



CONTACT INFORMATION

Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
<http://www.azgs.az.gov>
inquiries@azgs.az.gov

The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

CHILDS-ALDWINKLE MINE

PINAL COUNTY

Mine visit to Childs-Aldwinkle mine - Met loaded truck. No one at mine just hauling ore to mill. No activity east or south of here. GWI WR 6-26-65

Information from Mrs. Burney - Childs-Aldwinkle mine - not active. May give up lease. Will probably do experimental work on dumps from Indiana Arizona mine for Western Minerals Corporation - Mr. William Knox, Pres. of St. Louis, Missouri. If work turns out okay will truck ore from Indiana Arizona near Silver Bell to Burney mill at Mammoth. GWI WR & note 9-20-65

Mine visit to Childs-Aldwinkle mine - Closed. Magma drilling area. GWI WR 4-1-67

Mine visit to Childs-Aldwinkle mine - no activity. GWI WR 6-30-68

No apparent activity at Newmont's Copper Creek project. GWI QR 10-1-70

Very little activity noted in Copper Creek by Newmont. GWI QR 4-1-71

Bill Burney reports that his uncle, Bob Burney, died during the last Christmas season. Bob was active in mining around Copper Creek, was former operator of the Childs-Aldwinkle mine and a small flotation mill at Mammoth. GWI WR 11/24/75

References: Mining World, June 1962, p. 27-29
" " Dec. " p. 36

CHILDS-ALDWINKLE MINE

PINAL COUNTY

Field interview with Bob Burney, P. O. Box 364, Oracle - re operations at the Childs-Aldwinkle Mine and the Burney Mill. Mr. Burney obtained another lease on the Childs-Aldwinkle, and started operating the mine, and milling the ore at the mill about Feb. 1, 1964.

ALJ WR 3/30/64

AMT INTERNATIONAL MINING CORPORATION

TSE:AAI

NEWS RELEASE

AMT Announces Results of Recent Drill Program

(Toronto, Ontario, November 24, 1999) AMT International Mining Corporation is pleased to announce the results of its recently completed drilling program at its Copper Creek property located in Pinal County in southern Arizona, USA. The program commenced on June 1, 1999 and was completed on October 29, 1999. A total of 26,886 feet of core drilling was completed in 12 holes that explored two of the Company's primary targets. The two targets are known as the Mammoth-Keel Zone and the American Eagle Breccia.

Mammoth-Keel Zone

The Mammoth-Keel Zone target lies sub-vertically below the Mammoth Breccia deposit, which is part of AMT's current ore reserves. The Mammoth-Keel Zone is interpreted to be a high grade copper-molybdenum feeder zone within a larger shell of lower grade, porphyry-related copper (\pm molybdenum) mineralization. The high grade mineralization is localized within brecciated hangingwall contacts between granodiorite and southeasterly-plunging, tongue-shaped porphyry dikes.

The results from the eight drill holes for 19,539 feet (LM-1 through LM-8) at the Mammoth-Keel Zone are as follows:

Mammoth/Keel Zone Drilling Program

Drill Intercepts				
Drill Hole	Interval (footage)	Length (feet)	Avg. Cu%	Avg. Mo%
LM-1	1,730 to 2,360	630'	1.00%	0.031%
includes	1,760 to 1,890	130'	1.81%	0.021%
Also includes	2,160 to 2,250	90'	1.12%	0.133%
LM-2	1,800 to 2,600	800'	0.95%	0.029%
includes	1,800 to 1,940	140'	1.01%	0.011%
also includes	2,250 to 2,400	150'	2.02%	0.111%
LM-3	1,860 to 1,920	60'	1.02%	0.008%
	2,240 to 2,340	100'	1.20%	0.036%
includes	2,240 to 2,200	40'	1.93%	0.080%
LM-4	1,990 to 2,060	70'	1.30%	0.021%
LM-5	No significant interval		No assays	No assays
LM-6	2,070 to 2,140	70'	1.02%	0.014%
LM-7	No significant interval		No assays	No assays
LM-8	1,790 to 2,980	1,190'	0.77%	0.018%
includes	2,390 to 2,550	160'	1.67%	0.053%
also includes	2,410 to 2,510	100'	2.25%	0.069%

Also, as anticipated, the recent drilling intersected high grade copper mineralization within the Mammoth Breccia in all eight holes. The results from these intercepts will be used to update the grade model when all assays have been received.

An additional hole (UM-1) was drilled to test the possible upward continuity of the mineralization. This hole was terminated at 743.5 feet. The hole did not encounter breccia and was barren of mineralization.

American Eagle Breccia

The American Eagle Breccia area is located approximately 2,500 feet south-east of the Mammoth Breccia deposit. The current target is situated above the American Eagle porphyry copper deposit which is carried in AMT's resource inventory.

The results from the three drill holes aggregating 5,603.5 feet (AE-1 through AE-3) at the American Eagle Breccia are as follows:

American Eagle Breccia Drilling Program

Drill Intercepts				
Drill Hole	Interval (footage)	Length (feet)	Avg. Cu%	Avg. Mo%
AE-1	670 to 720	50'	0.94%	0.022%
	880 to 970	90'	0.84%	0.015%
AE-2	900 to 980	80'	0.63%	0.199%
AE-3	No significant interval		No assays	No assays

Drill holes AE-1 and AE-2 intersected mineralized breccia containing copper and molybdenum. This program demonstrated that breccia mineralization in the American Eagle Breccia target has depth continuity of at least one thousand feet.

Major Environmental Permit Granted

AMT has been advised by the Arizona Department of Environmental Quality (ADEQ) that it has ended the statutory 30 day public comment period for the Aquifer Protection Permit (APP) which is necessary prior to the construction of AMT's Ryland decline. The ADEQ received no public comments and advised AMT that they intend to sign and issue the APP during the next few weeks.

This permit is the essential permit required prior to starting construction and AMT is pleased that ADEQ is in agreement that AMT's proposed plan is protective of the environment.

New Appointments

AMT International's Board of Directors is pleased to announce the following new appointments:

Peter A. Crossgrove	- Chairman and CEO
John W. W. Hick	- President
Richard Neal	- Director

For further information, contact:

Mani Verma
Executive Vice President
Telephone: (520)544-8815, Ext. 28
Fax: (520)544-8507

pr99-9

Arizona Department of Mines and Mineral Resources

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA

MM-4854 Molybdenite

PINAL, CO.

and Bornite

COPPER CREEK (Childs and Aldwinckle Claim)

MM 4853 Bornite
4852 Molybdenite
4851 Molybdenite
4850 Molybdenite

MILS # 5483

6-AKA's

Childs Aldwinckle (f.c.)

VERBAL INFORMATION SUMMARY

MINE: CHILDS ALDWINKLE

DATE: January 29, 1988

ENGINEER: Nyal Niemuth

Don Hausen of Newmont Mining gave a presentation to the Annual SME meeting January 24 - 28, 1988 on the alteration studies of the American Eagle Breccias of the Copper Creek area, Pinal County. (Copper Creek Project - file; Childs Aldwinkle - file; Old Reliable - file; Copper Prince - file; all in Pinal County) The presentation has been briefly summarized below.

This deposit, located in the western slopes of the Galiaro Mountains, has surface showings that consist of spotty high grade deposits such as the Childs Aldwinkle, the Copper Prince, the Copper Giant and Old Reliable, etc. which formed as a result of escaping fluids from the evolving porphyritic magma. Identified by deep drilling and geophysics the 64-68 million year old intrusive is overlain by Galiuro Volcanics. E/NE trending shear zones and N/NW trending dikes and breccia pipes control distribution of the copper mineralization. The porphyry was identified and drilled due to the copper associated with the pipes. They have a resource identified at greater than 2000' deep. Analysis of the cuttings indicate that feldspar lows identified by XRD are good indication of the alteration. The orebody consists of inward trending concentric shells of chalcopyrite, chalcopyrite/bornite, and chalcopyrite/molybdenite. Local geology has resulted in the oxidation depths varying greatly with permeability. Occupying the center of the breccia pipe area, the Childs Aldwinkle deposit contains much molybdenum.

AMT (USA) INC.

7400 N. Oracle Road, Suite 343

Tucson, Az. 85704

Phone: (520)544-8815 Fax: (520)544-8507

FAX COVER SHEET

TO:

MASON LOGGIN

DATE:

10/23/97ARIZONA DEPT. OF

TIME:

1:00pmMINES & MINERALRESOURCES (PHOENIX)

FAX #:

(602) 255-3777

FROM:

CHRISTINE HAMILTON

TOTAL #

OF PAGES:

4X 32

MESSAGE:

AMT INTERNATIONAL MINING CORPORATION

TSE:AAI

NEWS RELEASE

AMT ANNOUNCES COMPLETION OF FEASIBILITY STUDY

(October 16, 1997 - Toronto, Ontario) AMT International Mining Corporation (AMT) has completed a positive feasibility study with respect to the development of Phase I of the Copper Creek copper deposits located approximately 45 miles northeast of Tucson, Arizona. A copy of this feasibility study has been delivered to BHP Copper (BHP) for review, which, when approved by BHP, together with BIIP's acceptance of expenditures of more than the required US\$3.0 million on the BIIP portion of the property, fulfills AMT's commitment to earn a 50% joint venture ownership interest in BHP's Copper Creek properties.

The Copper Creek Project is comprised of five contiguous properties covering approximately 6,000 acres. These properties include the joint venture property with BHP, a joint venture property with Phelps-Dodge Corporation, a 100% AMT-owned staked federal claims property, a purchase option on a 780 acre homestead ranch property and a prospecting permit on state lands.

Phase I of the Copper Creek project involves the open-pit mining of the Old Reliable surface leachable deposit and the underground mining of the shallow sulfide ores of the Childs-Aldwinkle and the Creek breccia deposits. The surface leachable ore will be heap leached and processed at an SX-EW plant to be constructed by AMT on its ranch property. The shallow sulfides will be mined using blast hole stoping methods and the ore pre-concentrated by means of heavy media separation and thereafter treated by a flotation plant to be constructed at AMT's ranch property.

The Phase I feasibility study, which is based on total mineable reserves of 11.4 million tons averaging 1.3% total copper (2.9 million tons of leachable reserves at 0.93% total copper and 8.5 million tons of sulfide reserves at 1.42% total copper) and is derived from information obtained from over 100 drill holes, confirmed positive economics at a production rate of 2,000 tons per day of leachable material and 5,000 tons per day of underground sulfides for an average annual production rate of 55 million pounds of copper at cash costs of approximately US\$0.54 per pound (all costs except financing). The total estimated pre-production capital cost of placing the Phase I shallow sulfide reserves into production is US\$40 million. The capital cost of placing the leachable reserves into production is estimated at US\$12 million, which amount is expected to be funded from future cash flow.

Phase II of the project involves the delineation of further leachable reserves on the total 6,000 acre property as well as increasing sulfide production to approximately 10,000 tons per day, resulting in 100 million pounds of annual copper production.

Phase III involves the continued exploration and development of known and indicated large hybrid porphyry copper systems, commencing at a depth of approximately 2,000 feet below the surface. Exploration, including 44 diamond drill holes completed to date, suggests the presence of multiple large tonnage hybrid porphyry copper systems on the Copper Creek property having the potential for copper grades averaging in excess of 0.9%, not including credits for contained molybdenum, gold and silver. The mineral resource delineated by AMT to date is 301 million tons at 0.75% copper grade. This includes 80 million tons in the indicated category, and 221 million tons in the inferred resource category, as defined in the Australasian Code. Pre-feasibility engineering has been carried out using 60% of these geological resources at 0.9% copper grade to produce over 200 millions lbs. of copper per year.

The Phase I feasibility study has been completed to industry standards for reserves, plant, infrastructure and mine design as well as economic evaluation with the assistance and review of independent consulting firms including: The Winters Company (permitting,

flotation plant design, environmental issues and economic evaluation); Western States Engineering (engineering design and cost estimation for the heavy media separation plant and the leaching project); Mountain States R&D International (metallurgical testing and flow sheets); Cella Barr Associates (roads, water and power); BLM Engineering (mine planning) and Golder Associates (rock mechanics). The feasibility results were then reviewed and audited by The Winters Company as to mineral resources and ore reserves and Behre Dolbear & Company Inc. as to mining, infrastructure and processing.

The Phase I feasibility study is currently being reviewed with BHP and financing alternatives for its implementation are under consideration.

For further information, contact:

Dr. Kushal Singh, President (ext. 1)
or W. Glen Zinn, Chief Operating Officer (ext. 2)
Telephone: (520) 544-8815
Fax: (520) 544-8507
e-mail: amt1@primenet.com

Forbes West, Investor Relations
Telephone: (416) 868-6666

AMT website: www.primenet.com/~amt1/

pr97-11

DEPARTMENT OF MINERAL RESOURCES

**STATE OF ARIZONA
FIELD ENGINEERS REPORT**

Mine Childs-Aldwinkle Mine Date Jan. 28, 1965
District Bunker Hill District - Pinal County Engineer Axel L. Johnson
Subject: Field Engineer's report. Information from R. A. (Bob) Burney.

References: Report of June 25, 1964 and previous reports.

Present Mining Activity: Mining ore by underground stoping, hauling the ore to Mammoth, a distance of about 12 miles, and milling same at the Burney mill in Mammoth. 4 men are working, alternating their work between the mine and the mill - mining 4 days and milling the rest of the time. Production is variable and may average about 50 to 65 tons per week.

A new stope was opened up about 30 ft. below the main adit by drifting west from the main shaft a distance of about 30 ft. Square setting is being used.

No ore sorting is necessary of the ore from this stope.

Ore Values: Ore reported to run 1 to 1.5% copper and about 2% molybdenum.

Ore in Sight: About 300 tons of ore is available from this stope. After this is mined out, exploration and development work will have to be done on the next orebody.

Review of Recent Operations: Since last report of June 25, 1964:

(1) Stopping was done above the main adit level with ore sorting at the ore bin from date of report to Jan. 1, 1965.

(2) Stopping from the new stope, 30 ft. below the main adit level from Jan. 1, 1965 to date.

Milling & Marketing: See report of Burney Mill under date of Jan. 28, 1965.

Phoenix, Arizona

- (Field Engineer)

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Copper Creek Project - Magma Copper Co. Date June 29, 1967
District Copper Creek or Bunker Hill - Pinal Co. Engineer G. W. Irvin
Subject: Mine visit by field engineer

Information from H. Steele of Magma

The Magma Co. is reported to have optioned most of the mining property at Copper Creek, including the Old Reliable, Childs-Aldwinkle and others.

On a visit March 30 to the area by the engineer one drill was operating. This was located south of the Childs-Aldwinkle near the top of the ridge.

On the June 29 visit, the Joy driller was working in the area reported that they had three drills operating.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Childs-Aldwinkle Mine

Date June 25, 1964

District Bunker Hill District

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from R. A. (Bob) Burney.

References Report of March 26, 1964 and previous reports.

Present Mining Activity Mining ore by underground stoping, hauling the ore to Mammoth, and milling same at the Burney mill at Mammoth. 6 men are now working, alternating their work between the mine and the mill --- mining 4 days and milling the rest of the time. The stoping is being done above the main tunnel level, the ore being trammed out this level and dumped in the ore bin. Two ore sorters are stationed at the ore bin, sorting the ore as it is dumped into the bin. Production -- 100 tons/week.

Ore Values Mr. Burney now reports that the ore shipped to the mill averages 2.5 % to 3.0 % copper; 1.0 to 1.5 oz. silver; and about \$ 1.00 per ton in gold. There is not enough molybdenum to attempt a molybdenum recovery.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Childs-Aldwinkle Mine

Date March 26, 1964

District Bunker Hill District, Pinal Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report - Information from R. A. (Bob) Burney.

References: Report of Jan. 31, 1963, Aug. 30, 1962 & previous reports.

Owner: I.W. Bonbright, New York City

Lessee: R.A. (Bob) Burney, Box 364, Oracle. This is a 10 year lease - Jan. 7, 1964 to Jan. 7, 1974, if the Bear Creek Mining Co. does not exercise their option to purchase the property; or a 1 year lease - Jan. 7, 1964 to Jan. 7, 1965 if the Bear Creek Mining Co. exercise their option to purchase.

Number of Claims: 8 patented claims, one being a fraction.

Principal Minerals: Copper.

Present Mining Activity: Mining ore by underground stoping, hauling the ore to Mammoth, and milling same at the Burney mill at Mammoth. 4 men working, alternating their work between the mine and the mill - mining 4 days & milling 3 days. Production about 60 tons per week.

Ore Values: Mr. Burney reports that the copper runs from 3 to 3½%. The ore produced at present contains no molybdenum.

Milling: Milling the ore at the Burney mill in Mammoth.

Review of Operations: The same crew of 4 men works the mine for 4 days, and then operates the mill for 3 days. The mining was started on Feb. 1, 1964 and milling on Feb. 16, 1964.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Childs-Aldwinkle Mine

Date March 26, 1964 & April 20, 1964

District Bunker Hill District, Pinal Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from R.A. Burney on Mar. 26, 1964
" " Jackson Clark, Bear Creek on April 20, 1964

References: Report of Oct. 8, 1963

Owner: I.W. Bonbright, New York City - 8 patented claims
Bear Creek Mining Co. - about 25 to 30 unpatented claims adjoining the
patented group, located recently.

Option to Purchase: Bear Creek Mining Co., 2601 N. 1st Ave., Tucson. This option has a provision whereby R.A. (Bob) Burney, Box 364, Oracle retains a one year lease from I.W. Bonbright to operate the property (from Jan. 7, 1964 to Jan. 7, 1965).

Present Activity: Diamond drilling on contract to Boyles Bros., with one diamond drill working 2 shifts.

Diamond drilling was started about Mar. 16, 1964 and they are still drilling on the first hole. This presumably is a deep hole to map the structure.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Childs-Aldwinkle Mine Date Oct. 8, 1963
District Bunker Hill District, Pinal Co. Engineer Axel L. Hohnson
Subject: Field Engineers Report. Information from Jackson Clark, Bear Creek Mining Co.

References Report of Jan. 31, 1963, and August 30, 1962

Location Approx. Sec. 11, T 8 S, R 18 E. About 12 miles east of Mammoth.

Owner I. W. Bonbright, New York City.

Option to Purchase Bear Creek Mining Co., 2601 N. 1st Ave., Tucson
The previous lease to D. M. B. D. Mining Co. expired last July.
After the expiration of this lease, in July, 1963), Bear Creek Mining Co. obtained an option on the property.

Number of Claims 8 patented claims, of which one is a fraction.

Principal Minerals Copper ore

Present Activity None. Bear Creek Mining Co. has no funds appropriated for exploration work this year.

Proposed Plans Bear Creek Mining Co. expects to do diamond drilling and other exploration work on the property in 1964. At the same time, they will do diamond drilling and other exploration work on 20 claims which the company owns adjoining the Childs-Aldwinkle.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Childs-Aldwinkle Mine Date Jan. 31, 1963
District Bunker Hill District, Pinal Co. Engineer Axel L. Johnson.
Subject: Field Engineers Report. Information from Tex Schumake, Box 667, Mammoth.

References Report of Aug. 30, 1962 and previous reports.

Present Mining Activity None. Mine is closed down. Both the mine and the Burney Mill at Mammoth have now been closed down for about 2 months. Mr. Schumake reported that lack of funds and disagreement between the owners of the company were responsible for the closing of the mine and mill.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Childs-Aldwinkle Mine

Date Sept. 28, 1961 & Oct. 11, 1961

District Bunker Hill District, Pinal Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from R. A. (Bob) Burney.

References Report of June 14, 1961 and previous reports.

Present Mining Activity Stoping ore in shrinkage stopes above the main adit. 6 men working. Mine works 2 shifts, 5 days per week. Production is about 35 tons per day. Mine Foreman is Felix Vargas. (Former foreman, Frank Ellsworth deceased Sept. 17)

Ore Values Mr. Burney reports that the ore mined runs from 3 to 4 % in copper and from 0.40 to 0.75 % in molybdenum.

Milling and Marketing The ore mined is hauled by truck to the company's mill in Mammoth for milling. The concentrates are hauled by truck to the A. S. & R. smelter in Hayden, except for the molybdenum concentrates, which will be shipped to San Francisco.

Review of Operations Two stopes are being worked, both of these stopes being above the main adit (300 ft. level). One of the stopes is about 50 ft. above the adit, and the other stope is about 75 ft. above the adit. The shrinkage stope system is being used in both stopes. The ore deposits are breccia pipes, the top parts of which are mined out, and the bottom parts extending a considerable distance below the main adit (300 ft. level). Operators expect to increase the mine production to about 40 tons per day shortly, which is approximately the capacity of the Mammoth mill. The ore removed from the shrinkage stopes is hauled by truck to the Mammoth mill, a distance of about 10 1/2 miles. Two trucks are used for this purpose --- one a 10 ton truck and the other a 7 ton.

Proposed Plans Operators plan to dewater the main shaft, extending down from the adit level (300 ft. level) in order to start mining operations from the 980 ft. level (680 ft. below the adit level). Mr. Burney stated that they expect to start pumping next week. The water in the shaft is now 300 ft. below the adit level, and he estimates it will take 2 or 3 months to get the shaft dewatered below the 980 ft. level.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Childs-Aldwinkle Mine

Date June 14, 1961

District Bunker Hill District, Pinal Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from R. A. (Bob) Burney

References: Report of Oct. 8, 1959 & previous reports.

Owner: I.W. Bonbright, New York City

Lessees: D.M.B. D. Mining Co., Inc., P.O. Box 364, Oracle, Ariz.

Owners of the company are: R.A. (Bob) Burney, Box 364, Oracle - President
John Dockey, Vice President
Barry DeRose, 102 S. Broad St., Globe, Secretary
Lee Miller, Treas.

Principal Minerals: Copper and molybdenum

Present Mining Activity: Stopping ore in shrinkage stope. 3 men working.

Ore Values: Mr. Burney reports that the copper runs from 3.0 to 5.0%, with from 0.31% to 1.25% of molybdenum sulphide.

Milling & Marketing: The D.M.B.D. Mining Co. is now constructing a mill near Mammoth for concentrating the ore from the Childs-Aldwinkle. The ore will be milled by selective flotation, with a molybdenum circuit. See separate report on "Burney Mill."

Review of Recent Operations: Operators are stopping out an ore body above the old main adit, the shrinkage stope system being used. The ore lens starts at about 32 ft. above the adit, extending upward, and is from 6 to 10 ft. wide. The stope mined out is now 70 ft. long, 6 to 10 ft. wide, and 25 ft. high (32' to 57' above the adit). Two raises, 50 ft. & 70 ft. high were put up from the old adit prior to stopping operations. A connection has also been made with an old stope to provide ventilation. Mr. Burney reports that they have 1,500 to 2,000 tons of broken ore in the shrinkage stope. In addition, 50 tons of ore were hauled to the mill at Mammoth to fill the ore bin at the mill. Frank Ellsworth is the foreman in charge of the mining operations. Mr. Ellsworth lives at the camp near the mine.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Childs-Aldwinkle Mine

Date Oct. 8, 1959

District Bunker Hill District, Pinal Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from R. A. (Bob) Burney. No Mine Visit.

References Report of Jan. 17, 1958 & previous reports.

Location About Sec. 11 -- T 8 S. -- R 18 E.

Owner I. W. Bonbright, New York City.

Lessees & Operators R. A. (Bob) Burney, Box 364, Oracle, Ariz.
Barry D. Rose, atty, 102 S. Broad St., Globe, Ariz (P. O. Box 512)

Principal Minerals Copper, with some molybdenum.

Present Mining Activity Repairing roads and repairing mine tracks. 2 men working.
Started working on July 15.

Proposed Plans Operators plan to install pumps soon for dewatering the shaft.
Mr. Burney estimates it will take from 1 1/2 to 2 months to dewater the shaft.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine : Childs-Aldwinkle Mine

Date August 30, 1962

District Bunker Hill District, Pinal Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from Lee Miller.

References: Report of February 14, 1962 and previous reports.

Officers: Mr. Miller informed the field engineer that Art Hendrickson of Tucson, Arizona is now the general manager of the mine and mill. Mr. Hendrickson is a member of Brittain & Hendrickson Mining Co., 891 East Alta Vista, Tucson, Arizona. Mr. Hendrickson's local address is Box 97, Mammoth, Arizona.

Present Mining Activities: Working an open pit near the Childs-Aldwinkle shaft. Pit is being worked 1 shift, 5 days per week. 4 men working - 2 men in the open pit and 2 truck drivers.

Production: 50-55 tons ore per day.

Ore Values: The ore is reported to run from 1.25% to 1.50% copper, and from 0.02 to 0.04% molybdenum.

Review of Operations: Open pit operations were started on July 1st, after 1 mile of road was constructed for access to the open pit.

Mr. Miller reported that the ore in the open pit at the present time does not require any blasting. The ore is excavated with an end loader loading directly to trucks which transport the ore to the Burney mill in Mammoth.

Mr. Miller stated that the open pit operations were started in order to cut down on mining costs. However, he stated that when this decision was made it was expected that the open pit ore would be of somewhat higher grade. Now the company is considering reverting to underground on account of the low grade of open pit ore. However, he stated that they might ultimately decide to obtain about 50% from underground and 50% from open pit operations and mix the ore about half and half for mill feed.

The engineer did not visit the open pit but Mr. Miller described it as being a narrow cut into the mountain, now about 150 ft. deep, and stated that the orebody is only about 25 ft. in width.

He also stated that some ore had been taken out of this pit a number of years ago.

Mining World 12/62

See: MINING WORLD, Dec. 1962, p 36

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Childs-Aldwinkle Mine

Date Feb. 14, 1962

District Bunker Hill District, Pinal Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from R. A. (Bob) Burney

References Report of Sept. 28-Oct. 11, 1961 and previous reports.

Location Approx. Sec. 11 - T 8 S - R 18 E. About 12 miles E of Mammoth

Number of Claims 8 patented claims of which one is a fraction.

Owner I. W. Bonbright, New York City.

Lessees & Operators D. M. B. D. Mining Co., P. O. Box 364, Oracle, Ariz.

R. A. (Bob) Burney, Box 364, Oracle, President

John Dockey, Vice President

Barry DeRose, 102 S. Broad St., Globe, Ariz. --- Secretary

Lee Miller, Treasurer.

Above company is reported to have a lease with option to purchase at \$ 300,000

Principal Minerals Copper and molybdenum

Present Mining Activity Stoping ore from 2 shrinkage stopes above the main adit. 6 men working, one shift, 5 days per week. Production about 25 tons per day. R. A. (Bob) Burney is the foreman for the mining operations.

Ore Values Ore mined runs from 3 to 4 % in copper and from 0.40 to 0.75 % in molybdenum

Milling & Marketing The ore is hauled by truck to the company's mill in Mammoth for milling (See report of Burney Mill). One-- 7 ton truck is used for this purpose. The ~~mineral~~ copper concentrates are hauled by truck to the A. S. & R. smelter at Hayden, and the molybdenum concentrates are shipped to Fred H. Lenway, 100 California St., San Francisco.

Review of Operations Operations are the same as described in the Sept. 28 - Oct. 11, 1961 report. Mr. Burney reports limited working conditions at the mine prevents more production.

Proposed Plans Same as Sept. 28 - Oct. 11, 1961 report, except that pumping out the water in the main shaft will not start before shortly after March 1st.

Additional Mr. Burney reports that Bear Creek Mining Co. is negotiating for an option to purchase the property.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Childs-Aldwinkle Mine

Date Jan. 17, 1958

District Bunker Hill District ----- Pinal Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Personal Visit & Information from R. A. Burney, Supt.

References Report of May 24, 1957.

Location About Sec. 11 -- T 8 S -- R 18 E. About 12 miles E of Mammoth, Ariz.

Owner I. W. Bonbright, New York City.

Option to Purchase Copper Creek Mines, Inc., W. C. Rigg, et. al., Suite 823,
250 Park Ave. New York City. ----- local address Box 415, Mammoth, Ariz.

✓ R. A. Burney, Superintendent, P. O. Box 64, Oracle, Ariz.

Principal Minerals Copper ores, with some molybdenum. No molybdenum mined now.

Present Mining Activity Stoping ore and milling same at the Old Reliable mill.
16 men employed at the mine, and 4 men at the mill.----- total of 20 men. 3 shifts worked.
Production about 100 tons per day.

Geology & Mineralization See Arizona Bureau of Mines Bull. # 145-- pp. 127--130, & map,
by T. H. Kuhn.

Ore Values Average of ore mined not published by operators. Ore is milling grade,
milled at the Old Reliable mill. It is all sulphides, mostly bornite and chalcocite.

Milling & Marketing Facilities The Old Reliable Mill near the Old Reliable Mine is
used for milling the ore produced. This mill is leased on a monthly rental basis from
the Siskon Corp., Box 889, Reno, Nev., as that corporation has suspended indefinitely
exploration work on the Old Reliable and adjoining properties. Mill is run 2 shifts.
4 men are employed at the milling operations. (See ~~report~~ report of the Old
Reliable Mine ----- July 19 and Aug. 31, 1954 by field engineer, for a description of
the mill and mill equipment.)

Past History & Production See report of May 24, 1957.

Mine Workings See report of May 24, 1957.

Present Mining Operations Mining ore from a shrinkage stope above the 680 ft. level
(the lowest level of the mine). Ore is bornite and chalcocite and all sulphides.
No molybdenum is found at that particular locality. About 100 tons of ore is produced
per day, working 3 shifts. The ore is hauled by truck to the Old Reliable mill for
milling. The mill has a capacity of 7 to 8 tons per hour. Milling operations are
continued on two shifts.

Proposed Plans Diamond drilling will be started next Monday, Jan. 20, a contract having
been made with the Metlet Bros. Drilling Co. for this drilling. The drilling will be
done from the 680 ft. level, drilling down an additional 200 ft. to explore for copper
ore deposits below the 680 ft. level of the mine.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Not for Publication

Mine Childs-Aldwinkle Mine

Date May 24, 1957

District Bunker Hill District ---- Pinal Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Personal Visit & Information from Bob Byrne, Foreman.

Location About Sec. 11 -- T 8 S -- R 18 E. About 12 miles E. of Mammoth, Ariz.

Owner I. W. Bonbright, New York City.

Option to Purchase Copper Creek Mines, Inc.,
W. C. Rigg, et. al., Suite # 823, 250 Park Ave., New York City.

Representative of Purchasers B. H. (Bill) Martin, 711 Sixth St., Tucson, Ariz.
Bob Byrne, Mine Foreman.
Byrne

Principal Minerals Copper ore with some molybdenum.

Present Mining Activity Exploration and development. No ore production.
12 men working. 3 shifts worked, 4 men on each shift.

Geology Country rock is granite diorite. More information on the Geology to be submitted later.

Ore Values According to Bob *Byrne*, Mine Foreman, the diamond drill holes show an average of 4 1/2 % copper, with some molybdenum.

Ore in Sight & Probable Not determined as yet.

Milling & Marketing Facilities No milling facilities at present. Operators plan to develop enough ore to warrant the construction of a mill.

Past History Considerable past production prior to 1930.

Work done by the present operators has been as follows:

- (1) Work started about June 5, 1956.
- (2) Repairing and laying track and pipes in the main adit, about 300 ft. long.
- (3) Repairing and dewatering the 500 ft. vertical winze in the main adit.
- (4) Sinking the 500 ft. vertical winze an additional 180 ft. down to 680 ft. depth.
- (5) Drifting on the 680 ft. level ~~222x~~ 52 of drift and 75 ft. of cross cut.
- (6) A considerable amount of diamond drilling from the underground levels of the mine.

Mine Workings (1) One main ~~adit~~ adit ---- 300 ft. long.
(2) One main winze ----- 680 ft. deep.
(3) 52 ft. of drift and a 75 ft. cross cut on the 680 ft. level.
(4) A number of worked out stopes on the upper levels of the mine.

Present Mining Operations

Operators are, at present driving a cross cut on the 680 ft. level. This cross cut is in 75 ft. now, and headed for a drill hole with 85 ft. more to go.

Proposed Plans Operators plan to develop enough ore reserves to warrant the construction of a mill.

CHILDS-ALDWINKLE MINE

PINAL COUNTY

10-15-58⁵⁹
FPK

According to R. A. Burney the mine not only is closed but the equipment has been disposed of.

Burney said he considered it worth looking into when copper price gets back around 30¢, and that the size of the pipe is about 110' x 120' averaging $2\frac{1}{2}\%$ +. The inner 25' x 60' + runs about 3% and between it and the outside is about $\frac{1}{2}\%$.

$$110' \times 120' = 13,200 \text{ sq. ft} \times 2\frac{1}{2} = 33,000$$

$$25 \times 60 = 1,500 \times 3 = 4,500$$
$$11,700 \times \frac{1}{2} = \underline{5,850} \qquad 10,350$$

$$13,200 \times .8 = \qquad 10,560$$

Figures do not agree.

Information from MINE INSPECTOR'S OFFICE - August 15, 1957

✓
COPPER CREEK MINES, Copper Creek, Ariz. Pinal Co. Bunker Hill Dist. 2-9-57

CU

✓
COPPER CREEK MINES, INC.
Box 415, Mammoth, Arizona,

✓ W. G. Riggs - Pres., 250 Park Ave., New York, N. Y.
✓ L. A. Burney, Oracle, Ariz., Supt.

Developing (11 Men)

L.A.S.

REPORT ON COPPER CREEK MINES

BY NESTOR A. YOUNG, MINING ENGINEER.

Copper Creek Mining Co.

Tucson, Arizona.

Dear Sirs:-

Agreeably to my contract with you, I visited your properties in Graham County, Arizona, and herewith submit a report on the same.

~~PERAL~~

LOCATION

PINAL

This property lies in the Galiuro mountains, Graham County, Ariz. It is south of the great copper properties of Globe, and north of the Copper Queen at Bisbee. The situation is remarkable, it being directly in line, and between the Great United Verde, Old Dominion, Globe and other valuable copper properties on the north, and the celebrated Copper Queen, Calumet and Arizona, and other mines at Bisbee, Arizona, and at Cananea in Mexico; and west of the great producers at Clifton and Morenci, and east of the Mammoth and Mohawk mines. This is conceded to be the greatest copper zone in the United States.

CLAIMS AND VEINS.

This company owns 34 claims and six mill sites. There are three large main fissures, either one of which would constitute a great property. Leading into these are so many smaller veins, that the whole 710 acres of land are a mass of fissures and veins, constituting the largest body of copper ore I have ever examined, except possibly the United Verde, and I am of the opinion that when sufficient depth shall have been reached in the "Copper Creek Mines" a very healthy rival for the celebrated United Verde property will have been developed.

ACCESS TO MINES AND MEANS OF TRANSPORTATION.

There is an excellent wagon road built by the Copper Creek Co., from Klondyke, in the upper end of the Sulphur Springs Valley, a distance of about ten miles. The nearest station on the Southern Pacific is Willcox, to which there is a first class wagon road from Klondyke. A fine down-grade road is possible to the Phoenix and Eastern Railroad, now being built up the San Pedro River. This will shorten the distance to railway communication to 14 miles. The survey has been made for this road, and the company will complete this means of easy access, when the P. & E. R. R. is in operation to Mammoth.

FUEL, WATER, CLIMATE AND ALTITUDE.

There is sufficient timber upon this property to answer for hoisting and all development work necessary. Should the company erect a smelter (which in a very short time it must do) it will be necessary to haul coal, coke or oil from the railway station, 14 miles distant.

Water is abundant, and several springs are of such pure, unmineralized nature as to be wholesome to the human stomach, as well as adapted to use in boilers.

The climate is delightful, at this 5,000 feet altitude, for prosecuting development.

FORMATION AND CHARACTERISTICS

The formation is similar to the country around Globe; the country rock being rhyolite and granite. Formerly this rhyolite was overlaid by limestone, but the erosion of the ages has removed the greater part of the lime, leaving the rhyolite exposed.

The structural conditions in this region are specially favorable to large deposits of ore. This entire region is made up of distinctive ore bodies of the concentrates of copper and silver.

It is a matter of history of this entire country that all of the great copper ore bodies in this great fissured zone, occur in rhyolite and limestone formation.

DEVELOPMENT

All of the 34 claims have sufficient development to demonstrate the continuity of the ore bodies on each claim, while four of them have been opened up to such a depth as to have produced without stoping, many carloads of high grade ore. Notably on the Sioux Chief, there is a very large strong vein of copper glance, traceable upon the surface more than half a mile, running over and through the Arrapahoe. This is an exceedingly valuable claim, and in itself constitutes a mine, because the mill tests made of tons of ore averaged 22 ounces of silver per ton, and 26 per cent copper.

In prosecuting the development of this claim to demonstrate its continuity of ore body, several carloads of ore, averaging \$75 per ton were shipped.

The Iroquois claim is quite similar to the Sioux Chief, running somewhat richer in copper and lighter values in silver. This vein is very plainly visible on the surface for 500 feet, and there can be no doubt, from the exploitations made, of the great extent of its ore body.

The Toltec adjoins the Iroquois with fully as rich ore. Nearly 200 feet of shaft and tunnel work has been done on this claim, abundantly satisfying the management of the great body of ore it also contains.

The Ute Chief claim has a very fine grade of copper ore, assaying from \$50 to \$110 per ton. Three carloads shipped from this mine gave returns from the smelter of \$106 per ton. Over 400 feet of development work has been done on this claim.

The Mohican and Navajo have had sufficient work done to demonstrate their remarkable values.

I might continue a description of the exploiting work done upon the remaining claims, but it would only multiply words and redescribe what has been gone over in the other claims. One pertinent point is that every claim in the entire group shows copper glance that assays from 10 to 80% copper and from 20 to 100 ounces of silver per ton. Moreover these claims are all of the contact type.

Still another feature of the many tunnels and shafts made upon this property, there seems to have been no useless work done, as probably every one of these works will be made use of and be more or less serviceable to the company.

Another favorable feature that speaks volumes for the property, is that in every shaft the permanent sulphides are reached within the first 100 feet of depth, and increase in richness, broadening out as they go down.

It is a matter of history that these sulphide-copper-ores never run out, but are worked with increasing profit until they have reached the depth where human endurance is no longer possible.

The Sioux Chief upon which the main hoist and workings are located, has blocked out in the neighborhood of 85,000 tons of ore. I think I am very conservative in my estimate that this ore will average \$50 per ton. This would mean ore in sight in this one mine alone of \$3,250,000. This without having gone more than 200 feet down. What may be taken from this one claim by the time it has reached 1000 feet?

The principal machinery consists of a double cylinder gasoline engine with a power hoist of capacity for sinking 1000 feet, and handling 130 tons of ore daily. It is also equipped with air compressor, air drills, automatic dumps, cars and a fair machine shop equipment.

The Manager is an experienced mining man of the highest personal

character. The Superintendent is an experienced, thoroughly practical instant-in-season man. The chief foreman is one of the best practical miners in the west, with a good clean practical record of more than thirty years in some of the best copper mines of Arizona.

Both the President and Superintendent informed me that the policy of the company had been and would continue to be "absolutely no debts incurred". Under this prudent management the work has proceeded until this group of mines is today practically ready for a smelter, which when completed will be ready to blow in under the most favorable circumstances of any mine I have ever known.

PERTINENT MEMORANDA.

Every geological condition existing in the great dividend payers mentioned heretofore, such as the United Verde, Copper Queen, Old Dominion and others of this region, is found in this group of mines, of the Copper Creek Mining Company; with this fact in its favor, that the field is larger and more extensive in Copper Creek, with every natural facility for operating in this vast ore body.

That this group of mines will prove one of the great copper mines of Arizona is a conclusion reached as a sequel to the experience of miners and the deductions of science.

All work done upon this property is first class and highly commendable.

Its officers, without exception, are among the most reputable citizens and are all men of exemplary life, and see eye to eye as to the methods of developing the property. Not having been placed in their present positions because they have been judges, Congressmen or Governors, but because of their fitness for their responsible positions and because they were very large stockholders, and most of them practical miners.

No intoxicants are permitted on or near the premises.

Among the principal "facts to be determined" by the investor in mining property or mining stock are; Has the mine a true ledge? What is the extent of development? What is the value of the ore? What is the best method of working? Its title, risks of litigation, flooding, and its management?

Briefly let me answer these seriatim:

There can be no question as to the ledge formation, being the most extensive of any mines that I have ever examined. The extent as developed has equally been shown. The values of the ore have been fully established by the many carloads already smelted. The method of working the property is also fully determined, and is practical and economical. Its title is absolutely perfect. There can therefore be no litigation. There is no danger whatever of flooding. Better still there are no difficult special problems presenting themselves in these mines.

In conclusion I will say that the vastness of the ore body, the exceedingly high grade, the simplicity and cheapness with which it may be mined, and the other natural advantages and facilities, justify me in saying that I unhesitatingly pronounce this one of the great coming mines of Arizona, and that in my opinion the child is yet unborn that will ever live to see the resources of this mine exhausted.

Respectfully Submitted,

Nelson Young
E.M.