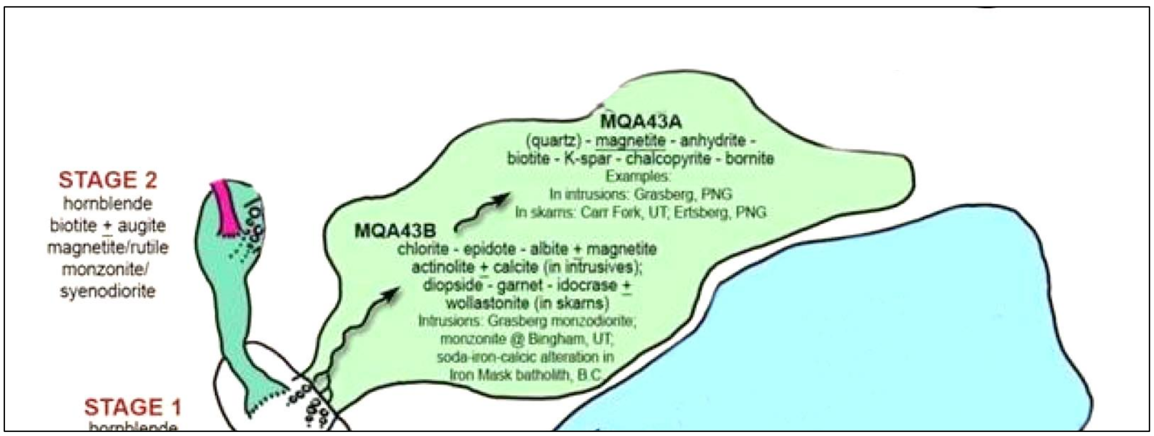
5.7.7 Alteration Associated with Jurassic Porphyry Copper

Strong potassic alteration occurred at Yuma King, based on the disseminated green biotite and secondary K-feldspar replacing feldspars and forming overgrowths (Hansley, 2011). The potassic alteration zone is closest to the igneous intrusion in a copper-molybdenum porphyry system.

Proceeding outward from the igneous intrusion, the next alteration zone is the phyllic zone represented by a sericite, quartz, and pyrite assemblage. In many of the Yuma King core samples, sericite is also closely associated with chalcopyrite (Hansley, 2011).

The outermost hydrothermal alteration zone is represented by propylitic alteration. Albite, epidote, ankerite or calcite, and chlorite are the most common secondary minerals in this zone with epidote commonly associated with chalcopyrite (Hansley, 2011).

The presence of epidote, magnetite, diopside, phlogopite, and/or actinolite in the Yuma King core samples can be a strong indication that the sample is a skarn and indicates proximity to an igneous/sedimentary contact. Magnetite often lies along contorted schistose layers, indicating that its formation preceded regional metamorphism (Hansley, 2011).



Source: Keith (2011)

Figure 5-29. Stage 2 hornblende monzonite/syenodiorite magma and Stage 2 hydrothermal fluid

The Stage 2 hydrothermal fluid forms proximal Fe skarns and widespread peripheral propylitic alteration. Mineral assemblages include proximal chlorite, epidote, albite, ± magnetite, actinolite, calcite in the intrusives and diopside, garnet, idocrase, ± wollastonite in skarns. Examples of intrusions with proximal MQA*wo* deposits are Grasberg monzodiorite, Bingham monzonite, and soda-iron-calcic alteration in the Iron Mask batholith, British Columbia, Canada.

The Stage 2 hydrothermal fluid forms distal quartz, magnetite, anhydrite, biotite, K-spar, chalcopyrite, bornite assemblages. Examples of intrusions with distal MQA*wo* deposits are Grasberg, Papua New Guinea (PNG) and examples of skarns with distal MQA*wo* deposts are Carr Fork, UT, and Ertsberg, PNG. The model consists of sodic-calcic-iron, propylitic (chlorite-epidote-albite-magnetite ± calcite) alteration in intrusives or diopside-garnet-idocrase ± wollastonite skarn in or near hornblende/biotite syenodiorite/monzonite intrusions. It is Stage 2 in meso-epizonal MQA*wo*h series sequence. Examples are the propylitic alteration in the last Chance monzonite at Bingham, UT; the Na-Ca-

Fe alteration in the Iron Mask intrusions in BC, Canada; and Na-Ca alteration in Grasberg diorites, Indonesia.

5.7.8 Stage 2 – Hornblende Monzonite/Syenodiorite Magma – Copper-Magnetite Skarn

The copper-iron deposits of the Swansea-Yuma King supersystem are associated with a suite of quartz alkalic intrusions. This intrusive suite displays a staged magma-metal sequence similar to that found at Bingham, Utah.

In the Granite Wash Mountains area, the Yuma King intrusive suite was mapped as the Jurassic alaskite map unit on Map 30 by Reynolds et al. (1989, 1991). The Granite Wash Mountains have experienced significant deformation by the various thrust deformations (D1 and D2). These deformations have also seriously affected the intrusive-related metal systems and rocks as young as the circa 80 Ma, Tank Pass quartz monzonite pluton. However, the Tank Pass plutonic complex appears to have intruded D1 southeast-directed fabrics and only locally has been affected by the D2 event in the easternmost portion of Map 30. From a timing viewpoint, these observations indicate the copper-molybdenum (gold-silver) metallization was pre-80 Ma.

Much of the magnetic anomaly pattern and magnetite skarn mineralization at Yuma King (Figure 5-30) can be attributed to Stage 2 monzodiorite to monzonite intrusions that are commonly associated with magnetite-(chalcopyrite) skarns.

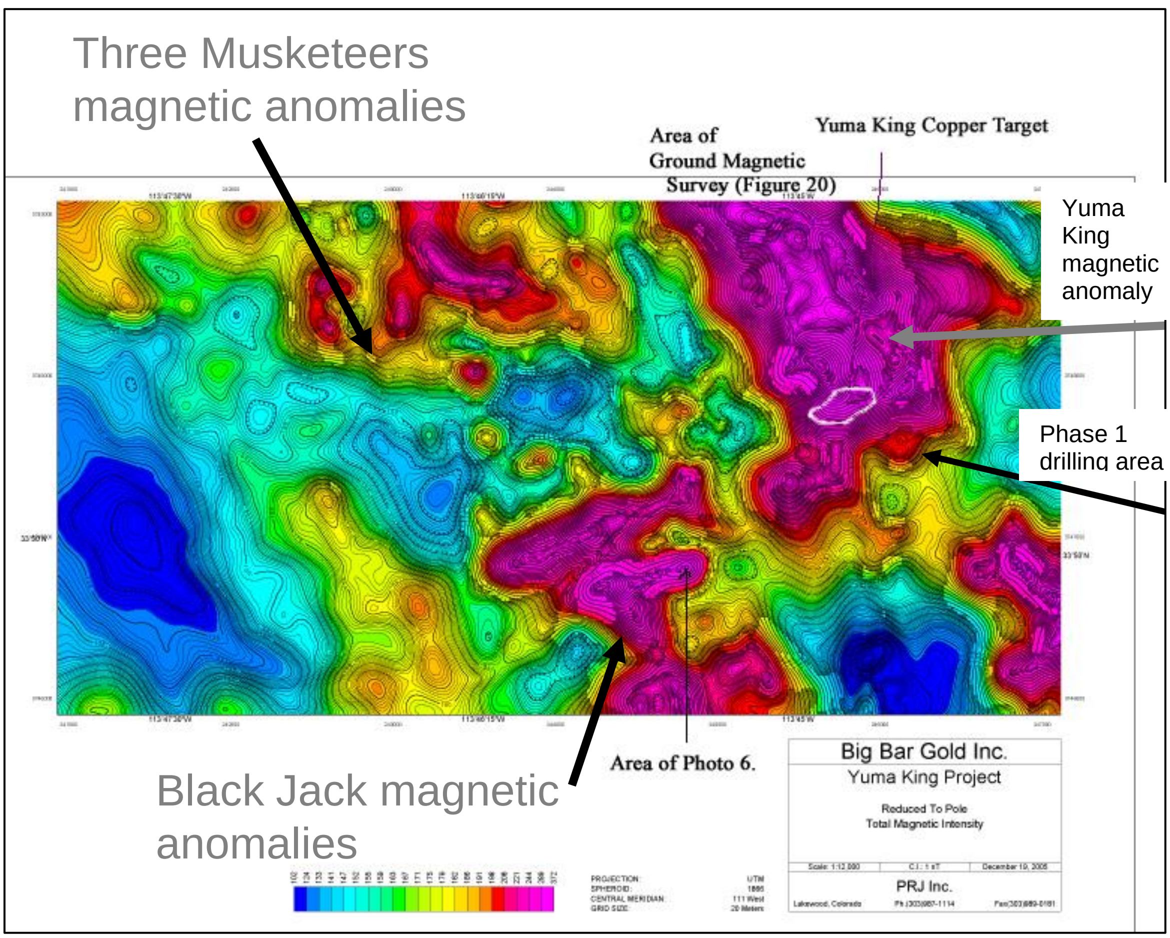


Figure 5-30. High resolution aeromagnetic map of Yuma King project area

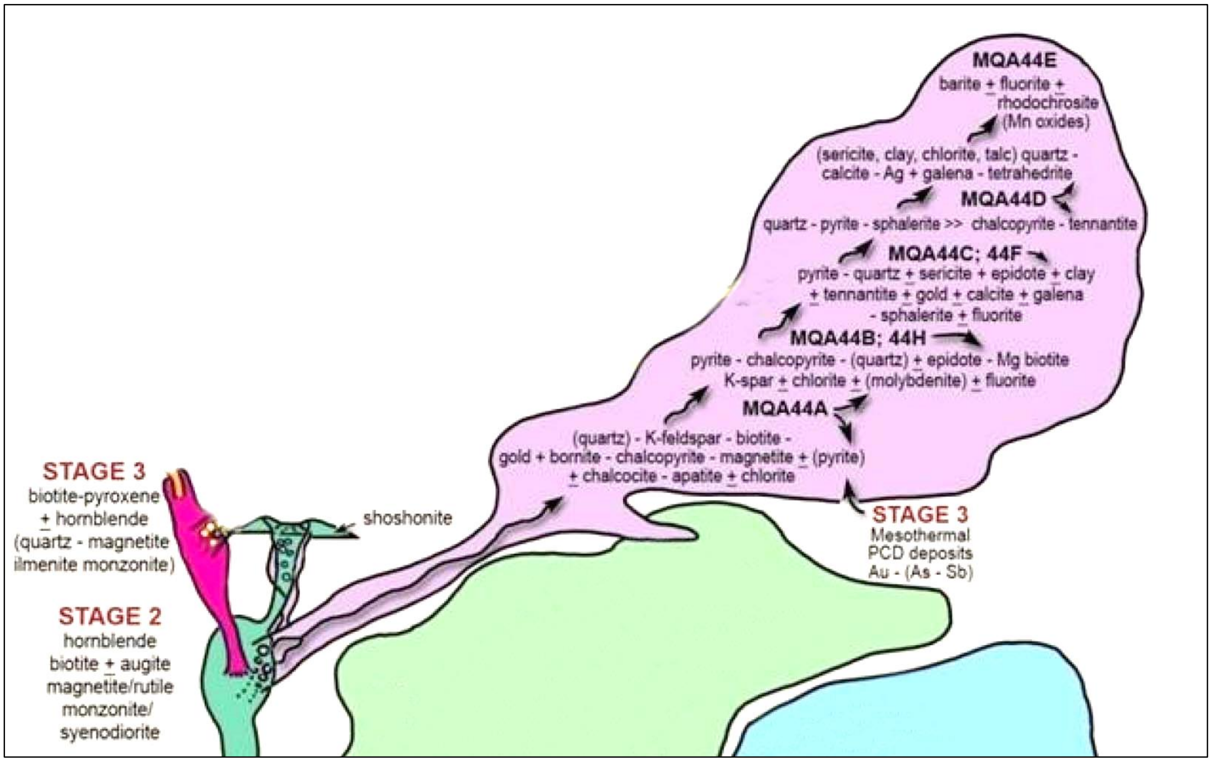
The principal calc-silicate skarn assemblage is actinolite-tremolite and *verde antique* (lizardite serpentine-tremolite mixture). This assemblage is well developed at the Black Rock magnetite deposit described by Harrer (1964) and at iron skarns in the greater Yuma King mine area to the north and west of the Yuma Mine.

Magnetite-actinolite-*verde-antique* skarns with minor copper are found in the footwall of a weakly propylitically altered hornblende syenodiorite rock (Figure 5-31). This rock is the main rock phase found in western exposures of the alaskite unit (Ja) mapped by Reynolds et al. (1989, 1991) north and west of the Yuma mine area and was the main rock type intercepted by drillhole YK-6C. Possible inclusions of quartzite (Cambrian Bolsa Quartzite?) were intersected above this interval. The hornblende minerals are the elongate blackish green grains.

Source: Photograph by Stanley Keith, 2011

Figure 5-31. 'Salt and pepper' textured, medium-grained, hornblende (biotite) syenodiorite intrusion in drill YK-06c at 1857-1864 feet. The white parts of the core consist of albite alteration, which is a widespread propylitic alteration phase in the Stage 2 hornblende syenodiorite.

When the Stage 2 magma, (hornblende biotite ± augite magnetite/rutile) monzonite/syenodiorite unmixes, it emits a Stage 3, slightly more felsic magma (biotite-pyroxene ± hornblende [quartz – magnetite/ilmenite] monzonite (Figure 5-32). Upon partial crystallization, the Stage 2 monzonite/syenodiorite magma emits a Stage 3 hydrothermal fluid that crystallizes into mesothermal porphyry copper-gold deposits that are gold rich with minor arsenic and antimony.



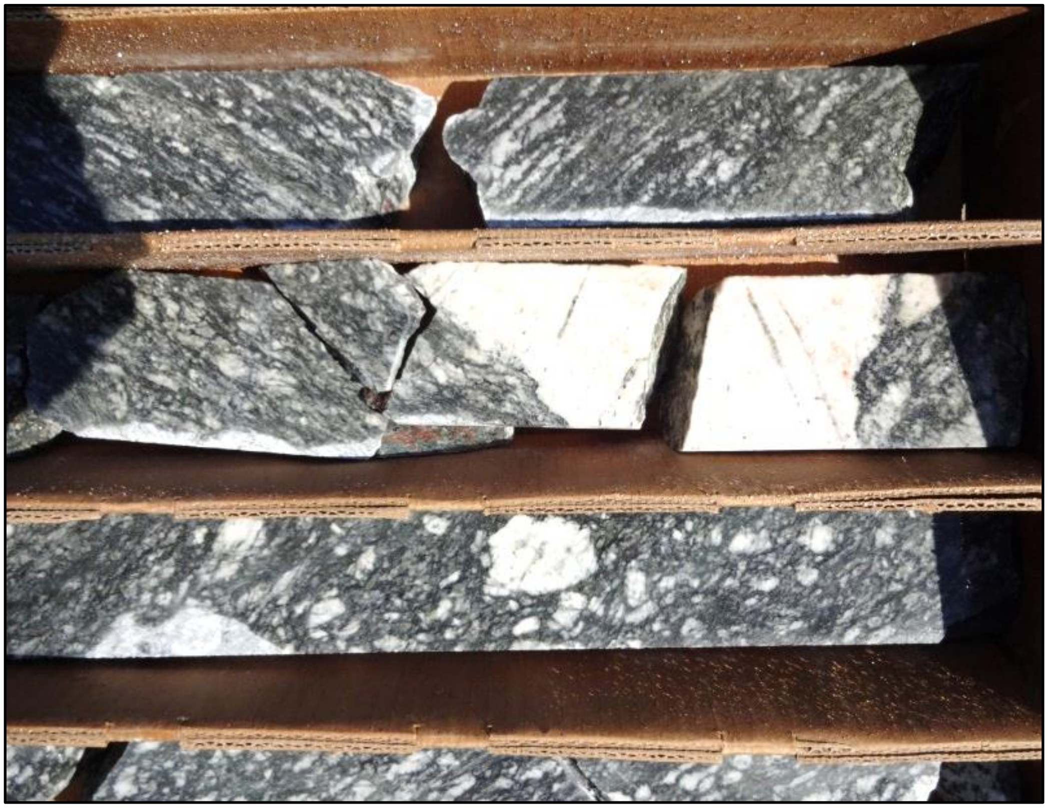
Source: Stanley Keith, 2011

Figure 5-32. Stage 2 hornblende monzonite/syenodiorite magma emitting Stage 3 monzonite and Stage 3 mesothermal porphyry copper-gold hydrothermal systems

5.7.9 Stage 3 –Biotite-Pyroxene ± Hornblende Monzonite Magma – Porphyry Copper-Gold

The more differentiated and fractionated, Stage 3, biotite quartz monzonite rocks in the immediate vicinity of the Yuma mine are considered to be the most economically prospective rock phase in the greater Yuma King porphyry mineral system and have received most of the exploration work to date. The Stage 3 hydrothermal fluid unmixes into a sequence of deposit types from proximal to distal (Keith, 1983, Model Book, revised 2003).

The quartz monzonites exhibit a distinctive foliated quartz monzonite porphyry texture when weakly deformed (Figure 5-33), but also commonly appear as strongly foliated mylonite schists. This creates confusion in mapping as the weakly deformed quartz monzonite is confused with the Jurassic metavolcanics in the area.



Source: Photograph by Keith (2011)

Figure 5-33 Porphyritic texture grading into schistose mylonitic deformation in the stage 3 monzonite to quartz monzonite intrusive phase

The foliated quartz monzonite is clearly cross cut by a stage 4 aplo-granite dikelet, which is cut by quartz-molybdenite veinlets.

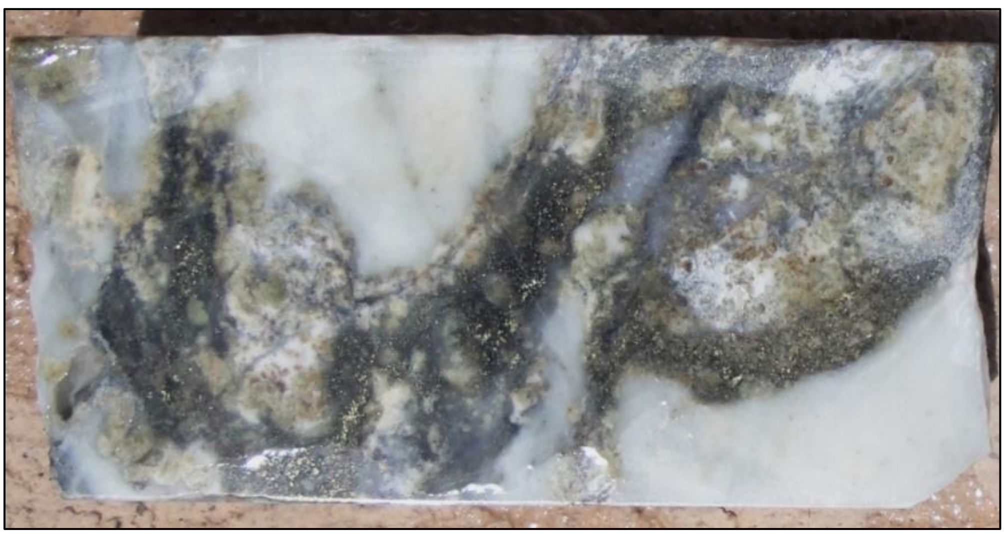
A more quartz-rich version of the sheared monzonite porphyry is believed to be the main source/causative intrusion for the fluid release associated with the copper magnetite replacement skarn mineralization. The specimen shown in Figure 5-23 is from the bench cut near the old shaft site and has been affected by chloritization of the biotite mafic component. The shear fabric in the sheared, stage 3, altered, quartz monzonite porphyry is attributed to the D1 Late Cretaceous (circa 80-75 Ma), southeast-directed, thrust tectonism that post-dates the associated copper-molybdenum mineralization.

More economic types of alteration associated with the copper replacement bodies are represented by quartz-sericite-pyrite with minor chalcopyrite in the immediate hanging wall of the replacement bodies (Figure 5-34). Petrochemistry on this and other related rocks indicates that the fractionation sequence belongs to the Bingham Canyon model.

Source: Photograph by Keith, 2011

Figure 5-34. Net textured chalcopyrite-magnetite band within reddish andradite garnet at 1186 feet depth in drillhole AZ11-1. Core from this interval assayed 18,600 ppm Cu, 363 ppm Mo, 370 ppb Re, 220 ppb Au, and 19 ppm Ag.

The garnet-skarns appear to be best developed in the metamorphosed Mississippian Redwall Limestone section adjacent to the stage 3 biotite quartz monzonite porphyry phases. The higher copper grades are associated with magnetite interbanded with reddish andradite garnet phase (Figure 5-35).



Source: Photograph by Keith, 2011

Figure 5-35. Deformed chalcopyrite-magnetite skarn with quartz veining folded into calcite-marble from 1193 feet in drillhole AZ11-1. Core from this interval assayed 3,170 ppm Cu, 53.2 ppm Mo, 31 ppm Re, 141 ppb Au, and 2.9 ppm Ag.

The most common spatial association identified by drilling to date is for a footwall configuration that is consistent with an overturned section. Skarn replacements typically occur in the hanging wall of source intrusions in normal, intrusion-related, skarn environments that have not experienced the regional tectonism. However, the inverted, 'upside down', skarn replacement format is perhaps the main physical style of mineralization in the Swansea-Yuma King cluster. This inverted stratigraphy should be taken into account in ongoing and future exploration efforts.

The monzonite porphyry phase is the host to most of the copper-molybdenum mineralization found to date at the Yuma King deposit. Figure 5-36 shows copper-molybdenum mineralization hosted in the quartz-monzonite porphyry from the YK-02B drillhole. Copper assays from the 398 to 403 ft interval yielded 0.079 wt. % Cu and 0.017 wt. % Mo with 19 ppb Au and 0.31 ppm Ag.

Source: Photograph by Stanley Keith, 2011

Figure 5-36. Stage 3 quartz monzonite porphyry-hosted copper-molybdenum mineralization

The skarn-replacement style mineralization is typical of much of the copper-iron mineralization found throughout the Swansea-Yuma King supersystem. However, a significant amount of copper-molybdenum in the Yuma King area that has been intersected by drilling is present in intrusive phases, especially in the biotite quartz monzonite to monzonite porphyries. Perhaps because of its lower grades, this style of mineralization has been overlooked in the Swansea-Yuma King cluster. Deformed intrusive phases were described by Bancroft (1911) at Swansea.

When the Stage 3 magma (biotite-pyroxene ± hornblende [quartz – magnetite/ilmenite] monzonite) partially crystallizes, it exsolves a more felsic magma, Stage 4 (biotite quartz) syenite/latite (± quartz), and a Stage 4 hydrothermal fluid that crystallizes into meso-epithermal, stockwork and veinlets type deposits (Mo (F, W, Ag, LREE), quartz ± sericite (Figure 5-37). Examples of Stage 4 mineralization are late-stage metallization at Copper Flat and Three Rivers, NM; post-quartz latite Mo-quartz veins at Bingham, UT; and late marginal quartz-Mo veins at Ely, NV.

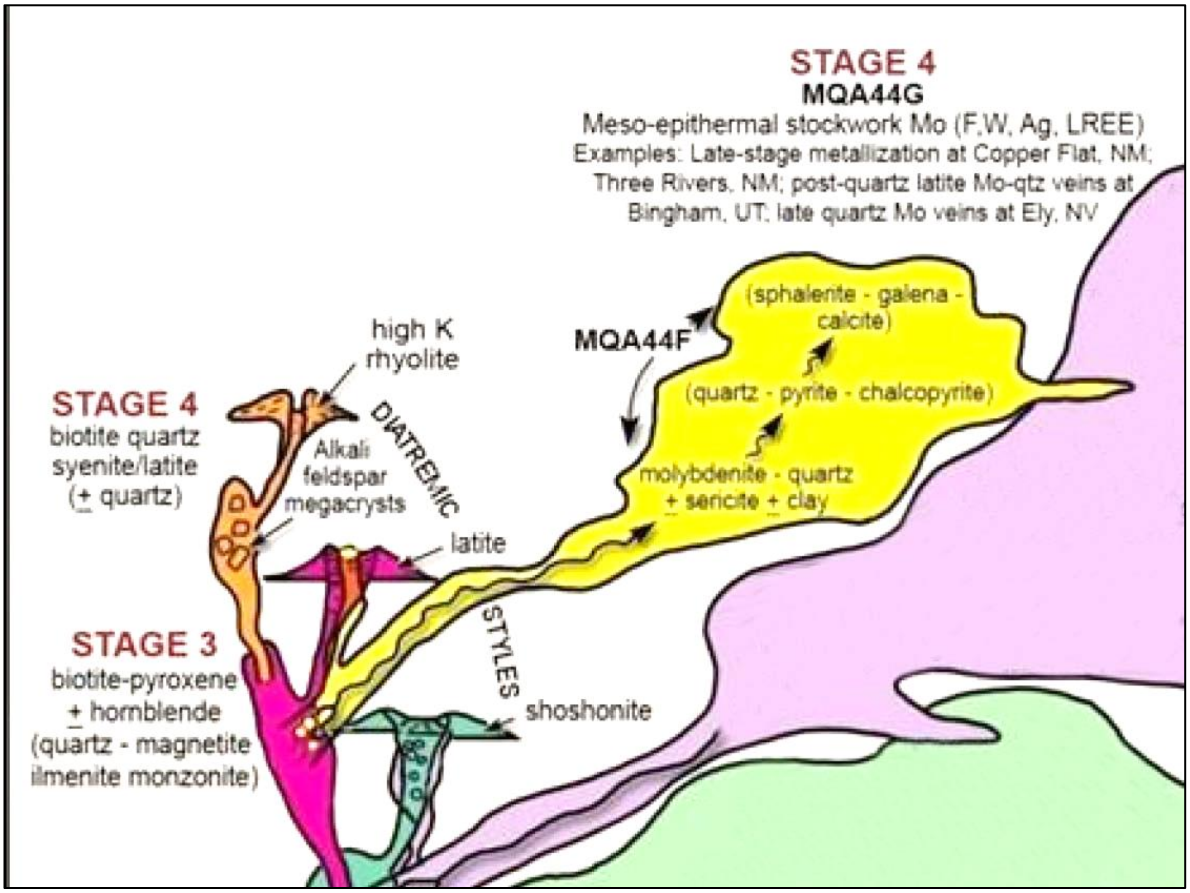


Figure 5-37. Stage 3 monzonite emitting Stage 4 syenite/latite and Stage 4 hydrothermal system

5.7.10 Stage 4 – Biotite Quartz Syenite/Latite (± Quartz) – Porphyry Molybdenum

The presence of porphyry molybdenum (copper) mineralization is a newly discovered style of mineralization at Yuma King. A significant intercept of meta-stockwork, molybdenum mineralization was intersected by drilling at drill site 2 in May of 2006. The discovery intercept is a 159.5 foot interval that averaged 309 ppm molybdenum and 0.087 wt. % copper between 538.0 feet and 697.5 feet. The bottom of the drill hole was at 697.5 ft and thus the location may possibly be mineralized deeper to an unknown depth.

Better grade intervals appeared to be increasing toward the bottom of the interval. For example, a 10-foot interval grading 657 ppm Mo and 0.099 wt. % Cu was intercepted between 668 and 678 feet in drillhole YK-02B (Table 5-4). The interval consisted of numerous hairline, quartz-molybdenite stockwork style veinlets with disseminated pyrite-chalcopyrite mineralization, all hosted in silicified, alaskitic, stage 4 aplogranite (Figure 5-38).

Source: Photograph by Stanley Keith, 2011

Figure 5-38. Intrusive breccia at contact of Stage 4 Mo-Cu alaskitic aplogranite and foliated biotite quartz monzonite porphyry at 980 feet in drillhole AZ11-1

The matrix consists of Stage 4, quartz eye, sericitic-altered, alaskitic aplogranite with angular clasts of chalcopyrite-pyrite bearing mineralized Stage 3 quartz monzonite porphyry.

Figure 5-39 shows a core box containing molybdenite-bearing quartz veins cutting the silicified alaskite porphyry unit in drill hole YK02-B. Molybdenum from this interval assayed 524 ppm Mo.

Source: Photograph by Stanley Keith, 2011

Figure 5-39. Stage 4 alaskitic aplo-granite-hosting molybdenum-copper mineralization

When the Stage 3 magma (monzonite) partially crystallizes, it exsolves a more felsic magma (of biotite quartz syenite/latite composition) and a Stage 4 hydrothermal fluid that crystallizes into the late veins and stockworks at porphyry copper-gold systems. Stage 4 mineral assemblages include:

- Proximal early molybdenite – quartz ± sericite ± clay, followed by
- Medial (quartz – pyrite – chalcopyrite), followed by
- Distal (sphalerite – galena – calcite).

When Stage 4 magma biotite quartz syenite/latite decompresses, a high-K rhyolite can be emitted.

In summary, a large area of copper-iron (gold-silver) replacement-skarn deposits exists in northern La Paz county of western Arizona, referred to as the Swansea-Yuma King supersystem. The deposits are hosted in metamorphosed and skarnified Paleozoic though Early Jurassic metasedimentary deposits. A 190.6 Ma, Re-Os date has been obtained from a stockwork molybdenum-copper system intersected by drilling to the immediate northeast of the historical Yuma mine workings.

Most of the deposits have been deformed and dismembered by at least two episodes of late Mesozoic thrust faults that ended about 80 Ma and a regional-scale event of normal slip, denudational faulting in the Miocene between about 20 and 13 Ma.

The largest production came from the Swansea mining area where initial mining began in 1863 and in the Yuma mine area where mining activity took place between 1940 and 1963. Significant exploration potential exists in the greater Yuma King area and may remain in the Planet-Swansea mineral system.

Table 5-4. Assay data for molybdenum-rich Stage 4 alaskite/latite porphyry

Drill Hole (Dip; Length Ft, Bearing)	Generic Rock Type and depth (ft)	Intercept From – To (Ft) (*selected higher grade Cu intervals*)	Intercept Thickness (Ft)	Approximate True Thickness (Ft)	% Copper	*Molybdenum Ppm ****
YK02-B (-45°;697;N10°E)	dolomite	53.0 to 63.0	10.0	10.0	0.138	-
Including	monzonite porphyry	319.0 to 413.0 354.0 to 367.0 370.0 to 374.0	94.0 13.0 4.0	92.0 12.6 3.9	0.098 0.135 0.241	- - -
	monzonite porphyry	*393.0 to 453.0* 423.0 to 433.0	*60.0* 10.0	*58.2* 9.8	- 0.088	*154 ppm* -
	silicified alaskite feldspar porphyry	499.0 to 643.0	144.0	140.0	0.095	-
(Including)	*silicified alaskite feldspar porphyry*	*509.0 to 528.0* *538.0 to 697.5* *(568.0 to 573.0)* *(628.0 to 631.5)* *(649.5 to 697.5)* *(668.0 to 678.0)*	*19.0* *159.5* *(5.0)* *(3.5)* *(48.0)* *(10.0)*	*18.4* *154.7* *(4.8)* *(3.3)* *(47.0)* *(9.5)*	0.121 0.087 (0.076) (0.067) (0.093) (0.090)	*135 ppm* *308 ppm* *(583 ppm)* *(601 ppm)* *(463 ppm)* *(657 ppm)*

From Big Bar Resources news release dated June 6, 2007

5.7.11 Supergene Enrichment of the Skarn

Supergene enrichment of the pre-thrust mineralized areas resulted in a leachable copper oxide mineralized target with high silver chloride concentrations near modern stream channels that traverse the oxidized mineralization. The current boundary between the sulfide mineralized body and the oxidized updip portion, as observed in the underground exposures and the drilling, is approximately a level line that cuts through the highly folded primary metallization. Although some of the oxidation of the 191 Ma Jurassic copper-gold system could have occurred in the Jurassic, as it did at Bisbee, much of the oxidation most likely occurred during uplift events in the mid-Tertiary (Middle Miocene) erosion event as documented in Rasmussen and Keith (2023) for Bisbee.

Copper Oxides and Gold

The copper oxide mineralization includes azurite, malachite, and chrysocolla at the Yuma mine adit (Figure 5-40) and a black mineral, commonly misidentified as manganese, which is tenorite (Figure 5-41), from the Yuma mine adit. Banded azurite (blue), malachite (green), and minor tenorite occur in a high-grade oxide stope in the adit of the historic Yuma mine (Figure 5-42). The black tenorite/melaconite assemblage may constitute the main component of the oxide mineralization, as it does at the similar oxidized areas of the Bisbee copper deposits (Rich Leveille, 2013, personal communication with Keith).

Turquoise also occurs in the oxide zone on the Yuma King property (Figure 5-43). The oxide mineralization was intersected in the YK 01-A drill hole at a depth of 68 feet (Figure 5-44). Turquoise is persistently distributed through the oxide zone of the Yuma mine area and indicates a similarity to the Bisbee Blue turquoise occurrence, as it requires elevated phosphorus, possibly supplied by leaching of the overlying rocks.

Source: Keith (2007)

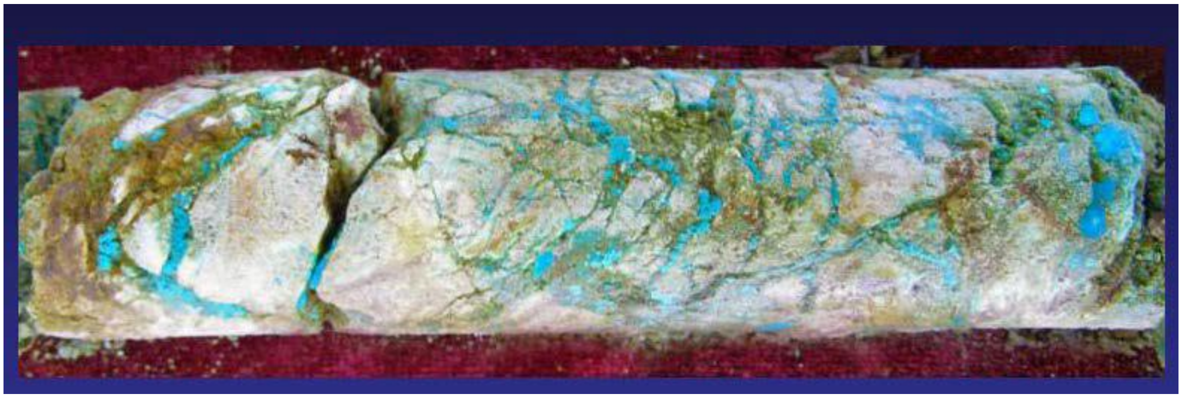
Figure 5-40 Folded copper oxide (azurite, malachite, chrysocolla) skarn in Yuma mine adit

Source: SRK (2011)

Figure 5-41 Tenorite at the Yuma mine adit

Source: Keith (2011)

Figure 5-42 Azurite and malachite mineralization from the Yuma mine



Source: Keith (2011)

Figure 5-43 Turquoise in HQ core from drill hole YK-01 in the oxide zone of the Yuma King property

Source: Keith (2007)

Figure 5-44 Copper oxide mineralization in YK01-A, 68 ft depth

Table 5-5 Copper, gold, and silver assays for oxidized Stage 2 replacement/skarn mineralization at Drill Site YK-01

Drill Hole Dip, Angle. Length, Bearing	From – To (Feet)	Intercept Thickness (Feet)	True Thickness (Feet)	Au Grams/ tonne	Ag Grams /tonne	% Cu
YK01-A (-45°; 883 ft; N40°W)	**0.0-170.0**	**170.0**	**80.0**	**0.477**	**5.57**	**0.70**
Including	*53.0-76.0*	*23.0*	*11*	*0.760*	*4.20*	*1.67*
	101.5-108.0	*6.5*	*3*	*1.237*	*7.27*	*1.61*
	121.0-143.0	*22.0*	*10*	*0.819*	*14.749*	*0.78*
	147.5-164.0	*16.5*	*8*	*0.954*	*19.15*	*1.10*
Which includes	*157-157.5*	*.5*		*4.56*	*37.9*	*2.992*
	15.7.5-159.5	*2.0*		*2.86**	*40.9*	*1.611*
	178.0-233.0	**55.0**	**26**	**0.273**	**5.05**	**0.22**
YK01-B (-70°; 217 ft; N40°W)	**0.0-138.0**	**138.0**	**105.0**	**0.467**	**3.37**	**0.58**
Including	*95.0-128.0*	*33.0*	*25*	*1.205*	*6.90*	*0.95*
Which includes	*98-103*	*5*		*1.9*	*9.49*	*.242*
YK01-C (-60°; 168 ft; S50°W)	**19.5 to 99.5**	**80.0**	**75**	**0.478**	**5.05**	**0.74**
Including	*72.5-95.5*	*23.0*	*21*	*0.8232*	*12.76*	*1.28*
Which includes	*93-95.5*	*2.5*		*.737*	*47.8*	*3.124*
YK01-D (-45°; 193 ft; S40°E)	**22.0 to 123.0**	**101.0**	**95**	**0.564**	**48.03**	**0.55**
Including	*68.0-83.0*	*15.0*	*14*	*0.8575*	*10.6*	*1.29*
	110.0-123.0	*13.0*	*12*	*1.390*	*352.5*	*0.74*
Which includes	*120-123*	*3.0*		*1.89*	*1510***	*0.45*
Or	*68.0-123.0*	*55.0*	*52*	*0.824*	*87.64*	*0.76*

Notes:
***Chemex re-assay (by Fire Assay) of a re-split from this interval yielded an 11.95 g/t (.348 oz/ton) gold assay**
**** An ActLabs re-assay (by Fire Assay) of this interval yielded a 1760 g/t (51.3 oz/ton) silver assay**

In addition to copper, gold and silver are present in the oxidized magnetite replacement bodies (Table 5-5). Continuous oxide copper mineralization was intercepted in a 50-ft thick zone between the existing workings and a post-mineral, syeno-gabbro dike.

Supergene Silver Enrichment

The copper oxide mineralization also contains high-grade silver chloride stringers, as one drill hole at Drill Site YK01-D serendipitously intercepted 3 ft of 50 oz Ag/ton, possibly associated with an overlying modern stream channel. The bonanza grade silver occurrence was originally identified in a three-foot long intercept in drillhole YK01-D between 120 and 123 feet, with a true width of 2.5 feet.

The bonanza silver occurrence is positioned just above the contact between carbonate and the lower monzonite porphyry contact. This continuous contact is viewed as a major zone of permeability that is present throughout the property. The bonanza silver occurrence is about sixty feet below the current ground surface. Significant silver (with an average grade approximating 1.5 oz/ton or about 50 ppm) also occurs at the same contact in drillhole YK01-C below the ground surface. Both intercepts occur below a wash that drains a small drainage basin above the Yuma Mine underground workings.

The bonanza silver occurrence is also associated with high levels of copper, gold, bromine and especially molybdenum (>1990 ppm) values. The highly elevated bromine indicates silver is present as a silver bromine/chloride (embolite) with most of the silver being fixed by chlorine (chlorargyrite component). Close inspection of the interval by hand lens did not reveal native silver.

Table 5-6 Geochemical and Assay Information for Bonanza Silver Interval in YK01-D

Footage Interval	Ag Actlabs Fire Assay (ppm)	Ag Actlabs Fire Assay (oz/ton)	Ag Actlabs composite multi-element geochem (ppm)	Au Actlabs Fire Assay (ppb)	Cu Jacobs AA (%)	Pb KP-MS (ppm)	Zn ICP-MS (ppm)	Mo ICP (ppm)	W INAA (ppm)	Br INAA (ppm)
110-113	15	0.44	5.26	1210	0.942	24.3	743	114	66	< 0.5
113-116	19	0.55	3.95	1060	0.245	21	326	186	150	< 0.5
116-118	< 3	0.05	1.85	430	0.523	25.7	481	72	114	< 0.5
118-120	29	0.85	10.5	2500	1.812	30.1	1400	178	232	< 0.5
120-123 *	1760 *	51.31 *	1510 *	2140	0.45	5780	1020	1990	120	314
123-128	13	0.38	11.3	100	0.094	46.3	460	37	20	< 0.5

Notes: * The initial Jacob's Assay was 1748 ppm (51 oz/ton); an ActLabs check of the neutron activation 1510 ppm value by an ICP-OES assay gave 1620 ppm and a Chemex Fire Assay of a re-split from this interval yielded a 1605 ppm (46.8 oz/ton). ** Weighted average for 18 foot intercept reported in the above table.

5.8 Later Mineralization Episodes

Various currently noneconomic types of mineralization are present in the Granite Wash Mountains (Figure 5-17). The currently noneconomic mineralizations are summarized below.

5.8.1 Late Jurassic Cu-rich Horizon (Kupferschiefer Analog ~155 Ma)

A sample that returned a value of 800 ppm Cu was present at the base of a black shale, which is the Yellowbird Member of McCoy Mountains Formation. The mineral may be chalcocite, similar to the Kupferschiefer copper mineralization in northern Europe (Keith et al., 2018, 2022).

U-Pb isotopic analysis of 396 zircon sand grains from at or near the top of McCoy Mountains

Formation sections, identified only Jurassic or older zircons in the southern Little Harquahala, Granite Wash, New Water, and southern Plomosa Mountains of western Arizona. A basaltic lava flow near the top of the section in the New Water Mountains yielded a U-Pb zircon date of 154.4 ± 2.1 Ma. Geochemically similar lava flows and sills in the Granite Wash and southern Plomosa Mountains are inferred to be approximately the same age (Spencer et al., 2011).

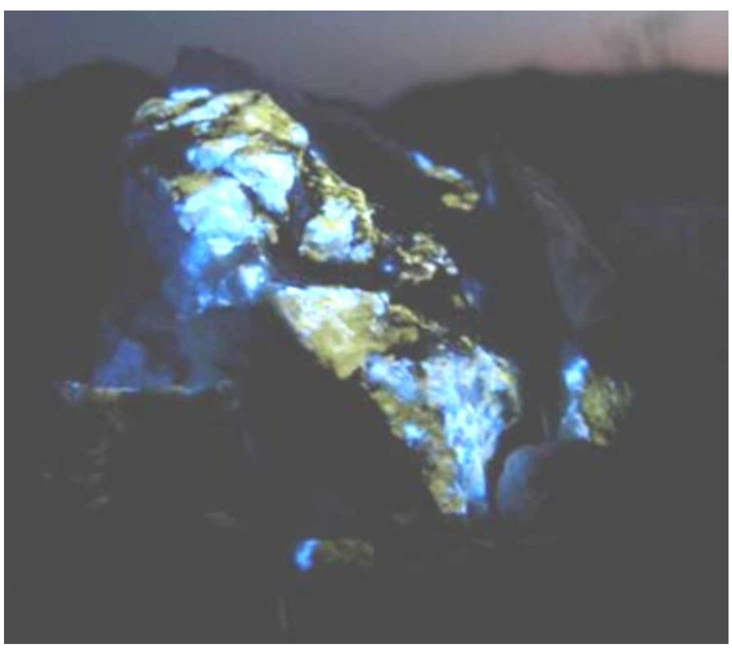
In the Granite Wash Mountains, basaltic flows or gabbro sills similar to those in the dated New Water section are found in graphite-bearing shales of the Yellowbird lower member of the McCoy Mountains Formation. Th Kupferschiefer-like interval occurs at the base of the Yellowbird member. At this point, only one sample that yielded the anomalous copper value has been collected from this basal unit. Hence, the Kupferschiefer-analog possibility is underexplored.

5.8.2 Late Cretaceous (~70 Ma), Shear Zone-Hosted Tungsten (Scheelite)

Past production of currently non-economic mineralization includes tungsten hosted in late D2 thrust shear-zones, such as at the Three Musketeers and Jewel Anne mines. These mines were on unpatented claims and those claims have lapsed and the locations are currently within the Yuma King land position.

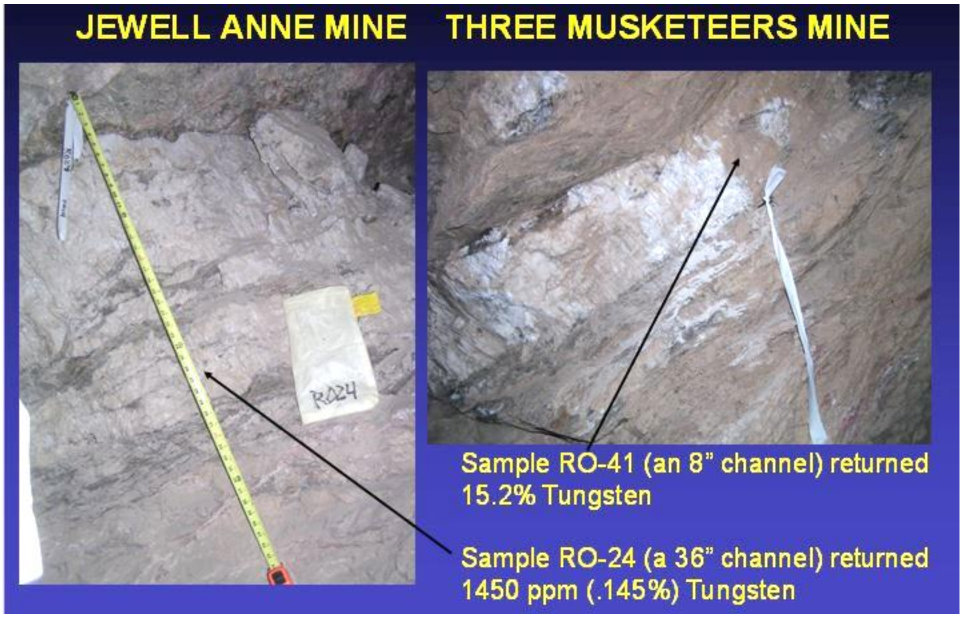
The greisen tungsten mineralization is associated with a Late Cretaceous-Early Tertiary muscovite aplogranite (leucogranite) stock that resembles those that are now well dated in the nearby Harcuvar Mountains (Wong et al., 2023). The tungsten occurs as scheelite in quartz veins, veinlets and greisen stockworks in the Three Musketeers shear zone in the northwestern Granite Wash Mountains. Scheelite occurs in a 2-square mile area within the Yuma King land position. The shear zone is at least 4,000 ft long and 50 ft thick.

Tungsten occurs as high grade scheelite in quartz veins, veinlets, and greisen stockworks in these historic mines and fluoresces a bright blue (Figure 5-45). The tungsten in the historic Three Musketeers mine occurs in the Three Musketeers shear zone (Figure 5-46).



Source: Keith (2011)

Figure 5-45 Scheelite (tungsten) sample fluorescing bright blue-white, Jewell Anne historic mine



Source: Keith (2011)

Figure 5-46 Scheelite-bearing quartz veins in the Three Musketeers shear zone at the Jewell Ann and Three Musketeers mines

On the Three Musketeers unpatented claims, scheelite occurs as small grains and pods, up to a few inches in size, in quartz lenses and calcareous schist. Crystalline limestone overlies the schist. Scheelite also occurs in quartz-filled fractures in a light-colored, medium-grained biotite granite. The quartz lenses are discontinuous and generally conform to the regional geologic structure. All formations are broken by four predominant sets of fractures with respective strikes and dips of: N50-56°E, dipping 50-70°SE; N70-75°E, dipping 50-60°SE; striking E, dipping 40°S; and N80°W, dipping 55°SW. A few of the quartz lenses have been faulted, but most tend to pinch out within short distances, both horizontally and vertically. Parallel veins are common (Dale, 1959).

At the Three Musketeers mine, scheelite is found as grains and pods in both the quartz and the enclosing schist. In the granite, scheelite is confined to the quartz, but much of the quartz is barren of scheelite. Narrow veinlets of scheelite (about one-eighth to one-half inch wide) occur in both the quartz and the schist. The quartz is brittle and easily broken, which indicates that it has been subjected to stresses after deposition. The scheelite shows little evidence of any crushing or distortion, and this indicates the last phase of mineralization. The ore is exceptionally free of any penalizing impurities. The nature of the quartz, brittle and easily broken, makes the ore dressing comparatively simple (Dale, 1959, p. 15).

In the Pee Wee unpatented claims, sparse, sporadic scheelite occurs as grains, pods, and crystals in quartz veinlets (2 to 18 inches wide). The scheelite-bearing quartz veinlets cut a light-colored, medium-grained, biotite granite. The granite is overlain by schist and marbleized limestone. The schist and limestone, and the granite near its contact with overlying strata are extensively fractured. Quartz occupies the fractures erratically. The quartz carries minor amounts of iron oxides and willemite in addition to the scheelite. There are trace amounts of other minerals (Dale, 1959, p. 15).

At the Jewel Ann unpatented claims, the small, narrow stringers of white, glassy quartz cut marbleized limestone. Scheelite occurs sporadically in the quartz and marble in widths ranging from 1 to 15 feet along a strike length of about 200 feet. The mineralized zone strikes generally N65˚W and appears to dip flatly north (Dale, 1959, p. 15).

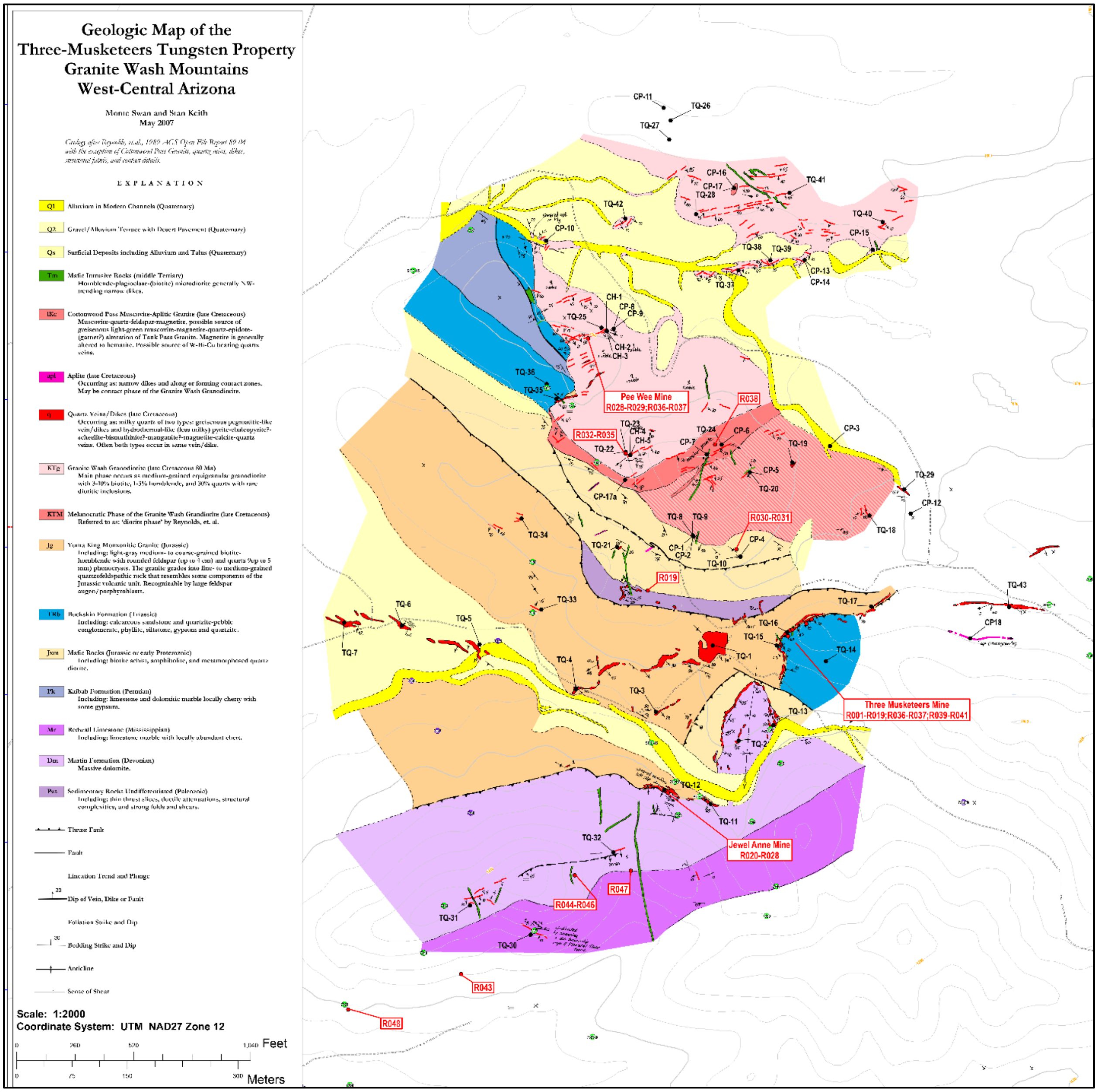
Source: Keith (2007)

Figure 5-47 Jewel Anne tungsten historic mine adit

At the Ace unpatented claims, sparse, sporadic scheelite occurs in the schist and quartz. The quartz has intruded calcareous schist and is discontinuous, ranging from 1-inch to 2.5 ft in width (Dale, 1959, p. 17-18).

At the Trioni Group of unpatented claims, scheelite occurs sporadically in pockets in narrow (2 to 3 inches) stringers of quartz. The quartz stringers cut gneiss, shale, schist, and limestones and strike N47W and dip nearly vertical (Dale, 1959).

At the Squaw T Group, sparse, sporadic scheelite occurs in the schist, limestone, and fractures in the granite. Pockets or pods of high-grade scheelite seem to occur near the contact between the limestone and schist (Dale, 1959).



Source: Keith, 2011

Figure 5-48 Geologic map of Three Musketeers tungsten area

5.8.3 Late Cretaceous, Kyanite-Bearing Pyrophyllite-Quartz Horizon

Although not present at currently economic grades or quantities, the kyanite-quartz lenses are rumored to be of good quality for industrial use. One of Robert Wilson's associates sent a sample to an east coast kyanite producer, who determined that the kyanite was good enough for industrial use. They were not interested as they already had a sufficient supply (Keith, personal communication, 2024). However, there is a considerable tonnage of kyanite-bearing rock associated with a kyanite-bearing zone shown on the composite commodity map (Figure 5-17).

The thrust sheet of Jurassic volcanic and volcaniclastic rocks locally contains lenses of massive quartz-kyanite rocks. Kyanite-bearing quartz lenses occur in mica schist above the Yuma mine thrust and below the Hercules thrust (Reynolds et al., 1989, 1991). The aluminous rocks are lenses of massive quartz-kyanite rocks hosted by metavolcanic rocks along the Hercules, Yuma Mine, and subsidiary thrusts on the flanks of Mt. Green and Salome Peak. Massive quartz-andalusite rocks with rare kyanite were also observed in thin section along the Yuma mine thrust near the Calcite mine (Reynolds et al., 1989, 1991).

The aluminous rocks are associated with either quartzite or massive quartz rocks. The rocks are also associated with tourmaline-bearing schist, altered metavolcanic rocks and gypsiferous soil. Accessory minerals include tourmaline, rutile, ilmenite, magnetite, pyrite, and, in one locality, bornite. The Jurassic metavolcanic rocks that host the aluminous rocks are anomalously micaceous and pyritic (Reynolds et al., 1989, 1991).

The Jk unit (quartzite, quartz-kyanite rocks and mica schist) crops out in a discontinuous band within the sequence of Jurassic volcanic and volcaniclastic rocks below the McCoy Mountains Formation. In these exposures, the unit consists of approximately 30 m of white-weathering, mica-quartz-pyrite schist interbedded with thin (1 to 2 m) lenses of massive quartzite. All lithologies in this unit form discontinuous lenticular outcrops (Reynolds et al., 1989).

The exposures in the valley southwest of Mt. Green include white- to tannish-brown mylonitic quartzite, vuggy quartz rocks that locally contain kyanite and pyrophyllite, quartz-feldspar-muscovite schist, and some interlayered feldspar-quartz-lithic schists derived from felsic volcanic and volcaniclastic rocks or locally from alaskite.

Two types of kyanite are present. One type, hosted by quartz-muscovite schist and well-foliated quartzite, consists of almost colorless to very pale greenish blue kyanite in crystals as long as 10 cm. The second type of kyanite consists of medium blue kyanite in more equant, undeformed crystals that are 1 to 3 cm in diameter. These are present as clots within unstrained pods, segregations, and veins of coarse-grained quartz.

Pyrophyllite is associated with and locally replaces both types of kyanite. Tourmaline is locally abundant and comprises 5 to 10% of some quartz-mica schists and also occurs as pods within coarse-grained quartz segregations (Reynolds et al., 1989).

5.8.4 Late Cretaceous Kerogen-Graphene-Graphite

The graphite-graphene mineralization is inferred to have been formed by frictional heating and shearing associated with the SW-directed thrusting in early Laramide time circa 89-85 Ma. The graphite is contained in a relatively flat-lying, dark gray, carbonaceous, phyllitic meta-mudstone body about 500 feet thick, as established by drilling in June-July 2016 (Keith, 2016).

The strongly non-magnetic body is believed to correlate with the thicker graphite unit that is present in the Y01 and AV11-02 drillholes. This magnetic low occupies at least a square kilometer and is inferred to be the main center of the graphite-graphene-bearing rock. In addition, an 80-foot zone of carbonaceous rock that averages about 89% black mudstone contains significant amounts of flake graphene-bearing graphite and occurs in about the middle of the 500 foot section (Keith, 2016, AIME abstract Maricopa Section).

The carbonaceous, kerogen-rich mud rock protolith for the flake graphene was deposited as part of the early to mid-Cretaceous McCoy Mountains Formation. The best graphite-graphene (in terms of black color and 'magic tape' field testing for graphene) seems to be associated with shear fabrics presumably associated with the overlying McVay thrust. Raman spectrometry has confirmed the presence of a significant disordered graphene component (Keith, 2016). Late stage graphene fills retrograde shear fabric related to the McVay thrust and is associated with circa 550°C. formation temperatures by Raman geothermometry on the graphite (Keith et al., 2019). It is also probably related to the 76 to 70 Ma metamorphic event.

5.8.5 Mid-Tertiary Gold (Copper-Silver-Fluorite Pyrite Mineralization

The northern Granite Wash Mountains and surrounding regions were affected in the Early to mid-Miocene by a major episode of mafic to felsic dikes. The more mafic dikes apparently are associated with quartz-gold veins that postdate all of the earlier mineralization events summarized above. The gold-related dike occurrences are shown on the composite commodity map (Figure 5-17). More regionally, the gold occurrences on the Yuma King property are part of the Glory Hole mineral district, which in turn is a component of the Salome supersystem cluster of gold deposits (Rasmussen and Keith, 2024).

The post-thrust, dike-related, gold-pyrite mineralization consists of pyritic gold emplaced as disseminations and high-grade pyritic, low-angle vein zones within shears in a Cambrian quartzite unit (Bolsa Quartzite). The Bolsa has been thrust over a Devonian-Mississippian carbonate section that hosts the copper-bearing magnetite skarns. In addition, both the skarn mineralization and the thrust deformation are cut by dioritic to granodioritic dikes, which display no evidence of deformation. Alteration related to the gold mineralization affects the dikes.

No major production has been obtained to date from this younger cross-cutting gold mineralization event in the Granite Wash Mountains. In the nearby Harquahala Mountains, the Bonanza/Little Harquahala mine has produced a significant amount of gold. Production from the Little Harquahala or Bonanza mine from 1888 to 1963 was 116,929 tons of ore, 47,658 lb Cu, 154,785 lb Pb., 143,308 oz Au, and 89,833 oz Ag (Rasmussen and Keith, 2024).

This pyritic gold mineralization commonly occurs in the quartzite units that appear to have been emplaced after the copper skarn mineralization. Whereas much of the gold appears to be hosted in the quartzitic units within the Yuma Mine allochthon, the gold commonly occurs at higher and lower structural levels along microdiorite dike contacts. In the Yuma mine plate/allochthon, strongly anomalous gold mineralization was obtained from a prospect above the quartzite allochthon at sample site 0358 (Stanley Keith, 2003).

The post-thrust fault (probably Early to mid- Miocene [22-13 Ma] Tertiary age), gold-pyrite mineralization is probably related to dikes of high-potassium, syeno-gabbro to syenodiorite, also called microdiorite dikes. Within the Yuma King claim area, no production has been reported from the Tertiary gold mineralization event (Keith, 2003). The best gold occurrence is in claim BJ-4, which contained high grade gold and where it has been prospected by several small adits. Several high grade samples were obtained from a low angle tectonic zone within the quartzite at BJ-4. Samples from the High Graders tunnel (G-1605 to G-1609, 5 out of 6 grab samples were better than 0.16 opt Au and ranged from 0.043 up to 2.182 opt in G-1605 (Palmer, 2016). A chloritically altered microdiorite dike is exposed at the tunnel entrance (Stanley Keith, 2024, personal communication). In addition, the high grade gold sample G-1605 contained 74.86 ppm Au, 2.2 ppm Ag, 274 ppm Cu, 55 ppm Mo, 80 ppm Pb, 14 ppm W, 5.8 ppm Te (Palmer, 2016). The anomalous tellurium and bismuth are geochemical characteristics of the Miocene microdiorite dike-related gold deposits.

Gold mineralization extends into the quartzite along fractures and as pyritic disseminations. Some of the pyritic fractures have been prospected by small pits in an area referred to as the ‘yellow slide’ (Palmer, 2016). Gold grades ranging from 0.01 to 0.298 oz/ton were obtained from oxidized, pyritic fractures in the quartzite at the yellow slide location. High-angle, oxidized, pyritic fractures in unprospected outcrops have also yielded elevated gold numbers. Samples from relatively unfractured quartzite with disseminated pyrite also yield anomalous gold (Stanley Keith, 2003).

Gold-copper (telluride) minerals, along with low but variable amounts of fine-grained chalcopyrite and pyrite mineralization, occur as indistinct replacements of sheared and fractured zones on competent rocks, such as the quartz veins and lamprophyre dikes and sills. Siderite and chlorite are common associates of the mineralization and contain pyrite, chalcopyrite, and gold with a high gold to silver ratio. Gold tellurides, specifically sylvanite and nagyagite, have been reported from the True Blue mine (ADMMR files). Examples of the gold-quartz veins associated with microdiorite dikes are the True Blue, Desert Queen, Pandoras Box and Yellow Breast prospects (Corn and Ahern, 1989).

6. DEPOSIT TYPES

Geochemical and geological analyses of production from the Ellsworth district indicate that there are two deposit major types and ages of mineralization. The Jurassic (~191 Ma) magmatism and mineralization is responsible for the past production of copper ore. The mid-Tertiary (22-18 Ma) mafic dikes are responsible for the gold-pyrite mineralization in quartz veins that has had only minor production.

6.1 Canadian Mineral Deposit Type

The copper-molybdenum-gold mineralization on the Yuma King property is an example of the alkalic porphyry copper-gold deposit type (Category 19.3) described in the "Geology of Canadian Mineral Deposit Types" (Kirkham and Sinclair, 1996; Lang, 2000). Copper grades in porphyry copper-gold deposits are similar to those of the porphyry copper type (0.2% to more than 1.0% copper), but gold contents are higher (>0.4 to 2.0 g/t gold).

These deposits are associated with alkaline intrusions. Principal ore minerals are chalcopyrite, bornite, chalcocite, tennantite, native gold, electrum and associated pyrite (Kirkham and Sinclair, 1996).

The mineralization is similar to copper-gold porphyry deposits at Bingham, Utah; Ok Tedi, Papua New Guinea; Ertsberg and Grasberg, Indonesia; Mamut, Malaysia; Copper Mountain, Mt. Milligan, and Afton, British Columbia; Bajo La Alumbrera, Argentina; and Casino, Yukon Territory.

6.2 U.S. Geological Survey Deposit Type

The U. S. Geological Survey (USGS) model type for the Yuma King property is 20c, porphyry copper-gold mineralization (Cox, 1992; Cox and Singer, 1992). Porphyry deposits are known throughout the world for their large size and suitability to bulk-mining methods. They are the world's most important source of copper and molybdenum and are increasingly significant producers of both gold and silver. Porphyry deposits commonly occur in clusters in sulfide-rich areas that, as defined by IP geophysical surveys, range from a few km2 to over 100 km2.

Peripheral to many porphyry districts are skarn and/or gold-vein deposits that were formed as integral parts of the same hydrothermal system that produced the porphyry deposits. Typically, these skarn deposit types have higher unit values and much smaller sizes than the porphyry deposits. Skarn formation commonly depends on the presence of a suitable wallrock host. Vein deposits are low-temperature, commonly peripheral, late-stage deposits, many of which are rich in Pb, Zn, and antimony, as well as precious metals.

6.3 MagmaChem Magma-Metal Series Deposit Type

The Yuma mine copper-magnetite skarn most closely corresponds with the Sacramento zone (MQA45A) of the Bisbee type (MQA45). Outlying, more silver-, lead-, manganese-, and uranium-rich magnetite skarns, such as that on the BJ-1 claim, may correspond with the Warren zone (MQA45B) of the Bisbee type (MQA45).

The Yuma King property is categorized as a Bingham Type (Quartz Alkalic Cu-Au porphyry deposit - MQA44) system in the MagmaChem model book (Stanley Keith, 2003). This deposit type is associated with weakly oxidized (magnetite-rutile), biotite-augite monzonite intrusions, particularly in the third stage of the differentiating magmatic sequence. Strong phyllic alteration and well-developed supergene enrichment zones are generally lacking. These deposits commonly have well-developed Pb-Zn-Ag halos (Stanley Keith, 2003).

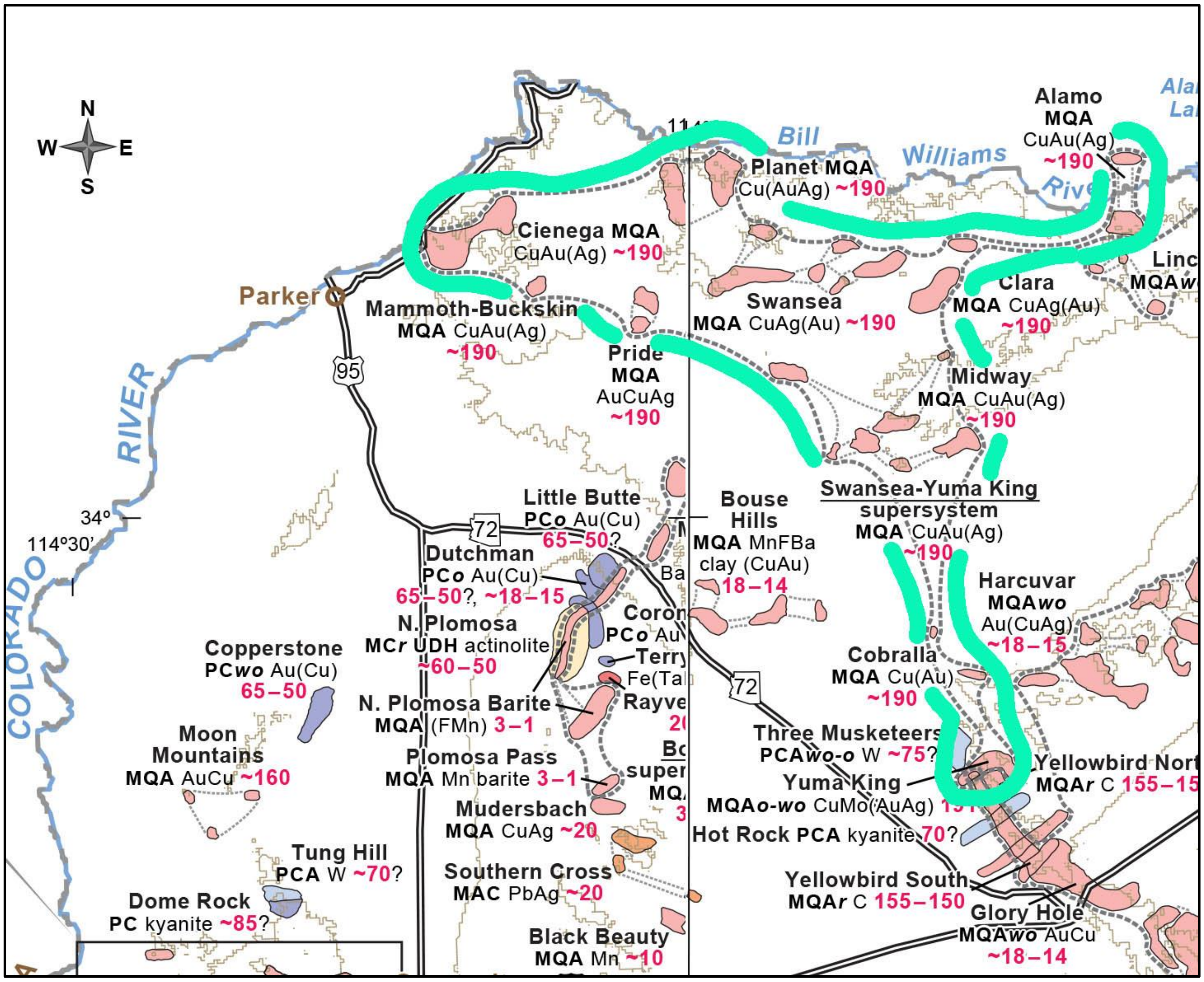
According to the MagmaChem classification (Stanley Keith, 2003), the mineralization is related to metaluminous, quartz alkalic, weakly oxidized plutons (Stanley Keith, 2011). The mineralization is associated with three phases of the Jurassic alaskitic intrusions:

- Stage 2 oxidized and primary copper-gold-molybdenum replacement/skarn targets associated with syenodiorite igneous phases and strong magnetic anomalies (MagmaChem models 43, 43A, and 43B as shown on Figure 5-18 and Figure 5-21);
- Stage 3 copper-gold-molybdenum mineralization associated with quartz monzonite porphyry phases (MagmaChem model 44 [Bingham type] with subtypes of 44A, 44H, 44F, 44D, and 44E as shown on Figure 5-18 and Figure 5-21); and
- Stage 4 molybdenum-copper mineralization associated with late alaskite/quartz syenite porphyry phases (MagmaChem model 44 G and 44F as shown on Figure 5-18 and Figure 5-21).

Quartz alkalic weakly oxidized (MQAwo) and oxidized (MQAo) igneous rocks are associated with gold-rich porphyry copper deposits, such as Bisbee (Warren district) in Cochise County and the Swansea-Yuma King supersystem in La Paz County. Metaluminous quartz alkalic (MQA) porphyry copper-gold deposits (for example, Bisbee, AZ; Bingham, UT; and Hillsboro, NM) occur in and marginal to, and are genetically linked with, metaluminous quartz alkalic, hydrous, iron-poor, weakly oxidized to oxidized, quartz or hypersthene normative, epizonal, monzonite plutons and dikes. Metals present in quartz alkalic porphyries include copper-gold (with minor manganese-silver-uranium-platinoids) and fringing copper-lead-zinc-iron-gold-silver (with minor fluorine-tellurium-manganese-uranium-cobalt-nickel-barium-yttrium) (Keith, 1983, rev. 2003).

The metaluminous quartz alkalic, weakly oxidized (MQAwo) subclass of the magma-metal series classification contains world-class porphyry copper-gold deposits with good grade and tonnage characteristics. These mesothermal, high-sulfur porphyry deposits are primarily copper-gold-molybdenum deposits. Quartz alkalic oxidized igneous rocks are associated with porphyry copper-gold deposits similar to the Bingham mine in Utah; Bisbee mine in southern Arizona; Ely, NV; Copper Flat, NM; and Baja Alumbrera mine in Argentina. These porphyry, skarn, and vein deposits have major production of copper, significant production of gold, and some copper and molybdenum production, with lesser amounts of distal lead, zinc, and silver (Keith et al., 1991). Examples of quartz alkalic, weakly oxidized mining districts include Bingham, UT; Ely, NV; Copper Flat, NM; and Baja Alumbrera, Argentina.

Arizona examples of the quartz alkalic, weakly oxidized mining districts include Bisbee in Cochise County and the nearby mines of the Swansea-Yuma King supersystem (Figure 6-1) (Rasmussen and Keith, 2024).



Source: Rasmussen and Keith, 2024

Figure 6-1 Swansea-Yuma King supersystem of ~190 Ma Cu-Au-Ag deposits (Metaluminous Quartz Alkalic)

Continued intrusions and movements on the main zone of weakness influenced fractionation of the mafic diorite to granodiorite into increasingly more felsic, quartz monzonite and granitic plutons. The stages in a typical metaluminous quartz alkalic (MQA) porphyry copper-gold system are shown on Figure 5-18. The central zone of many of these MQAwo districts contain porphyry copper-gold-molybdenum deposits, although most systems are spread out laterally.

7. EXPLORATION

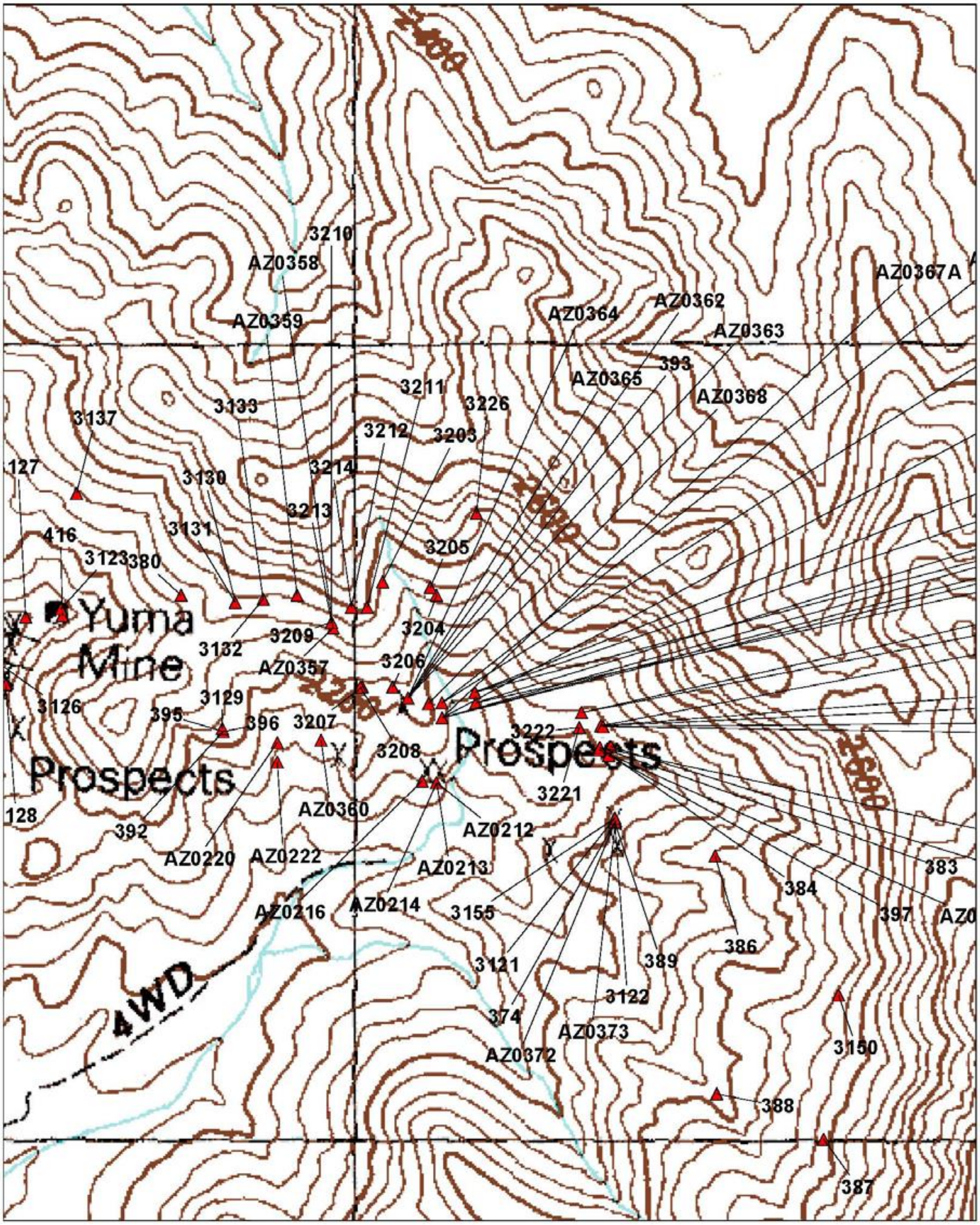
Extensive exploration has been conducted at the Yuma King property since 2003. The work includes geologic mapping, an extensive rock chip sampling program on the surface and underground at the historic Yuma mine, geophysical surveys, and drilling 19 core holes.

7.1 Relevant Exploration Work

In 2003, Rubicon conducted geological reconnaissance exploration of the Yuma mine area and commissioned a geological report by Keith (2003). Exploration conducted prior to 2005 was summarized by Russell (2005) in a Canadian NI 43-101 technical report that included resource estimates of the material remaining in the underground workings of the historic Yuma mine, which is within the Yuma King land position.

In 2006, Big Bar conducted a Phase 1 drill program on 6 drill sites with several angled drill holes from each site. The 19 core drill holes tested over 10,800 ft and reported downdip and strike extensions of the copper-magnetite skarn in the area surrounding the historic Yuma mine.

Also during 2006, an extensive rock chip sampling program was conducted over large areas of the Yuma King property position, focusing on tungsten occurrences in the Three Musketeers area in the northwest portion of the Yuma King property. An example of the location maps for the samples is shown in Figure 7-1.

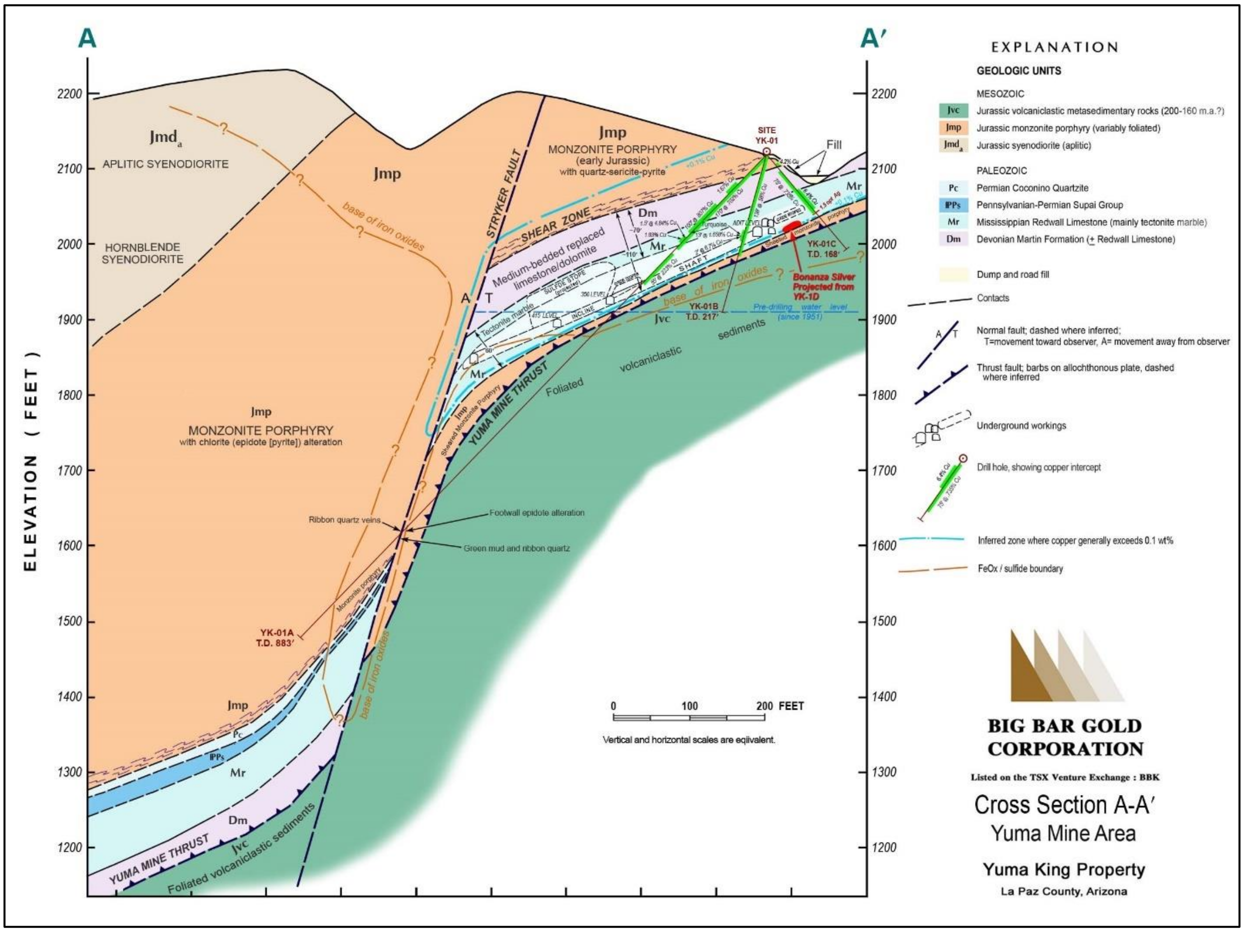


Source: Keith presentation (2006)

Figure 7-1 Example of a location map for the rock chip samples collected in 2006

7.1.1 Oxide Exploration

The strong oxide copper-gold-molybdenum mineralization intersected by the drilling at drill site 1 is open in several direction. Cross section line A-A' (trends southeast and looks northeast) (Figure 7-2) shows the copper skarn/replacement mineralization in the Mississippian Redwall Limestone is within the tectonic plate above the Yuma mine thrust. Cross-section A-A' (Figure 7-2) though the historic Yuma mine workings and Big Bar drill site YK01 shows the dimensions of the known oxide copper accumulation in the inverted Paleozoic carbonate section and overlying quartz monzonite porphyry. The up-dip projection of the prospective oxide orebody extends up-dip for several hundred meters to the right of the cross-section. Copper and gold grades that are similar to those intersected in the YK01 drill hole were obtained from surface sampling in April of 2012 by Merrill Palmer for Rare Green.



Source: Keith (2011); line of cross sections shown on Figure 5-2; green bars on drill holes indicate intercepts of mineralization at 0.7% to 6% copper

Figure 7-2 Cross section A-A' looking northeast showing copper intercepts from drill hole YK-01

Surface geochemical sampling by Rare Green extended the oxide copper-gold-silver exploration up-dip from its well-constrained position in the mine workings and at Big Bar drill site YK01. This exploration observed a strong copper-gold association (Figure 7-3 and Table 7-1).

The surface confirmation of the up-dip extension of relatively high grade copper mineralization allows speculation (historical, non-NI 43-101 compliant) of approximately 4 million tons grading 0.8 wt. % copper and 700 ppb gold (0.02 oz per ton) (Keith, 2013). The mineralization occurs between a post-mineral alkali gabbro dike and the topographic edge of exposure to the west. This body could be recovered by open-bench mining technology. The surface map showing the updip oxide copper target appears as Figure 7-3.

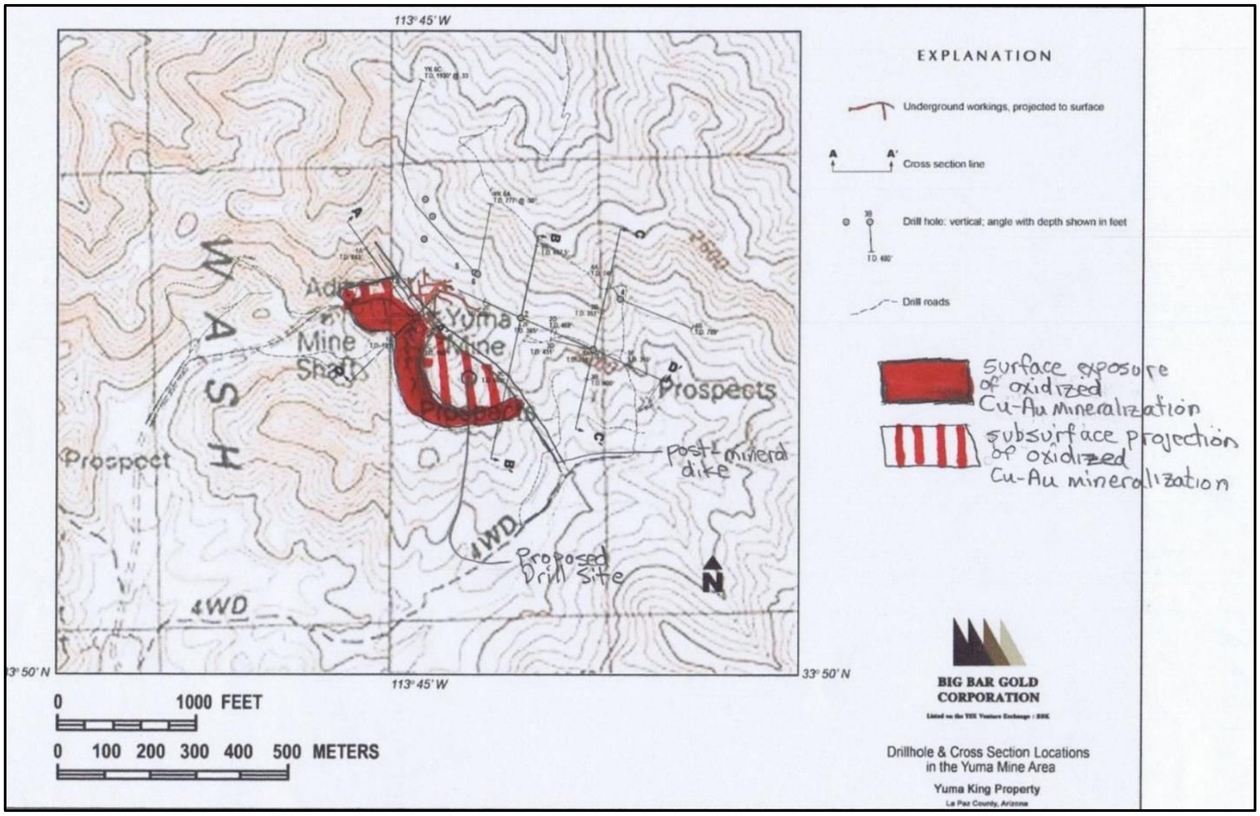
Table 7-1 Results of surface sampling by Merrill Palmer of the up-dip outcropping oxide copper mineralization

Report: A12-03163

Final Report
Activation Laboratories

Report Date: 5/10/2012							
Analyte Symbol	Au	Ag	Cu	Cu	Mo	Pb	Zn
Unit Symbol	ppb	ppm	ppm	%	ppm	ppm	ppm
Detection Limit	2	0.05	0.2	0.001	1	0.5	0.5
Analysis Method	INAA	MULT INAA/TD-ICP/TD-MS	MULT TD-ICP/TD-ICP-MS	ICP-OES	MULT INAA / TD-ICP	MULT TD-ICP/TD-ICP-MS	MULT INAA/TD-ICP/TD-MS
YK-2012 #100	232	1.4	> 10000	3.18	95	15.6	3310
YK-2012 #101	1880	1.95	> 10000	2.15	245	5.3	360
YK-2012 #102	817	1.71	8590		178	13.6	230
YK-2012 #103	1420	1.91	> 10000	2.25	124	6.3	189
YK-2012 #104	1570	4.78	> 10000	1.27	475	12.2	508
YK-2012 #105	1120	4.06	9850		575	8.3	287
YK-2012 #106	1520	2.94	> 10000	6.85	255	19.4	228
YK-2012 #107	85	0.76	6980		96	6.9	307
YK-2012 #108	462	0.36	> 10000	1.51	23	10	227
YK-2012 #109	818	1.28	6150		149	15.9	832
YK-2012 #110	262	0.52	3400		34	30.9	353
YK-2012 #111	378	2.88	> 10000	1.73	63	72.9	1060
YK-2012 #112	1160	1.67	> 10000	1.16	96	15.7	387
YK-2012 #113	1010	1.45	9390		92	12.1	844
YK-2012 #114	602	1.15	7520		86	16.9	600
YK-2012 #115	880	1.36	> 10000	1.14	174	13.9	1030
YK-2012 #116	264	1.66	> 10000	4.11	148	16.5	302
YK-2012 #117	472	0.55	> 10000	2.24	116	4.8	135
YK-2012 #118	486	0.67	> 10000	2.64	126	5.1	147
YK-2012 #119	2420	0.81	> 10000	1.45	145	12.2	243
YK-2012 #120	924	2	> 10000	0.983	42	5.8	108

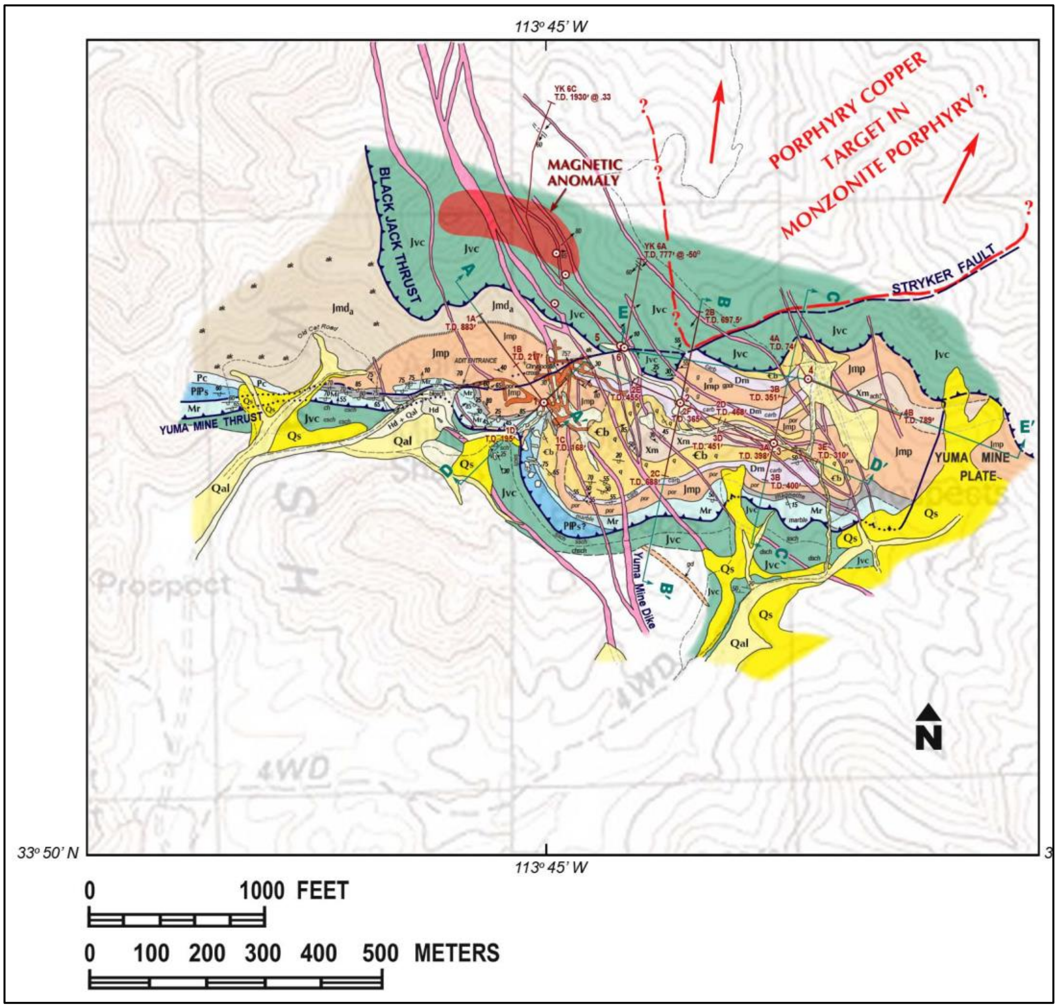
Source: Keith (2011).



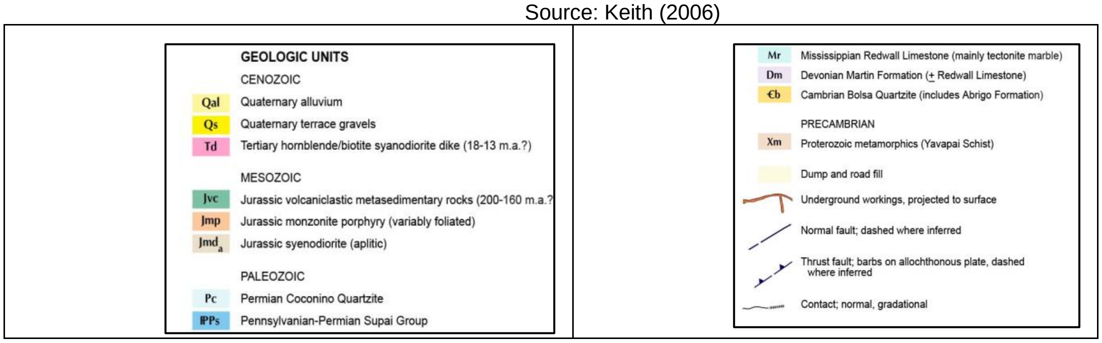
Source: Keith (2012)

Figure 7-3 Map of speculated potential of about 4 million tons of copper oxide-gold mineralization south of the historic Yuma mine area

Records of underground sampling were obtained from the Arizona Department of Mines and Mineral Resources (now part of the Arizona Geological Survey) in Phoenix. These were documented, shown on maps, and used by Russell (2005) in his historic inferred resource estimate.



Source: Keith (2006)



Source: Keith (2006)

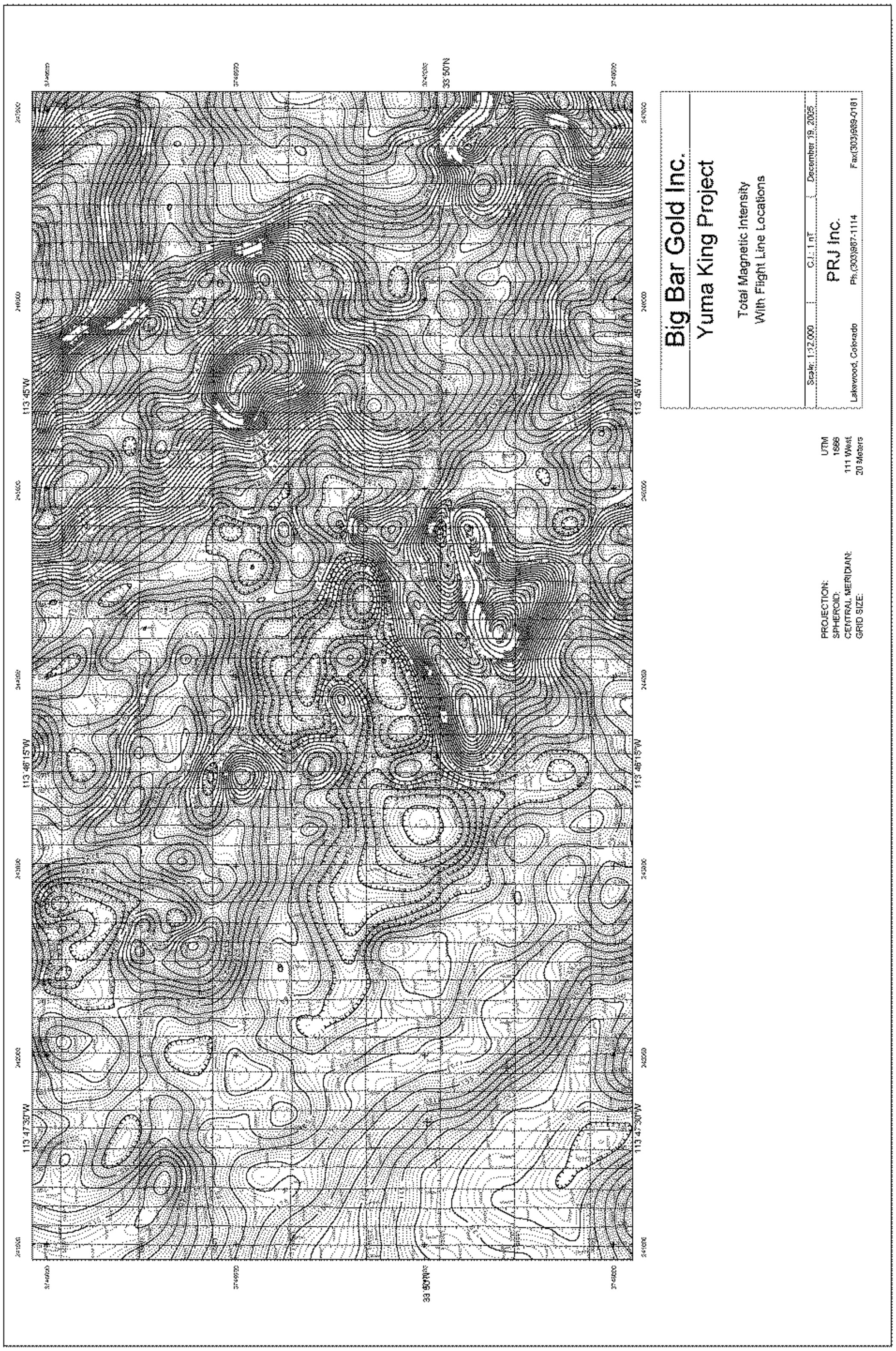
Figure 7-4 Geologic map of the Yuma Mine area showing the Stryker fault and its influence on exploration targets

7.2 Geophysical Surveys and Investigations

Ground magnetic surveys, high resolution aeromagnetic surveys, and IP surveys were conducted across the Yuma King property. The geophysical surveys were interpreted by Keith (2013) in conjunction with the contractors and those observations and interpretations are summarized here.

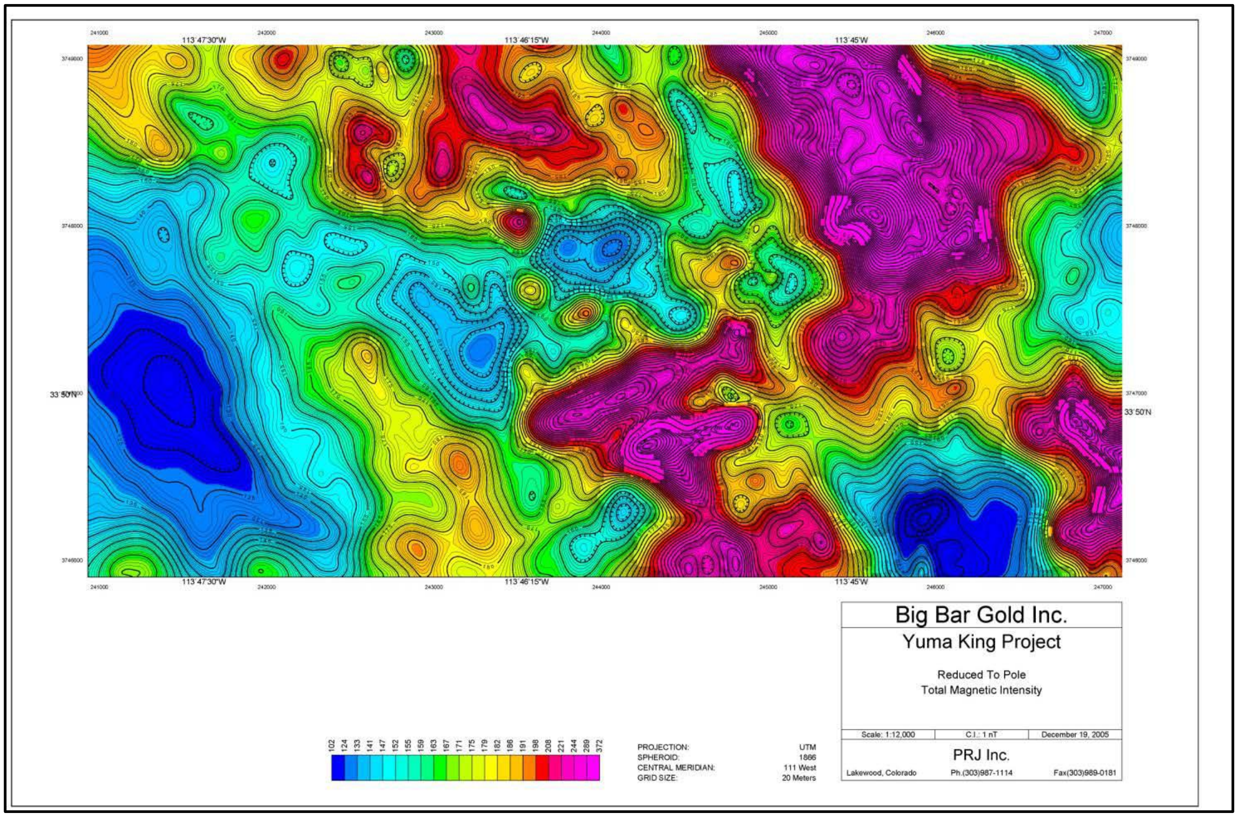
7.2.1 Ultralight Aeromagnetic Geophysical Survey

High resolution aeromagnetic surveys were conducted in October 2006 by EDCON-PRJ, Inc. of Lakewood, Colorado. The surveys were conducted using industry-standard data acquisition and recording of GPS locations, digital data transmission, editing, corrections, and leveling. The total magnetic intensity and flight lines are shown in Figure 7-5 and the Reduction to the Pole, which calculates a correction that shifts the magnetic anomalies more nearly over the causative bodies (Figure 7-5).



Source: PRJ, Inc. report to Big Bar, October 2006

Figure 7-5 Total magnetic intensity results showing flight line paths for first survey



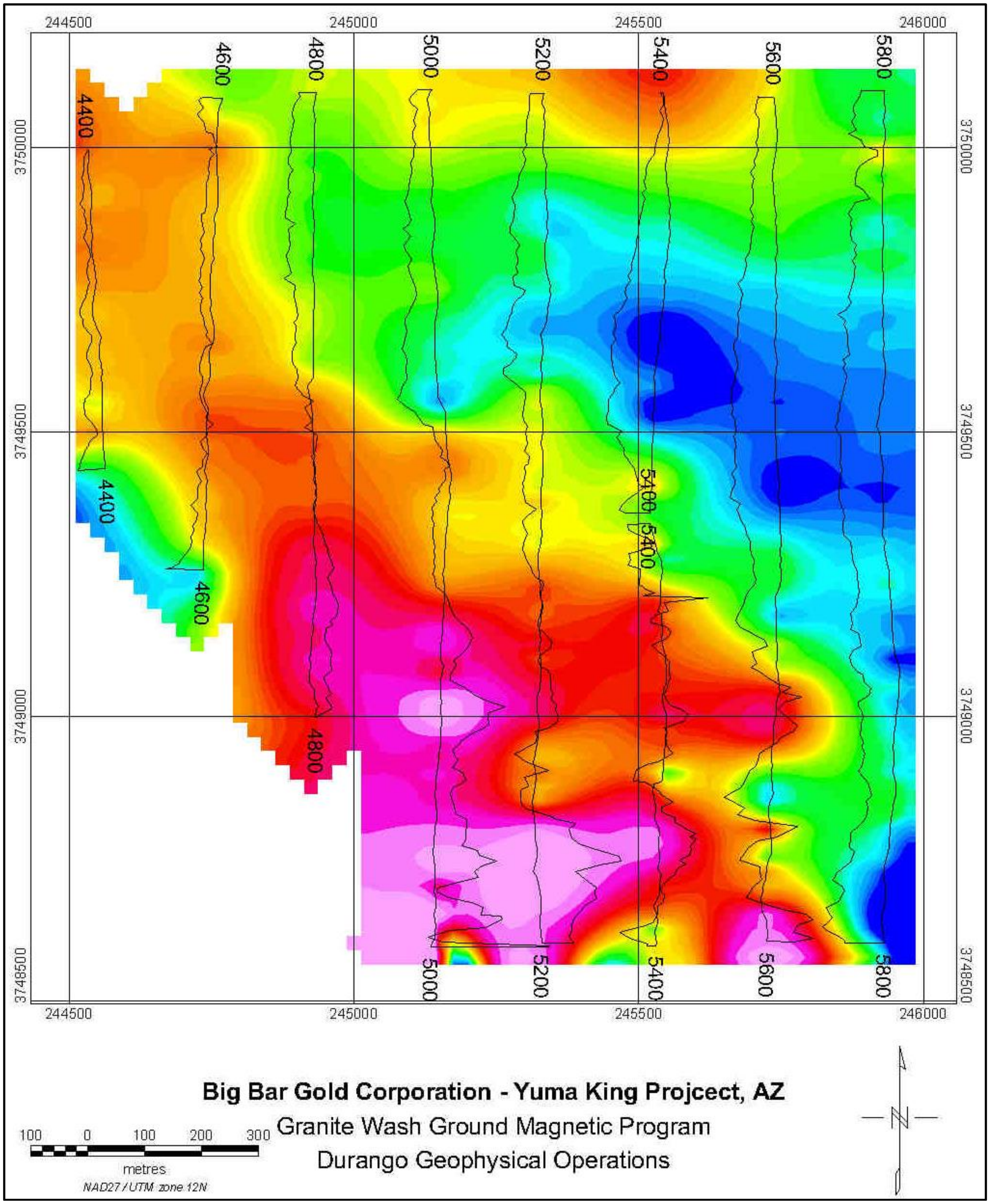
Source: EDCON-PRJ, Inc, 2006

Figure 7-6 First aeromagnetic survey of the Yuma King area, total magnetic intensity, reduced to pole

At that time, this magnetic anomaly was open to the north, thus additional geophysical surveys and drilling were conducted.

7.2.2 Ground Magnetic Geophysical Survey

Ground magnetic surveys were conducted by John Reynolds of Durango Geophysical Operations in 2006 to investigate the possibility that the magnetic anomaly continued to the north. Results of this survey are shown in Figure 7-7. The ground magnetic survey was able to close the Yuma King magnetic anomaly.

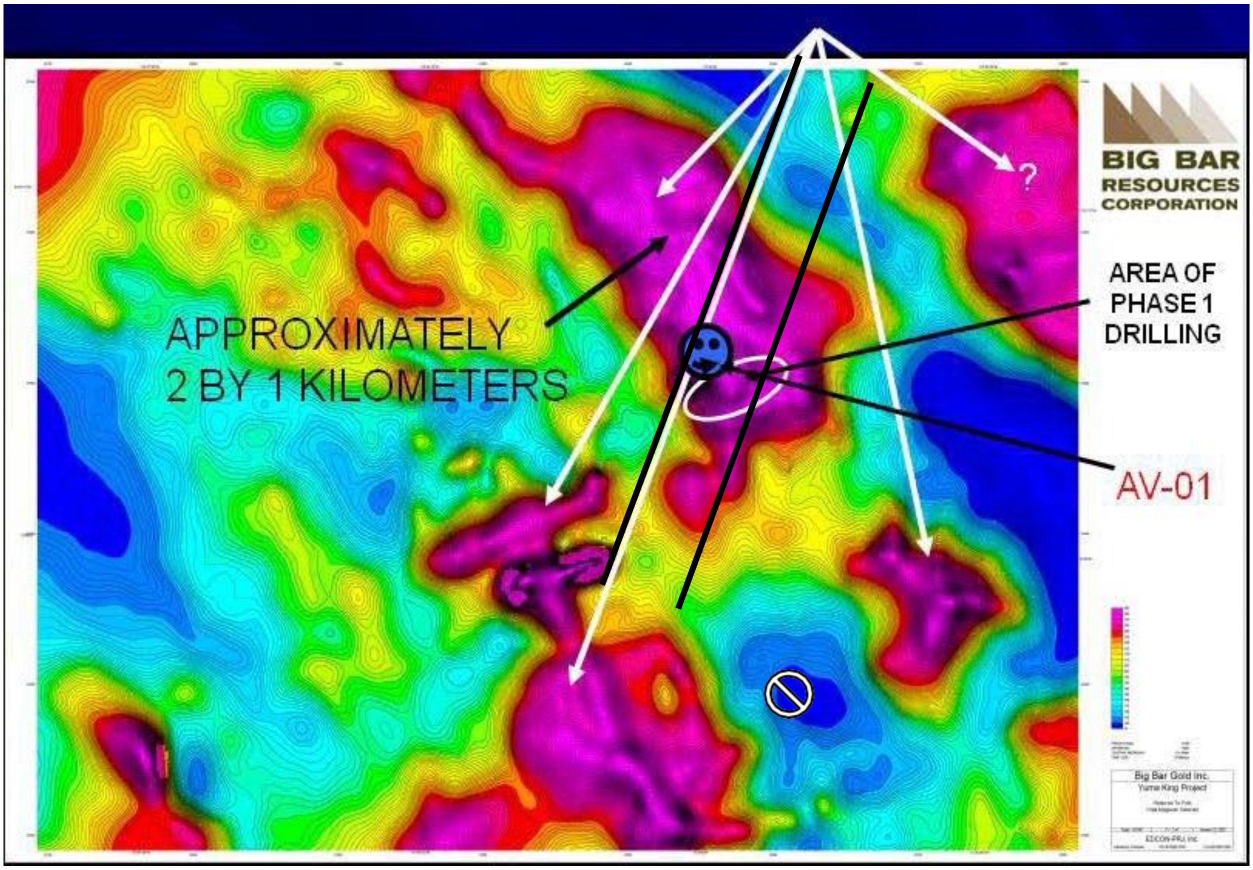


Source: Keith (2011)

Figure 7-7 Ground magnetic geophysical survey of Yuma King property

7.2.3 Additional Ultralight Aeromagnetic Geophysical Survey

The original ultra-light survey was extended outwards for another 1 km surrounding the initial survey to determine the northern limit of the Yuma King magnetic anomaly, as well as obtain a more regional context. PRJ also conducted this additional, ultralight-flown, aeromagnetic survey (Figure 7-8) in 2006-07 (EDCON-PRJ, 2006). The Yuma King magnetic anomaly is a two-square kilometer area at the upper right center of this map. This anomaly may represent a magnetite skarn containing copper, gold and molybdenum. The location of the AV11-02 (T.D. 525 feet) is also shown on Figure 7-8 with the symbol ⦸.



Source: Keith (2013) Face is location of AV-01 and ⦸ is location of AV-02

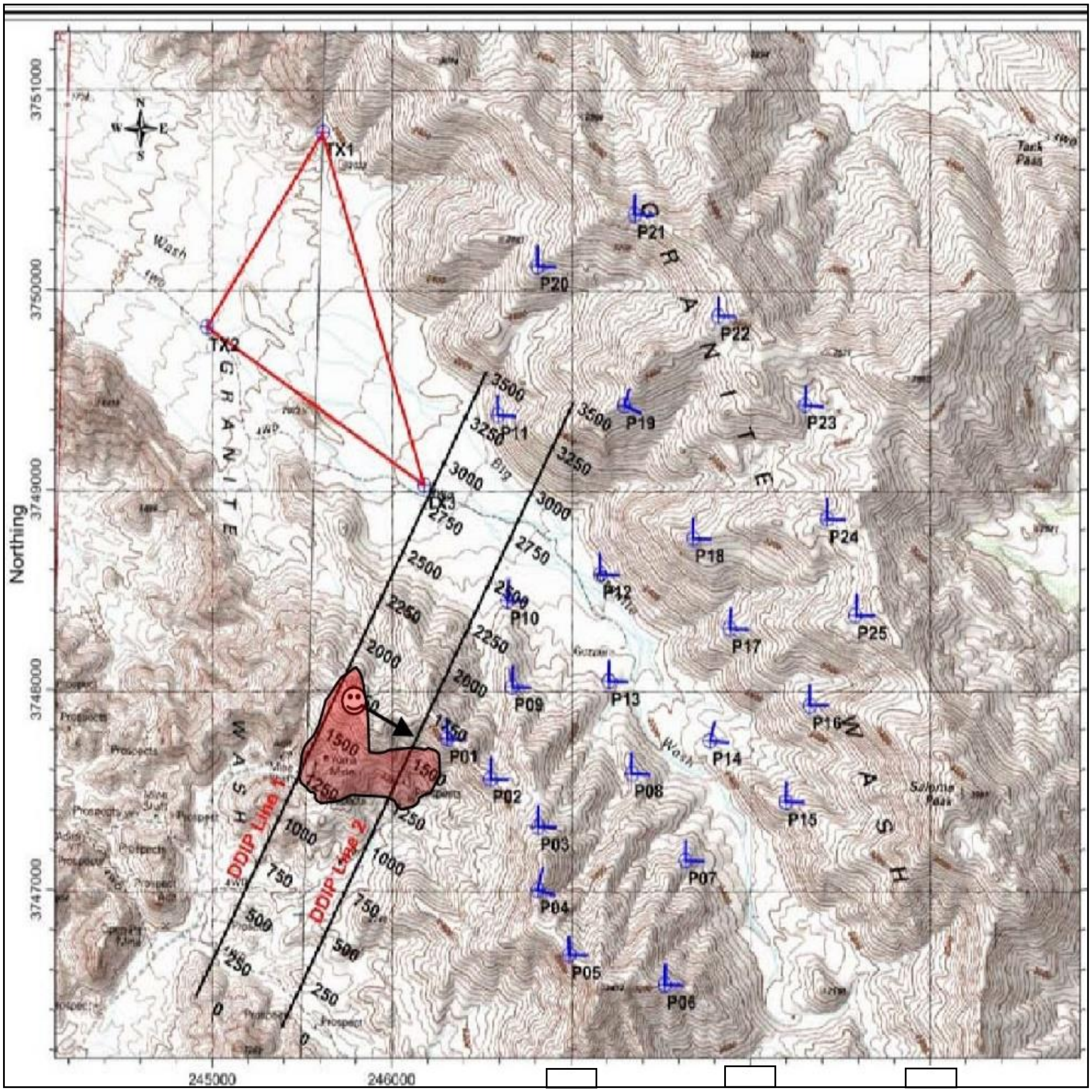
Figure 7-8 Second ultralight aeromagnetic expanded survey flown by PRJ in 2006-2007

The Yuma King magnetic anomaly also continues to the north, where it is apparently concealed beneath nonmagnetic Tank Pass quartz monzonite.

7.2.4 Complex Resistivity-Induced Polarization Survey

In April-May 2013, Zonge Geophysics, at the request of Freeport-McMoRan and Rare Green Inc., conducted a complex resistivity-induced polarization (CR/IP) survey at the Yuma King copper project held at that time by Rare Green Inc. The location of this survey is shown in Figure 7-9. The purpose of the survey was to test if the sulfide anomaly intersected by existing drilling and mining activity at the Yuma mine was present to the north and east.

Another important objective was to determine to what extent the IP geophysics corresponded with a series of magnetic anomalies that were geologically concealed by post-mineral intrusions, such as the circa 80 million year old Tank Pass Granite, and post-mineral thrust faults.



LOC/
Dipole-Dipc
Geophy
YUMA
Park
Freeport-McI

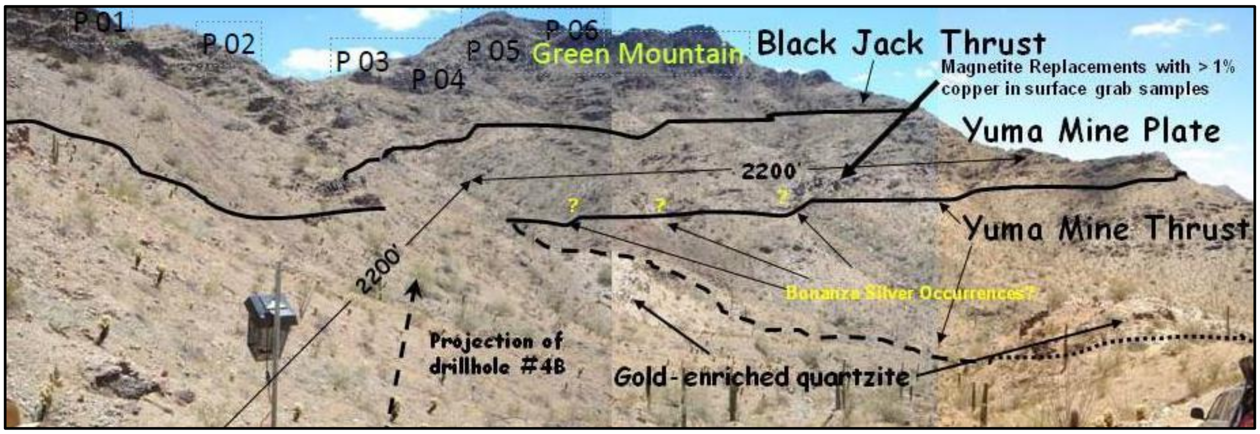
Base Map: USC
o33113g7 East
o33113g6 Harc
Project Datum:
Projection: UTN

Black lines show the location of Dipole-Dipole and tensor IP stations (blue markers) and red triangle shows tensor IP transmitting array. The Vane AV11-01 drillhole (☺) is also shown. The arrow shows the projection of the AV1-01 drillhole onto the line 2 dipole-dipole line. The black outlined area indicates the zone of subsurface high sulfides that has been encountered by existing drilling.

Figure 7-9 Location map for dipole-dipole and tensor IP geophysical survey of Yuma King project

The inferred projection of the prospective mineralization in the Yuma mine plate to the southeast of Drill Site 4 is shown on Figure 7-10 and Figure 7-11. The Line 2 dipole-dipole line is positioned about 100 meters to the west of the photograph. The approximate positions of tensor stations 1 through 6 are shown along the top of the ridge, except from station 6, which is projected from the east flank of Green Mountain and station 1, which is projected from the east side of the skyline ridge.

The prospective mineralization occurs in the middle plate (referred to as the Yuma mine plate) of a thrust fault 'sandwich' bounded by non-prospective rocks in the thrust plates below the Yuma mine thrust fault and the thrust plate above the Black Jack Thrust. In the vicinity of the combined IP and magnetic feature, the prospective Yuma mine middle plate ranges from a few hundred to more than 1000 feet thick (100 m to more than 300 meters).



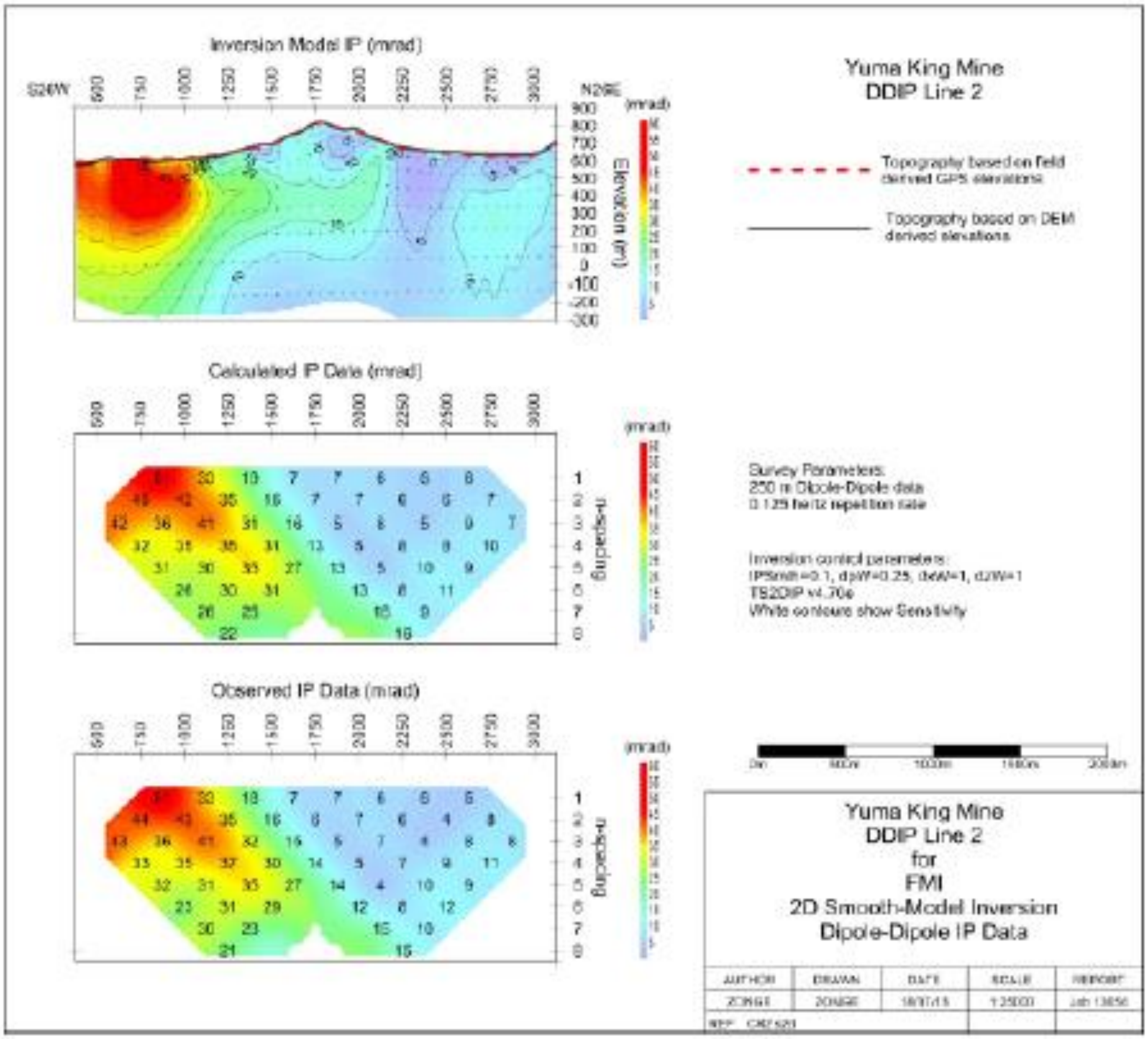
Note: The line 2 dipole-dipole line is positioned about 100 meters to the west of this picture. The approximate positions of tensor stations 1 through 6 are shown along the top of the ridge (except from station 6 which is projected from the east flank of Green Mountain and station 1 which is projected from the east side of the skyline ridge).

Figure 7-10 Photo showing projection of possible mineralization in the Yuma Plate SE of drill site 4

The geologic interpretation of line 2 is shown on Figure 7-11 and Figure 7-12. The resistive, non-responsive IP pattern at the northeastern end of the line correlates well with the map position of the Tank Pass Granite. The synformal shaped IP anomaly coincides with a bowl-shaped syncline mapped by Keith (2013) and is physically confirmed by the high (5 – 20%) sulfide interval intersected in the AV11-01 drill hole.

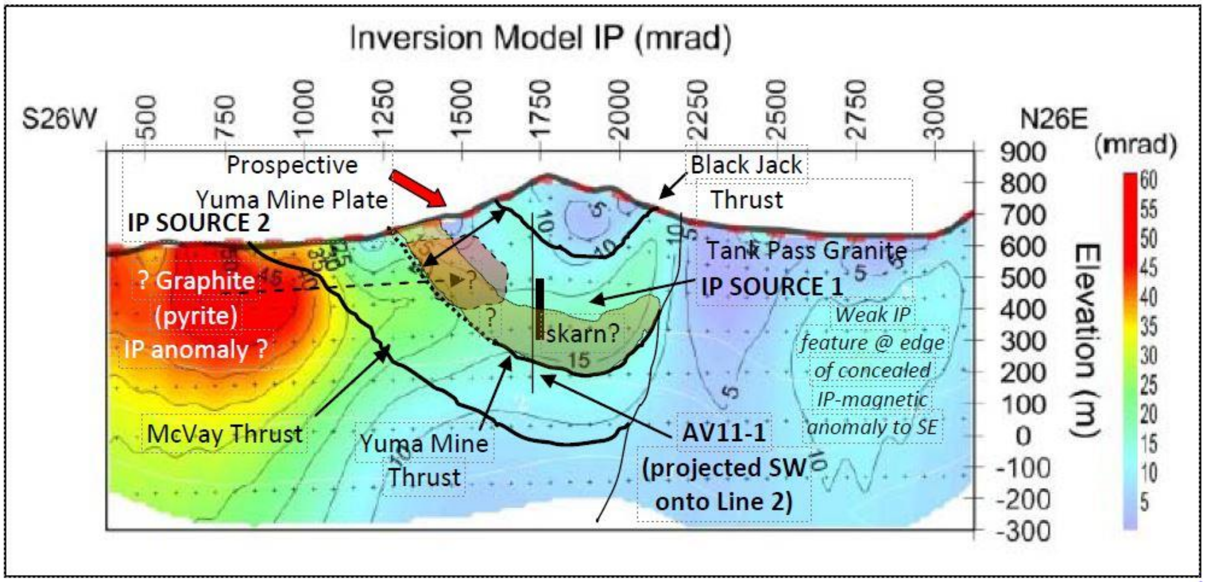
The area of very high (30 to 50 milliradian) IP response is interpreted as a chargeability source associated with a graphite-(pyrite)-bearing mudstone (red area on left side of diagram). This high chargeability area correlates with the McVay thrust and an underlying, probably weakly pyritic and graphitic mudstone in the McCoy Mountains Formation beneath the McVay thrust. This area is not associated with copper mineralization, as shown by the completely negative results of drill hole AV11-02 (Keith, 2013).

A separate, moderate (14 to 24 milliradian anomaly) chargeability source coincides with an area of high sulfide that was intersected below the oxide zone in the main drilling area indicated by the pink outline to the southwest of drill hole AV11-01 in Figure 7-9. The AV11-01 drillhole was projected onto the IP pseudo-section as a thin vertical line. The 15 milliradian contour appears to identify subsurface concealed IP features that correlate well with the known geology and the sulfidic interval intersected in the AV11-01 drill hole (shown as a thick bold line). The inferred concealed Cu (Au-Ag-Mo-Re) skarn body is shown by the dotted orangish brown outline. The moderate IP anomaly on both Line 1 and Line 2 appears to be rootless with no depth extension, which is consistent with the thrust sandwich model of Figure 7-12 (Stanley Keith, 2013).



Source: Keith (2013). Line locations on Figure 7-9.

Figure 7-11 Chargeability/induced polarization (IP) for the line 2 dipole-dipole line

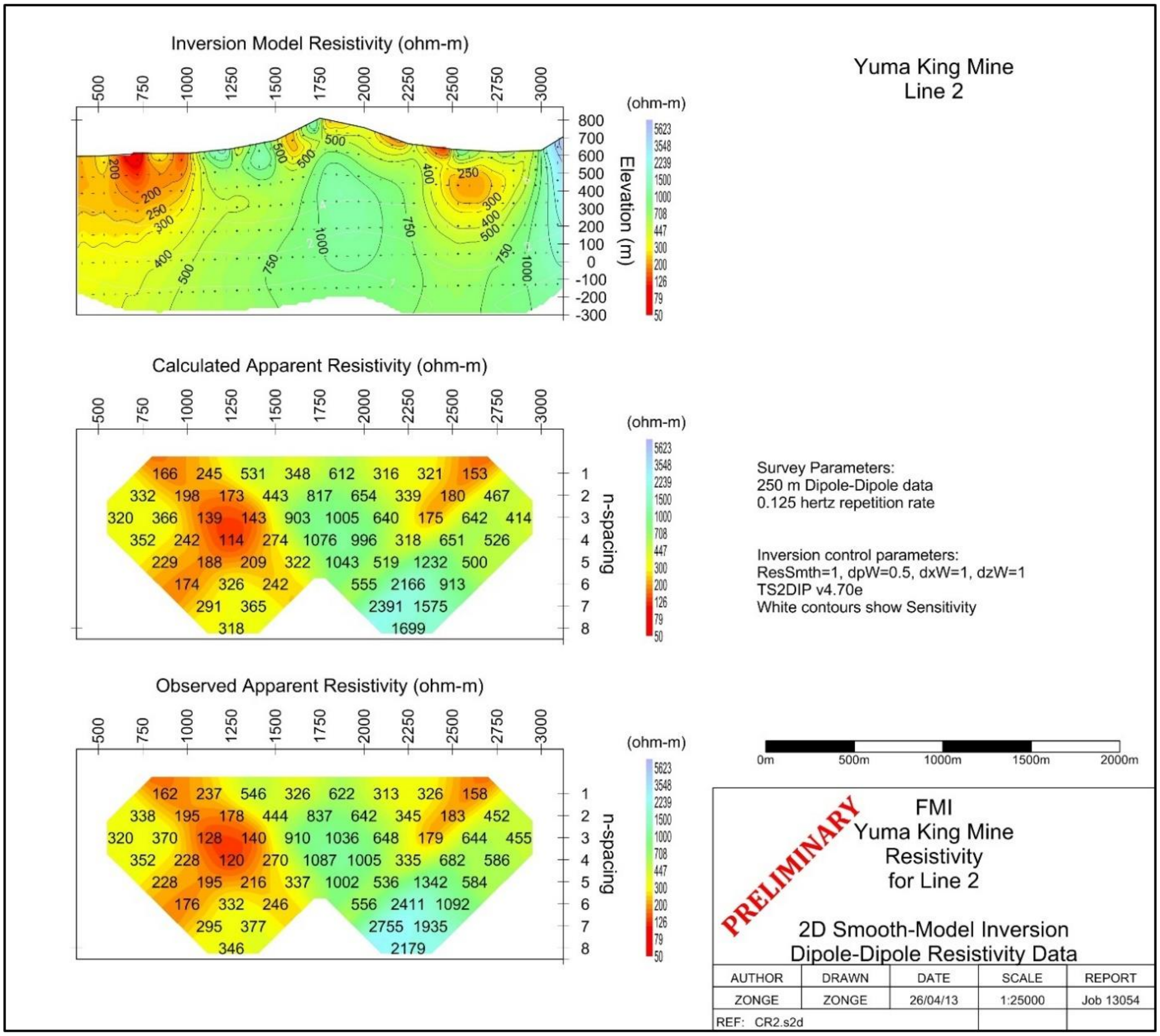


Source: Keith (2013). Line location on Figure 7-9.

Figure 7-12 Schematic geologic interpretation of the first chargeability pattern in line 2

Both the IP (Figure 7-12) and resistivity (Figure 7-13) profiles suggest that the magnetite-copper skarn may lie beneath Big Granite Wash to the northeast of the known Yuma King porphyry copper/skarn system. This IP geophysics, along with the magnetics and the discovery of an altered monzo-diorite outcrop, was part of the motivation to acquire the Green Dragon claim block staked in 2023-2024.

Both the IP profiles indicate the presence of a possible concealed, magnetic, charged and conductive body beneath Big Granite Wash. The moderate IP expression is identified in the interpretive modeling of the Line 2 profile in Figure 7-13. The Line 2 resistivity data also identifies a conductive body in the same position beneath Big Granite Wash. Additional electrical geophysical surveys are recommended to establish validity and more specific dimensions of this electrical geophysical target. In this case, a cross line is recommended to run parallel to Big Granite Wash.



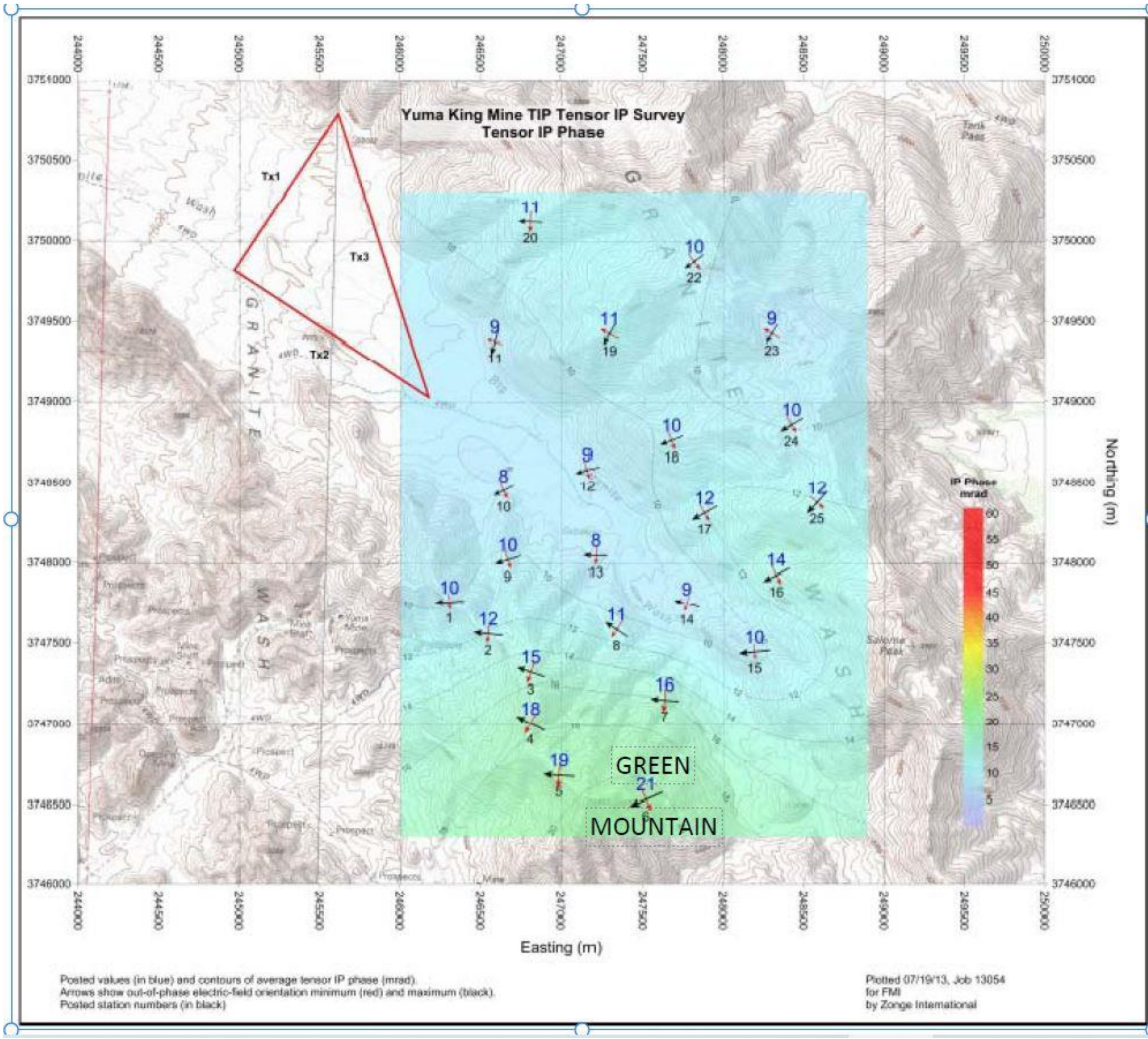
Source: Zonge Geophysics (2013) unpublished IP data. Line location on Figure 7-9.

Figure 7-13 Apparent resistivity profile for Line 2 electrical survey

7.2.5 Tensor IP Survey

A tensor IP survey was conducted to the north and east of the main drilling area to test to what extent sulfide mineralization might be present (Figure 7-14 and Figure 7-15). The vectors (red arrows) point toward a large, moderate chargeability feature in the vicinity of the Yuma mine and beneath Green Mountain southeast of the Yuma mine and towards a second high chargeability feature intersected in the southern portions of IP dipole-dipole lines 1 and 2.

The moderate IP feature at stations 16, 17, and 25 coincides with the magnetic anomaly identified by the ultralight magnetic survey conducted by PRJ for Big Bar Resources in 2006. The moderate anomaly is interpreted as a concealed, sulfide-rich, magnetite skarn body embedded in or beneath the post-mineral Tank Pass granitic pluton as a large pluton. The edge of this skarn body may have been intersected by the line 2 dipole-dipole pseudo-section (Figure 7-11 and Figure 7-12). In this interpretation, the Tank Pass Granite may be more of a sill-like body that conceals magnetite-copper skarn mineralization, which could be an exploration target.



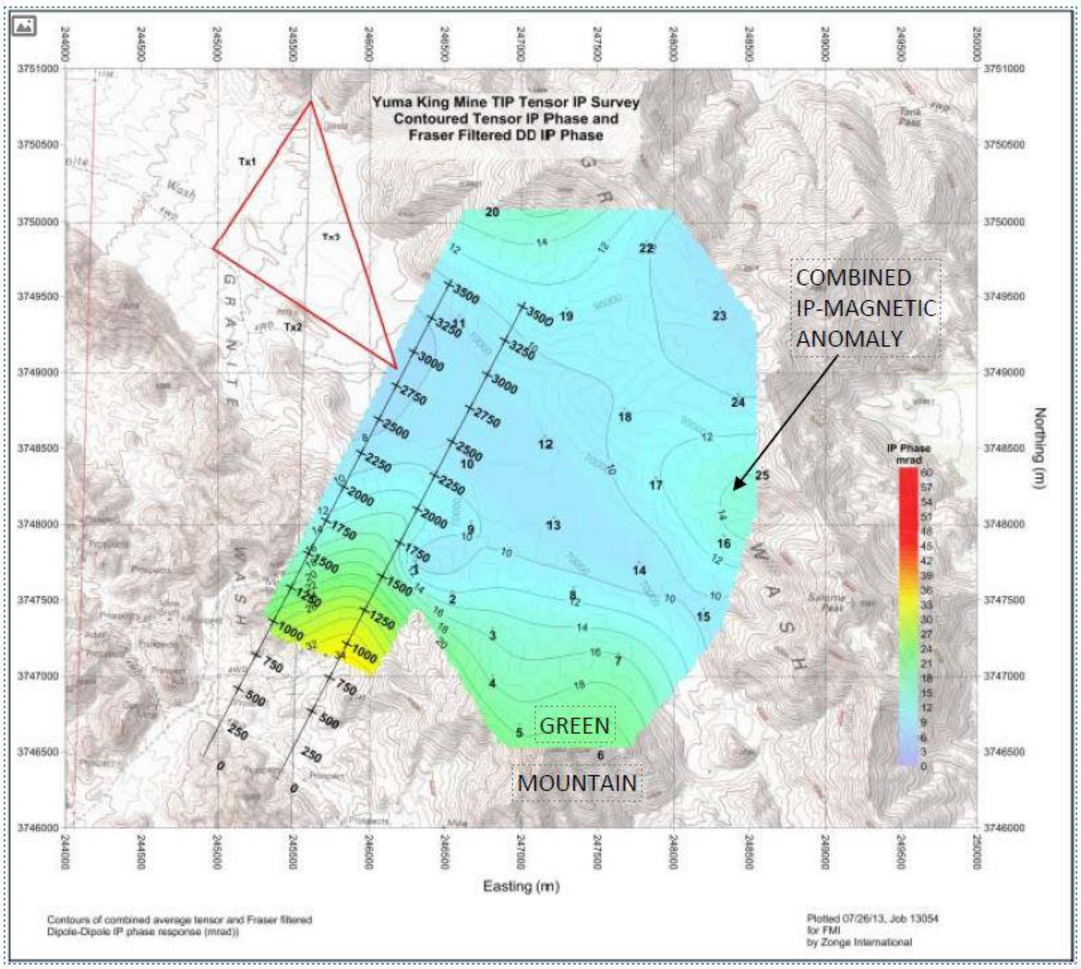
Source: Keith (2013)

Figure 7-14 Map showing tensor IP data in milliradians

Figure 7-14 shows that throughout the tensor IP grid, a consistent vector points west and southwest toward a large chargeability/IP feature beneath tectonic concealment in the vicinity of the Yuma mine and beneath Green Mountain about 2 kilometers southeast of the Yuma mine and Yuma King drilling area.

Figure 7-15 shows that a continuous, plus 14 milliradian anomaly exists beneath these areas. Beneath and northwest of Green Mountain the anomaly ranges between 15 and 21 milliradians and is consistent with a concealed sulfide anomaly in the Yuma mine plate beneath the Green Mountain area. This anomaly is of the same magnitude as that identified in the Line 2 dipole-dipole pseudo-section and is confirmed physically by projection of the sulfidic zone encountered in the VANE 11-1 core hole.

The combined IP map of Figure 7-15 shows that the tensor IP data and the dipole-dipole surface projected IP data form a continuous area between the drilled area and Green Mountain to the southeast.



Source: Keith (2013)

Figure 7-15 Map showing contoured IP data in milliradians for integrated Fraser filtered IP from the dipole-dipole lines and Tensor IP DDIP data (in milliradians

7.3 Sampling Methods and Quality

Rock chip samples were collected from surface and underground outcrops in the historic Yuma mine, Three Musketeers, Jewel Anne areas by Stan Keith, Monte Swan, and Ron Radzieta with industry standard procedures. Sample locations were entered by Global Positioning System coordinates, samples were photographed (Figure 7-16), securely handled, stored, and sent for analysis by a certified analytical laboratory. More than 140 samples were collected and analyzed for 89 elements, with some elements being analyzed by several methods.

Source: Keith photographs (2006)

Figure 7-16 Example of sample identification and photography method

7.4 Significant Results and Interpretation

The aeromagnetic surveys show the presence of large magnetic features that are correlated with surface outcrops of flat-lying copper magnetite skarns. The magnetic data show a 2 km by 1 km magnetic mass that may be caused by copper-bearing magnetite skarn to the north of the Phase 1 drilling area (Keith, 2007).

The initial, high resolution, ultra-light, airborne geomagnetic survey (Figure 7-6) revealed a strong magnetic anomaly in the Yuma mine area, which is called the Yuma King magnetic anomaly. The Yuma King magnetic anomaly is correlated with surface magnetite bodies that are related to the Yuma mine copper-gold-magnetite skarn bodies.

Drill hole AV11-02 intersected a thick section of graphitic schist with minor pyrite and pyrrhotite that might explain the high chargeability feature found in southern portions of IP lines 1 and 2. The AV11-02 drill hole was drilled to test the strong magnetic low feature in the ultra-light survey. VANE inferred that this magnetic low was the magnetic destruction core of a porphyry copper system, surrounded by magnetic response. Instead, the drill hole penetrated the McVay thrust and intersected a nonmagnetic footwall beneath the McVay thrust that hosted a graphite-graphene deposit. No porphyry copper alteration or copper anomalies were intersected. Instead, the AV11-02 drill hole is now considered to have serendipitously discovered a large deposit of graphite-graphene in the McCoy Mountains Formation. Considerable follow-up drilling by Cash Capitol attempted to better define what is now called the Yellowbird graphite-graphene deposit. Details of that work are not considered in this report.

The post-mineral thrusting is estimated to have occurred between 55 to 110 Ma and was related to the Sevier and Laramide orogenic episodes that deformed what appears to be a large porphyry copper (gold-silver-molybdenum-rhenium)/skarn-replacement metal system. This older mineralization was inferred to be of Jurassic age. This inference was confirmed by a radiometric date by the Re-Os technique at 191 Ma on stage 4 molybdenite from drill hole 2B in the Yuma Mine area.

The IP data coincide with the magnetic anomalies identified during magnetic surveys for Big Bar Resources in 2006-2007 (Figure 7-7). The magnetic features can be explained by sulfide-bearing magnetite anomalies associated with copper skarn mineralization. Numerous drill holes (including the AV11-01 drill hole) have shown that the sulfide-bearing rocks are especially well developed in the contact zone between the skarn and the overlying ‘hanging wall’ porphyry intrusives. Based on the reconnaissance tensor IP data, this sulfide-bearing zone can be interpreted to extend for a considerable distance to the southeast (Stanley Keith, 2013).

Assays from the sampling program in the Three Musketeers shear zone at the Three Musketeers mine the Jewel Anne mine and neighboring prospects are presented in Table 7-1 and Table 7-2, respectively. The results show elevated results in gold, silver, copper, molybdenum, zinc, and bismuth in selected samples. Elevated tungsten was measured in the 1-m thick quartz veins.

Table 7-2 Example of assay data for samples from Three Musketeers tungsten mine

Analyte Symbol	Au	Ag	Jacobs Cu	Mo	Zn	Bi	W	W				
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%				
Detection Limit	2	0.05		1	0.5	0.1	1	0.001				
Analysis Method	INAA	MULT INAA/TD-ICP/TD-MS		MULT INAA / TD-ICP	MULT INAA/TD-ICP/TD-MS	MULT TD ICP/TD-ICP-MS	INAA	INAA	Mine	Type	Channel Length	Ore
ROO1	41	1.2	0012	26	104	27.7	53		3M	Channel	12"	UG Ore
ROO2	25	4.32	0016	122	154	179	144		3M	Channel	12"	UG Ore
ROO3	1260	2.17	0018	24	115	259	2170		3M	Channel	18"	UG Ore
ROO4	<10	5.2	0063	23	128	122	7740		3M	Channel	24"	UG Ore
ROO5	13	4.59	0007	16	48.6	130	858		3M	Channel	12"	UG Ore
ROO6	32	0.83	0008	5	294	26.2	437		3M	Channel	12"	UG Ore
ROO7	49	1.92	0018	28	142	552	199		3M	Channel	18"	UG Ore
ROO8	47	3.28	0121	16	195	55.3	81		3M	Channel	24"	UG Ore
ROO9	<5	3.47	0008	19	42.4	82.2	2350		3M	Channel	12"	UG Ore
RO10	23	1.03	0005	6	218	193	106		3M	Channel	12"	UG Ore
RO11	<2	1.04	0019	19	137	88.4	38		3M	Channel	12"	UG Ore
RO12	25	0.11	0017	1	199	55	324		3M	Channel	12"	UG Ore
RO13	12	4.04	0011	37	106	59.5	877		3M	Channel	60"	Outcrop of Ore
RO14	<20	3.57	0017	82	152	203	>10000	1.85	3M	Channel	60"	Outcrop of Ore
RO15	26	1.97	0006	89	57.5	117	1530		3M	Channel	48"	Outcrop of Ore
RO16	14	7.81	0006	52	129	44	67		3M	Channel	48"	Outcrop of Ore
RO17	63	2.99	0013	57	34.8	647	52		3M	Channel	48"	Outcrop of Ore
RO18	21	1.75	0007	51	37.8	287	119		3M	Channel	48"	Outcrop of Ore
RO19	6	0.12	0003	27	19.1	23.7	15		3M	Outcrop		
RO39	<30	3.85	0025	45	72.8	359	>10000	4.94	3M	Channel	12"	UG Ore
RO40	<20	1.31	0006	78	103	18.6	>10000	2.88	3M	Channel	3"	UG Ore
RO41	<120	0.76	0013	73	66.8	1230	>10000	15.20	3M	Channel	8"	UG Ore
Average:							12,084.6			tot:	515"	
Weighted Avg:							2,426.3					

Source: Keith presentation (2006)

Table 7-3 Example of assay data for Jewel Anne mine and neighboring tungsten prospects

Analyte Symbol	Au	Ag	Jacobs Cu	Mo	Zn	Bi	W	W				
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%				
Detection Limit	2	0.05		1	0.5	0.1	1	0.001				
Analysis Method	INAA	MULT INAA/TD-ICP/TD-MS		MULT INAA / TD-ICP	MULT INAA/TD-ICP/TD-MS	MULT TD-ICP/TD-ICP-MS	INAA	INAA	Mine	Type	Channel Length	Ore
RO20	48	5.52	0.003	27	72.1	3.3	4380		JA	Channel		UG Ore
RO21	18	2.1	0.002	15	410	13.5	2540		JA	Channel	32"	UG Ore
RO23	32	2.3	0.005	15	167	356	540		JA	Channel	66"	UG Ore
RO23-HG	<10	2.2	0.012	24	31.2	184	9180		JA	Channel	3"	HG Ore
RO24	32	3.82	0.003	19	189	35	1450		JA	Channel	36"	UG Ore
RO25	<10	1.51	0.003	14	199	6.2	6000		JA	Channel	2"	HG Ore
RO26	<80	1.45	0.003	34	152	12.9	>10000	9.66	JA	Channel	2"	HG Ore
RO27	<80	4.3	0.004	22	13.2	44.5	>10000	9.12	JA	Channel	2"	HG Ore
RO28	<30	2.85	0.016	245	32.5	70.2	>10000	2.97	JA	Channel	2"	HG Ore
Average:							2,684.3			tot:	145"	
Weighted Avg:							4,439.0					
RO29	<30	0.06	0.004	208	9.2	2.6	>10000	3.88	PW	Channel	2"	HG Ore
RO36	<3	2.49	0.005	27	25	17.4	2430		PW	Channel	1"	HG Ore
RO37	<70	0.28	0.004	81	7.5	1.3	>10000	7.57	PW	Channel	2"	HG Ore
Average:							38,976.7			tot:	5"	
Weighted Avg:							46,286.0					
RO30	33	0.42	0.073	116	215	5.8	227			Outcrop		
RO31	5	0.17	0.015	52	57.5	3.1	141			Outcrop		
RO32	45	2.96	0.009	83	20	75.1	1610			Channel		HG Ore
RO33	<15	0.96	0.009	48	14.9	23.4	9820			Channel		HG Ore
RO34	150	18.6	0.018	97	33.6	591	206					
RO38	<25	2.61	0.037	179	22.7	51.2	>10000	3.04		Channel	3"	Adit Ore
RO43	<5	8.44	0.418	17	20.3	86.9	4680		Ace		18"	Copper Prospect
RO48	<2	0.33	0.009	< 1	63.3	6.6	420					
Average:							11,833.3			tot:	21"	
Weighted Avg:							8,354.3					
Total Average:							25,884.4			grand tot:	171"	
Total Weighted Avg:							6,143.5					

Source: Keith presentation (2006)

8. DRILLING

Section 8 provides information on the type and extent of the drilling completed to date, methods used, and an interpretation of results.

8.1 Type and Extent

Coupal (1944, 1950) mentions underground drill holes in the Yuma King mine; however, the results of this drilling are unavailable. There are no surface drill holes known to have been drilled on the property by previous operators prior to 2006 (Russell, 2005).

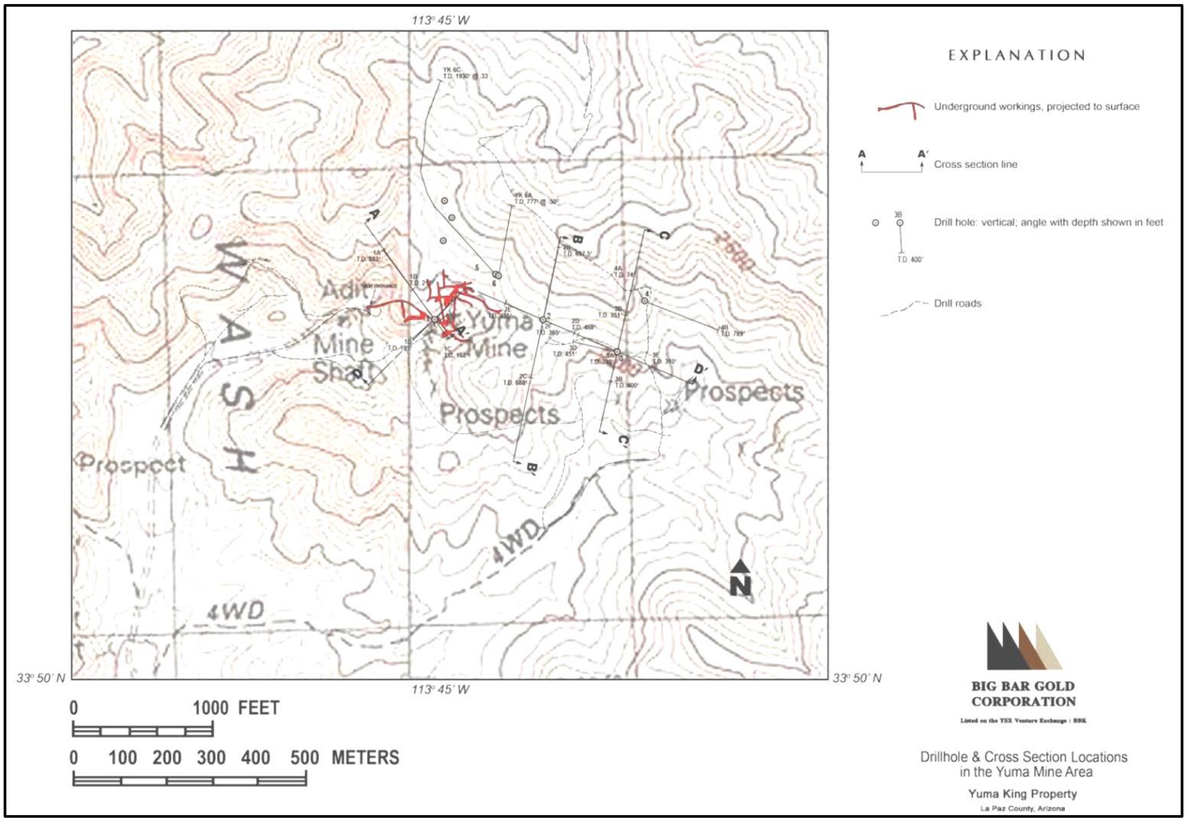
In 2006, Big Bar conducted a Phase 1 drill program consisting of 19 diamond drill holes on six drill sites with several angled drill holes from each site. The 19 core drill holes tested over 10,800 ft and reported extension down dip and along strike of the copper-magnetite skarn in the area surrounding the historic Yuma mine. Locations and details of the drill holes are shown in Figure 8-1 and Table 8-1.

In 2009-2011 VANE drilled two diamond drill holes, AV1 to a total depth of 1,677 ft and AV2 to a total depth of 525 ft. VANE drilled AV1 to the northeast of the previous drilling and AV2 to the southwest of the previous drilling in the center of a magnetic low at UTM coordinates 246070 Easting and 3745910 Northing.

Table 8-1 Yuma King drill hole collars, total depths and survey data

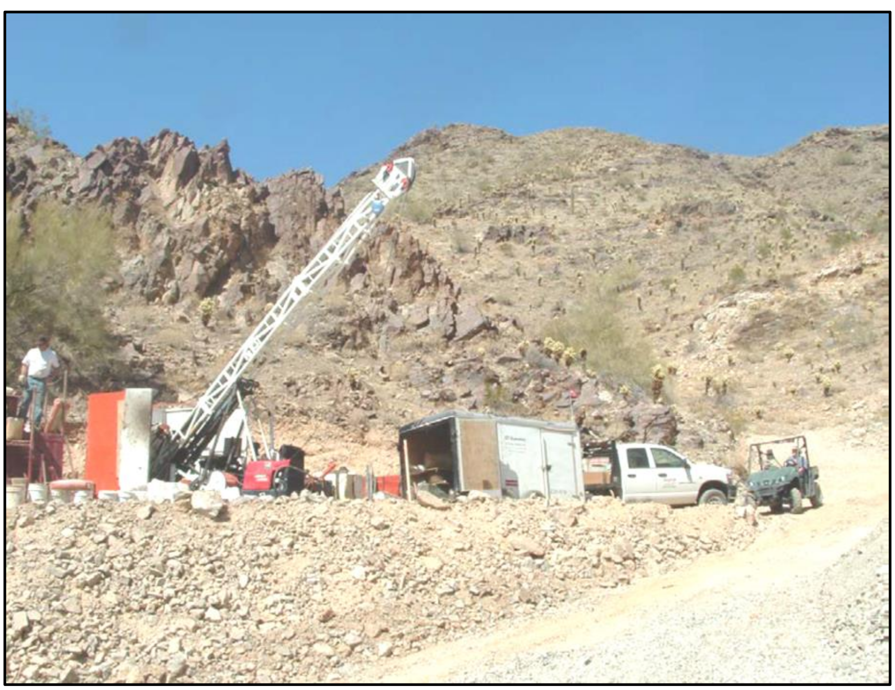
Drill hole	E_NAD27	N_NAD27	ELEV	Depth (ft)	Azimuth (raw)	Azimuth (corrected)	Dip	Total Deph (ft)
YK-01A	245,588	3,747,681	2122	**0**		320	45	
YK-01A	245,588	3,747,681	2122	420	311	323.5	47	
YK-01A	245,588	3,747,681	2122	600	313	325.5	48.75	
YK-01A	245,588	3,747,681	2122	800	313	325.5	49	883
YK-01B	245,589	3,747,680	2122	0		320	70	
YK-01B	245,589	3,747,680	2122	200	314	326.5	69	217
YK-01C	245,588	3,747,680	2122	0		230	60	
YK-01C	245,588	3,747,680	2122	160	219	231.5	60	168
YK-01D	245,590	3,747,679	2122	0		140	45	
YK-01D	245,590	3,747,679	2122	185	126	138.5	44	193
DH YK-02A	245,824	3,747,680	2325	0		0	90	
YK-02A	245,824	3,747,680	2325	200		0	89.5	465
YK-02B	245,824	3,747,681	2325	0		10	60	
YK-02B	245,824	3,747,681	2325	590	6	18.5	57	697
YK-02C	245,824	3,747,679	2325	0		190	50	
YK-02C	245,824	3,747,679	2325	200	181	193.5	48	
YK-02C	245,824	3,747,679	2325	400	182	194.5	46.5	
YK-02C	245,824	3,747,679	2325	600	183	195.5	44	688
YK-02D	245,825	3,747,680	2325	0		100	60	
YK-02D	245,825	3,747,680	2325	400	94	106.5	60	468
YK-02E	245,823	3,747,680	2325	0		280	50	
YK-02E	245,823	3,747,680	2325	203	274	286.5	49	
YK-02E	245,823	3,747,680	2325	400	276	288.5	50	455
YK-03A	245,965	3,747,580	2228	0		0	90	

Drill hole	E_NAD27	N_NAD27	ELEV	Depth (ft)	Azimuth (raw)	Azimuth (corrected)	Dip	Total Deph (ft)
YK-03A	245,965	3,747,580	2228	200	197	209.5	89.5	
YK-03A	245,965	3,747,580	2228	390	167	179.5	88.5	398
YK-03B	245,965	3,747,581	2228	0		10	45	
YK-03B	245,965	3,747,581	2228	200	356	8.5	44	
YK-03B	245,965	3,747,581	2228	345	357	9.5	44	351
YK-03C	245,965	3,747,579	2228	0		190	60	
YK-03C	245,965	3,747,579	2228	200	177	189.5	59.5	
YK-03C	245,965	3,747,579	2228	395	178	190.5	59	400
YK-03D	245,964	3,747,580	2228	0		280	45	
YK-03D	245,964	3,747,580	2228	200	269	281.5	42	
YK-03D	245,964	3,747,580	2228	400	277	289.5	41.25	461
YK-03E	245,966	245,966	2228	0		100	45	310
YK-03E	245,966	245,966	2228	200	114.5	127	44	
YK-04A	246,060	3,747,671	2325	0		0	90	
YK-04A	246,060	3,747,671	2325	200	207	219.5	88.5	
YK-04A	246,060	3,747,671	2325	400	100	112.5	88.5	
YK-04A	246,060	3,747,671	2325	600	41	53.5	89	744.5
YK-04B	246,064	37477667	2325	0		90 ?	45	
YK-04B	246,064	37477667	2325	180	71	83.5	42	
YK-04B	246,064	37477667	2325	380	75	87.5	42	
YK-04B	246,064	37477667	2325	580	76	88.5	41.5	
YK-04B	246,064	37477667	2325	780	76	88.5	41	786
YK-06A	245,724	3,747,751	2270	0		0	50	
YK-06A	245,724	3,747,751	2270	230	6	18.5	48	
YK-06A	245,724	3,747,751	2270	401	9	21.5	48.5	
YK-06A	245,724	3,747,751	2270	600	9	21.5	50	
YK-06A	245,724	3,747,751	2270	777	9.5	22	48	777
YK-06B	245,724	3,747,750	2270	0		0	90	
YK-06B	245,724	3,747,750	2270	203	111	123.5	88	388
YK-06C	245,723	3,747,751	2270	0		315	45	
YK-06C	245,723	3,747,751	2270	413	304	316.5	43	
YK-06C	245,723	3,747,751	2270	600	306	318.5	40	
YK-06C	245,723	3,747,751	2270	1000	312.5	325	36	
YK-06C	245,723	3,747,751	2270	1200	??		34	
YK-06C	245,723	3,747,751	2270	1400	2	14.5	32.5	
YK-06C	245,723	3,747,751	2270	1600	356	368.5	33	
YK-06C	245,723	3,747,751	2270	1800	12	24.5	33	1935
Big Bar subtotal								10,785
AZ11-01					90	Vertical		1306
AZ11-02					90	Vertical		525
VANE subtotal								1,831
Total								**12,616**



Source: Keith (2011)

Figure 8-1 Map of Big Bar drill hole locations and cross section lines



Source: Keith (2011)

Figure 8-2 Drill rig at Site 2 in 2006

The AV11-01 (also called AV-1) core hole drilled by Brown Drilling for VANE Resources tested the concept that the mineralization extended northward of the known drilled area for more than 1000 feet beneath the tectonic concealment provided by the barren thrust plate above the post-mineral Black Jack thrust. This drillhole confirmed the presence of a concealed porphyry copper system in the hanging wall of the higher grade copper skarn. The skarn had been explored in its up-dip portions by historic workings in the Yuma Mine in the 1940s and 1950s. The skarn was confirmed to have extended to the east by a drilling program conducted by Big Bar Resources in 2006.

8.2 Procedures

Drilling was conducted in 2006 by Major Drilling of Salt Lake City, Utah, and consisted of vertical and angled HQ diamond drill coring. The drill core was photographed, logged, and sampled in a secure, locked storage area in Parker, Arizona (Figure 8-3). The geologist noted rock type, structure, alteration, oxidation, and mineralization in each sample. One-half the sample interval was collected for sample analysis. Samples were predominantly 5 ft in length but range from 1 to 10 ft. Analyses were performed by Jacobs Laboratory in Tucson, Arizona and by ALS Chemex in Sparks, Nevada by a variety of methods. For the major elements (Au, Ag, Cu, Mo, W, Pb, and Zn), reanalysis of selected intervals was completed at a different method at lower or higher reporting limits as necessary to analyze low- and high-grade samples. Table 8-2 summarizes the sample results and tabulates the number of samples available for each element.

SRK plotted the results of copper versus gold analyses by rock type and by drillhole as shown in Source: SRK (2011)

Figure 8-4 through Figure 8-22. Dolomite, dolomite skarn, and marble skarn show the highest intensity of both copper and gold mineralization.

Source: SRK (2011)

Figure 8-3 Storage of drill core from Yuma King drilling at Parker, Arizona

Table 8-2 Summary of sample results from Big Bar 2006 drilling

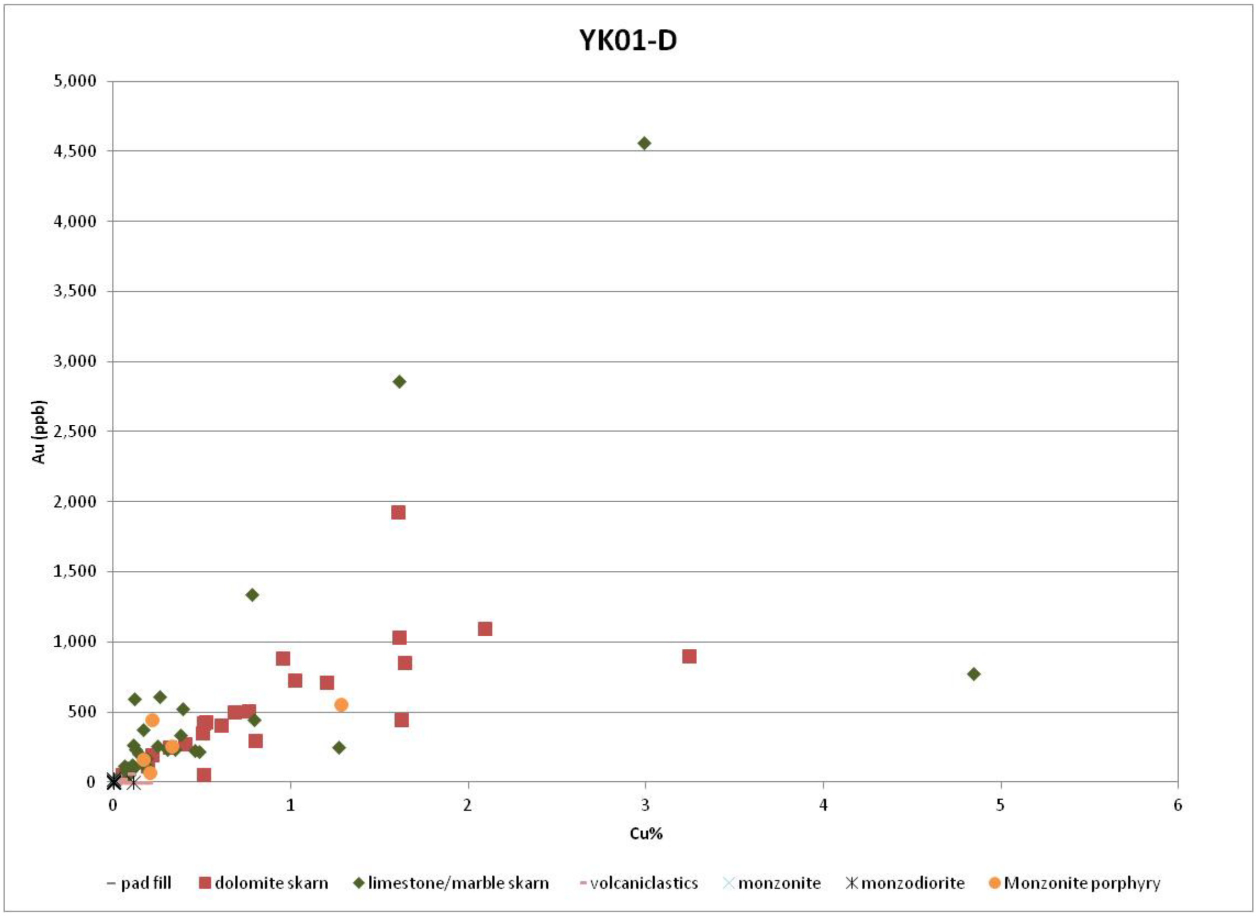
Hole ID	Total Depth (ft)	Total # of Samples	# Au Analyses above Detection ALS 2 ppb	# Ag Analyses above Detection (ALS) 0.05 ppm	# Cu Analyses above Detection Jacob	# Mo Analyses above Detection (ALS) 1 ppm	# Cu Analyses below background <0.02%	# Cu Analyses above background >0.02%	# Cu Analyses above 0.2% Cu
YK01-A	786	131	78	85	131	120	45	72	38
YK01-B	146.5	34	34	34	34	34	2	32	24
YK01-C	118	23	22	22	22	23	3	20	19
YK01-D	167	44	41	41	44	43	9	35	28
YK02-A	465	103	66	80	103	102	58	68	0
YK02-B	697.5	152	118	130	152	145	64	88	2
YK02-C	688	152	79	108	152	150	100	51	0
YK02-D	468	117	96	107	117	111	65	52	1
YK02-E	455	104	64	60	104	91	76	27	0
YK03-A	398	88	64	71	88	82	32	50	9
YK03-B	351	85	81	84	85	81	12	73	9
YK03-C	400	85	50	63	84	84	51	34	3
YK03-D	467	111	88	102	111	108	26	85	12
YK03-E	310	78	63	78	78	77	6	74	10
YK06-A	809	174	118	110	174	108	38	76	3
YK06-B	786	193	141	171	193	169	84	109	11
YK06-C	777	87	41	57	87	87	74	13	0
YK04-A	383	83	62	58	83	71	51	32	1
YK04-B	1935	207	51	16	204	200	203	4	0
VANE AV1	1677	24	Not analyzed	10	24	17	17	7	1
VANE AV2		0	Not analyzed	Not analyzed	Not analyzed	Not analyzed	Not analyzed	Not analyzed	Not analyzed
Total	**12,284**	**2075**	**1357**	**1477**	**2047**	**1900**	**1015**	**1002**	**171**

Source: SRK, 2011; compiled from drillhole assay data; VANE results from Aven Associates, LLC

Table 8-3 Copper, gold, and silver assays for oxidized replacement/skarn mineralization at drill site YK-01

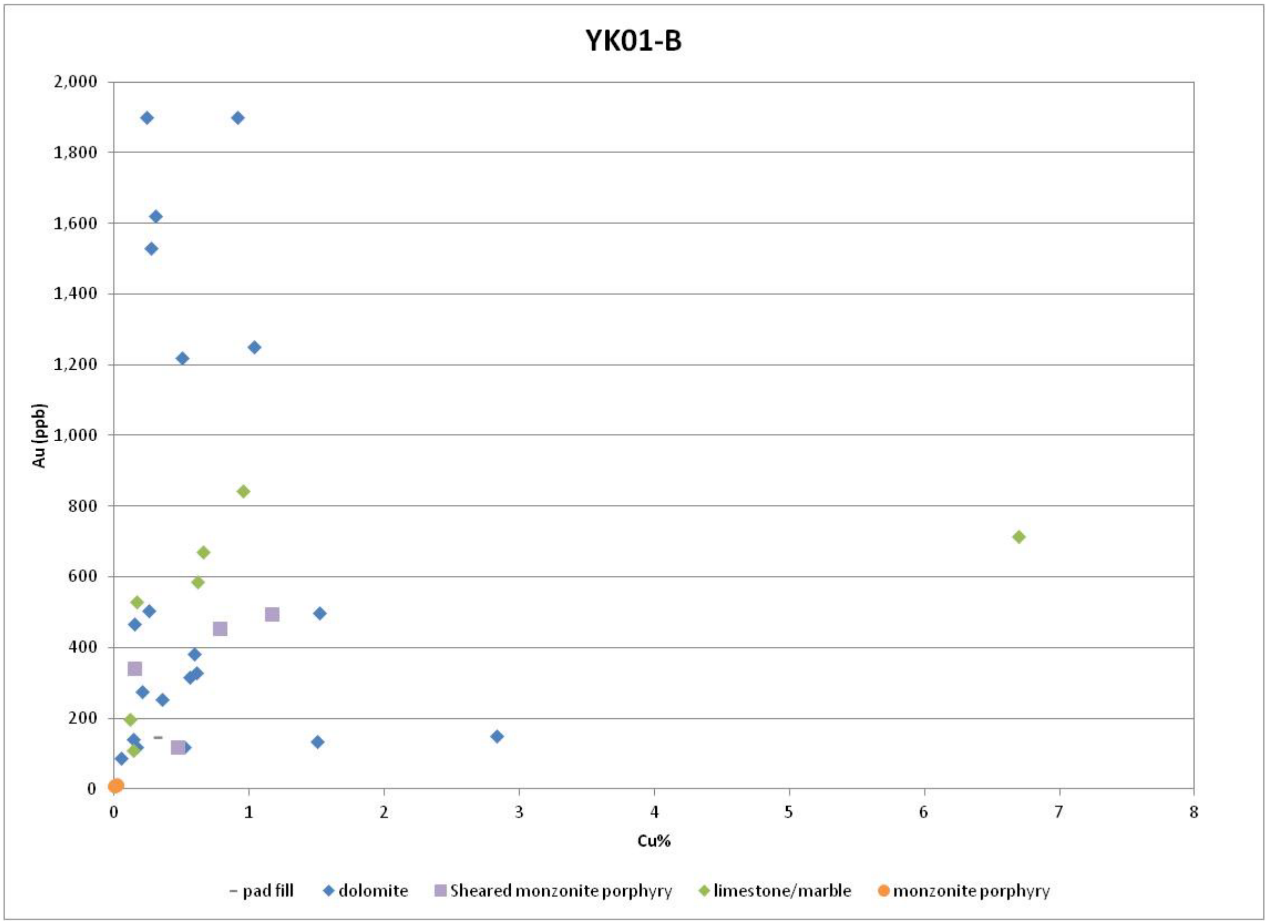
Drill Hole Dip, Angle. Length, Bearing	From – To (Feet)	Intercept Thickness (Feet)	True Thickness (Feet)	Au Grams/ tonne	Ag Grams /tonne	% Cu
YK01-A (-45°; 883 ft; N40°W)	**0.0-170.0**	**170.0**	**80.0**	**0.477**	**5.57**	**0.70**
Including	*53.0-76.0*	*23.0*	*11*	*0.760*	*4.20*	*1.67*
	101.5-108.0	*6.5*	*3*	*1.237*	*7.27*	*1.61*
	121.0-143.0	*22.0*	*10*	*0.819*	*14.749*	*0.78*
	147.5-164.0	*16.5*	*8*	*0.954*	*19.15*	*1.10*
Which includes	*157-157.5*	*.5*		*4.56*	*37.9*	*2.992*
	15.7.5-159.5	*2.0*		*2.86**	*40.9*	*1.611*
	178.0-233.0	**55.0**	**26**	**0.273**	**5.05**	**0.22**
YK01-B (-70°; 217 ft; N40°W)	**0.0-138.0**	**138.0**	**105.0**	**0.467**	**3.37**	**0.58**
Including	*95.0-128.0*	*33.0*	*25*	*1.205*	*6.90*	*0.95*
Which includes	*98-103*	*5*		*1.9*	*9.49*	*.242*
YK01-C (-60°; 168 ft; S50°W)	**19.5 to 99.5**	**80.0**	**75**	**0.478**	**5.05**	**0.74**
Including	*72.5-95.5*	*23.0*	*21*	*0.8232*	*12.76*	*1.28*
Which includes	*93-95.5*	*2.5*		*.737*	*47.8*	*3.124*
YK01-D (-45°; 193 ft; S40°E)	**22.0 to 123.0**	**101.0**	**95**	**0.564**	**48.03**	**0.55**
Including	*68.0-83.0*	*15.0*	*14*	*0.8575*	*10.6*	*1.29*
	110.0-123.0	*13.0*	*12*	*1.390*	*352.5*	*0.74*
Which includes	*120-123*	*3.0*		*1.89*	*1510***	*0.45*
Or	*68.0-123.0*	*55.0*	*52*	*0.824*	*87.64*	*0.76*

Notes:
***Chemex re-assay (by Fire Assay) of a re-split from this interval yielded an 11.95 g/t (.348 oz/ton) gold assay**
**** An ActLabs re-assay (by Fire Assay) of this interval yielded a 1760 g/t (51.3 oz/ton) silver assay**



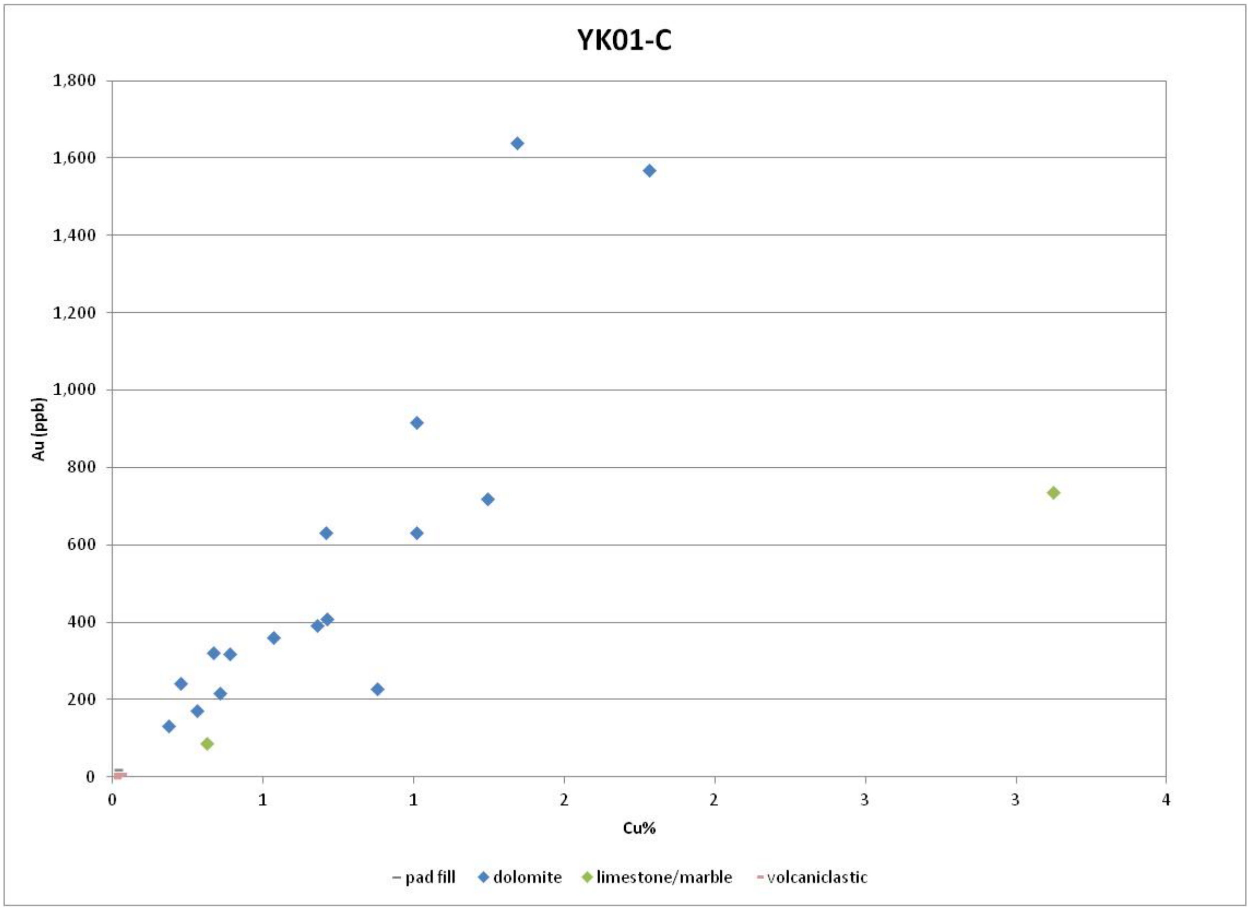
Source: SRK (2011)

Figure 8-4 Drill hole YK01-A, Au (ppb) versus Cu (%) results by rock type



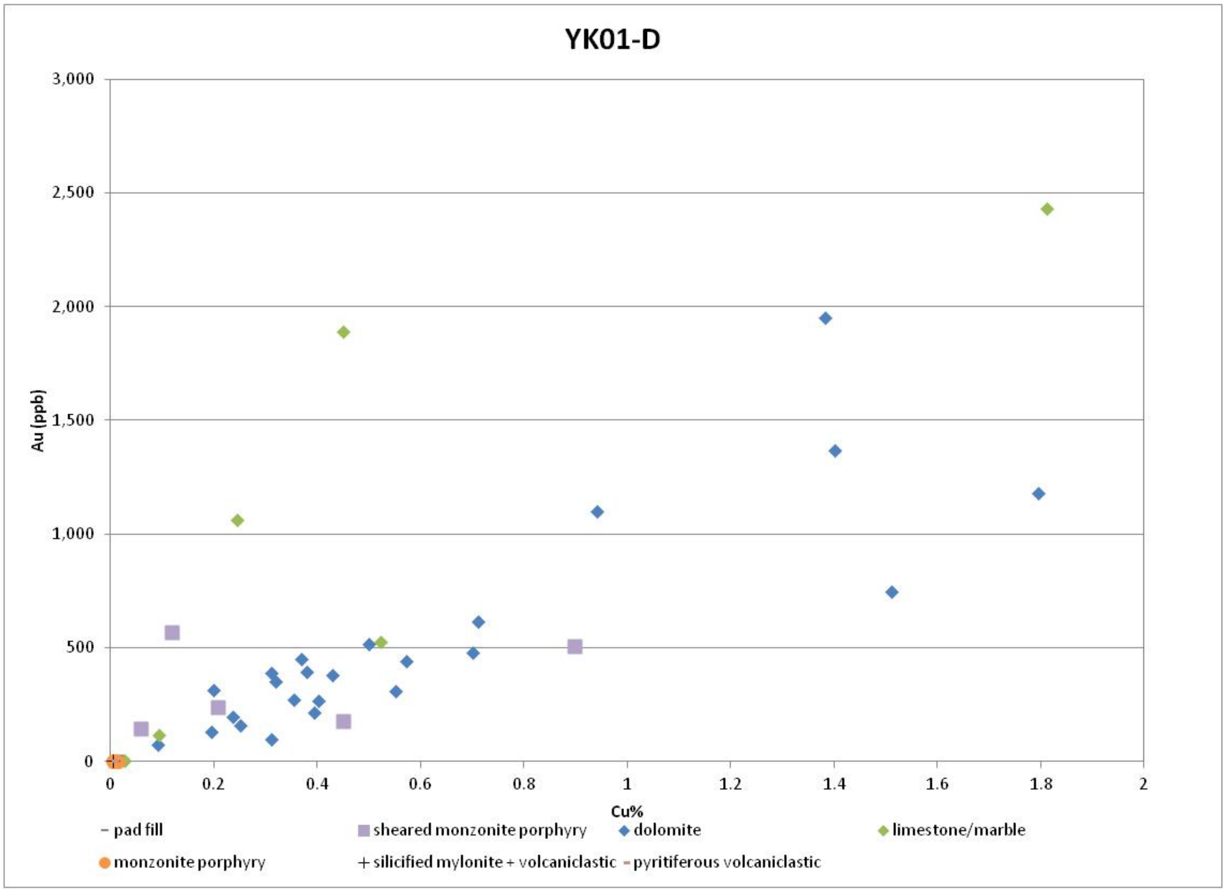
Source: SRK (2011)

Figure 8-5 Drill hole YK01-B, Au (ppb) versus Cu (%) results by rock type



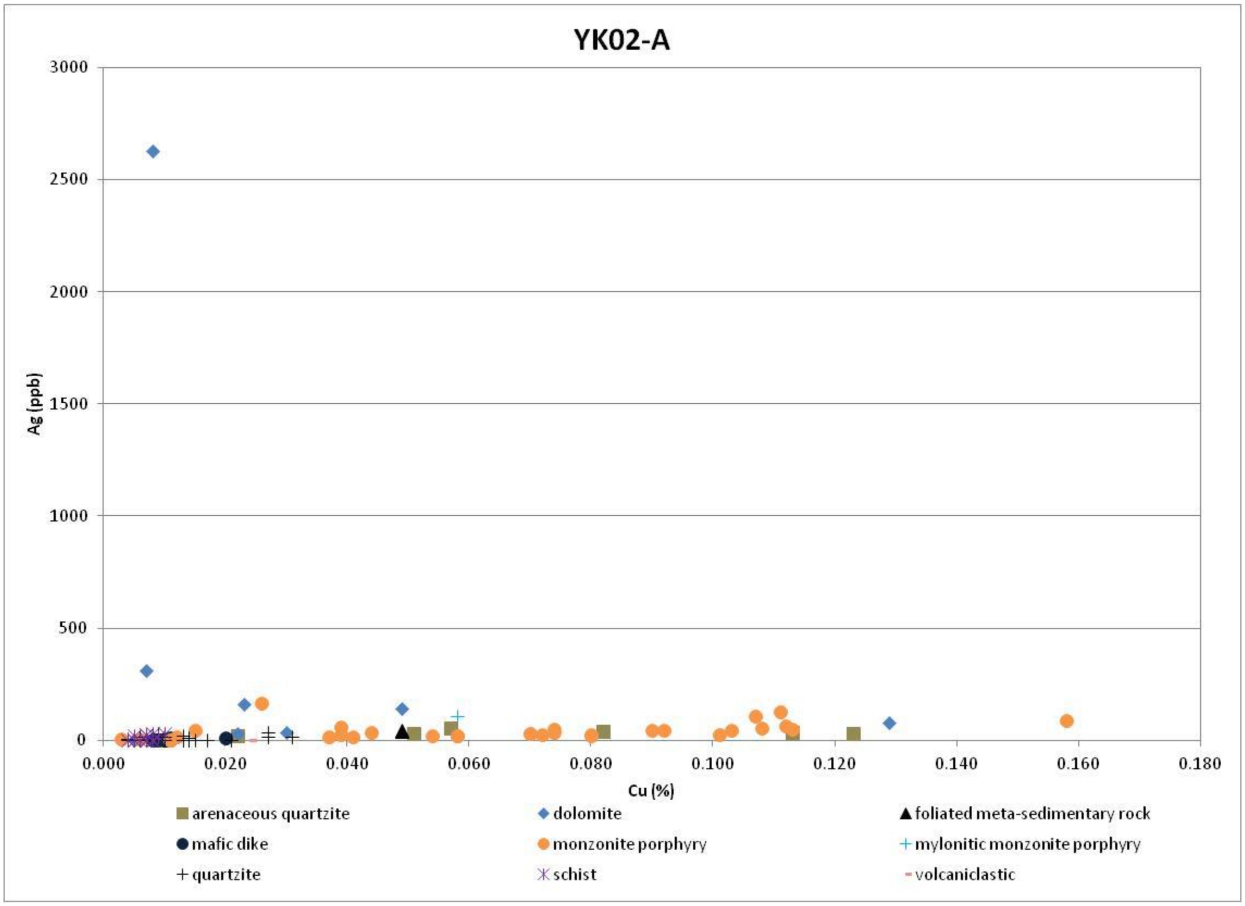
Source: SRK (2011)

Figure 8-6 Drill hole YK01-C, Au (ppb) versus Cu (%) results by rock type



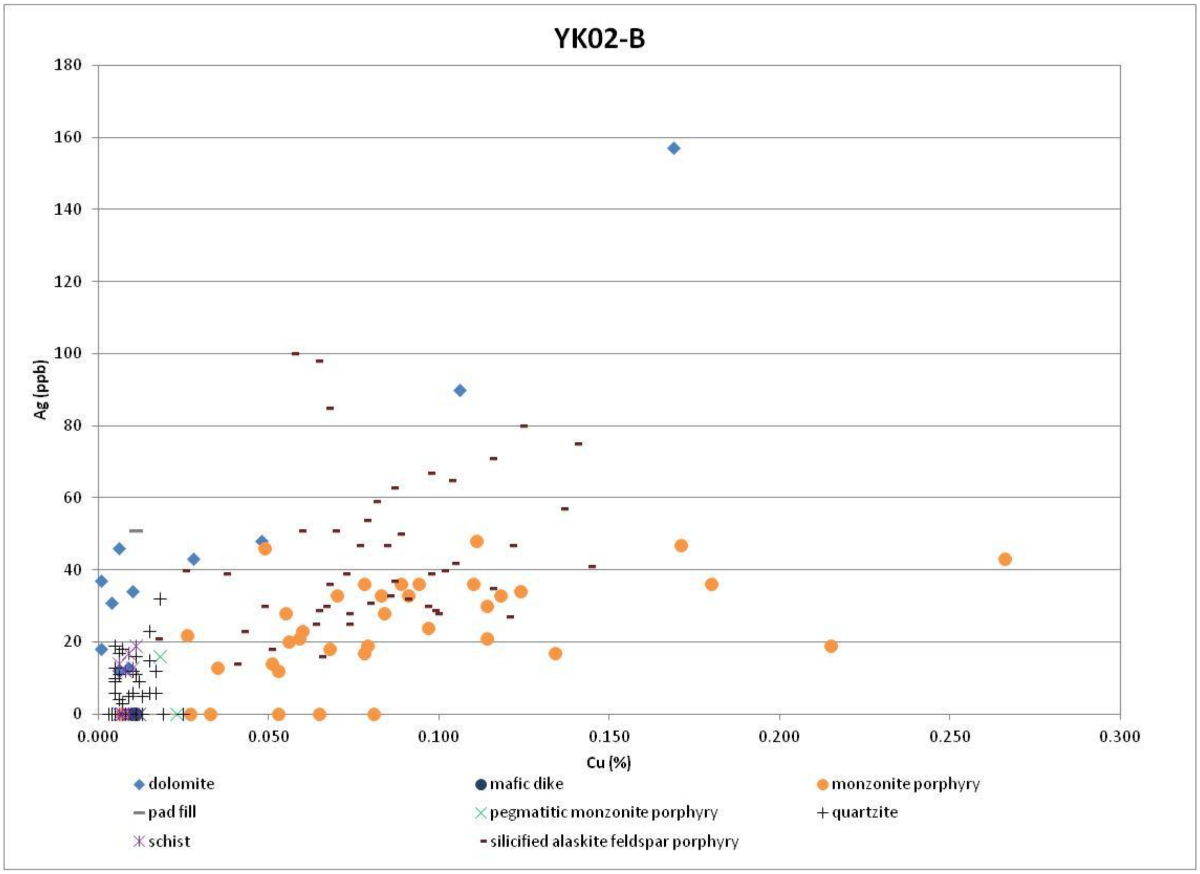
Source: SRK (2011)

Figure 8-7 Drill hole YK01-D, Au (ppb) versus Cu (%) results by rock type



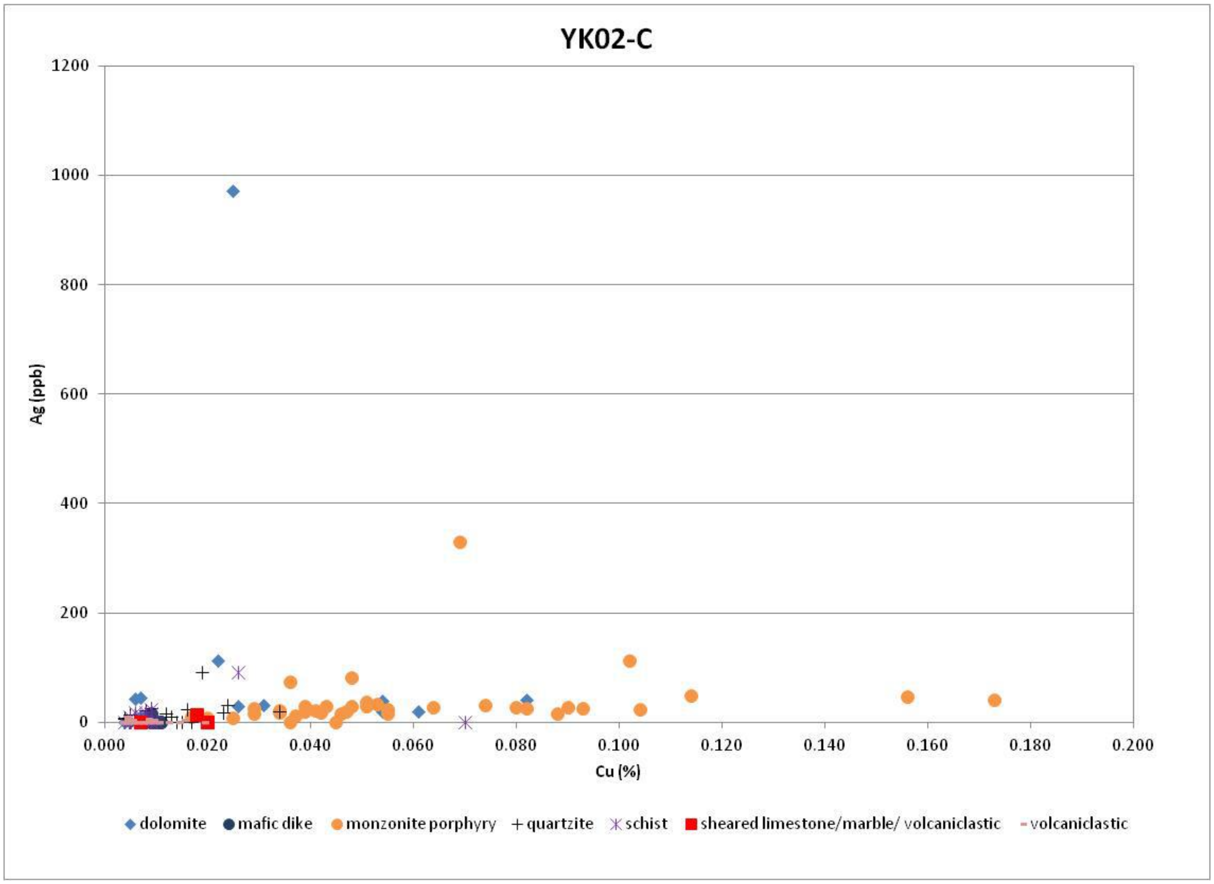
Source: SRK (2011)

Figure 8-8 Drill hole YK02-A, Au (ppb) versus Cu (%) results by rock type



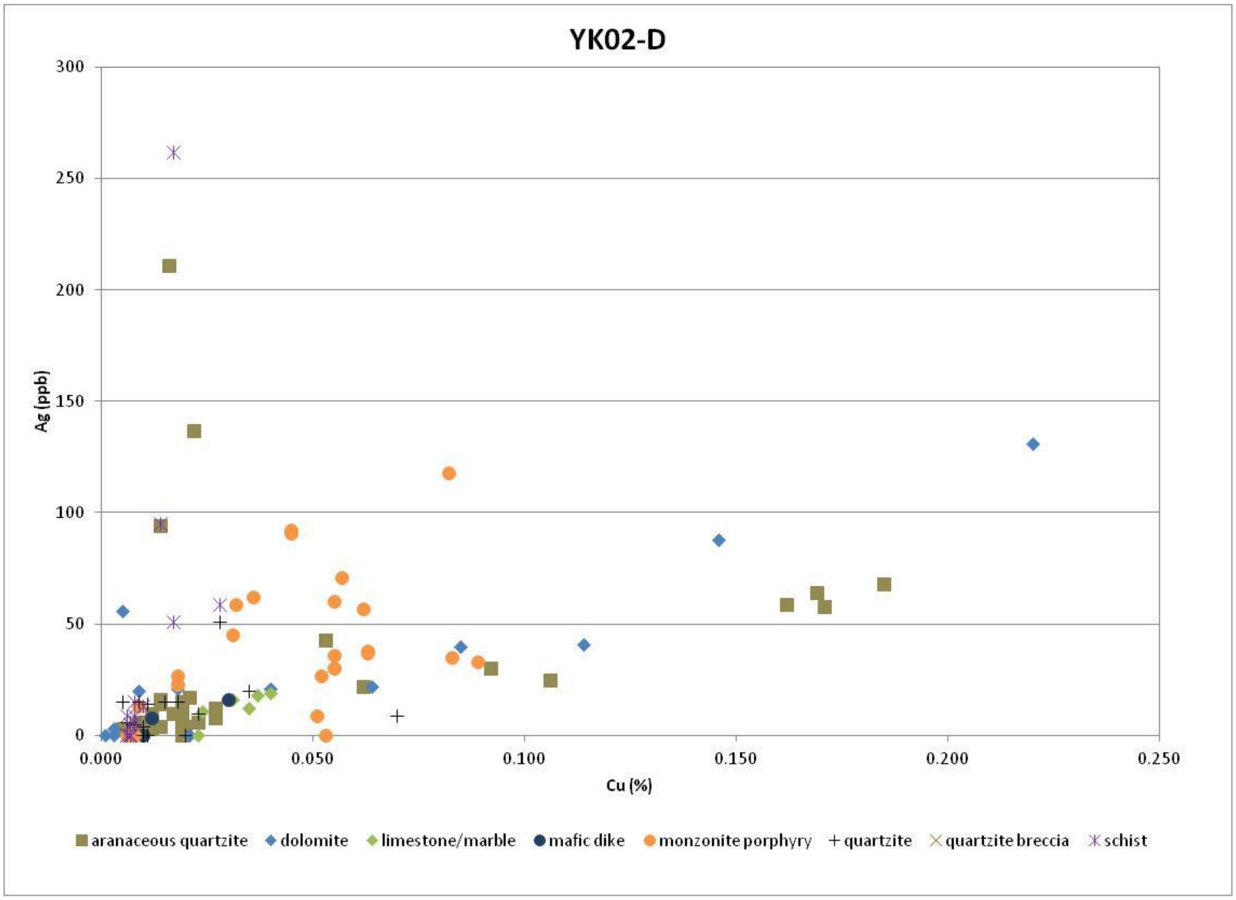
Source: SRK (2011)

Figure 8-9 Drill hole YK02-B, Au (ppb) versus Cu (%) results by rock type



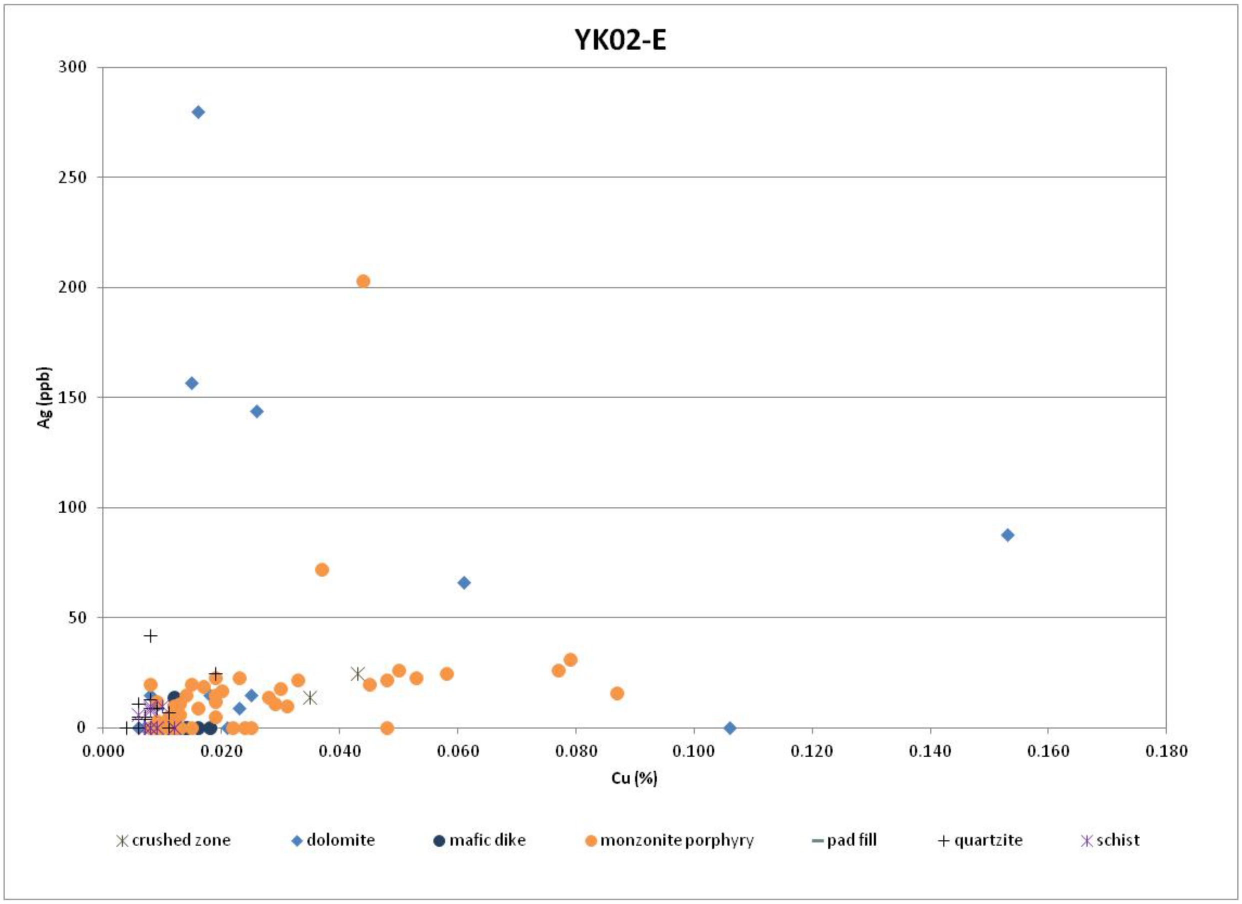
Source: SRK (2011)

Figure 8-10 Drill hole YK02-C, Au (ppb) versus Cu (%) results by rock type



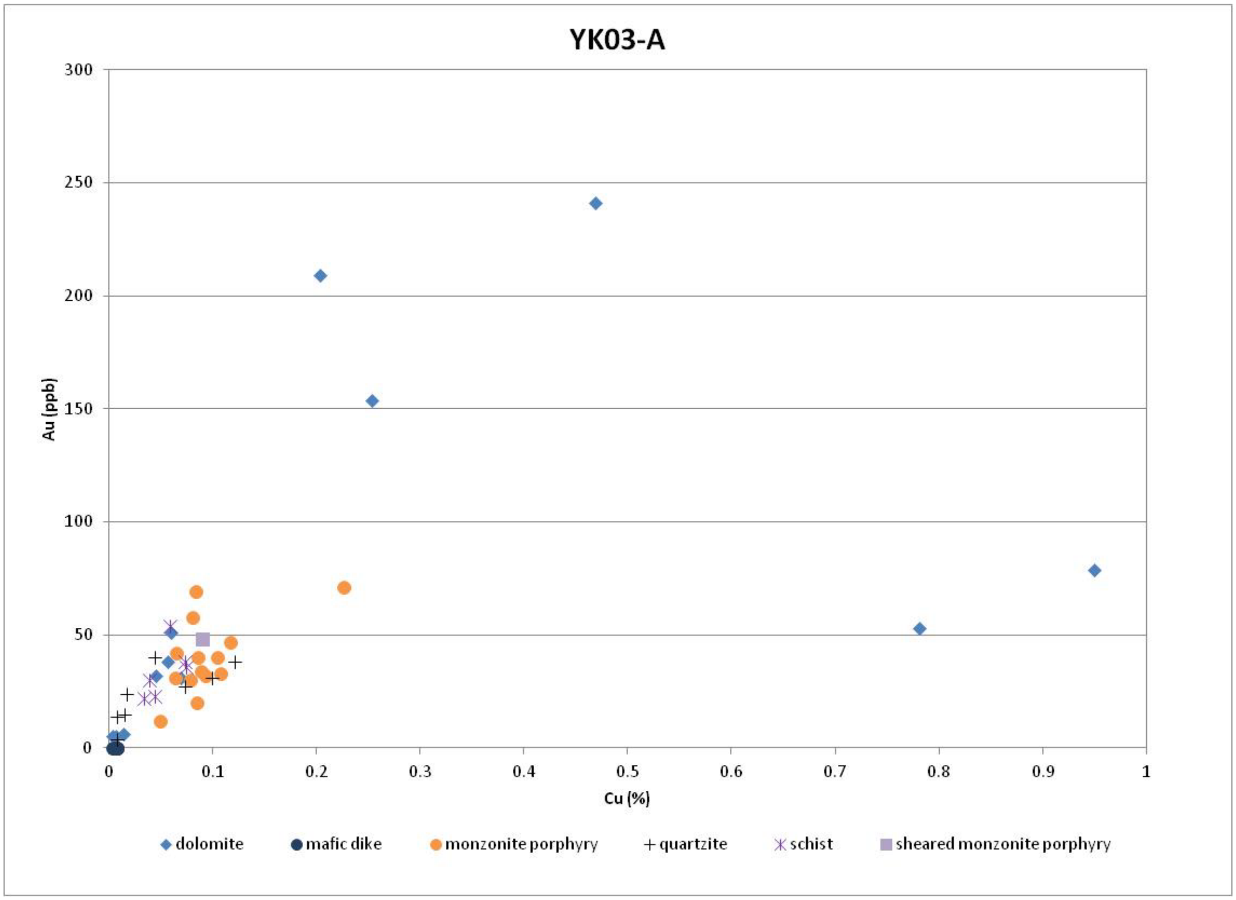
Source: SRK (2011)

Figure 8-11 Drill hole YK02-D, Au (ppb) versus Cu (%) results by rock type



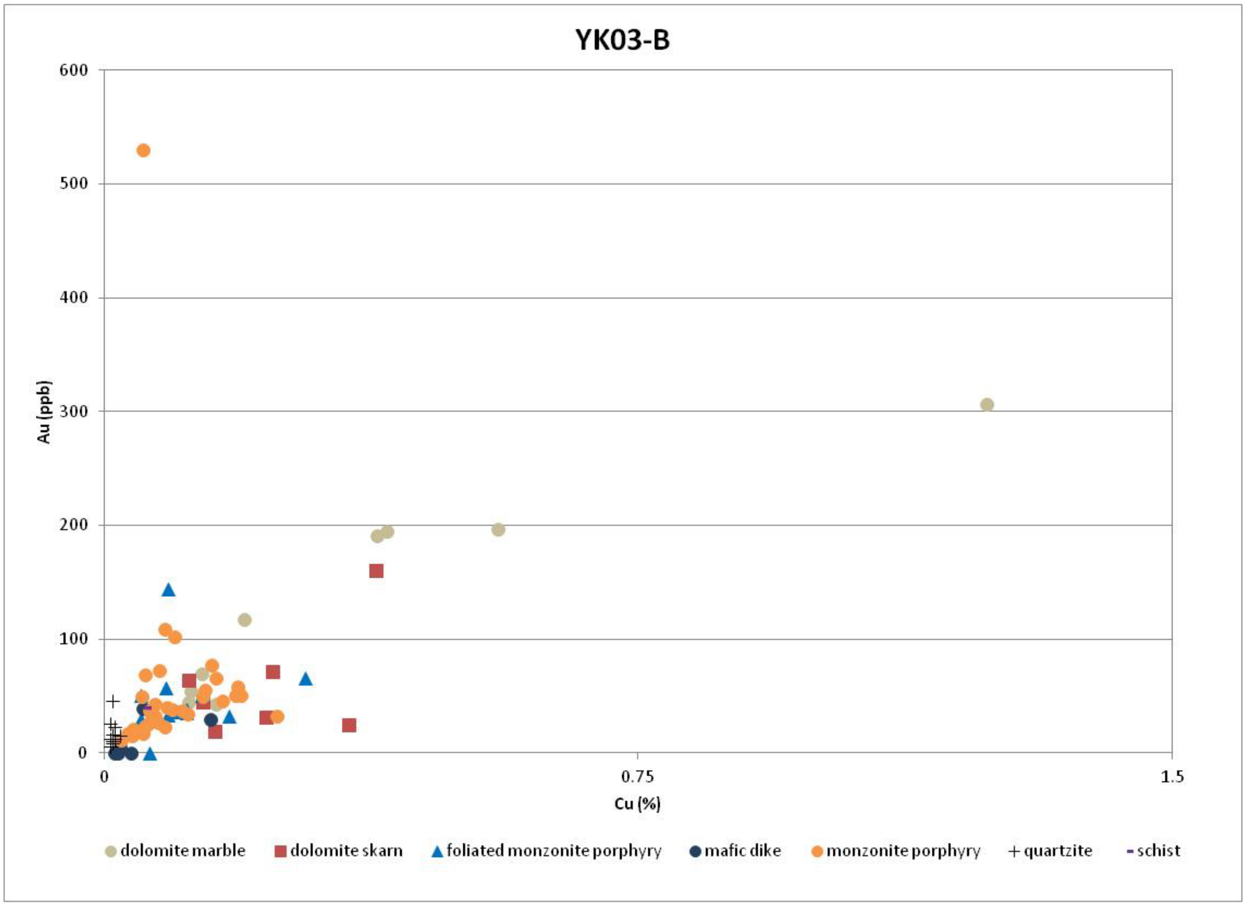
Source: SRK (2011)

Figure 8-12 Drill hole YK02-E, Au (ppb) versus Cu (%) results by rock type



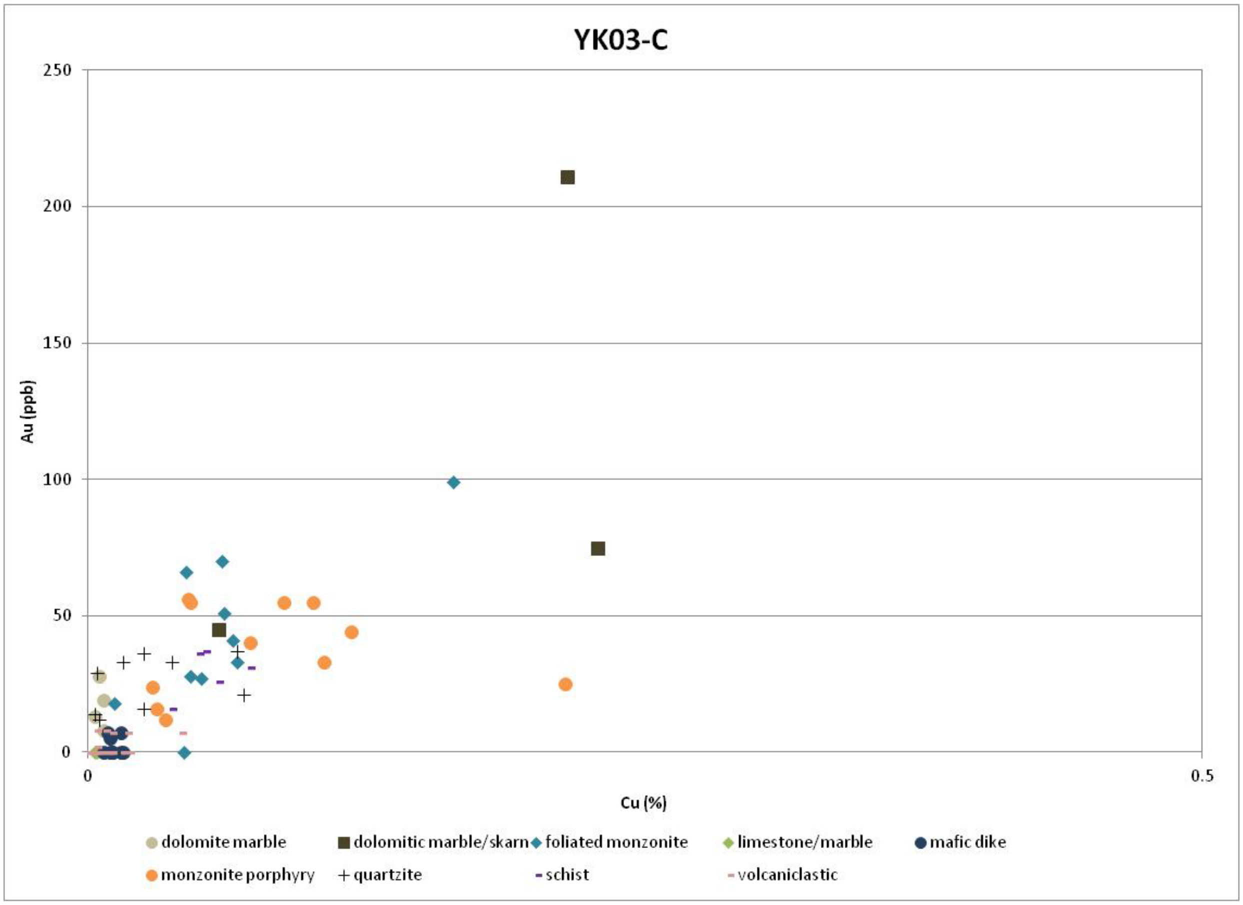
Source: SRK (2011)

Figure 8-13 Drill hole YK03-A, Au (ppb) versus Cu (%) results by rock type



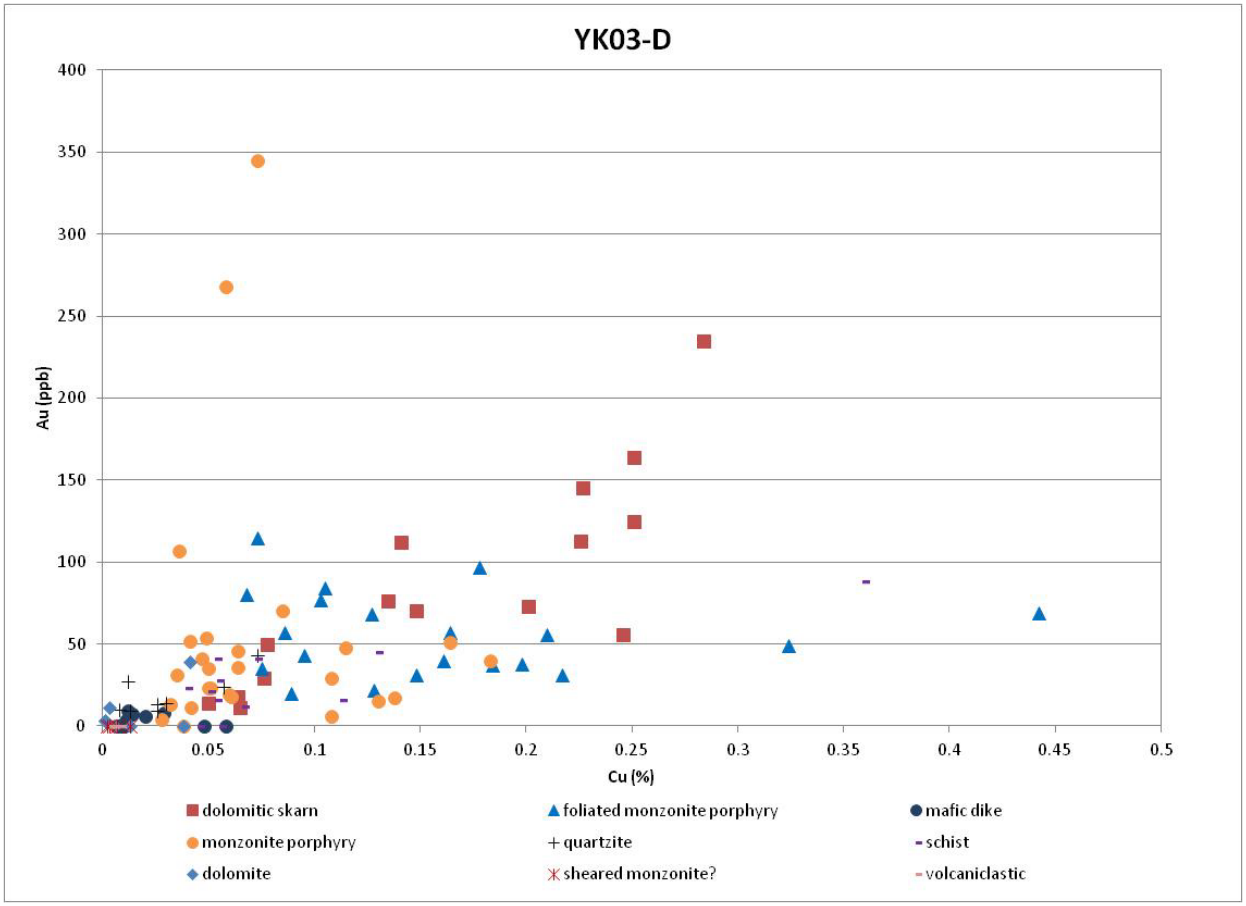
Source: SRK (2011)

Figure 8-14 Drill hole YK03-B, Au (ppb) versus Cu (%) results by rock type



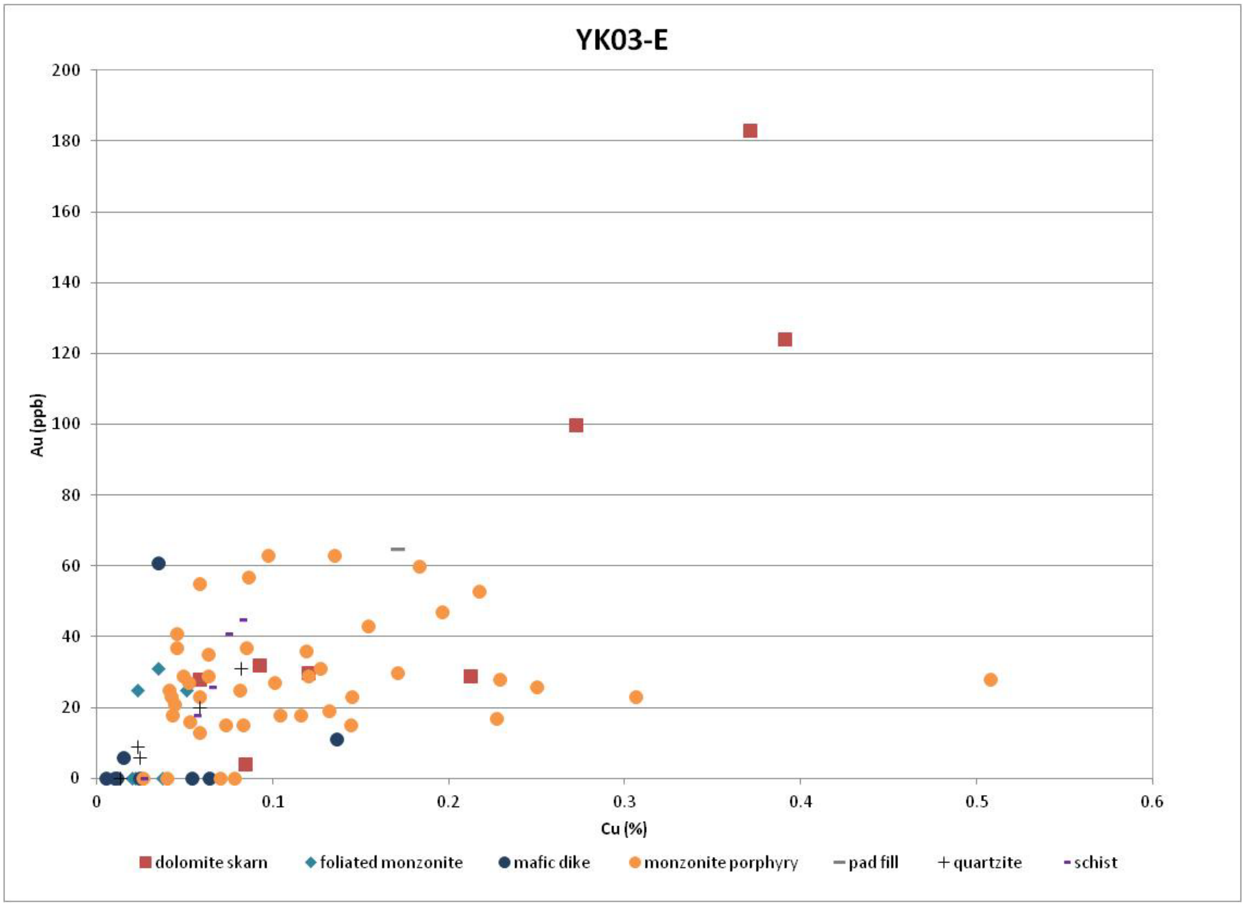
Source: SRK (2011)

Figure 8-15 Drill hole YK03-C, Au (ppb) versus Cu (%) results by rock type



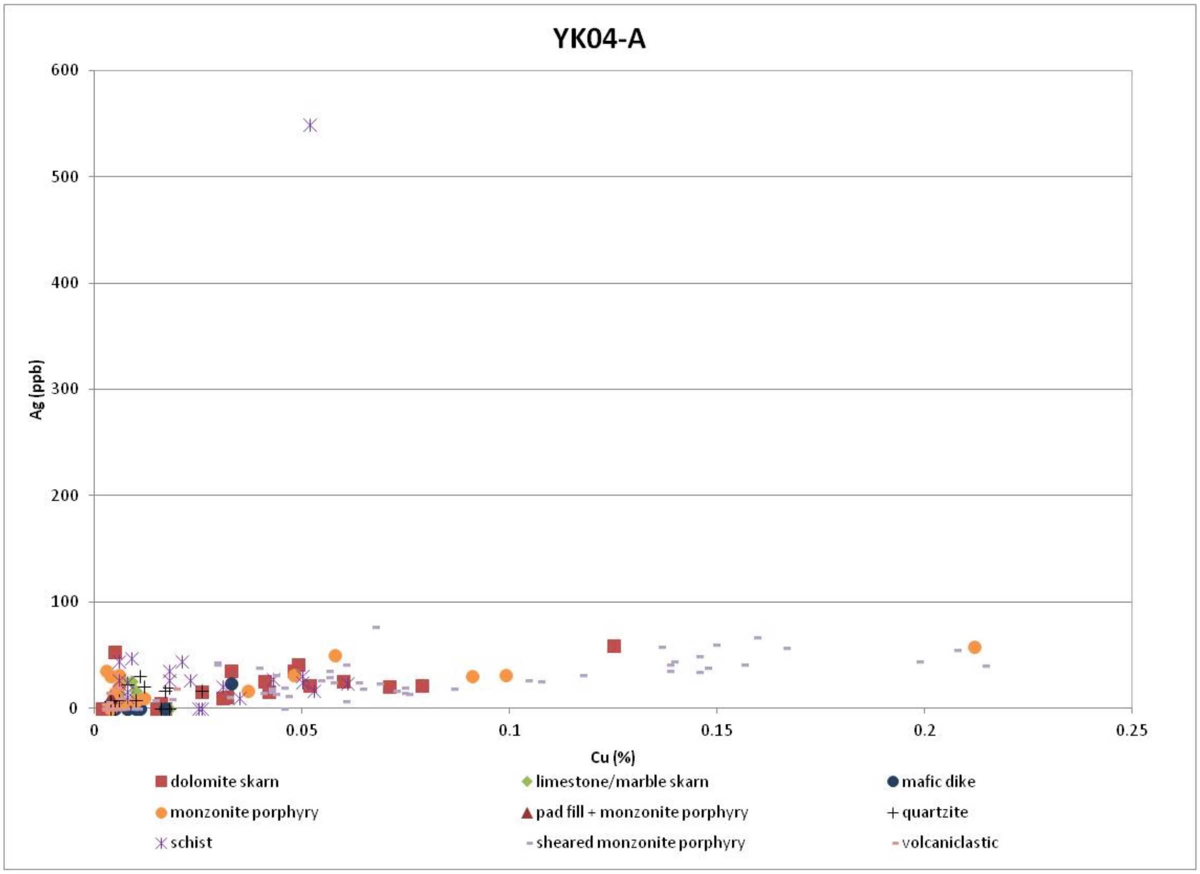
Source: SRK (2011)

Figure 8-16 Drill hole YK03-D, Au (ppb) versus Cu (%) results by rock type



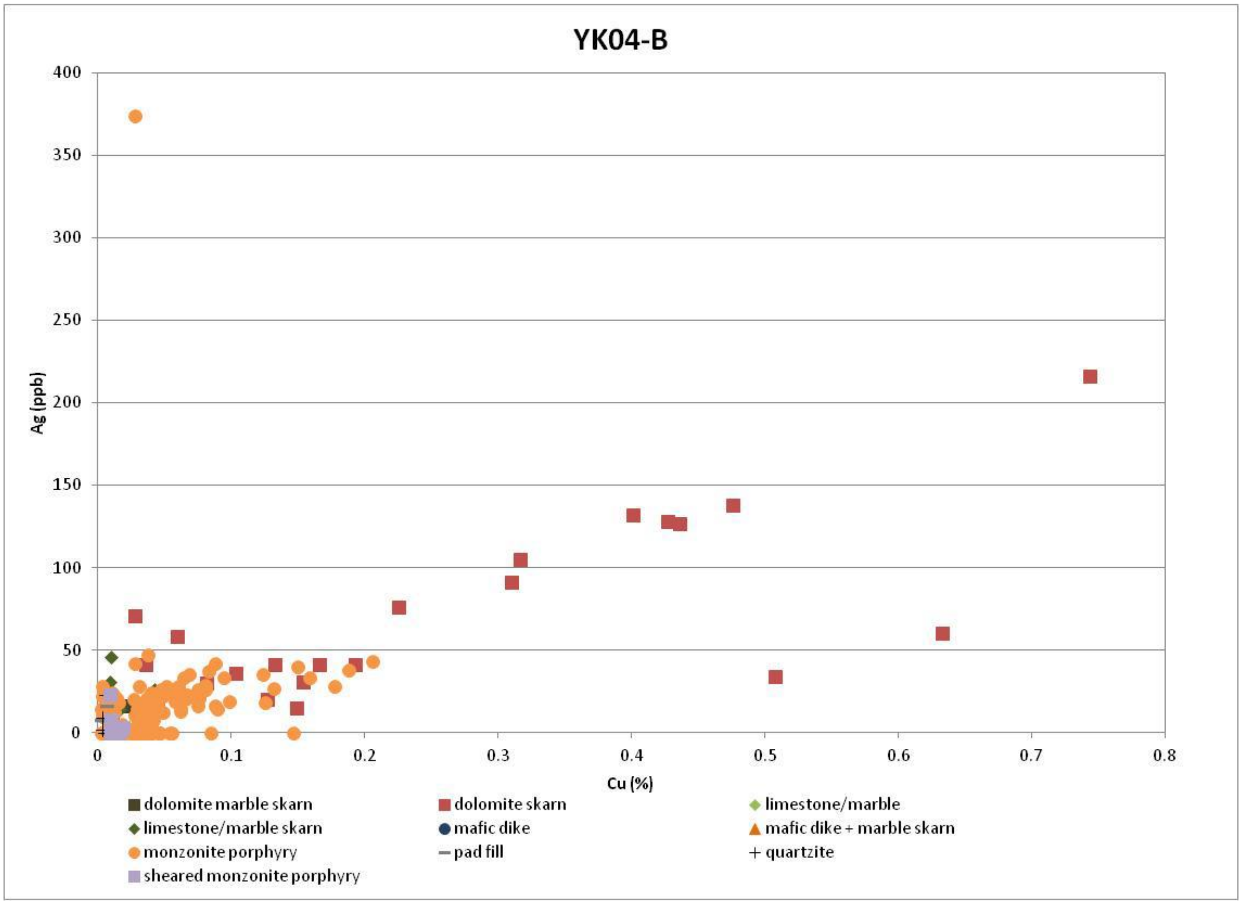
Source: SRK (2011)

Figure 8-17 Drill hole YK03-E, Au (ppb) versus Cu (%) results by rock type



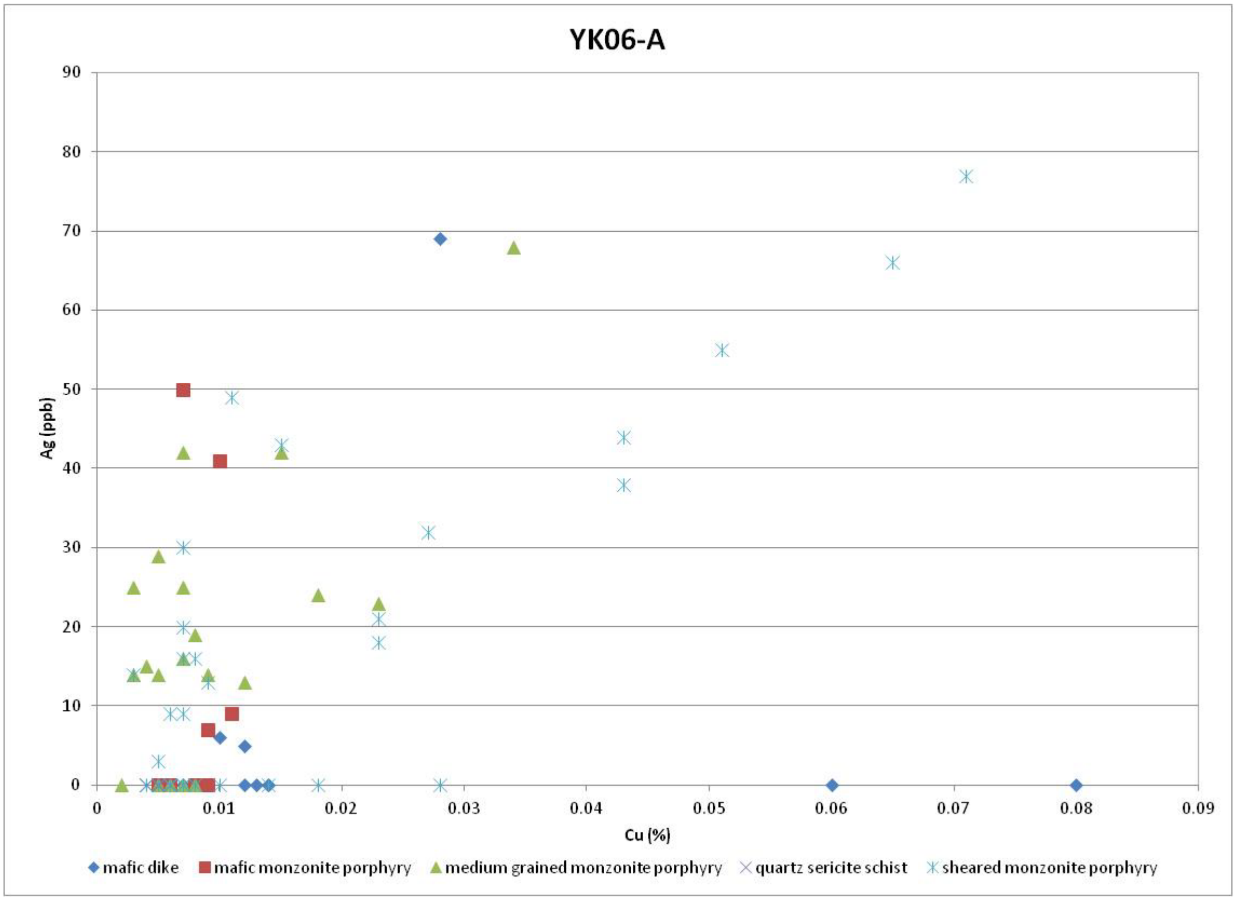
Source: SRK (2011)

Figure 8-18 Drill hole YK04-A, Au (ppb) versus Cu (%) results by rock type



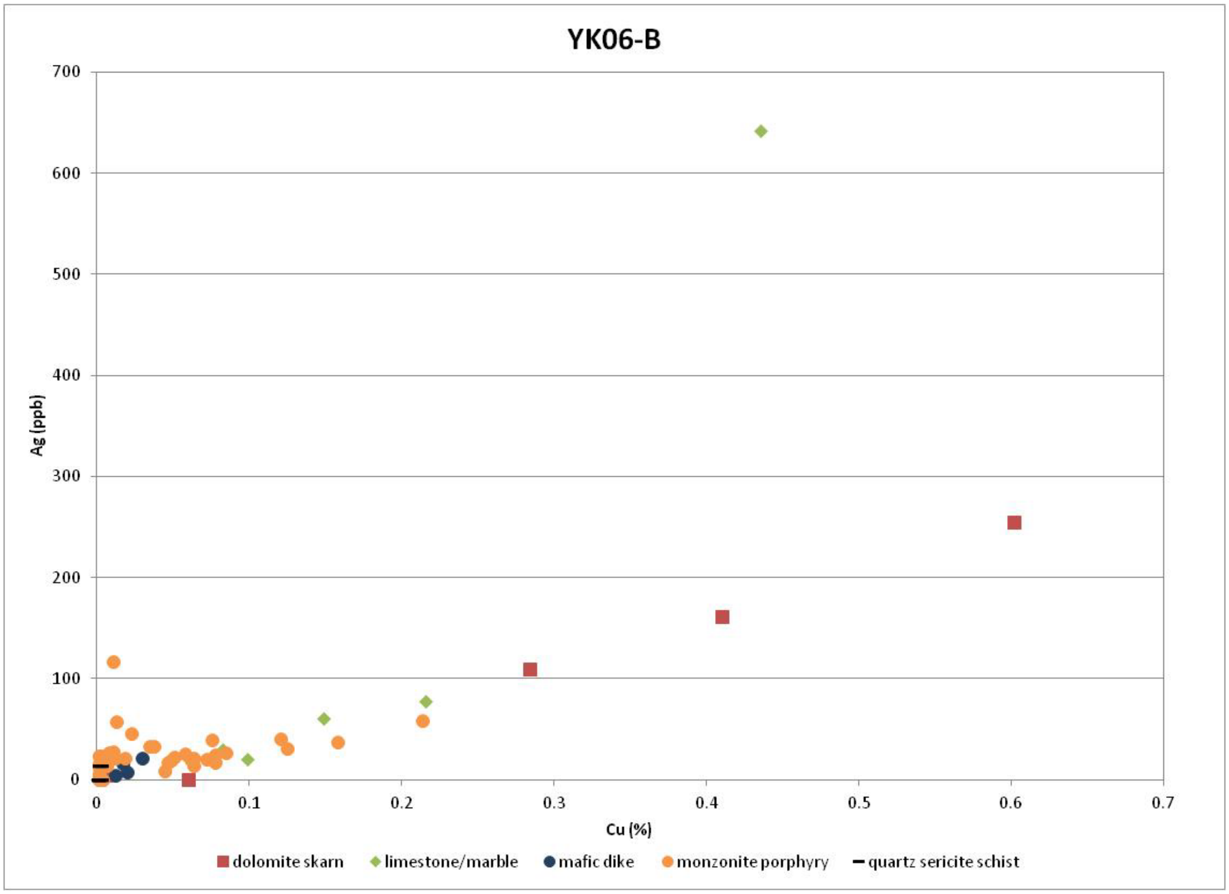
Source: SRK (2011)

Figure 8-19 Drill hole YK04-B, Au (ppb) versus Cu (%) results by rock type



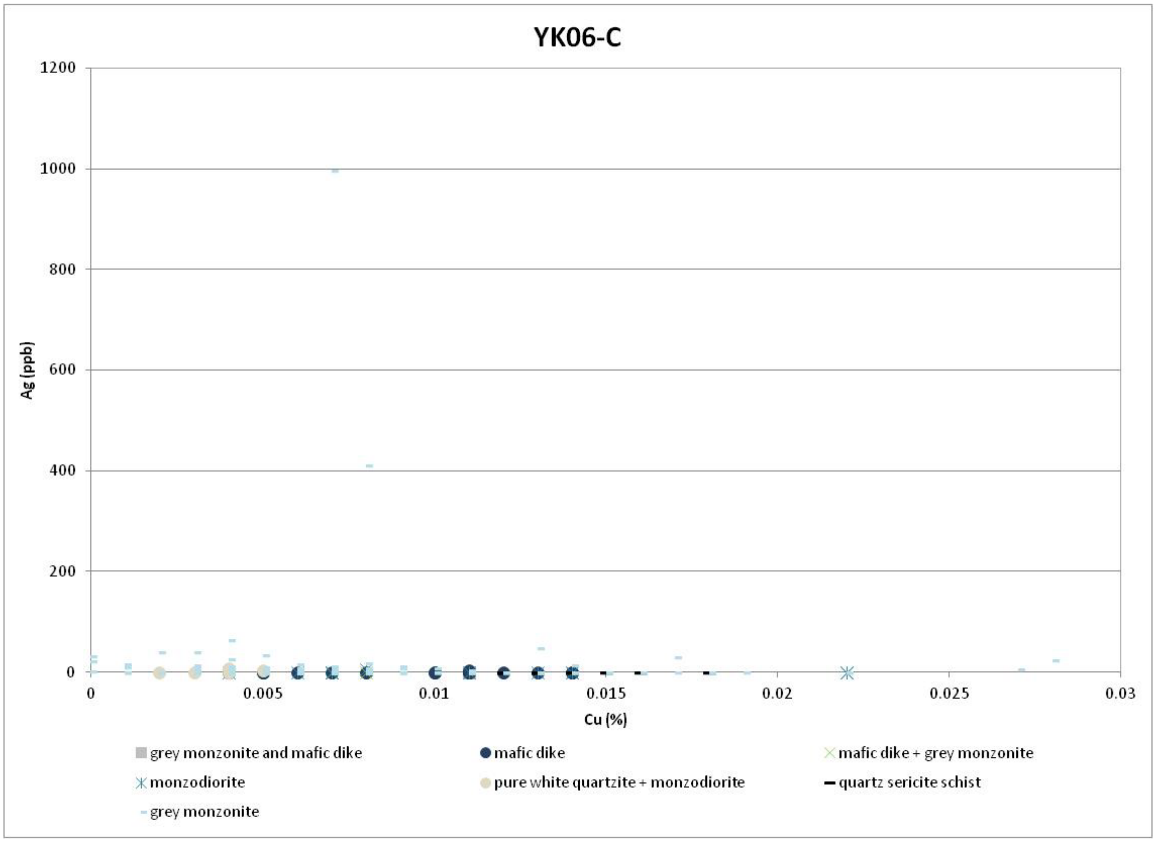
Source: SRK (2011)

Figure 8-20 Drill hole YK06-A, Au (ppb) versus Cu (%) results by rock type



Source: SRK (2011)

Figure 8-21 Drill hole YK06-B, Au (ppb) versus Cu (%) results by rock type



Source: SRK (2011)

Figure 8-22 Drill hole YK06-C, Au (ppb) versus Cu (%) results by rock type

Table 8-4 Grade-thickness data for Phase 1 drilling by Big Bar at Yuma King

Cumulative Intercept/Grade Data for Phase 1 Drilling at Yuma King, Arizona[1]									
		Sediments		Quartz Monzonite Porphyry		Alaskite/Latite Porphyry		All Intrusions	
	Character	Intercept[3]	Grade[4]	Intercept[3]	Grade[4]	Intercept[3]	Grade[4]	Intercept[3]	Grade[4]
Cu	Sulfide[2]	244	0.219	817.5	0.11	178.5	0.091	996	0.107
	Oxide (in metasediments minus YK-6B)	552	0.591						
Mo	Oxide	298.5	0.0171						
	Sulfide (metasediments except YK-6B)	121	0.0132	1176	0.0147	178.5	0.029	1354.5	0.0167
	Sulfide (metasediments in YK-6B)	42	0.098						
	Sulfide (metasediments)	163	0.035						
Au	Oxidized metasediments	489	0.0144						
Ag	Oxidized metasediments	489	13.6						

[1] Where copper >= .07wt % and Mo >= .007wt %. Calculated from tables in New Releases dated 9/19/2006, 5/16/2007 and 6/6/2007.
[2] Includes minor intervals of oxide
[3] Intercepts are in feet
[4] Grades are in weight percent for Cu and Mo, and oz/ton for Au and Ag

Source: Keith (2006)

Table 8-5 June 2011 assay results from VANE AV1 drill hole samples

ITEM	Analyte	Cu	Mo	Re	Au	Ag	Pb	Zn	F	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co
NO.	Units	ppm	ppm	ppb	ppb	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	Limit	0.1	0.1	5	5	0.1	0.1	1	0.01	0.01	0.5	1	1	0.1	0.01	0.1	1	0.1
	Package Code	TE-5	TE-5	TE-5	FA-01	TE-5	TE-5	TE-5	WR-F	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5
	SAMPLE ID																	
1	AV1-11 530-540	27.5	2.5	9	7	0.4	15.4	61	0.04	10.2	1.7	974	3	0.6	1.73	<0.1	79	9.4
2	AV1-11 540-550	91.7	3.9	7	12	0.3	21.9	257	0.06	9.14	3	964	3	0.8	3.57	<0.1	68	9
3	AV1-11 550-560	94.8	6.1	32	9	0.3	25.4	152	0.03	9.58	4.3	981	3	0.5	4	0.1	67	19.2
4	AV1-11 560-570	95.8	3.9	7	11	0.3	25.5	99	0.01	8.82	3.8	> 1000	3	0.4	3.95	<0.1	57	12.2
5	AV1-11 570-580	337	14.8	5	16	0.3	22.1	117	0.03	8.47	4.7	884	3	0.4	4.1	0.1	69	13.8
6	AV1-11 580-590	176	12.3	10	<5	0.3	20.1	92	0.03	8.7	5	972	3	0.3	4.94	<0.1	72	19.6
7	AV1-11 590-600	170	71.6	24	5	0.3	18.6	101	0.03	8.38	6.5	863	3	0.4	6.34	<0.1	69	16.2
8	AV1-11 600-610	91.9	10.7	8	<5	0.4	20.6	93	0.03	8.44	3.4	938	3	0.3	4.37	<0.1	63	9.8
9	AV1-11 610-620	36.5	10.1	7	<5	0.2	21.8	120	0.04	8.86	3.2	813	3	0.4	3.75	0.1	62	10.3
10	AV1-11 620-630	78.3	5.8	6	8	0.3	29.1	98	0.01	8.6	2.5	> 1000	3	0.6	3.51	0.1	57	16.8
11	AV1-11 630-640	72.3	6.8	7	8	0.3	26.1	87	0.01	8.82	3.3	999	3	0.6	4.1	0.1	57	21.2
12	AV1-11 640-650	288	11.5	15	94	0.4	26.8	135	0.04	8.36	2.7	960	4	2.6	4.87	0.1	57	11.5
13	AV1-11 650-660	581	22.3	27	156	0.8	39.3	112	0.03	8.46	1.7	673	4	9.8	3.95	0.2	74	13.8
14	AV1-11 660-670	19.6	44.3	37	12	0.5	18.2	72	0.07	7.98	2	548	4	1.5	1.44	<0.1	106	3.3
15	AV1-11 670-680	19.3	5.8	<5	<5	0.3	21	41	<0.01	8.47	1.2	551	4	1.2	1.72	<0.1	90	2.5
16	AV1-11 680-690	19.4	6.3	<5	9	0.2	20.2	37	<0.01	8.01	0.6	506	4	0.5	1.77	<0.1	90	2.5
17	AV1-11 690-700	73.8	3.1	<5	6	0.2	19.7	113	0.1	9.21	0.8	672	4	0.6	2.78	<0.1	80	12.6
18	AV1-11 700-710	26.4	3.1	<5	9	0.2	16.8	57	0.01	9.03	0.6	645	3	0.4	2.1	<0.1	89	3.3
19	AV1-11 710-720	21.1	0.6	<5	10	0.2	21.3	66	0.02	9.74	0.6	> 1000	3	0.6	2.71	<0.1	59	5.7
20	AV1-11 720-730	67.4	1.4	5	7	0.2	19.5	73	<0.01	9.39	2	616	2	0.4	4.62	<0.1	66	20.4
23	AV1-11 730-740	113	1.1	6	5	0.3	33.2	121	<0.01	9.25	0.8	388	2	0.2	7.12	0.3	43	38.4
24	AV1-11 740-750	52.6	6.4	7	7	0.3	21.4	38	<0.01	7.39	<0.5	619	4	0.8	1.51	<0.1	87	3.3
25	AV1-11 750-760	21	8.8	<5	<5	0.3	21	35	<0.01	6.87	<0.5	622	3	0.5	1.08	<0.1	90	2.3
26	AV1-11 760-770	22.3	8.6	<5	7	0.3	21.8	68	0.04	7.88	<0.5	680	4	0.9	2.33	<0.1	91	7.3
27	AV1-11 770-780	22.4	4.4	6	7	0.2	25.8	80	0.04	7.87	<0.5	601	4	0.8	2.58	<0.1	92	7.5
28	AV1-11 780-790	18.3	16.5	9	<5	0.2	26	55	0.02	7.59	0.7	414	5	0.7	1.51	<0.1	79	2.5
29	AV1-11 790-800	14.4	9.1	5	<5	0.2	24.6	42	0.02	7.03	0.7	447	5	0.6	1.16	<0.1	76	2.3
30	AV1-11 800-810	14.1	7.4	<5	<5	0.2	26.1	50	0.03	7.16	0.7	481	4	0.7	1.95	<0.1	80	2
31	AV1-11 810-820	20.4	6.3	<5	8	0.2	25.1	39	0.02	7.34	0.8	441	4	0.4	2.14	<0.1	82	1.5
32	AV1-11 820-830	23.5	7.4	5	9	0.2	21	57	0.02	6.8	0.7	522	4	3.9	1.75	<0.1	81	2.2
33	AV1-11 830-840	24.5	8.7	8	9	0.2	22.2	43	0.02	6.29	<0.5	552	4	1.4	1.45	<0.1	80	1.9
34	AV1-11 840-850	16.6	22.7	20	6	0.1	23.7	46	0.01	6.85	<0.5	543	3	0.5	1.19	<0.1	79	2.1
35	AV1-11 850-860	12.7	7.3	7	<5	0.1	19.5	33	0.2	7.49	<0.5	558	3	0.8	2.13	<0.1	85	3.3
36	AV1-11 860-870	11.9	21.8	8	<5	0.1	19.2	31	0.01	7.24	<0.5	574	3	1	1.1	<0.1	85	1.7
37	AV1-11 870-880	11.1	60.6	16	<5	0.1	19.6	33	0.02	7.22	<0.5	608	4	1.2	1.43	<0.1	83	2.1
38	AV1-11 880-890	14.6	6.8	6	<5	0.1	20.1	44	0.01	6.99	<0.5	563	3	1.7	1.9	<0.1	82	1.7
39	AV1-11 890-900	10.3	23.6	5	5	0.1	20.7	40	0.01	7.04	<0.5	571	4	1.3	1.28	<0.1	81	1.8
40	AV1-11 900-910	16.6	19.1	10	<5	0.1	21.3	36	<0.01	6.85	<0.5	614	3	0.4	1.02	<0.1	82	1.7
41	AV1-11 910-920	17.7	3.8	<5	10	0.5	24.3	28	<0.01	7.39	0.7	581	3	0.8	1.13	<0.1	87	1.6
42	AV1-11 920-930	14	6.1	8	8	0.3	19.4	34	0.02	7.57	0.5	562	3	3.4	1.18	<0.1	89	2.1

ITEM	Analyte	Cu	Mo	Re	Au	Ag	Pb	Zn	F	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co
45	AV1-11 930-940	19.8	6.5	<5	15	0.3	21.1	39	0.03	7.25	<0.5	608	4	0.7	1.3	<0.1	89	2.3
46	AV1-11 940-950	32.9	3.9	<5	10	0.2	20.9	35	0.02	6.93	<0.5	637	3	0.9	1.68	<0.1	87	2.9
47	AV1-11 950-960	17.9	6	5	12	0.2	19.4	32	0.04	7.11	<0.5	588	3	0.4	1.47	<0.1	84	2.4
48	AV1-11 960-970	16.6	3.3	<5	7	0.2	20.3	27	0.02	7.35	<0.5	616	3	0.7	0.94	<0.1	92	2.5
49	AV1-11 970-980	22.8	3.3	5	10	0.2	19.3	45	0.1	7.62	0.8	662	3	0.3	2.11	<0.1	69	3.1
50	AV1-11 980-990	51.8	1.4	6	13	0.2	26.8	75	0.06	7.51	1.1	895	3	0.4	3.23	<0.1	56	4.6
51	AV1-11 990-1000	69.2	5	5	17	0.2	30.2	88	0.04	8.55	1.8	880	3	0.5	3.22	<0.1	62	7.3
52	AV1-11 1000-1010	264	7.8	8	64	0.2	36.7	90	0.04	8.36	1.8	840	3	0.9	3.46	<0.1	61	7.9
53	AV1-11 1010-1020	75.1	7.9	6	17	0.2	28	80	0.05	8.47	2	908	3	0.4	2.85	<0.1	63	6.2
54	AV1-11 1020-1030	261	8	9	44	0.3	27.2	82	0.03	8.47	1.2	973	3	1.6	3.16	0.2	63	11.4
55	AV1-11 1030-1040	22.3	4.5	6	18	0.2	25.7	85	0.03	8.61	1.3	941	3	0.4	3.18	0.1	65	7
56	AV1-11 1040-1050	27.8	1.7	<5	10	0.2	27.5	83	0.02	8.64	1.6	933	3	0.3	3.25	0.1	63	5.6
57	AV1-11 1050-1060	32.5	1.7	<5	13	0.2	26.8	100	0.02	8.57	1.6	912	2	0.4	3.33	<0.1	58	5.9
58	AV1-11 1060-1070	129	1.4	<5	9	0.2	24.7	113	0.02	8.84	1.3	879	2	0.3	3.38	<0.1	60	7.3
59	AV1-11 1070-1080	39	2	6	14	0.2	24.5	79	<0.01	8.44	1.4	896	3	0.4	3.57	<0.1	57	6.7
60	AV1-11 1080-1090	349	11.4	16	24	0.1	7.7	156	0.17	3	2.1	147	1	0.5	14.3	0.2	30	6.6
61	AV1-11 1090-1100	372	163	81	24	0.6	12	80	0.06	6.28	1.2	809	2	0.3	7.66	0.3	39	5.3
62	AV1-11 1100-1110	500	158	77	38	0.4	17.4	62	0.06	7.82	0.8	932	2	0.3	2.52	0.1	48	5.1
63	AV1-11 1110-1120	530	175	86	62	0.4	20.5	55	0.05	7.78	1	936	2	0.6	2.53	0.2	46	4.9
64	AV1-11 1120-1130	547	212	115	65	0.6	43.1	112	0.03	5.29	0.8	582	1	3.9	2.14	0.2	52	3.7
67	AV1-11 1130-1140	867	1070	1001	40	0.4	20.3	53	0.09	7.32	0.8	429	2	0.5	2.38	0.7	77	7.8
68	AV1-11 1140-1150	919	1000	1001	45	0.4	29.1	69	0.17	8.46	0.8	373	3	0.8	4.15	0.7	75	6.7
69	AV1-11 1150-1160	1640	44.9	30	135	0.8	6.6	195	1.41	0.87	4	12	<1	0.4	11.1	0.4	7	13
70	AV1-11 1160-1170	830	52.5	44	47	0.7	11.6	278	0.37	0.9	40.9	9	<1	0.5	21.5	1.4	12	5.5
71	AV1-11 1170-1180	636	60.1	66	22	0.5	12.1	173	0.49	1.3	11	9	2	0.4	21.3	0.9	12	3.7
72	AV1-11 1180-1189	1800	172	147	68	0.8	10.5	108	0.09	1.81	3.4	8	4	1	22.2	0.5	21	4.9
	AV1-11 1189.5-1190	18600	363	370	220	18.6	4.5	360	0.05	0.47	2.7	5	2	2.3	24.2	5.1	13	22
73	AV1-11 1190-1200	3170	53.2	31	141	2.9	10.6	140	0.67	0.24	5	3	1	2.5	> 25.00	1.2	4	6.7
74	AV1-11 1200-1210	1240	26.6	17	145	1.4	10.5	197	0.1	3.01	5.3	17	3	4.1	16.2	0.8	11	12.7
75	AV1-11 1210-1220	929	204	177	43	0.8	8.4	126	0.21	0.47	7.9	11	<1	0.4	22.1	0.8	5	5.8
76	AV1-11 1220-1230	738	106	88	34	0.4	12.4	146	0.2	0.19	18.6	4	<1	0.9	> 25.00	0.8	3	6.9
77	AV1-11 1230-1240	759	97.1	80	53	0.5	8	146	0.33	0.28	11	4	<1	0.7	> 25.00	0.7	3	5.7
78	AV1-11 1240-1250	704	68	67	32	0.4	8.8	147	0.31	0.69	7.9	27	<1	0.4	23.3	0.6	5	5.6
79	AV1-11 1250-1260	410	14.9	15	22	0.3	21.9	179	0.09	2.04	36.4	240	<1	0.2	23.7	0.6	36	15.2
80	AV1-11 1260-1270	400	35.1	28	17	0.3	33.4	213	0.12	3.17	33.3	528	<1	0.3	18.7	0.8	55	21.3
81	AV1-11 1270-1280	529	51.3	54	13	0.7	12.3	339	0.12	0.23	17.2	7	<1	0.2	> 25.00	2.3	3	3.7
82	AV1-11 1280-1290	990	63.2	51	304	1.3	9.9	569	0.05	0.69	5.5	6	<1	3.3	> 25.00	4.4	8	2.3
83	AV1-11 1290-1300	195	13.5	11	117	0.5	20.2	366	0.06	4.82	2.3	614	1	0.7	13.2	2	48	6
84	AV1-11 1300-1310	39.8	1.6	<5	<5	0.2	22.4	90	0.04	7.61	1.4	> 1000	2	0.2	2.49	0.1	36	3.7
85	AV1-11 1310-1320	64.8	0.9	<5	<5	0.2	16.6	122	0.04	8.95	2.1	648	2	0.3	5.67	<0.1	32	16.8
86	AV1-11 1320-1330	45	0.5	5	<5	0.1	17.8	91	0.03	8.21	1.4	748	2	0.1	4.37	<0.1	35	11.7

Table 8-6 (continued) June 2011 assay results from VANE AV1 drill hole samples

ITEM	Analyte	Cr	Cs	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Na	Nb	Ni	P	Rb
NO.	Units	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm
	Limit	1	0.1	0.01	1	0.1	0.1	0.01	0.01	1	0.1	0.01	1	0.01	0.1	0.1	0.001	0.1
	Package Code	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5
	SAMPLE ID																	
1	AV1-11 530-540	18	5.3	3.64	25	1.8	0.5	0.17	4.54	33	33.5	1.01	394	2.13	16.2	20.8	0.13	174
2	AV1-11 540-550	28	8.3	3.93	23	2.1	0.4	0.1	3.6	29	36.2	1.52	703	3.43	16.6	25.3	0.151	141
3	AV1-11 550-560	25	4.5	3.68	23	2	0.7	0.1	3.51	33	23.5	1.01	754	4.55	15.5	18.3	0.21	131
4	AV1-11 560-570	23	2.7	2.96	23	1.6	0.4	0.1	3.74	27	17.5	0.86	579	3.92	14.3	31.4	0.18	113
5	AV1-11 570-580	22	1.9	2.82	22	1.6	0.5	0.14	3.44	33	17.5	0.83	645	3.98	17.6	16.4	0.171	113
6	AV1-11 580-590	26	2	3.42	22	1.9	0.4	0.15	3.24	34	15.1	0.88	668	3.51	15.9	19.9	0.198	104
7	AV1-11 590-600	29	1.1	3.38	21	1.9	0.5	0.18	2.92	35	10.8	1.05	1020	2.95	13.8	22.7	0.274	88.5
8	AV1-11 600-610	21	1.7	2.31	21	1.6	0.4	0.14	3.37	30	16.7	0.85	733	3.8	14.8	16.3	0.194	115
9	AV1-11 610-620	22	2.7	2.42	21	1.6	0.4	0.11	3.26	31	23.9	1	708	4.25	14	18.9	0.207	122
10	AV1-11 620-630	19	2.6	2.71	21	1.7	0.4	0.15	4.36	27	18.9	0.75	593	3.94	14.3	37.7	0.177	125
11	AV1-11 630-640	19	2.2	2.9	21	1.5	0.4	0.15	4.03	28	17.7	0.83	695	3.71	13.5	16.3	0.175	124
12	AV1-11 640-650	32	3.6	3.13	24	1.7	0.5	0.19	4.71	27	32.3	1.2	911	3.15	17.3	25.5	0.206	149
13	AV1-11 650-660	27	2.9	3.4	21	1.6	0.3	0.28	4.62	37	28	0.82	795	3.37	15.8	17.6	0.133	163
14	AV1-11 660-670	11	1.8	1.46	18	1.6	0.3	0.02	5.24	70	11.9	0.27	229	2.43	21.6	6.2	0.054	183
15	AV1-11 670-680	10	1.3	1.27	18	1.6	0.2	0.01	5.2	61	10.5	0.27	250	2.93	16.7	5.3	0.063	166
16	AV1-11 680-690	10	1.2	1.36	18	1.7	0.2	<0.01	5.22	60	10.6	0.26	226	2.81	17.8	5.7	0.052	172
17	AV1-11 690-700	31	6.7	3.29	20	2.1	0.3	0.03	5.79	44	30.5	1.21	714	2.64	17.6	29	0.222	308
18	AV1-11 700-710	13	2.4	1.81	20	1.6	0.4	0.02	4.87	59	12.6	0.48	393	3.55	22.7	12	0.1	183
19	AV1-11 710-720	8	2.2	2.33	25	1.5	0.9	0.02	3.78	32	14.9	0.57	484	4.25	16.7	11.2	0.143	150
20	AV1-11 720-730	126	1.8	3.94	21	1.5	1.4	0.03	3.21	34	32.4	1.99	651	3.21	13.6	66.4	0.122	120
23	AV1-11 730-740	230	3.3	5.89	19	1.5	2.2	0.05	1.54	22	32.6	4.27	634	2.92	8.9	168	0.138	58.4
24	AV1-11 740-750	8	1.5	1.4	19	1.6	0.3	0.01	4.68	55	11.3	0.23	195	2.77	21.9	6.3	0.051	177
25	AV1-11 750-760	9	1.3	1.12	17	1.4	0.3	0.01	4.67	57	8.8	0.19	172	2.58	18	5.6	0.043	165
26	AV1-11 760-770	18	3.7	2.28	19	1.6	0.4	0.03	4.76	58	14.7	0.68	464	1.96	19.6	18.9	0.139	235
27	AV1-11 770-780	21	3.8	2.38	19	1.8	0.5	0.03	4.68	60	16.2	0.73	448	1.97	17.4	22.1	0.138	236
28	AV1-11 780-790	10	1.8	1.39	18	2	0.6	0.02	4.78	45	13.2	0.27	229	2.36	20.2	6.6	0.056	215
29	AV1-11 790-800	9	1.9	1.29	18	2	0.6	0.01	4.72	42	16.5	0.22	203	2.87	19	5.7	0.051	213
30	AV1-11 800-810	13	1.8	1.29	17	1.8	0.5	0.01	4.78	51	14.5	0.2	247	2.64	18.4	6.9	0.046	202
31	AV1-11 810-820	9	1.7	1.26	18	1.8	0.4	0.01	4.67	50	12.3	0.21	203	2.37	20.3	5.4	0.044	207
32	AV1-11 820-830	12	1.6	1.42	17	1.7	0.4	0.02	4.65	53	13.4	0.2	224	2.06	21.1	5.7	0.043	188
33	AV1-11 830-840	14	1.6	1.24	17	1.6	0.4	0.01	4.83	44	12.2	0.19	191	2.36	20.5	5.4	0.044	181
34	AV1-11 840-850	12	1.4	1.27	17	1.6	0.3	<0.01	4.79	51	12.8	0.18	153	2.64	15.1	4.8	0.044	182
35	AV1-11 850-860	13	1.3	1.41	17	1.6	0.3	0.01	4.9	56	12.6	0.2	163	2.55	16	4.7	0.044	181
36	AV1-11 860-870	12	1.2	1.33	17	1.8	0.3	<0.01	5.05	53	12.2	0.17	128	2.71	13.5	4.1	0.044	187
37	AV1-11 870-880	14	1.3	1.46	17	1.6	0.2	<0.01	5.21	54	13.4	0.18	138	2.61	12.9	4.6	0.048	188
38	AV1-11 880-890	13	1.3	1.37	16	1.6	0.2	0.01	4.69	53	12.7	0.19	160	2.55	14.6	4.4	0.045	168
39	AV1-11 890-900	14	1.1	1.3	16	1.5	0.2	<0.01	4.87	51	12.4	0.17	125	2.93	12.3	4.3	0.045	169
40	AV1-11 900-910	16	1.2	1.3	16	1.6	0.3	<0.01	5.2	49	13	0.18	123	2.86	14.7	4.9	0.046	183
41	AV1-11 910-920	25	1.2	1.45	17	1.6	0.2	<0.01	5.24	56	13.2	0.17	142	2.91	14.6	5.1	0.047	187
42	AV1-11 920-930	13	1.3	1.27	17	1.6	0.4	<0.01	4.72	58	13.8	0.22	147	2.65	15	4.7	0.045	173

ITEM	Analyte	Cr	Cs	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Na	Nb	Ni	P	Rb
45	AV1-11 930-940	17	1.4	1.46	18	1.6	0.3	0.01	4.98	59	17.3	0.21	150	2.63	16.2	5.4	0.046	186
46	AV1-11 940-950	16	1.3	1.44	17	1.5	0.3	0.01	4.96	59	17	0.18	158	2.72	13.6	5.3	0.046	186
47	AV1-11 950-960	11	1.3	1.31	16	1.6	0.3	0.01	4.97	56	14.9	0.23	210	2.31	13.2	4.9	0.043	186
48	AV1-11 960-970	11	1.1	1.41	17	1.7	0.4	0.01	5.34	58	13.2	0.21	158	2.53	17.4	5.1	0.047	178
49	AV1-11 970-980	12	1.2	1.3	17	1.6	0.3	0.02	5.11	32	14.9	0.26	216	2.76	13.9	6.5	0.068	167
50	AV1-11 980-990	14	2.5	2.61	20	1.5	0.4	0.07	4.09	30	20.5	0.6	314	3.43	12.3	10.2	0.154	135
51	AV1-11 990-1000	17	2.4	2.98	20	1.4	0.5	0.08	4.05	38	19.2	0.68	561	3.91	12.8	12	0.166	127
52	AV1-11 1000-1010	16	1.6	2.59	19	1.3	0.5	0.11	3.72	37	17.8	0.6	591	3.78	12.4	11.1	0.16	113
53	AV1-11 1010-1020	15	2.2	2.71	20	1.6	0.5	0.06	4.19	38	21.5	0.67	541	3.71	13.2	11.5	0.164	124
54	AV1-11 1020-1030	19	2.3	3.22	20	1.4	0.5	0.06	4.28	40	18.2	0.7	500	3.7	12.4	12.8	0.155	125
55	AV1-11 1030-1040	18	2.3	2.79	20	1.4	0.4	0.05	4.07	38	18.8	0.75	610	4.06	13.4	12.6	0.166	122
56	AV1-11 1040-1050	16	1.9	2.84	21	1.3	0.5	0.05	4.44	36	19.1	0.73	469	4.11	13.7	12.3	0.168	122
57	AV1-11 1050-1060	15	1.6	2.7	20	1.1	0.4	0.05	4.15	32	17.8	0.71	489	3.91	12.5	13.1	0.166	115
58	AV1-11 1060-1070	22	1.8	2.76	20	1.1	0.4	0.08	4.3	32	18.8	0.85	666	3.6	13.7	17.1	0.173	126
59	AV1-11 1070-1080	16	1.9	2.53	19	1	0.4	0.05	3.68	30	14.3	0.76	538	4.04	12.4	13.3	0.16	107
60	AV1-11 1080-1090	29	3.8	2.02	9	2.9	0.6	0.25	1.48	18	18.1	9.88	870	0.28	4.6	31.7	0.228	101
61	AV1-11 1090-1100	28	2	2.02	15	1.9	0.9	0.08	3.03	20	23.4	5.2	521	2.05	7.8	14.3	0.156	83.6
62	AV1-11 1100-1110	16	1.9	2.28	18	1.5	0.3	0.04	4.91	24	25.8	0.61	309	2.95	10.8	11	0.133	106
63	AV1-11 1110-1120	17	2.3	2.33	18	1.5	0.2	0.05	5.27	24	24.9	0.6	348	2.71	9.9	11.2	0.131	115
64	AV1-11 1120-1130	24	1.9	1.75	13	1.5	0.1	0.06	3.95	23	19.3	0.5	296	1.19	7	12.2	0.106	103
67	AV1-11 1130-1140	42	3.2	2.22	17	1.9	0.3	0.05	5.37	37	31.4	0.86	333	1.1	10.8	29.7	0.206	146
68	AV1-11 1140-1150	44	3.9	2.09	21	2.5	0.7	0.09	5.97	38	33.9	2.32	370	1.56	14.1	27.1	0.092	173
69	AV1-11 1150-1160	10	1.2	4.09	5	6.9	<0.1	0.36	0.27	3	7.1	17.2	808	0.12	1.5	10.4	0.029	19
70	AV1-11 1160-1170	11	0.4	1.7	3	2.2	0.3	0.22	0.1	6	3.5	14.7	763	0.14	1.2	8.2	0.033	6.9
71	AV1-11 1170-1180	11	0.2	1.13	3	1.6	0.4	0.16	0.06	6	3	11.8	514	0.13	1.5	6.2	0.026	3
72	AV1-11 1180-1189	24	0.2	7.31	9	12.9	0.7	1.48	0.05	9	4.9	3.61	1150	0.14	2.4	12.9	0.033	1.8
	AV1-11 1189.5-1190	10	<0.1	9.42	6	15.8	0.2	2.51	0.03	4	<0.1	0.39	825	0.1	0.7	13.7	0.019	1.3
73	AV1-11 1190-1200	14	0.1	2.59	2	7.6	0.3	0.84	0.03	3	2.1	6.1	904	0.11	0.6	6.3	0.022	1.3
74	AV1-11 1200-1210	16	2.1	2.16	5	1.6	0.3	0.2	0.54	7	5.3	13.1	786	0.15	3.9	18.4	0.091	45.2
75	AV1-11 1210-1220	10	1.1	1.55	2	1.6	<0.1	0.27	0.28	4	2.6	12	826	0.12	0.7	9.6	0.042	23.3
76	AV1-11 1220-1230	11	<0.1	1.03	<1	1.2	0.4	0.11	0.02	2	2.1	13.9	544	0.12	0.4	14.3	0.028	0.7
77	AV1-11 1230-1240	12	0.2	1.18	1	1.4	0.3	0.16	0.03	2	3.1	12.7	766	0.12	0.6	10.5	0.023	1.6
78	AV1-11 1240-1250	13	0.7	1.62	3	2	0.3	0.17	0.2	3	5.6	10.7	767	0.21	0.8	11.1	0.028	12.8
79	AV1-11 1250-1260	76	0.5	2.32	5	1.3	1.2	0.06	0.33	19	29.2	8.33	1210	0.6	2.5	64.4	0.115	9.3
80	AV1-11 1260-1270	144	0.6	3.31	8	1.3	2	0.07	0.72	29	18.9	9.35	1060	0.79	4.8	105	0.151	19.1
81	AV1-11 1270-1280	9	0.2	0.89	<1	1.5	0.1	0.12	0.05	3	2.6	7.66	636	0.11	0.3	8.9	0.035	2.9
82	AV1-11 1280-1290	20	0.2	1.99	2	2.1	0.6	0.33	0.1	5	4.5	0.51	506	0.12	1.2	6.3	0.034	4.4
83	AV1-11 1290-1300	29	2	2.57	12	1.8	0.5	0.12	2.06	23	14.1	1.15	1080	1.48	6.6	18.5	0.086	77.9
84	AV1-11 1300-1310	18	2.9	2.74	19	1.4	0.6	0.02	3.3	16	22.8	0.64	285	3.23	6.9	11.7	0.127	104
85	AV1-11 1310-1320	49	9.1	4.48	18	1.6	0.4	0.04	2.89	15	30.1	1.93	782	3.03	7.4	51.4	0.174	117
86	AV1-11 1320-1330	39	7.5	3.56	20	1.6	0.3	0.04	2.78	16	24.1	1.24	429	3.5	8	32.4	0.149	96.6

Table 8-7 (continued) June 2011 assay results from VANE AV1 drill hole samples

ITEM	Analyte	S	Sb	Sc	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zr
NO.	Units	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	Limit	0.05	0.1	0.1	0.1	1	0.1	0.1	0.1	0.005	0.1	0.1	2	0.1	0.1	0.1
	Package Code	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5	TE-5
	SAMPLE ID															
1	AV1-11 530-540	1.48	0.6	13.7	2.3	483	1	0.3	11.6	0.487	1.8	3.7	147	8.3	19.9	13.4
2	AV1-11 540-550	1.56	1	15.3	1.9	919	1	0.2	9	0.437	1.4	3.3	138	2.3	26.8	8.6
3	AV1-11 550-560	2.25	0.8	15.7	1.6	743	0.9	0.2	11	0.332	1	3.7	130	1.4	23.7	10.5
4	AV1-11 560-570	1.9	0.6	13.2	1.7	692	0.7	0.2	10.4	0.281	0.8	3.4	128	0.9	21.2	9.4
5	AV1-11 570-580	2.06	0.6	13.5	2	702	1	0.2	10	0.329	0.7	3.1	117	1	26	10.2
6	AV1-11 580-590	2.26	0.7	14.6	1.8	742	0.9	0.2	9.5	0.34	0.7	3.2	137	0.6	25	7.8
7	AV1-11 590-600	1.87	0.9	20	2.2	741	0.7	0.2	8.7	0.412	0.5	3.8	160	1.1	28.5	10.2
8	AV1-11 600-610	1.52	0.6	13.7	1.6	533	0.7	0.2	9.9	0.308	0.7	3.4	118	4.6	22.3	7.8
9	AV1-11 610-620	1.53	0.6	14.3	1.4	611	0.7	0.1	10.9	0.311	0.7	3.4	119	1.4	21.9	9.1
10	AV1-11 620-630	2.49	0.6	12.5	1.5	640	0.7	0.2	10.3	0.271	0.8	3.2	106	0.6	20.8	8.8
11	AV1-11 630-640	2.64	0.5	12.8	1.4	712	0.7	0.4	10.4	0.267	0.8	3.4	113	0.8	21.7	8.8
12	AV1-11 640-650	2.02	0.7	15.4	2.7	547	1	1.7	10.2	0.39	1.5	3.2	139	4	22.6	9.2
13	AV1-11 650-660	3.02	0.5	12	3.3	363	1	5.8	18	0.27	1.1	6.9	88	4.2	19.2	8.8
14	AV1-11 660-670	2.4	0.3	5	1.9	205	1.5	0.2	41.7	0.144	1	13.9	27	4.6	15.6	10.2
15	AV1-11 670-680	2.15	0.2	4.8	1.7	252	1.2	0.1	40.8	0.133	0.9	11.9	24	3.9	17.9	7.6
16	AV1-11 680-690	2.17	0.2	4.7	1.5	196	1.5	<0.1	39.6	0.14	0.9	11.4	24	2.9	25.3	7.2
17	AV1-11 690-700	1.78	0.4	13	1.5	323	1.3	<0.1	28.8	0.381	1.8	7.7	116	6	28.1	7.3
18	AV1-11 700-710	1.56	0.2	6.8	1.6	327	1.5	0.1	38.3	0.25	1	10.5	54	3.8	23	11.3
19	AV1-11 710-720	1.41	0.3	5.8	0.9	506	1.1	0.2	7.5	0.271	0.8	3.5	75	8.4	13.4	29.6
20	AV1-11 720-730	1.6	0.4	19.1	1	384	1	<0.1	13	0.418	0.5	4.1	131	1.4	17.5	58.5
23	AV1-11 730-740	1.35	0.3	29.9	0.8	467	0.6	<0.1	4.3	0.59	0.3	1.4	185	0.5	18.3	101
24	AV1-11 740-750	1.26	0.2	4.6	1.9	220	1.7	<0.1	48.4	0.153	0.9	13.1	27	4	19.3	9.4
25	AV1-11 750-760	1.21	0.2	4.2	2.2	170	1.4	<0.1	47.3	0.128	0.9	11.7	23	4.7	16.4	8.3
26	AV1-11 760-770	1.19	0.2	8.8	2.4	266	1.5	<0.1	38.5	0.261	1.5	10.4	70	10.7	23.4	8.5
27	AV1-11 770-780	1.14	0.3	9.8	2.1	288	1.3	<0.1	37.6	0.263	1.5	13.3	74	10.8	21.1	11.4
28	AV1-11 780-790	1.05	0.2	5.6	2.1	165	1.4	<0.1	37.2	0.148	1.1	18.9	30	5	14.9	15.2
29	AV1-11 790-800	0.93	0.2	4.9	2	180	1.3	<0.1	35.1	0.131	1.1	15.7	27	3.6	18.3	11.7
30	AV1-11 800-810	1.44	0.2	4.9	2.2	190	1.3	<0.1	41.4	0.136	1.2	16.7	24	4.4	17	12.1
31	AV1-11 810-820	1.69	0.2	4.6	2.1	209	1.3	<0.1	41.2	0.126	1.1	17.1	23	5.2	15.8	11.9
32	AV1-11 820-830	1.67	0.2	4.3	2.3	170	1.7	<0.1	44.1	0.133	1	14.4	22	5.6	19.3	11.8
33	AV1-11 830-840	1.59	0.2	4	2.4	186	1.5	<0.1	39.5	0.137	1	14.6	23	4.1	15.7	13
34	AV1-11 840-850	2.05	0.2	4.2	2.2	205	1	<0.1	44.5	0.105	1	11.9	20	3.2	17.8	8.4
35	AV1-11 850-860	2.84	0.2	4.4	2.1	278	1.2	<0.1	47.7	0.098	1.1	14.9	20	4.4	11.2	8.6
36	AV1-11 860-870	2.33	0.1	4.3	2	178	1.1	<0.1	51	0.09	1.1	13.9	19	3.1	12.5	7.7
37	AV1-11 870-880	2.82	0.1	4.5	2	186	0.9	<0.1	46.7	0.088	1.2	12.3	20	3.1	16	5.8
38	AV1-11 880-890	3.04	0.2	4.6	2.5	277	1	<0.1	44.8	0.095	1	13.4	22	3.8	13.2	6.8
39	AV1-11 890-900	2.8	0.1	4.3	1.9	211	1	0.1	47.6	0.082	1.1	13	17	2	17.5	6.9
40	AV1-11 900-910	2.52	0.1	4.2	2.3	225	1.1	<0.1	46.4	0.097	1.2	12.5	19	2.7	17.8	7.7
41	AV1-11 910-920	2.71	0.2	4.8	2.5	203	1.1	<0.1	45.4	0.097	1.2	12.8	20	2.5	16.2	7.1

ITEM	Analyte	S	Sb	Sc	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zr
42	AV1-11 920-930	2.21	0.2	4.9	2.5	222	1.2	0.2	48.3	0.098	1	13.1	21	4.4	9.4	12.1
45	AV1-11 930-940	2.88	0.2	4.7	3.3	274	1.3	<0.1	49.1	0.104	1.1	13.2	21	4.3	9.9	9
46	AV1-11 940-950	3.21	0.2	4.4	2.9	330	1	<0.1	47.1	0.092	1.2	14.1	19	3.2	11.1	9.4
47	AV1-11 950-960	2.27	0.2	4.4	2.4	272	1	<0.1	47.2	0.096	1.2	14	20	3.6	10.3	10.7
48	AV1-11 960-970	2.41	0.2	4.6	2.9	181	1.4	<0.1	50.5	0.115	1.1	14.3	21	4	11.9	12.9
49	AV1-11 970-980	2.4	0.3	5.3	3.2	328	0.9	<0.1	43.5	0.127	1	12.2	31	4.1	15.1	7.7
50	AV1-11 980-990	1.6	0.4	10.4	2.2	676	0.6	0.1	9.2	0.234	0.8	4.1	88	1	18	8.7
51	AV1-11 990-1000	1.67	0.3	11.9	1.9	771	0.7	0.2	11.5	0.237	0.7	5.1	93	1.8	21.9	11.5
52	AV1-11 1000-1010	1.61	0.4	10.9	1.8	627	0.6	0.2	10.5	0.232	0.6	4.4	88	2.6	20.5	11.9
53	AV1-11 1010-1020	1.29	0.4	11.4	1.5	745	0.7	0.1	10.8	0.237	0.6	4.8	94	1.7	22.2	9.9
54	AV1-11 1020-1030	3.42	0.3	10.6	1.5	806	0.7	0.9	11.3	0.236	0.7	4.7	88	4.9	21.2	12.6
55	AV1-11 1030-1040	1.44	0.3	11.5	1.5	839	0.7	<0.1	11.5	0.238	0.6	5.1	90	1	22.6	10.8
56	AV1-11 1040-1050	1.41	0.3	11.7	1.4	771	0.8	<0.1	11.6	0.244	0.6	5.3	92	0.6	21.8	13.1
57	AV1-11 1050-1060	1.63	0.2	11.1	1.4	639	0.7	0.2	10.3	0.242	0.5	4.4	91	0.7	20.4	9.2
58	AV1-11 1060-1070	1.85	0.2	12	1.6	613	0.7	<0.1	11.6	0.255	0.7	4.8	90	1	22.7	9.6
59	AV1-11 1070-1080	1.94	0.2	11	1.3	611	0.6	0.1	10.9	0.24	0.5	4	84	1.2	21	9
60	AV1-11 1080-1090	5.24	0.1	7	3.9	320	0.2	<0.1	3.3	0.194	0.6	8.9	73	0.8	17.3	17.1
61	AV1-11 1090-1100	4.38	0.2	8.3	1.6	390	0.5	<0.1	4.5	0.208	0.4	2.3	71	3	17.1	35.4
62	AV1-11 1100-1110	2.41	0.2	9.7	1.5	605	0.6	0.3	5.5	0.233	0.5	1.5	74	2.3	19.6	8
63	AV1-11 1110-1120	2.83	0.2	9.5	1.4	555	0.5	0.4	5.2	0.242	0.6	1.4	78	2.3	19.5	5.6
64	AV1-11 1120-1130	2.42	0.2	8.4	1.3	361	0.3	0.9	8	0.231	0.6	1.5	58	3.5	25.6	3.7
67	AV1-11 1130-1140	2.59	0.3	15.2	3	261	0.6	0.2	13.3	0.327	0.8	2.7	70	6.6	48.3	6.5
68	AV1-11 1140-1150	4.15	0.3	15.9	3.7	207	1	0.2	13.3	0.312	1	3.7	70	8.4	38.8	20.6
69	AV1-11 1150-1160	9.96	0.4	2.5	2.5	205	<0.1	0.2	0.9	0.054	0.1	1.7	33	33	3.9	3.6
70	AV1-11 1160-1170	5.07	0.9	2.4	2	101	<0.1	0.1	1.2	0.061	<0.1	1.2	32	23.9	4.9	10.6
71	AV1-11 1170-1180	3.49	1.2	2.5	1.7	102	<0.1	0.1	1.4	0.08	<0.1	0.7	28	7.2	4.5	15
72	AV1-11 1180-1189	8.11	0.8	5.7	28.7	125	0.2	0.2	1.8	0.156	<0.1	2.7	92	35.4	8.8	21.2
	AV1-11 1189.5-1190	12.8	0.2	1.5	33.8	165	<0.1	1.2	0.5	0.041	<0.1	2.6	58	105	3.5	8.9
73	AV1-11 1190-1200	6	0.4	1.1	9.7	114	<0.1	0.2	0.3	0.029	<0.1	3.7	21	37.4	4.5	11.6
74	AV1-11 1200-1210	1.43	0.5	5	1.3	101	0.2	0.7	1	0.099	0.3	0.3	57	6	11	7.2
75	AV1-11 1210-1220	3.64	0.4	1.6	2.7	133	<0.1	0.1	0.7	0.041	0.2	0.6	26	11.6	8	3.6
76	AV1-11 1220-1230	2.11	0.5	1	0.9	82	<0.1	0.1	0.3	0.025	<0.1	0.3	20	15.2	6.8	16
77	AV1-11 1230-1240	2.3	0.3	1.3	1.2	110	<0.1	0.2	0.4	0.031	<0.1	0.3	21	11.3	4.8	11.4
78	AV1-11 1240-1250	2.86	0.4	1.7	2.4	110	<0.1	<0.1	0.7	0.048	0.1	0.5	27	6.2	4.6	9.1
79	AV1-11 1250-1260	3.39	0.7	9.6	0.8	359	0.1	0.1	1.8	0.216	<0.1	0.5	80	15.3	12.2	51.1
80	AV1-11 1260-1270	1.2	0.6	15.4	0.9	627	0.1	<0.1	2.7	0.291	0.1	0.8	117	13.5	15.2	83.1
81	AV1-11 1270-1280	1.7	0.4	0.9	0.9	93	<0.1	<0.1	0.3	0.016	<0.1	0.3	16	6.7	6	6.1
82	AV1-11 1280-1290	2.7	1.1	2.1	2.2	135	<0.1	0.1	1.1	0.073	<0.1	0.9	19	9.1	6.2	25.5
83	AV1-11 1290-1300	2.65	0.9	8.8	2	524	0.3	0.2	6.4	0.241	0.4	2.1	57	5	19.8	13.8
84	AV1-11 1300-1310	3.08	0.2	10.6	1.8	1001	0.3	0.2	3.7	0.247	0.5	1.3	85	0.8	14	16.7
85	AV1-11 1310-1320	1.33	0.6	23.4	1.2	968	0.4	0.1	2.4	0.582	0.7	0.8	173	1.1	19	13
86	AV1-11 1320-1330	0.61	0.5	16.8	1.1	706	0.3	<0.1	2.8	0.427	0.5	1	137	0.4	17.1	8.2

8.3 Interpretation and Relevant Results

Copper mineralization was intersected in the oxide and sulfide replacement/skarn in the Paleozoic sediments, quartz monzonite porphyry, and alaskite/latite porphyry. These results confirm that copper mineralization is present (Stanley Keith, 2006).

Drilling to date (especially the AV 11-01 drill hole) established that the magnetic bodies extended under tectonic cover of the Black Jack thrust. The Black Jack thrust plate consists of several hundred feet of upper plate, late Jurassic metavolcanic and metaclastic sedimentary rocks. The Black Jack thrust plate has concealed the Yuma mine plate that contains the prospective copper-molybdenum-precious metal mineralization.

The re-assays of AV 11-01 intersected at least 190 feet of generally plus 500 ppm copper averaging 0.175 wt. % copper with assays up to 1.86 wt. % copper with significant molybdenum, rhenium and gold contents was intercepted in the AV1-11 drillhole. A significant amount of stockwork fluorine rich molybdenum-rhenium mineralization in molybdenite associated with a late stage alaskitic aplogranite was also encountered and greatly extends the known molybdenum anomaly encountered in drillholes YK02-B and YK06-B. A 90 foot intercept encountered between 1030 and 1120 approaches discovery quality at a possible copper equivalent grade of 0.6 wt. %.

Copper analyses in the Big Bar 19 drillholes ranged from 0.002 to 4.8 % copper in six different rock types. Grades are lowest in the mafic dikes (0.0 1 to 0.05 % copper) and peak at 4.8 percent copper in dolomite skarn and dolomite as noted in the drill holes from YK-01. Gold grades ranged from 0.27 to 4.56 ppb in drill hole YK01-A. Assays of the drill core from drill site YK-01 indicated that the oxide copper mineralization exposed in the underground workings is present in a greater thickness (2 to 10 ft) in the drill hole (Table 8-3).

Lower grades of copper are present in a thicker sequence in drill site YK-03 and appear to increase in grade toward drill site YK-04. In addition, an 8 ft intercept of bonanza-grade silver (19.15 %) in drill hole YK 01-D was correlated with seven similar occurrences in modern drainages in the Yuma King copper target area. Drill holes YK-04-A and YK-04-B intercepted mineralized, pyritic, sheared monzonite porphyry and two zones of fold-repeated, skarn-altered and magnetite-replaced mineralization in lower Paleozoic rocks (Stanley Keith, 2006). The bottom of drill hole YK-06-C intercepted possible Coconino Sandstone in a presumed overturned upper Paleozoic section. However, the younger Kaibab Limestone with its copper-magnetite replacement/skarn mineralization was not intersected, as the drill hole became shallower near the depth limit of the LF-60 drill rig (Stanley Keith, 2006).

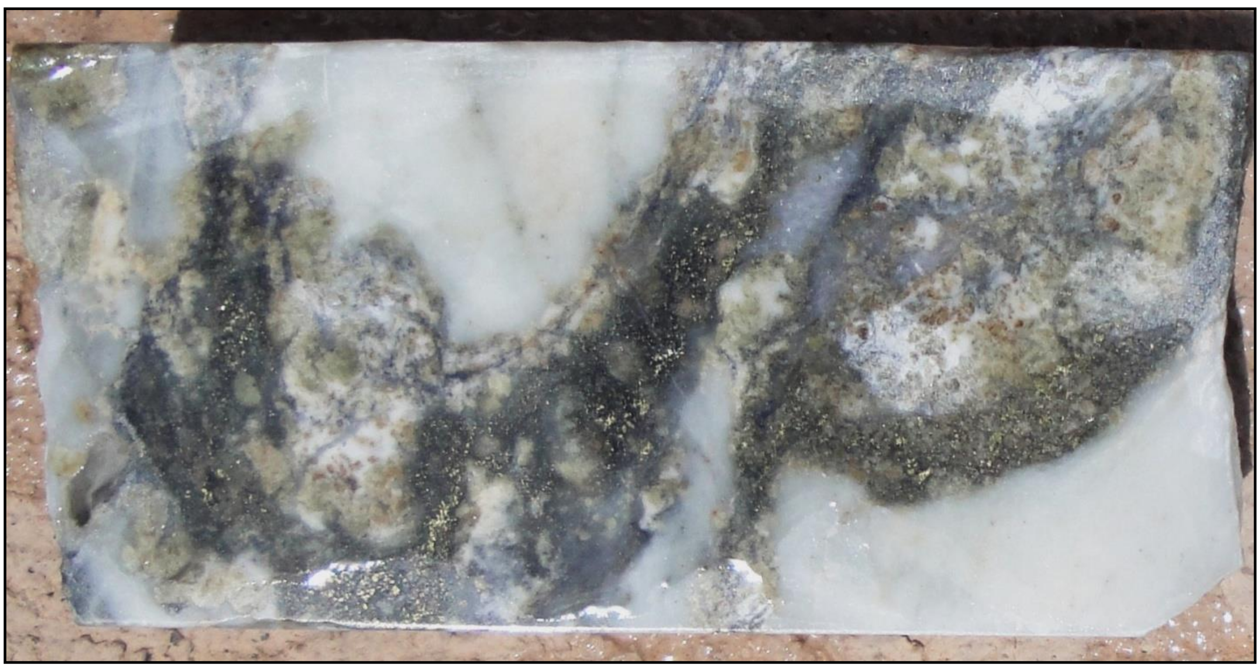
A re-assay of VANE's drill hole AV11-1 is presented in Table 8-5 (Keith, 2006). Economically interesting visible chalcopyrite and molybdenite were observed in 90 ft of the core from 1130 ft to 1220 ft (Keith, 2013). When assayed by Skyline Labs, under the supervision of Freeport McMoRan, economically interesting values of molybdenum, gold, and rhenium were intercepted, as shown by highlighted rows in yellow in Table 8-5.

At 1189.5 to 1190 ft, an interval was intersected where copper was 1.86%, molybdenum was 363 ppm, rhenium was 320 ppm, gold was 220 ppb, and silver was 18.6 ppm. Visual inspection of this interval showed that several intervals contained chalcopyrite that was consistently associated with magnetite and red andradite garnet (Figure 8-23). These copper-andradite-magnetite skarn intervals are considered Stage 3 mineralization associated with the quartz monzonite porphyry unit. Visible fluorite was frequently observed.

Source: Keith (2013)

Figure 8-23 Highly metalized andradite-grossular garnet (pinkish red vitreous aggregates) with intervening magnetite-chalcopyrite layers from the 1190 ft depth in core from AV1-11

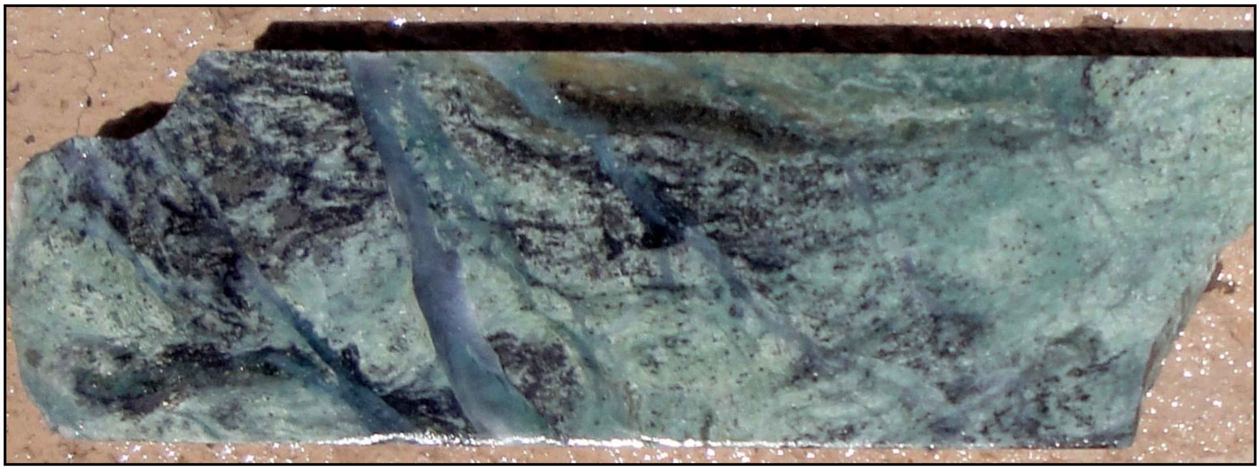
Molybdenite occurs as fillings in quartz veins from several intervals (Figure 8-24). In current economics, the combined values when calculated as copper equivalents are likely to constitute a discovery quality intercept.



Source: Keith (2013)

Figure 8-24 Deformed chalcopyrite-grossular garnet-magnetite-purplish gray fluorite skarn 'floating' in marble tectonite

The molybdenite-bearing quartz vein cross-cuts the deformed magnetite-chalcopyrite-bearing skarn at 1149.5 ft depth in AV1-11 (Figure 8-25) and represents Stage 4 mineralization. A nearby Niton spot XRF analysis in the interval at 1141 ft returned over 5,000 ppm molybdenum.



Source: Keith (2013)

Figure 8-25 Molybdenite-bearing quartz vein cross-cutting the early deformed magnetite-chalcopyrite-bearing skarn rock at 1149.5 ft depth in core hole AV1-11.

Source: Keith (2013)

Figure 8-26 Quatrz-(anhydrite-molybdenite-bearing vein in sheared diopside skarn about 30 ft above the copper-bearing skarn section at 1133 ft.

The AV11-01 drill hole proves the tectonically concealed porphyry copper/skarn model indicated by and inferred from the 2006 Big Bar drilling campaign. This drill hole strongly validates the geologic ‘upside’ of the Yuma King project that was implied by the 2006 drilling program.

Source: Keith (2013)

Figure 8-27 Reclaimed drill site AV11-01

VANE's drill hole AV2 intersected a sequence of felsic metavolcanics, the McVay thrust fault, and an underlying sequence of graphitic metamudstones. Some pyrite was noted and was higher along the shear zones. The Niton XRF results were negative for copper, so no samples from AV2 were sent to the laboratory for assaying (Al Edwards, personal communication to Merrill Palmer).

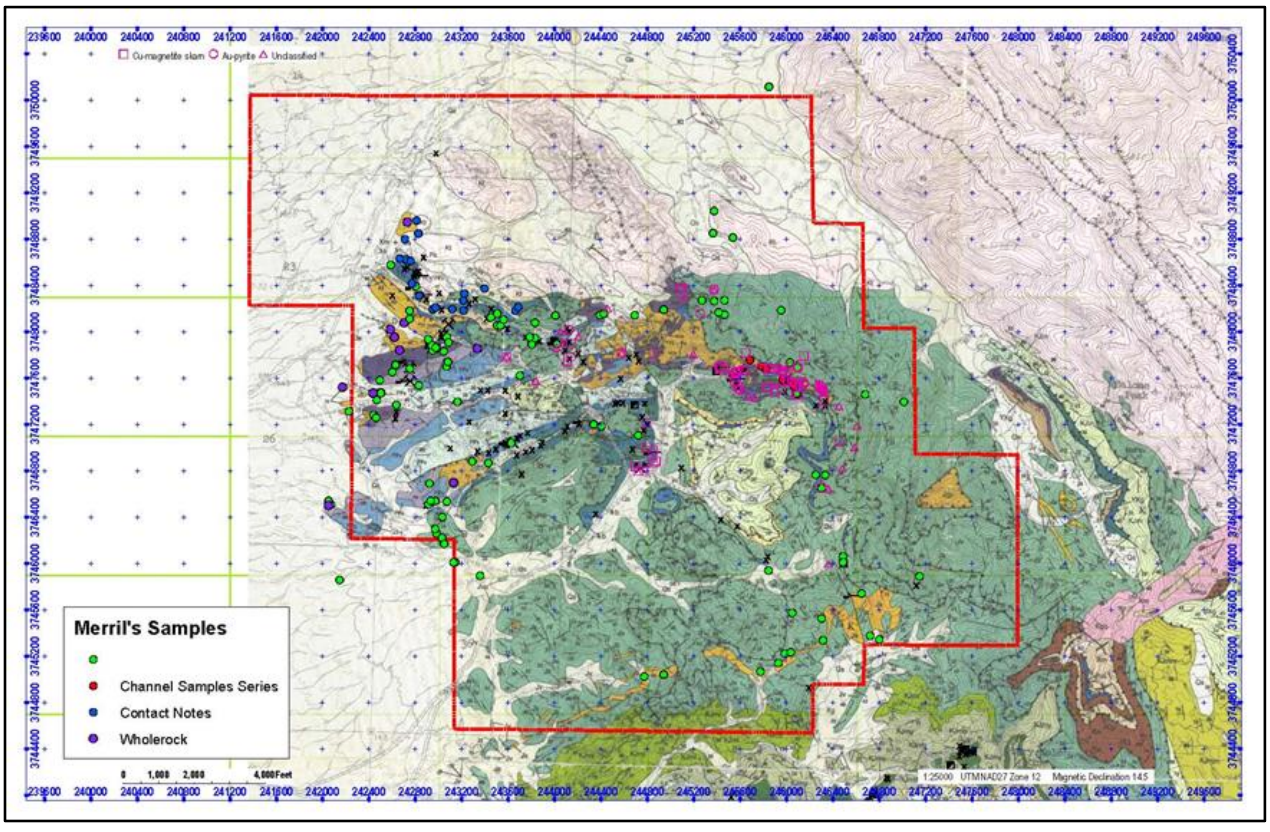
9. SAMPLE PREPARATION, ANALYSIS AND SECURITY

Samples were collected and analyzed with industry standard procedures in several different sampling programs. The initial sampling in the Yuma King area was conducted by Merrill Palmer and Stanley Keith. Additional rock chip samples were collected in the tungsten prospect areas in the northern part of the claim block in 2006. Core samples were collected during the diamond drilling in 2006, with additional core samples collected during the 2010-11 drilling by VANE.

9.1 Methods

Palmer collected numerous samples at various locations on the Yuma King property (Figure 9-1). Keith, as a consulting geologist for Rubicon, collected 144 samples for multi-element geochemical analysis in 2003. Sample locations and gold and copper analytical results, as well as the results for other elements, were presented in Appendix III of Russell (2005). An example of one of his sample location maps is shown on Figure 7-1.

Keith collected the samples in accordance with industry standards, placed the samples in standard cloth and/or plastic sample bags and transported the samples to Tucson, Arizona. The samples were delivered to the ActLabs/Skyline sample preparation facility. ActLabs/Skyline prepared the rock samples for analysis and then analyzed the samples at the Tucson facility. The samples were collected, prepared and analyzed according to industry standards and the analytical results are accurate and reliable (Russell, 2005).



Source: Keith (2011); base map from Reynolds et al. (1989) (not current claim outline)

Figure 9-1 Samples collected by Merrill Palmer, superimposed of the geologic map of northern Granite Wash Mountains

Rock chip samples were collected from the surface in the Three Musketeers and Jewel Anne tungsten prospect areas by Keith and Mr. Monte Swan in 2006 with industry standard procedures. Sample locations were entered by GPS coordinates, samples were photographed (Figure 7-16), securely handled, stored, and sent for analysis by a certified analytical laboratory. More than 140 samples were collected and analyzed for 89 elements, with some elements being analyzed by several methods.

None of the various historical reports written specifically about the Yuma mine or which mention the Yuma mine address specific details of sample recovery, preparation, and security employed during mine operation or any sampling programs. However, it is believed that all previous operators, due to the fact it was in their best interest, employed mining and technical practices that met industry standards of the time. Therefore, the available historical data are accurate and reliable (Russell, 2005).

9.2 Sample Preparation and Security Measures

Standard industry procedures for sample collection and security were followed in the sampling programs. Sample preparation and security measures for the drill core are described in Section 8 on drilling.

9.3 Laboratories

Rock chip samples were sent to ActLabs of Lancaster, Ontario, Canada. Drill core samples were sawed in half lengthwise, then first sent to Jacobs Assaying for sample preparation and for analysis of gold by fire assay and copper by wet chemistry analysis to get a quick turn-around on results. The pulps from Jacobs were then sent to ActLabs of Lancaster, Ontario, Canada, for full analysis of gold plus 64 elements. Additional check analyses were conducted by Act Labs on the samples that returned greater than 0.4% copper.

9.4 QA/QC Procedures

The Quality Assurance/Quality Control procedures for the collection, recording, and assaying of samples from the rock chip sampling and the drill core sampling by the Big Bar drilling was conducted according to industry standards. Data was received by the QP for the QA/QC procedures conducted during the Big Bar and VANE drilling.

9.5 Opinion on Adequacy

The QP believes that industry standard procedures were followed in the drilling and sampling conducted at the Yuma King property. The QP makes the following recommendations for the future:

- Standard Operating Procedures should be developed for all sampling programs to ensure that collection, handling, storage, and record-keeping methods are uniform, repeatable, and documentable. Establish procedures to ensure that sample bias and contamination do not occur.
- Due care should be taken to collect representative samples above and below the water table, where intercepted.
- Core should be digitally photographed, split or sawn, and the half-core not sampled should be archived, as was done in the Phase 1 drilling in 2006. Pulps should be retained indefinitely in a dry storage location. Rejects should be retained for a period of time until all analyses have been evaluated. Rejects can be used for additional QA/QC checks by outside laboratories or for possible metallurgical and mineralogical investigations.
- Samples should be given an ambiguous sample identification number to disguise the sample location or depth. Samples should be analyzed by a certified laboratory for a minimum of total copper by

atomic absorption method. Multi-element scans are also recommended by ICP-MS analytical methods to enable Rare Green to assess other metal concentrations, associations, and ratios.

- Field blanks and pulp standards (if available) should accompany each 10 samples, at a minimum. Field blanks should be prepared using inert, non-mineralized rock collected outside the area of mineralization.
- Duplicate pulp samples should be sent to an independent, certified assay laboratory at the rate of one per 20 samples for quality assurance/quality control purposes.
- For several drill holes, the half-core samples from several intervals should be analyzed to assess homogeneity of the mineralization.
- Assay results of duplicate samples from two laboratories should be compared to determine analytical precision.

10. DATA VERIFICATION

Data verification was performed in the field and office and is described in this section. Historical assay data exist that are impossible to verify because the assay certificates are not available or no longer exist; these data were not used in this report. Assay certificates for the 2006 and 2011 were spot checked.

10.1 Procedures

Data for this report have been compiled by the QP, including field visits to the Yuma King property on October 21 and 22, 2011, and on October 25 and 26, 2024. Data were obtained from Keith and Merrill Palmer and additional data were compiled from published sources or file data. No samples were taken in the field by the author as the return of analytical results from the laboratories generally takes two months.

At the core storage facility in Parker, a random sampling of core boxes was examined and verified against the Excel spreadsheets of assay values. Mineralogical examination of several different core boxes and comparison with the assay results confirmed that the analytical data was consistent with the observed mineralogy in the core boxes.

During the site visit, samples of copper mineralization were examined at the outcrop and verified that the descriptions of the mineralization were valid. Visual inspection of alteration, rock types, and structures that crop out at prospects, historic adits, and drill sites was conducted at various locations and drill sites at the Yuma King property.

Original laboratory reports from Jacobs Assay Office in Tucson were examined for several of the drill holes. A random check of the assay results from approximately 10 percent of the results from drill holes 31A, 3B, and 3C were correlated with the Excel spreadsheets of the assay results. This random sampling verified that the data in the Excel spreadsheets was accurately correlated with the assay sheets.

Visual inspection in the field confirms the geology of the Yuma King property is as described in historical reports. Magnetite skarn/replacement mineralization in limestone and dolomite, alteration, and copper oxide and sulfide mineralization are visible in outcrop. Identification of gold or silver mineralization is difficult in oxidized weathered outcrops, and so was not directly confirmed in the field. Also visible in the field were a significant number of historical mine roads, adits, dumps, and mine sites.

10.2 Data Adequacy

The QP reviewed the data on the Yuma King property drilling and sampling since 2011 and believes that the data has been collected, recorded, and assembled into spreadsheets according to appropriate industry standards. The QP concludes that the 2005 and later data provided by Keith and Palmer for the Yuma King project have been collected and analyzed in accordance with acceptable industry procedures and are verifiable and acceptable.

11. MINERAL PROCESSING AND METALLURGICAL TESTING

Mineral processing and/or metallurgical testing have not been done at the Yuma King project, as the project is currently in the advanced exploration phase. Any copper or gold discovery should be amenable to well-known metallurgical recovery methods that are used in porphyry copper deposits throughout the world. Until a mineral deposit of potentially economic interest is located, metallurgical testing is not necessary.

12. MINERAL RESOURCE AND RESERVE ESTIMATE

The Yuma King project is an advanced stage exploration project. At this stage of the project, mineral resources and mineral reserves have not been defined for the Yuma King project.

There is no current NI 43-101 compliant mineral resource or mineral reserve estimate for the Yuma King project. The historical production stated in Section 6.0 (History) should not be relied upon as they have not been verified or classified according to CIM or SME resource/reserve categories by a Qualified Person (CIM, 2011, 2018).

13. ADJACENT PROPERTIES

There are no data available regarding properties adjacent to the Yuma King property. There are no operating mines in the immediate area of the Yuma King property, although historic prospect pits or adits are present. The QP is not aware of any exploration or mine development plans for any adjacent properties.

Properties that are not adjacent to the Yuma King property, but are located in the vicinity, include the Copperstone Mine, which is approximately 30 miles west of the Yuma King property in La Paz County, Arizona. Cyprus produced gold from the Copperstone Mine from 1987 through 1993 of approximately 514,000 oz of gold from 6,173,000 tons of mill feed grading 0.089 oz/ton Au. In 2012, American Bonanza Gold Corp. started underground mining at the Copperstone Mine from two declines that were developed in the bottom of the open pit. From January 2012 to July 2013, American Bonanza produced approximately 16,900 oz of gold from 163,000 tons of mill feed grading 0.104 oz/ton. Exploration and development activity continues at the Copperstone Mine, although no activity was observed on October 19, 2024. A recent NI 43-101 report estimated the measured plus indicated mineral resources were 1,330,000 tons containing 300,000 troy oz of gold at an average grade of 0.226 troy oz/short ton (7.74 grams/Tonne) on February 15, 2023 (Hard Rock Consulting, 2023).

Other mineralized areas in the region (Figure 1-1) continue to experience active exploration. Areas under active exploration include those in the Plomosa Mountains about 15 to 20 miles west-northwest of the Yuma King area (Bouse, Little Butte and Coronation mineral districts (Rasmussen and Keith, 2024).

14. OTHER RELEVANT DATA AND INFORMATION

The QP is not aware of any other relevant data or information that affects the potential to pursue continued exploration on the Yuma King project land holdings.

The QP knows of no other relevant technical or other data or information that might materially impact the interpretations and conclusions presented herein, nor of any additional information necessary to make the report more understandable or not misleading.

15. INTERPRETATION AND CONCLUSIONS

The QP's examination of the evidence indicates that CuQuest's approach to exploration at the Yuma King project is valid. The Yuma King project is an advanced-stage exploration property in an area that generally has been inactive for the past 70 years due to low metal commodity prices. Potential may exist to establish the existence of a porphyry copper-gold target, in addition to skarn/replacement mineralization previously mined at the historic Yuma mine.

The Ellsworth mining district had undergone exploration and extensive development during the period 1878 through the 1910s, but activity declined after that. Total historical expenditures on the property are not known, although Keith estimated that approximately $4.5 million has been spent on the property in exploration and drilling.

While current, NI 43-101-compliant resources and/or reserves have not been established, the QP considers the existing project data to be important, substantial, and relevant to the project. In the QP's opinion, resource estimation is not achievable using the existing drilling data.

The Yuma King property does, however, represent an opportunity to develop and pursue exploration concepts and targets for drilling, using the existing historical data for background. The Yuma King property will have the inherent opportunity and risk of a advanced stage exploration property as defined in the sections below.

15.1 Results

The QP concludes that the advanced-stage exploration concept of CuQuest is appropriate for the Yuma King property. The concept for a potential buried copper-gold-molybdenum porphyry deposit has been developed based on an interpretation of the available local and district-scale surface geological, structural, geochemical, and drill assay data. The compilation of mineralization and zonation observations made by Keith and others from geological mapping and drilling, and the geophysical surveys indicate a potential for a large porphyry copper gold system.

The compilation of available data has been conducted in accordance with acceptable industry procedures. The presence of the skarn/replacement copper-gold-molybdenum mineralization has been confirmed by the drilling and the potential for porphyry copper-gold mineralization has been indicated by the assay results of drilling programs on the Yuma King property.

15.2 Significant Risks and Uncertainties

A copper-gold-molybdenum ore deposit has not yet been drill-defined by CuQuest for the Yuma King property, although intercepts of copper-gold-molybdenum mineralization are present in all the drillholes. Exceptions for porphyry copper model are the southernmost drill hole AV11-02 drilled by VANE and the drill holes by Cash Capital testing the extent of graphene/graphite mineralization (Y1 through Y4 drill holes).

The primary risk at an exploration stage is that drill targets and the depth of the proposed drill holes will not hit sufficient target mineralization.

Exploration targets of current interest are:

- Copper-bearing skarns and veins found in structural zones and in contact metamorphic zones adjacent to dikes and intrusions (Stage 2),
- Porphyry deposits and the copper-gold primary mineralization associated with the large magnetic anomaly to the north and east of current drill holes (Stage 3), and

- Porphyry molybdenum mineralization associated with Stage 4 intrusions.

It is not yet known the total extent of copper-gold-molybdenum mineralization of economic interest that might be present. However, the intersection of copper-molybdenum mineralization below the Black Jack thrust fault lowers the exploration risk.

A mineral resource estimation for the Yuma King project is premature, pending further exploration drilling that defines such a mineralized deposit. There are many variables in the resource estimation process that are risks to achieving a desirable resource estimate and include the variability of assay grades. As with any advanced stage exploration project, there is no guarantee that a resource of sufficient size to be of economic interest to CuQuest can be identified.

The current price for copper is at a record high for the last 50 years. Currently the price is over US$4.60 per lb, which is more than three times the commodity price of earlier years. Stability of commodity prices and the availability of supplies to meet demand are risk factors for all mineral deposits, including the Yuma King project.

16. RECOMMENDATIONS

The following tasks are recommended to be completed to advance the Project and to prepare for Project development and operation.

16.1 Recommended Work Programs

Additional work is warranted and recommended to define the full extent of the copper-gold-molybdenum mineralization in and around the historic Yuma Mine and to determine its economic significance. It is recommended that a Phase 3 exploration program with budgets of US$ 3,100,000 be conducted to achieve the primary goal of continuing exploration at the Yuma King property. That information is needed to confirm, extend and discover copper mineralization in and contiguous to the current underground workings of the Yuma Mine. It is particularly important to explore for a potentially large, mineralized area to the north and east of the drilling conducted through 2011 (Stanley Keith, 2024, personal communication).

A NI 43-101 resource estimate would not be conducted until sufficient drilling was completed to characterize the resources to an inferred classification.

16.1.1 Data Compilation – Phase 3a

It is recommended that a data compilation phase be conducted to bring together all historic data into a modern data base with potential to assess data in three dimensions. All drillhole information should be migrated into a formal database software such as Excel or Access or other data compilation that can be imported into a 3-dimensional data program, such as LeapFrog or Vulcan or similar computer program.

16.1.2 Geophysical Surveying – Phase 3a

The existing ultralight magnetic survey identified potential magnetic anomalies that do not correspond with non-magnetic surface outcrops of Tank Pass granite (Keith, 2024, personal communications). The elevated magnetic anomalies can be interpreted to represent magnetite-bearing copper skarn bodies associated with an extension of the Yuma King magnetic skarn bodies north of and beneath the Tank Pass Granite.

Additional high-resolution Induced Polarization (IP) should be conducted to identify areas of potentially strong sulfide and magnetite in the subsurface associated with copper replacement mineralization. One dipole-dipole IP line out to the north is recommended that runs from P13 northwest along Granite Wash to the 3,000 station on dipole-dipole line 1 and continues northwest to the word ‘Wash’ northwest of the siting triangle on Figure 7-9 (Keith, 2024, personal communications).

This proposed IP line will test for any conductivity and IP response that might exist beneath what is inferred to be the footwall of the Tank Pass Granite. The Tank Pass Granite is postulated to be a sill-like body that could conceal a northward extension of the Yuma King skarn system. This prediction is supported by the discovery of a propylitically altered, monzo-diorite porphyry (Stage 2) outcrop on Green Dragon’s No. 33 and 34 claims (Keith, 2024, personal communications).

If the IP survey yields a positive result, follow-up drilling to the immediate southwest of the porphyry exposure is recommended to test any combined IP-conductivity anomaly.

16.1.3 Additional Geological Mapping and Sampling – Phase 3a

Additional detailed geologic mapping, similar to that in the Yuma mine plate east of the Yuma mine (Figure 7-4) should be extended to the east and south, emphasizing the mineralized Paleozoic section and the overlying sheared intrusive sequences beneath the Black Jack thrust (Figure 5-16).

16.1.4 Exploration Drilling – Phase 3b

Keith recommends further core drilling programs be conducted on the Yuma King project (Figure 16-1). After the most favorable targets are determined by Phase 3 drilling, definition drilling as Phase 4 drilling can proceed on that target to define a potential ore body. Phase 3 core drilling would be aimed at determining depths and grades of mineralization, rock types, and alteration zoning. The Phase 3 core drilling would also provide geotechnical information, samples for bulk density measurements, and samples for preliminary metallurgical testing.

The Phase 3 core drilling program should be conducted to test targets defined by the geological and geophysical programs. The recent drilling and proposed Phase 3 drill holes are basically accessed by existing drill roads, so little additional disturbance would be required to potentially stay within the 5 acre disturbance rule. This may require some reclamation of current drill roads.

Approximately 15,000 ft of drill core is recommended in 13 to 15 drill holes (Figure 16-1). Drill sites recommended by Keith include the following:

[1] From Drill Site #2 (line #2F), drill one core hole about 1,800 ft deep that is angled about N50E to intersect the base of the Yuma mine thrust and test the complete interval of the stockwork molybdenum found in drill hole 2B. This drill hole would also test the skarn target below the stockwork molybdenum mineralization and above the Yuma Mine thrust.

[2] From Drill Site #2 (line #2G), drill one core hole about 700 ft deep angled about S30W to intersect the extension of the copper oxide zone immediately east of the old Yuma mine vertical shaft. This oxide mineralization will presumably be terminated by the Yuma mine thrust, at which point the #2G drill hole can be terminated.

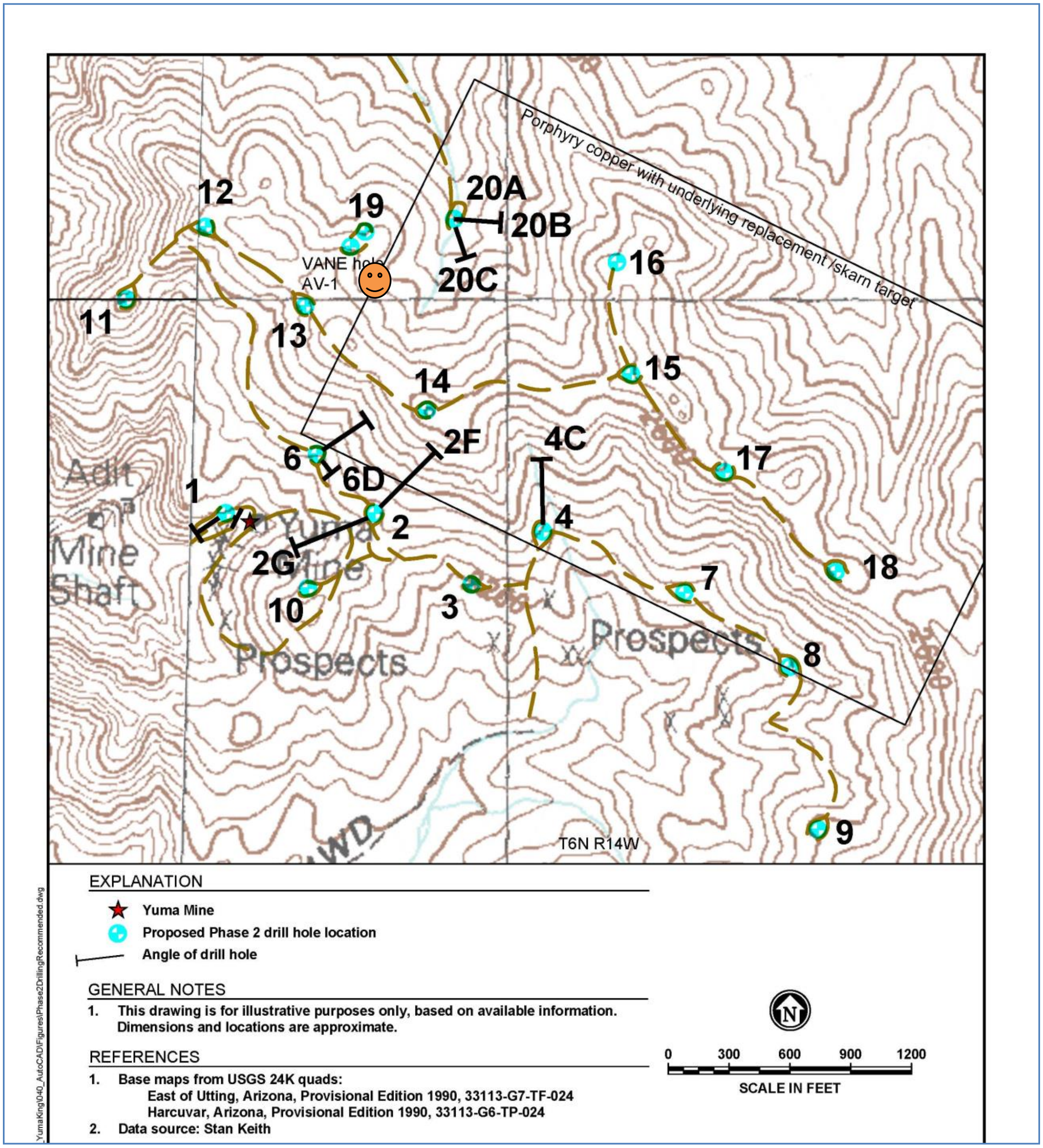
[3] From about 500 ft northeast of the VANE AV1 drill site (Site #20A), drill one vertical core hole about 1,300 ft deep angled to the east to intersect the quartz monzonite porphyry that may host the porphyry copper-gold-molybdenum mineralization. This #20A drill hole should be continued to the Yuma mine thrust to test for the extension of the copper-molybdenum-gold target in the footwall of the quartz monzonite porphyry and above the Yuma mine thrust.

[4] From about 500 ft northeast of the VANE AV1 drill site (Site #20B), drill one core hole about 1,500 ft deep angled to the east to intersect the quartz monzonite porphyry that may host the porphyry copper-gold-molybdenum mineralization. This drill hole should be continued to the Yuma mine thrust to test for the extension of the copper-molybdenum-gold target in the footwall of the quartz monzonite porphyry and above the Yuma mine thrust.

[5] From about 500 ft northeast of the VANE AV1 drill site (Site #20C), drill one core hole about 1,500 ft deep that is angled to the south-southeast to intersect the quartz monzonite porphyry that may host the porphyry copper-gold-molybdenum mineralization. This drill hole should be continued to the Yuma mine thrust to test for the extension of the copper-molybdenum-gold target in the footwall of the quartz monzonite porphyry and above the Yuma mine thrust.

[6] From Drill Site #4 (line #4C), drill one core hole about 1,800 ft deep that is angled to the north to drill through the Black Jack thrust and intersect the quartz monzonite porphyry that may host the copper-gold-molybdenum mineralization. This drill hole should be continued to the Yuma mine thrust to test for the extension of the copper-molybdenum-gold target in the footwall of the quartz monzonite porphyry and above the Yuma mine thrust.

[7] From Drill Site #6D, drill one core hole about 800 ft deep angled to the southeast to intersect the skarn/replacement zone and to miss the opening that led to the loss of Big Bar drill hole 6B. This drill hole should be continued to the Yuma mine thrust to test for the extension of the copper-molybdenum-gold target in the footwall of the quartz monzonite porphyry and above the Yuma mine thrust.



Source: SRK (2011), Smile face marks the position of the VANE drill hole AV11-01

Figure 16-1 Recommended Phase 3 drilling

[8] From Drill Site #1E, drill about 200 ft to intersect a possible continuation of the high-grade silver chloride mineralization along From the stream channel that was intersected in drill hole 1D.

[9] From near the old vertical shaft for the Yuma Mine, drill one vertical core hole that offsets the old mine shaft that probably went through the oxide zone. The drill hole should be positioned to miss the barren microdiorite dike that appears just west of the mine shaft.

[10] From near the old vertical shaft for the Yuma Mine, drill an inclined hole to the northeast to test for the existence of additional oxide and sulfide mineralization east of the old mine shaft.

[11] From proposed Drill Site #14, drill an inclined hole about 60˚ to the ENE and one vertical hole. Both holes should go through the Yuma mine plate and bottom beneath the Yuma mine thrust. These drill holes will test the dimensions of the predicted skarn ore body indicated by geophysical IP line 2. The inclined drill hole will test the possible eastward extension of the skarn target and the porphyry copper molybdenum in the hanging wall of the skarn.

[12] Proposed Drill Sites 12 and 13 are positioned near the culmination of the Yuma King magnetic anomaly. A vertical drill hole from each of these sites should continue until the predicted magnetite skarn in the underlying Paleozoic section is reached. These drill holes should test what is in the magnetic high indicated in the ultra-light magnetic survey (hopefully copper and a high volume of magnetite skarns).

[13] From proposed drill site 10, drill one vertical hole and two inclined drill holes to test the updip projection of the oxide mineralization to the south of drill site 1, which contains numerous copper-gold-molybdenum assays.

[14] Drill hole 9 is a prospective drill site southeast of the Yuma mine area mineralization on the west side of Mt. Green. Several drill holes can be drilled from this site if favorable geology and sampling results are obtained from the Phase 3a exploration program suggested in Section 16.1.1.

If the above drill program is successful and a potentially commercial porphyry copper-molybdenum system combined with an underlying copper magnetite skarn system is discovered, an additional Phase 4 drill program is proposed. This phase 4 drilling is also shown on Figure 16-1.

For Phase 4, from drill site 14, an additional drill road should be constructed that services drill sites 15 through 18 along the ridge line to the east. From Drill Site 4, another drill road should be constructed along a topographic bench that services drill sites 5, 6, 7, 8, and 9. These additional drill roads would trigger additional permitting requirements (see Section 2.4.2).

The all-in drilling cost is estimated to be about $100 per foot, for a cost of approximately $1,500,000 for drilling, including labor of a geologist to log core and a technician to enter data into computer programs.

After the best target is determined by Phase 3 drilling, future drilling efforts can be focused on defining grades and amounts of mineralization to the inferred, indicated, or measured ranges.

16.1.5 Underground Exploration

Examination of the underground resource analysis by Russell (2005) revealed that additional exploration opportunity remains, as both the oxide and sulfide underground mineralization is open to the east for an unknown distance. This underground exploration would trigger additional requirements from Mine Safety and Health Administration (MSHA).

The following program is recommended by Keith (personal communication, 2024) to define the dimensions of the additional underground resource possibilities.

[1] The oxide zone extension east of the baren microdiorite dike at the Yuma mine vertical shaft can be more thoroughly tested by long-hole drilling from the unmapped extension of the adit level at the Yuma mine. The adit level should first be adequately surveyed by a Brunton and tape survey to its end. Shallowly upward-inclined (15-20˚) long-holes can be drilled to penetrate a presumed extension of the oxide mineralization, which is well explored to the west of the dike but is unexplored east of the dike.

[2] A series of long-holes should be drilled from near the end of the 350 level drift. One set should

be drilled at shallow angles to the east to determine the eastward extent of the oxide or sulfide mineralization, as the 350 level is drifted very close to the oxide-sulfide boundary.

A second set of upward (30˚) inclined long-holes should include long holes drilled to the southeast and south should further test the updip continuation of the oxide mineralization. These holes will compliment the down dip holes drilled from the extension of the adit level.

If the underground exploration program is successful and additional resources are established in the underground mine workings, Keith estimates that the additional underground exploration work, if successful, could double the resource estimate of the Russell 43-101 report. It is expected that this underground effort will mainly be applied to the oxide portion of the underground, some of which may be amenable to open pit mining.

Phase 4 Underground Exploration

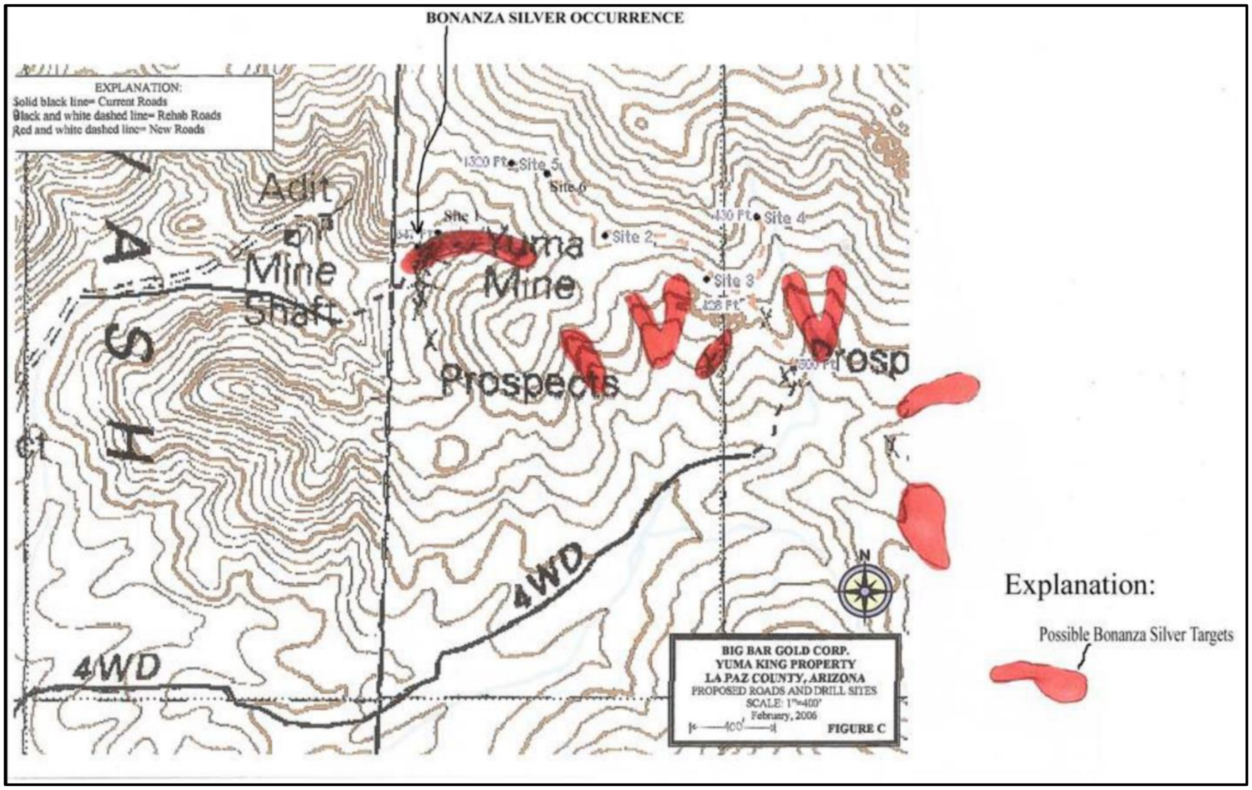
Keith recommends the following Phase 4 exploration work for the underground. Adits should be driven from the adit level into the northward-dipping oxide deposit. Bulk sampling should be done in the mineralized ground as the drifts drive inward. In addition, the end of the adit level and the end of the 350 ft level should be extended to the east until the end of visible mineralization is reached. The extension should be combined with bulk sampling.

16.1.6 New Oxide Exploration

The strong oxide copper-gold-molybdenum mineralization intersected by the drilling at drill site 1 is open in several direction and should be further tested by drilling. Additional drilling from a proposed drill site on the end of a ridge about 1000 feet south of drill site YK01 could discover a mineable oxide body. In addition to the elevated gold and copper values, molybdenum values could also be elevated.

Bonanza Silver Exploration

Exploration drilling from Big Bar Site 1, unexpectedly intersected a bonanza silver in drill hole D1-D beneath a modern stream channel. This was discussed in section 5.8.5. Significantly, no elevated silver values were intersected by other drill holes near this contact. However, none of these drill holes were placed on modern stream channels or gullies, where abundant supergene water could leach the existing copper-gold-molybdenum skarn bodies. A map of potential bonanza supergene silver occurrences that require follow-up exploration is shown on Figure 16-2.



Source: Keith (2011)

Figure 16-2 Map showing possible silver targets within the Yuma King oxidized skarn area

16.1.7 Other Geological and Metallurgical Work

Data should be entered into computer programs, such as a GIS model of the district. These data can be transferred where appropriate to an appropriate 3-dimensional geology mine planning and resource estimating software, such as Vulcan or Leapfrog.

Initial rock mechanics data should also be obtained on drill core samples (RQD data, compressive strength, along with representative specific gravities) as an integral part of the drilling program. Initial metallurgical testing can be done on new drill core as well. The aim of the metallurgical testing is to evaluate minimum preliminary indications of possible metal recoveries.

16.2 Costs

In the following cost estimates, where cost per sample is quoted, these are "all in" costs and include all sample collection costs including mobilization and demobilization, travel, food and lodging, field crew and supervision, base maps, sample bags, shipping, sample preparation and assay costs.

16.2.1 Proposed Budget

It is recommended that a Phase 3 exploration program with a budget of US$ 450,000 for Phase 3a data compilation, followed by a budget of US$ 2,970,000 for a Phase 3b core drilling program. This Phase 3 exploration program will advance the Yuma King property to establish a recognizable discovery quality result that would lead to a future prefeasibility program. The purpose of the Phase 3 drilling and exploration program is to confirm, extend and discover copper resources in and contiguous to the current underground workings of the historic Yuma mine.

A Phase 3a data compilation and data base construction, geologic mapping, and select rock sampling should be conducted. The area on the west side of Mt. Green is likely to be a continuation of the more explored area east of the Yuma mine area and should be sampled and mapped.

A Phase 3b core drilling program should be conducted to test targets defined by the geological and geophysical programs. A minimum of 15,000 ft of HX/HQ core is recommended in 13 to 15 drill holes. Details of the recommended Phase 3 exploration program are given in Table 16-2.

Table 16-1 Recommended Phase 3a Data Compilation Program, Yuma King property

Task	Estimated Cost
Data compilation	$ 100,000
Assays/Geochemical Analyses	$ 50,000
Detailed surface geologic mapping (mine area to area west of Mt. Green)	$ 100,000
Geophysics (IP survey)	$ 50,000
Computer modeling and data base	$ 100,000
Prepare permitting documents for drilling and supply Bureau of Land Management reclamation bonds for drill roads and drill sites (2-3 month process)	$ 50,000
Total Phase 3 Recommended Expenditures	**$ 450,000**

Table 16-2 Recommended Phase 3b Drilling Exploration Program, Yuma King property

Task	Estimated Cost
Drilling: Core in 15 holes; 20,000 ft @ $100.00/ft.	$ 2,000,000
Assays/Geochemical Analyses	$ 70,000
Underground long-hole drilling	$ 400,000
Updip oxide drilling	$ 500,000
Total Phase 3 Recommended Expenditures	**$ 2,970,000**

Note: Costs are in U.S. dollars

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18. Appendix A: Glossary

18.1 Mineral Resources

The mineral resources and mineral reserves have been classified according to the "CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines" (November 27, 2010). Accordingly, the Resources have been classified as Measured, Indicated or Inferred, the Reserves have been classified as Proven, and Probable based on the Measured and Indicated Resources as defined below.

A Mineral Resource is a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes.

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes that are spaced closely enough to confirm both geological and grade continuity.

18.2 Mineral Reserves

A Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.

A 'Probable Mineral Reserve' is the economically mineable part of an Indicated, and in some circumstances a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

A 'Proven Mineral Reserve' is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

18.3 Terms, Definitions, Abbreviations

The following general mining terms may be used in this report.

Table 18-1 Terms and Definitions

Term	Definition
Assay	The chemical analysis of mineral samples to determine the metal content.
Composite	Combining more than one sample result to give an average result over a larger distance
Cut-off Grade	The grade of mineralized rock, which determines as to whether or not it is economic to recover its gold content by further concentration.
Dip	Angle of inclination of a geological feature/rock from the horizontal.
Fault	The surface of a fracture along which movement has occurred.
Footwall	The underlying side of an orebody or stope.
Gangue	Non-valuable components of the ore.
Grade	The measure of concentration of gold within mineralized rock.
Hanging wall	The overlying side of an orebody or slope.
Igneous	Primary crystalline rock formed by the solidification of magma.
Lithological	Lithological: Geological description pertaining to different rock types.
Mineral/Mining Lease	A lease area for which mineral rights are held.
Ore Reserve	See Mineral Reserve
Sedimentary	Pertaining to rocks formed by the accumulation of sediments, formed by the erosion of other rocks.
Shaft	An opening cut downwards from the surface for transporting personnel, equipment, supplies, ore and waste.
Sill	A thin, tabular, horizontal to sub-horizontal body of igneous rock formed by the injection of magma into planar zones of weakness.
Stope	Underground void created by mining.
Stratigraphy	The study of stratified rocks in terms of time and space.
Strike	Direction of line formed by the intersection of strata surfaces with the horizontal plane, always perpendicular to the dip direction
Sulfide	A sulfur-bearing mineral

Table 18-2 Abbreviations

Abbreviation	Unit or Term
AA	Atomic absorption
Ag	Silver
Au	Gold
°C	Degrees Centigrade
cm	Centimeter
cm^2	Square centimeter
°	Degree (degrees)
Dia.	diameter
FA	Fire assay
Ft	Foot (feet)
Ft^2	Square foot (feet)
Ft^3	Cubic feet (feet)
g	Gram
Gal	gallon
g/L	Gram per liter
g/t	Grams per tonne
ha	Hectares
ICP	Induced couple plasma

Abbreviation	Unit or Term
ICP-MS	Induced couple plasma-multiple spectrometer
kg	Kilograms
Km	kilometer
Km^2	Square kilometer
LOI	Loss On Ignition
m	Meter
m^2	Square meter
m^3	Cubic meter
Ma	Million years ago or Mega-annum
NI 43-101	Canadian national Instrument 43-101
oz	Troy ounce
%	percent
ppb	Parts per billion
ppm	Parts per million
QA/QC	Quality Assurance/Quality Control
RC	Rotary circulation drilling
RQD	Rock Quality Description
SEC	U. S. Securities & Exchange Commission
sec	Second
St	Short ton (2,000 pounds)
t	Tonne (metric tone (2,204.6 pounds

Table 18-3 List of Acronyms

AAL	American Assay Laboratory	NEPA	National Environmental Protection Act
ADMMR	Arizona Dept. Mines and Mineral Resources	NI 43-101	National Instrument 43-101 Technical Report
ADEQ	Arizona Department of Environmental Quality	NOI	Notice of Intent
ADWR	Arizona Department of Water Resources	PG	Professional Geologist
Ag	Silver	ppm	Parts per million
ALS	ALS Laboratories	PRJ	Pearson, deRidder and Johnson, Inc.
APP	Aquifer Protection Permit	QAQC	Quality Assurance/Quality Control
Au	Gold	QP	Qualified Person
AWQS	Aquifer Water Quality Standards	RMR	Rock mass rating
BADCT	Best available control technology	RQD	Rock Quality Data
BDL	Below detection	SME-RM	Society of Mining and Metallurgy and Exploration – Registered Member
BLM	Bureau of Land Management	SRM	Standard Reference Material
Bmsl	Below mean sea level	SWS	Schlumberger Water Services
CIM	Canadian Institute of Mining, Metallurgy and Petroleum	TOMCL	Trans Oceanic Mineral Company Ltd.
Cu	Copper	tpd	Tones per day
FW	Footwall	tph	Tones per hour
g/L	Grams per litre	TSF	Tailings storage facility
g/mt	Grams per metric tonne	USGS	United States Geological Survey
HW	Hanging wall		
IP	Induced Polarization		
ISO	International Standards Organization		
MPO	Mine Plan of Operations		
MSGP	Multi-Sector General Permit		

19. APPENDIX B: Yuma King Copper Project, List of Unpatented Claims, Sept. 1, 2024

Claim Name	BLM Serial No.
FOUR OR MORE#1	AMC#349474
FOUR OR MORE#2	AMC#349475
FOUR OR MORE#3	AMC#349476
FOUR OR MORE#4	AMC#349477
FOUR OR MORE#5	AMC#349478
FOUR OR MORE#6	AMC#349479
MP#1	AMC#357503
MP#2	AMC#357504
MP#3	AMC#357542
MP#4	AMC#357543
MP#5	AMC#358952
MP#6	AMC#358953
MP#7	AMC#358954
MP#8	AMC#358955
MP#9	AMC#358956
MP#10	AMC#358957
MP#t1	AMC#358958
MP#12	AMC#358959
MP#13	AMC#358960
MP#14	AMC#358961
MP#15	AMC#358962
MP#16	AMC#358963
MP#17	AMC#358964
MP#18	AMC#358965
MP#19	AMC#358966
MP#20	AMC#358967
MP#21	AMC#358968
MP#22	AMC#358969
MP#23	AMC#358970
KING#1	AMC#357198
KING#2	AMC#357199
KING#3	AMC#357200
KING#4	AMC#357201
KING#S	AMC#357202
KING#6	AMC#357505
KING#7	AMC#357506
KING#8	AMC#358944,
KING#9	AMC#358945
KING#10	AMC#358946
KING#11	AMC#358947
KING#12	AMC#358948
KING#13	AMC#358949
KING#14	AMC#358950
KING#15	AMC#358951
BLACK JACK#1	AMC#356883
BLACK JACK#2	AMC#356909
BLACK JACK#3	AMC#357117
BLACK JACK#4	AMC#357118
BLACK JACK#5	AMC#358943
BJ #6	AMC#360012
BJ #7	AMC#360013
BJ #8	AMC#360014

Claim Name	BLM Serial No.
Subtotal miscellaneous	**52**
Yuma 108	AMC# 369846
Yuma 109	AMC# 369847
Yuma 110	AMC# 369848
Yuma 111	AMC# 369849
Yuma 112	AMC# 369850
Yuma113	AMC# 369851
Yuma 114	AMC# 369852
Yuma115	AMC# 369853
Yuma 116	AMC# 369854
Yuma117	AMC# 369855
Yuma 118	AMC# 369856
Yuma 119	AMC# 369857
Yuma120	AMC# 369858
Yuma 121	AMC# 369859
Yuma 122	AMC# 369860
Yuma 123	AMC# 369861
Yuma 124	AMC# 369862
Yuma 125	AMC# 369863
Yuma 126	AMC# 369864
Yuma 1	AMC# 369865
Yuma 2	AMC# 369866
Yuma 3	AMC# 369867
Yuma 4	AMC# 369868
Yuma 5	AMC# 369869
Yuma 6	AMC# 369870
Yuma 7	AMC# 369871
Yuma 8	AMC# 369872
Yuma 9	AMC# 369873
Yuma 10	AMC# 369874
Yuma 11	AMC# 369875
Yuma 12	AMC# 369876
Yuma 13	AMC# 369877
Yuma 14	AMC# 369878
Yuma 15	AMC# 369879
Yuma 16	AMC# 369880
Yuma 17	AMC# 369881
Yuma 18	AMC# 369882
Yuma 19	AMC# 369883
Yuma 20	AMC# 369884
Yuma 21	AMC# 369885
Yuma 23	AMC# 369886
Yuma 22	AMC# 369887
Yuma 101	AMC# 369787
Yuma 102	AMC# 369788
Yuma 103	AMC# 369789
Yuma 104	AMC# 369790
Yuma 105	AMC# 369791
Yuma 106	AMC# 369792
Yuma 107	AMC# 369793
Yuma 26	AMC# 369796
Yuma 27	AMC# 369797

Claim Name	BLM Serial No.
Yuma 28	AMC# 369798
Yuma 31	AMC# 369801
Yuma 32	AMC# 369802
Yuma 33	AMC# 369803
Yuma 34	AMC# 369804
Yuma 35	AMC# 369805
Yuma 36	AMC# 369806
Yuma 37	AMC# 369807
Yuma 38	AMC# 369808
Yuma 39	AMC# 369809
Yuma 40	AMC# 369810
Yuma 45	AMC# 369815
Yuma 46	AMC# 369816
Yuma 47	AMC# 369817
Yuma 48	AMC# 369818
Yuma 49	AMC# 369819
Yuma 50	AMC# 369820
Yuma 51	AMC# 369821
Yuma 52	AMC# 369822
Yuma 53	AMC# 369823
Yuma 54	AMC# 369824
Yuma 55	AMC# 369825
Yuma 56	AMC# 369826
Yuma 57	AMC# 369827
Yuma 58	AMC# 369828
Yuma 59	AMC# 369829
Yuma 60	AMC# 369830
Yuma 61	AMC# 369831
Yuma 62	AMC# 369832
Yuma 63	AMC# 369833
Yuma 64	AMC# 369834
Yuma 65	AMC# 369835
Yuma 66	AMC# 369836
Yuma 67	AMC# 369837
Yuma 68	AMC# 369838
Yuma 69	AMC# 369839
Subtotal Yuma	**87**
North Yuma #11	AMC# 371331
North Yuma #12	AMC# 371332
North Yuma #13	AMC# 371333
North Yuma #14	AMC# 371334
Subtotal North Yuma	**4**
SE YUMA#18	AMC# 378854
SE YUMA#19	AMC378855
SE YUMA#20	AMC378856
SE YUMA#21	AMC378857
SE YUMA#22	AMC378858
SE YUMA#23	AMC378859
SE YUMA#24	AMC378860
SE YUMA#31	AMC378867
SE YUMA#32	AMC378868
SE YUMA#33	AMC378869
SE YUMA#34	AMC378870
SE YUMA#35	AMC378871
SE YUMA#36	AMC378872
SE YUMA#37	AMC378873
SE YUMA#38	AMC378874

Claim Name	BLM Serial No.
SE YUMA#46	AMC435476
SE YUMA#47	AMC435477
SE YUMA#48	AMC435478
SE YUMA#49	AMC435479
SE YUMA#53	AMC378889
SE YUMA#54	AMC378890
SE YUMA#55	AMC378891
SE YUMA#56	AMC378892
SE YUMA#57	AMC435106
SE YUMA#58	AMC435107
SE YUMA#59	AMC435108
SE YUMA#60	AMC435109
SE YUMA#61	AMC435110
SE YUMA#62	AMC435111
SE YUMA#63	AMC435112
SE YUMA#64	AMC435113
SE YUMA#65	AMC435114
SE YUMA#66	AMC435115
SE YUMA#67	AMC378903
SE YUMA#68	AMC378904
SE YUMA#69	AMC378905
SE YUMA#70	AMC378906
SEYUMA#71	AMC378907
SE YUMA#72	AMC378908
SE YUMA#73	AMC378909
SE YUMA#74	AMC378910
SE YUMA#75	AMC378911
SE YUMA#76	AMC378912
SE YUMA#77	AMC378913
SE YUMA#78	AMC378914
SE YUMA#79	AMC435116
SE YUMA#80	AMC435117
SE YUMA#81	AMC378917
SE YUMA#82	AMC378918
SE YUMA#83	AMC378919
SE YUMA#84	AMC378920
SE YUMA#85	AMC378921
SE YUMA#86	AMC378922
SE YUMA#87	AMC378923
SE YUMA#88	AMC378924
SE YUMA#89	AMC378925
SE YUMA#90	AMC378926
SE YUMA#91	AMC378927
SE YUMA#92	AMC378928
SE YUMA#93	AMC378929
SE YUMA#94	AMC378930
SE YUMA#95	AMC378931
SE YUMA#96	AMC378932
SE YUMA#97	AMC435118
SE YUMA#98	AMC435119
SE YUMA#99	AMC435120
SE YUMA#100	AMC435121
SE YUMA#101	AMC435122
SE YUMA#102	AMC435123
SE YUMA#103	AMC435124
SE YUMA#104	AMC378940
SE YUMA#105	AMC378941

Claim Name	BLM Serial No.
SE YUMA#106	AMC378942
SE YUMA#107	AMC435125
SE YUMA#108	AMC435126
SE YUMA#109	AMC435127
SE YUMA#114	AMC435128
SE YUMA#115	AMC435129
SE YUMA#116	AMC435130
SE YUMA#117	AMC435131
SE YUMA#118	AMC435132
SE YUMA#119	AMC435133
SE YUMA#120	AMC435134
SE YUMA#121	AMC435135
SE YUMA#122	AMC435136
SE YUMA#123	AMC435137
SE YUMA#130	AMC435480
SE YUMA#131	AMC435481
SE YUMA#132	AMC435482
SE YUMA#133	AMC435483
SE YUMA#134	AMC435484
SE YUMA#135	AMC435485
SE YUMA#136	AMC435486
SE YUMA#137	AMC435487
SE YUMA#138	AMC435488
SE YUMA #139	AMC435489
SE YUMA#140	AMC435490
SE YUMA#141	AMC435491
SE YUMA#142	AMC435492
SE YUMA#143	AMC435493
SE YUMA#144	AMC435494
SE YUMA#145	AMC435495
SE YUMA#146	AMC435496
SE YUMA#147	AMC435497
SE YUMA#148	AMC435498
SE YUMA#149	AMC435499
Subtotal SE Yuma	**106**
G#1	AMC447363
G#2	AMC447364
G#3	AMC447365
G#4	AMC447366
G#5	AMC447367
G#6	AMC447368
G#7	AMC447369
G#8	AMC447370
G#9	AMC447371
G#10	AMC447372
G#11	AMC447373
G#12	AMC447374
G#13	AMC447375
G#14	AMC447376
G#15	AMC447377
G#16	AMC447378
G#17	AMC447379
G#18	AMC447380
G#19	AMC447381
G#20	AMC447382
G#21	AMC447383
G#22	AMC447384

Claim Name	BLM Serial No.
G#23	AMC447385
G#24	AMC447386
G#25	AMC447387
G#26	AMC447388
G#27	AMC447389
G#28	AMC447390
G#29	AMC447391
G#30	AMC447392
G#31	AMC447393
G#32	AMC447394
G#33	AMC447395
G#34	AMC447396
G#35	AMC447397
G#36	AMC447398
G#37	AMC447399
G#38	AMC447400
G#39	AMC447401
G#40	AMC447402
G#41	AMC447403
G#42	AMC447404
G#43	AMC447405
G#44	AMC447406
G#45	AMC447407
G#46	AMC447408
G#47	AMC447409
G#48	AMC447410
G#49	AMC447411
G#50	AMC447412
G#51	AMC447413
G#52	AMC447414
G#53	AMC447415
G#54	AMC447416
G#55	AMC447417
G#56	AMC447418
G#57	AMC447419
G#58	AMC447420
G#59	AMC447421
G#60	AMC447422
G#61	AMC447423
G#62	AMC447424
Claim Name	**BLM Serial No.**
G#63	AMC447425
G#64	AMC447426
G#65	AMC447427
G#66	AMC447428
G#67	AMC447429
G#68	AMC447430
G#69	AMC447431
G#70	AMC447432
G#71	AMC447433
G#72	AMC447434
G#73	AMC447435
G#74	AMC447436
G#75	AMC447437
G#76	AMC447438
G#77	AMC447439
G#78	AMC447440

G#79	AMC447441
G#80	AMC447442
G#81	AMC447443
G#82	AMC447444
G#83	AMC447445
G#84	AMC447446
G#85	AMC447447
G#86	AMC447448
G#87	AMC447449
G#88	AMC447450
G#89	AMC447451
G#90	AMC447452
G#91	AMC447453
G#92	AMC447454
G#93	AMC447455
G#94	AMC447456
G#95	AMC447457
G#96	AMC447458
G#97	AMC447459
G#98	AMC447460
G#99	AMC447461
G#100	AMC447462
G#101	AMC447463
G#102	AMC447464
G#103	AMC447465
G#104	AMC447466
G#105	AMC447467
G#106	AMC447468
G#107	AMC447469
G#108	AMC447470
G#109	AMC447471
G#110	AMC447472
G#111	AMC447473
G#112	AMC447474
G#113	AMC447475
G#114	AMC447476
G#115	AMC447477
G#116	AMC447478
G#117	AMC447479
Claim Name	**BLM Serial No.**
G#118	AMC447480
G#119	AMC447481
G#120	AMC447482
G#121	AMC447483
G#122	AMC447484
G#123	AMC447485
G#124	AMC447486
G#125	AMC447487
G#126	AMC447488
G#127	AMC447489
G#128	AMC447490
G#129	AMC447491
G#130	AMC447492
G#131	AMC447493
G#132	AMC447494
G#133	AMC447495
G#134	AMC447496
G#135	AMC447497
G#136	AMC447498

G#137	AMC447499
G#138	AMC447500
G#139	AMC447501
G#140	AMC447502
G#141	AMC447503
G#142	AMC447504
G#143	AMC447505
G#144	AMC447506
G#145	AMC447507
G#146	AMC447508
G#147	AMC447509
G#148	AMC447510
G#149	AMC447511
G#150	AMC447512
G#151	AMC447513
G#152	AMC447514
G#153	AMC448493
G#154	AMC448494
G#155	AMC448495
G#156	AMC448496
G#157	AMC448497
G#158	AMC448498
G#159	AMC448499
G#160	AMC448500
G#161	AMC448501
G#162	AMC448502
G#163	AMC448503
G#164	AMC448504
G#165	AMC448505
G#166	AMC448506
G#167	AMC448507
G#168	AMC448508
G#169	AMC448509
G#170	AMC448510
G#171	AMC448511
G#172	AMC448512
Claim Name	**BLM Serial No.**
G#173	AMC448513
G#174	AMC448514
G#175	AMC448515
G#176	AMC448516
G#177	AMC448517
G#178	AMC448518
G#179	AMC448519
G#180	AMC448520
G#181	AMC448521
G#182	AMC448522
G#183	AMC448523
G#184	AMC448524
G#185	AMC448525
G#186	AMC448526
G#187	AMC448527
G#188	AMC448528
G#189	AMC448529
G#190	AMC448530
G#191	AMC448531
G#192	AMC448532
G#193	AMC448533
G#194	AMC448534

G#195	AMC448535
G#196	AMC448536
G#197	AMC448537
G#198	AMC448538
G#199	AMC448539
G#200	AMC448540
G#201	AMC448541
G#202	AMC448542
G#203	AMC448543
G#204	AMC448544
G#205	AMC448545
G#206	AMC448546
G#207	AMC448547
G#208	AMC448548
G#209	AMC448549
G#210	AMC448550
G#211	AMC448551
G#212	AMC448552
G#213	AMC448553
G#214	AMC448554
G#215	AMC448555
G#216	AMC448556
G#217	AMC448557
G#218	AMC448558
G#219	AMC448559
G#220	AMC448560
G#221	AMC448561
Claim Name	**BLM Serial No.**
G#222	AMC448562
G#223	AMC448563
G#224	AMC448564
G#225	AMC448565
G#226	AMC448566
G#227	AMC448567
G#228	AMC448568
G#229	AMC448569
G#230	AMC448570
G#231	AMC448571
G#232	AMC448572

G#233	AMC448573
G#234	AMC448574
G#235	AMC448575
G#236	AMC448576
G#237	AMC448577
G#238	AMC448578
G#239	AMC448579
G#240	AMC448580
G#241	AMC448581
G#242	AMC448582
G#243	AMC448583
G#244	AMC448584
G#245	AMC448585
G#246	AMC448586
Subtotal G	**246**
GREEN DRAGON 1	AZ 106359533
GREEN DRAGON 2	AZ 106359534
GREEN DRAGON 3	AZ 106359535
GREEN DRAGON 4	AZ 106359536
GREEN DRAGON 5	AZ 106359537
GREEN DRAGON 6	AZ 106359538
GREEN DRAGON 7	AZ 106359539
GREEN DRAGON 12	AZ 106359540
GREEN DRAGON 13	AZ 106359541
GREEN DRAGON 14	AZ 106359542
GREEN DRAGON 15	AZ 106359543
GREEN DRAGON 16	AZ 106359544
GREEN DRAGON 17	AZ 106359545
GREEN DRAGON 18	AZ 106359546
GREEN DRAGON 19	AZ 106359547
GREEN DRAGON 20	AZ 106359548
GREEN DRAGON 21	AZ 106359549
GREEN DRAGON 22	AZ 106359550
GREEN DRAGON 23	AZ 106359551
GREEN DRAGON 24	AZ 106359552
Subtotal Green Dragon	**20 claims**
Grand Total Claims	**515 claims**

20. APPENDIX C: Analyses

Hole ID	Total Depth (ft)	Total # of Samples	# Au Analyses above Detection (ALS) 2 ppb	# Ag Analyses above Detection (ALS) 0.05 ppm	# Cu Analyses above Detection (Jacobs) %	# Mo Analyses above Detection (ALS) 1 ppm	# Cu Analyses below back-ground <0.02%	# Cu Analyses above back-ground >0.02%	# Cu Analyses above 0.2% Cu
YK01-A	786.0	131.0	78.0	85.0	131.0	120.0	45.0	72.0	38.0
YK01-B	146.5	34.0	34.0	34.0	34.0	34.0	2.0	32.0	24.0
YK01-C	118.0	23.0	22.0	22.0	23.0	23.0	3.0	20.0	19.0
YK01-D	167.0	44.0	41.0	41.0	44.0	43.0	9.0	35.0	28.0
YK02-A	465.0	103.0	66.0	80.0	103.0	102.0	58.0	68.0	0.0
YK02-B	697.5	152.0	118.0	130.0	152.0	145.0	64.0	88.0	2.0
YK02-C	688.0	152.0	79.0	108.0	152.0	150.0	100.0	51.0	0.0
YK02-D	468.0	117.0	96.0	107.0	117.0	111.0	65.0	52.0	1.0
YK02-E	455.0	104.0	64.0	60.0	104.0	91.0	76.0	27.0	0.0
YK03-A	398.0	88.0	64.0	71.0	88.0	82.0	32.0	50.0	9.0
YK03-B	351.0	85.0	81.0	84.0	85.0	81.0	12.0	73.0	9.0
YK03-C	400.0	85.0	50.0	63.0	84.0	81.0	51.0	34.0	3.0
YK03-D	467.0	111.0	88.0	102.0	111.0	108.0	26.0	85.0	12.0
YK03-E	310.0	78.0	63.0	78.0	78.0	77.0	5.0	74.0	10.0
YK04-A	809.0	174.0	118.0	110.0	174.0	108.0	38.0	76.0	3.0
YK04-B	786.0	193.0	141.0	171.0	193.0	169.0	84.0	109.0	11.0
YK06-A	777.0	87.0	41.0	57.0	87.0	87.0	74.0	13.0	0.0
YK06-B	383.0	83.0	62.0	58.0	83.0	71.0	51.0	32.0	1.0
YK06-C	1,935.0	207.0	51.0	16.0	204.0	200.0	203.0	4.0	0.0
VANE 1	1,677.0	24.0	Not analyzed	10.0	24.0	17.0	17.0	7.0	1.0
Total	12,284	2,075	1,357	1,487	2,071	1,900	1,015	1,002	171

Drill Hole YK01-A

Laboratory Element				Generic Rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:						ppb	ppm	%	ppm
Detection Limit:						2	0.05		1
Analysis Character:						multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:						encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:	From	To	Interval			INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 50; INAA > 50
YK-1A 0-10	0	10	10	pad fill	oxide	148	0.71	0.179	35
YK-1A 10-15	10	15	5	pad fill	oxide	67	0.29	0.186	25
YK-1A 15-22	15	22	7	Monzonite porphyry	oxide	68	0.24	0.204	22
YK-1A 22-27	22	27	5	Monzonite porphyry	oxide	164	0.22	0.169	9
YK-1A 27-30	27	30	3	Monzonite porphyry	oxide	553	0.37	1.280	123
YK-1A 30-33	30	33	3	Monzonite porphyry	oxide	446	1.60	0.219	178
YK-1A 33-38	33	38	5	Monzonite porphyry	oxide	257	0.45	0.333	29
YK-1A 38-40	38	40	2	dolomite skarn	oxide	350	6.00	0.501	117
YK-1A 40-44	40	44	4	dolomite skarn	oxide	116	1.89	0.194	50
YK-1A 44-48	44	48	4	dolomite skarn	oxide	56	1.43	0.510	10
YK-1A 48-53	48	53	5	dolomite skarn	oxide	75	0.50	0.077	4
YK-1A 53-57	53	57	4	dolomite skarn	oxide	727	2.52	1.020	97
YK-1A 57-62	57	62	5	dolomite skarn	oxide	448	4.21	1.624	199
YK-1A 62-68	62	68	6	dolomite skarn	oxide	851	4.16	1.644	596
YK-1A 68-70	68	70	2	dolomite skarn	oxide	899	5.82	3.241	223
YK-1A 70-73	70	73	3	dolomite skarn	oxide	713	2.92	1.200	260
YK-1A 73-76	73	76	3	dolomite skarn	oxide	1100	6.70	2.094	210
YK-1A 76-83	76	83	7	dolomite skarn	oxide	275	2.66	0.402	104
YK-1A 83-88	83	88	5	dolomite skarn	oxide	54	0.48	0.051	16
YK-1A 88-93	88	93	5	dolomite skarn	oxide	194	0.91	0.219	42
YK-1A 93-98	93	98	5	dolomite skarn	oxide	433	4.49	0.520	149
YK-1A 98-101.5	98	101.5	3.5	dolomite skarn	oxide	421	2.30	0.511	148

Laboratory Element				Generic Rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK-1A 101.5-103	101.5	103	1.5	dolomite skarn	oxide	**1930**	**10.30**	**1.603**	**455**
YK-1A 103-108	103	108	5	dolomite skarn	oxide	**1030**	**6.36**	**1.611**	**139**
YK-1A 108-113	108	113	5	dolomite skarn	oxide	**299**	**4.59**	**0.800**	**113**
YK-1A 113-118	113	118	5	dolomite skarn	oxide	**405**	**3.73**	**0.611**	**77**
YK-1A 118-121	118	121	3	dolomite skarn	oxide	**248**	**1.40**	**0.317**	**37**
YK-1A 121-128	121	128	7	dolomite skarn	oxide	**500**	**4.16**	**0.680**	**103**
YK-1A 128-132	128	132	4	dolomite skarn	oxide	**510**	**11.40**	**0.763**	**141**
YK-1A 132-137	132	137	5	dolomite skarn	oxide	**887**	**9.37**	**0.954**	**509**
YK-1A 137-143	137	143	6	limestone/marble skarn	oxide	**1340**	**33.80**	**0.780**	**357**
YK-1A 143-143.5	143	143.5	0.5	limestone/marble skarn	oxide	**252**	**8.88**	**1.272**	**31**
YK-1A 143.5-147.5	143.5	147.5	4	limestone/marble skarn	oxide	**220**	**2.20**	**0.488**	**33**
YK-1A 147.5-151	147.5	151	3.5	limestone/marble skarn	oxide	**526**	**13.40**	**0.394**	**32**
YK-1A 151-152.5	151	152.5	1.5	limestone/marble skarn	oxide	**776**	**41.40**	**4.844**	**149**
YK-1A 152.5-157	152.5	157	4.5	limestone/marble skarn	oxide	**447**	**12.50**	**0.793**	**38**
YK-1A 157-157.5	157	157.5	0.5	limestone/marble skarn	oxide	**4560**	**37.90**	**2.992**	**69**
YK-1A 157.5-159.5	157.5	159.5	2	limestone/marble skarn	oxide	**2860**	**40.90**	**1.611**	**47**
YK-1A 159.5-164	159.5	164	4.5	limestone/marble skarn	oxide	**607**	**11.10**	**0.262**	**19**
YK-1A 164-170	164	170	6	limestone/marble skarn	oxide	**86**	**3.04**	**0.100**	**28**
YK-1A 170-173	170	173	3	limestone/marble skarn	oxide	**93**	**2.26**	**0.090**	**67**
YK-1A 173-178	173	178	5	limestone/marble skarn	oxide	**115**	**1.46**	**0.064**	**27**
YK-1A 178-183	178	183	5	limestone/marble skarn	oxide	**233**	**3.30**	**0.125**	**76**
YK-1A 183-187	183	187	4	limestone/marble skarn	oxide	**115**	**7.14**	**0.186**	**21**
YK-1A 187-188	187	188	1	limestone/marble skarn	oxide	**237**	**12.10**	**0.305**	**36**
YK-1A 188-193	188	193	5	limestone/marble skarn	oxide	**336**	**6.11**	**0.379**	**17**
YK-1A 193-198	193	198	5	limestone/marble skarn	oxide	**227**	**11.90**	**0.458**	**27**
YK-1A 198-203	198	203	5	limestone/marble skarn	oxide	**172**	**6.20**	**0.189**	**37**
YK-1A 203-205.5	203	205.5	2.5	limestone/marble skarn	oxide	**254**	**18.50**	**0.252**	**34**
YK-1A 205.5-208	205.5	208	2.5	limestone/marble skarn	oxide	**262**	**3.13**	**0.116**	**50**
YK-1A 208-213	208	213	5	limestone/marble skarn	oxide	**598**	**1.02**	**0.121**	**11**
YK-1A 213-221	213	221	8	limestone/marble skarn	oxide	**376**	**1.93**	**0.172**	**18**
YK-1A 221-223	221	223	2	limestone/marble skarn	oxide	**201**	**1.55**	**0.145**	**10**
YK-1A 223-228	223	228	5	limestone/marble skarn	oxide	**230**	**2.67**	**0.348**	**18**
YK-1A 228-233	228	233	5	limestone/marble skarn	oxide	**123**	**1.74**	**0.110**	**41**
YK-1A 233-237	233	237	4	limestone/marble skarn	oxide	**50**	**1.54**	**0.088**	**26**

Laboratory Element				Generic Rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK-1A 237-243	237	243	6	limestone/marble skarn	oxide	11	0.25	0.021	15
YK-1A 243-245	243	245	2	limestone/marble skarn	oxide	20	0.21	0.018	32
YK-1A 245-248	245	248	3	limestone/marble skarn	oxide	106	3.51	0.121	63
YK-1A 248-250	248	250	2	limestone/marble skarn	oxide	83	1.84	0.071	29
YK-1A 250-253	250	253	3	limestone/marble skarn	oxide	178	6.2	0.161	68
YK-1A 253-258	253	258	5	limestone/marble skarn	oxide	127	5.01	0.172	70
YK-1A 258-263	258	263	5	limestone/marble skarn	oxide	97	1.95	0.085	58
YK-1A 263-268	263	268	5	volcaniclastics	oxide	63	0.78	0.080	24
YK-1A 268-273	268	273	5	volcaniclastics	oxide	20	0.47	0.038	26
YK-1A 273-278	273	278	5	volcaniclastics	oxide	7	0.14	0.015	16
YK-1A 278-283	278	283	5	volcaniclastics	oxide	< 2	< 0.05	0.006	16
YK-1A 283-288	283	288	5	volcaniclastics	oxide	< 2	< 0.05	0.007	13
YK-1A 288-293	288	293	5	volcaniclastics	oxide	< 2	< 0.05	0.005	18
YK-1A 293-298	293	298	5	volcaniclastics	oxide	< 2	0.08	0.004	16
YK-1A 298-303	298	303	5	volcaniclastics	oxide	12	< 0.05	0.004	18
YK-1A 303-308.5	303	308.5	5.5	volcaniclastics	oxide	< 2	0.16	0.008	27
YK-1A 308.5-311.5	308.5	311.5	3	volcaniclastics	oxide	< 2	< 0.05	0.007	24
YK-1A 311.5-316	311.5	316	4.5	volcaniclastics	oxide	< 2	0.18	0.008	16
YK-1A 316-323	316	323	7	volcaniclastics	oxide	< 2	< 0.05	0.008	15
YK-1A 323-328	323	328	5	volcaniclastics	oxide	< 2	< 0.05	0.004	20
YK-1A 328-333	328	333	5	volcaniclastics	oxide/sulfide transition	< 2	0.29	0.004	18
YK-1A 333-338	333	338	5	volcaniclastics	oxide/sulfide transition	7	0.4	0.006	27
YK-1A 338-343	338	343	5	volcaniclastics	oxide/sulfide transition	< 2	< 0.05	0.005	13
YK-1A 343-348	343	348	5	volcaniclastics	sulfide	< 2	0.99	0.004	19
YK-1A 348-353	348	353	5	volcaniclastics	sulfide	< 2	0.25	0.004	23
YK-1A 353-358	353	358	5	volcaniclastics	sulfide	< 2	0.28	0.002	22
YK-1A 358-363	358	363	5	volcaniclastics	sulfide	< 2	0.18	0.002	23
YK-1A 363-368	363	368	5	volcaniclastics	sulfide	< 2	< 0.05	0.003	17
YK-1A 368-373	368	373	5	volcaniclastics	sulfide	< 2	< 0.05	0.004	17
YK-1A 373-378	373	378	5	volcaniclastics	sulfide	< 2	< 0.05	0.001	19
YK-1A 378-383	378	383	5	volcaniclastics	sulfide	< 2	< 0.05	0.002	18
YK-1A 383-388	383	388	5	volcaniclastics	sulfide	< 2	< 0.05	0.002	17
YK-1A 388-393	388	393	5	volcaniclastics	sulfide	< 2	< 0.05	0.002	16
YK-1A 393-397	393	397	4	volcaniclastics	sulfide	18	0.05	0.023	14

Laboratory Element				Generic Rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK-1A 397-4400	397	400	3	volcaniclastics	sulfide	< 2	< 0.05	0.014	16
YK-1A 400-402.5	400	402.5	2.5	volcaniclastics	sulfide	< 2	< 0.05	0.008	18
YK-1A 402.5-412.5	402.5	415.5	13	volcaniclastics	sulfide	< 2	< 0.05	0.002	15
YK-1A 415.5-423	415.5	423	7.5	volcaniclastics	sulfide	< 2	< 0.05	0.003	15
YK-1A 423-433	423	433	10	volcaniclastics	sulfide	< 2	0.1	0.003	20
YK-1A 433-443	433	443	10	volcaniclastics	sulfide	< 2	< 0.05	0.003	16
YK-1A 443-453	443	453	10	volcaniclastics	sulfide	< 2	0.14	0.003	15
YK-1A 453-463	453	463	10	volcaniclastics	sulfide	< 2	< 0.05	0.004	15
YK-1A 463-473	463	473	10	volcaniclastics	sulfide	< 2	0.07	0.062	2
YK-1A 473-483	473	483	10	volcaniclastics	sulfide	< 2	< 0.05	0.182	2
YK-1A 483-493	483	493	10	volcaniclastics	sulfide	< 2	< 0.05	0.157	< 1
YK-1A 493-503	493	503	10	volcaniclastics	sulfide	< 2	0.06	0.127	2
YK-1A 503-513	503	513	10	volcaniclastics	sulfide	< 2	0.06	0.049	< 1
YK-1A 513-523	513	523	10	volcaniclastics	sulfide	< 2	< 0.05	0.005	6
YK-1A 523-533	523	533	10	volcaniclastics	sulfide	< 2	< 0.05	0.08	8
YK-1A 533-543	533	543	10	volcaniclastics	sulfide	< 2	< 0.05	0.005	< 1
YK-1A 543-553	543	553	10	volcaniclastics	sulfide	< 2	< 0.05	0.005	< 1
YK-1A 553-563	553	563	10	volcaniclastics	sulfide	< 2	< 0.05	0.005	< 1
YK-1A 563-573	563	573	10	volcaniclastics	sulfide	< 2	< 0.05	0.006	1
YK-1A 573-583	573	583	10	volcaniclastics	sulfide	4	< 0.05	0.008	< 1
YK-1A 583-591	583	591	8	volcaniclastics	sulfide	< 2	< 0.05	0.009	< 1
YK-1A 591-601	591	601	10	volcaniclastics	sulfide	< 2	< 0.05	0.005	< 1
YK-1A 601-608	601	608	7	volcaniclastics	sulfide	< 2	< 0.05	0.007	1
YK-1A 608-618	608	638	30	volcaniclastics	sulfide	< 2	< 0.05	0.006	8
YK-1A 638-648	638	648	10	monzonite	sulfide	8	< 0.05	0.007	60
YK-1A 648-658	648	658	10	monzonite	sulfide	12	< 0.05	0.005	7
YK-1A 658-668	658	668	10	monzonite	sulfide	< 2	< 0.05	0.006	4
YK-1A 668-678	668	678	10	monzonite	sulfide	18	0.06	0.004	1
YK-1A 678-685	678	685	7	monzonite	sulfide	< 2	< 0.05	0.005	1
YK-1A 685-693	685	693	8	monzodiorite	sulfide	< 2	< 0.05	0.002	< 1
YK-1A 693-703	693	703	10	monzodiorite	sulfide	< 2	< 0.05	0.001	2
YK-1A 703-713	703	713	10	monzodiorite	sulfide	< 2	< 0.05	0.002	1
YK-1A 713-723	713	723	10	monzodiorite	sulfide	< 2	< 0.05	0.004	2
YK-1A 723-733	723	733	10	monzodiorite	sulfide	< 2	< 0.05	0.004	2

Laboratory Element				Generic Rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK-1A 733-743	733	743	10	monzodiorite	sulfide	**< 2**	**< 0.05**	**0.002**	**2**
YK-1A 743-753	743	753	10	monzodiorite	sulfide	**< 2**	**0.2**	**0.004**	**< 1**
YK-1A 753-763	753	763	10	monzodiorite	sulfide	**21**	**0.22**	**0.003**	**< 1**
YK-1A 753-777	753	777	24	monzodiorite	sulfide	**19**	**< 0.05**	**0.003**	**2**
YK-1A 763-773	763	773	10	monzodiorite	sulfide	**5**	**< 0.05**	**0.004**	**7**
YK-1A 773-777	773	777	4	monzodiorite	sulfide	**7**	**0.05**	**0.004**	**1**
YK-1A 777-786	777	786	9	monzodiorite	sulfide	**2**	**< 0.05**	**0.116**	**2**

Drill Hole YK01-B

Laboratory Element				Generic Rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:						ppb	ppm	%	ppm
Detection Limit:						2	0.05		1
Analysis Character:						multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:						encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:	From	To	Interval			INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 50; INAA > 50
YK01B - 0-17	0	17	17	pad fill	oxide	147	0.35	0.320	43
YK01B - 17-23	17	23	6	Sheared monzonite porphyry	oxide	454	0.62	0.780	112
YK01B - 23-28	23	28	5	Sheared monzonite porphyry	oxide	341	0.28	0.155	113
YK01B - 28-33	28	33	5	Sheared monzonite porphyry	oxide	495	0.58	1.170	130
YK01B - 33-36.5	33	36.5	3.5	Sheared monzonite porphyry	oxide	117	2.29	0.475	39
YK01B - 36.5-41.5	36.5	41.5	5	dolomite	oxide	504	1.58	0.258	48
YK01B - 41.5-47	41.5	47	5.5	dolomite	oxide	381	2.1	0.590	53
YK01B - 47-52	47	52	5	dolomite	oxide	120	3.66	0.522	93
YK01B - 52-57	52	57	5	dolomite	oxide	87	0.72	0.056	3
YK01B - 57-62	57	62	5	dolomite	oxide	117	1.6	0.164	32
YK01B - 62-67	62	67	5	dolomite	oxide	142	1.22	0.142	19
YK01B - 67-72	67	72	5	dolomite	oxide	276	1.57	0.211	26
YK01B - 72-75	72	75	3	dolomite	oxide	468	1.52	0.149	50
YK01B - 75-78	75	78	3	dolomite	oxide	498	3.7	1.522	135
YK01B - 78-82.5	78	82.5	4.5	dolomite	oxide	328	5.87	0.611	35
YK01B - 82.5-84	82.5	84	1.5	dolomite	oxide	150	2.9	2.834	91
YK01B - 84-88	84	88	4	dolomite	oxide	315	1.55	0.560	72
YK01B - 88-93	88	93	5	dolomite	oxide	252	1.37	0.354	56
YK01B - 93-95	93	95	2	dolomite	oxide	135	7.69	1.504	31
YK01B - 95-98	95	98	3	dolomite	oxide	1620	6.08	0.309	222

Laboratory Element				Generic Rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK01B - 98-103	98	103	5	dolomite	oxide	1900	9.49	0.242	300
YK01B - 103-105	103	105	2	dolomite	oxide	1530	6.89	0.272	197
YK01B - 105-108	105	108	3	dolomite	oxide	1220	3.82	0.500	135
YK01B - 108-110	108	110	2	dolomite	oxide	1250	3.98	1.040	130
YK01B - 110-113	110	113	3	dolomite	oxide	1900	11	0.910	123
YK01B - 113-115	113	115	2	limestone/marble	oxide	716	1.51	6.700	43
YK01B - 115-118	115	118	3	limestone/marble	oxide	586	4.34	0.615	164
YK01B - 118-120	118	120	2	limestone/marble	oxide	529	5.63	0.166	5
YK01B - 120-123	120	123	3	limestone/marble	oxide	671	6.68	0.660	20
YK01B - 123-128	123	128	5	limestone/marble	oxide	844	9.68	0.951	253
YK01B - 128-133	128	133	5	limestone/marble	oxide	110	6.62	0.141	60
YK01B - 133-138	133	138	5	limestone/marble	oxide	198	8.95	0.120	30
YK01B - 138-141.5	138	141.5	3.5	monzonite porphyry	oxide	12	0.68	0.018	7
YK01B - 141.5-146.5	141.5	146.5	5	monzonite porphyry	oxide/sulfide transition	10	0.09	0.006	5

Drill Hole YK01-C

Laboratory Element				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:						ppb	ppm	%	ppm
Detection Limit:						2	0.05		1
Analysis Character:						multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:						encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:	From	To	Interval			INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 50; INAA > 50
YK01C - 0-19.5	0	19.5	19.5	pad fill	oxide	20	0.2	0.020	10
YK01C - 19.5-27	19.5	27	7.5	dolomite	oxide	631	0.54	1.010	249
YK01C - 27-32.5	27	32.5	5.5	dolomite	oxide	319	0.38	0.391	106
YK01C - 32.5-38	32.5	38	5.5	dolomite	oxide	322	0.46	0.335	84
YK01C - 38-43	38	43	5	dolomite	oxide	408	1.2	0.712	35
YK01C - 43-48	43	48	5	dolomite	oxide	218	1.81	0.357	15
YK01C - 48-52	48	52	4	dolomite	oxide	243	0.62	0.226	35
YK01C - 52-56	52	56	4	dolomite	oxide	133	0.75	0.188	7
YK01C - 56-61	56	61	5	dolomite	oxide	173	1.21	0.282	29
YK01C - 61-63	61	63	2	dolomite	oxide	719	1.44	1.244	36
YK01C - 63-68	63	68	5	dolomite	oxide	392	1.75	0.679	49
YK01C - 68-72.5	68	72.5	4.5	dolomite	oxide	360	10.5	0.533	40
YK01C - 72.5-73.5	72.5	73.5	1	dolomite	oxide	1640	5.71	1.344	712
YK01C - 73.5-78	73.5	78	4.5	dolomite	oxide	229	4.24	0.878	58
YK01C - 78-84	78	84	6	dolomite	oxide	632	4.39	0.710	81
YK01C - 84-88	84	88	4	dolomite	oxide	1570	10.5	1.781	183
YK01C - 88-93	88	93	5	dolomite	oxide	918	6.2	1.010	67
YK01C - 93-95.5	93	95.5	2.5	limestone/marble	oxide	737	47.8	3.124	105
YK01C - 95.5-99.5	95.5	99.5	4	limestone/marble	oxide	86	3.98	0.313	23
YK01C - 99.5-102	99.5	102	2.5	volcaniclastic	oxide	8	0.8	0.022	7
YK01C - 102-106	102	106	4	volcaniclastic	oxide	6	6.76	0.014	14

Laboratory Element				**Generic rock type**	**Oxide/Sulfide Character**	**Actlabs Au**	**Actlabs Ag**	**Jacob's Cu**	**Actlabs Mo**
YK01C - 106-113.5	106	113.5	7.5	volcaniclastic	oxide	**< 2**	**0.07**	**0.006**	**5**
YK01C - 113.5-118	113.5	118	4.5	volcaniclastic	oxide	**8**	**< 0.05**	**0.005**	**5**

Drill Hole YK01-D

Laboratory Element				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:						ppb	ppm	%	ppm
Detection Limit:						2	0.05		1
Analysis Character:						multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:						encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:	From	To	Interval			INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 50; INAA > 50
YK0I-D 0-10	0	10	10	pad fill	oxide	25	0.28	0.019	6
YK0I-D 10-19.5	10	19.5	9.5	pad fill	oxide	12	0.17	0.016	7
YK0I-D 19.5-22	19.5	22	2.5	pad fill	oxide	11	0.29	0.016	6
YK0I-D 22-27.5	22	27.5	5.5	sheared monzonite porphyry	oxide	179	0.15	0.450	47
YK0I-D 27.5-30	27.5	30	2.5	sheared monzonite porphyry	oxide	506	0.61	0.898	202
YK0I-D 30-35	30	35	5	sheared monzonite porphyry	oxide	567	0.17	0.118	33
YK0I-D 35-40	35	40	5	sheared monzonite porphyry	oxide	144	0.3	0.058	82
YK0I-D 40-45	40	45	5	sheared monzonite porphyry	oxide	238	0.31	0.209	86
YK0I-D 45-48	45	48	3	dolomite	oxide	133	0.68	0.195	44
YK0I-D 48-51	48	51	3	dolomite	oxide	274	1.28	0.356	164
YK0I-D 51-53	51	53	2	dolomite	oxide	158	1.77	0.251	9
YK0I-D 53-58	53	58	5	dolomite	oxide	195	0.96	0.237	8
YK0I-D 58-60	58	60	2	dolomite	oxide	268	1.82	0.402	7
YK0I-D 60-63	60	63	3	dolomite	oxide	310	0.89	0.551	23
YK0I-D 63-66	63	66	3	dolomite	oxide	73	0.48	0.092	3
YK0I-D 66-68	66	68	2	dolomite	oxide	214	0.89	0.394	12
YK0I-D 68-73	68	73	5	dolomite	oxide	745	3.26	1.511	77
YK0I-D 73-78	73	78	5	dolomite	oxide	615	9.54	0.711	34
YK0I-D 78-80	78	80	2	dolomite	oxide	1370	14.2	1.402	78
YK0I-D 80-83	80	83	3	dolomite	oxide	1180	22.4	1.794	193
YK0I-D 83-86	83	86	3	dolomite	oxide	352	6.25	0.319	7
YK0I-D 86-88	86	88	2	dolomite	oxide	98	2.97	0.311	< 1

Laboratory Element				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK0I-D 88-90.5	88	90.5	2.5	dolomite	oxide	**451**	**4.06**	**0.370**	**49**
YK0I-D 90.5-93	90.5	93	2.5	dolomite	oxide	**1950**	**4.47**	**1.383**	**67**
YK0I-D 93-95	93	95	2	dolomite	oxide	**516**	**1.82**	**0.501**	**46**
YK0I-D 95-98	95	98	3	dolomite	oxide	**390**	**1.49**	**0.311**	**39**
YK0I-D 98-101	98	101	3	dolomite	oxide	**315**	**1.42**	**0.199**	**42**
YK0I-D 101-103	101	103	2	dolomite	oxide	**442**	**3.16**	**0.573**	**61**
YK0I-D 103-105	103	105	2	dolomite	oxide	**393**	**1.35**	**0.381**	**62**
YK0I-D 105-108	105	108	3	dolomite	oxide	**381**	**2.12**	**0.430**	**103**
YK0I-D 108-110	108	110	2	dolomite	oxide	**479**	**2.47**	**0.701**	**92**
YK0I-D 110-113	110	113	3	dolomite	oxide	**1100**	**5.26**	**0.942**	**106**
YK0I-D 113-116	113	116	3	limestone/marble	oxide	**1060**	**3.95**	**0.245**	**162**
YK0I-D 116-118	116	118	2	limestone/marble	oxide	**528**	**1.85**	**0.523**	**74**
YK0I-D 118-120	118	120	2	limestone/marble	oxide	**2430**	**10.5**	**1.812**	**164**
YK0I-D 120-123	120	123	3	limestone/marble	oxide	**1890**	**1510**	**0.450**	**1760**
YK0I-D 123-128	123	128	5	limestone/marble	oxide	**115**	**11.3**	**0.094**	**37**
YK0I-D 128-133	128	133	5	limestone/marble	oxide/sulfide transition	**5**	**1.29**	**0.028**	**7**
YK0I-D 133-138	133	138	5	monzonite porphyry	sulfide	**< 2**	**0.32**	**0.015**	**10**
YK0I-D 138-143	138	143	5	monzonite porphyry	sulfide	**5**	**0.21**	**0.012**	**7**
YK0I-D 143-148	143	148	5	monzonite porphyry	sulfide	**< 2**	**< 0.05**	**0.005**	**6**
YK0I-D 148-153	148	157	9	monzonite porphyry	sulfide	**6**	**< 0.05**	**0.005**	**3**
YK0I-D 157-162	157	162	5	silicified mylonite + volcaniclastic	sulfide	**4**	**< 0.05**	**0.004**	**3**
YK0I-D 162-167	162	167	5	pyritiferous volcaniclastic	sulfide	**5**	**0.13**	**0.003**	**7**

Drill hole YK02-A

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:						ppb	ppm	%	ppm
Detection Limit:						2	0.05		1
Analysis Character:						multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:						encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:	From	To	Interval			INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 50; INAA > 50
YK02-A 0-5	0	5	5	dolomite	oxide	162	0.32	0.023	8
YK02-A 5-9	5	9	4	dolomite	oxide	< 2	< 0.05	0.005	1
YK02-A 9-13	9	13	4	dolomite	oxide	144	0.19	0.049	22
YK02-A 13-16	13	16	3	dolomite	oxide	28	0.15	0.022	2
YK02-A 16-20.5	16	20.5	4.5	dolomite	oxide	310	0.19	0.007	3
YK02-A 20.5-26	20.5	26	5.5	dolomite	oxide	2630	0.07	0.008	2
YK02-A 26-31	26	31	5	dolomite	oxide	34	0.22	0.030	4
YK02-A 31-36.5	31	36.5	5.5	dolomite	oxide	78	1.16	0.129	8
YK02-A 36.5-41.5	36.5	41.5	5	dolomite	oxide	12	0.07	0.008	19
YK02-A 41.5-47	41.5	47	5.5	quartzite	oxide	22	0.15	0.013	15
YK02-A 47-52	47	52	5	schist	oxide	26	0.13	0.007	8
YK02-A 52-57	52	57	5	schist	oxide	25	< 0.05	0.007	6
YK02-A 57-62	57	62	5	schist	oxide	< 2	0.06	0.004	6
YK02-A 62-67	62	67	5	schist	oxide	< 2	< 0.05	0.008	6
YK02-A 67-72	67	72	5	schist	oxide	< 2	< 0.05	0.006	6
YK02-A 72-77	72	77	5	schist	oxide	< 2	2.1	0.007	5
YK02-A 77-80.5	77	82	5	schist	oxide	< 2	< 0.05	0.008	6
YK02-A 82.5-87.5	82	87.5	5.5	schist	oxide	< 2	< 0.05	0.008	7
YK02-A 87.5-92.5	87.5	92.5	5	schist	oxide	< 2	< 0.05	0.008	6
YK02-A 92.5-97.5	92.5	97.5	5	schist	oxide	18	0.17	0.009	8
YK02-A 97.5-102.5	97.5	105.5	8	schist	oxide	< 2	< 0.05	0.007	7
YK02-A 105.5-108	105.5	108	2.5	schist	oxide	< 2	< 0.05	0.005	7
YK02-A 108-113	108	113	5	schist	oxide	< 2	< 0.05	0.005	8
YK02-A 113-118	113	118	5	schist	oxide	< 2	< 0.05	0.007	10

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-A 118-123	118	123	5	schist	oxide	< 2	< 0.05	0.008	7
YK02-A 123-128	123	128	5	schist	oxide	19	0.07	0.005	10
YK02-A 128-133	128	133	5	schist	oxide	31	0.09	0.008	11
YK02-A 133-138	133	138	5	schist	oxide	28	0.09	0.010	11
YK02-A 138-143	138	143	5	quartzite	oxide	31	0.47	0.009	18
YK02-A 143-147.5	143	147.5	4.5	quartzite	oxide	14	0.16	0.010	20
YK02-A 147.5-149	147.5	149	1.5	quartzite	oxide	18	0.41	0.006	24
YK02-A 149-155	149	155	6	quartzite	oxide	7	0.21	0.004	10
YK02-A 155-159	155	159	4	quartzite	oxide	--	--	0.004	--
YK02-A 159-162	159	162	3	quartzite	oxide	9	0.15	0.014	14
YK02-A 162-166	162	166	4	quartzite	oxide	< 2	0.07	0.013	19
YK02-A 166-169	166	169	3	quartzite	oxide	< 2	< 0.05	0.010	12
YK02-A 169-174	169	174	5	quartzite	oxide	< 2	0.08	0.010	26
YK02-A 174-177	174	177	3	quartzite	oxide	< 2	0.26	0.010	34
YK02-A 177-179	177	179	2	quartzite	oxide	< 2	< 0.05	0.010	14
YK02-A 179-182.5	179	182.5	3.5	quartzite	oxide	< 2	< 0.05	0.014	11
YK02-A 182.5-187	182.5	187	4.5	quartzite	oxide	15	0.07	0.031	20
YK02-A 187-192.5	187	192.5	5.5	quartzite	oxide	6	0.09	0.007	20
YK02-A 192.5-195	192.5	195	2.5	quartzite	oxide	< 2	0.05	0.021	23
YK02-A 195-199	195	199	4	quartzite	oxide	< 2	0.09	0.006	24
YK02-A 199-205	199	205	6	quartzite	oxide	< 2	0.08	0.013	18
YK02-A 205-209	205	209	4	quartzite	oxide	< 2	0.1	0.017	45
YK02-A 209-215	209	215	6	mafic dike	oxide	< 2	0.15	0.011	8
YK02-A 215-220	215	220	5	mafic dike	oxide	4	< 0.05	0.011	6
YK02-A 220-225.5	220	225.5	5.5	mafic dike	oxide	< 2	0.08	0.010	6
YK02-A 225.5-230	225.5	230	4.5	mafic dike	oxide	< 2	< 0.05	0.010	5
YK02-A 230-235.5	230	235.5	5.5	mafic dike	oxide	< 2	< 0.05	0.009	5
YK02-A 235.5-240	235.5	240	4.5	mafic dike	oxide	9	< 0.05	0.011	6
YK02-A 240-245	240	245	5	mafic dike	oxide	< 2	0.05	0.008	5
YK02-A 245-247	245	247	2	mafic dike	oxide	12	0.45	0.020	6
YK02-A 247-249	247	249	2	quartzite	oxide	< 2	< 0.05	0.010	21
YK02-A 249-251	249	251	2	quartzite	oxide	< 2	0.11	0.014	39
YK02-A 251-254	251	254	3	quartzite	oxide	< 2	< 0.05	0.007	21
YK02-A 254-259	254	259	5	quartzite	oxide	< 2	0.11	0.009	26

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-A 259-264	259	264	5	quartzite	oxide	< 2	0.35	0.015	41
YK02-A 264-266	264	266	2	quartzite	oxide	18	0.28	0.027	344
YK02-A 266-268	266	268	2	quartzite	oxide	34	0.31	0.027	164
YK02-A 268-270	268	270	2	arenaceous quartzite	oxide	38	0.21	0.082	152
YK02-A 270-272.5	270	272.5	2.5	arenaceous quartzite	oxide	30	0.16	0.051	146
YK02-A 272.5-274	272.5	274	1.5	arenaceous quartzite	oxide	34	0.19	0.113	118
YK02-A 274-276.5	274	276.5	2.5	arenaceous quartzite	oxide	21	0.12	0.022	255
YK02-A 276.5-278	276.5	278	1.5	arenaceous quartzite	oxide	53	2.57	0.057	88
YK02-A 278-279	278	279	1	arenaceous quartzite	oxide	32	0.49	0.123	24
YK02-A 279-282	279	282	3	monzonite porphyry	oxide	< 2	< 0.05	0.011	22
YK02-A 282-286.5	282	286.5	4.5	monzonite porphyry	oxide	17	0.08	0.012	107
YK02-A 286.5-293	286.5	293	6.5	monzonite porphyry	oxide	< 2	0.33	0.011	62
YK02-A 293-296	293	296	3	monzonite porphyry	oxide	5	0.1	0.003	109
YK02-A 296-300	296	300	4	monzonite porphyry	oxide	8	0.15	0.006	43
YK02-A 300-305	300	305	5	monzonite porphyry	oxide	23	0.53	0.039	121
YK02-A 305-308	305	308	3	foliated meta-sedimentary rock	oxide	41	0.57	0.049	306
YK02-A 308-313	308	323	15	foliated meta-sedimentary rock	oxide	47	0.52	0.049	598
YK02-A 323-328	323	328	5	monzonite porphyry	sulfide	17	0.2	0.037	59
YK02-A 328-333	328	333	5	monzonite porphyry	sulfide	19	0.41	0.058	68
YK02-A 333-335	333	335	2	monzonite porphyry	sulfide	31	0.43	0.070	65
YK02-A 335-340	335	340	5	monzonite porphyry	sulfide	59	0.65	0.039	88
YK02-A 340-344	340	344	4	monzonite porphyry	sulfide	47	0.33	0.015	15
YK02-A 344-349	344	349	5	mylonitic monzonite porphyry	sulfide	109	0.92	0.058	47
YK02-A 349-355.5	349	355.5	6.5	monzonite porphyry	sulfide	166	0.62	0.026	52
YK02-A 355.5-361	355.5	361	5.5	monzonite porphyry	sulfide	27	0.85	0.080	60
YK02-A 361-367.5	361	367.5	6.5	monzonite porphyry	sulfide	46	0.8	0.092	42
YK02-A 367.5-373	367.5	373	5.5	monzonite porphyry	sulfide	19	0.26	0.054	101
YK02-A 373-376	373	376	3	monzonite porphyry	sulfide	20	0.19	0.058	91
YK02-A 376-379.5	376	379.5	3.5	monzonite porphyry	sulfide	31	0.4	0.070	101
YK02-A 379.5-384.5	379.5	384.5	5	monzonite porphyry	sulfide	14	0.27	0.041	131
YK02-A 384.5-387.5	384.5	387.5	3	monzonite porphyry	sulfide	22	0.35	0.080	94
YK02-A 387.5-394	387.5	405	17.5	monzonite porphyry	sulfide	23	0.25	0.072	102
YK02-A 405-409	405	409	4	monzonite porphyry	sulfide	33	0.12	0.074	295

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-A 409-415.5	409	415.5	6.5	monzonite porphyry	sulfide	26	0.18	0.101	259
YK02-A 415.5-419	415.5	419	3.5	monzonite porphyry	sulfide	50	0.22	0.113	393
YK02-A 419-423	419	423	4	monzonite porphyry	sulfide	47	0.25	0.090	187
YK02-A 423-427	423	429	6	monzonite porphyry	sulfide	44	0.67	0.103	254
YK02-A 429-433	429	433	4	monzonite porphyry	sulfide	126	0.33	0.111	131
YK02-A 433-437	433	437	4	monzonite porphyry	sulfide	107	0.6	0.107	381
YK02-A 437-443	437	443	6	monzonite porphyry	sulfide	48	0.51	0.074	323
YK02-A 443-446	443	446	3	monzonite porphyry	sulfide	62	0.41	0.112	236
YK02-A 446-450	446	450	4	monzonite porphyry	sulfide	54	0.95	0.108	240
YK02-A 450-455	450	455	5	monzonite porphyry	sulfide	86	1.38	0.158	310
YK02-A 455-460	455	460	5	monzonite porphyry	sulfide	33	0.26	0.044	66
YK02-A 460-465	460	465	5	volcaniclastic	sulfide	< 2	0.1	0.024	19

Drill hole YK02-B

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:						ppb	ppm	%	ppm
Detection Limit:						2	0.05		1
Analysis Character:						multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:						encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:	From	To	Interval			INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP
YK02-B 0-5	0	5	5	pad fill	oxide	51	0.61	0.011	52
YK02-B 5-12.5	5	12.5	7.5	dolomite	oxide	48	0.63	0.048	38
YK02-B 12.5-19	12.5	19	6.5	dolomite	oxide	31	0.1	0.004	1
YK02-B 19-24	19	24	5	dolomite	oxide	18	< 0.05	0.001	< 1
YK02-B 24-29.5	24	29.5	5.5	dolomite	oxide	37	< 0.05	0.001	< 1
YK02-B 29.5-33	29.5	33	3.5	dolomite	oxide	13	0.09	0.009	< 1
YK02-B 33-38.5	33	38.5	5.5	dolomite	oxide	34	0.87	0.010	< 1
YK02-B 38.5-42	38.5	42	3.5	dolomite	oxide	< 2	1.84	0.008	< 1
YK02-B 42-48	42	48	6	dolomite	oxide	12	4.01	0.006	< 1
YK02-B 48-53	48	53	5	dolomite	oxide	46	0.09	0.006	< 1
YK02-B 53-58	53	58	5	dolomite	oxide	157	2.64	0.169	14
YK02-B 58-63	58	63	5	dolomite	oxide	90	1.01	0.106	23
YK02-B 63-68	63	68	5	dolomite	oxide	43	0.51	0.028	20
YK02-B 68-73	68	73	5	quartzite	oxide	19	0.11	0.005	19
YK02-B 73-78	73	78	5	quartzite	oxide	18	< 0.05	0.007	17
YK02-B 78-83	78	83	5	quartzite	oxide	9	< 0.05	0.005	17
YK02-B 83-88	83	88	5	quartzite	oxide	17	0.11	0.006	12
YK02-B 88-93	88	93	5	quartzite	oxide	< 2	< 0.05	0.007	11
YK02-B 93-98	93	98	5	schist	oxide	14	< 0.05	0.006	9
YK02-B 98-103	98	103	5	schist	oxide	< 2	< 0.05	0.007	7
YK02-B 103-108	103	108	5	schist	oxide	< 2	< 0.05	0.007	7

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-B 108-113	108	113	5	schist	oxide	< 2	< 0.05	0.007	8
YK02-B 113-118	113	118	5	schist	oxide	12	0.06	0.008	8
YK02-B 118-123	118	123	5	schist	oxide	< 2	0.07	0.009	7
YK02-B 123-128	123	128	5	schist	oxide	13	0.09	0.010	6
YK02-B 128-133	128	133	5	schist	oxide	17	0.09	0.009	7
YK02-B 133-138	133	138	5	schist	oxide	< 2	< 0.05	0.006	6
YK02-B 138-141	138	141	3	schist	oxide	< 2	< 0.05	0.012	7
YK02-B 141-145	141	145	4	schist	oxide	19	0.17	0.011	6
YK02-B 145-150	145	150	5	schist	oxide	< 2	< 0.05	0.009	7
YK02-B 150-155	150	155	5	quartzite	oxide	< 2	< 0.05	0.004	7
YK02-B 155-157.5	155	157.5	2.5	quartzite	oxide	< 2	< 0.05	0.003	8
YK02-B 157.5-158	157.5	158	0.5	quartzite	oxide	< 2	0.73	0.011	11
YK02-B 158-165	158	165	7	quartzite	oxide	13	0.16	0.005	9
YK02-B 165-169.5	165	169.5	4.5	quartzite	oxide	< 2	< 0.05	0.004	10
YK02-B 169.5-175	169.5	175	5.5	quartzite	oxide	< 2	0.1	0.004	13
YK02-B 175-180	175	180	5	quartzite	oxide	10	0.13	0.005	13
YK02-B 180-185.5	180	185.5	5.5	quartzite	oxide	< 2	0.15	0.004	14
YK02-B 185.5-190	185.5	190	4.5	quartzite	oxide	11	0.37	0.006	10
YK02-B 190-194	190	194	4	quartzite	oxide	12	0.54	0.010	13
YK02-B 194-198	194	198	4	quartzite	oxide	6	0.09	0.005	25
YK02-B 198-203	198	203	5	quartzite	oxide	15	0.1	0.015	41
YK02-B 203-208	203	208	5	pegmatitic monzonite porphyry	oxide	< 2	< 0.05	0.012	10
YK02-B 208-213	208	213	5	mafic dike	oxide	< 2	< 0.05	0.011	5
YK02-B 213-218	213	218	5	mafic dike	oxide	< 2	< 0.05	0.010	3
YK02-B 218-220	218	220	2	mafic dike	oxide	< 2	< 0.05	0.010	6
YK02-B 220-223	220	223	3	pegmatitic monzonite porphyry	oxide	16	0.13	0.018	83
YK02-B 223-228	223	228	5	pegmatitic monzonite porphyry	oxide	< 2	0.15	0.023	42
YK02-B 228-230	228	230	2	quartzite	oxide	11	0.09	0.011	36
YK02-B 230-233.5	230	233.5	3.5	quartzite	oxide	< 2	0.18	0.004	9
YK02-B 233.5-235	233.5	235	1.5	quartzite	oxide	5	0.05	0.009	21
YK02-B 235-237	235	237	2	quartzite	oxide	4	0.06	0.006	12
YK02-B 237-242.5	237	242.5	5.5	quartzite	oxide	< 2	< 0.05	0.005	17
YK02-B 242.5-246.5	242.5	246.5	4	quartzite	oxide	3	0.09	0.007	18
YK02-B 246.5-252.5	246.5	252.5	6	quartzite	oxide	9	0.07	0.012	18

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-B 252.5-255	252.5	255	2.5	quartzite	oxide	**32**	**1.14**	**0.018**	**27**
YK02-B 255-258	255	258	3	quartzite	oxide	**23**	**0.19**	**0.015**	**29**
YK02-B 258-262	258	262	4	quartzite	oxide	**6**	**0.21**	**0.017**	**20**
YK02-B 262-265	262	265	3	quartzite	oxide	**< 2**	**0.09**	**0.019**	**51**
YK02-B 265-270.5	265	270	5	quartzite	oxide	**5**	**0.08**	**0.013**	**23**
YK02-B 270.5-273	270	273	3	quartzite	oxide	**< 2**	**< 0.05**	**0.013**	**16**
YK02-B 273-277	273	277	4	quartzite	oxide	**6**	**0.07**	**0.010**	**12**
YK02-B 277-282	277	282	5	quartzite	oxide	**< 2**	**0.06**	**0.007**	**18**
YK02-B 282-286.5	282	286.5	4.5	quartzite	oxide	**< 2**	**0.1**	**0.008**	**21**
YK02-B 286.5-292	286.5	292	5.5	quartzite	oxide	**16**	**0.21**	**0.011**	**61**
YK02-B 292-295	292	295	3	quartzite	oxide	**12**	**0.11**	**0.017**	**10**
YK02-B 295-297	295	297	2	quartzite	oxide	**6**	**0.12**	**0.015**	**7**
YK02-B 297-299	297	299	2	quartzite	oxide	**< 2**	**0.08**	**0.013**	**13**
YK02-B 299-302.5	299	302.5	3.5	quartzite	oxide	**< 2**	**0.45**	**0.025**	**33**
YK02-B 302.5-307	302.5	307	4.5	monzonite porphyry	oxide	**< 2**	**0.28**	**0.027**	**38**
YK02-B 307-312.5	307	312.5	5.5	monzonite porphyry	oxide	**< 2**	**0.27**	**0.033**	**44**
YK02-B 312.5-315	312.5	315	2.5	monzonite porphyry	oxide	**33**	**0.63**	**0.083**	**165**
YK02-B 315-317	315	317	2	monzonite porphyry	oxide	**13**	**0.36**	**0.035**	**114**
YK02-B 317-319	317	319	2	monzonite porphyry	oxide	**46**	**0.55**	**0.049**	**30**
YK02-B 319-322.5	319	322.5	3.5	monzonite porphyry	oxide	**36**	**0.66**	**0.089**	**60**
YK02-B 322.5-326	322.5	326	3.5	monzonite porphyry	oxide	**22**	**0.48**	**0.026**	**150**
YK02-B 326-329	326	329	3	monzonite porphyry	oxide	**17**	**0.25**	**0.134**	**36**
YK02-B 329-333	329	333	4	monzonite porphyry	oxide	**< 2**	**0.38**	**0.053**	**53**
YK02-B 333-336	333	336	3	monzonite porphyry	oxide	**17**	**0.13**	**0.078**	**22**
YK02-B 336-339	336	339	3	monzonite porphyry	oxide	**28**	**0.59**	**0.084**	**31**
YK02-B 339-342	339	312	-27	monzonite porphyry	oxide	**21**	**0.48**	**0.114**	**35**
YK02-B 342-348	312	348	36	monzonite porphyry	oxide	**48**	**0.49**	**0.111**	**92**
YK02-B 348-350.5	348	350.5	2.5	monzonite porphyry	oxide	**< 2**	**0.27**	**0.081**	**24**
YK02-B 350.5-354	350.5	354	3.5	monzonite porphyry	oxide	**12**	**0.4**	**0.053**	**18**
YK02-B 354-357	354	357	3	monzonite porphyry	oxide	**34**	**0.65**	**0.124**	**46**
YK02-B 357-362	357	362	5	monzonite porphyry	sulfide	**47**	**0.89**	**0.171**	**105**
YK02-B 362-367	362	367	5	monzonite porphyry	oxide/sulfide transition	**36**	**0.49**	**0.110**	**28**

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-B 367-369	367	369	2	monzonite porphyry	oxide/sulfide transition	36	0.47	0.094	25
YK02-B 369-370	369	370	1	monzonite porphyry	oxide/sulfide transition	36	1.29	0.180	96
YK02-B 370-372	370	372	2	monzonite porphyry	oxide/sulfide transition	19	0.55	0.215	16
YK02-B 372-374	372	374	2	monzonite porphyry	oxide/sulfide transition	43	1.41	0.266	33
YK02-B 374-377	374	0.77	-373.23	monzonite porphyry	oxide/sulfide transition	21	0.5	0.059	41
YK02-B 377-382	0.77	0.82	0.05	monzonite porphyry	oxide/sulfide transition	33	0.58	0.091	298
YK02-B 382-388	0.82	0.88	0.06	monzonite porphyry	oxide/sulfide transition	33	0.7	0.118	54
YK02-B 388-393	0.88	0.93	0.05	monzonite porphyry	oxide/sulfide transition	30	0.67	0.114	91
YK02-B 393-398	0.93	0.98	0.05	monzonite porphyry	sulfide	< 2	0.26	0.065	121
YK02-B 398-403	0.98	403	402.02	monzonite porphyry	sulfide	19	0.31	0.079	166
YK02-B 403-408	403	408	5	monzonite porphyry	sulfide	14	0.18	0.051	104
YK02-B 408-413	408	413	5	monzonite porphyry	sulfide	33	0.33	0.070	97
YK02-B 413-418	413	418	5	monzonite porphyry	sulfide	18	0.38	0.068	198
YK02-B 418-423	418	423	5	monzonite porphyry	sulfide	23	0.32	0.060	224
YK02-B 423-428	423	428	5	monzonite porphyry	sulfide	24	0.58	0.097	164
YK02-B 428-433	428	433	5	monzonite porphyry	sulfide	36	0.49	0.078	118
YK02-B 433-438	433	438	5	monzonite porphyry	sulfide	< 2	< 0.05	0.007	12
YK02-B 438-442	438	442	4	monzonite porphyry	sulfide	20	0.45	0.056	242
YK02-B 442-446	442	446	4	monzonite porphyry	sulfide	28	0.57	0.055	200
YK02-B 446-448.5	446	448.5	2.5	silicified alaskite feldspar porphyry	sulfide	21	0.4	0.017	320
YK02-B 448.5-453	448.5	453	4.5	silicified alaskite feldspar porphyry	sulfide	40	0.26	0.025	147
YK02-B 453-458	453	458	5	silicified alaskite feldspar porphyry	sulfide	16	0.32	0.065	82
YK02-B 458-464.5	458	464.5	6.5	silicified alaskite feldspar porphyry	sulfide	30	1.9	0.048	83
YK02-B 464.5-471	464.5	471	6.5	silicified alaskite feldspar porphyry	sulfide	51	1.64	0.059	83
YK02-B 471-477	471	477	6	silicified alaskite feldspar porphyry	sulfide	98	1.12	0.064	87
YK02-B 477-479	477	479	2	silicified alaskite feldspar porphyry	sulfide	100	1.05	0.057	107
YK02-B 479-483.5	479	483.5	4.5	silicified alaskite feldspar porphyry	sulfide	39	0.27	0.037	98
YK02-B 483.5-490	483.5	490	6.5	silicified alaskite feldspar porphyry	sulfide	29	0.74	0.064	67
YK02-B 490-494	490	494	4	silicified alaskite feldspar porphyry	sulfide	51	0.58	0.069	78

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-B 494-499	494	499	5	silicified alaskite feldspar porphyry	sulfide	23	0.5	0.042	61
YK02-B 499-504	499	504	5	silicified alaskite feldspar porphyry	sulfide	54	0.74	0.078	93
YK02-B 504-509	504	509	5	silicified alaskite feldspar porphyry	sulfide	71	1.22	0.115	76
YK02-B 509-513.5	509	513.5	4.5	silicified alaskite feldspar porphyry	sulfide	80	0.93	0.124	172
YK02-B 513.5-520	513.5	520	6.5	silicified alaskite feldspar porphyry	sulfide	75	1.47	0.140	134
YK02-B 520-524	520	524	4	silicified alaskite feldspar porphyry	sulfide	27	0.91	0.120	99
YK02-B 524-528	524	528	4	silicified alaskite feldspar porphyry	sulfide	40	0.76	0.101	131
YK02-B 528-533	528	533	5	silicified alaskite feldspar porphyry	sulfide	65	1.03	0.103	96
YK02-B 533-538	533	538	5	silicified alaskite feldspar porphyry	sulfide	59	0.6	0.081	62
YK02-B 538-543	538	543	5	silicified alaskite feldspar porphyry	sulfide	39	1.95	0.097	211
YK02-B 543-548	543	548	5	silicified alaskite feldspar porphyry	sulfide	35	0.51	0.115	174
YK02-B 548-554	548	554	6	silicified alaskite feldspar porphyry	sulfide	25	0.46	0.063	117
YK02-B 554-558	554	558	4	silicified alaskite feldspar porphyry	sulfide	57	0.83	0.136	198
YK02-B 558-562.5	558	562.5	4.5	silicified alaskite feldspar porphyry	sulfide	85	0.26	0.067	189
YK02-B 562.5-568	562.5	568	5.5	silicified alaskite feldspar porphyry	sulfide	50	0.57	0.088	152
YK02-B 568-573	568	573	5	silicified alaskite feldspar porphyry	sulfide	47	0.94	0.076	583
YK02-B 573-578	573	578	5	silicified alaskite feldspar porphyry	sulfide	31	0.8	0.079	163
YK02-B 578-584	578	584	6	silicified alaskite feldspar porphyry	sulfide	41	1.09	0.144	150
YK02-B 584-593.5	584	593.5	9.5	silicified alaskite feldspar porphyry	sulfide	42	0.56	0.104	157
YK02-B 593.5-600	593.5	600	6.5	silicified alaskite feldspar porphyry	sulfide	30	0.31	0.066	266
YK02-B 600-605	600	605	5	silicified alaskite feldspar porphyry	sulfide	28	0.63	0.073	258
YK02-B 605-608	605	608	3	silicified alaskite feldspar porphyry	sulfide	47	0.4	0.084	116
YK02-B 608-613	608	613	5	silicified alaskite feldspar porphyry	sulfide	37	0.14	0.086	103
YK02-B 613-617	613	617	4	silicified alaskite feldspar porphyry	sulfide	28	0.21	0.099	329
YK02-B 617-622	617	622	5	silicified alaskite feldspar porphyry	sulfide	30	0.51	0.096	280
YK02-B 622-628	622	628	6	silicified alaskite feldspar porphyry	sulfide	25	0.22	0.073	280
YK02-B 628-631.5	628	631.5	3.5	silicified alaskite feldspar porphyry	sulfide	36	0.13	0.067	601
YK02-B 631.5-636.5	631.5	636.5	5	silicified alaskite feldspar porphyry	sulfide	33	0.14	0.085	397
YK02-B 636.5-643	636.5	643	6.5	silicified alaskite feldspar porphyry	sulfide	29	0.33	0.098	308
YK02-B 643-644	643	644	1	silicified alaskite feldspar porphyry	sulfide	18	0.08	0.050	105
YK02-B 644-649.5	644	649.5	5.5	silicified alaskite feldspar porphyry	sulfide	14	0.14	0.040	230
YK02-B 649.5-659	649.5	659	9.5	silicified alaskite feldspar porphyry	sulfide	47	0.68	0.121	252
YK02-B 659-668	659	668	9	silicified alaskite feldspar porphyry	sulfide	39	0.41	0.072	512
YK02-B 668-678	668	678	10	silicified alaskite feldspar porphyry	sulfide	32	0.33	0.090	657

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-B 678-687.5	678	687.5	9.5	silicified alaskite feldspar porphyry	sulfide	**63**	**2.31**	**0.086**	**358**
YK02-B 687.5-697.5	687.5	697.5	10	silicified alaskite feldspar porphyry	sulfide	**67**	**1.17**	**0.097**	**524**

Drill hole YK02-C

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:						**ppb**	**ppm**	**%**	**ppm**
Detection Limit:						**2**	**0.05**		**1**
Analysis Character:						**multi-element geochem**	**Reported Composite multi-element geochem**	**assay**	**Reported Composite**
Preparation:						**encapsul-ated rock powder**	**TD (4 acid "near-total" digestion)**	**TD 2 Stage Multi-Acid (Aqua regia/HCl)**	**TD (4 acid "near-total" digestion)**
Analytical Method:	**From**	**To**	**Interval**			**INAA**	**ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100**	**AA**	**ICP <= 50; INAA > 50**
YK02-C 0-5	0	5	5	dolomite	oxide	**11**	**< 0.05**	**0.007**	**5**
YK02-C 5-13	5	13	8	dolomite	oxide	**46**	**0.16**	**0.007**	**4**
YK02-C 13-18	13	18	5	dolomite	oxide	**43**	**0.07**	**0.006**	**7**
YK02-C 18-23	18	23	5	quartzite	oxide	**7**	**0.06**	**0.008**	**18**
YK02-C 23-26.5	23	26.5	3.5	quartzite	oxide	**7**	**0.11**	**0.004**	**21**
YK02-C 26.5-30	26.5	30	3.5	quartzite	oxide	**9**	**0.11**	**0.004**	**22**
YK02-C 30-36	30	36	6	quartzite	oxide	**14**	**< 0.05**	**0.005**	**28**
YK02-C 36-41	36	41	5	quartzite	oxide	**< 2**	**0.07**	**0.008**	**26**
YK02-C 41-46	41	46	5	quartzite	oxide	**92**	**0.16**	**0.019**	**40**
YK02-C 46-51	46	51	5	quartzite	oxide	**31**	**0.38**	**0.024**	**49**
YK02-C 51-54	51	54	3	schist	oxide	**92**	**0.42**	**0.026**	**15**
YK02-C 54-59.5	54	59.5	5.5	schist	oxide	**10**	**< 0.05**	**0.005**	**10**
YK02-C 59.5-63	59.5	63	3.5	schist	oxide	**12**	**< 0.05**	**0.007**	**7**
YK02-C 63-66	63	66	3	schist	oxide	**< 2**	**< 0.05**	**0.008**	**7**
YK02-C 66-70	66	70	4	schist	oxide	**< 2**	**< 0.05**	**0.008**	**6**
YK02-C 70-74	70	74	4	schist	oxide	**< 2**	**< 0.05**	**0.010**	**7**
YK02-C 74-78	74	78	4	schist	oxide	**< 2**	**0.12**	**0.006**	**8**
YK02-C 78-80	78	80	2	schist	oxide	**< 2**	**< 0.05**	**0.070**	**8**
YK02-C 80-83	80	83	3	schist	oxide	**< 2**	**0.82**	**0.010**	**6**
YK02-C 83-88	83	88	5	schist	oxide	**< 2**	**< 0.05**	**0.009**	**4**

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-C 88-92	88	92	4	schist	oxide	**< 2**	**< 0.05**	**0.009**	**4**
YK02-C 92-95.5	92	95.5	3.5	schist	oxide	**< 2**	**< 0.05**	**0.007**	**6**
YK02-C 95.5-97	95.5	97	1.5	schist	oxide	**< 2**	**< 0.05**	**0.004**	**4**
YK02-C 97-103	97	103	6	schist	oxide	**< 2**	**0.14**	**0.006**	**5**
YK02-C 103-106	103	106	3	schist	oxide	**15**	**0.08**	**0.009**	**7**
YK02-C 106-112.5	106	112.5	6.5	schist	oxide	**23**	**11.5**	**0.009**	**8**
YK02-C 112.5-117	112.5	117	4.5	schist	oxide	**17**	**2.48**	**0.008**	**7**
YK02-C 117-122.5	117	122.5	5.5	schist	oxide	**18**	**4.28**	**0.006**	**6**
YK02-C 122.5-129	122.5	129	6.5	schist	oxide	**< 2**	**2.53**	**0.008**	**7**
YK02-C 129-135	129	135	6	schist	oxide	**< 2**	**1.04**	**0.006**	**6**
YK02-C 135-137	135	137	2	schist	oxide	**< 2**	**0.8**	**0.005**	**4**
YK02-C 137-141	137	141	4	schist	oxide	**< 2**	**1.42**	**0.006**	**7**
YK02-C 141-143	141	143	2	quartzite	oxide	**6**	**0.51**	**0.004**	**6**
YK02-C 143-148	143	148	5	quartzite	oxide	**26**	**0.59**	**0.009**	**7**
YK02-C 148-152	148	152	4	quartzite	oxide	**< 2**	**0.53**	**0.006**	**10**
YK02-C 152-156.5	152	156.5	4.5	quartzite	oxide	**21**	**0.65**	**0.008**	**17**
YK02-C 156.5-160	156.5	160	3.5	quartzite	oxide	**11**	**0.64**	**0.013**	**16**
YK02-C 160-168.5	160	168.5	8.5	quartzite	oxide	**< 2**	**0.79**	**0.007**	**9**
YK02-C 168.5-173	168.5	173	4.5	quartzite	oxide	**16**	**0.45**	**0.012**	**10**
YK02-C 173-178	173	178	5	quartzite	oxide	**24**	**0.9**	**0.016**	**18**
YK02-C 178-181	178	181	3	quartzite	oxide	**18**	**0.79**	**0.023**	**16**
YK02-C 181-183	181	183	2	quartzite	oxide	**19**	**0.9**	**0.034**	**19**
YK02-C 183-187	183	187	4	mafic dike	oxide	**< 2**	**0.27**	**0.011**	**8**
YK02-C 187-192	187	192	5	mafic dike	oxide	**15**	**0.15**	**0.009**	**7**
YK02-C 192-197	192	197	5	mafic dike	oxide	**< 2**	**0.1**	**0.009**	**7**
YK02-C 197-202	197	202	5	mafic dike	oxide	**< 2**	**0.4**	**0.011**	**3**
YK02-C 202-207	202	207	5	mafic dike	oxide	**< 2**	**0.08**	**0.010**	**6**
YK02-C 207-212	207	212	5	mafic dike	oxide	**< 2**	**0.2**	**0.009**	**5**
YK02-C 212-217	212	217	5	quartzite	oxide	**< 2**	**0.1**	**0.014**	**23**
YK02-C 217-222	217	222	5	quartzite	oxide	**< 2**	**0.2**	**0.017**	**14**
YK02-C 222-225	222	225	3	quartzite	oxide	**< 2**	**0.07**	**0.015**	**64**
YK02-C 225-229	225	229	4	quartzite	oxide	**< 2**	**0.2**	**0.010**	**24**
YK02-C 229-231.5	229	231.5	2.5	monzonite porphyry	oxide	**48**	**0.9**	**0.114**	**33**
YK02-C 231.5-237	231.5	237	5.5	monzonite porphyry	oxide	**47**	**0.8**	**0.156**	**20**

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-C 237-242.5	237	242.5	5.5	monzonite porphyry	oxide	41	0.9	0.173	34
YK02-C 242.5-245	242.5	245	2.5	monzonite porphyry	oxide	23	2	0.104	76
YK02-C 245-250.5	245	250.5	5.5	monzonite porphyry	oxide	16	0.4	0.088	43
YK02-C 250.5-254.5	250.5	254.5	4	monzonite porphyry	oxide	27	0.4	0.080	55
YK02-C 254.5-258	254.5	258	3.5	monzonite porphyry	oxide	112	0.3	0.102	29
YK02-C 258-260	258	260	2	monzonite porphyry	oxide	81	0.2	0.048	63
YK02-C 260-263	260	263	3	monzonite porphyry	oxide	21	0.2	0.034	15
YK02-C 263-266	263	266	3	monzonite porphyry	oxide	15	0.1	0.029	34
YK02-C 266-271.5	266	271.5	5.5	monzonite porphyry	oxide	10	0.2	0.017	7
YK02-C 271.5-274.5	271.5	274.5	3	monzonite porphyry	oxide	9	0.2	0.025	36
YK02-C 274.5-278	274.5	278	3.5	monzonite porphyry	oxide	8	0.8	0.020	76
YK02-C 278-282.5	278	282.5	4.5	monzonite porphyry	oxide	30	0.3	0.043	71
YK02-C 282.5-286	282.5	286	3.5	monzonite porphyry	oxide	21	0.2	0.041	17
YK02-C 286-291	286	291	5	monzonite porphyry	oxide	19	0.4	0.039	50
YK02-C 291-294	291	294	3	monzonite porphyry	oxide	12	0.2	0.037	74
YK02-C 294-298	294	298	4	monzonite porphyry	oxide	< 2	0.3	0.036	65
YK02-C 298-300.5	298	300.5	2.5	monzonite porphyry	oxide	24	0.8	0.055	27
YK02-C 300.5-304	300.5	304	3.5	dolomite	oxide	20	0.8	0.061	6
YK02-C 304-308	304	308	4	dolomite	oxide	33	0.6	0.054	5
YK02-C 308-313	308	313	5	monzonite porphyry	oxide	16	0.5	0.046	20
YK02-C 313-316	313	316	3	monzonite porphyry	oxide	18	0.4	0.034	12
YK02-C 316-318	316	318	2	monzonite porphyry	oxide	15	0.7	0.055	35
YK02-C 318-322.5	318	322.5	4.5	monzonite porphyry	oxide	29	0.5	0.039	25
YK02-C 322.5-326	322.5	326	3.5	monzonite porphyry	oxide	17	0.2	0.042	21
YK02-C 326-331.5	326	331.5	5.5	monzonite porphyry	oxide	38	0.5	0.051	35
YK02-C 331.5-336	331.5	336	4.5	monzonite porphyry	oxide	29	0.4	0.048	18
YK02-C 336-341.5	336	341.5	5.5	monzonite porphyry	oxide	33	0.5	0.053	26
YK02-C 341.5-346	341.5	346	4.5	monzonite porphyry	oxide	27	0.8	0.090	40
YK02-C 346-350	346	350	4	monzonite porphyry	oxide	26	0.8	0.082	16
YK02-C 350-355	350	355	5	monzonite porphyry	oxide	20	0.4	0.047	40
YK02-C 355-359	355	359	4	monzonite porphyry	oxide	< 2	0.1	0.045	23
YK02-C 359-362.5	359	362.5	3.5	monzonite porphyry	oxide	330	0.6	0.069	24
YK02-C 362.5-367	362.5	367	4.5	monzonite porphyry	oxide	75	0.3	0.036	25
YK02-C 367-372.5	367	372.5	5.5	monzonite porphyry	oxide	25	0.3	0.029	30
YK02-C 372.5-378	372.5	378	5.5	monzonite porphyry	oxide	27	0.5	0.064	74

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-C 378-383	378	383	5	monzonite porphyry	oxide	26	0.4	0.093	60
YK02-C 383-388	383	388	5	monzonite porphyry	oxide	30	0.4	0.051	33
YK02-C 388-393	388	393	5	monzonite porphyry	oxide	31	0.5	0.074	48
YK02-C 393-398	393	398	5	dolomite	oxide	41	0.8	0.082	89
YK02-C 398-403	398	403	5	dolomite	oxide sulfide boundary	40	8.5	0.054	73
YK02-C 403-410.5	403	410.5	7.5	dolomite	sulfide	19	0.3	0.054	18
YK02-C 410.5-413	410.5	413	2.5	dolomite	sulfide	113	0.2	0.022	57
YK02-C 413-417	413	417	4	dolomite	sulfide	972	0.4	0.025	74
YK02-C 417-418	417	418	1	dolomite	sulfide	30	0.1	0.026	117
YK02-C 418-420	418	420	2	dolomite	sulfide	31	0.2	0.031	33
YK02-C 420-424.5	420	424.5	4.5	dolomite	sulfide	< 2	0.08	0.004	< 1
YK02-C 424.5-428	424.5	428	3.5	dolomite	sulfide	14	0.4	0.008	< 1
YK02-C 428-432	428	431	3	dolomite	sulfide	< 2	0.1	0.005	10
YK02-C 432-435	431	435	4	sheared limestone/marble/ volcaniclastic	sulfide	< 2	0.06	0.007	6
YK02-C 435-438	435	438	3	sheared limestone/marble/ volcaniclastic	sulfide	< 2	0.09	0.020	13
YK02-C 438-443	438	443	5	sheared limestone/marble/ volcaniclastic	sulfide	14	0.1	0.018	8
YK02-C 443-448	443	448	5	volcaniclastic	sulfide	< 2	< 0.05	0.006	9
YK02-C 448-453	448	453	5	volcaniclastic	sulfide	11	< 0.05	0.004	8
YK02-C 453-458	453	458	5	volcaniclastic	sulfide	< 2	< 0.05	0.003	6
YK02-C 458-463	458	463	5	volcaniclastic	sulfide	< 2	< 0.05	0.005	7
YK02-C 463-468	463	468	5	volcaniclastic	sulfide	< 2	< 0.05	0.005	6
YK02-C 468-473	468	473	5	volcaniclastic	sulfide	< 2	< 0.05	0.004	6
YK02-C 473-478	473	478	5	volcaniclastic	sulfide	< 2	0.3	0.019	13
YK02-C 478-483	478	483	5	volcaniclastic	sulfide	< 2	0.1	0.009	13
YK02-C 483-488	483	488	5	volcaniclastic	sulfide	< 2	< 0.05	0.006	9
YK02-C 488-493	488	493	5	volcaniclastic	sulfide	< 2	< 0.05	0.003	7
YK02-C 493-498	493	498	5	volcaniclastic	sulfide	< 2	< 0.05	0.003	10
YK02-C 498-503	498	503	5	volcaniclastic	sulfide	< 2	< 0.05	0.003	10
YK02-C 503-508	503	508	5	volcaniclastic	sulfide	< 2	< 0.05	0.006	10
YK02-C 508-513	508	513	5	volcaniclastic	sulfide	< 2	0.07	0.003	9
YK02-C 513-518	513	518	5	volcaniclastic	sulfide	< 2	< 0.05	0.005	12
YK02-C 518-523	518	523	5	volcaniclastic	sulfide	3	< 0.05	0.005	10
YK02-C 523-528	523	528	5	volcaniclastic	sulfide	< 2	< 0.05	0.004	10
YK02-C 528-533	528	533	5	volcaniclastic	sulfide	< 2	< 0.05	0.007	9

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-C 533-538	533	538	5	volcaniclastic	sulfide	< 2	< 0.05	0.007	7
YK02-C 538-543	538	543	5	volcaniclastic	sulfide	< 2	< 0.05	0.005	9
YK02-C 543-548	543	548	5	volcaniclastic	sulfide	< 2	< 0.05	0.005	9
YK02-C 548-553	548	553	5	volcaniclastic	sulfide	< 2	0.8	0.019	17
YK02-C 553-558	553	558	5	volcaniclastic	sulfide	< 2	0.1	0.010	17
YK02-C 558-563	558	563	5	volcaniclastic	sulfide	5	0.3	0.009	21
YK02-C 563-568	563	568	5	volcaniclastic	sulfide	< 2	0.2	0.007	17
YK02-C 568-573	568	573	5	volcaniclastic	sulfide	< 2	< 0.05	0.006	8
YK02-C 573-578	573	578	5	volcaniclastic	sulfide	< 2	0.3	0.012	8
YK02-C 578-583	578	583	5	volcaniclastic	sulfide	< 2	< 0.05	0.008	11
YK02-C 583-588	583	588	5	volcaniclastic	sulfide	< 2	< 0.05	0.004	11
YK02-C 588-593	588	593	5	volcaniclastic	sulfide	< 2	< 0.05	0.008	12
YK02-C 593-598	593	598	5	volcaniclastic	sulfide	< 2	0.3	0.010	17
YK02-C 598-602	598	602	4	volcaniclastic	sulfide	< 2	0.08	0.007	18
YK02-C 602-606.5	602	606.5	4.5	volcaniclastic	sulfide	< 2	0.1	0.007	12
YK02-C 606.5-612.5	606.5	612.5	6	volcaniclastic	sulfide	< 2	0.3	0.009	8
YK02-C 612.5-617	612.5	617	4.5	volcaniclastic	sulfide	< 2	< 0.05	0.003	10
YK02-C 617-621	617	621	4	volcaniclastic	sulfide	< 2	< 0.05	0.004	11
YK02-C 621-628	621	628	7	volcaniclastic	sulfide	< 2	< 0.05	0.003	11
YK02-C 628-633	628	633	5	volcaniclastic	sulfide	< 2	< 0.05	0.004	9
YK02-C 633-638	633	638	5	volcaniclastic	sulfide	4	0.57	0.005	5
YK02-C 638-643	638	643	5	volcaniclastic	sulfide	< 2	0.1	0.004	3
YK02-C 643-648	643	648	5	volcaniclastic	sulfide	4	< 0.05	0.004	1
YK02-C 648-654	648	654	6	volcaniclastic	sulfide	6	< 0.05	0.008	2
YK02-C 654-668	654	668	14	volcaniclastic	sulfide	< 2	0.05	0.007	1
YK02-C 668-673	668	673	5	volcaniclastic	sulfide	4	< 0.05	0.015	3
YK02-C 673-678	673	678	5	volcaniclastic	sulfide	< 2	< 0.05	0.010	2
YK02-C 678-683	678	683	5	volcaniclastic	sulfide	< 2	< 0.05	0.014	4
YK02-C 683-688	683	688	5	volcaniclastic	sulfide	< 2	< 0.05	0.008	5

Drill hole YK02-D

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:						ppb	ppm	%	ppm
Detection Limit:						2	0.05		1
Analysis Character:						multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:						encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:	From	To	Interval			INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 50; INAA > 50
YK02-D 0-7	0	7	7	dolomite	oxide	< 2	0.2	0.006	16
YK02-D 7-9	7	9	2	dolomite	oxide	3	0.2	0.003	< 1
YK02-D 9-13	9	13	4	dolomite	oxide	20	0.5	0.009	6
YK02-D 13-16	13	16	3	dolomite	oxide	21	0.2	0.018	< 1
YK02-D 16-18	16	18	2	dolomite	oxide	< 2	0.3	0.003	< 1
YK02-D 18-20	18	20	2	dolomite	oxide	< 2	0.3	0.006	< 1
YK02-D 20-23	20	23	3	dolomite	oxide	< 2	0.1	0.001	< 1
YK02-D 23-28	23	28	5	dolomite	oxide	56	0.2	0.005	< 1
YK02-D 28-31	28	31	3	dolomite	oxide	88	0.6	0.146	16
YK02-D 31-33	31	33	2	dolomite	oxide	131	1.9	0.220	9
YK02-D 33-36	33	36	3	dolomite	oxide	40	0.8	0.085	8
YK02-D 36-38	36	38	2	dolomite	oxide	21	0.4	0.040	5
YK02-D 38-40	38	40	2	dolomite	oxide	22	0.6	0.064	4
YK02-D 40-43	40	43	3	quartzite	oxide	9	0.05	0.070	13
YK02-D 43-48	43	48	5	quartzite	oxide	6	1.4	0.007	5
YK02-D 48-53	48	53	5	quartzite	oxide	15	0.1	0.009	4
YK02-D 53-55	53	55	2	quartzite	oxide	15	0.2	0.015	4
YK02-D 55-58	55	58	3	quartzite	oxide	15	0.2	0.018	45
YK02-D 58-63	58	63	5	quartzite	oxide	51	0.4	0.028	47
YK02-D 63-68	63	68	5	schist	oxide	59	0.5	0.028	6
YK02-D 68-73	68	73	5	schist	oxide	51	0.2	0.017	5

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-D 73-78	73	78	5	schist	oxide	< 2	0.08	0.007	2
YK02-D 78-83	78	83	5	schist	oxide	3	0.3	0.007	3
YK02-D 83-88	83	88	5	schist	oxide	9	0.07	0.008	2
YK02-D 88-93	88	93	5	schist	oxide	5	0.1	0.007	3
YK02-D 93-98	93	98	5	schist	oxide	6	0.1	0.008	3
YK02-D 98-103	98	103	5	schist	oxide	< 2	0.1	0.007	2
YK02-D 103-108	103	108	5	schist	oxide	< 2	< 0.05	0.006	3
YK02-D 108-113	108	113	5	schist	oxide	< 2	< 0.05	0.007	3
YK02-D 113-118	113	118	5	schist	oxide	15	0.05	0.008	3
YK02-D 118-123	118	123	5	schist	oxide	95	0.2	0.014	5
YK02-D 123-128	123	128	5	schist	oxide	262	0.4	0.017	7
YK02-D 128-133	128	133	5	schist	oxide	13	0.2	0.010	6
YK02-D 133-138	133	138	5	schist	oxide	< 2	< 0.05	0.007	3
YK02-D 138-143	138	143	5	schist	oxide	< 2	< 0.05	0.006	2
YK02-D 143-148	143	148	5	schist	oxide	9	< 0.05	0.006	2
YK02-D 148-153	148	153	5	schist	oxide	< 2	< 0.05	0.007	2
YK02-D 153-158	153	158	5	quartzite	oxide	6	0.06	0.006	6
YK02-D 158-163	158	163	5	quartzite	oxide	15	0.1	0.005	6
YK02-D 163-168	163	168	5	monzonite porphyry	oxide	13	0.06	0.009	3
YK02-D 168-173	168	173	5	monzonite porphyry	oxide	< 2	0.09	0.008	2
YK02-D 173-178	173	178	5	monzonite porphyry	oxide	< 2	0.1	0.006	5
YK02-D 178-183	178	183	5	monzonite porphyry	oxide	27	0.1	0.018	5
YK02-D 183-186	183	186	3	monzonite porphyry	oxide	23	0.2	0.018	17
YK02-D 186-190	186	190	4	quartzite	oxide	14	0.3	0.011	26
YK02-D 190-193	190	193	3	quartzite	oxide	4	0.08	0.010	9
YK02-D 193-195	193	195	2	quartzite	oxide	< 2	0.1	0.011	6
YK02-D 195-198	195	198	3	quartzite	oxide	5	0.1	0.008	13
YK02-D 198-203.5	198	203.5	5.5	mafic dike	oxide	< 2	0.07	0.010	4
YK02-D 203.5-208	203.5	208	4.5	mafic dike	oxide	8	0.5	0.012	4
YK02-D 208-213.5	208	213.5	5.5	quartzite breccia	oxide	5	0.05	0.007	9
YK02-D 213.5-216.5	213.5	216.5	3	quartzite	oxide	< 2	< 0.05	0.010	6
YK02-D 216.5-219	216.5	219	2.5	quartzite	oxide	< 2	0.1	0.020	13
YK02-D 219-221.5	219	221.5	2.5	quartzite	oxide	10	0.05	0.023	9
YK02-D 221.5-226.5	221.5	226.5	5	quartzite	oxide	20	0.1	0.035	48

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-D 226.5-228	226.5	228	1.5	arenaceous quartzite	oxide	17	< 0.05	0.021	33
YK02-D 228-232.5	228	232.5	4.5	arenaceous quartzite	oxide	6	0.4	0.011	9
YK02-D 232.5-235.5	232.5	235.5	3	arenaceous quartzite	oxide	6	0.3	0.023	9
YK02-D 235.5-239	235.5	239	3.5	arenaceous quartzite	oxide	< 2	0.1	0.019	12
YK02-D 239-241	239	241	2	arenaceous quartzite	oxide	4	0.3	0.020	21
YK02-D 241-244	241	244	3	arenaceous quartzite	oxide	3	0.3	0.012	10
YK02-D 244-247	244	247	3	arenaceous quartzite	oxide	6	0.08	0.009	6
YK02-D 247-249.5	247	249.5	2.5	arenaceous quartzite	oxide	94	0.2	0.014	10
YK02-D 249.5-251	249.5	251	1.5	arenaceous quartzite	oxide	10	0.1	0.017	25
YK02-D 251-254	251	257	6	arenaceous quartzite	oxide	9	0.1	0.012	10
YK02-D 254-257	257	257	0	arenaceous quartzite	oxide	15	0.08	0.019	16
YK02-D 257-259.5	257	259.5	2.5	arenaceous quartzite	oxide	14	0.1	0.014	9
YK02-D 259.5-263	259.5	263	3.5	arenaceous quartzite	oxide	8	0.1	0.027	29
YK02-D 263-266.5	263	266.5	3.5	arenaceous quartzite	oxide	30	0.2	0.092	40
YK02-D 266.5-269	266.5	269	2.5	arenaceous quartzite	oxide	25	0.3	0.106	42
YK02-D 269-272.5	269	272.5	3.5	arenaceous quartzite	oxide	59	0.4	0.162	105
YK02-D 272.5-276	272.5	276	3.5	arenaceous quartzite	oxide	68	0.5	0.185	32
YK02-D 276-280	276	280	4	arenaceous quartzite	oxide	64	0.4	0.169	37
YK02-D 280-283	280	283	3	arenaceous quartzite	oxide	58	0.9	0.171	33
YK02-D 283-285	283	285	2	arenaceous quartzite	oxide	12	0.2	0.027	13
YK02-D 285-288	285	288	3	arenaceous quartzite	oxide	5	0.1	0.010	32
YK02-D 288-291	288	291	3	arenaceous quartzite	oxide	6	0.1	0.010	16
YK02-D 291-296	291	296	5	arenaceous quartzite	oxide	4	0.2	0.014	107
YK02-D 296-301	296	301	5	arenaceous quartzite	oxide	3	0.07	0.005	53
YK02-D 301-305.5	301	305.5	4.5	arenaceous quartzite	oxide	14	0.06	0.014	76
YK02-D 305.5-307	305.5	307	1.5	arenaceous quartzite	oxide	5	0.08	0.019	47
YK02-D 307-310	307	310	3	arenaceous quartzite	oxide	11	0.2	0.019	93
YK02-D 310-313	310	313	3	arenaceous quartzite	oxide	5	0.2	0.010	33
YK02-D 313-318	313	318	5	arenaceous quartzite	oxide	16	0.2	0.014	137
YK02-D 318-322	318	322	4	arenaceous quartzite	oxide	211	0.2	0.016	96
YK02-D 322-337	322	337	15	arenaceous quartzite	oxide	137	0.31	0.022	206
YK02-D 337-338.5	337	338.5	1.5	arenaceous quartzite	oxide	43	1.52	0.053	101
YK02-D 338.5-343	338.5	343	4.5	arenaceous quartzite	oxide	22	0.08	0.062	219
YK02-D 343-346	343	346	3	arenaceous quartzite	oxide	10	0.22	0.012	133

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-D 346-348.5	346	348.5	2.5	dolomite	oxide	41	0.99	0.114	125
YK02-D 348.5-350	348.5	350	1.5	dolomite	oxide	31	0.86	0.055	65
YK02-D 350-355	350	355	5	dolomite	oxide	< 2	0.28	0.021	5
YK02-D 355-359.5	355	359.5	4.5	limestone/marble	oxide	12	0.21	0.035	19
YK02-D 359.5-364.5	359.5	364	4.5	limestone/marble	oxide	< 2	< 0.05	0.023	22
YK02-D 364.5-371	364	371	7	limestone/marble	oxide	11	< 0.05	0.024	54
YK02-D 371-376	371	376	5	limestone/marble	oxide	18	0.15	0.037	37
YK02-D 376-381	376	381	5	limestone/marble	oxide	19	0.09	0.040	45
YK02-D 381-384	381	384	3	limestone/marble	oxide/sulfide transition	16	0.33	0.031	25
YK02-D 384-386	384	386	2	mafic dike	sulfide	16	0.17	0.030	56
YK02-D 386-391.5	386	391.5	5.5	monzonite porphyry	sulfide	27	0.35	0.052	66
YK02-D 391.5-395.5	391.5	395.5	4	monzonite porphyry	sulfide	9	0.35	0.051	36
YK02-D 395.5-400.5	395.5	400.5	5	monzonite porphyry	sulfide	118	1.86	0.082	75
YK02-D 400.5-405.5	400.5	405.5	5	monzonite porphyry	sulfide	60	0.62	0.055	42
YK02-D 405.5-410.5	405.5	410.5	5	monzonite porphyry	sulfide	92	0.58	0.045	51
YK02-D 410.5-414.5	410.5	414.5	4	monzonite porphyry	sulfide	59	0.94	0.032	66
YK02-D 414.5-420.5	414.5	420.5	6	monzonite porphyry	sulfide	45	0.63	0.031	106
YK02-D 420.5-425	420.5	425	4.5	monzonite porphyry	sulfide	91	0.79	0.045	90
YK02-D 425-429	425	429	4	monzonite porphyry	sulfide	38	0.68	0.063	26
YK02-D 429-434	429	434	5	monzonite porphyry	sulfide	71	0.67	0.057	44
YK02-D 434-438	434	438	4	monzonite porphyry	sulfide	57	0.78	0.062	35
YK02-D 438-440	438	440	2	monzonite porphyry	sulfide	36	0.4	0.055	163
YK02-D 440-444.5	440	444.5	4.5	monzonite porphyry	sulfide	62	0.57	0.036	80
YK02-D 444.5-449	444.5	449	4.5	monzonite porphyry	sulfide	30	0.38	0.055	82
YK02-D 449-453	449	453	4	monzonite porphyry	sulfide	37	0.62	0.063	35
YK02-D 453-457	453	457	4	monzonite porphyry	sulfide	33	0.98	0.089	76
YK02-D 457-462	457	462	5	monzonite porphyry	sulfide	35	0.93	0.083	60
YK02-D 462-468	462	468	6	monzonite porphyry	sulfide	< 2	0.2	0.053	44

Drill hole YK02-E

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:						ppb	ppm	%	ppm
Detection Limit:						2	0.05		1
Analysis Character:						multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:						encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:	From	To	Interval			INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 50; INAA > 50
YK02-E 0-9	0	9	9	pad fill	oxide	9	2.3	0.009	21
YK02-E 9-13	9	13	4	dolomite	oxide	15	0.1	0.018	< 1
YK02-E 13-18.5	13	18.5	5.5	dolomite	oxide	15	0.07	0.008	< 1
YK02-E 18.5-21.5	18.5	21.5	3	dolomite	oxide	< 2	< 0.05	0.013	< 1
YK02-E 21.5-26.5	21.5	26.5	5	dolomite	oxide	9	< 0.05	0.023	< 1
YK02-E 26.5-29.5	26.5	29.5	3	dolomite	oxide	< 2	0.5	0.021	< 1
YK02-E 29.5-31.5	29.5	31.5	2	dolomite	oxide	< 2	0.2	0.006	< 1
YK02-E 31.5-34	31.5	34	2.5	dolomite	oxide	< 2	0.09	0.007	< 1
YK02-E 34-37	34	37	3	dolomite	oxide	157	0.08	0.015	< 1
YK02-E 37-40.5	37	40.5	3.5	dolomite	oxide	280	< 0.05	0.016	< 1
YK02-E 40.5-44.5	40.5	44.5	4	dolomite	oxide	144	< 0.05	0.026	< 1
YK02-E 44.5-49	44.5	49	4.5	dolomite	oxide	15	0.3	0.025	< 1
YK02-E 49-53	49	53	4	dolomite	oxide	88	1.5	0.153	5
YK02-E 53-58	53	58	5	dolomite	oxide	66	1.4	0.061	40
YK02-E 58-63	58	63	5	dolomite	oxide	< 2	0.05	0.106	14
YK02-E 63-68	63	68	5	quartzite	oxide	< 2	< 0.05	0.011	49
YK02-E 68-73	68	73	5	quartzite	oxide	7	< 0.05	0.011	7
YK02-E 73-78	73	78	5	schist	oxide	10	< 0.05	0.008	5
YK02-E 78-80.5	78	80.5	2.5	schist	oxide	< 2	< 0.05	0.008	2
YK02-E 80.5-85.5	80.5	85.5	5	schist	oxide	< 2	< 0.05	0.012	2
YK02-E 85.5-90.5	85.5	90.5	5	schist	oxide	< 2	< 0.05	0.009	3
YK02-E 90.5-95.5	90.5	95.5	5	schist	oxide	9	< 0.05	0.008	3
YK02-E 95.5-101	95.5	101	5.5	schist	oxide	< 2	< 0.05	0.007	4

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-E 101-103	101	103	2	schist	oxide	6	< 0.05	0.006	4
YK02-E 103-108	103	108	5	schist	oxide	8	< 0.05	0.008	2
YK02-E 108-113	108	113	5	schist	oxide	< 2	< 0.05	0.009	4
YK02-E 113-118	113	118	5	schist	oxide	< 2	< 0.05	0.012	3
YK02-E 118-123	118	123	5	schist	oxide	10	< 0.05	0.010	2
YK02-E 123-128	123	128	5	schist	oxide	< 2	< 0.05	0.008	3
YK02-E 128-133	128	133	5	quartzite	oxide	< 2	< 0.05	0.004	2
YK02-E 133-138	133	138	5	quartzite	oxide	< 2	< 0.05	0.006	2
YK02-E 138-141.5	138	141.5	3.5	quartzite	oxide	11	0.2	0.006	3
YK02-E 141.5-143	141.5	143	1.5	quartzite	oxide	9	0.1	0.009	4
YK02-E 143-148	143	148	5	quartzite	oxide	< 2	< 0.05	0.006	6
YK02-E 148-153	148	153	5	quartzite	oxide	13	< 0.05	0.008	5
YK02-E 153-154	153	154	1	quartzite	oxide	5	< 0.05	0.006	3
YK02-E 154-159	154	159	5	quartzite	oxide	4	0.06	0.007	4
YK02-E 159-163	159	163	4	quartzite	oxide	9	0.07	0.008	8
YK02-E 163-168	163	168	5	quartzite	oxide	5	0.06	0.007	4
YK02-E 168-173	168	173	5	quartzite	oxide	5	0.09	0.007	6
YK02-E 173-178	173	178	5	quartzite	oxide	42	0.08	0.008	4
YK02-E 178-181	178	181	3	quartzite	oxide	4	< 0.05	0.006	6
YK02-E 181-183	181	183	2	quartzite	oxide	25	0.1	0.019	6
YK02-E 183-188	183	188	5	monzonite porphyry	oxide	12	0.06	0.009	7
YK02-E 188-193	188	193	5	monzonite porphyry	oxide	17	0.1	0.020	5
YK02-E 193-198	193	198	5	monzonite porphyry	oxide	18	0.08	0.030	18
YK02-E 198-203	198	203	5	monzonite porphyry	oxide	26	0.3	0.050	35
YK02-E 203-208	203	208	5	monzonite porphyry	oxide	22	0.4	0.033	110
YK02-E 208-213	208	213	5	monzonite porphyry	oxide	< 2	0.07	0.011	5
YK02-E 213-218	213	218	5	monzonite porphyry	oxide	10	0.1	0.012	17
YK02-E 218-223	218	223	5	monzonite porphyry	oxide	< 2	0.1	0.013	40
YK02-E 223-228	223	228	5	monzonite porphyry	oxide	< 2	0.1	0.012	10
YK02-E 228-233	228	233	5	monzonite porphyry	oxide	20	0.2	0.008	6
YK02-E 233-236	233	236	3	monzonite porphyry	oxide	20	0.2	0.015	17
YK02-E 236-239.5	236	239.5	3.5	monzonite porphyry	oxide	19	0.1	0.017	16
YK02-E 239.5-244.5	239.5	244	4.5	monzonite porphyry	oxide	11	0.06	0.013	3
YK02-E 244.5-249	244	249	5	monzonite porphyry	oxide	15	0.1	0.014	6

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-E 249-254	249	254	5	monzonite porphyry	oxide	10	< 0.05	0.031	6
YK02-E 254-259	254	259	5	monzonite porphyry	oxide	< 2	0.05	0.013	5
YK02-E 259-262	259	262	3	monzonite porphyry	oxide	< 2	< 0.05	0.011	8
YK02-E 262-264	262	264	2	monzonite porphyry	oxide	14	0.07	0.028	45
YK02-E 264-267.5	264	267.5	3.5	monzonite porphyry	oxide	12	< 0.05	0.019	38
YK02-E 267.5-269	267.5	269.5	2	mafic dike	oxide	< 2	< 0.05	0.014	13
YK02-E 269.5-274	269.5	274	4.5	mafic dike	oxide	14	< 0.05	0.012	3
YK02-E 274-279	274	279	5	mafic dike	oxide	< 2	< 0.05	0.018	3
YK02-E 279-284	279	284	5	mafic dike	oxide	< 2	< 0.05	0.014	1
YK02-E 284-289	284	289	5	mafic dike	oxide	10	< 0.05	0.012	2
YK02-E 289-294	289	294	5	mafic dike	oxide	< 2	< 0.05	0.012	1
YK02-E 294-299	294	299	5	mafic dike	oxide	< 2	< 0.05	0.012	2
YK02-E 299-304	299	304	5	mafic dike	oxide	< 2	< 0.05	0.011	2
YK02-E 304-309	304	309	5	mafic dike	oxide	< 2	< 0.05	0.013	2
YK02-E 309-314	309	314	5	mafic dike	oxide	< 2	< 0.05	0.016	2
YK02-E 314-318.5	314	318.5	4.5	monzonite porphyry	oxide	< 2	0.2	0.024	66
YK02-E 318.5-323	318.5	323	4.5	monzonite porphyry	oxide	25	0.4	0.058	46
YK02-E 323-328	323	328	5	monzonite porphyry	oxide	< 2	0.2	0.048	49
YK02-E 328-333	328	333	5	monzonite porphyry	oxide	< 2	< 0.05	0.009	< 1
YK02-E 333-338	333	338	5	monzonite porphyry	oxide	< 2	< 0.05	0.009	< 1
YK02-E 338-343	338	343	5	monzonite porphyry	oxide	< 2	< 0.05	0.025	2
YK02-E 343-349	343	349	6	monzonite porphyry	oxide	< 2	< 0.05	0.013	2
YK02-E 349-354	349	354	5	monzonite porphyry	oxide	< 2	0.07	0.015	3
YK02-E 354-359	354	359	5	monzonite porphyry	oxide	< 2	0.1	0.010	2
YK02-E 359-364	359	364	5	monzonite porphyry	oxide	< 2	< 0.05	0.008	2
YK02-E 364-369	364	369	5	monzonite porphyry	oxide	3	0.3	0.009	3
YK02-E 369-371	369	371	2	monzonite porphyry	oxide	< 2	0.08	0.009	4
YK02-E 371-374	371	374	3	monzonite porphyry	oxide	6	0.1	0.013	15
YK02-E 374-379.5	374	379.5	5.5	monzonite porphyry	oxide	23	0.6	0.019	16
YK02-E 379.5-384	379.5	384	4.5	monzonite porphyry	oxide	5	< 0.05	0.012	5
YK02-E 384-389	384	389	5	monzonite porphyry	oxide	5	< 0.05	0.011	1
YK02-E 389-390	389	390	1	monzonite porphyry	oxide	9	0.09	0.016	9
YK02-E 390-395	390	395	5	monzonite porphyry	oxide	15	0.80	0.019	45
YK02-E 395-399	395	399	4	monzonite porphyry	oxide	11	0.40	0.029	73

Element:				Generic rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK02-E 399-401	399	401	2	monzonite porphyry	oxide	**23**	**0.30**	**0.053**	**231**
YK02-E 401-403.5	401	403.5	2.5	monzonite porphyry	oxide	**20**	**0.50**	**0.045**	**50**
YK02-E 403.5-406	403.5	406	2.5	monzonite porphyry	oxide	**26**	**0.30**	**0.077**	**205**
YK02-E 406-408.5	406	408.5	2.5	crushed zone	oxide	**14**	**0.20**	**0.035**	**50**
YK02-E 408.5-413.5	408.5	413.5	5	monzonite porphyry	oxide	**72**	**0.40**	**0.037**	**157**
YK02-E 413.5-419	413.5	419	5.5	monzonite porphyry	oxide/sulfide transition	**203**	**1.00**	**0.044**	**64**
YK02-E 419-423	419	423	4	crushed zone	oxide/sulfide transition	**25**	**0.20**	**0.043**	**54**
YK02-E 423-428	423	428	5	monzonite porphyry	sulfide	**22**	**0.10**	**0.048**	**84**
YK02-E 428-433	428	433	5	monzonite porphyry	sulfide	**23**	**0.20**	**0.023**	**8**
YK02-E 433-442.5	433	442.5	9.5	monzonite porphyry	sulfide	**31**	**0.50**	**0.079**	**108**
YK02-E 442.5-447.5	442.5	447.5	5	monzonite porphyry	sulfide	**16**	**0.20**	**0.087**	**129**
YK02-E 447.5-452.5	447.5	452.5	5	monzonite porphyry	sulfide	**5**	**0.20**	**0.019**	**4**
YK02-E 452.5-455	452.5	455	2.5	monzonite porphyry	sulfide	**< 2**	**0.30**	**0.022**	**5**

Drill hole YK03-A

Element:				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:						ppb	ppm	%	ppm
Detection Limit:						2	0.05		1
Analysis Character:						multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:						encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:						INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 50; INAA > 50
YK03A 0-7.5	0	7.5	7.5	schist	oxide	36	0.2	0.074	52
YK03A 7.5-13	7.5	13	5.5	schist	oxide	54	0.25	0.059	97
YK03A 13-18	13	18	5	schist	oxide	30	0.41	0.039	45
YK03A 18-23	18	23	5	schist	oxide	38	1.54	0.073	44
YK03A 23-24	23	24	1	schist	oxide	23	0.35	0.044	46
YK03A 24-33	24	33	9	schist	oxide	22	0.12	0.034	106
YK03A 33-43	33	43	10	quartzite	oxide	14	0.2	0.008	36
YK03A 43-44	43	44	1	quartzite	oxide	4	< 0.05	0.008	13
YK03A 44-47	44	47	3	quartzite	oxide	15	0.08	0.015	47
YK03A 47-50	47	50	3	quartzite	oxide	24	0.35	0.017	156
YK03A 50-52	50	52	2	quartzite	oxide	40	1.06	0.044	221
YK03A 52-54	52	54	2	quartzite	oxide	38	0.43	0.121	320
YK03A 54-62.5	54	62.5	8.5	quartzite	oxide	27	0.59	0.073	145
YK03A 62.5-65	62.5	65	2.5	quartzite	oxide	31	0.27	0.099	147
YK03A 65-67.5	65	67.5	2.5	sheared monzonite porphyry	oxide	48	0.82	0.090	409
YK03A 67.5-72.5	67.5	72.5	5	sheared monzonite porphyry	oxide	48	1.25	0.179	187
YK03A 72.5-77.5	72.5	77.5	5	sheared monzonite porphyry	oxide	54	1.43	0.238	373
YK03A 77.5-83	77.5	83	5.5	sheared monzonite porphyry	oxide	145	1.13	0.100	311
YK03A 83-86	83	86	3	sheared monzonite porphyry	oxide	85	0.94	0.461	108
YK03A 86-88	86	88	2	sheared monzonite porphyry	oxide	60	1.04	0.137	127
YK03A 88-91	88	91	3	sheared monzonite porphyry	oxide	134	1	0.123	226
YK03A 91-93	91	93	2	sheared monzonite porphyry	oxide	77	1.41	0.072	109
YK03A 93-98	93	98	5	sheared monzonite porphyry	oxide	178	0.61	0.102	158

Element:				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK03A 98-99	98	99	1	sheared monzonite porphyry	oxide	**72**	0.76	0.155	**102**
YK03A 99-102	99	102	3	sheared monzonite porphyry	oxide	**98**	0.84	0.348	**201**
YK03A 102-104	102	104	2	sheared monzonite porphyry	oxide	**111**	0.72	0.217	**124**
YK03A 104-109	104	109	5	sheared monzonite porphyry	oxide	**44**	0.57	0.104	**118**
YK03A 109-113	109	113	4	sheared monzonite porphyry	oxide	**30**	0.89	0.130	**113**
YK03A 113-118	113	118	5	sheared monzonite porphyry	oxide	**34**	0.79	0.192	**66**
YK03A 118-123	118	123	5	sheared monzonite porphyry	oxide	**20**	1.16	0.164	**127**
YK03A 123-125	123	125	2	sheared monzonite porphyry	oxide	**21**	0.67	0.264	**60**
YK03A 125-28	125	128	3	dolomite	oxide	**79**	1.63	0.950	**345**
YK03A 128-131	128	131	3	dolomite	oxide	**241**	5.13	0.469	**108**
YK03A 131-133	131	133	2	dolomite	oxide	**209**	2.26	0.204	**143**
YK03A 133-136	133	136	3	dolomite	oxide	**53**	2.33	0.781	**219**
YK03A 136-143	136	143	7	monzonite porphyry	oxide	**20**	0.67	0.085	**119**
YK03A 143-148	143	148	5	monzonite porphyry	oxide	**12**	0.17	0.050	**206**
YK03A 148-153	148	153	5	monzonite porphyry	oxide	**33**	0.54	0.108	**118**
YK03A 153-158	153	158	5	monzonite porphyry	oxide	**40**	0.73	0.105	**97**
YK03A 158-163	158	163	5	monzonite porphyry	oxide	**30**	0.74	0.079	**143**
YK03A 163-168	163	168	5	monzonite porphyry	oxide	**58**	14.6	0.081	**94**
YK03A 168-173	168	173	5	monzonite porphyry	oxide	**69**	3.38	0.084	**51**
YK03A 173-178	173	178	5	monzonite porphyry	oxide	**47**	3.03	0.117	**66**
YK03A 178-183	178	183	5	monzonite porphyry	oxide	**31**	0.63	0.064	**167**
YK03A 183-186	183	186	3	monzonite porphyry	oxide	**32**	1.36	0.093	**166**
YK03A 186-188.5	186	188.5	2.5	monzonite porphyry	oxide	**71**	2.41	0.226	**241**
YK03A 188.5-193	188.5	193	4.5	dolomite	oxide	**154**	2.1	0.253	**134**
YK03A 193-196	193	196	3	dolomite	oxide	**31**	0.71	0.069	**37**
YK03A 196-201	196	201	5	dolomite	oxide	**38**	0.88	0.057	**31**
YK03A 201-207	201	207	6	dolomite	oxide	**51**	1.02	0.060	**32**
YK03A 207-212	207	212	5	dolomite	oxide	**32**	0.75	0.045	**19**
YK03A 212-217.5	212	217.5	5.5	monzonite porphyry	oxide	**42**	0.71	0.065	**24**
YK03A 217.5-222.5	217.5	222.5	5	monzonite porphyry	oxide	**40**	1.02	0.086	**49**
YK03A 222.5-227.5	222.5	227.5	5	monzonite porphyry	oxide	**34**	0.87	0.089	**95**
YK03A 227.5-233	227.5	233	5.5	dolomite	oxide/sulfide boundary	**6**	0.14	0.014	**7**
YK03A 233-238	233	238	5	dolomite	sulfide	**5**	0.08	0.004	**4**

Element:				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK03A 238-243	238	243	5	dolomite	sulfide	**5**	0.07	0.007	**31**
YK03A 243-248	243	249	6	sheared monzonite porphyry	sulfide	**8**	0.24	0.003	**6**
YK03A 249-253	249	253	4	sheared monzonite porphyry	sulfide	**5**	1.11	0.005	**2**
YK03A 253-258	253	258	5	mafic dike	sulfide	**< 2**	0.08	0.004	**2**
YK03A 258-263	258	263	5	sheared monzonite porphyry	sulfide	**< 2**	0.07	0.003	**4**
YK03A 263-268	263	268	5	sheared monzonite porphyry	sulfide	**< 2**	0.06	0.004	**3**
YK03A 273-278	273	278	5	sheared monzonite porphyry	sulfide	**< 2**	0.56	0.018	**3**
YK03A 278-283	278	283	5	sheared monzonite porphyry	sulfide	**11**	0.2	0.002	**4**
YK03A 283-288	283	288	5	sheared monzonite porphyry	sulfide	**< 2**	< 0.05	0.004	**2**
YK03A 288-293	288	293	5	sheared monzonite porphyry	sulfide	**< 2**	< 0.05	0.005	**1**
YK03A 293-298	293	298	5	sheared monzonite porphyry	sulfide	**5**	< 0.05	0.003	**1**
YK03A 303-308	303	308	5	sheared monzonite porphyry	sulfide	**4**	< 0.05	0.001	**1**
YK03A 308-313	308	313	5	sheared monzonite porphyry	sulfide	**< 2**	< 0.05	0.001	**1**
YK03A 323-328	323	328	5	sheared monzonite porphyry	sulfide	**< 2**	0.07	0.008	**4**
YK03A 328-333	328	333	5	sheared monzonite porphyry	sulfide	**< 2**	< 0.05	0.001	**2**
YK03A 333-338	333	339	6	sheared monzonite porphyry	sulfide	**< 2**	< 0.05	0.001	**1**
YK03A 343-348	343	348	5	sheared monzonite porphyry	sulfide	**< 2**	< 0.05	0.001	**1**
YK03A 348-353	348	353	5	sheared monzonite porphyry	sulfide	**< 2**	< 0.05	0.007	**1**
YK03A 353-358	353	358	5	sheared monzonite porphyry	sulfide	**< 2**	0.12	0.018	**3**
YK03A 363-368	363	368	5	sheared monzonite porphyry	sulfide	**< 2**	0.22	0.008	**5**
YK03A 368-373	368	373	5	sheared monzonite porphyry	sulfide	**< 2**	< 0.05	0.004	**2**
YK03A 373-378	373	378	5	mafic dike	sulfide	**< 2**	0.07	0.007	**3**
YK03A 378-383	378	383	5	mafic dike	sulfide	**< 2**	< 0.05	0.008	**1**
YK03A 383-388	383	388	5	mafic dike	sulfide	**< 2**	< 0.05	0.008	**1**
YK03A 388-393	388	393	5	mafic dike	sulfide	**< 2**	< 0.05	0.007	**2**
YK03A 393-398	393	398	5	mafic dike	sulfide	**< 2**	< 0.05	0.008	**3**

Drill hole YK03-B

Laboratory Element				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:						ppb	ppm	%	ppm
Detection Limit:						2	0.05		1
Analysis Character:						multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:						encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:						INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 50; INAA > 50
YK03B 0-10.5	0	10.5	10.5	schist	oxide	**40**	**0.61**	0.056	71
YK03B 10.5-19	10.5	19	8.5	schist	oxide	**40**	**0.58**	0.084	37
YK03B 19-26	19	26	7	schist	oxide	**36**	**0.54**	0.058	34
YK03B 26-35.5	26	35.5	9.5	schist	oxide	**36**	**0.25**	0.038	27
YK03B 35.5-45	35.5	45	9.5	schist	oxide	**23**	**0.24**	0.021	28
YK03B 45-50	45	50	5	quartzite	oxide	**15**	**0.28**	0.022	35
YK03B 50-54	50	54	4	quartzite	oxide	**16**	**0.18**	0.012	54
YK03B 54-58	54	58	4	quartzite	oxide	**26**	**0.83**	0.008	191
YK03B 58-63	58	63	5	quartzite	oxide	**46**	**1.15**	0.011	39
YK03B 63-68	63	68	5	quartzite	oxide	**12**	**0.82**	0.014	32
YK03B 68-71	68	71	3	quartzite	oxide	**10**	**0.58**	0.011	63
YK03B 71-76.5	71	76.5	5.5	quartzite	oxide	**12**	**0.91**	0.008	82
YK03B 76.5-81.5	76.5	81.5	5	quartzite	oxide	23	0.56	0.015	68
YK03B 81.5-85	81.5	85	3.5	quartzite	oxide	6	0.29	0.009	26
YK03B 85-90	85	90	5	quartzite	oxide	9	0.23	0.012	67
YK03B 90-95	90	95	5	quartzite	oxide	10	0.37	0.011	26
YK03B 95-101	95	101	6	foliated monzonite porphyry	oxide	33	1.67	0.090	109
YK03B 101-106	101	106	5	foliated monzonite porphyry	oxide	57	0.94	0.087	102
YK03B 106-111	106	111	5	foliated monzonite porphyry	oxide	144	0.99	0.089	172
YK03B 111-116	111	116	5	foliated monzonite porphyry	oxide	66	1.51	0.282	98
YK03B 116-121	116	121	5	foliated monzonite porphyry	oxide	51	0.3	0.052	65
YK03B 121-126.5	121	126.5	5.5	foliated monzonite porphyry	oxide	38	0.42	0.116	68
YK03B 126.5-133	126.5	133	6.5	mafic dike	oxide	30	0.64	0.149	65
YK03B 133-138	133	138	5	foliated monzonite porphyry	oxide	30	0.29	0.051	71
YK03B 138-143	138	143	5	foliated monzonite porphyry	oxide	--	--	0.064	--
YK03B 143-145.5	143	145.5	2.5	mafic dike	oxide	39	0.23	0.055	87

Laboratory Element				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK03B 145.5-150	145.5	150	4.5	foliated monzonite porphyry	oxide	32	0.6	0.175	102
YK03B 150-155	150	155	5	mafic dike	oxide	< 2	0.45	0.038	8
YK03B 155-160	155	160	5	monzonite porphyry	oxide	34	0.25	0.117	44
YK03B 160-165	160	165	5	monzonite porphyry	oxide	73	0.37	0.077	119
YK03B 165-167	165	167	2	monzonite porphyry	oxide	109	0.54	0.085	71
YK03B 167-170	167	170	3	monzonite porphyry	oxide	55	0.91	0.142	32
YK03B 170-172	170	172	2	monzonite porphyry	oxide	58	4.04	0.187	72
YK03B 172-175	172	175	3	monzonite porphyry	oxide	46	1.93	0.166	56
YK03B 175-180	175	180	5	monzonite porphyry	oxide	50	0.3	0.138	30
YK03B 180-183	180	183	3	monzonite porphyry	oxide	40	0.17	0.088	40
YK03B 183-185	183	185	2	dolomite skarn	oxide	25	0.64	0.343	46
YK03B 185-187	185	187	2	dolomite skarn	oxide	19	0.2	0.156	8
YK03B 187-190	187	190	3	dolomite skarn	oxide	160	1.68	0.382	62
YK03B 190-193	190	193	3	dolomite skarn	oxide	64	1.26	0.118	38
YK03B 193-195.5	193	195.5	2.5	dolomite skarn	oxide	45	0.49	0.139	15
YK03B 195.5-198.5	195.5	198.5	3	dolomite skarn	oxide	72	0.57	0.236	35
YK03B 198.5-200.5	198.5	200.5	2	dolomite skarn	oxide	31	1.85	0.227	52
YK03B 200.5-206	200.5	206	5.5	foliated monzonite porphyry	oxide	36	1.03	0.104	42
YK03B 206-211	206	211	5	foliated monzonite porphyry	oxide	51	0.53	0.137	28
YK03B 211-216	211	216	5	foliated monzonite porphyry	oxide	35	0.45	0.116	37
YK03B 216-218.5	216	218.5	2.5	monzonite porphyry	oxide	17	0.15	0.033	16
YK03B 218.5-220	218.5	220	1.5	monzonite porphyry	oxide	21	0.5	0.040	38
YK03B 220-224	220	224	4	monzonite porphyry	oxide	27	0.64	0.076	100
YK03B 224-226	224	226	2	monzonite porphyry	oxide	77	0.85	0.151	100
YK03B 226-229	226	229	3	monzonite porphyry	oxide	43	1.04	0.071	45
YK03B 229-232	229	232	3	monzonite porphyry	oxide	15	0.07	0.039	20
YK03B 232-234	232	234	2	monzonite porphyry	oxide	16	0.08	0.039	26
YK03B 234-238	234	238	4	monzonite porphyry	oxide	11	0.06	0.024	18
YK03B 238-243	238	243	5	monzonite porphyry	oxide	35	0.67	0.065	62
YK03B 243-248	243	248	5	monzonite porphyry	oxide	51	0.89	0.192	108
YK03B 248-251	248	251	3	monzonite porphyry	oxide	37	0.59	0.110	85
YK03B 251-253	251	253	2	monzonite porphyry	oxide	51	0.49	0.184	65
YK03B 253-255	253	255	2	monzonite porphyry	oxide	32	0.39	0.072	40
YK03B 255-260	255	260	5	monzonite porphyry	oxide	32	0.85	0.242	47
YK03B 260-263	260	263	3	monzonite porphyry	oxide	38	1.57	0.095	46
YK03B 263-265	263	265	2	mafic dike	oxide	< 2	0.14	0.019	1
YK03B 265-271.5	265	271.5	6.5	mafic dike	oxide	< 2	0.06	0.015	< 1
YK03B 271.5-273	271.5	273	1.5	mafic dike	oxide	5	0.08	0.023	< 1
YK03B 273-276.5	273	276.5	3.5	dolomite marble	oxide	18	0.47	0.055	< 1
YK03B 276.5-281.5	276.5	281.5	5	dolomite marble	oxide	45	1.1	0.119	35

Laboratory Element				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK03B 281.5-286	281.5	286	4.5	dolomite marble	oxide	43	1.53	0.157	43
YK03B 286-288A	286	286	0	dolomite marble	oxide	197	5.28	0.553	78
YK03B 286-288B	286	288	2	dolomite marble	oxide	307	9.35	1.240	114
YK03B 288-292	288	292	4	dolomite marble	oxide	195	3.24	0.397	63
YK03B 292-294	292	294	2	dolomite marble	oxide	70	1.04	0.137	20
YK03B 294-297	294	297	3	dolomite marble	oxide	54	0.88	0.122	11
YK03B 297-299	297	299	2	dolomite marble	oxide	117	2.05	0.197	14
YK03B 299-302	299	302	3	dolomite marble	oxide	191	4.14	0.383	43
YK03B 302-305	302	305	3	monzonite porphyry	oxide/sulfide boundary	69	1.86	0.058	128
YK03B 305-307	305	307	2	monzonite porphyry	sulfide	30	0.77	0.070	177
YK03B 307-312	307	312	5	monzonite porphyry	sulfide	23	0.25	0.085	117
YK03B 312-317	312	317	5	monzonite porphyry	sulfide	102	0.29	0.098	312
YK03B 317-322	317	322	5	monzonite porphyry	sulfide	530	0.33	0.054	170
YK03B 322-326	322	326	4	monzonite porphyry	sulfide	50	0.45	0.053	75
YK03B 326-331	326	331	5	monzonite porphyry	sulfide	26	0.75	0.062	163
YK03B 331-336	331	336	5	monzonite porphyry	sulfide	66	1.07	0.157	167
YK03B 336-341	336	341	5	monzonite porphyry	sulfide	24	0.29	0.057	151
YK03B 341-346	341	346	5	monzonite porphyry	sulfide	17	0.78	0.055	150
YK03B 346-351	346	351	5	monzonite porphyry	sulfide	37	0.45	0.063	107

Drill hole YK03-C

Laboratory Element				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:						ppb	ppm	%	ppm
Detection Limit:						2	0.05		1
Analysis Character:						multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:						encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:	From	To	Interval	Generic Rock Type	Oxide/Sulfide Character	INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 50; INAA > 50
YK03C 0-9.5	0	9.5	9.5	schist	oxide	31	2.11	0.072	7
YK03C 9.5-13	9.5	13	3.5	schist	oxide	16	0.59	0.037	< 1
YK03C 13-18	13	18	5	schist	oxide	36	0.71	0.049	2
YK03C 18-23	18	23	5	schist	oxide	37	1.18	0.052	23
YK03C 23-28	23	28	5	schist	oxide	26	0.83	0.058	8
YK03C 28-33	28	33	5	quartzite	oxide	16	0.32	0.025	40
YK03C 33-36	33	36	3	quartzite	oxide	14	0.51	0.003	29
YK03C 36-41	36	41	5	quartzite	oxide	29	1.23	0.004	3
YK03C 41-46	41	46	5	quartzite	oxide	12	0.41	0.005	< 1
YK03C 46-51	46	51	5	quartzite	oxide	36	0.98	0.025	7
YK03C 51-56	51	56	5	quartzite	oxide	33	0.62	0.016	< 1
YK03C 56-58	56	58	2	quartzite	oxide	33	1.13	0.038	13
YK03C 58-61	58	61	3	quartzite	oxide	37	0.77	0.067	10
YK03C 61-66	61	66	5	quartzite	oxide	21	0.36	0.070	29
YK03C 66-71	66	71	5	foliated monzonite	oxide	51	0.6	0.061	71
YK03C 71-73	71	73	2	foliated monzonite	oxide	99	1.29	0.164	168
YK03C 73-76	73	76	3	foliated monzonite	oxide	66	0.31	0.044	164
YK03C 76-81	76	81	5	foliated monzonite	oxide	33	0.65	0.067	106
YK03C 81-86	81	86	5	foliated monzonite	oxide	28	0.77	0.046	80
YK03C 86-91	86	91	5	foliated monzonite	oxide	27	0.72	0.051	191
YK03C 91-96	91	96	5	foliated monzonite	oxide	41	0.77	0.065	406
YK03C 96-101	96	101	5	monzonite porphyry	oxide	40	0.48	0.073	3

Laboratory Element				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK03C 101-106	101	106	5	monzonite porphyry	oxide	55	0.76	0.101	3
YK03C 106-111	106	111	5	monzonite porphyry	oxide	55	0.77	0.088	3
YK03C 111-116	111	116	5	monzonite porphyry	oxide	33	0.5	0.106	4
YK03C 116-121	116	121	5	monzonite porphyry	oxide	44	0.8	0.118	--
YK03C 121-124.5	121	124.5	3.5	monzonite porphyry	oxide	25	4.69	0.214	6
YK03C 124.5-127	124.5	127	2.5	dolomitic marble/skarn	oxide	75	1.8	0.229	48
YK03C 127-131	127	131	4	dolomitic marble/skarn	oxide	211	1.74	0.215	67
YK03C 131-135	131	135	4	dolomitic marble/skarn	oxide	45	1.45	0.059	67
YK03C 135-140.5	135	140.5	5.5	mafic dike	oxide	< 2	0.05	0.011	350
YK03C 140.5-145.5	140.5	145.5	5	mafic dike	oxide	5	< 0.05	0.010	217
YK03C 145.5-150.5	145.5	150.5	5	mafic dike	oxide	< 2	< 0.05	0.010	110
YK03C 150.5-156	150.5	156	5.5	mafic dike	oxide	< 2	< 0.05	0.011	114
YK03C 156-169	156	169	13	mafic dike	oxide	< 2	0.07	0.011	314
YK03C 161-166.5	161	166.5	5.5	mafic dike	oxide	< 2	0.07		98
YK03C 166.5-172	166.5	172	5.5	mafic dike	oxide	7	< 0.05	0.009	76
YK03C 169-166.5	169	161	-8	mafic dike	oxide	--	--	0.015	201
YK03C 172-177	172	177	5	mafic dike	oxide	7	0.14	0.015	17
YK03C 177-179	177	179	2	monzonite porphyry	oxide	12	0.22	0.035	2
YK03C 179-182	179	182	3	monzonite porphyry	oxide	16	0.72	0.031	16
YK03C 182-185	182	185	3	monzonite porphyry	oxide	56	2.53	0.045	43
YK03C 185-187	185	187	2	monzonite porphyry	oxide	55	2.2	0.046	15
YK03C 187-192	187	192	5	monzonite porphyry	oxide	24	0.98	0.029	12
YK03C 192-197	192	197	5	dolomite marble	oxide	19	0.15	0.007	44
YK03C 197-202	197	202	5	dolomite marble	oxide	28	0.19	0.005	92
YK03C 202-204	202	204	2	dolomite marble	oxide	8	0.14	0.007	109
YK03C 204-207	204	207	3	dolomite marble	oxide	13	0.08	0.003	86
YK03C 207-212	207	212	5	foliated monzonite?	oxide	70	0.71	0.060	105
YK03C 212-217	212	217	5	foliated monzonite?	oxide	18	0.16	0.012	124
YK03C 217-222	217	222	5	foliated monzonite?	oxide	< 2	0.46	0.043	152
YK03C 222-227	222	227	5	limestone/marble	oxide/sulfide transition	< 2	0.23	0.008	134
YK03C 227-232	227	232	5	limestone/marble	oxide/sulfide transition	< 2	0.2	0.003	174
YK03C 232-238	232	238	6	limestone/marble	oxide/sulfide transition	< 2	0.22	0.004	230

Laboratory Element				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK03C 238-243	238	243	5	volcaniclastic	oxide/sulfide transition	**7**	**2.92**	**0.010**	**3**
YK03C 243-248	243	248	5	volcaniclastic	sulfide	**< 2**	**0.06**	**0.004**	**2**
YK03C 248-253	248	253	5	volcaniclastic	sulfide	**< 2**	**3.63**	**0.002**	**3**
YK03C 253-263	253	263	10	volcaniclastic	sulfide	**< 2**	**0.07**	**0.008**	**5**
YK03C 263-268	263	268	5	volcaniclastic	sulfide	**< 2**	**< 0.05**	**0.003**	**4**
YK03C 268-273	268	273	5	volcaniclastic	sulfide	**8**	**0.2**	**0.007**	**3**
YK03C 273-278	273	278	5	volcaniclastic	sulfide	**< 2**	**0.09**	**0.007**	**14**
YK03C 278-283	278	283	5	volcaniclastic	sulfide	**< 2**	**0.15**	**0.002**	**11**
YK03C 283-288	283	288	5	volcaniclastic	sulfide	**< 2**	**< 0.05**	**0.007**	**9**
YK03C 288-293	288	293	5	volcaniclastic	sulfide	**< 2**	**< 0.05**	**0.002**	**12**
YK03C 293-298	293	298	5	volcaniclastic	sulfide	**< 2**	**0.1**	**0.009**	**9**
YK03C 298-303	298	303	5	volcaniclastic	sulfide	**< 2**	**0.2**	**0.015**	**7**
YK03C 303-308	303	308	5	volcaniclastic	sulfide	**< 2**	**0.1**	**0.002**	**12**
YK03C 308-313	308	313	5	volcaniclastic	sulfide	**< 2**	**0.07**	**0.005**	**14**
YK03C 313-318	313	318	5	volcaniclastic	sulfide	**< 2**	**1.55**	**0.018**	**7**
YK03C 318-323.5	318	323.5	5.5	volcaniclastic	sulfide	**< 2**	**< 0.05**	**0.015**	**8**
YK03C 323.5-328.5	323.5	328.5	5	volcaniclastic	sulfide	**< 2**	**< 0.05**	**0.010**	**8**
YK03C 328.5-333.5	328.5	333.5	5	volcaniclastic	sulfide	**< 2**	**< 0.05**	**0.010**	**7**
YK03C 333.5-338.5	333.5	338.5	5	volcaniclastic	sulfide	**< 2**	**< 0.05**	**0.001**	**9**
YK03C 338.5-344	338.5	344	5.5	volcaniclastic	sulfide	**< 2**	**< 0.05**	**0.001**	**10**
YK03C 344-349	344	349	5	volcaniclastic	sulfide	**< 2**	**< 0.05**	**0.000**	**9**
YK03C 349-354	349	354	5	volcaniclastic	sulfide	**< 2**	**< 0.05**	**0.001**	**11**
YK03C 354-359	354	359	5	volcaniclastic	sulfide	**2**	**< 0.05**	**0.003**	**9**
YK03C 359-364.5	359	364.5	5.5	volcaniclastic	sulfide	**< 2**	**< 0.05**	**0.004**	**11**
YK03C 364.5-370	364.5	370	5.5	volcaniclastic	sulfide	**< 2**	**< 0.05**	**0.002**	**10**
YK03C 370-375	370	375	5	volcaniclastic	sulfide	**8**	**< 0.05**	**0.003**	**9**
YK03C 375-380	375	380	5	volcaniclastic	sulfide	**< 2**	**< 0.05**	**0.003**	**25**
YK03C 380-385	380	385	5	volcaniclastic	sulfide	**7**	**< 0.05**	**0.017**	**10**
YK03C 385-390.5	385	390	5	volcaniclastic	sulfide	**7**	**0.2**	**0.041**	**6**
YK03C 390.5-395	390	395	5	mafic dike	sulfide	**< 2**	**0.09**	**0.016**	**5**
YK03C 395-400	395	400	5	mafic dike	sulfide	**< 2**	**< 0.05**	**0.007**	**3**

Drill hole YK03-D

Laboratory Element				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:						ppb	ppm	%	ppm
Detection Limit:						2	0.05		1
Analysis Character:						multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:						encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:	From	To	Interval	Generic Rock Type	Oxide/Sulfide Character	INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 50; INAA > 50
YK03D 0-4.5	0	4.5	4.5	schist	oxide	45	0.31	0.129	7
YK03D 4.5-11	4.5	11	6.5	schist	oxide	< 2	0.37	0.055	6
YK03D 11-14	11	14	3	schist	oxide	88	0.52	0.359	32
YK03D 14-18.5	14	18.5	4.5	schist	oxide	16	0.52	0.112	11
YK03D 18.5-21.5	18.5	21.5	3	schist	oxide	< 2	0.42	0.045	9
YK03D 21.5-26.5	21.5	26.5	5	schist	oxide	41	1.18	0.072	15
YK03D 26.5-31.5	26.5	31.5	5	schist	oxide	41	0.83	0.053	7
YK03D 31.5-34	31.5	34	2.5	schist	oxide	12	0.54	0.066	9
YK03D 34-38	34	38	4	schist	oxide	23	0.35	0.039	11
YK03D 38-43	38	43	5	schist	oxide	21	0.46	0.050	17
YK03D 43-47	43	47	4	schist	oxide	28	0.87	0.054	15
YK03D 47-52	47	52	5	schist	oxide	16	0.18	0.053	13
YK03D 52-57	52	57	5	quartzite	oxide	24	0.69	0.057	71
YK03D 57-62.5	57	62.5	5.5	quartzite	oxide	27	0.74	0.012	134
YK03D 62.5-67.5	62.5	67.5	5	quartzite	oxide	10	0.46	0.008	96
YK03D 67.5-71	67.5	71	3.5	quartzite	oxide	9	0.29	0.013	154
YK03D 71-73	71	73	2	quartzite	oxide	13	0.36	0.026	199
YK03D 73-76	73	76	3	quartzite	oxide	14	0.21	0.030	64
YK03D 76-78.5	76	78.5	2.5	quartzite	oxide	9	0.14	0.026	12
YK03D 78.5-80.5	78.5	80.5	2	quartzite	oxide	43	0.32	0.073	10
YK03D 80.5-84	80.5	84	3.5	foliated monzonite porphyry	oxide	35	0.63	0.075	97
YK03D 84-87	84	87	3	foliated monzonite porphyry	oxide	77	0.45	0.103	114

Laboratory Element				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK03D 87-91	87	91	4	foliated monzonite porphyry	oxide	115	0.87	0.073	43
YK03D 91-94	91	94	3	foliated monzonite porphyry	oxide	80	0.46	0.068	68
YK03D 94-98.5	94	98.5	4.5	foliated monzonite porphyry	oxide	97	0.72	0.178	66
YK03D 98.5-101	98.5	101	2.5	foliated monzonite porphyry	oxide	84	1.21	0.105	55
YK03D 101-106	101	106	5	foliated monzonite porphyry	oxide	37	0.77	0.184	71
YK03D 106-109	106	109	3	foliated monzonite porphyry	oxide	40	0.62	0.161	85
YK03D 109-115	109	115	6	foliated monzonite porphyry	oxide	22	0.29	0.128	95
YK03D 115-120	115	120	5	foliated monzonite porphyry	oxide	20	0.4	0.089	84
YK03D 120-125	120	125	5	foliated monzonite porphyry	oxide	49	0.43	0.324	61
YK03D 125-128	125	128	3	foliated monzonite porphyry	oxide	56	0.59	0.210	133
YK03D 128-130	128	130	2	foliated monzonite porphyry	oxide	38	0.33	0.198	162
YK03D 130-135	130	135	5	foliated monzonite porphyry	oxide	31	0.39	0.148	145
YK03D 135-137	135	137	2	foliated monzonite porphyry	oxide	31	0.49	0.217	69
YK03D 137-143	137	143	6	foliated monzonite porphyry	oxide	43	0.71	0.095	112
YK03D 143-145	143	145	2	foliated monzonite porphyry	oxide	57	1.24	0.086	162
YK03D 145-149	145	149	4	foliated monzonite porphyry	oxide	57	0.5	0.164	22
YK03D 149-153	149	153	4	foliated monzonite porphyry	oxide	69	0.96	0.442	41
YK03D 153-158	153	158	5	foliated monzonite porphyry	oxide	68	1.81	0.127	56
YK03D 158-161	158	161	3	mafic dike	oxide	9	0.43	0.012	91
YK03D 161-163	161	163	2	monzonite porphyry	oxide	17	0.2	0.138	8
YK03D 163-168	163	168	5	monzonite porphyry	oxide	40	0.57	0.183	5
YK03D 168-170	168	170	2	monzonite porphyry	oxide	51	0.88	0.164	5
YK03D 170-172	170	172	2	monzonite porphyry	oxide	70	0.81	0.085	7
YK03D 172-177	172	177	5	monzonite porphyry	oxide	48	0.71	0.115	9
YK03D 177-182	177	182	5	monzonite porphyry	oxide	15	0.54	0.130	15
YK03D 182-187	182	187	5	monzonite porphyry	oxide	29	0.4	0.108	37
YK03D 187-190	187	190	3	monzonite porphyry	oxide	19	0.16	0.060	29
YK03D 190-192	190	192	2	monzonite porphyry	oxide	23	0.22	0.051	21
YK03D 192-195	192	195	3	mafic dike	oxide	< 2	0.11	0.058	125
YK03D 195-200	195	200	5	mafic dike	oxide	< 2	0.09	0.048	161
YK03D 200-205	200	205	5	mafic dike	oxide	< 2	0.07	0.010	127
YK03D 205-210	205	210	5	mafic dike	oxide	3	0.05	0.011	102
YK03D 210-215	210	215	5	mafic dike	oxide	< 2	0.06	0.010	54
YK03D 215-220	215	220	5	mafic dike	oxide	< 2	< 0.05	0.010	128

Laboratory Element				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK03D 220-225	220	225	5	mafic dike	oxide	< 2	< 0.05	0.008	1
YK03D 225-230.5	225	230	5	mafic dike	oxide	7	< 0.05	0.014	< 1
YK03D 230.5-235.5	230	235.5	5.5	mafic dike	oxide	6	0.08	0.020	< 1
YK03D 235.5-238.5	235.5	238.5	3	mafic dike	oxide	8	0.15	0.029	< 1
YK03D 238.5-240.5	238.5	240.5	2	monzonite porphyry	oxide	54	0.25	0.049	29
YK03D 240.5-245.5	240.5	245.5	5	monzonite porphyry	oxide	345	0.13	0.073	19
YK03D 245.5-247	245.5	247	1.5	monzonite porphyry	oxide	268	0.31	0.058	61
YK03D 247-250	247	250	3	monzonite porphyry	oxide	36	0.3	0.064	31
YK03D 250-255	250	255	5	monzonite porphyry	oxide	41	0.1	0.047	13
YK03D 255-259	255	259	4	monzonite porphyry	oxide	52	< 0.05	0.041	13
YK03D 259-264	259	264	5	monzonite porphyry	oxide	46	0.24	0.064	24
YK03D 264-269.5	264	269.5	5.5	dolomitic skarn	oxide	18	0.34	0.064	36
YK03D 269.5-274.5	269.5	274.5	5	dolomitic skarn	oxide	14	0.55	0.050	55
YK03D 274.5-280	274.5	280	5.5	dolomitic skarn	oxide	50	1.48	0.078	64
YK03D 280-283	280	283	3	dolomitic skarn	oxide	76	1.2	0.135	29
YK03D 283-285	283	285	2	dolomitic skarn	oxide	164	2.8	0.251	34
YK03D 285-290	285	290	5	dolomitic skarn	oxide	112	1.55	0.141	229
YK03D 290-294	290	294	4	dolomitic skarn	oxide	145	1.69	0.227	56
YK03D 294-300	294	300	6	dolomitic skarn	oxide	73	2.15	0.201	27
YK03D 300-303	300	303	3	dolomitic skarn	oxide	235	0.7	0.284	41
YK03D 303-305	303	305	2	dolomitic skarn	oxide	56	1.78	0.246	61
YK03D 305-308	305	308	3	dolomitic skarn	oxide	125	2.23	0.251	35
YK03D 308-310.5	308	310.5	2.5	dolomitic skarn	oxide	113	2.09	0.226	90
YK03D 310.5-312	310.5	312	1.5	dolomitic skarn	oxide	70	1.64	0.148	125
YK03D 312-316	312	316	4	dolomitic skarn	oxide	11	0.63	0.065	113
YK03D 316-320	316	320	4	dolomitic skarn	oxide sulfide boundary	29	0.77	0.076	118
YK03D 320-321.5	320	321.5	1.5	monzonite porphyry	sulfide	18	0.51	0.061	42
YK03D 321.5-327	321.5	327	5.5	monzonite porphyry	sulfide	11	0.3	0.042	32
YK03D 327-332.5	327	332.5	5.5	monzonite porphyry	sulfide	35	0.29	0.050	43
YK03D 332.5-338	332.5	338	5.5	monzonite porphyry	sulfide	23	0.42	0.050	194
YK03D 338-343	338	343	5	dolomite	sulfide	39	0.44	0.041	24
YK03D 343-348	343	348	5	dolomite	sulfide	< 2	0.38	0.038	40
YK03D 348-353	348	353	5	dolomite	sulfide	< 2	0.26	0.013	80

Laboratory Element				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK03D 353-358	353	358	5	dolomite	sulfide	2	0.06	**0.002**	**28**
YK03D 358-363	358	363	5	dolomite	sulfide	3	< 0.05	**0.001**	**12**
YK03D 363-368	363	368	5	dolomite	sulfide	11	0.05	**0.003**	**27**
YK03D 368-373	368	373	5	dolomite	sulfide	3	< 0.05	**0.001**	**38**
YK03D 373-376	373	376	3	dolomite	sulfide	< 2	0.14	**0.006**	**65**
YK03D 376-381	376	381	5	sheared monzonite?	sulfide	< 2	2.03	**0.013**	**12**
YK03D 381-386	381	386	5	sheared monzonite?	sulfide	< 2	0.13	**0.007**	**32**
YK03D 386-391	386	391	5	sheared monzonite?	sulfide	< 2	0.15	**0.002**	**23**
YK03D 391-396	391	396	5	sheared monzonite?	sulfide	< 2	0.12	**0.003**	**10**
YK03D 396-401	396	401	5	monzonite porphyry	sulfide	107	8.23	**0.036**	**116**
YK03D 401-405	401	405	4	monzonite porphyry	sulfide	31	2.79	**0.035**	**186**
YK03D 405-410	405	410	5	monzonite porphyry	sulfide	4	1.71	**0.028**	**270**
YK03D 410-415	410	415	5	monzonite porphyry	sulfide	< 2	1.77	**0.038**	**607**
YK03D 415-420	415	420	5	monzonite porphyry	sulfide	6	10.5	**0.108**	**217**
YK03D 420-425	420	425	5	monzonite porphyry	sulfide	13	4.34	**0.032**	**109**
YK03D 425-430.5	425	430.5	5.5	volcaniclastic	sulfide	< 2	0.31	**0.005**	**12**
YK03D 430.5-435.5	430.5	435.5	5	mafic dike	sulfide	< 2	0.08	**0.007**	**4**
YK03D 435.5-440.5	435.5	440.5	5	volcaniclastic	sulfide	< 2	< 0.05	**0.005**	**10**
YK03D 440.5-445.5	440.5	445.5	5	volcaniclastic	sulfide	< 2	0.09	**0.003**	**10**
YK03D 445.5-451	445.5	451	5.5	volcaniclastic	sulfide	< 2	< 0.05	**0.003**	**10**
YK03D 451-456	451	456	5	volcaniclastic	sulfide	< 2	0.13	**0.008**	**11**
YK03D 456-461	456	461	5	volcaniclastic	sulfide	< 2	< 0.05	**0.003**	**10**

Drill hole YK03-E

Laboratory Element				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:						ppb	ppm	%	ppm
Detection Limit:						2	0.05		1
Analysis Character:						multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:						encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:	From	To	Interval	Generic Rock Type	Oxide/Sulfide Character	INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 50; INAA > 50
YK03E 0-9	0	9	9	pad fill	oxide	65	0.17	0.171	187
YK03E 9-13	9	13	4	schist	oxide	18	0.4	0.055	20
YK03E 13-18	13	18	5	schist	oxide	< 2	0.52	0.025	36
YK03E 18-23	18	23	5	schist	oxide	26	2.96	0.064	65
YK03E 23-25	23	25	2	schist	oxide	45	2.14	0.081	112
YK03E 25-28	25	28	3	schist	oxide	41	4.44	0.073	
YK03E 28-30	28	30	2	quartzite	oxide	31	0.98	0.082	188
YK03E 30-33	30	33	3	quartzite	oxide	20	2.02	0.058	57
YK03E 33-36.5	33	36.5	3.5	quartzite	oxide	9	1.26	0.023	109
YK03E 36.5-41.5	36.5	41.5	5	quartzite	oxide	6	0.8	0.024	130
YK03E 41.5-47	41.5	47	5.5	quartzite	oxide	< 2	0.53	0.013	105
YK03E 47-49	47	49	2	foliated monzonite	oxide	< 2	0.75	0.022	25
YK03E 49-52	49	52	3	foliated monzonite	oxide	< 2	0.87	0.037	26
YK03E 52-57	52	57	5	foliated monzonite	oxide	25	0.55	0.023	41
YK03E 57-60	57	60	3	foliated monzonite	oxide	--	--	0.063	104
YK03E 60-63	60	63	3	foliated monzonite	oxide	25	0.36	0.051	139
YK03E 63-67	63	67	4	foliated monzonite	oxide	31	0.36	0.035	--
YK03E 67-72	67	72	5	foliated monzonite	oxide	< 2	0.11	0.020	48
YK03E 72-77.5	72	77.5	5.5	mafic dike	oxide	61	0.83	0.035	107
YK03E 77.5-82.5	77.5	82.5	5	mafic dike	oxide	< 2	0.08	0.005	22
YK03E 82.5-86	82.5	86	3.5	mafic dike	oxide	< 2	0.17	0.010	145
YK03E 86-87.5	86	87.5	1.5	monzonite porphyry	oxide	28	0.61	0.508	81
YK03E 87.5-93	87.5	93	5.5	monzonite porphyry	oxide	57	0.54	0.086	278

Laboratory Element				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK03E 93-95	93	98	5	monzonite porphyry	oxide	55	1.27	0.058	363
YK03E 98-103	98	103	5	monzonite porphyry	oxide	37	1.08	0.085	94
YK03E 103-108	103	108	5	monzonite porphyry	oxide	21	0.35	0.044	417
YK03E 108-113	108	113	5	monzonite porphyry	oxide	23	1.36	0.042	243
YK03E 113-118	113	118	5	monzonite porphyry	oxide	23	0.48	0.058	127
YK03E 118-120	118	120	2	monzonite porphyry	oxide	36	0.43	0.119	59
YK03E 120-123	120	123	3	monzonite porphyry	oxide	63	1.71	0.135	394
YK03E 123-128	123	128	5	monzonite porphyry	oxide	43	0.31	0.154	20
YK03E 128-133	128	133	5	monzonite porphyry	oxide	30	0.26	0.171	15
YK03E 133-137	133	137	4	monzonite porphyry	oxide	18	0.14	0.116	23
YK03E 137-142	137	142	5	mafic dike	oxide	11	0.78	0.136	9
YK03E 142-144.5	142	144.5	2.5	mafic dike	oxide	< 2	0.54	0.064	6
YK03E 144.5-149	144.5	149	4.5	mafic dike	oxide	< 2	0.44	0.054	58
YK03E 149-153	149	153	4	monzonite porphyry	oxide	18	0.33	0.104	21
YK03E 153-158	153	158	5	monzonite porphyry	oxide	19	1.05	0.132	19
YK03E 158-163	158	163	5	monzonite porphyry	oxide	17	0.49	0.227	21
YK03E 163-165	163	165	2	monzonite porphyry	oxide	23	1.8	0.145	99
YK03E 165-168	165	168	3	monzonite porphyry	oxide	53	0.56	0.217	61
YK03E 168-171	168	171	3	monzonite porphyry	oxide	60	0.55	0.183	24
YK03E 171-175	171	175	4	monzonite porphyry	oxide	47	0.43	0.196	18
YK03E 175-180	175	180	5	monzonite porphyry	oxide	26	0.43	0.250	12
YK03E 180-183	180	183	3	monzonite porphyry	oxide	23	0.73	0.306	21
YK03E 183-187	183	187	4	monzonite porphyry	oxide	15	0.58	0.083	8
YK03E 187-190	187	190	3	dolomite skarn	oxide	4	0.23	0.084	67
YK03E 190-193	190	193	3	dolomite skarn	oxide	183	2.42	0.371	84
YK03E 193-198	193	198	5	dolomite skarn	oxide	100	5.85	0.272	81
YK03E 198-204	198	204	6	mafic dike	oxide	< 2	0.2	0.024	126
YK03E 204-208	204	208	4	dolomite skarn	oxide	32	0.8	0.092	24
YK03E 208-210	208	210	2	dolomite skarn	oxide	28	0.35	0.058	41
YK03E 210-213	210	213	3	dolomite skarn	oxide	124	1.16	0.391	63
YK03E 213-215	213	215	2	dolomite skarn	oxide	30	0.47	0.120	44
YK03E 215-218.5	215	218.5	3.5	dolomite skarn	oxide	29	0.96	0.212	20
YK03E 218.5-223.5	218.5	223.5	5	monzonite porphyry	oxide	29	0.54	0.049	98
YK03E 223.5-229	223.5	229	5.5	monzonite porphyry	oxide	< 2	0.12	0.026	34

Laboratory Element				Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK03E 229-231	229	231	2	monzonite porphyry	oxide	37	0.29	0.045	6
YK03E 231-234	231	234	3	mafic dike	oxide	6	0.06	0.015	145
YK03E 234-239	234	239	5	mafic dike	oxide	< 2	0.22	0.011	122
YK03E 239-244	239	244	5	monzonite porphyry	oxide	13	0.37	0.058	27
YK03E 244-249.5	244	249.5	5.5	monzonite porphyry	oxide	25	0.45	0.081	14
YK03E 249.5-252	249.5	252	2.5	monzonite porphyry	oxide	15	0.48	0.073	104
YK03E 252-254	252	254	2	monzonite porphyry	oxide	15	0.26	0.144	173
YK03E 254-258.5	254	258.5	4.5	monzonite porphyry	oxide	28	0.43	0.229	188
YK03E 258.5-263.5	258.5	263.5	5	monzonite porphyry	oxide	29	0.55	0.120	231
YK03E 263.5-265	263.5	265	1.5	monzonite porphyry	oxide	41	0.7	0.045	135
YK03E 265-267	265	267	2	monzonite porphyry	oxide	< 2	0.87	0.070	538
YK03E 267-268.5	267	268.5	1.5	monzonite porphyry	oxide	27	0.81	0.052	13
YK03E 268.5-273	268.5	273	4.5	monzonite porphyry	oxide	27	0.73	0.101	6
YK03E 273-275.5	273	275.5	2.5	monzonite porphyry	oxide	31	0.6	0.127	132
YK03E 275.5-278.5	275.5	278.5	3	monzonite porphyry	oxide	< 2	0.55	0.040	103
YK03E 278.5-283.5	278.5	283.5	5	monzonite porphyry	oxide	35	0.68	0.063	58
YK03E 283.5-288.5	283.5	288.5	5	monzonite porphyry	oxide	63	1.12	0.097	196
YK03E 288.5-294	288.5	294	5.5	monzonite porphyry	oxide	16	0.27	0.053	94
YK03E 294-298	294	298	4	monzonite porphyry	oxide	25	0.25	0.041	96
YK03E 298-302	298	302	4	monzonite porphyry	oxide	< 2	0.27	0.078	263
YK03E 302-304.5	302	304.5	2.5	monzonite porphyry	oxide	18	0.37	0.043	221
YK03E 304.5-310	304.5	310	5.5	monzonite porphyry	oxide	29	0.4	0.063	445

Drill Hole YK04-A

Element:					Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:							ppb	ppm	%	ppm
Detection Limit:							2	0.05		1
Analysis Character:							multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:							encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:		From	To	Interval	Generic Rock Type	Oxide/Sulfide Character	INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 50; INAA > 50
YK04-A	0-15	0	15	15	pad fill + monzonite porphyry	oxide	11	0.43	0.004	4
YK04-A	18-22	18	22	4	limestone/marble skarn	oxide	16	0.26	0.010	6
YK04-A	22-25	22	25	3	limestone/marble skarn	oxide	25	0.29	0.009	4
YK04-A	25-27	25	27	2	limestone/marble skarn	oxide	26	0.32	0.007	4
YK04-A	27-31	27	31	4	limestone/marble skarn	oxide	11	0.47	0.010	3
YK04-A	33-37	33	37	4	limestone/marble skarn	oxide	10	0.34	0.012	5
YK04-A	37-42	37	42	5	limestone/marble skarn	oxide	14	0.32	0.006	6
YK04-A	42-47	42	47	5	monzonite porphyry	oxide	35	0.36	0.003	5
YK04-A	47-50	47	50	3	monzonite porphyry	oxide	31	0.14	0.006	5
YK04-A	50-54	50	54	4	monzonite porphyry	oxide	30	0.15	0.004	5
YK04-A	54-58	54	58	4	monzonite porphyry	oxide	20	0.11	0.006	5
YK04-A	58-61	58	61	3	monzonite porphyry	oxide	8	0.13	0.005	3
YK04-A	61-63.5	61	63.5	2.5	monzonite porphyry	oxide	5	0.18	0.007	4
YK04-A	63.5-67	63.5	67	3.5	monzonite porphyry	oxide	7	0.19	0.010	4
YK04-A	70-73.5	70	73.5	3.5	monzonite porphyry	oxide	5	0.21	0.004	4
YK04-A	73.5-79	73.5	79	5.5	monzonite porphyry	oxide	10	0.32	0.012	6
YK04-A	79-83.5	79	83.5	4.5	monzonite porphyry	oxide	14	0.29	0.005	5
YK04-A	83.5-86	83.5	86	2.5	quartzite	oxide	8	0.61	0.006	4
YK04-A	86-90.5	86	90.5	4.5	quartzite	oxide	22	0.43	0.008	5
YK04-A	90.5-93	90.5	93	2.5	quartzite	oxide	30	0.28	0.011	4
YK04-A	93-97	93	97	4	quartzite	oxide	7	0.19	0.004	5
YK04-A	97-102	97	102	5	schist	oxide	26	0.38	0.006	3
YK04-A	102-105.5	102	105.5	3.5	schist	oxide	44	0.72	0.006	4
YK04-A	105.5-111	105.5	111	5.5	schist	oxide	47	0.5	0.009	3
YK04-A	111-113	111	113	2	schist	oxide	44	0.54	0.021	3

Element:					Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK04-A	113-115	113	115	2	schist	oxide	**549**	**0.81**	**0.052**	**5**
YK04-A	115-120	115	120	5	schist	oxide	**23**	**0.41**	**0.061**	**4**
YK04-A	120-124	120	124	4	schist	oxide	**15**	**0.26**	**0.008**	**5**
YK04-A	124-126	124	126	2	schist	oxide	**24**	**0.09**	**0.008**	**3**
YK04-A	126-130	126	130	4	schist	oxide	**35**	**0.67**	**0.018**	**7**
YK04-A	130-133	130	133	3	schist	oxide	**11**	**0.23**	**0.008**	**7**
YK04-A	133-135	133	135	2	schist	oxide	**30**	**0.31**	**0.050**	**4**
YK04-A	145.5-150	145.5	150	4.5	schist	oxide	**26**	**0.23**	**0.018**	**21**
YK04-A	150-155.5	150	155.5	5.5	schist	oxide	**20**	**0.21**	**0.031**	**22**
YK04-A	155.5-160	155.5	160	4.5	schist	oxide	**27**	**0.39**	**0.043**	**37**
YK04-A	160-165	160	165	5	schist	oxide	**16**	**0.51**	**0.053**	**19**
YK04-A	165-169.5	165	169.5	4.5	schist	oxide	**10**	**0.16**	**0.035**	**43**
YK04-A	169.5-175.5	169.5	175.5	6	schist	oxide	**24**	**0.35**	**0.050**	**33**
YK04-A	175.5-179	175.5	179	3.5	sheared monzonite porphyry	oxide	**41**	**0.3**	**0.029**	**25**
YK04-A	179-184	179	184	5	sheared monzonite porphyry	oxide	**18**	**0.74**	**0.042**	**14**
YK04-A	184-187	184	187	3	sheared monzonite porphyry	oxide	**18**	**0.35**	**0.086**	**36**
YK04-A	187-190	187	190	3	sheared monzonite porphyry	oxide	**13**	**0.38**	**0.043**	**11**
YK04-A	190-194	190	194	4	sheared monzonite porphyry	oxide	**11**	**0.14**	**0.032**	**15**
YK04-A	208-213	208	213	5	mafic dike	oxide	**23**	**0.31**	**0.033**	**119**
YK04-A	213-217	213	217	4	quartzite	oxide	**16**	**0.27**	**0.017**	**102**
YK04-A	223-226	223	226	3	quartzite	oxide	**8**	**0.1**	**0.010**	**75**
YK04-A	231-236	231	236	5	quartzite	oxide	**19**	**0.05**	**0.018**	**79**
YK04-A	236-241	236	241	5	quartzite	oxide	**20**	**0.13**	**0.012**	**133**
YK04-A	241-246	241	246	5	monzonite porphyry	oxide	**50**	**0.26**	**0.058**	**105**
YK04-A	246-251	246	251	5	monzonite porphyry	oxide	**31**	**0.33**	**0.048**	**84**
YK04-A	251-254	251	254	3	monzonite porphyry	oxide	**16**	**0.21**	**0.037**	**131**
YK04-A	254-258.5	254	258.5	4.5	monzonite porphyry	oxide	**30**	**0.45**	**0.091**	**188**
YK04-A	258.5-264	258.5	264	5.5	monzonite porphyry	oxide	**58**	**0.99**	**0.212**	**241**
YK04-A	264-267	264	267	3	monzonite porphyry	oxide sulfide transition	**31**	**0.42**	**0.099**	**949**
YK04-A	267-271	267	271	4	sheared monzonite porphyry	sulfide	**44**	**1.24**	**0.139**	**324**
YK04-A	271-274.5	271	274.5	3.5	sheared monzonite porphyry	sulfide	**67**	**1.15**	**0.159**	**269**
YK04-A	274.5-277.5	274.5	277.5	3	sheared monzonite porphyry	sulfide	**58**	**0.89**	**0.136**	**336**
YK04-A	277.5-282	277.5	282	4.5	sheared monzonite porphyry	sulfide	**41**	**0.95**	**0.138**	**183**
YK04-A	282-287	282	287	5	sheared monzonite porphyry	sulfide	**57**	**1.07**	**0.166**	**179**
YK04-A	287-293.5	287	293.5	6.5	sheared monzonite porphyry	sulfide	**35**	**0.82**	**0.138**	**162**
YK04-A	293.5-294	293.5	297	3.5	sheared monzonite porphyry	sulfide	**60**	**0.98**	**0.149**	**295**
YK04-A	297-300	297	300	3	sheared monzonite porphyry	sulfide	**38**	**0.86**	**0.147**	**141**
YK04-A	300-306	300	306	6	sheared monzonite porphyry	sulfide	**40**	**1.32**	**0.214**	**207**
YK04-A	306-311.5	306	311.5	5.5	sheared monzonite porphyry	sulfide	**34**	**0.64**	**0.145**	**165**
YK04-A	311.5-317	311.5	318	6.5	sheared monzonite porphyry	sulfide	**31**	**0.66**	**0.117**	**146**
YK04-A	317-322	318	322	4	sheared monzonite porphyry	sulfide	**44**	**1.74**	**0.198**	**236**

Element:					Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK04-A	322-327	322	327	5	sheared monzonite porphyry	sulfide	**25**	**1.08**	**0.107**	**226**
YK04-A	327-332	327	332	5	sheared monzonite porphyry	sulfide	**55**	**0.82**	**0.207**	**114**
YK04-A	332-337	332	337	5	sheared monzonite porphyry	sulfide	**26**	**0.51**	**0.104**	**216**
YK04-A	337-342	337	342	5	sheared monzonite porphyry	sulfide	**49**	**0.61**	**0.145**	**113**
YK04-A	342-347	342	347	5	sheared monzonite porphyry	sulfide	**41**	**0.82**	**0.156**	**290**
YK04-A	347-352.5	347	352.5	5.5	sheared monzonite porphyry	sulfide	**35**	**0.36**	**0.056**	**666**
YK04-A	352.5-355	352.5	355	2.5	sheared monzonite porphyry	sulfide	**77**	**0.49**	**0.067**	**253**
YK04-A	355-360	355	360	5	sheared monzonite porphyry	sulfide	**24**	**0.24**	**0.063**	**104**
YK04-A	360-365	360	365	5	sheared monzonite porphyry	sulfide	**18**	**0.2**	**0.064**	**79**
YK04-A	365-368	365	368	3	sheared monzonite porphyry	sulfide	**16**	**0.1**	**0.072**	**122**
YK04-A	368-371	368	371	3	sheared monzonite porphyry	sulfide	**13**	**0.05**	**0.075**	**76**
YK04-A	371-374	371	374	3	sheared monzonite porphyry	sulfide	**7**	**0.07**	**0.060**	**75**
YK04-A	377-382	377	382	5	sheared monzonite porphyry	sulfide	**9**	**0.21**	**0.018**	**80**
YK04-A	382-384	382	384	2	sheared monzonite porphyry	sulfide	**31**	**0.42**	**0.043**	**82**
YK04-A	384-387	384	387	3	sheared monzonite porphyry	sulfide	**19**	**0.66**	**0.045**	**44**
YK04-A	387-390	387	390	3	sheared monzonite porphyry	sulfide	**29**	**0.73**	**0.056**	**75**
YK04-A	390-394	390	394	4	sheared monzonite porphyry	sulfide	**26**	**0.68**	**0.054**	**223**
YK04-A	394-397	394	397	3	sheared monzonite porphyry	sulfide	**23**	**0.76**	**0.068**	**75**
YK04-A	399.5-405	399.5	405	5.5	sheared monzonite porphyry	sulfide	**15**	**0.48**	**0.042**	**96**
YK04-A	405-407.5	405	407.5	2.5	sheared monzonite porphyry	sulfide	**24**	**0.71**	**0.057**	**79**
YK04-A	407.5-411	407.5	411	3.5	sheared monzonite porphyry	sulfide	**41**	**0.76**	**0.060**	**121**
YK04-A	411-416	411	416	5	sheared monzonite porphyry	sulfide	**14**	**0.46**	**0.074**	**78**
YK04-A	416-419	416	419	3	sheared monzonite porphyry	sulfide	**12**	**0.34**	**0.046**	**64**
YK04-A	419-422	419	422	3	sheared monzonite porphyry	sulfide	**19**	**0.43**	**0.074**	**40**
YK04-A	422-427	422	427	5	sheared monzonite porphyry	sulfide	**14**	**0.28**	**0.040**	**47**
YK04-A	435-437	435	437	2	sheared monzonite porphyry	sulfide	**43**	**0.41**	**0.029**	**106**
YK04-A	437-442	437	442	5	sheared monzonite porphyry	sulfide	**38**	**0.46**	**0.039**	**55**
YK04-A	442-447	442	447	5	dolomite skarn	sulfide	**25**	**0.57**	**0.060**	**58**
YK04-A	447-450	447	450	3	dolomite skarn	sulfide	**10**	**0.25**	**0.031**	**15**
YK04-A	450-452.5	450	452.5	2.5	dolomite skarn	sulfide	**15**	**0.68**	**0.042**	**6**
YK04-A	452.5-457	452.5	457	4.5	dolomite skarn	sulfide	**41**	**0.83**	**0.049**	**10**
YK04-A	457-459	457	459	2	dolomite skarn	sulfide	**59**	**0.91**	**0.125**	**6**
YK04-A	459-462	459	462	3	dolomite skarn	sulfide	**25**	**0.44**	**0.041**	**23**
YK04-A	462-467	462	467	5	dolomite skarn	sulfide	**21**	**0.29**	**0.052**	**< 1**
YK04-A	467-471	467	471	4	dolomite skarn	sulfide	**15**	**0.27**	**0.026**	**10**
YK04-A	471-475	471	475	4	dolomite skarn	sulfide	**21**	**0.86**	**0.079**	**38**
YK04-A	475-477	475	477	2	dolomite skarn	sulfide	**20**	**1.15**	**0.071**	**269**
YK04-A	477-482	477	482	5	dolomite skarn	sulfide	**35**	**0.62**	**0.033**	**148**
YK04-A	482-487	482	487	5	dolomite skarn	sulfide	**35**	**0.71**	**0.048**	**76**
YK04-A	495-797	495	497	2	dolomite skarn	sulfide	**5**	**0.61**	**0.016**	**8**
YK04-A	497-503	497	503	6	dolomite skarn	sulfide	**11**	**0.38**	**0.032**	**2**

Element:					**Generic Rock Type**	**Oxide/Sulfide Character**	**Actlabs Au**	**Actlabs Ag**	**Jacob's Cu**	**Actlabs Mo**
YK04-A	507-512	507	512	5	dolomite skarn	sulfide	**53**	**0.15**	**0.005**	**18**
YK04-A	517-522	517	522	5	volcaniclastic	sulfide	**18**	**0.25**	**0.019**	**7**
YK04-A	604-609	604	609	5	volcaniclastic	sulfide	**4**	**0.12**	**0.002**	**< 1**

Drill Hole YK04-B

Element:					Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:							ppb	ppm	%	ppm
Detection Limit:							2	0.05		1
Analysis Character:							multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:							encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:		From	To	Interbal	Generic Rock Type	Oxide/Sulfide Character	INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 50; INAA > 50
YK04-B	0-33	0	33	33	pad fill	oxide	< 2	0.2	0.008	4
YK04-B	33-36	33	36	3	pad fill	oxide	16	0.2	0.007	2
YK04-B	36-41	36	41	5	pad fill	oxide	8	0.2	0.005	2
YK04-B	41-43	41	43	2	pad fill	oxide	8	0.2	0.003	3
YK04-B	43-45	43	45	2	quartzite	oxide	23	0.2	0.006	2
YK04-B	45-49	45	49	4	quartzite	oxide	2	0.2	0.004	1
YK04-B	49-52	49	52	3	quartzite	oxide	< 2	0.3	0.005	2
YK04-B	52-54	52	54	2	quartzite	oxide	9	0.2	0.004	2
YK04-B	54-58	54	58	4	mafic dike	oxide	10	0.07	0.011	< 1
YK04-B	58-63.5	58	63.5	5.5	mafic dike	oxide	9	0.07	0.011	< 1
YK04-B	63.5-66	63.5	66	2.5	mafic dike	oxide	< 2	< 0.05	0.011	< 1
YK04-B	66-69	66	69	3	mafic dike	oxide	17	0.2	0.011	< 1
YK04-B	69-74	69	74	5	quartzite	oxide	< 2	0.3	0.008	2
YK04-B	74-76	74	76	2	mafic dike	oxide	< 2	0.1	0.009	< 1
YK04-B	76-81	76	81	5	monzonite porphyry	oxide	11	0.2	0.005	3
YK04-B	81-86	81	86	5	monzonite porphyry	oxide	24	0.6	0.011	4
YK04-B	86-90	86	90	4	monzonite porphyry	oxide	< 2	0.2	0.005	2
YK04-B	90-91.5	90	91.5	1.5	monzonite porphyry	oxide	9	0.3	0.005	2
YK04-B	91.5-96	91.5	96	4.5	monzonite porphyry	oxide	17	0.3	0.006	3
YK04-B	96-101	96	101	5	monzonite porphyry	oxide	18	0.4	0.006	3

Element:					Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK04-B	101-103	101	103	2	monzonite porphyry	oxide	< 2	0.4	0.005	3
YK04-B	103-106	103	106	3	monzonite porphyry	oxide	16	0.1	0.005	2
YK04-B	106-111	106	111	5	monzonite porphyry	oxide	14	0.2	0.006	2
YK04-B	111-116	111	116	5	monzonite porphyry	oxide	18	0.1	0.012	3
YK04-B	116-119	116	119	3	monzonite porphyry	oxide	16	0.2	0.013	2
YK04-B	119-121	119	121	2	monzonite porphyry	oxide	14	0.1	0.011	1
YK04-B	121-126	121	126	5	monzonite porphyry	oxide	14	0.2	0.007	1
YK04-B	126-131	126	131	5	monzonite porphyry	oxide	22	0.2	0.004	2
YK04-B	131-132	131	132	1	monzonite porphyry	oxide	< 2	0.2	0.003	2
YK04-B	132-136	132	136	4	monzonite porphyry	oxide	11	0.3	0.004	3
YK04-B	136-141	136	141	5	monzonite porphyry	oxide	20	0.2	0.007	3
YK04-B	141-143.5	141	143.5	2.5	monzonite porphyry	oxide	28	0.5	0.004	3
YK04-B	143.5-148.5	143.5	148.5	5	monzonite porphyry	oxide	14	0.2	0.004	2
YK04-B	148.5-151	148.5	151	2.5	monzonite porphyry	oxide	14	0.2	0.003	4
YK04-B	151-154	151	154	3	monzonite porphyry	oxide	< 2	0.7	0.004	3
YK04-B	154-158	154	158	4	monzonite porphyry	oxide	< 2	0.4	0.004	4
YK04-B	158-164	158	164	6	mafic dike	oxide	< 2	0.05	0.008	< 1
YK04-B	164-169	164	169	5	mafic dike	oxide	< 2	< 0.05	0.008	< 1
YK04-B	169-174	169	174	5	mafic dike	oxide	< 2	0.2	0.007	< 1
YK04-B	174-178	174	178	4	limestone/marble skarn	oxide	< 2	0.3	0.013	2
YK04-B	178-181	178	181	3	limestone/marble skarn	oxide	< 2	0.4	0.005	< 1
YK04-B	181-185	181	185	4	limestone/marble skarn	oxide	12	0.6	0.010	2
YK04-B	185-188	185	188	3	limestone/marble skarn	oxide	< 2	0.4	0.008	< 1
YK04-B	188-191	188	191	3	limestone/marble skarn	oxide	12	0.4	0.010	1
YK04-B	191-192	191	192	1	limestone/marble skarn	oxide	< 2	1.22	0.010	6
YK04-B	192-195	192	195	3	limestone/marble skarn	oxide	< 2	0.12	0.015	3
YK04-B	195-197	195	197	2	limestone/marble skarn	oxide	< 2	0.07	0.013	2
YK04-B	197-200	197	200	3	limestone/marble skarn	oxide	< 2	0.37	0.012	2
YK04-B	200-203	200	203	3	limestone/marble skarn	oxide	14	1.02	0.017	2
YK04-B	203-206	203	206	3	limestone/marble skarn	oxide	13	0.18	0.015	2
YK04-B	206-211	206	211	5	limestone/marble skarn	oxide	< 2	0.16	0.012	3
YK04-B	211-216	211	216	5	limestone/marble skarn	oxide	19	0.5	0.014	4
YK04-B	216-221	216	221	5	limestone/marble skarn	oxide	31	0.09	0.009	6
YK04-B	221-222	221	222	1	limestone/marble skarn	oxide	46	0.07	0.010	9

Element:					Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK04-B	222-226	222	226	4	limestone/marble skarn	oxide	**24**	**0.25**	**0.012**	**5**
YK04-B	226-228	226	228	2	limestone/marble skarn	oxide	**8**	**< 0.05**	**0.009**	**3**
YK04-B	228-231	228	231	3	limestone/marble skarn	oxide	**19**	**0.14**	**0.009**	**3**
YK04-B	231-233	231	233	2	limestone/marble skarn	oxide	**10**	**< 0.05**	**0.009**	**3**
YK04-B	233-236	233	236	3	dolomite marble skarn	oxide	**16**	**0.23**	**0.020**	**2**
YK04-B	236-238	236	238	2	dolomite marble skarn	oxide	**< 2**	**< 0.05**	**0.013**	**1**
YK04-B	238-242	238	242	4	sheared monzonite porphyry	oxide	**23**	**0.25**	**0.009**	**4**
YK04-B	242-246	242	246	4	sheared monzonite porphyry	oxide	**< 2**	**0.11**	**0.010**	**3**
YK04-B	246-251	246	251	5	sheared monzonite porphyry	oxide	**< 2**	**0.15**	**0.016**	**4**
YK04-B	251-256	251	256	5	sheared monzonite porphyry	oxide	**8**	**0.26**	**0.010**	**4**
YK04-B	256-261	256	261	5	sheared monzonite porphyry	oxide	**< 2**	**0.4**	**0.014**	**5**
YK04-B	261-266	261	266	5	sheared monzonite porphyry	oxide	**< 2**	**< 0.05**	**0.017**	**5**
YK04-B	266-276	266	276	10	mafic dike + marble skarn	oxide	**< 2**	**0.06**	**0.010**	**1**
YK04-B	276-281	276	281	5	mafic dike	oxide	**< 2**	**< 0.05**	**0.010**	**2**
YK04-B	281-286	281	286	5	limestone/marble skarn	oxide	**26**	**0.17**	**0.043**	**1**
YK04-B	286-291	286	291	5	limestone/marble skarn	oxide	**11**	**0.13**	**0.028**	**4**
YK04-B	291-296	291	296	5	mafic dike	oxide	**< 2**	**< 0.05**	**0.018**	**3**
YK04-B	296-301	296	301	5	monzonite porphyry	oxide	**14**	**< 0.05**	**0.030**	**17**
YK04-B	301-306	301	306	5	monzonite porphyry	oxide	**24**	**0.17**	**0.040**	**21**
YK04-B	306-311	306	311	5	monzonite porphyry	oxide	**14**	**0.09**	**0.034**	**25**
YK04-B	311-316	311	316	5	monzonite porphyry	oxide	**< 2**	**< 0.05**	**0.039**	**45**
YK04-B	316-321	316	321	5	monzonite porphyry	oxide sulfide transition	**8**	**0.16**	**0.042**	**15**
YK04-B	321-326	321	326	5	monzonite porphyry	sulfide	**< 2**	**0.53**	**0.041**	**13**
YK04-B	326-331	326	331	5	monzonite porphyry	sulfide	**26**	**0.29**	**0.048**	**172**
YK04-B	331-336	331	336	5	monzonite porphyry	sulfide	**16**	**0.49**	**0.075**	**30**
YK04-B	336-341	336	341	5	monzonite porphyry	sulfide	**42**	**1.06**	**0.088**	**89**
YK04-B	341-346	341	346	5	monzonite porphyry	sulfide	**19**	**0.31**	**0.058**	**85**
YK04-B	346-351	346	351	5	monzonite porphyry	sulfide	**13**	**0.24**	**0.062**	**174**
YK04-B	351-356	351	356	5	monzonite porphyry	sulfide	**33**	**0.24**	**0.065**	**23**
YK04-B	356-361	356	361	5	monzonite porphyry	sulfide	**22**	**0.25**	**0.049**	**88**
YK04-B	361-365.5	361	365.5	4.5	monzonite porphyry	sulfide	**28**	**0.48**	**0.080**	**24**
YK04-B	365.5-369	365.5	369	3.5	monzonite porphyry	sulfide	**28**	**0.32**	**0.052**	**47**
YK04-B	369-374	369	374	5	monzonite porphyry	sulfide	**28**	**0.43**	**0.061**	**35**
YK04-B	374-378	374	378	4	monzonite porphyry	sulfide	**12**	**0.14**	**0.040**	**109**

Element:					Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK04-B	378-380	378	380	2	monzonite porphyry	sulfide	< 2	0.17	0.047	92
YK04-B	380-385	380	385	5	monzonite porphyry	sulfide	23	0.21	0.067	94
YK04-B	385-390	385	390	5	monzonite porphyry	sulfide	27	0.21	0.061	91
YK04-B	390-392	390	392	2	monzonite porphyry	sulfide	12	0.19	0.040	21
YK04-B	392-395	392	395	3	monzonite porphyry	sulfide	18	0.14	0.039	88
YK04-B	395-400	395	400	5	monzonite porphyry	sulfide	12	0.14	0.033	76
YK04-B	400-404	400	404	4	monzonite porphyry	sulfide	47	0.05	0.038	16
YK04-B	404-407	404	407	3	monzonite porphyry	sulfide	15	0.15	0.062	67
YK04-B	407-411	407	411	4	monzonite porphyry	sulfide	21	0.26	0.067	358
YK04-B	411-416	411	416	5	monzonite porphyry	sulfide	33	0.47	0.095	146
YK04-B	416-421	416	421	5	monzonite porphyry	sulfide	22	0.35	0.076	50
YK04-B	421-426	421	426	5	monzonite porphyry	sulfide	14	0.42	0.090	42
YK04-B	426-431	426	431	5	monzonite porphyry	sulfide	25	0.17	0.052	42
YK04-B	431-436	431	436	5	monzonite porphyry	sulfide	37	0.35	0.083	84
YK04-B	436-441	436	441	5	monzonite porphyry	sulfide	< 2	0.23	0.046	62
YK04-B	441-445	441	445	4	monzonite porphyry	sulfide	10	0.2	0.037	81
YK04-B	445-450	445	450	5	monzonite porphyry	sulfide	9	0.21	0.032	130
YK04-B	450-455	450	455	5	monzonite porphyry	sulfide	5	0.3	0.032	149
YK04-B	455-459	455	459	4	monzonite porphyry	sulfide	25	0.72	0.059	255
YK04-B	459-462	459	462	3	monzonite porphyry	sulfide	23	0.34	0.067	71
YK04-B	462-466	462	466	4	monzonite porphyry	sulfide	--	--	0.027	--
YK04-B	466-471	466	471	5	monzonite porphyry	sulfide	10	0.12	0.028	260
YK04-B	471-473.5	471	473.5	2.5	monzonite porphyry	sulfide	374	0.1	0.028	17
YK04-B	473.5-477	473.5	477	3.5	monzonite porphyry	sulfide	28	0.3	0.031	111
YK04-B	477-480	477	480	3	monzonite porphyry	sulfide	< 2	0.2	0.037	119
YK04-B	480-484	480	484	4	monzonite porphyry	sulfide	42	0.1	0.028	129
YK04-B	484-489	484	489	5	monzonite porphyry	sulfide	4	0.2	0.029	91
YK04-B	489-493.5	489	493.5	4.5	monzonite porphyry	sulfide	< 2	0.2	0.033	76
YK04-B	493.5-497	493.5	497	3.5	monzonite porphyry	sulfide	< 2	0.2	0.035	236
YK04-B	497-502	497	502	5	monzonite porphyry	sulfide	20	< 0.05	0.027	190
YK04-B	502-506	502	506	4	monzonite porphyry	sulfide	< 2	0.2	0.046	261
YK04-B	506-511	506	511	5	monzonite porphyry	sulfide	21	0.2	0.037	415
YK04-B	511-515	511	515	4	monzonite porphyry	sulfide	16	0.3	0.037	156
YK04-B	515-524	515	524	9	monzonite porphyry	sulfide	5	0.06	0.018	86

Element:					Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK04-B	524-529	524	529	5	monzonite porphyry	sulfide	18	0.1	0.045	230
YK04-B	529-534	529	534	5	monzonite porphyry	sulfide	16	0.2	0.033	255
YK04-B	534-539	534	539	5	monzonite porphyry	sulfide	26	0.5	0.081	163
YK04-B	539-544	539	544	5	monzonite porphyry	sulfide	26	0.5	0.075	179
YK04-B	544-548	544	548	4	monzonite porphyry	sulfide	35	0.4	0.069	485
YK04-B	548-553	548	553	5	monzonite porphyry	sulfide	38	1.2	0.188	96
YK04-B	553-556	553	556	3	monzonite porphyry	sulfide	33	0.9	0.159	225
YK04-B	556-561	556	561	5	monzonite porphyry	sulfide	16	0.3	0.088	121
YK04-B	561-566	561	566	5	monzonite porphyry	sulfide	< 2	0.2	0.054	205
YK04-B	566-571	566	571	5	monzonite porphyry	sulfide	< 2	0.2	0.056	79
YK04-B	571-574	571	574	3	monzonite porphyry	sulfide	< 2	< 0.05	0.024	122
YK04-B	574-579	574	579	5	dolomite skarn	sulfide	41	0.9	0.133	76
YK04-B	579-584	579	584	5	dolomite skarn	sulfide	30	0.5	0.082	54
YK04-B	584-588	584	588	4	monzonite porphyry	sulfide	< 2	0.1	0.030	58
YK04-B	588-592	588	592	4	monzonite porphyry	sulfide	13	0.2	0.047	172
YK04-B	592-596.5	592	596.5	4.5	monzonite porphyry	sulfide	< 2	0.05	0.026	94
YK04-B	596.5-600.5	596.5	600.5	4	monzonite porphyry	sulfide	< 2	0.4	0.085	28
YK04-B	600.5-604.5	600.5	604.5	4	monzonite porphyry	sulfide	19	0.4	0.099	262
YK04-B	604.5-609.5	604.5	609.5	5	monzonite porphyry	sulfide	29	0.3	0.081	137
YK04-B	609.5-614	609.5	614	4.5	monzonite porphyry	sulfide	27	0.4	0.132	98
YK04-B	614-619	614	619	5	monzonite porphyry	sulfide	12	0.2	0.049	91
YK04-B	619-624	619	624	5	monzonite porphyry	sulfide	4	0.06	0.040	100
YK04-B	624-627	624	627	3	monzonite porphyry	sulfide	< 2	< 0.05	0.032	146
YK04-B	627-630	627	630	3	dolomite skarn	sulfide	23	0.1	0.047	60
YK04-B	630-632	630	632	2	dolomite skarn	sulfide	7	0.3	0.032	16
YK04-B	632-635	632	635	3	dolomite skarn	sulfide	36	0.6	0.104	13
YK04-B	635-637	635	637	2	dolomite skarn	sulfide	76	1.6	0.226	< 1
YK04-B	637-639	637	639	2	dolomite skarn	sulfide	105	2.3	0.317	19
YK04-B	639-640	639	640	1	dolomite skarn	sulfide	127	2.8	0.436	57
YK04-B	640-642	640	642	2	dolomite skarn	sulfide	132	2.9	0.401	141
YK04-B	642-644	642	644	2	dolomite skarn	sulfide	216	4.9	0.744	2
YK04-B	644-646	644	646	2	dolomite skarn	sulfide	91	2	0.310	2
YK04-B	646-648	646	648	2	dolomite skarn	sulfide	31	0.9	0.154	88
YK04-B	648-650	648	650	2	dolomite skarn	sulfide	41	1.1	0.193	78

Element:					**Generic Rock Type**	**Oxide/Sulfide Character**	**Actlabs Au**	**Actlabs Ag**	**Jacob's Cu**	**Actlabs Mo**
YK04-B	650-653	650	653	3	dolomite skarn	sulfide	**41**	**1**	**0.166**	**125**
YK04-B	653-655	653	655	2	dolomite skarn	sulfide	**138**	**3.2**	**0.476**	**11**
YK04-B	655-657.5	655	657.5	2.5	dolomite skarn	sulfide	**128**	**2.7**	**0.427**	**10**
YK04-B	657.5-660	657.5	660.5	3	dolomite skarn	sulfide	**20**	**0.3**	**0.045**	**11**
YK04-B	660.5-663	660.5	663	2.5	dolomite skarn	sulfide	**17**	**0.5**	**0.033**	**< 1**
YK04-B	663-666.5	663	666.5	3.5	dolomite skarn	sulfide	**20**	**0.7**	**0.127**	**< 1**
YK04-B	666.5-669	666.5	669	2.5	dolomite skarn	sulfide	**34**	**2.5**	**0.508**	**1**
YK04-B	669-672	669	672	3	dolomite skarn	sulfide	**60**	**3.2**	**0.633**	**3**
YK04-B	672-675	672	675	3	dolomite skarn	sulfide	**15**	**1**	**0.149**	**117**
YK04-B	675-678	675	678	3	monzonite porphyry	sulfide	**< 2**	**0.3**	**0.046**	**9**
YK04-B	678-682	678	682	4	monzonite porphyry	sulfide	**18**	**0.06**	**0.016**	**< 1**
YK04-B	682-686	682	686	4	monzonite porphyry	sulfide	**35**	**0.7**	**0.124**	**382**
YK04-B	686-690	686	690	4	monzonite porphyry	sulfide	**43**	**0.7**	**0.206**	**214**
YK04-B	690-693	690	693	3	monzonite porphyry	sulfide	**28**	**0.1**	**0.178**	**193**
YK04-B	693-696	693	696	3	monzonite porphyry	sulfide	**< 2**	**0.08**	**0.147**	**355**
YK04-B	696-700.5	696	700.5	4.5	monzonite porphyry	sulfide	**21**	**0.2**	**0.076**	**369**
YK04-B	700.5-703	700.5	703	2.5	monzonite porphyry	sulfide	**18**	**0.25**	**0.126**	**571**
YK04-B	703-706	703	706	3	monzonite porphyry	sulfide	**40**	**0.88**	**0.150**	**258**
YK04-B	706-709	706	709	3	monzonite porphyry	sulfide	**9**	**0.2**	**0.038**	**16**
YK04-B	709-712	709	712	3	monzonite porphyry	sulfide	**21**	**< 0.05**	**0.014**	**3**
YK04-B	712-716	712	716	4	monzonite porphyry	sulfide	**12**	**< 0.05**	**0.013**	**1**
YK04-B	716-720	716	720	4	monzonite porphyry	sulfide	**< 2**	**< 0.05**	**0.015**	**2**
YK04-B	720-725	720	725	5	mafic dike	sulfide	**< 2**	**< 0.05**	**0.014**	**< 1**
YK04-B	725-727	725	727	2	mafic dike	sulfide	**< 2**	**< 0.05**	**0.011**	**1**
YK04-B	727-732	727	732	5	dolomite skarn	sulfide	**12**	**0.1**	**0.006**	**< 1**
YK04-B	732-736	732	736	4	dolomite skarn	sulfide	**71**	**0.42**	**0.028**	**< 1**
YK04-B	736-740	736	740	4	dolomite skarn	sulfide	**41**	**0.11**	**0.036**	**14**
YK04-B	740-744	740	744	4	dolomite skarn	sulfide	**58**	**0.2**	**0.060**	**29**
YK04-B	744-749	744	749	5	dolomite skarn	sulfide	**< 2**	**0.09**	**0.032**	**11**
YK04-B	749-753	749	753	4	mafic dike	sulfide	**< 2**	**< 0.05**	**0.016**	**< 1**
YK04-B	753-758	753	758	5	limestone/marble	sulfide	**5**	**< 0.05**	**0.011**	**< 1**
YK04-B	758-763	758	763	5	limestone/marble	sulfide	**4**	**0.07**	**0.008**	**< 1**
YK04-B	763-768	763	768	5	limestone/marble	sulfide	**2**	**< 0.05**	**0.007**	**< 1**
YK04-B	768-773	768	773	5	limestone/marble	sulfide	**7**	**0.13**	**0.008**	**< 1**

Element:					Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK04-B	773-778	773	778	5	limestone/marble	sulfide	**8**	**0.07**	**0.007**	**< 1**
YK04-B	778-783	778	783	5	limestone/marble	sulfide	**22**	**1.06**	**0.009**	**10**
YK04-B	783-786	783	786	3	sheared monzonite porphyry	sulfide	**3**	**0.22**	**0.019**	**12**

Drill Hole YK06-A

Element:					Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:							ppb	ppm	%	ppm
Detection Limit:							2	0.05		1
Analysis Character:							multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:							encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:		From	To	Interval	Generic Rock Type	Oxide/Sulfide Character	INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP
YK06-A	0-9	0	9	9	quartz sericite schist	oxide	< 2	0.12	0.005	5
YK06-A	9-13.5	9	13.5	4.5	quartz sericite schist	oxide	< 2	< 0.05	0.006	7
YK06-A	13.5-19.5	13.5	19.5	6	quartz sericite schist	oxide	< 2	0.05	0.005	6
YK06-A	19.5-28	19.5	28	8.5	quartz sericite schist	oxide	< 2	0.07	0.005	6
YK06-A	28-33	28	33	5	quartz sericite schist	oxide	< 2	< 0.05	0.005	8
YK06-A	33-38	33	38	5	quartz sericite schist	oxide	< 2	< 0.05	0.005	7
YK06-A	38-43	38	43	5	quartz sericite schist	oxide	< 2	< 0.05	0.006	5
YK06-A	43-48	43	48	5	quartz sericite schist	oxide	< 2	< 0.05	0.006	5
YK06-A	48-53	48	53	5	quartz sericite schist	oxide	< 2	< 0.05	0.006	3
YK06-A	53-58	53	58	5	quartz sericite schist	oxide	< 2	< 0.05	0.005	9
YK06-A	58-63	58	63	5	quartz sericite schist	oxide	< 2	< 0.05	0.004	11
YK06-A	63-68	63	68	5	quartz sericite schist	oxide	< 2	< 0.05	0.004	11
YK06-A	68-78	68	78	10	mafic dike	oxide	< 2	< 0.05	0.060	9
YK06-A	78-88	78	88	10	mafic dike	oxide	< 2	< 0.05	0.006	9
YK06-A	88-96.5	88	96.5	8.5	mafic dike	oxide	< 2	< 0.05	0.007	8
YK06-A	96.5-106	96.5	106	9.5	mafic monzonite porphyry	oxide	< 2	0.05	0.006	7
YK06-A	106-107.5	106	107.5	1.5	mafic monzonite porphyry	oxide	< 2	0.11	0.009	7
YK06-A	107.5-118	107.5	118	10.5	mafic monzonite porphyry	oxide	< 2	0.1	0.005	6
YK06-A	118-128	118	128	10	mafic monzonite porphyry	oxide	< 2	0.17	0.005	7
YK06-A	128-138	128	138	10	mafic monzonite porphyry	oxide	< 2	0.05	0.009	10
YK06-A	138-148	138	148	10	mafic monzonite porphyry	oxide	< 2	0.06	0.008	13
YK06-A	148-158	148	158	10	mafic monzonite porphyry	oxide	41	0.06	0.010	10
YK06-A	158-167.5	158	167	9	mafic monzonite porphyry	oxide	50	0.07	0.007	9
YK06-A	167-177.5	167	177.5	10.5	mafic monzonite porphyry	oxide	7	0.1	0.009	7

Element:					Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK06-A	177.5-188	177.5	188	10.5	mafic monzonite porphyry	oxide	9	0.08	0.011	6
YK06-A	188-198	188	198	10	medium grained monzonite porphyry	oxide	25	0.05	0.003	6
YK06-A	198-208	198	208	10	medium grained monzonite porphyry	oxide	29	< 0.05	0.005	11
YK06-A	208-218	208	218	10	medium grained monzonite porphyry	oxide	42	0.27	0.007	2
YK06-A	218-228	218	228	10	medium grained monzonite porphyry	oxide	25	0.29	0.007	7
YK06-A	228-238	228	238	10	medium grained monzonite porphyry	oxide	15	0.13	0.004	8
YK06-A	238-248	238	248	10	medium grained monzonite porphyry	oxide	< 2	< 0.05	0.002	8
YK06-A	248-258	248	258	10	medium grained monzonite porphyry	oxide	14	< 0.05	0.003	8
YK06-A	258-268	258	268	10	medium grained monzonite porphyry	oxide	14	0.16	0.005	10
YK06-A	268-278	268	278	10	medium grained monzonite porphyry	oxide	< 2	0.06	0.006	7
YK06-A	278-288	278	288	10	medium grained monzonite porphyry	oxide	< 2	< 0.05	0.005	6
YK06-A	288-298	288	298	10	medium grained monzonite porphyry	oxide	< 2	0.11	0.007	6
YK06-A	298-308	298	308	10	medium grained monzonite porphyry	oxide	42	0.23	0.015	7
YK06-A	308-318	308	318	10	medium grained monzonite porphyry	oxide	16	0.22	0.007	7
YK06-A	318-328	318	328	10	medium grained monzonite porphyry	oxide	19	0.16	0.008	7
YK06-A	328-338	328	338	10	medium grained monzonite porphyry	oxide	< 2	0.21	0.008	6
YK06-A	338-348	338	348	10	medium grained monzonite porphyry	oxide	68	0.54	0.034	5
YK06-A	348-357	348	357	9	mafic dike	oxide	< 2	0.1	0.013	11
YK06-A	357-367	357	367	10	medium grained monzonite porphyry	oxide	23	0.23	0.023	5
YK06-A	367-376	367	376	9	mafic dike	oxide/sulfide transition	< 2	0.09	0.012	10
YK06-A	376-380.5	376		-376	mafic dike	oxide/sulfide transition	5	0.06	0.012	12
YK06-A	388-396.5	388	396.5	8.5	medium grained monzonite porphyry	sulfide	24	0.07	0.018	7
YK06-A	396.5-406.5	396.5	406.5	10	medium grained monzonite porphyry	sulfide	14	< 0.05	0.009	8
YK06-A	406.5-416	406.5	416	9.5	mafic dike	sulfide	< 2	0.08	0.014	11
YK06-A	416-423	416	423	7	mafic dike	sulfide	< 2	0.06	0.014	7
YK06-A	423-433	423	433	10	sheared monzonite porphyry	sulfide	18	0.23	0.023	10
YK06-A	433-444	433	444	11	sheared monzonite porphyry	sulfide	21	0.29	0.023	9
YK06-A	444-454	444	454	10	sheared monzonite porphyry	sulfide	32	0.23	0.027	9
YK06-A	454-464	454	464	10	sheared monzonite porphyry	sulfide	< 2	0.07	0.028	10
YK06-A	464-474.5	464	474.5	10.5	sheared monzonite porphyry	sulfide	< 2	< 0.05	0.014	8
YK06-A	474.5-482.5	474.5	482.5	8	sheared monzonite porphyry	sulfide	13	< 0.05	0.009	7
YK06-A	482.5-493	482.5	493	10.5	sheared monzonite porphyry	sulfide	< 2	1.64	0.006	7
YK06-A	493-503.5	493	503.5	10.5	sheared monzonite porphyry	sulfide	< 2	0.1	0.006	7
YK06-A	503.5-512.5	503.5	512.5	9	sheared monzonite porphyry	sulfide	< 2	0.14	0.007	7
YK06-A	512.5-524	512.5	524	11.5	sheared monzonite porphyry	sulfide	< 2	0.05	0.004	8
YK06-A	524-534	524	534	10	sheared monzonite porphyry	sulfide	< 2	< 0.05	0.008	7
YK06-A	534-544	534	544	10	sheared monzonite porphyry	sulfide	< 2	< 0.05	0.018	8
YK06-A	544-554.5	544	554.5	10.5	sheared monzonite porphyry	sulfide	3	< 0.05	0.005	8
YK06-A	554.5-564.5	554.5	564.5	10	sheared monzonite porphyry	sulfide	9	< 0.05	0.007	7
YK06-A	564.5-572	564.5	572	7.5	sheared monzonite porphyry	sulfide	< 2	0.12	0.008	8
YK06-A	572-582.5	572	582.5	10.5	sheared monzonite porphyry	sulfide	9	0.07	0.006	7

Element:					Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
YK06-A	582.5-593	582.5	593	10.5	sheared monzonite porphyry	sulfide	**< 2**	**0.06**	**0.006**	**8**
YK06-A	593-599.5	593	599.5	6.5	sheared monzonite porphyry	sulfide	**20**	**< 0.05**	**0.007**	**8**
YK06-A	599.5-606	599.5	606	6.5	sheared monzonite porphyry	sulfide	**< 2**	**< 0.05**	**0.007**	**9**
YK06-A	606-614	606	614	8	sheared monzonite porphyry	sulfide	**16**	**0.09**	**0.007**	**10**
YK06-A	614-624	614	624	10	sheared monzonite porphyry	sulfide	**16**	**0.06**	**0.008**	**9**
YK06-A	624-634	624	634	10	sheared monzonite porphyry	sulfide	**30**	**0.05**	**0.007**	**9**
YK06-A	634-644	634	644	10	sheared monzonite porphyry	sulfide	**49**	**0.12**	**0.011**	**8**
YK06-A	644-653	644	653	9	sheared monzonite porphyry	sulfide	**43**	**0.14**	**0.015**	**8**
YK06-A	653-663	653	663	10	sheared monzonite porphyry	sulfide	**< 2**	**< 0.05**	**0.007**	**13**
YK06-A	663-668	663	668	5	sheared monzonite porphyry	sulfide	**14**	**< 0.05**	**0.003**	**15**
YK06-A	668-678	668	678	10	sheared monzonite porphyry	sulfide	**< 2**	**< 0.05**	**0.005**	**6**
YK06-A	678-688	678	688	10	sheared monzonite porphyry	sulfide	**< 2**	**< 0.05**	**0.010**	**67**
YK06-A	688-691.5	688	691.5	3.5	sheared monzonite porphyry	sulfide	**< 2**	**0.07**	**0.006**	**90**
YK06-A	691.5-706.5	691.5	706.5	15	mafic dike	sulfide	**< 2**	**< 0.05**	**0.080**	**8**
YK06-A	706.5-716.5	706.5	716.5	10	mafic dike	sulfide	**69**	**0.15**	**0.028**	**6**
YK06-A	716.5-726.5	716.5	726.5	10	sheared monzonite porphyry	sulfide	**38**	**0.2**	**0.043**	**91**
YK06-A	726.5-736.5	726.5	736.5	10	sheared monzonite porphyry	sulfide	**44**	**0.13**	**0.043**	**5**
YK06-A	736.5-746.5	736.5	746.5	10	mafic dike	sulfide	**6**	**0.17**	**0.010**	**7**
YK06-A	746.5-757	746.5	757	10.5	sheared monzonite porphyry	sulfide	**66**	**0.16**	**0.065**	**42**
YK06-A	757-767	757	767	10	sheared monzonite porphyry	sulfide	**77**	**0.16**	**0.071**	**100**
YK06-A	767-777	767	777	10	sheared monzonite porphyry	sulfide	**55**	**0.15**	**0.051**	**54**
YK06-A	380.5-388		388	388	medium grained monzonite porphyry	oxide/sulfide transition	**13**	**0.06**	**0.012**	**7**

Drill Hole YK06-B

Element:					Generic Rock type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:							ppb	ppm	%	ppm
Detection Limit:							2	0.05		1
Analysis Character:							multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:							encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:		From	To	Interval	Generic Rock type	Oxide/Sulfide Character	INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 1000; INAA > 1000?
YK06-B	0-5	0	5	5	quartz sericite schist	oxide	14	1	0.003	373
YK06-B	5-8	5	8	3	quartz sericite schist	oxide	< 2	< 0.05	0.003	5640
YK06-B	8-13	8	13	5	quartz sericite schist	oxide	< 2	0.06	0.001	86
YK06-B	13-14	13	14	1	quartz sericite schist	oxide	< 2	0.4	0.001	9
YK06-B	14-19	14	19	5	quartz sericite schist	oxide	< 2	0.5	0.002	354
YK06-B	19-23	19	23	4	quartz sericite schist	oxide	< 2	< 0.05	0.001	467
YK06-B	23-28	23	28	5	quartz sericite schist	oxide	< 2	< 0.05	0.002	406
YK06-B	28-33	28	33	5	quartz sericite schist	oxide	< 2	0.08	0.003	1450
YK06-B	33-38	33	38	5	quartz sericite schist	oxide	14	0.1	0.002	830
YK06-B	38-43	38	43	5	monzonite porphyry	oxide	< 2	0.2	0.003	4
YK06-B	43-48	43	48	5	monzonite porphyry	oxide	< 2	< 0.05	0.004	3
YK06-B	48-53	48	53	5	monzonite porphyry	oxide	17	< 0.05	0.006	3
YK06-B	53-56	53	56	3	monzonite porphyry	oxide	5	< 0.05	0.002	3
YK06-B	56-58	56	58	2	monzonite porphyry	oxide	< 2	< 0.05	0.002	5
YK06-B	58-63	58	63	5	monzonite porphyry	oxide	< 2	< 0.05	0.002	3
YK06-B	63-68	63	68	5	monzonite porphyry	oxide	12	0.1	0.003	< 1
YK06-B	68-73	68	73	5	monzonite porphyry	oxide	24	0.1	0.003	< 1
YK06-B	73-76	73	76	3	monzonite porphyry	oxide	< 2	0.1	0.003	1
YK06-B	76-78	76	78	2	monzonite porphyry	oxide	14	< 0.05	0.002	< 1
YK06-B	78-83	78	83	5	monzonite porphyry	oxide	17	0.06	0.003	1
YK06-B	83-88	83	88	5	monzonite porphyry	oxide	16	0.09	0.002	2

YK06-B	88-93	88	93	5	monzonite porphyry	oxide	23	0.2	**0.003**	**2**
YK06-B	93-98	93	98	5	monzonite porphyry	oxide	24	< 0.05	**0.002**	**2**
YK06-B	98-103	98	103	5	monzonite porphyry	oxide	12	< 0.05	**0.002**	**1**
YK06-B	103-108	103	108	5	mafic dike	oxide	< 2	< 0.05	**0.003**	**5**
YK06-B	108-113	108	113	5	monzonite porphyry	oxide	< 2	< 0.05	**0.003**	**< 1**
YK06-B	113-118	113	118	5	mafic dike	oxide	< 2	< 0.05	**0.004**	**3**
YK06-B	118-123	118	123	5	monzonite porphyry	oxide	< 2	< 0.05	**0.002**	**1**
YK06-B	123-128	123	128	5	monzonite porphyry	oxide	< 2	< 0.05	**0.002**	**2**
YK06-B	128-133	128	133	5	monzonite porphyry	oxide	< 2	< 0.05	**0.002**	**2**
YK06-B	133-138	133	138	5	monzonite porphyry	oxide	24	0.05	**0.002**	**1**
YK06-B	138-143	138	143	5	monzonite porphyry	oxide	3	< 0.05	**0.002**	**2**
YK06-B	143-148	143	148	5	monzonite porphyry	oxide	< 2	< 0.05	**0.002**	**3**
YK06-B	148-153	148	153	5	monzonite porphyry	oxide	7	< 0.05	**0.002**	**5**
YK06-B	153-158	153	158	5	monzonite porphyry	oxide	14	< 0.05	**0.002**	**5**
YK06-B	158-163	158	163	5	monzonite porphyry	oxide	20	0.1	**0.004**	**3**
YK06-B	163-168	163	168	5	monzonite porphyry	oxide	14	0.1	**0.003**	**3**
YK06-B	168-173	168	173	5	monzonite porphyry	oxide	58	0.2	**0.013**	**2**
YK06-B	173-178	173	178	5	monzonite porphyry	oxide	28	0.4	**0.011**	**2**
YK06-B	178-183	178	183	5	monzonite porphyry	oxide	46	0.4	**0.023**	**133**
YK06-B	183-188	183	188	5	monzonite porphyry	oxide	33	0.6	**0.035**	**4**
YK06-B	188-193	188	193	5	monzonite porphyry	oxide	33	0.9	**0.038**	**4**
YK06-B	193-198	193	198	5	monzonite porphyry	oxide	22	0.3	**0.019**	**1**
YK06-B	198-203	198	203	5	monzonite porphyry	oxide	21	0.3	**0.012**	**1**
YK06-B	203-208	203	208	5	monzonite porphyry	oxide	27	0.06	**0.008**	**8**
YK06-B	208-213	208	213	5	monzonite porphyry	oxide	23	0.4	**0.011**	**14**
YK06-B	213-218	213	218	5	monzonite porphyry	oxide	16	0.07	**0.007**	**16**
YK06-B	218-223	218	223	5	monzonite porphyry	oxide	14	< 0.05	**0.007**	**83**
YK06-B	223-227	223	227	4	monzonite porphyry	oxide	< 2	< 0.05	**0.004**	**57**
YK06-B	227-232.5	227	232.5	5.5	monzonite porphyry	oxide	13	< 0.05	**0.004**	**115**
YK06-B	232.5-237.5	232.5	237.5	5	monzonite porphyry	oxide	117	0.4	**0.011**	**154**
YK06-B	237.5-241	237.5	241	3.5	dolomite skarn	oxide	4	0.1	**0.006**	**2**
YK06-B	241-242.5	241	242.5	1.5	dolomite skarn	oxide	3	0.07	**0.003**	**< 1**
YK06-B	242.5-248	242.5	248	5.5	monzonite porphyry	oxide	25	0.3	**0.078**	**105**
YK06-B	248-251	248	251	3	monzonite porphyry	oxide	9	0.2	**0.045**	**81**
YK06-B	251-253	251	253	2	monzonite porphyry	oxide	20	0.6	**0.072**	**113**
YK06-B	253-255	253	255	2	monzonite porphyry	oxide	59	1.9	**0.214**	**124**

YK06-B	255-258	255	258	3	monzonite porphyry	oxide	14	0.4	**0.064**	**145**
YK06-B	258-263	258	263	5	monzonite porphyry	oxide	27	0.6	**0.085**	**73**
YK06-B	263-268	263	268	5	monzonite porphyry	oxide	23	0.3	**0.051**	**178**
YK06-B	268-273	268	273	5	monzonite porphyry	oxide	20	0.5	**0.062**	**203**
YK06-B	273-278	273	278	5	monzonite porphyry	oxide	22	0.4	**0.064**	**12**
YK06-B	278-283.5	278	283.5	5.5	monzonite porphyry	oxide	19	0.2	**0.049**	**< 1**
YK06-B	283.5-288.5	283.5	288.5	5	monzonite porphyry	oxide	26	0.4	**0.058**	**171**
YK06-B	288.5-293	288.5	293	4.5	monzonite porphyry	oxide sulfide boundary	17	0.1	**0.078**	**200**
YK06-B	293-298	293	298	5	mafic dike	sulfide	8	0.1	**0.020**	**3**
YK06-B	298-303	298	303	5	mafic dike	sulfide	4	0.1	**0.012**	**3**
YK06-B	303-307	303	307	4	monzonite porphyry	sulfide	17	0.3	**0.047**	**235**
YK06-B	307-312	307	312	5	mafic dike	sulfide	21	0.2	**0.030**	**5**
YK06-B	312-317	312	317	5	monzonite porphyry	sulfide	41	0.7	**0.121**	**259**
YK06-B	317-324	317	324	7	monzonite porphyry	sulfide	39	0.4	**0.076**	**225**
YK06-B	324-333	324	333	9	monzonite porphyry	sulfide	31	0.4	**0.125**	**299**
YK06-B	333-338	333	338	5	monzonite porphyry	sulfide	37	0.2	**0.158**	**110**
YK06-B	338-345	338	345	7	dolomite skarn	sulfide	255	2.6	**0.602**	**< 1**
YK06-B	345-348	345	348	3	dolomite skarn	sulfide	162	1.8	**0.410**	**< 1**
YK06-B	348-351.5	348	351.5	3.5	dolomite skarn	sulfide	110	1.6	**0.284**	**< 1**
YK06-B	351.5-353	351.5	353	1.5	dolomite skarn	sulfide	< 2	1.2	**0.060**	**< 1**
YK06-B	353-356	353	356	3	mafic dike	sulfide	16	< 0.05	**0.017**	**7**
YK06-B	356-358.5	356	358.5	2.5	limestone/marble	sulfide	78	0.7	**0.216**	**< 1**
YK06-B	358.5-363	358.5	363	4.5	limestone/marble	sulfide	30	0.2	**0.083**	**< 1**
YK06-B	363-368	363	368	5	limestone/marble	sulfide	20	0.2	**0.099**	**2**
YK06-B	368-371	368	371	3	limestone/marble	sulfide	61	0.5	**0.149**	**1**
YK06-B	371-383	371	383	12	limestone/marble	sulfide	642	3.1	**0.436**	**3**

Drill Hole YK06-C

Element:					Generic Rock Type	Oxide/Sulfide Character	Actlabs Au	Actlabs Ag	Jacob's Cu	Actlabs Mo
Units:							ppb	ppm	%	ppm
Detection Limit:							2	0.05		1
Analysis Character:							multi-element geochem	Reported Composite multi-element geochem	assay	Reported Composite
Preparation:							encapsul-ated rock powder	TD (4 acid "near-total" digestion)	TD 2 Stage Multi-Acid (Aqua regia/HCl)	TD (4 acid "near-total" digestion)
Analytical Method:		From	To	Interval	Generic Rock Type	Oxide/Sulfide Character	INAA	ICP-MS <=10.5; ICP > 10.5 - <100; INAA >100	AA	ICP <= 50; INAA > 50
YK06-C	0-10	0	10	10	quartz sericite schist	oxide	< 2	< 0.05	0.016	9
YK06-C	10-17	10	17	7	quartz sericite schist	oxide	< 2	< 0.05	0.018	6
YK06-C	17-27	17	27	10	quartz sericite schist	oxide	< 2	< 0.05	0.012	7
YK06-C	27-36.5	27	36.5	9.5	quartz sericite schist	oxide	< 2	< 0.05	0.013	12
YK06-C	36.5-44.5	36.5	44.5	8	quartz sericite schist	oxide	< 2	< 0.05	0.013	8
YK06-C	44.5-53	44.5	53	8.5	quartz sericite schist	oxide	< 2	< 0.05	0.012	10
YK06-C	53-63	53	63	10	quartz sericite schist	oxide	< 2	< 0.05	0.012	21
YK06-C	63-73	63	73	10	quartz sericite schist	oxide	< 2	< 0.05	0.014	9
YK06-C	73-83	73	83	10	quartz sericite schist	oxide	< 2	< 0.05	0.013	9
YK06-C	83-90	83	90	7	quartz sericite schist	oxide	< 2	< 0.05	0.015	9
YK06-C	90-101	90	101	11	grey monzonite	oxide	6	< 0.05	0.027	< 1
YK06-C	101-111	101	111	10	grey monzonite	oxide	29	< 0.05	0.017	5
YK06-C	111-121.5	111	121.5	10.5	grey monzonite	oxide	< 2	< 0.05	0.018	< 1
YK06-C	121.5-131	121.5	131	9.5	grey monzonite	oxide	24	< 0.05	0.028	1
YK06-C	131-141.5	131	141.5	10.5	grey monzonite	oxide	< 2	< 0.05	0.019	2
YK06-C	141.5-151.5	141.5	151.5	10	grey monzonite	oxide	< 2	< 0.05	0.015	< 1
YK06-C	151.5-161.5	151.5	161.5	10	grey monzonite	oxide	< 2	< 0.05	0.011	< 1
YK06-C	161.5-163.5	161.5	163.5	2	grey monzonite	oxide	12	< 0.05	0.009	< 1
YK06-C	163.5-168.5	163.5	168.5	5	grey monzonite	oxide	< 2	< 0.05	0.010	< 1

YK06-C	168.5-173	168.5	173	4.5	grey monzonite	oxide	< 2	< 0.05	0.010	< 1
YK06-C	173-178	173	178	5	grey monzonite	oxide	< 2	< 0.05	0.013	7
YK06-C	178-183	178	183	5	grey monzonite	oxide	< 2	< 0.05	0.009	2
YK06-C	183-193	183	193	10	grey monzonite	oxide	< 2	< 0.05	0.011	2
YK06-C	193-198	193	198	5	grey monzonite	oxide	7	< 0.05	0.010	2
YK06-C	198-208	198	208	10	grey monzonite	oxide	< 2	< 0.05	0.007	2
YK06-C	208-218	208	218	10	grey monzonite	oxide	17	< 0.05	0.008	4
YK06-C	218-223	218	223	5	grey monzonite	oxide	< 2	< 0.05	0.007	3
YK06-C	223-233	223	233	10	grey monzonite	oxide	< 2	< 0.05	0.009	6
YK06-C	233-238	233	238	5	grey monzonite	oxide	< 2	< 0.05	0.007	4
YK06-C	238-243	238	243	5	grey monzonite	oxide	< 2	< 0.05	0.009	4
YK06-C	243-248	243	248	5	grey monzonite	oxide	3	< 0.05	0.008	2
YK06-C	248-253	248	253	5	grey monzonite	oxide	< 2	< 0.05	0.003	3
YK06-C	253-258	253	258	5	grey monzonite	oxide	14	< 0.05	0.003	3
YK06-C	258-262	258	262	4	grey monzonite	oxide	9	< 0.05	0.005	2
YK06-C	262-264.5	262	264.5	2.5	grey monzonite	oxide	< 2	< 0.05	0.004	10
YK06-C	264.5-268	264.5	268	3.5	grey monzonite	oxide	< 2	< 0.05	0.004	10
YK06-C	268-277	268	277	9	grey monzonite	oxide	< 2	< 0.05	0.001	9
YK06-C	277-287.5	277	287.5	10.5	grey monzonite	oxide	26	< 0.05	0.004	9
YK06-C	287.5-298	287.5	298	10.5	grey monzonite	oxide	39	< 0.05	0.002	7
YK06-C	298-308	298	308	10	grey monzonite	oxide	< 2	< 0.05	0.005	16
YK06-C	308-315.5	308	315.5	7.5	grey monzonite	oxide	< 2	< 0.05	0.006	9
YK06-C	315.5-323	315.5	323	7.5	grey monzonite	oxide	15	< 0.05	0.006	12
YK06-C	323-333	323	333	10	grey monzonite	oxide	64	< 0.05	0.004	9
YK06-C	333-337.5	333	337.5	4.5	grey monzonite	oxide	< 2	< 0.05	0.008	8
YK06-C	337.5-347	337.5	347	9.5	grey monzonite	oxide	< 2	< 0.05	0.007	8
YK06-C	347-356.5	347	356.5	9.5	grey monzonite	oxide	12	< 0.05	0.007	9
YK06-C	356.5-364	356.5	364	7.5	grey monzonite	oxide	< 2	< 0.05	0.007	9
YK06-C	364-374	364	374	10	grey monzonite	oxide	< 2	< 0.05	0.006	8
YK06-C	374-384	374	384	10	grey monzonite	oxide	< 2	< 0.05	0.005	9
YK06-C	384-393.5	384	393.5	9.5	grey monzonite	oxide	< 2	< 0.05	0.006	9
YK06-C	393.5-403.5	393.5	403.5	10	grey monzonite and mafic dike	oxide	< 2	< 0.05	0.011	4
YK06-C	403.5-413	403.5	413	9.5	grey monzonite	oxide	< 2	< 0.05	0.014	9
YK06-C	413-423	413	423	10	grey monzonite	oxide	< 2	< 0.05	0.013	10
YK06-C	423-432	423	432	9	grey monzonite	oxide	< 2	< 0.05	0.013	10
YK06-C	432-442	432	442	10	grey monzonite	oxide	14	< 0.05	0.014	10

YK06-C	442-452	442	452	10	grey monzonite	oxide	**48**	**0.16**	**0.013**	**12**
YK06-C	452-463	452	463	11	grey monzonite	oxide/sulfide transition	**39**	**< 0.05**	**0.003**	**18**
YK06-C	463-473	463	473	10	grey monzonite	oxide/sulfide transition	**21**	**< 0.05**	**<0.001**	**10**
YK06-C	473-483	473	483	10	grey monzonite	sulfide	**16**	**0.09**	**0.001**	**10**
YK06-C	483-493	483	493	10	grey monzonite	sulfide	**32**	**< 0.05**	**<0.001**	**9**
YK06-C	493-503	493	503	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.001**	**9**
YK06-C	503-513	503	513	10	grey monzonite	sulfide	**2**	**< 0.05**	**<0.001**	**7**
YK06-C	513-523	513	523	10	grey monzonite	sulfide	**9**	**< 0.05**	**0.001**	**9**
YK06-C	523-532	523	532	9	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.001**	**16**
YK06-C	532-542	532	542	10	mafic dike	sulfide	**< 2**	**< 0.05**	**0.007**	**4**
YK06-C	542-552	542	552	10	mafic dike	sulfide	**< 2**	**0.07**	**0.008**	**7**
YK06-C	552-562	552	562	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.002**	**14**
YK06-C	562-573	562	573	11	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.003**	**13**
YK06-C	573-582.5	573	582.5	9.5	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.003**	**8**
YK06-C	582.5-595	582.5	595	12.5	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.009**	**16**
YK06-C	595-602	595	602	7	mafic dike	sulfide	**3**	**0.07**	**0.011**	**8**
YK06-C	602-612	602	612	10	mafic dike + grey monzonite	sulfide	**< 2**	**< 0.05**	**0.008**	**31**
YK06-C	612-617.5	612	617.5	5.5	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.003**	**8**
YK06-C	617.5-627.5	617.5	627.5	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.004**	**19**
YK06-C	627.5-638	627.5	638	10.5	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.004**	**16**
YK06-C	638-647	638	647	9	grey monzonite	sulfide	**8**	**< 0.05**	**0.003**	**8**
YK06-C	647-656.5	647	656.5	9.5	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.004**	**10**
YK06-C	656.5-668	656.5	668	11.5	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.012**	**9**
YK06-C	668-678	668	678	10	mafic dike	sulfide	**< 2**	**< 0.05**	**0.014**	**9**
YK06-C	678-688	678	688	10	mafic dike	sulfide	**< 2**	**0.05**	**0.014**	**14**
YK06-C	688-698	688	698	10	mafic dike	sulfide	**< 2**	**< 0.05**	**0.011**	**7**
YK06-C	698-708	698	708	10	mafic dike	sulfide	**< 2**	**0.09**	**0.012**	**6**
YK06-C	708-718	708	718	10	mafic dike	sulfide	**< 2**	**< 0.05**	**0.011**	**6**
YK06-C	718-728	718	728	10	mafic dike	sulfide	**< 2**	**< 0.05**	**0.013**	**7**
YK06-C	728-738	728	738	10	mafic dike	sulfide	**< 2**	**< 0.05**	**0.004**	**6**
YK06-C	738-748	738	748	10	mafic dike	sulfide	**< 2**	**< 0.05**	**0.005**	**7**
YK06-C	748-757.5	748	757.5	9.5	mafic dike	sulfide	**< 2**	**0.05**	**0.006**	**21**
YK06-C	757.5-768	757.5	768	10.5	mafic dike	sulfide	**< 2**	**0.07**	**0.010**	**37**
YK06-C	768-778	768	778	10	mafic dike	sulfide	**< 2**	**< 0.05**	**0.005**	**22**
YK06-C	778-784	778	784	6	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.003**	**12**
YK06-C	784-794	784	794	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.005**	**5**

YK06-C	794-799	794	799	5	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.005**	**3**
YK06-C	799-808.5	799	808.5	9.5	grey monzonite	sulfide	**410**	**< 0.05**	**0.008**	**18**
YK06-C	808.5-818	808.5	818	9.5	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.002**	**147**
YK06-C	818-828	818	828	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.006**	**13**
YK06-C	828-838	828	838	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.008**	**15**
YK06-C	838-848	838	848	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.007**	**5**
YK06-C	848-858	848	858	10	grey monzonite	sulfide	**8**	**0.47**	**0.008**	**7**
YK06-C	858-868.5	858	868.5	10.5	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.017**	**9**
YK06-C	868.5-878	868.5	878	9.5	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.009**	**17**
YK06-C	878-888	878	888	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.009**	**8**
YK06-C	888-898	888	898	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.009**	**14**
YK06-C	898-908	898	908	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.008**	**15**
YK06-C	908-918	908	918	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.009**	**14**
YK06-C	918-928	918	928	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.011**	**4**
YK06-C	928-938	928	938	10	grey monzonite	sulfide	**7**	**< 0.05**	**0.009**	**4**
YK06-C	938-948	938	948	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.009**	**4**
YK06-C	948-958	948	958	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.007**	**2**
YK06-C	958-968	958	968	10	grey monzonite	sulfide	**997**	**< 0.05**	**0.007**	**4**
YK06-C	968-978	968	978	10	grey monzonite	sulfide	**34**	**< 0.05**	**0.005**	**2**
YK06-C	978-988	978	988	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.006**	**2**
YK06-C	988-998	988	998	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.006**	**2**
YK06-C	998-1008	998	1008	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.007**	**3**
YK06-C	1008-1018	1008	1018	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.005**	**4**
YK06-C	1018-1028	1018	1028	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.004**	**9**
YK06-C	1028-1038	1028	1038	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.004**	**38**
YK06-C	1038-1048	1038	1048	10	grey monzonite	sulfide	**8**	**< 0.05**	**0.005**	**17**
YK06-C	1048-1058	1048	1058	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.005**	**20**
YK06-C	1058-1068	1058	1068	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.006**	**13**
YK06-C	1068-1078	1068	1078	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.006**	**14**
YK06-C	1078-1088	1078	1088	10	grey monzonite	sulfide	**7**	**< 0.05**	**0.006**	**7**
YK06-C	1088-1098	1088	1098	10	mafic dike	sulfide	**< 2**	**< 0.05**	**0.010**	**20**
YK06-C	1098-1108	1098	1108	10	mafic dike	sulfide	**< 2**	**0.05**	**0.011**	**17**
YK06-C	1108-1118	1108	1118	10	mafic dike + grey monzonite	sulfide	**< 2**	**< 0.05**	**0.007**	**6**
YK06-C	1118-1128	1118	1128	10	grey monzonite	sulfide	**10**	**< 0.05**	**0.004**	**5**
YK06-C	1128-1138	1128	1138	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.005**	**5**
YK06-C	1138-1148	1138	1148	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.005**	**6**

YK06-C	1148-1158	1148	1158	10	grey monzonite	sulfide	< 2	< 0.05	0.004	5
YK06-C	1158-1168	1158	1168	10	grey monzonite	sulfide	< 2	< 0.05	0.006	4
YK06-C	1168-1178	1168	1178	10	grey monzonite	sulfide	< 2	< 0.05	0.005	12
YK06-C	1178-1188	1178	1188	10	grey monzonite	sulfide	< 2	< 0.05	0.006	9
YK06-C	1188-1198	1188	1198	10	grey monzonite	sulfide	< 2	< 0.05	0.005	5
YK06-C	1198-1208	1198	1208	10	grey monzonite	sulfide	4	< 0.05	0.005	6
YK06-C	1208-1218	1208	1218	10	grey monzonite	sulfide	< 2	< 0.05	0.006	9
YK06-C	1218-1228	1218	1228	10	grey monzonite	sulfide	< 2	< 0.05	0.004	9
YK06-C	1228-1238	1228	1238	10	grey monzonite	sulfide	< 2	< 0.05	0.004	8
YK06-C	1238-1248	1238	1248	10	grey monzonite	sulfide	< 2	< 0.05	0.005	12
YK06-C	1248-1258	1248	1258	10	grey monzonite	sulfide	12	< 0.05	0.004	23
YK06-C	1258-1268	1258	1268	10	grey monzonite	sulfide	< 2	< 0.05	0.004	35
YK06-C	1268-1278	1268	1278	10	grey monzonite	sulfide	< 2	< 0.05	0.005	54
YK06-C	1278-1288	1278	1288	10	grey monzonite	sulfide	< 2	< 0.05	0.005	21
YK06-C	1288-1298	1288	1298	10	grey monzonite	sulfide	< 2	< 0.05	0.004	17
YK06-C	1298-1308	1298	1308	10	grey monzonite	sulfide	< 2	0.31	0.005	15
YK06-C	1308-1318	1308	1318	10	grey monzonite	sulfide	< 2	< 0.05	0.005	10
YK06-C	1318-1328	1318	1328	10	grey monzonite	sulfide	< 2	< 0.05	0.006	10
YK06-C	1328-1338	1328	1338	10	grey monzonite	sulfide	< 2	< 0.05	0.005	9
YK06-C	1338-1348	1338	1348	10	grey monzonite	sulfide	< 2	0.09	0.005	10
YK06-C	1348-1358	1348	1358	10	grey monzonite	sulfide	< 2	< 0.05	0.001	9
YK06-C	1358-1368	1358	1368	10	grey monzonite	sulfide	< 2	< 0.05	0.002	9
YK06-C	1368-1378	1368	1378	10	grey monzonite	sulfide	< 2	< 0.05	0.004	9
YK06-C	1378-1388	1378	1388	10	grey monzonite	sulfide	< 2	< 0.05	0.004	5
YK06-C	1388-1398	1388	1398	10	grey monzonite	sulfide	9	< 0.05	0.005	5
YK06-C	1398-1408	1398	1408	10	grey monzonite	sulfide	< 2	< 0.05	0.003	7
YK06-C	1408-1418	1408	1418	10	grey monzonite	sulfide	< 2	< 0.05	0.005	6
YK06-C	1418-1428	1418	1428	10	grey monzonite	sulfide	9	< 0.05	0.003	13
YK06-C	1428-1436	1428	1436	8	grey monzonite	sulfide	6	< 0.05	0.003	17
YK06-C	1436-1444.5	1436	1444.5	8.5	grey monzonite	sulfide	< 2	< 0.05	0.004	11
YK06-C	1444.5-1454	1444.5	1454	9.5	grey monzonite	sulfide	< 2	< 0.05	0.005	11
YK06-C	1454-1464	1454	1464	10	grey monzonite	sulfide	< 2	< 0.05	0.005	9
YK06-C	1464-1474	1464	1474	10	grey monzonite	sulfide	< 2	< 0.05	0.007	10
YK06-C	1474-1484	1474	1484	10	grey monzonite	sulfide	< 2	< 0.05	0.006	10
YK06-C	1484-1494	1484	1494	10	grey monzonite	sulfide	< 2	< 0.05	0.005	8
YK06-C	1494-1504	1494	1504	10	grey monzonite	sulfide	< 2	< 0.05	0.003	8

YK06-C	1504-1514	1504	1514	10	grey monzonite	sulfide	**3**	**< 0.05**	**0.003**	**9**
YK06-C	1514-1524	1514	1524	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.002**	**7**
YK06-C	1524-1534	1524	1534	10	grey monzonite	sulfide	**5**	**< 0.05**	**0.008**	**8**
YK06-C	1534-1544	1534	1544	10	grey monzonite	sulfide	**5**	**< 0.05**	**0.004**	**6**
YK06-C	1544-1554	1544	1554	10	grey monzonite	sulfide	**5**	**< 0.05**	**0.006**	**8**
YK06-C	1554-1564	1554	1564	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.006**	**12**
YK06-C	1564-1574	1564	1574	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.006**	**5**
YK06-C	1574-1584	1574	1584	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.004**	**6**
YK06-C	1584-1588	1584	1588	4	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.008**	**4**
YK06-C	1588-1598	1588	1598	10	grey monzonite	sulfide	**4**	**< 0.05**	**0.007**	**6**
YK06-C	1598-1608	1598	1608	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.008**	**6**
YK06-C	1608-1618	1608	1618	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.005**	**6**
YK06-C	1618-1628	1618	1628	10	grey monzonite	sulfide	**8**	**< 0.05**	**0.006**	**5**
YK06-C	1628-1638	1628	1638	10	grey monzonite	sulfide	**15**	**< 0.05**	**0.006**	**4**
YK06-C	1638-1648	1638	1648	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.004**	**5**
YK06-C	1648-1658	1648	1658	10	grey monzonite	sulfide	**4**	**< 0.05**	**0.006**	**6**
YK06-C	1658-1668	1658	1668	10	grey monzonite	sulfide	**10**	**< 0.05**	**0.007**	**8**
YK06-C	1668-1678	1668	1678	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.008**	**4**
YK06-C	1678-1688	1678	1688	10	grey monzonite	sulfide	**8**	**< 0.05**	**0.003**	**5**
YK06-C	1688-1698	1688	1698	10	grey monzonite	sulfide	**8**	**< 0.05**	**0.005**	**7**
YK06-C	1698-1708	1698	1708	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.005**	**6**
YK06-C	1708-1718	1708	1718	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.009**	**7**
YK06-C	1718-1728	1718	1728	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.008**	**8**
YK06-C	1728-1738	1728	1738	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.004**	**7**
YK06-C	1738-1748	1738	1748	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.003**	**4**
YK06-C	1748-1758	1748	1758	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.003**	**5**
YK06-C	1758-1768	1758	1768	10	grey monzonite	sulfide	**< 2**	**< 0.05**	**0.004**	**5**
YK06-C	1768-1778	1768	1778	10	pure white quartzite + monzodiorite	sulfide	**< 2**	**< 0.05**	**0.004**	**16**
YK06-C	1778-1788	1778	1788	10	pure white quartzite + monzodiorite	sulfide	**< 2**	**< 0.05**	**0.003**	**16**
YK06-C	1788-1798	1788	1798	10	pure white quartzite + monzodiorite	sulfide	**7**	**< 0.05**	**0.004**	**9**
YK06-C	1798-1808	1798	1808	10	pure white quartzite + monzodiorite	sulfide	**< 2**	**< 0.05**	**0.002**	**8**
YK06-C	1808-1816.5	1808	1816.5	8.5	pure white quartzite + monzodiorite	sulfide	**4**	**< 0.05**	**0.005**	**9**
YK06-C	1816.5-1825	1816.5	1825	8.5	monzodiorite	sulfide	**< 2**	**< 0.05**	**0.004**	**21**
YK06-C	1825-1833	1825	1833	8	monzodiorite	sulfide	**< 2**	**< 0.05**	**0.007**	**16**
YK06-C	1833-1843.5	1833	1843.5	10.5	monzodiorite	sulfide	**6**	**< 0.05**	**0.008**	**106**
YK06-C	1843.5-1853.5	1843.5	1853.5	10	monzodiorite	sulfide	**< 2**	**0.1**	**0.022**	**9**

YK06-C	1853.5-1863.5	1853.5	1863.5	10	monzodiorite	sulfide	**< 2**	**< 0.05**	**0.022**	**9**
YK06-C	1863.5-1874	1863.5	1874	10.5	monzodiorite	sulfide	**< 2**	**0.31**	**0.013**	**6**
YK06-C	1874-1884	1874	1884	10	monzodiorite	sulfide	**< 2**	**0.05**	**0.014**	**15**
YK06-C	1884-1894	1884	1894	10	monzodiorite	sulfide	**< 2**	**< 0.05**	**0.014**	**13**
YK06-C	1894-1904.5	1894	1904.5	10.5	monzodiorite	sulfide	**< 2**	**0.14**	**0.011**	**12**
YK06-C	1904.5-1914.5	1904.5	1914.5	10	monzodiorite	sulfide	**< 2**	**< 0.05**	**0.007**	**24**
YK06-C	1914.5-1924.5	1914.5	1924.5	10	monzodiorite	sulfide	**< 2**	**< 0.05**	**0.007**	**20**
YK06-C	1924.5-1935	1924.5	1935	10.5	monzodiorite	sulfide	**< 2**	**< 0.05**	**0.006**	**7**

VANE 01-11

ITEM	Analyte	Rock Type	Alteration	Cu	Mo	Re	Au	Ag	Pb	Zn
NO.	Units			ppm	ppm	ppb	ppb	ppm	ppm	ppm
	Limit			0.1	0.1	5	5	0.1	0.1	1
	Package Code			TE-5	TE-5	TE-5	FA-01	TE-5	TE-5	TE-5
1	AV1-11 530-540	hornblende syenodiorite	chlorite (epidote) with quartz sericite pyrite overprint	27.5	2.5	9	7	0.4	15.4	61
2	AV1-11 540-550	hornblende syenodiorite	chlorite (epidote) with quartz sericite pyrite overprint	91.7	3.9	7	12	0.3	21.9	257
3	AV1-11 550-560	hornblende syenodiorite	chlorite (epidote) with quartz sericite pyrite overprint	94.8	6.1	32	9	0.3	25.4	152
4	AV1-11 560-570	hornblende syenodiorite	chlorite (epidote) with quartz sericite pyrite overprint	95.8	3.9	7	11	0.3	25.5	99
5	AV1-11 570-580	hornblende syenodiorite	chlorite (epidote) with quartz sericite pyrite overprint	337	14.8	5	16	0.3	22.1	117
6	AV1-11 580-590	hornblende syenodiorite	chlorite (epidote) with quartz sericite pyrite overprint	176	12.3	10	<5	0.3	20.1	92
7	AV1-11 590-600	hornblende syenodiorite	chlorite (epidote) with quartz sericite pyrite overprint	170	71.6	24	5	0.3	18.6	101
8	AV1-11 600-610	hornblende syenodiorite	chlorite (epidote) with quartz sericite pyrite overprint	91.9	10.7	8	<5	0.4	20.6	93
9	AV1-11 610-620	hornblende syenodiorite	chlorite (epidote) with quartz sericite pyrite overprint	36.5	10.1	7	<5	0.2	21.8	120
10	AV1-11 620-630	hornblende syenodiorite	chlorite (epidote) with quartz sericite pyrite overprint	78.3	5.8	6	8	0.3	29.1	98
11	AV1-11 630-640	hornblende syenodiorite	chlorite (epidote) with quartz sericite pyrite overprint	72.3	6.8	7	8	0.3	26.1	87
12	AV1-11 640-650	hornblende syenodiorite	chlorite (epidote) with quartz sericite pyrite overprint	288	11.5	15	94	0.4	26.8	135
13	AV1-11 650-660	hornblende syenodiorite	chlorite (epidote) with quartz sericite pyrite overprint	581	22.3	27	156	0.8	39.3	112
14	AV1-11 660-670	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	19.6	44.3	37	12	0.5	18.2	72
15	AV1-11 670-680	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	19.3	5.8	<5	<5	0.3	21	41
16	AV1-11 680-690	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	19.4	6.3	<5	9	0.2	20.2	37
17	AV1-11 690-700	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	73.8	3.1	<5	6	0.2	19.7	113
18	AV1-11 700-710	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	26.4	3.1	<5	9	0.2	16.8	57
19	AV1-11 710-720	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	21.1	0.6	<5	10	0.2	21.3	66
20	AV1-11 720-730	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	67.4	1.4	5	7	0.2	19.5	73
23	AV1-11 730-740	diabasic fine grained syenogabbro dike	minor chlorite-epidote propylitic	113	1.1	6	5	0.3	33.2	121
24	AV1-11 740-750	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	52.6	6.4	7	7	0.3	21.4	38
25	AV1-11 750-760	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	21	8.8	<5	<5	0.3	21	35

ITEM	Analyte	Rock Type	Alteration	Cu	Mo	Re	Au	Ag	Pb	Zn
26	AV1-11 760-770	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	22.3	8.6	<5	7	0.3	21.8	68
27	AV1-11 770-780	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	22.4	4.4	6	7	0.2	25.8	80
28	AV1-11 780-790	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	18.3	16.5	9	<5	0.2	26	55
29	AV1-11 790-800	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	14.4	9.1	5	<5	0.2	24.6	42
30	AV1-11 800-810	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	14.1	7.4	<5	<5	0.2	26.1	50
31	AV1-11 810-820	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	20.4	6.3	<5	8	0.2	25.1	39
32	AV1-11 820-830	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	23.5	7.4	5	9	0.2	21	57
33	AV1-11 830-840	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	24.5	8.7	8	9	0.2	22.2	43
34	AV1-11 840-850	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	16.6	22.7	20	6	0.1	23.7	46
35	AV1-11 850-860	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	12.7	7.3	7	<5	0.1	19.5	33
36	AV1-11 860-870	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	11.9	21.8	8	<5	0.1	19.2	31
37	AV1-11 870-880	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	11.1	60.6	16	<5	0.1	19.6	33
38	AV1-11 880-890	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	14.6	6.8	6	<5	0.1	20.1	44
39	AV1-11 890-900	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	10.3	23.6	5	5	0.1	20.7	40
40	AV1-11 900-910	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	16.6	19.1	10	<5	0.1	21.3	36
41	AV1-11 910-920	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	17.7	3.8	<5	10	0.5	24.3	28
42	AV1-11 920-930	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	14	6.1	8	8	0.3	19.4	34
45	AV1-11 930-940	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	19.8	6.5	<5	15	0.3	21.1	39
46	AV1-11 940-950	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	32.9	3.9	<5	10	0.2	20.9	35
47	AV1-11 950-960	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	17.9	6	5	12	0.2	19.4	32
48	AV1-11 960-970	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	16.6	3.3	<5	7	0.2	20.3	27
49	AV1-11 970-980	aplo-granite w/trace biotite	strong quartz-sericite-pyrite (hematite-[rutile])	22.8	3.3	5	10	0.2	19.3	45
50	AV1-11 980-990	mega-crystic (quartz) monzonite porphyry	biotitic alteration overprinted by quartz-sericite-pyrite	51.8	1.4	6	13	0.2	26.8	75
51	AV1-11 990-1000	mega-crystic (quartz) monzonite porphyry	biotitic alteration overprinted by quartz-sericite-pyrite	69.2	5	5	17	0.2	30.2	88
52	AV1-11 1000-1010	mega-crystic (quartz) monzonite porphyry	biotitic alteration overprinted by quartz-sericite-pyrite	264	7.8	8	64	0.2	36.7	90
53	AV1-11 1010-1020	mega-crystic (quartz) monzonite porphyry	biotitic alteration overprinted by quartz-sericite-pyrite	75.1	7.9	6	17	0.2	28	80
54	AV1-11 1020-1030	mega-crystic (quartz) monzonite porphyry	biotitic alteration overprinted by quartz-sericite-pyrite	261	8	9	44	0.3	27.2	82

ITEM	Analyte	Rock Type	Alteration	Cu	Mo	Re	Au	Ag	Pb	Zn
55	AV1-11 1030-1040	mega-crystic (quartz) monzonite porphyry	biotitic alteration overprinted by quartz-sericite-pyrite	22.3	4.5	6	18	0.2	25.7	85
56	AV1-11 1040-1050	mega-crystic (quartz) monzonite porphyry	biotitic alteration overprinted by quartz-sericite-pyrite	27.8	1.7	<5	10	0.2	27.5	83
57	AV1-11 1050-1060	mega-crystic (quartz) monzonite porphyry	biotitic alteration overprinted by quartz-sericite-pyrite	32.5	1.7	<5	13	0.2	26.8	100
58	AV1-11 1060-1070	mega-crystic (quartz) monzonite porphyry	biotitic alteration overprinted by quartz-sericite-pyrite	129	1.4	<5	9	0.2	24.7	113
59	AV1-11 1070-1080	mega-crystic (quartz) monzonite porphyry	biotitic alteration overprinted by quartz-sericite-pyrite	39	2	6	14	0.2	24.5	79
60	AV1-11 1080-1090	sheared diopside skarn	diopside hornfels	349	11.4	16	24	0.1	7.7	156
61	AV1-11 1090-1100	mega-crystic (quartz) monzonite porphyry	biotitic alteration	372	163	81	24	0.6	12	80
62	AV1-11 1100-1110	mega-crystic (quartz) monzonite porphyry	biotitic alteration	500	158	77	38	0.4	17.4	62
63	AV1-11 1110-1120	mega-crystic (quartz) monzonite porphyry	biotitic alteration	530	175	86	62	0.4	20.5	55
64	AV1-11 1120-1130	zoned magnesian skarn	brecciated diopside hornfels	547	212	115	65	0.6	43.1	112
67	AV1-11 1130-1140	zoned magnesian skarn	diopside hornfels with strong Mo-anhydrite veining	867	1070	1001	40	0.4	20.3	53
68	AV1-11 1140-1150	zoned magnesian skarn	diopside hornfels with strong Mo-anhydrite veining	919	1000	1001	45	0.4	29.1	69
69	AV1-11 1150-1160	zoned magnesian skarn	garnetite (mainly andradite)	1640	44.9	30	135	0.8	6.6	195
70	AV1-11 1160-1170	zoned magnesian skarn	diopside hornfels with magnetite	830	52.5	44	47	0.7	11.6	278
71	AV1-11 1170-1180	zoned magnesian skarn	diopside hornfels with magnetite	636	60.1	66	22	0.5	12.1	173
72	AV1-11 1180-1189	zoned magnesian skarn	andradite garnet-chalcopyrite-magnetite (fluorite)	1800	172	147	68	0.8	10.5	108
	AV1-11 1189.5-1190	zoned magnesian skarn	andradite garnet-chalcopyrite-magnetite (fluorite)	18600	363	370	220	18.6	4.5	360
73	AV1-11 1190-1200	zoned magnesian skarn	andradite-grossular garnet-chalcopyrite-magnetite (fluorite)	3170	53.2	31	141	2.9	10.6	140
74	AV1-11 1200-1210	zoned magnesian skarn	andradite garnet-chalcopyrite-magnetite (fluorite)-diopsidic (?) marble	1240	26.6	17	145	1.4	10.5	197
75	AV1-11 1210-1220	zoned magnesian skarn	marble (andradite-magnetite)	929	204	177	43	0.8	8.4	126
76	AV1-11 1220-1230	zoned magnesian skarn	marble with local magnetite bands	738	106	88	34	0.4	12.4	146
77	AV1-11 1230-1240	zoned magnesian skarn	verde antique calcite marble with local magnetite bands	759	97.1	80	53	0.5	8	146
78	AV1-11 1240-1250	zoned magnesian skarn	verde antique calcite marble with local magnetite bands	704	68	67	32	0.4	8.8	147
79	AV1-11 1250-1260	zoned magnesian skarn	verde antique calcite marble with local magnetite bands	410	14.9	15	22	0.3	21.9	179
80	AV1-11 1260-1270	zoned magnesian skarn	verde antique calcite marble with local magnetite bands	400	35.1	28	17	0.3	33.4	213

ITEM	Analyte	Rock Type	Alteration	Cu	Mo	Re	Au	Ag	Pb	Zn
81	AV1-11 1270-1280	zoned magnesian skarn	verde antique calcite marble with local magnetite bands	529	51.3	54	13	0.7	12.3	339
82	AV1-11 1280-1290	zoned magnesian skarn	grossular garnet-magnetite (minor marble)	990	63.2	51	304	1.3	9.9	569
83	AV1-11 1290-1300	sheared volcaniclastics	chlorite (epidote) with quartz-pyrite lenticular veins	195	13.5	11	117	0.5	20.2	366
84	AV1-11 1300-1310	sheared volcaniclastics	chlorite (epidote) with quartz-pyrite lenticular veins	39.8	1.6	<5	<5	0.2	22.4	90
85	AV1-11 1310-1320	sheared volcaniclastics	chlorite (epidote) with quartz-pyrite lenticular veins	64.8	0.9	<5	<5	0.2	16.6	122
86	AV1-11 1320-1330	sheared volcaniclastics	chlorite (epidote) with quartz-pyrite lenticular veins	45	0.5	5	<5	0.1	17.8	91