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PRINTED: 09/12/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: YUMA COPPER MINE

ALTERNATE NAMES:

LA PAZ COUNTY MILS NUMBER: 76

LOCATION: TOWNSHIP 6 N RANGE 14 W SECTION 30 QUARTER NE
LATITUDE: N 33DEG 50MIN 26SEC LONGITUDE: W 113DEG 44MIN 56SEC
TOPO MAP NAME: SALOME - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
- COPPER OXIDE
- SILVER
- GOLD
- IRON OXIDE

BIBLIOGRAPHY:

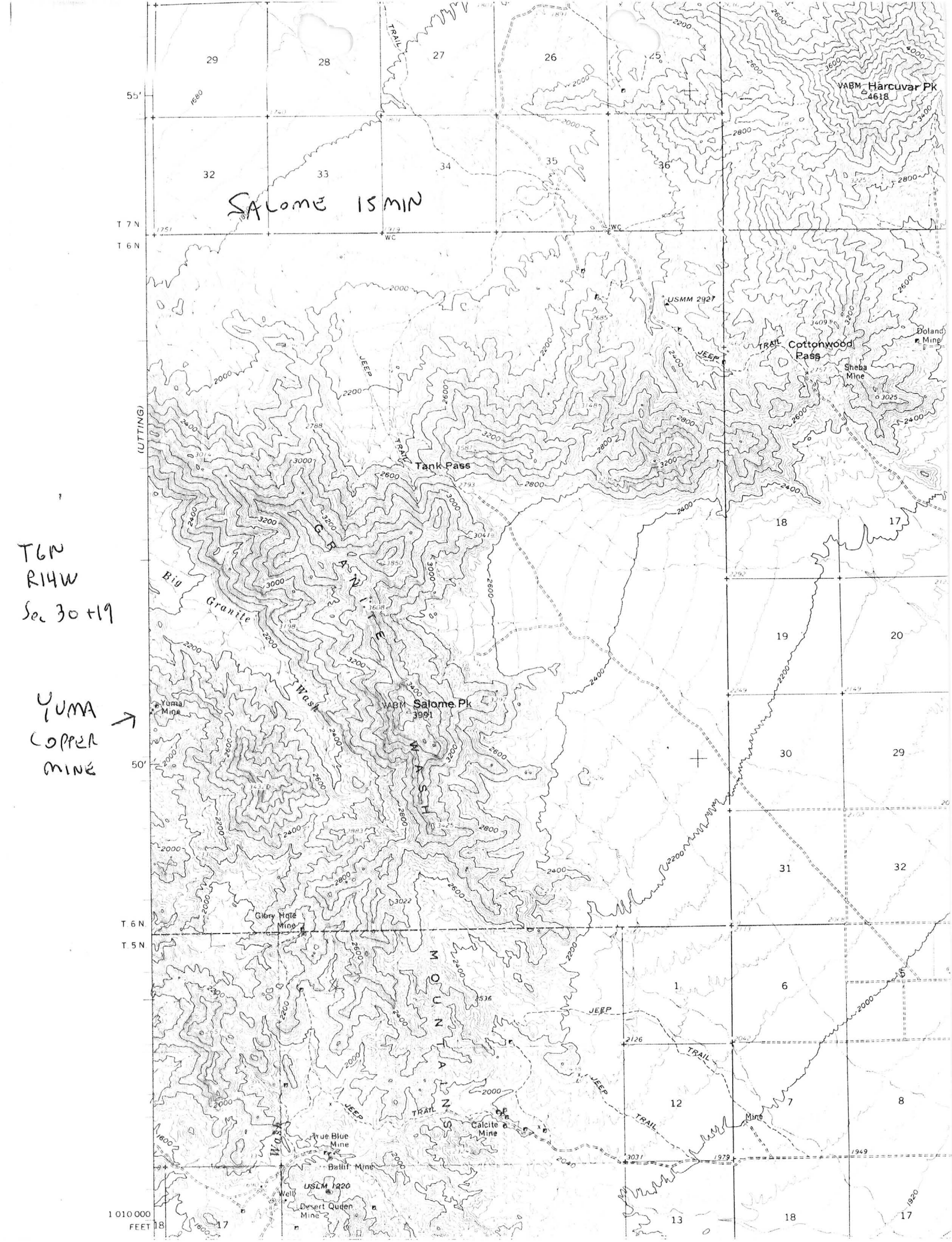
- KEITH, S.B., 1978, AZBM BULL. 192, P. 150
- ADDITIONAL WORKINGS SEC. 19
- ADMMR YUMA COPPER MINE FILE
- USGS BULL 451, P 95
- MAPS IN ROLLED MAP CABINET (PHX) - WORKINGS
- AGSU OFR 89-4, P. 41

YUMA COPPER MINE YUMA COUNTY

FOR MAP OF WORKINGS SEE: SECTION #5

BROWN MAP CABINET, ~~TOP OF MINE OWNERS~~
Maps now in the rolled cabinet, alphabetically
~~REPORT FILES.~~ arranged.

See: USGS Bull. 451 Page 95



T6N
R14W
Sec 30 + 19

YUMA COPPER MINE →

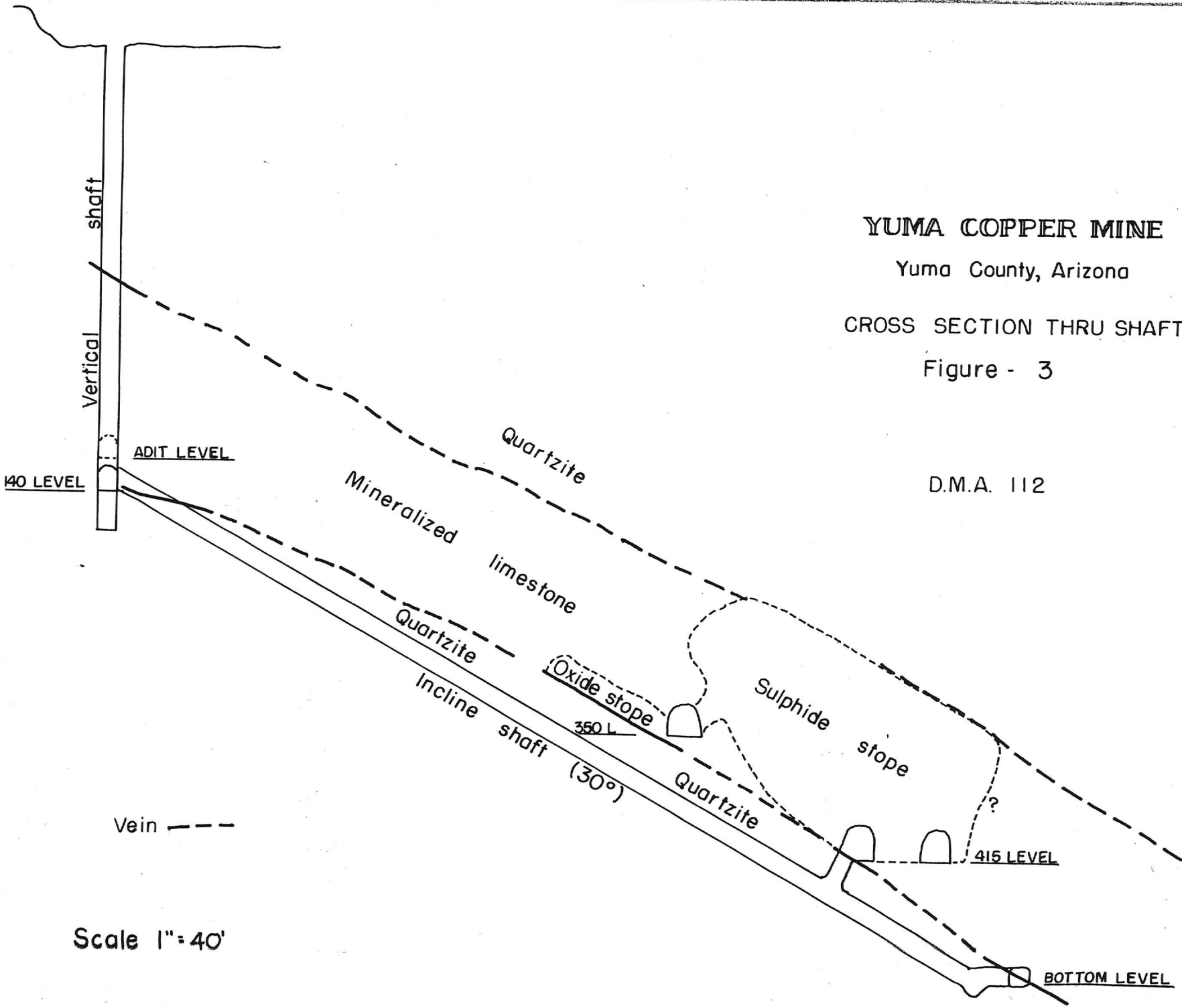
YUMA COPPER MINE

Yuma County, Arizona

CROSS SECTION THRU SHAFT

Figure - 3

D.M.A. 112



USBM
From: IC 8236

At the Cinnabor mine, country rock consists of a series of fine-grained quartz-mica schists of sedimentary origin. Part of the schist sequence contains an abundance of finely crystalline magnetite, giving it a mottled appearance. Schists at the mine strike N 53° W and dip 15° to 45° NE (4, pp 82-84; 38, p. 27).

Granite Wash Mountains Cupreous Magnetite

Cupreous magnetite (113, fig. 1) occurs as a contact metamorphic replacement on the Yuma Copper and Iron Dike group of claims being developed by C. E. King and T. H. Crawford, approximately in secs 24, 25, 29, and 30, T 6 N, R 1 W, in the rugged Granite Wash Mountains of the Harcuvar range. The deposit is in the Harcuvar-Ellsworth mining district, 5.5 miles northeast of McVay and 6.5 miles north of Vicksburg.

Magnetite (fig. 57) partly replaces a bed of yellow, crystalline limestone in a Precambrian complex of metamorphosed sediments, sedimentary schist and granite gneiss-schist and Tertiary quartz monzonite intrusives. The

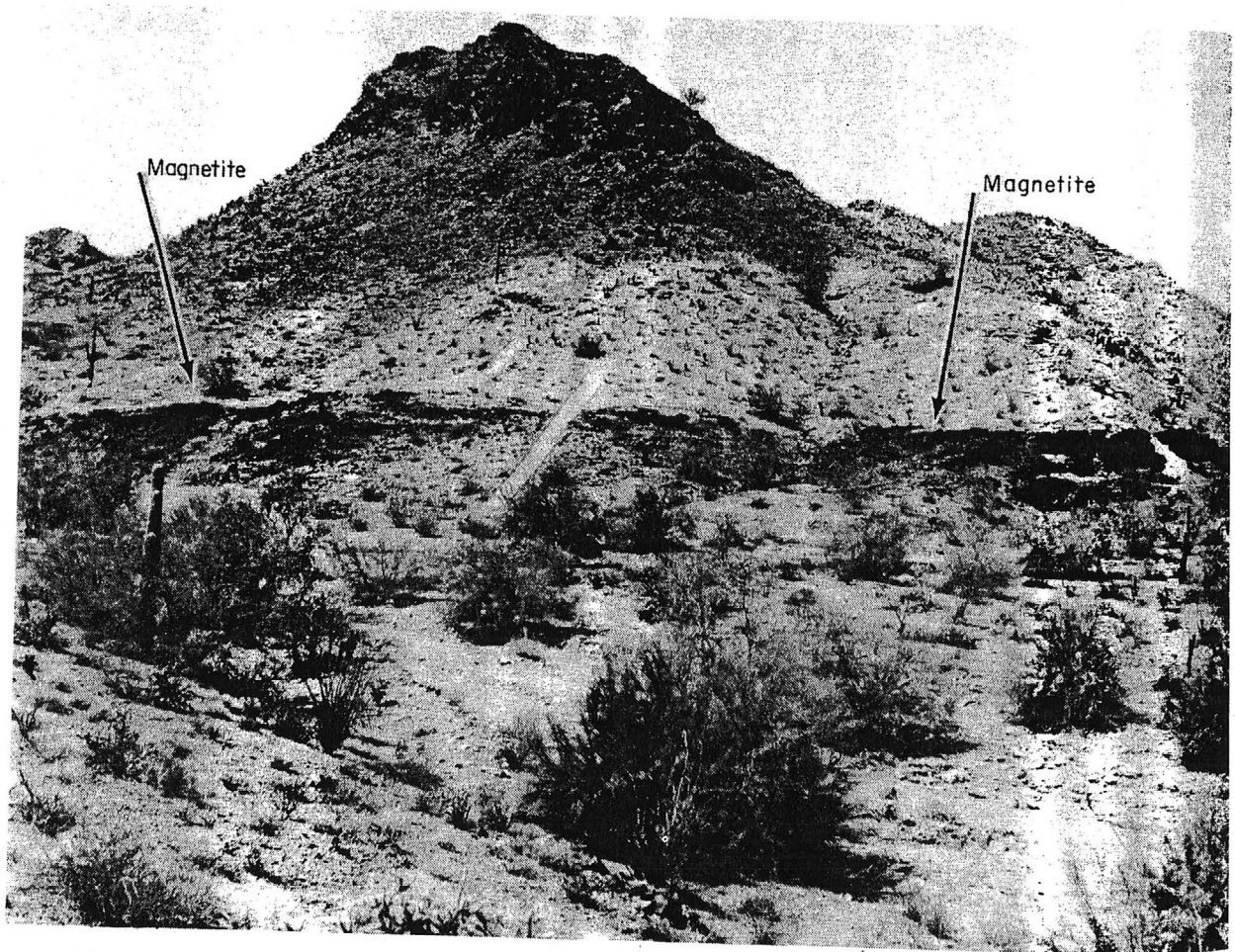


FIGURE 57. - Cupreous Magnetite Outcrop (Arrows), Yuma Copper Co., T 6 N, R 14 W, Yuma County, Ariz.

gnetite is associated with copper sulfides and their oxidation products, yrrhotite, pyrite, garnet, actinolite, calcite, and quartz. The magnetite m be traced (fig. 57), as masses and disseminations as much as 50 feet thick, n an interrupted pattern along its north strike for several thousand feet. ip is 15° to 35° W. A character sample of the magnetite taken by the Bureau n 1960 contained 58.4 percent iron, 0.2 percent titania, 0.3 percent manga- ese, 0.13 percent phosphorus, 0.14 percent sulfur, and 12.2 percent silica.

The deposit has been developed for copper by several small cuts, pits, hallow shafts, and an adit level. In 1961 underground exploration by King nd Crawford indicated a cupriferous pyrrhotite-magnetite deposit, estimated o contain 50 percent iron, 0.75 to 1.6 percent copper, and 0.04 ounce gold a on (4, pp. 95-96).

Harcuvar Mountains Hematite

Many ledges of impure siliceous hematite, some of considerable thickness, ccur at Cunningham Pass (114, fig. 1) and in the vicinity of the Cunningham ass copper mine in the Harcuvar Mountains, in T 7 N, R 12 W, about 9 miles orth of Wenden. The deposits are small (4, p. 119).

Hope (Bauer-Kelly) Alluvial Magnetite

Titaniferous magnetite sand (116, fig. 1) is prominent in the alluvium of he southwest peneplain from the Little Harquahala Mountains in T 4 N, R 14 W. he alluvial deposits are about 2.5 miles south of Hope and U.S. Highway 60-70, n the valley and dry-wash areas of secs 2, 3, 9, 10, 11, 12, 13, 14, 15, 16, 7, 21, and 22 in T 4 N, R 14 W.

The magnetitic alluvium of the area was located by Paul Bauer, D. W. elly, and others of Wickenburg and Quartzsite. The deposit has been super- icially explored with test pits and bulldozer trenches to depths from 6 to 10 eet. A sampling by Arizona Metals Co., R. R. Langley, president, indicates a to 4 percent magnetite content with local concentrations as much as 10 per- ent magnetite. Screening and magnetic concentration tests yielded a concen- rate containing as much as 68 percent iron and 0.9 percent titania. Magnetic eparation of 20- to 30-mesh screened material reportedly yielded a concen- rate containing 62 to 65 percent iron and 1 percent titania. Another trial esulted in a final concentrate reported as 66.11 percent iron, 0.9 to 1.01 ercent titania, 0.008 percent sulfur, and 0.19 percent phosphorus.

Tank Mountains Magnetite, Hematite, Limonite, Jarosite

Magnetite, hematite, limonite, and jarosite occur in a lenticular vein illing a shear zone in granite on the Johnnie or Engesser prospect (127, fig.) in the northeastern part of the Tank Mountains, T 2 S, Rs 15 and 16 W., bout 10 miles from Kofa and 30 miles from Clanton across desert terrain. The ein outcrop pinches to a few inches wide and swells as much as 3 feet wide. he vein strikes N 20° E, and dips 45° to 70° W. At the surface hematite is ard to pulverulent with some quartz and is flanked by like thicknesses of arosite and limonite. Dump rock includes large aggregates of granular

Nyal Niemuth

From: "leah tews" <ltews2001@yahoo.com>
To: <njn22r@hotmail.com>; "candy home email" <lenslady@cybertrails.com>
Sent: Friday, June 08, 2001 12:40 AM
Attach: eMINEstone.jpg; eMINE2.jpg; eMINE1.jpg
Subject: Old Yuma County Copper Company Mine

Hi Nyal,

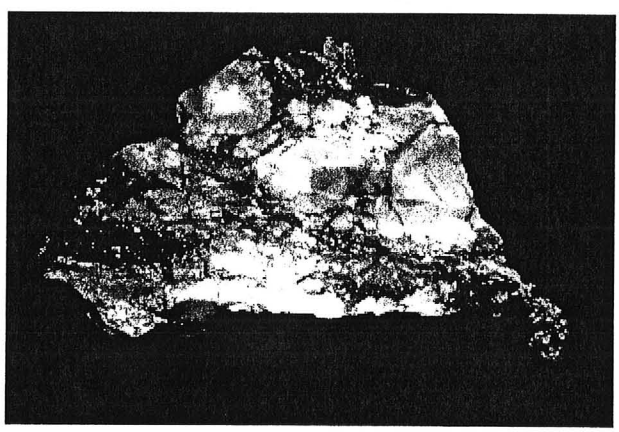
I would like to thank you for the time you spent with me yesterday over the phone. I realize how valuable your time is and truly appreciate it.

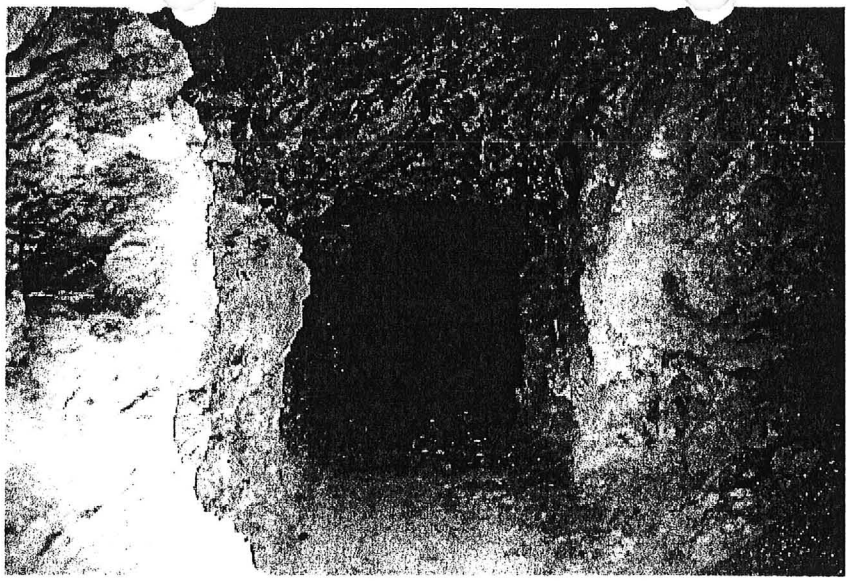
I have enclosed a couple of pictures that my sister Candy has taken recently of our mine for your review. I have very limited information in regards to the mine to my understanding we have a total of 6 claims left covering 120 acres. My sister has all of the paperwork and information on it and I am certain she would be willing to provide whatever additional information you may need. Her e-mail is lenslady@cybertrails.com

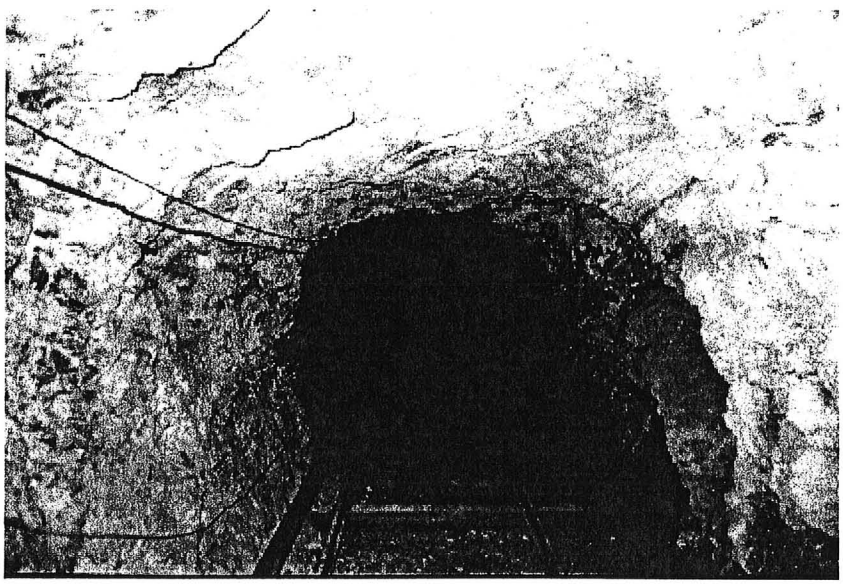
Any assistance in getting the word out on it would of course be appreciated. Also we would be very interested in speaking to the people from West Virginia if they happen to surface again. You of course may contact me at anytime, my line of communication is always open to you.

Regards,

Leah Tews
ltews2001@yahoo.com
Personal Assistant # 888.315.8158







Press Release Source: Big Bar Gold Corporation

YUMA COPPER MINE - LA PAZ Co.

Big Bar provides geologic update on Yuma King

Tuesday October 11, 11:06 am ET

Trading Symbol: BBK.H

VANCOUVER, Oct. 11 /PRNewswire-FirstCall/ - Further to its news release on August 11 2005, Big Bar wishes to provide a geologic update on its recently acquired Yuma King property (the "Property"), comprised of 52 mining claims, situated in La Paz County in the State of Arizona. This update has been compiled following additional work carried out on the Property by Mr. Stan Keith of Arizona-based MagmaChem, LLC and a review of the data sets on the distribution and grade of copper mineralization underground at the Yuma King Property by Mr. Rick Russell, a Qualified Person as defined by National Instrument 43-101 of the TSX Venture Exchange.

Using polygon maps of the Coupal data developed by Toronto-listed Rubicon Minerals Corp., the former lease holder of the Property, Rick Russell, a Qualified Person, has recently calculated a greater than 550,000 ton resource at an average 3.03% copper grade. This resource calculation conforms to 43-101 guidelines. In addition to the copper resource, add-on metal by-product values can be expected based on past production and gold and silver assays accompanying the Coupal sampling.

Analysis by MagmaChem of the physical geology of the vicinity of the Yuma Mine working indicates that the footwall environment containing the copper metallization extends at least 2000 feet to the east of the mine and at least 1000 feet to the northeast of the working down the dip. Further, initial detailed geologic mapping by MagmaChem to the north and east of the Yuma Mine shows that the monzonite porphyry unit is more widespread than previously thought. Thus, emerging new geologic information indicates that the footwall environment for copper replacement bodies is more extensive than existing maps have shown and hence, considerable geologic potential exists for the discovery of additional substantial copper replacement bodies.

The magma-metal series approach developed by Stan Keith has been applied to the Yuma King Property. At Yuma King, a sequence of intrusions with magma- metal series petrochemistry similar to the Sacramento intrusive complex at Bisbee, Arizona is associated with copper and gold mineralization. Extensive sampling of the metallization and the intrusions has allowed a magma-metal series model assignment to the Bisbee type porphyry copper-gold-silver skarn replacement MQA45 model.

The above sampling by MagmaChem has also permitted the development of a preliminary pluton vectoring model for the Yuma King copper replacement system. Pluton vectoring indicates the presence of two eastward-differentiating MQA45 magma-metal series rock systems. One system is associated with copper-gold-silver replacement/skarn mineralization in its footwall; the second system is associated with quartz-sericite-pyrite-gold mineralization hosted in quartzite within the hanging wall of the copper skarn system. Within the Bisbee type fractional differentiation sequence copper-gold- silver enriched fluid releases into footwall skarn environments have the best- known economic track record.

At the Yuma King property, Bisbee type copper mineralization is associated with the footwall environment of the above described monzonite porphyry which crops out extensively throughout the property. In the vicinity of the Yuma copper mine working a small portion of the skarn replacement orebody in the footwall environment of the monzonite porphyry has been developed and produced 8,728 short tons at an average grade of 2.64% copper. This working was also sampled in the late 1940's as a basis for a resource assessment by mining engineer J.S. Coupal of the Arizona Department of Mineral Resources.

Discovery and confirmation of the copper resource extension from the current underground working will be the main goal of Big Bar's initial program at Yuma King. Additional detailed geologic mapping and sampling in the immediate area of the Yuma Mine (about 2 square miles at a scale of 1:5000) will be completed to obtain an accurate picture of the physical geology associated with the copper-replacement resource and its geographic extension to the north and east. High resolution aeromagnetic and ground based I.P. resistivity geophysics will be obtained to identify areas of strong sulfide and magnetite associated with copper replacements in the subsurface. Drilling is expected to commence in January 2006 once the current ongoing analysis of the map,

geochemical, and geophysical data is completed. About 2,000 meters of diamond-core drilling is envisioned.

Mr. Rick H. Russell, M.S. Geo. and a Qualified Person has reviewed the technical disclosure contained herein and approved the contents of this news release.

BIG BAR GOLD CORPORATION

per: "Albert Au"

Albert Au, Director

The NEX has not reviewed and does not accept responsibility for the adequacy or accuracy of the content of this News Release

BIG BAR GOLD CORPORATION
Suite 200 - 675 West Hastings Street
Vancouver, British Columbia, V6B 1N2
Telephone: (604) 681-7600
Facsimile: (604) 681-7622

EARL ABBOTT

Source: Big Bar Gold Corporation

YUMA COPPER MINE T 6N R14W Sec 19 YUMA COUNTY

KP/WR 11/9/79 - Mr. Nelson of Salome is working at the Yuma Copper Mine to evaluate its potential.

KP/WR 11/20/79 - Mr. Dan Nelson is sampling and planning development of the Yuma Copper Mine, Yuma Co. The claim group consists of 6 Golden Eagle claims and 19 Four or More claims. Mr. Nelson reported he owns one-third of the mine; Frank Aubel owns one-third (Mr. Aubel also owns the Hope Townsite); and Art Morin owns one-third. Mr. Morin lives on the property and keeps an apartment in Blythe, Ca. They have developed an azurite vein and have shipped some jewelry grade azurite to Wards Scientific Establishment in February through April of 1979. At that time two men were working the property for these specimens.

RRB WR 10/11/87: Dean Tedford and Don Nelson of the Golden Eagle Mine (Yuma Copper Mine - file) La Paz County were in to learn how to leach copper. They report that they have to mine junk oxide copper in order to produce gem quality chrysocolla and azurite so they think that they may as well leach it. They also report some sulfides. They also conduct underground mine tours. The address is Box 45, C.R., Salome, Arizona 85348 (602) 859-3614.

YUMA COPPER MINE YUMA COUNTY

Went to Aguila and visited with Dan King of ACM Corp. He said someone (name to be held confidential) had leased the Yuma Copper mine 5½ miles east of McVay, Yuma County, and intended to core 10,000 ft. in several holes. But a visit later to the property revealed no one or any equipment. However, there had been a big "Cat" in there rather recently. GW WR 5/17/72

Went to Aguila and saw Dan King of ACM who said a major company had drilled a 900 foot core hole at the Yuma Copper Mine 6 miles east of McVay. However, no one was at the rig when visited later in the day. GW WR 6/28/72

No one was at the Yuma Copper mine east of MacVay. GW WR 9/13/72

A trip into the Yuma Copper mine revealed no one. Since the demise of Dan King, there has been no information regarding Tenneco's findings at the Yuma Copper. GW WR 10/12/72

Drove on over the hill to the Yuma Copper mine but found no holes or anyone. GW WR 4-24-74

YUMA COPPER MINE YUMA COUNTY

ACM Corp. (Aguila Reduction Plant) is headed by D. S. King, of LaHabra, California. They own the Yuma Copper Mine east of Bouse and the "79" Mine near Hayden which they optioned to Kennecott. Pilz stated that Kennecott has done some drilling but he does not know whether or not they intend to exercise the option. The Yuma mine is inactive at present.

Taken from report by Robt. F. Playter, Engineer (ACM Corp file) 10/10/67.

Interview with Dan King at the ACM Plant - He has leased his Yuma mine east of McVey but did not say to whom. His father and a Mr. Crawford had the mine previously.
FTJ WR 6/13/69

YUMA COPPER

YUMA COUNTY
ELLSWORTH DIST.

Mine visit and Conference with P. T. Evans 10-14-64

Mr. Evans and helper have been driving three raises from the main 1200-foot adit, in the mineralized zone. These are at present up 25, 55 and 65 feet, respectively, but work is now centered in the 65-foot one. The mine is controlled by Dan King (Whittier, California) of Southern California Chemical Co., Box 2127, Las Nietos, California. According to Evans this Company makes copper sulphate and hopes to develop enough leachable copper ore to, at least, supply them with part of the copper sulphate they need.

The material from the raises is apparently an intensely altered rock, which now has been converted to a fairly soft yellowish-orange limonitic mass that contains vugs and fractures that are lined by or filled by quartz and some calcite. Some of the material has malachite, chrysocolla and a "hidden" copper mineral (probably cuprite) ~~or limonite~~. No evidence of sulphides was seen. According to Evans the oxidation zone extends to approximately 90 feet below the adit, generally. The sulphides are said to run 1.5 to 2.0 percent copper, but the oxidized part of the mineralized zone is reported to have a more varied copper content.

The work probably will continue on a part time basis (week ends) since Evans is a Foreman at the Aguila lettuce packing plant and it is due to start soon.

LAS 10/14/64

Ralph Godfrey and Flip Evans were in and Flip said he was beginning a cross-cut at the Yuma Copper and had finished the three raises.

LAS WR 1/22/65

Conference with Con Pilz, Mgr. of Aguila Copper Reduction Plant 2/14/67

Pilz said that Dan M. King, 2318 W. Whittier Blvd, LaHabra, Calif. is now the sole owner of this property and planned some work there before long. At the Aguila reduction plant a small reverbatory furnace and stack are being installed to smelt cement copper to 99.97 percent pure. A continuous interlocked ingot mould is being installed and will make ingots about 12-14 inches long and 4-5 inches wide and 3-4 inches in thickness. The mould assembly is about 25-30 feet long. The plant also has a crusher and ball mill to reduce cement copper to small enough mesh so that the fine iron particles can be removed by magnet. This product better than 90% Cu is now being marketed, but as soon as the reverbatory furnace is operating, it will be sent there. It is contemplated that eventually several chemicals may be made. The cement copper is mostly from California.

MEMO LAS 2/14/67

YUMA COPPER YUMA COUNTY

Learned in Bouse that Yuma Copper has resumed development following the Christmas holiday season.

TRAVIS PLANE - Weekly Report - 1-14-61

Feb. 16, - Visited the Yuma Copper mine operated by Crawford and King. Diamond drilling is in progress from the 425' level. 5 men employed.

TRAVIS P. LANE - Weekly Report - Feb. 18, 1961

June 16, 1961 - Interviewed Kimmy Kellis at Vicksburg. Learned that Yuma Copper has suspended for the duration of the hot season.

TRAVIS P. LANE - Weekly Report - 6-17-61

This property active Oct. 1961, 5 men working - Clarence King & Crawford, Partners, Sam'Haydis, Agent, Salome, Ariz.

This property active Feb. 1962, 5 men working.

June 14, 1962 - Visited the Yuma Copper Mine where Phil Grubaugh and 2 men ~~are cleaning~~ out the main interior shaft. They will suspend soon for the hot summer season.

TRAVIS P. LANE - Weekly Report - 6-16-62

YUMA COPPER MINE

YUMA COUNTY
ELLSWORTH DIST.

Active Mine List 2-1959

Interview Kennedy at Vicksburg. He reported that development work was continuing at a normal rate at the Yuma Copper project with 8 men employed.

TRAVIS P. LANE - WR - 5-23-59

Interviewed Thompson at Vicksburg re Yuma Copper operation. He reports 6 men working. The main shaft (winze) is being unwatered.

TRAVIS P. LANE - WR - 6-13-59

Visited the Yuma Copper Mine operated by Crawford and King. Work was suspended last July but according to the caretaker will be resumed about the first of the new year. The partners worked a crew of 5 to 7 men steadily during the first half of this year. The work consisted of rehabilitating the old workings and installing equipment for an extensive exploration project. The last work done was unwatering and sampling the lower workings (400'-500' deep on a 25° slope.)

TRAVIS P. LANE - WR - 10-17-59

Active Mine List 10-1959

Active Mine List 2-1960

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine	YUMA COPPER	Date	July 19, 1960
District	Ellsworth, Yuma County	Engineer	T. P. Lane
Subject:	Visit of June 16, 1960		

Following unwatering and examination of the lower workings in the early part of 1959, the operators concluded that the mine deserved vigorous development with expectations that construction of a mill might eventually be justified. Accordingly, after suspending during the summer season, work was resumed in the fall of 1959. The west shaft (485' inclined depth) was rehabilitated and 2 short raises driven above the adit level where intersected by the shaft. The raises are to accommodate a hoisting rope and sheave. Also, a hoist room has been cut out at this location. At the time of visit 2 men were working including the boss, Bill Grubough, setting an electric hoist and preparing to string the hoist cable and to construct a bin and a dumping device.

The partners, Crawford and King, had left the mine a few days before this visit. Reportedly a decision would be made soon whether to proceed during the summer or to suspend for several months.

This property active Sept. 1960, 5 men working. Clarence King & Crawford, Partners, Box 65, Vicksburg, Ariz.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Yuma Copper Mine

Date Feb. 27, 1959

District Ellsworth, Yuma County

Engineer Travis P. Lane

Subject: Visit of Feb. 12, 1959

Owner and Operator: Clarence King & Crawford
Box 64, Vicksburg, Arizona

or c/o Sam Hays, Atty., Salome, Arizona

The property comprises the Yuma group of 18 unpatented claims, and (about 2½ miles SW) the Kate Waters, group of 11 claims, also unpatented.

The property is located in the Harcuvar Mountains some 7 miles easterly from McVay, a station on the Santa Fe Railroad. McVay is also on Hwy. No. 72 about 14 miles SE of Bouse.

The country rock is a complex of gneiss and schist cut by numerous basic dikes. The main lode or vein is a highly silicified lime bed which strikes about N 80° W and dips about 30° north. The principal workings are an adit 680' in length which connects with a 75' vertical shaft; and an east and a west winze extending 485' and 420' respectively down the footwall of the lode.

The present operators took over the mine last fall and began rehabilitation in December. 4 men are working under the direction of Clarence King, (Bill Grubough is the pusher, Box 3, Wenden, Ariz.) laying track and installing an air line in the main adit. The operators plan to install a hoist at the head of the east winze on this level and will unwater and explore the mineralized zone in depth from this winze with the hope of proving a large copper sulphide ore body and/or a zone of enrichment. A power plant has been installed at the portal of the adit, also a compressor, cars, etc. A heavy duty electric hoist was on the platform at Vicksburg at the time of visit and was to be moved to the property within the next several days.

STATUS OF DORMANT MINES

MINE NAME: YUMA COPPER MINE

LOCATION: VICKSBURG, ARIZONA

~~OWNER XXXXXX~~ LESSEE: LIBERATOR MINES COMPANY (F. E. HASKELL, REPRESENTATIVE)

ADDRESS: 406 HOTEL ADAMS, PHOENIX, ARIZONA. (Please change address from Vicksburg.)

APPROXIMATE PRODUCTION (Year of 1945):

COPPER 127,150 Lbs. LEAD _____ Lbs.
(mostly development ore)
ZINC _____ Lbs. (OTHER) _____

CHECK THE CHIEF CAUSE OF YOUR DISCONTINUED PRODUCTION:

(A) Easily available ore worked out.
(B) Increased costs, but have quantity similar to past grade of ore.
(C) Too close a margin to develop more ore.
(D) We have from 500,000 to 800,000 tons of ore available, average assay about 1.7% copper and $1.00 in gold; too low grade to ship; mill required.

If you have ore ready to mine please give your estimate of the amount of metal (name each metal) that you could produce in one year (after allowing 60 days to get started) if there were premiums above present market prices. Name amount with a low premium, and amount at a high premium; such as:

Copper at 22½¢ plus 5¢ premium..... 1,000,000 Lbs.
Copper at 22½¢ plus 10¢ premium..... 1,500,000 Lbs.

If you do not have ore ready to mine please discuss the following:

(A) Do you think a reasonable development program would produce a justified tonnage of commercial ore at above mine?

(B) With a premium price (guaranteed for one year) could you carry out such a development program yourself? What premium?

(C) If you could not do this yourself, would a quick drilling program by some government agency (at government expense) be sufficient?

(D) Or would you prefer a loan plan similar to the arrangements during World War II?

How about a combination plan in two stages such as follows?

Stage 1: Government engineers review project and, if a little drilling appears to be justified and a preliminary key to the situation, such drilling program to be agreed upon by owner and government engineer, paid for by the government, but let by contract.

Stage 2: If results of drilling (or without drilling) justify underground development and/or production equipment, same to be obtainable via a mortgage loan on property.

Please discuss the above:

According to reports on hand, some additional underground work should be done to facilitate hoisting the ore, but the amount of ore stated can be taken out, and the indications are that a secondary enrichment and large body of better grade ore will be reached with depth.

SUGGESTIONS:

LIBERATOR MINES COMPANY

DATE August 7, 1950

SIGNATURE by P.E. Haskell

C O P Y

Report on

YUMA COPPER MINE

By J. S. Coupal, Registered Mining Engineer,

Phoenix, Arizona May, 1950.

FOREWORD: The Yuma Copper Mine has a sizeable deposit of low grade copper ore proven by extensive underground workings. During the course of development, several thousand tons of sulphide ore were mined, on which smelter returns averaged 1.7% copper and approximately $1.00 gold. Tests have shown the ore to be amenable to simple flotation, with a 98% recovery and a high ratio of concentration.

Conditions are favorable for low cost mining and milling, with ample water supply on the property, and trunk line electric power available within 5½ miles. Geologic conditions indicate that a higher grade zone of enrichment may be found within comparatively slight increased depth.

In order to avoid excessive costs of transportation and smelting of crude ore, an adequate milling plant is necessary.

Sufficient ore is now exposed to reasonably assure the return of the capital investment needed to install a milling plant, pay for further development, and show a good profit, with indications that increased depth will make it one of the big, profitable small mines of the State of Arizona.

Details follow.

PROPERTY: The property consists of 12 unpatented mining claims, approximately 240 acres, located in the Ellsworth Mining District, Yuma County, Arizona, about 9 miles northwest of Vicksburg, in the foothills of a spur of the Harcuvar Mountains, known as Granite Wash Hill, which are known and recorded in the County Recorder's office at Yuma, Arizona, as follows:

Name of Claim	Book of Mines	Page
Carbonate No. 1	27	2
" " 2	27	3
" " 3	27	4
" " 6	27	5
" " 7	27	6
Arizona No. 1	27	7
" " 2	40	236
" " 3	40	237
" " 4	40	238
" " 5	27	8
" " 8		
Union	26	558

The relative location of the claims is shown on the attached claim map.

ROAD FACILITIES: The nearest rail point is McVay, a pumping station and sidetrack on the Parker-cut-off branch of the Santa Fe Railway, about 56 miles southeast from Parker, on paved State Highway 72. At McVay is a loading ramp for shipping ore, and from McVay to the mine, a practically level dirt road 6½ miles northeast. McVay is about 127 miles from Phoenix.

NATURAL CONDITIONS: The elevation on the property ranges from about 1600 feet above sea level at the portal of the adit tunnel and camp to about 2400 feet at the high point on the claims. The vegetation is typical of the semi-arid area of the southwest, and consists of cactus, greasewood, etc., sparse and with no large growths. Rainfall is slight and no snow occurs. Domestic water supply is from shallow wells, and an ample flow for milling purposes may be had from the lower workings of the mine. Good camp site is available on the property, and a good road to mine and camp.

HISTORY: The claims were located in the early 90s, and the major development done during the next decade. The operators were seeking high-grade shipping ore, and no mill was erected on the property. After many years of idleness, the property was acquired under lease. An R. F. C. loan was obtained to unwater and examine the property. The Liberator Mines Company was formed in 1944 to operate the property. In the course of development, they shipped about 8000 tons of ore; about 400 tons were oxidized ore, shipped by sub-leasers, averaging 9% copper, and the balance sulphides from development work which averaged 1.7% copper and $1.00 plus in gold.

The development work in the sulphide zone indicated a large body of mill ore, but of a grade that could not be mined and shipped at a profit without concentration. Pending the erection of a mill, the mine has been kept unwatered.

ORE BODIES: There are two prominent ore bodies on the property; one, a heavy iron gossan, about 40 feet in width, exposed on Arizona Nos. 1, 2, 3, 4, and 7. Only minor development work has been done on this ore body, but it is known to carry good values in gold, and indications are that good values in copper should occur in depth.

The major ore body outcrops on Carbonate claims, Nos. 2 and 3, and on these claims the major developments have been made. See sketch map of the Tres Amigos Development Company.

DEVELOPMENT WORK: The major developments are on a lode which strikes north 78 degrees west, and which dips 30 degrees from the horizontal to the north. Developments consist of a vertical shaft which enters the mineralized zone at a depth of 75 feet below the collar of the shaft and the foot-wall of the mineralized zone at a depth of 140 feet; at the bottom of the shaft, levels were driven southeasterly 125 feet on ore, and westerly 150 feet, and an inclined shaft, 260 feet in slope distance, sunk in the foot-wall, just below the mineralized zone. This was evidently sunk as a working shaft, as it is of ample width and height, and straight. At a point about 60 feet east of the bottom of the vertical shaft, and on what is called the 140-foot level, another inclined winze was sunk on ore which dipped 26 degrees from the horizontal to a slope depth of 420 feet. This was evidently the exploration shaft, as it follows the foot-wall of the mineralized zone and a prominent practically vertical diabase dike. From the inclined winze, levels have been driven easterly for a distance of 220 feet on what is called the 350-foot level, and 475 feet easterly on the so-called 415-foot level. An adit was driven east for 680 feet at a point 125 feet lower than the collar of the vertical shaft, and connection made between it and a raise from the collar of the inclined winze for temporary hoisting purposes.

Two stopes from the adit level have been made in oxidized ores. A small stope has been made on the 140-foot level on oxidized ore, and another stope to the west of the inclined shaft at the 350-foot level, all on oxidized ore. Another stope to the east of the inclined winze has been made on oxidized ore.

Some exploration work, not yet productive of ore, has been done west of the inclined winze from the 350-foot level, hunting for the extension of ore exposed on the adit level.

The major stoping has been done at a point about 150 feet east of an inclined winze on the 350-foot level, and this stope has been connected with the 415-foot level. The stope at this point shows a thickness of mineralized area about 80 feet in thickness normal to the dip of the ore body.

Apart from the development mentioned, there have been several attempts at diamond drilling from the underground workings, to prove continuation and extent of the ore showings. The ore zone is in a disintegrated garnetized limestone, and no cores were obtainable, even though ore was indicated.

TONNAGE: Due to the irregularity of the underground workings in the sulphide ore body, it is impossible to make any positive statement as to the tonnage technically blocked out on four sides. The ore has been opened up on the 415 foot level for a distance of about 400 feet along the strike of the ore body. The cross-hatching on the 1"-equals-40' scale map of the workings shows that all ore extracted in the development work was shipped. The stope between the 350' level and the 415' level is not indicated on the map, but centers at the end of the northeast branch of the 350' level. This stope, mined mainly from the 415' level, shows the ore body to have a thickness at this point of about 80' normal to the dip. The extreme east end of the 415' sulphide level and the end of the 176-foot drill hole indicate a horizontal distance of 140 feet in ore, or an approximate thickness of ore, normal to the dip, of 80 feet at this point. The drift and drill hole on the north crosscut, 25 feet east of the incline winze on the 415-foot level, indicate a horizontal distance of 100 feet on ore, which is equivalent to thickness normal to the dip of 50 feet. This would give an average thickness of 70 feet, a length of 400 feet, and the measured slope depth in sulphides of approximately 130 feet. 70 x 400 x 130 equals 3,220,000 * cubic feet, or on this ore, approximately 300,000 tons. This is a calculation of the

possible ore indicated, but not conclusively proven, due to the limited extent and irregularity of the workings.

* (In checking these figures, I find the result of the multiplication should be 3,640,000 cubic feet, which would add considerably to the tonnage. F.E.HASKELL.)

PROBABILITIES IN DEPTH: There are indications that the lower workings are approaching a zone of enrichment where higher grade ore may be reasonably assumed, and also that a higher grade primary ore will be encountered at greater depth.

The ore on the 415-foot level is higher grade than the ore on the 350-level. The ore in the drift at the bottom of the inclined shaft is highergrade than the ore in the 415-foot level. The ore has been decomposed and leached, and shows increased value as greater depth is obtained. It is a safe assumption that the ore will continue to increase in value until a maximum value will be obtained in the zone of enrichment. There is nothing to indicate when the zone of enrichment will be reached, but it should occur within the next 200 feet in depth.

In addition to this, the ore is cut by numerous dense post-mineral vertical diabase dikes, which do not displace the ore body. Near several of these dikes, in areas which have been protected from the more extensive leaching action, remnants of massive, garnetized limestone occur, showing chalcopyrite ore of 5% to 6% copper content. This massive ore grades off within a foot of the dike, into the low-grade disintegrated and leached ore zone. This has been found in several places, and creates a strong belief that the primary ore which will be encountered below the enriched zone, will prove to be a higher grade chalcopyrite ore. The copper in the leached zone is the secondary ore, covellite.

MINING METHODS: The structural condition of the disintegrated garnetized limestone ore body and its thickness - 80 feet - make for low cost mining. In certain areas it has been possible to start a hole with an ordinary ½" pipe for cleaning blast holes, and advance the pipe, with 100 pounds air, at a rate of 3 to 4 feet per minute. In spite of this fact, the ore stands without timbering in stopes with spans of 30 to 40 feet, where the ground water level has been lowered.

The mining method will be some combination of top slicing and caving, but the actual procedure will depend upon the structural condition of the hanging-wall.

MILL TESTS: Concentration tests on the sulphide ore have been made by simple flotation. With a 60-mesh grind, a recovery of 95% of the copper and gold was made, and a concentration ratio of 30 to 1. Under the present high costs of transportation by truck or rail, this makes the erection of a flotation mill at the mine a "must" in order to handle the large body of low grade ore.

The flow sheet of the mill to be as follows:

Controlled feeder to ball mill;
Classifier;
Conditioner tank;
Flotation cells;
Concentrates to Thickener;
Filter;
Shipping bin.

It is estimated that the cost of equipment and mill erection will be about $150,000, and will take from 5 to 6 months' time, during which time stope preparation can be done and the mine placed in shape for low-cost mining and hoisting.

ASSAY MAP: On a large-scale office map the location of each car-load shipment is plotted, and attached to it, copies of lists of smelter settlements and assays. This map is not included with this report, but is available, and is of far greater value than an assay map of channel samples and assay results.

COSTS: Mining and milling costs are estimated at $3.90 per ton on a 200-ton daily production, as follows:

Mining	$1.10 per ton
Development	.50 " "
Milling	1.25 " "
Insurance, taxes, etc.	.40 " "
Royalty	.65 " "
	$3.90 " "

Value of ore	$6.50
Cost	3.90
Profit per ton	$2.60

EARNINGS: 200 tons @ $2.60 per ton — $ 520.00 per day
300 days per year — $156,000.00 per year

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RECOMMENDATIONS: The erection of a 200-ton-per-day mill.
The equipment of the mine for low-cost production.

Sink the incline shaft another 200 feet with stations each 100 feet.
Connect adit level with vertical shaft and incline shaft, with 400-ton underground ore pocket and direct hoist through incline shaft.
50-Ton underground ore pockets on the 350' and 415' levels and on the new levels.
Exploration of the iron gossan on the Arizona claims.
Power line from the trunk high-power line at railroad.

The cost of the work recommended is estimated at about $200,000, and provision should be made of $40,000 to $50,000 for working capital and contingencies.

CONCLUSIONS: The ore in sight and practically assured fully justifies the work outlined. Enough ore is assured to not only repay the capital investment required, but to show a substantial profit in addition. The prospect of opening up a larger tonnage of higher grade ore in depth is most favorable and indicates a long-continued profitable operation.

Respectfully submitted:

(Signed) J. S. COUPAL, Registered Mining Engineer,
Phoenix, Arizona

May, 1960 (sic)

YUMA COPPER MINE

CARLOAD SHIPMENTS TO CLARKDALE: Lot Numbers in Circles.

Shippers Lot No.	Dry Tons	Cu. %	Au.Oz.	Ag. Oz.	Fe. %	CaO. %	SiO2 %
5	58.152	1.35	0.025	0.36	13.0	20.6	28.5
6	54.137	1.50	0.04	0.27	18.1	10.5	45.4
7	104.740	1.72	0.01	0.29	18.1	20.8	36.5
8	106.639	2.03	0.02	0.25	16.4	19.3	38.0
9	97.389	2.52	0.02	0.36	18.3	17.0	35.3
10	99.622	1.72	0.02	0.27	17.3	15.0	38.3
11	107.859	1.33	0.03	0.25	21.3	17.2	35.1
12	96.597	2.53	0.02	0.28	17.4	14.8	39.5
13	103.869	2.67	0.02	0.22	15.5	14.6	37.6
14	100.612	1.90	0.01	0.22	15.3	14.6	38.3
15	99.943	1.34	0.03	0.27	15.0	15.2	38.4
16	209.058	1.37	0.03	0.22	15.7	17.9	38.0
17	107.436	1.19	0.02	0.19	13.0	14.8	40.5
18	103.692	.96	0.02	0.18	12.7	15.3	41.7
19	108.464	1.37	0.02	0.20	13.5	16.1	39.0
20	105.834	1.28	0.02	0.18	13.6	18.1	40.0
21	109.167	1.06	0.03	0.16	13.0	18.3	39.0
22	104.584	1.15	0.02	0.21	27.7	12.9	32.1
23	103.138	1.27	0.03	0.22	26.7	12.9	32.9
24	108.088	1.31	0.02	0.25	22.5	17.0	36.2
25	98.697	2.90	0.02	0.25	13.0	13.4	40.7
26	55.981	4.30	0.03	0.22	14.2	14.5	41.2
27	61.278	4.54	0.03	0.25	15.3	16.5	40.2
28	60.393	3.93	0.03	0.28	17.9	17.4	39.6
29	112.886	1.55	0.02	0.23	18.4	20.4	35.5
30	47.785	2.24	0.02	0.28	18.1	18.8	35.9
31	105.761	1.95	0.02	0.29	17.5	18.6	36.4
32	58.621	3.10	0.02	0.30	17.4	17.6	37.8
33	54.662	2.80	0.03	0.29	17.4	15.1	40.5
34	94.007	2.46	0.03	0.31	17.8	15.4	41.5
35	91.227	2.18	0.04	0.33	18.1	13.9	40.6
36	110.835	1.45	0.02	0.25	21.7	16.0	37.3
37	90.225	1.48	0.03	0.27	17.8	16.9	43.5
38	98.885	1.52	0.025	0.25	18.4	17.1	40.7
39	102.893	1.14	0.02	0.25	17.6	19.6	37.5
40	100.739	1.23	0.028	0.24	15.9	17.6	40.8
41	155,651	1.29	0.27	0.24	14.8	19.3	37.2
42	104.872	1.37	0.035	0.27	13.8	14.1	37.2
43	53.591	1.39	0.042	0.25	15.5	16.9	38.0
44	104.273	1.58	0.028	0.29	16.6	16.1	43.7
45	98.161	1.64	0.03	0.28	15.0	17.7	43.0
46	51.453	1.61	0.03	0.28	16.4	17.9	43.7
47	148.902	1.71	0.03	0.29	15.3	17.1	41.0
48	95.763	1.77	0.03	0.30	15.3	14.5	44.1
49	97.149	1.76	0.03	0.29	17.0	15.8	47.8
50	97.723	1.77	0.032	0.31	16.3	16.2	43.3
51	104.405	1.85	0.03	0.30	15.9	16.6	45.2
52	100.109	1.70	0.03	0.30	16.1	17.9	38.6
53	97.931	1.74	0.032	0.29	17.0	16.3	41.3
54	102.584	1.71	0.04	0.29	15.1	16.3	40.8
55	106.811	1.71	0.038	0.31	16.9	16.6	43.2
56	99.672	1.64	0.03	0.27	16.1	17.8	39.9
57	100.784	1.41	0.03	0.26	18.8	17.0	37.6
58	104.613	1.78	0.035	0.30	18.3	14.9	42.4

Yuma Copper Mine.

Channell Samples taken by L. L. Farnham. July 28-29, 1948.
Assays by Chas. A. Diehl.

Sample Number	* Length of Channel	Weight of Sample in Lbs.	Assays. Cu. %	Au. Oz.	Ag. Oz.
Y-1-1	7.0 ft.	35.5	1.03	0.06	0.20
Y-1-3	6.7 "	18.0	.87	0.06	0.1
Y-1-4	6.3 "	23.0	.76	0.05	0.1
Y-1-5	7.1 "	22.0	..65	0.04	0.2
Y-1-6	8.2 "	25.5	1.36	0.04	0.1
Y-1-7	9.0 "	32.5	1.36	0.12	0.2
Y-1-8	3.5 "	22.0	1.36	0.08	0.2
Y-1-9	9.0 "	33.5	1.19	0.06	0.1
Y-1-10	9.0 "	25.0	1.14	0.05	0.3
Y-1-2-HW	2.0 "	8.0	.81	0.04	0.2
Y-1-2-FW	5.0 "	23.5	1.68	0.04	0.2
Y-2-11	6.0 "	16.0	.87	0.04	0.2
Y-2-12	5.0 "	21.5	.92	0.04-	0.2
Y-2-13	7.2 "	24.0	.87	0.10	0.2
Y-2-14	7.0 "	28.0	1.14	0.05	0.1
Y-2-15	8.0 "	15.5	.70	0.03	0.1
Y-2-17	6.5 "	23.0	1.52	0.04	0.2
Y-2-18	7.0 "	24.0	1.09	0.02	0.2
Y-2-19	4.5 "	15.5	.98	0.01	0.2
Y-2-20	6.5 "	22.5	2.01	0.02	0.3
Y-2-21	6.4 "	9.5	.43	0.02	0.3
Y-2-22	6.0 "	16.5	.92	0.02	0.2
Y-2-23	5.6 "	16.0	.92	0.01	0.1
Y-2-24	5.8 "	28.0	1.30	0.01	0.1
Y-2-25	6.5 "	15.5	.70	0.02	0.3
Y-2-26	6.1 "	14.5	.87	0.02	0.1
Y-2-27	6.0 "	19.0	.87	0.03	0.3
Y-2-28	10.2 "	32.5	1.90	0.03	0.5
Y-2-29	5.6 "	25.0	1.30	0.03	0.3
Y-2-30	2.0 "	14.0	.49	0.01	0.2
Y-3-50	8.2 "	31.0	1.47	0.01	0.3
Totals	198.9 ft.	680.0 lbs.			

* Length of channel taken normal to dip of bedding.

Approximately 3.4 lbs. per foot of sample.

YUMA COPPER MINE.

CARLOAD SHIPMENTS TO CLARKDALE: Lot Numbers in Circles.

Shippers Lot No.	Dry Tons	Cu. %	Au. Oz.	Ag. Oz.	Fe. %	CaO. %	SiO2 %
59	118.166	1.53	0.032	0.26	18.3	16.5	42.8
60	117.157	1.41	0.035	0.26	20.1	15.3	39.4
61	115.031	1.62	0.03	0.37	19.5	15.0	39.6
62	120.27	1.45	0.03	0.26	19.5	14.0	41.9
63	117.810	1.46	0.033	0.29	19.3	14.8	40.0
64	116.721	1.37	0.032	0.24	19.0	16.0	40.5
65	241.260	1.31	0.028	0.23	20.4	14.8	37.3
66	36.659	2.06	0.028	0.39	18.3	14.0	42.3
67	57.296	1.36	0.025	0.28	18.2	14.7	41.2
68	46.997	5.07	0.01	0.16	15.0	18.3	37.4
69	45.415	2.12	0.015	0.25	17.0	18.2	41.1
70	21.536	8.08	0.005	0.10	11.9	16.2	41.3

Weighted Average 1.706%. Lots No. 68 and 70 omitted.

YUMA COPPER MINE.

CARLOAD SHIPMENTS TO MAGMA SMELTER: Sulphide Ores: Car Numbers Noted on Map.

Car Number	Dry Tons	Cu. %	Au. Oz.	Ag. Oz.	Fe %	CaO %	SiO_2 %
172258	47.9305	1.95	0.05	0.20	15.8	15.1	50.0
83285	57.122	1.95	0.05	0.20	15.7	15.2	52.2
173211	48.8715	2.00	0.06	0.40	15.8	15.8	51.2
81547 & 172130	95.065	2.10	0.06	0.40	14.3	14.8	51.0
174267	56.064	2.02	0.05	0.20	13.66	15.4	52.00
82490	48.80	1.74	0.04	0.20	16.4	14.6	48.6
83088 & 83087	102.2965	1.75	0.05	0.10	17.3	15.6	48.6
70011	90.922	1.73	0.05	0.10	16.3	15.1	49.2
85669	51.5285	1.60	0.05	0.20	14.4	15.6	51.0
81121 & 172698	101.0895	1.38	0.04	0.10	13.5	14.3	54.8
83942, 85638, 173584	157.505	1.63	0.06	0.60	14.3	16.5	52.6
82240 & 172950	101.079	1.92	0.04	0.20	14.8	18.3	49.4
84578 & 173900	90.543	1.61	0.04	0.20	14.7	16.2	52.0
			Oxidized Ores				
172783	43.9805	9.38	0.04	0.20	12.0	15.0	38.4
171804	42.6025	11.15	0.03	0.10	11.2	14.0	39.0
82152	38.053	11.48	0.06	0.40	9.8	14.2	39.2
83717	30.978	9.17	0.02	0.40	11.8	15.2	38.0
83747	43.248	9.78	0.03	0.50	10.8	14.2	40.0
173707	52.0675	8.52	0.02	0.30	12.4	16.9	37.4
172808	53.0185	8.80	0.02	0.50	12.2	16.2	39.2
84442	52.689	7.65	0.02	0.20	12.6	17.5	37.4
83373	49.4525	7.15	0.02	0.20	12.4	17.4	39.8

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Liberator Mining Company Date February 22, 1944

District Engineer J. S. Coupal

Subject: Attention: Miss Florence Haskell
Hotel Adams

May I make a few comments regarding your operations at the Yuma Mine from observation made on my visit to the property on February 22, 1944.

The adit tunnel work is progressing favorably and the work is now lined out so that good results can be expected. The lowering of the grade on the adit tunnel is advancing at the rate of about 16 feet a day (2 shifts). There is still about 110 feet to go before reaching the former breast. From there to cut the foot wall ore body will require about 62 feet on which about 10 feet a day can be made. It will then call for about 210 feet of drifting on the vein to reach the old workings and on that drifting ore can be made available for shipping as the work progresses. The ore bin is being erected to handle this ore. The camp, boarding house and labor supply are adequate to carry the present work forward at a good rate.

I believe you have a good workman in George Spry and would suggest that he be made superintendent and give that title along with a flat rate of $250 per month. He is capable, as far as actual work is concerned, but for over-all planning of the work I believe authority should be given to L. L. Farnham, whom I understand has agreed to act in a consulting capacity to check present work and to plan the future work. When the work he outlines is approved by you or your company, he should then give directions to the superintendent to carry out such plans.

Your labor costs are going to be high due to the excessive amount of overtime. An additional bunk house should be erected so as to accommodate from 3 to 4 extra men and avoid payment of time and a half for over 40 hours and double time for the seventh successive day's work as set forth in wage and hour regulations. Mr. Farnham is conversant with the plan commonly known as working two weeks back to back and avoiding time and a half and double time.

George Spry, on a flat rate as superintendent, will look after both shifts without time and a half, and can well give more of his time to supervision and training of his men rather than to too much actual manual labor on his own part.

Both Spry and MacDonald are over enthusiastic and the employment of Farnham so as to check costs and future planning is strongly urged.

After the foot wall vein is reached and after drifting on the ore is well in hand, it may be possible to start steady stoping on ore above the adit tunnel level. This will depend somewhat on the ore as exposed in the drift.

Two extra men can be used at present to prepare the old workings, as outlined by Pratt, for mining. This work can be carried on from the vertical shaft and consists of an ore pocket, raise, drift and haulage plans. It can be done without interference with the work on the adit level.

I would refer the purchase of a 50 KW generating unit for underground hoisting to Mr. Farnham. This, for an immediate expenditure, may depend upon the ore exposed in drifting on the ore after the foot wall vein is cut and opened up from the adit tunnel.

Within the next few weeks after Farnham has been able to put in 2 or 3 days on the property, you should be able to get a close figure on just how much additional expenditure you should be called upon to make prior to starting ore shipments.

You should have a transfer of the quota and premium prices allowed made from George Spry on the Yuma Mine to the Liberator Mining Company, so as to avoid unnecessary delays in ore settlements.

Your operations are marginal due to the low grade tenor of your ore. It is going to be necessary to closely watch operating costs. One item that should be carefully considered and on which unbiased opinion should be consulted is your industrial insurance.

The constrictions in the galley directly in front of the portal to the adit tunnel have me worried. If a cloudburst occurs in the drainage area of this gulley above the mine, I feel sure the workings would be flooded. This should be given attention.

Costly delays can be avoided if some system is devised between you and the mine for expediting shipment of supplies and materials needed at the mine. I understand you are working on some such plan with Mr. Shaw and it should be worked out in careful detail along with proper requisition for supplies.

I believe a daily report should be submitted by the superintendent, one copy to you and one to Mr. Farnham, if proper check is to be kept on work progress and on any changes necessary.

I suggest also that you consult Mr. Dixon Fagenberg, Phoenix, C.P.A., regarding bookkeeping methods in order to take full advantage of depletion and other items which enter corporate tax payments.

Yours very truly,

J. S. Coupal

J. S. Coupal

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine YUMA COPPER MINE Date February 11, 1943

District Ellsworth, Yuma Co., Arizona. Engineer Elgin B. Holt

Subject: REPORT

OWNER: C. H. Waters, Vicksburg, Arizona.

LESSEES: Roy R. MacDonald, Robert Douglas, and George Spry, Vicksburg, Arizona.

1141 W. Lincoln St. Phoenix, Ariz. (MW. 7-1942)

METALS: Copper.

LOCATION:

This property is located at the western end of the Harcuvar Mountains, about 11 miles northwest of Vicksburg, and is reached by a good desert road from a loading ramp located at McVay siding, on the Santa Fe Railroad, 5.5 miles from mine. The group is composed of 12 unpatented mining claims.

EXAMINATION:

This property was visited by me on February 7, 1943, in company with George Spry and his associates. At this time the mine was being operated with a crew of 8 men and ore was being extracted and shipped to smelters. Also the working shaft had been cleaned out and retimbered and a gasoline hoist had been installed. I went down on the mine bucket with Mr. Spry and we inspected the underground workings of the property. I found these workings in excellent condition, and operations were being conducted in a business-like manner. It might be well to note here that all three of the said lessees are skilled miners and are working right along with their men.

GEOLOGY:

The main ore-bearing zone consists of a limestone strata, or reef, striking east and west and dipping about 30 degrees north. On the hanging wall side of the reef there is a band of quartzite from 12 to 14 feet thick. Also, the adjacent rocks found on the north and

south sides of the ore zone mentioned, presumably consist of quartzite and quartz-porphyry.

VEINS:

Within the ore zone, which at mine workings is at least 100 feet wide, are four parallel veins, from 3 to 15 feet thick, with the same strike and dip as the zone under discussion. These veins were probably caused by shearing action, as the gangue material thereof is composed of brecciated and altered limestone, which has been changed into copper ore by ascending thermal solutions, carrying that metal. Above the water level of the mine, the ores are oxidized, consisting of copper carbonates; while below the water level, later to be discussed, the ore is sulphide material, consisting of chalcopyrite, bornite, etc. Also there is a stockwork of veinlets in the ore zone running in various and sundry directions. Furthermore, the zone is cut in numerous places in the mine workings by basic intrusive dikes from a few inches to 30 feet in width. Again, the ore-bearing zone, showing copper in outcroppings, is traceable on the surface a total distance of 4500 feet, per Mr. Spry. Hence, the geologic conditions are most pleasing, and the property has all the ear-marks of a large copper mine in the making.

MINE WORKINGS:

A vertical double compartment shaft was sunk to a depth of 135 feet, where a vein was encountered and drifts run thereon in an easterly and westerly direction. Thence, the vertical shaft goes on down 20 feet to a loading pocket. Thence, the shaft continues on downward at an inclination of 36 degrees, in the foot wall of zone, to the 500-foot level of the mine.

On the said 135-foot level, a drift was run west from shaft 160 feet, following a vein running from 3 to 8 feet in width. Also, a drift was run east from shaft 165 feet on the same vein. The oxidized ores found in these drifts average about 2 percent copper, per, Mr. Spry.

WINZE:

A working winze is located 78 feet west of shaft, and was sunk on vein to a total depth of 390 feet, below the said 135-foot level. Water now stands in this winze at a point 215 feet below the 135-foot level, mentioned.

OXIDIZED AND SULPHIDE ORE ZONES:

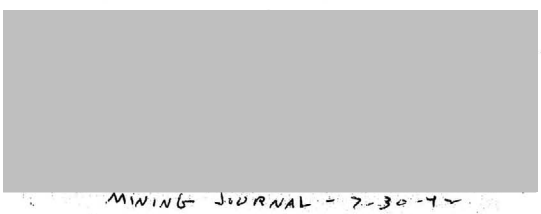
The oxidized ore zone goes down from the surface, to a point in the winze mentioned, 180 feet below the 135-foot level, below which point the vein was found to be leached and barren of values for an additional depth of 60 feet, where massive sulphide copper ore came in. This information was recently furnished to Mr. Spry by Louis T. Derwin, of Oracle, Arizona. Derwin was mine superintendent for the old Yuma Copper Company, 1906 - 1909, during which period all of the mining work in property was carried out, by people residing in Michigan.

Derwin stated that at a point 25 feet above the bottom of the winze, a drift was run in sulphide ore west 125 feet, and diamond drilling was then started from this level. As the water flow became troublesome, coming in at about 50 gallons per minute, the company abandoned this level, and backed up in winze 50 feet where another drift was driven on vein about 100 feet in an easterly direction. From this latter drift a number of diamond drill holes were run with a view to determining the extent of sulphide ore reserves in this area.

OPERATIONS: PLANNED:

Lessees are planning to raise capital sufficient to defray the cost of cleaning out, timbering where necessary and unwatering the winze referred to in order to uncover the sulphide ore discussed above. They are of the opinion, once the sulphide ore is opened up, they will be able to produce, by selective mining, somewhat higher grade ore than is now being mined and shipped from the oxidized zone above water level. Also, when and if ample sulphide ore reserves can be blocked out, such ores can be concentrated easily by flotation and thereby a high grade shipping product produced.

Elgin B. Holt,
Field Engineer.



MINING JOURNAL - 7-30-54

MINING WORLD
8-59

Derwin also stated, per Spry, that the sulphide ore vein was proven to be, by the drilling mentioned, from 30 to 50 feet wide; also that the granulated material from the drill holes averaged from 2.8 percent to 3 percent copper; but that bands of sulphide ore were encountered by the drill holes assaying from 10 to 30 percent copper.

The above statement is partly verified by the fact that some sulphide copper ore is now found on the mine dumps, consisting of chalcopyrite and bornite material. Also, within recent years several short lots of sulphide ore, said to assay around 10 percent copper, have been shipped from these dumps by chloriders.

PRODUCTION:

Lessees have opened a stope, in oxidized ore, on the 320-foot level in the winze. Here the vein is 10 feet in width, and all vein material has been shipped. Six car loads of ore have been marketed, to the Clarkdale, Magma and Hayden smelters; but at the time of visit, there were only five liquidation sheets available. These are tabulated as follows:

Tons	Cu-%	Au-oz	Ag-oz	Zn-%	CaO-%	SiO2-%	Fe-%
31.1835	5.75	.015	.24	.3	20.5	35.2	16.4
34.3985	5.52	.010	.24	.8	20.5	33.8	16.4
42.7130	4.39	.010	.24	.6	17.3	38.8	16.8
43.2385	4.88	.030	.30	-	20.6	38.0	15.7
35.0000	5.06	.010	.35	-	18.6	40.3	11.5

NOTE: The above car lots of ore were shipped from property between October 10, 1942, and Jan. 4, 1943. No ore is now in transit; but there are now 200 tons of broken ore on dump, of same grade material as noted above, ready to be shipped, as soon as the loading ramp at McVay siding can be completed. Also, a loading bin is being built at the mine in order to facilitate loading trucks at that end. Lessees are now planning to ship at least 4 car loads of ore from the mine monthly.

Excerpt: from U. S. G. S. Bulletin 451, "Reconnaissance of the Ore Deposits in Northern Yuma County, Arizona"

YUMA COPPER PROPERTY (FORMERLY I. & A.).

Location and Development.

The property of the Yuma Copper Company is 7 miles due north of Vicksburg and has been prospected by shallow surface cuts and short shafts, the deepest of which was inaccessible when the property was visited.[a] At that time a new inclined shaft was being sunk a short distance northeast of the so-called iron dike which is a prominent feature in the vicinity of the camp. Water is obtained from a well on the property.

Geology.

In the immediate vicinity of the various prospects there is a marked similarity in the general geologic section, although there is a distinct difference in the type of rock found at each of the three workings visited. Just east of the camp a steep mountain rises to an altitude of 3,200 feet, which is 1,400 feet above the camp of the Yuma Copper Company. The geologic section exposed here is composed almost entirely of rocks belonging in the general series of pre-Cambrian metamorphosed sediments which are found throughout the southwestern part of the Harcuvar Range and elsewhere in the vicinity. These are medium to fine-grained quartz-mica schists and arenaceous shales, intruded in an irregular manner by acidic and basic dikes which usually follow but occasionally cut directly across the planes of schistosity. Some of these are vogesite dikes presumably connected with the intrusion of the granite which forms Salome Peak only 1½ miles northeast of this mountain, and the rest are comparable to those already described as present in the sedimentary schist series. A thin band of rock, composed entirely of epidote, augite, hornblende, and albite, their relative abundance being in the order named, was observed near the base of the steep rise. This rock probably represents the result of contact metamorphism, which has accompanied the intrusion of the granite, the main mass of which is only a short distance northeast and branches of which are present in almost every part of the southwestern end of the Harcuvar Range. Small

Yuma Copper Property (Formerly I. & A.).

stringers of quartz occur throughout the section, and in many instances occupy joint planes in the rocks.

The partial replacement of a ledge of yellow crystalline limestone by magnetite in the vicinity of the camp is the most conspicuous part of the section exposed on the property. This replacement, though not entirely regular, is several feet thick and of considerable length. Thin layers of actinolite are present in the magnetite and quartz is also fairly conspicuous, all three constituents, as shown in a thin section, appearing to have crystallized contemporaneously. Calcite is also a prominent component of the ledge. The replacement of the limestone by magnetite may be one of the results of the metamorphic action produced by the intrusion of the granite in this general vicinity.

The new inclined shaft which was being sunk a short distance northeast of this magnetite ledge had for walls a very highly chloritized and epidotized, fine-grained schist, which showed some copper and manganese oxide stains in the joints and lamination planes and was underlain by a very impure limestone in which occur many pseudomorphs of hematite after pyrite and numerous vugs lined with calcite.

The dump of the vertical shaft showed two distinct types of rock - one a very much metamorphosed, fine-grained quartz-mica shhist highly chloritized and carrying noticeable quantities of pyrite, and the other pure white gypsum. The schist was fractured and the crevices filled with calcium sulphate, the latter occurring in such quantities on the dump as to indicate large depseits of this material below. As the shaft workings were inaccessible, nothing can be said about them.

The dump showed no promising looking ore, and the rocks thereon have been described.

a In a report issued by the company, March 16, 1910, the total development up to January 1, 1910, is claimed to be 1,022 feet, of which 543 feet is in shaft sinking and the rest in drifts, crosscuts, and surface trenching.

July 10, 61

MINERAL RESOURCES OF NORTHERN YUMA COUNTY

The mineral resources of northern Yuma County include principally gold, silver, copper, lead and manganese, also non metallics ~~and~~ as building stone and refractories (kyanite, dumortierite) etc.

In the early history of the region the discovery of rich gold districts - first placer then lode - attracted large numbers of prospectors and traders mostly from the California gold fields. At about the same time substantial silver-lead deposits were opened along the Colorado River, and the copper deposits of the Planet Region came into production. Some of the early ores of silver lead and copper were shipped to Swansea Wales for treatment. One of the oldest smelters in the state was at Planet - erected in 1884. Among the famous past gold producers of the region were the Harqua Hala, the King of Arizona, and the North Star. The placers, being easily discovered and readily worked, were largely exhausted within a short time. Over the years however a steady trickle of production has been maintained and recently much attention has been directed toward dry placering of the large quantity of such material existing at various places in the arid region. The development of newly perfected dry concentrating devices is believed to hold good promise for successfully handling this material.

The rich silver deposits were of the shallow "desert silver" type and were soon exhausted. Much silver however occurs in the ores of other metals as yet unmined. No important gold mines are now in operation. This is largely because of the uneconomic situation as regards the gold mining industry in the United States. The price of gold is fixed at $35 per ounce. This figure was established some 28 years ago whereas the cost of everything that goes into the cost of producing gold has increased almost three times. Unless or until a price change occurs little can be expected from the industry. Much effort is being expended by western groups to persuade the government to recognize that restoration of this great industry would be an act of simple justice and would benefit the nation in the manner that any other healthy

prosperous industry does and as gold mining did for so many years. Assistance in the form of higher payment for domestically produced gold would accomplish this purpose and would not affect the international price of gold. Aid for this purpose would parallel the same governmental solicitude that has been shown for a myriad of other commodities, services and projects, not to mention tremendous aid programs looking toward the well-being of countless non-citizens.

At various times in the past northern Yuma county has contributed other mineral wealth than gold, silver and copper, notably manganese and to a lesser degree tungsten and some non-metallic minerals. Because of the flooding of American markets by cheaper foreign metal and mineral products (manganese, tungsten, fluorspar, etc) many mining enterprises can only operate under a high tariff wall or with other protection, or under subsidized buying programs. Several years ago a manganese buying program stimulated production of that metal and the result was a going prosperous industry providing jobs, and wealth for the state and the nation.* Legislative committees of the Western states and of various mining groups are actively pressing for the declaration of a National Minerals Policy. This would result in a study of ways and means for ameliorating the depressed mining industry of so much of the west.

Present mining activity in northern Yuma county revolves about copper and gold-silver exploration projects in the Plant-Bouse region and some gold development activity in the Parker-Bouse and Harqua Hala regions. Also, the Plant-Bouse region is known to contain widespread occurences of iron ore and these have been under intense investigation by numerous engineers representing domestic iron and steel interests, and also Japanese firms. The promise for favorable results in this direction seem very good.

* The program terminated in August, 1959.

NAME OF MINE: YUMA Copper Mine

COUNTY: ~~MOHAVE~~ Yuma
DISTRICT:
METALS: CU

OPERATOR AND ADDRESS: DATE:		MINE STATUS DATE:	
5/1/44	Liberator Mining Co. Vicksburg, Arizona Miss F.E.Haskell Adams Hotel, Phoenix J. S. Coupal, Mgr.	5/1/44	Developing
		6/44	Shipping

Miss F. E. Haskell
married to Keith Knight
Sells, bldg. around 1953
died Feb. 1958

June 9, 1955

E.A.

Mrs. E. V. Haydis
Salome, Arizona

Dear Mr. Haydis:

We have been able to secure a copy of a map showing the underground workings of the Yuma Copper, together with a report on the property by Sam Coupal dated May 1950. We can furnish you a copy of both the report and the map if you are still interested.

A reproduction of the map will cost about $5.00. Please let us know if you are still interested.

Very truly yours,

R.I.C.Manning,
Director

RICM:lp

6-3-54 Present ownership

OLIVER A. WYMAN,
31 Milk Street
Boston, Mass.

5/2/55
Present Owner
Est. Waters Est.
E. Z. Haydis
Salome, Ariz

October 29, 1943

Mr. Harry F. Dise, Clerk
Local Board No. 1
Selective Service System
Post Office Building
Prescott, Arizona

Dear Sir:

Subject: George Edward Spry #1551

In reply to your letter of October 28 regarding Mr. Spry our field engineer, Elgin B. Holl, has examined the Yuma Copper Mine on several occasions and I have before me a report in which he says:

> "This is the best showing for a copper mine in my district, not even excluding the Emerald Isle. The Yuma Copper has the earmarks of making a real large producing mine if adequately developed, and it is in good hands as all the leasers are miners with splendid production records."

Whereas Mr. Spry has had some difficulty in operations, it has been due mainly to the difficulty ~~in~~ getting efficient labor and being adequately financed. Steps are being taken to correct these conditions.

The property has shipped during the past years over eleven carloads of 5% copper ore and I believe there is an excellent chance of the property developing into and continuing to be one of the substantial producers in the western part of the state.

I believe Mr. Spry should be deferred due to the conditions as I know them and would heartily endorse such by your Board.

Yours very truly,

J. S. Coupal, Director

JSC:LP

SELECTIVE SERVICE SYSTEM

Local Board No. X 81
Yavapai County 025

OCT 28 1943 001

P. O. Box
Prescott, Arizona
(STAMP OF LOCAL BOARD)

October 28, 1943

SUBJECT: George Edward Spry #1551

DEPT. MINERAL RESOURCES
RECEIVED
OCT 29 1943
PHOENIX, ARIZONA

TO: Mr. J. S. Coupal, Director
Department of Mineral Resources
State of Arizona
413 Home Builders Building
Phoenix, Arizona

Dear Sir:

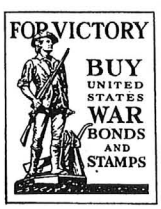
According to information contained in our files, the subject registrant is a partner in the Yuma Copper Mine at Vicksburg, Arizona. This Board would appreciate a report from you as to your opinion on the merits of this property. It is our understanding that production has been necessarily small due to difficulties encountered in reconditioning the mine.

We are enclosing a self-addressed envelope for your convenience in returning the desired information, and thank you heartily for your cooperation.

Yours very truly,

Harry F. Dise

HARRY F. DISE, Clerk



ms
Enc. env.

Aug 28, 1945

Dear Chuck—

I think you and Charlie both asked me about tin at the Yuma Copper Mine.

I asked B.of M. to check.

The confidential information is that 24 careful channel samples yielded

Tin content 0.002 or less.

" No exposures in the mine that contain sufficient tin to be of possible interest commercially"

Bill

Please tell Charlie

DEPARTMENT OF MINERAL RESOURCES

REPORT TO OPA ON ACTIVE MINING PROJECT

WAR PRICE & RATIONING BOARD
81.14.3
SALOME E.M.M. ARIZONA

DEPT. MINERAL RESOURCES
RECEIVED
DEC 15 1944

Filing Information

File System CUMBERLAND

File No. B (4)

This chart to be used for gallons of gasoline required per month.

Date December 2, 1944

Name of Mine Yuma Copper Mine

Owner or Operator X George Spry

Address Vicksburg, Arizona

Mine Location Ellsworth Mining District, Vicksburg, Arizona

PRESENT OPERATIONS: (check X)

Production X; Development X; Financing ....; Sale of mine ....;

Experimental (sampling) ....; Owner's occasional trip ....;

Other (specify) ....

PRODUCTION: Past and Future.

	Tons
Approx. tons last 3 months	1500
Approx. present rate per 3 months	2500
Anticipated rate next 3 months	3000
If in distant future check (X) here	

EQUIPMENT OPERATED:

Type	Quantity or Horse Power	Miles or Hours Per Month	Gallons Required Per Month — Requested	Recommended
Personal Cars				
Light or Service Trucks				
Ore Hauling Trucks				
Compressors	110 HP	240 hours	1200	1200
Other Mine or Mill Eqpt.				

PRODUCT PRODUCED OR CONTEMPLATED: Name metals or minerals.

Copper siliceous ore; fluxing

REMARKS:

Rumored from Mills and probably signed by him

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By ....

Jerome Copper

Oct. 25, 1944

% Senator Carl Hayden

Mr. J. S. Coupal,
Liberator Mines Company,
604 Heard Building,
Phoenix, Ariz.

Dear Sam,

I hate to be in the position of seeming to give you the brush-off, but you have handled enough government matters to know that they must be properly routed.

I can follow matters, and discuss them, and often expedite and get things done, but I cannot initiate moves for third parties.

If you will make your proposals to Rait for transmission to the Corporation, or direct to the RFC if Gooh ring thinks that the best route, without indicating Rait specifically, and will send me copies so that I am advised of the entire correspondence and can follow the case and make the best possible deal for you, you will get quick action.

You might send Kuehl a copy too, to keep him informed. But don't forget that Rait is head of the Mine Loan Division or Section, and that he is jealous of his prerogatives, as is any Government Section chief.

Just handle the original offers through "channels", give me all the information you can, and I will operate from there out. I don't want to take the matter up with Kuehl until this has been done, for your own advantage.

Sincerely,

W. C. Broadgate

F. E. HASKELL
SECRETARY-TREASURER

SHIPPING ADDRESS
SALOME, ARIZONA

LIBERATOR MINES COMPANY
604 HEARD BUILDING
PHOENIX, ARIZONA

ADDRESS MAIL COMMUNICATIONS TO
POST OFFICE BOX 655, PHOENIX

October 23,1944.

W. C. Broadgate
El Case, Apt. 204
705 4th. N.W.
Washington, 1. D.C.

SUBJECT: Cancellation notes
Yuma Copper Mine ores under
Docket N.D. 5621. (? ND-8111)

Dear Bill:-

Many thanks for your reply on this subject.

I called and discussed it with Mr. Wm. Gohring and he had just received a memo on the same subject from Mr. Tully.

Gohring was asked to submit a list of the equipment at the mine which was bought by R. F. C. under the loan with, I believe, the thought of liquidating the loan by selling this equipment and thus calling it a day. This seems like a fair and feasible manner of closing out this type of loan.

The equipment is at the mine and is being used and naturally should be paid for if it is to remain on the property. This would be agreeable to this company.

One point in addition to that, namely the repayments made on the loan from ores shipped from above the water level, which ore in no way benefited by the loan. Todate we have repaid $ 354.25. There is $ 206.71 in addition due from the 10 % to be paid on all ores shipped up to August 15th. Since that time there has been another 500 tons shipped on which at least $ 250 due R. F. C. on the 10 % repayment basis entered into by R.F.C. and Liberator. This would total about $ 800.00.

The cost price of the equipment on hand and purchased by R.F.C. money is $ 859.35 and if liquidated on a 75 % basis would mean that it should be purchased for $ 644.50.

I feel as though the Liberator should not have paid anything to R.F.C in repayment of loan. They would, if this was allowed, be credited with a payment of $ 354.25 on the $ 659.35 for liquidating the equipment. My company would willingly pay this balance of $ 299.25 and take title to the equipment, provided the notes or other lien against the Yuma Copper mine could in this manner be cancelled.

I would appreciate your taking this matter up with Mr. Fran Kuehl.

Very truly yours,

J. S. Coupal.

P.S. I enclose copy of the equipment compiled by Wm. Gohring.

Oct. 29, 1944

Mr. S. J. Goupal,
Liberator Mines Company,
604 Heard Building,
Phoenix, Ariz.

Dear Sam,

I have yours of the 25th regarding the cancellation of your loan. It must have crossed mine in the mail.

I hesitate to discuss this with Kuehl until the suggestion is formally cleared through Gohring and comes in here in the regular way, with Gohring's approval.

That is a good basis from which to start on this end. I lunched with Kuehl today and thought several times of mentioning your case, but decided I might prejudice it if I broached this somewhat revolutionary idea of the offset unless it came in with the field engineer's blessing.

You understand from my letter, I guess, that the usual procedure is in two steps. The loan is written off by the RFC at the Field Office recommendation, but the notes are held in the reserve portfolio.... the next step is the request for cancellation of the notes. Perhaps it all can be recommended at once, but I understand that is unusual.

I know you just wanted me to go fishing, but sometimes that is a dangerous enterprise and sets up a certain resistance unless the proper groundwork is laid.

Sincerely,

R. C. Broadgate

F. E. HASKELL
SECRETARY-TREASURER

SHIPPING ADDRESS
SALOME, ARIZONA

LIBERATOR MINES COMPANY
604 HEARD BUILDING
PHOENIX, ARIZONA

ADDRESS MAIL COMMUNICATIONS TO
POST OFFICE BOX 655, PHOENIX

October 25,1944.

W. C. Broadgate
El Caser, Apt. 204
705 4th N.W.
Washington, D.C.

SUBJECT: Cancellation notes
Yuma Copper Mine ores under
DOCKET ND 5621

Dear Bill:-

There are certain changes or activities being considered on the Liberator and the proposed new work. I wrote to you on Oct. 23rd regarding this same subject.

From the request for a list of the equipment on the Yuma Mine bought by R. F. C. I gather that they are considering liquidating the loan and thus give the new ~~owner~~ work a clear bill of health.

I think the arguement sound that no payments should have been made to liquidate the loan from ores which were in no benefited by the expenditure of the loan. This should give the Liberator a credit of the money paid R. F. C. which we should be able to apply on any cash payment required for liquidation of the loan.

I would greatly appreciate it if you are in position to argue this point with the R. F. C. department, under Mr. Tulley, I believe, or with Frank Kuehl and try to get an early decision.

I would gladly pay for a collect wire to me here at the Adams Hotel as soon as a decision can be obtained.

This would help me drive home certain points with the directors of the Liberator who are contemplating some moves which do not fully meet my approval and let me use it as a hammer over their heads.

No harm will be done if it cannot be done as no one except Bill Gohring knows of my try to get the liquidation of the loan.

Best wishes and my appreciation in advance.

Very truly yours.

J. S. Coupal.

P.S. I sure detest the attitude on the State of Texas matter and believe we must all get tough and let no one try to push us around. Whenever in Prescott I shall put in some of my time correcting any false notions I may find.

United States Senate

MEMORANDUM

Dec. 21, 1943

Baer Sam,

I think I will get this through all right.

I am surprised to hear that Pratt is back.

Regards,

Bill Broadgate

1 of 2

December 17, 1943

MEMORANDUM

NEW EQUIPMENT
YUMA COPPER MINE

TO: W. C. Broadgate

FROM: J. S. Coupal

Today the Western Machinery, Phoenix, is submitting a request from the War Production Board, Mining Division, on Form WPB 2910 for the purchase of one No. 12 Eimco Findley mucking machine for the Yuma Copper Mine, George Spry, operator, P. O. Box 655, Phoenix, or Vicksburg, Arizona.

The Yuma Copper had a $5,000 loan, opened up a substantial ore body and made a few shipments and were then refused an additional loan. I called the attention of the Arizona Eastern Gold Mines Company, owners of the Octave Mine, to this property and they have concluded negotiations with George Spry to take over the management, supply the necessary capital and go ahead on production. You may remember M. E. Pratt who was superintendent at the Octave Mine when I was there and remained in charge under the A.S. & R. until '39.

I have always kept in close contact with the Arizona Eastern and Miss Haskell, the secretary and treasurer, who caused an examination by Pratt to be made of the property and was influential in having the company take it over, is here at present.

This is a marginal copper and in order to show a profit it is necessary for them to use all labor saving equipment they can, particularly due to the fact that there is a labor shortage. Pratt believes the property can be put into very early production provided he is not hampered for equipment.

You will, of course, remember that our old friend, Carl Barth, was at the Octave. For sentimental, if no other, reasons I would like to see the Arizona Eastern make money on these operations and would appreciate any and everything you can do to get an immediate approval of this request for a preference rating which will give early delivery to this equipment.

You may wish to know the location of the Yuma Copper Mine which is about six or seven miles north and west of Quartzsite.

Any special attention you can give on this will be appreciated.

Sam Coupal.

JSC:LP

2022

F. E. HASKELL
SECRETARY-TREASURER

SHIPPING ADDRESS
SALOME, ARIZONA

LIBERATOR MINES COMPANY
604 HEARD BUILDING
PHOENIX, ARIZONA

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I feel as though the Liberator should not have paid anything to R.F.C in repayment of loan. They would, if this was allowed, be credited with a payment of $ 354.25 on the $ 659.35 for liquidating the equipment. My company would willingly pay this balance of $ 299.25 and take title to the equipment, provided the notes or other lien against the Yuma Copper mine could in this manner be cancelled.

I would appreciate your taking this matter up with Mr. Fran Kuehl.

Very truly yours,

J. S. Coupal.

P.S. I enclose copy of the equipment compiled by Wm. Gohring.

Oct. 29, 1944

Mr. S. J. Goupal,
Liberator Mines Company,
604 Heard Building,
Phoenix, Ariz.

Dear Sam,

I have yours of the 25th regarding the cancellation of your loan. It must have crossed mine in the mail.

I hesitate to discuss this with Kuehl until the suggestion is formally cleared through Gohring and comes in here in the regular way, with Gohring's approval.

That is a good basis from which to start on this end. I lunched with Kuehl today and thought several times of mentioning your case, but decided I might prejudice it if I broached this somewhat revolutionary idea of the offset unless it came in with the field engineer's blessing.

You understand from my letter, I guess, that the usual procedure is in two steps. The loan is written off by the RFC at the Field Office recommendation, but the notes are held in the reserve portfolio.... the next step is the request for cancellation of the notes. Perhaps it all can be recommended at once, but I understand that is unusual.

I know you just wanted me to go fishing, but sometimes that is a dangerous enterprise and sets up a certain resistance unless the proper groundwork is laid.

Sincerely,

R. C. Broadgate

F. E. HASKELL
SECRETARY-TREASURER

SHIPPING ADDRESS
SALOME, ARIZONA

LIBERATOR MINES COMPANY
604 HEARD BUILDING
PHOENIX, ARIZONA

ADDRESS MAIL COMMUNICATIONS TO
POST OFFICE BOX 655, PHOENIX

October 25,1944.

W. C. Broadgate
El Caser, Apt. 204
705 4th N.W.
Washington, D.C.

SUBJECT: Cancellation notes
Yuma Copper Mine ores under
DOCKET ND 5621

Dear Bill:-

There are certain changes or activities being considered on the Liberator and the proposed new work. I wrote to you on Oct. 23rd regarding this same subject.

From the request for a list of the equipment on the Yuma Mine bought by R. F. C. I gather that they are considering liquidating the loan and thus give the new ~~owner~~ WORK a clear bill of health.

I think the arguement sound that no payments should have been made to liquidate the loan from ores which were in no benefited by the expenditure of the loan. This should give the Liberator a credit of the money paid R. F. C. which we should be able to apply on any cash payment required for liquidation of the loan.

I would greatly appreciate it if you are in position to argue this point with the R. F. C. department, under Mr. Tulley, I believe, or with Frank Kuehl and try to get an early decision.

I would gladly pay for a collect wire to me here at the Adams Hotel as soon as a decision can be obtained.

This would help me drive home certain points with the directors of the Liberator who are contemplating some moves which do not fully meet my approval and let me use it as a hammer over their heads.

No harm will be done if it cannot be done as no one except Bill Gohring knows of my try to get the liquidation of the loan.

Best wishes and my appreciation in advance.

Very truly yours.

J. S. Coupal.

P.S. I sure detest the attitude on the State of Texas matter and believe we must all get tough and let no one try to push us around. Whenever in Prescott I shall put in some of my time correcting any false notions I may find.

June 17, 1944

File: LED

War Price and Rationing Board
No. 81.7.1
137 North Second Avenue
Phoenix, Arizona

Gentlemen:

Mr. A. J. Henneke, 708 North Ninth Avenue, Phoenix, is making application for supplemental gasoline for 750 miles per month.

Mr. Henneke is working at the Yuma Copper Company about 7 miles north of Vicksburg as a miner and this requires three trips a month from Phoenix to the mine and return.

I can certify as the need of this gas for work in the production of essential war mineral which is copper.

Yours very truly,

Chas. H. Dunning, Director
by J. S. Goupal

CHD:LP

C
O
P
Y.

EQUIPMENT PURCHASED BY

YUMA COPPER MINE

DOCKET ND - 8111

ITEMS	PURCHASE PRICE
Type N - Fairbanks-Morse 25 HP Hoist	$ 40.00
250' - 1/2" cable	34.80
2 - 3" check vales	39.00
4 - 2" gate vales	31.90
350' - 3" black iron pipe	149.04
Miscellaneous fittings, wrenches, pipe, etc.	137.88
Suction and fire hose.	97.74
Miscellaneous tools	38.99
Cameron pump.	290.00
	$ 859.35

All equipment second hand when bought except suction and fire hose.

Re-sale value of whole estimated at 75 % of original value $ 644.50

F. E. HASKELL
SECRETARY-TREASURER

SHIPPING ADDRESS
SALOME, ARIZONA

LIBERATOR MINES COMPANY
604 HEARD BUILDING
PHOENIX, ARIZONA

ADDRESS MAIL COMMUNICATIONS TO
POST OFFICE BOX 655, PHOENIX

October 14,1944.

W. C. Broadgate
Apt. 204 El Caser
705 - 4hh - N.W.
Washington, l. D.C.

Dear Bill:-

I am enclosing a copy of a letter I have just mailed to Frank Kuehl.

The cancellation of the RFC loan to the Yuma Copper Mine seems to me and to Charlie also, who has looked this over, as a strong case to present.

The loan money spent in no way benefited the mine nor the ore above the water level and the same work has to be done again in order to get at the sulphide ores. The grade is marginal and the new money ought not to be forced to carry the burden of paying for a dead horse. To make the mine pay-out all corners must be cut.

I know that my people would feel somewhat encouaged if the cancellation could be made.

Do hope you can see Frank Kuehl at your earliest convenice and go over this with him and see if quick action is possible.

I plan to rent equipment of sufficient power to do a quick job on the unwatering and if we find that the ore in the lower levels stands up under careful sampling and assaying we can then equip to mine and ship it economically.

One rather authentic statement by an early operator indicates that on a cross cut at the bottom of the 95 foot winze, sunk from the lowest level they cut 8 to 10 feet of 12 to 15 % ore carrying $ 8.00 to $ 10.00 ore. To check on this I believe a $ 5,000 added gamble is justified. There is no other way the company can pull themselves out of the hole they are now in.

With best wishes

Very truly yours,

J. S. Coypal.

Oct. 19, 1944

Mr. J. S. Goupal,
Liberator Mines Company,
604 Heard Bldg.,
Phoenix, Ariz.

Dear Sam,

I have yours of the 14th inst, with enclosure, and have discussed the matter with the RFC.

The usual procedure is to request the Field Office to recommend to the Washington office that the loan be written off the books here, after liquidation of any equipment which may have been purchased with RFC money.

After the Board has passed on that, application may be made, as I understand it, for release of the collateral, whatever it may be... in this case the usual note.

I believe several loans have been written off in this manner.

Sincerely,

M. C. Broadgate

P.S. Your argument is very ingenious! However, I don't think any loans have been written off for this reason... merely that they were unrecoverable.

October 14, 1944

Mr. Frank W. Kuehl,
Legal Department,
R.F.C. Annex,
2nd and Indiana, N.W.
Washington, D. C.

SUBJECT: Cancellation of lien against Yuma Copper Mine ores under R.F.C. Docket N.D. 5621.

Dear Frank:

On behalf of the Liberator Mines Company, now operating the Yuma Copper Mine, I wish to submit a request to have the agreement entered into by the Yuma Copper Mine with the Reconstruction Finance Corporation, on the $5,000.00 loan, Docket ND 5621, cancelled and to have the payments made by the Liberator Mines Company to the R. F. C., under a supplemental agreement, refunded.

The reasons for this request and a brief history of the operations follow:

1. The loan under Docket ND 5621 was made to unwater the Yuma Copper Mine and make accessible the lower workings for examination by the R. F. C. engineers, pending consideration of a development loan. The mine was unwatered to a level 95 feet on a 30-degree slope distance below the present water level, examined, and the application for a development loan rejected.

Records show that another level exists 125 feet on a slope distance below the one exposed, and a continuation of the ore exposed in a 95 foot vertical winze, sunk from this lower level, where high grade copper ore is reported.

2. The operator, George Spry, at that time was unable to finance the expense of keeping the water at the level reached, and the water rose to the original water level, so that the mine is now in the same condition, as far as accessibility to the lower workings is concerned, as it was before the expenditure of the loan. The loan expenditure therefore has benefited neither the operators nor the property, and is a loss directly chargeable to the war effort.

3. Since the rejection of the original application for a development loan, the Yuma Copper Mine has been granted an advanced premium of 15¢ per pound on copper, which now makes it possible to mine the ore in the lower levels at a profit, provided those workings were again re-Opened

and made available for operations.

4. Spry, later, interested private capital to form the Liberator Mines Company to take over his lease and obligations and finance mining of the oxide ores above the present water level. The Liberator Mines Company has shipped over 2,000 tons of oxidized ore from above water level. This ore was opened up and known long before any R. F. C. money was spent on the project. The Company did, however, agree to assume the obligations incurred under Docket ND 5621, and has made and is making payments of 10% of the net smelter and premium payments to liquidate this loan, although the ore mined in no way, shape or manner was benefited by the loan expenditures. It is my understanding that the intent of all such loans is that repayment shall be made out of ores exposed or made available by that particular money, and not out of known, previously existing and available ore assets of the Company.

5. The ores being mined are low grade and do not show a profit when obligated to pay the 10% royalty on all ores shipped to liquidate the R. F. C. loan, in addition to the 10% royalty being paid to the owner under the terms of the Spry lease. The new Company has spent in excess of $45,000.00 up to September 1st, 1944, and additional expenditures are contemplated. While the Company did agree to assume the obligations for payment incurred by Docket ND 5621, they never, in my opinion, should have been forced to do so.

6. I have recently taken over the management of the property for the Liberator Mines Company and have made an effort to recover at least part of their capital investment by mining and shipping the oxide ores occuring above the water level. As stated, over 2,000 tons have been mined and shipped, but due to the low tenor of copper, the limited extent of the ores in this zone, and the high costs of operating under present conditions, the total operating costs just about equal the net returns, so that no return of or on the invested capital is possible under such a program.

7. A careful study of the mine and the ore occurrences and a check on the old records of the mine indicate that higher grade sulphide ores occur in the lower levels, and that along with an increase in the copper content there is a payable increase in the gold content. In view of this, I have recommended to the Company that an additional $10,000.00 be spent to provide working capital and a complete unwatering of the mine to the bottom of the lowest workings. This expenditure is, in my opinion, justified in order that the new interests may at least have an opportunity to recover their invested capital. At least $5,000.00 of this new money must be spent for unwatering, thus doing all over again that work done under the R. F. C. loan, and making accessible for mining the higher grade sulphide ores known to exist in the lower workings.

8. I have qualified my recommendation to the extent that if the

May 29, 1944

PLEASE REPLY TO:
J. S. Coupal
304 Home Builder's Building
Phoenix, Arizona

War Production Board
Mining Branch
Washington, D. C.

SUBJECT: Transfer of Serial Number 48-208
Yuma Copper Mine to Liberator
Mines Company

Gentlemen:

On August 13, 1943, Serial Number 48-208 was issued to the Yuma Copper Mine. In January, the Liberator Mines Company, P. O. Box 655, Phoenix, entered into an agreement with George Spry, agent and operator of the Yuma Copper Mines, whereby the lease held by Spry was turned into the Liberator Mines Company and the Liberator Mines Company have taken over the entire operations.

I have been appointed manager of the Liberator Mines Company and, as purchases are made by this company, it seems desirable that the Serial Number be transfered. If there is any additional information required, I will gladly furnish same.

Very truly yours,

J. S. Coupal
Manager

JSC:JES

May 29, 1944

Mr. W. C. Broadgate
Apartment 204
El Caser
705 4th N. W.
Washington 1, D. C.

SUBJECT: Transfer of serial number, 48-208 Yuma Copper Mine to Liberator Mines Company.

Dear Bill:

On August 13, 1943, a serial number, 48-208, was issued to the Yuma Copper Mine (George Spry, Agent, Vicksburg, Arizona). Since that time, the Arizona Eastern Gold Mines Company which, as you remember, operated Octave, has entered into a deal with George Spry and they have put the lease on the Yuma Copper into the Liberator Mines Company, P. O. Box 655, Phoenix, Arizona.

Some steps were taken for an application to make this transfer but the proper procedure was not followed. I am enclosing a letter to The War Production Board, Mining Branch, Washington, D. C. which I believe is the branch to which the application for serial number under Preference Rating Order P-56 should be made. No space is provided for making a request for transfer of serial number.

I have been appointed manager for the Liberator Mines Company and have put in certain money to help get into immediate production. Is it asking too much of you to present the letter to the WPB, Mining Division, and ask them to steer through a transfer of the serial number from the Yuma Copper Mine to the Liberator Mines Company.

With best wishes and kindest personal regards, I remain

Very truly yours,

J. S. Coupal

JSC:JES

Washington, D.C.
May 15, 1944

SUBJECT: Yuma Mine access road

Dear Sam,

Your phone connection was not very good, but I got the drift of what you wanted. I did not quite get the Grazier's name, but after you hung up I realized it is Bud Dierking, whom I know. The contacts made during the Senate trip are invaluable...

As I told you, the Asst. Director of Grazing, Joe Leech, is a very good personal friend of mine.

I immediately told him your problem as far as I could get the drift of it.... principally that it entailed the diversion of a bull-dozer and that it would not cost more than $100 and take but a day or so.

Joe told me he would wire permission this afternoon. Joe will always do anything reasonable for me without much question, I am glad to say. That again is largely due to the Senate connection, as well as to our personal friendship.

I wired you as soon as Leech acceeded to my request.

Bill Broadgate

obligations under Docket ND 5621 are cancelled, I can state that the proposed expenditures are fully warranted, and if not cancelled, the expenditures are none-the-less necessary, but under rather harsh conditions. Due to the fact, however, that no advantage has or can be taken of the expenditure of the R. F. C. loan, it is obviously unfair that those putting up this new money should be saddled with this lien and be burdened with paying for a "dead horse" in order to pull the R. F. C. chestnuts out of the fire.

9. It is quite customary for private capital to unwater or otherwise make accessible mine workings for examination and if, after examination, the private operators decide not to exercise their option, they usually abandon the property without any thought of lien or other method of having their expenditures reimbursed. The R. F. C. could well consider adopting such a policy, especially in such cases as this particular one, where the R. F. C. money expended developed no new ore and in no way contributed to the betterment of the property. In fact, all that was accomplished was to give the property somewhat of a "black eye".

10. The fact that, after examination, the R. F. C. did not deem the property of sufficient merit to justify a development loan, under the existing demand and the premiums payable at that time, and that the expenditure of the loan in no way increased the value of the property, would fully justify the R. F. C. in writing off the expenditure made and the cancellation of any obligation to repay the money so expended from ores which additional capital must re-open and mine.

Conclusion: In view of the above statements, we ask that the lien against the ores in the Yuma Copper Mine, as set forth in Docket ND 5621 be cancelled; that the supplemental agreement by the Liberator Mines Company to assume repayment of this $5,000 loan also be cancelled and that any and all payments made to the R. F. C. on ores mined from above the water level by the Liberator Mines Company be refunded.

If this request can be complied with, I am assured that the additional money will be made available and the Liberator Mines Company given an opportunity to recover their invested capital from returns on mining the higher grade sulphide ores. The invested capital cannot be returned from continued mining in the oxide zone, and the only recourse for the operators would be to sit tight and hope for settlement under the quasi-contract provision of the Contract Termination Bill.

The new money provided has been from the Arizona-Eastern Gold Mines Company, owners of the Octave Mine in Yavapai County, Arizona. Operations were suspended at that property in November, 1942, and in an effort to assist in the war effort the expenditures at the Yuma Copper Mine were made.

With best wishes and kind personal regards, I am

Very truly yours,

Jas. Coupal.

J. S. Coupal, Manager.

January 18, 1944

Mr. M. E. Pratt
Vicksburg, Arizona

Dear Mort:

I have just received a memorandum from Bill Broadgate in which he states that the Yuma Copper has been allowed the 10 cents additional premium on copper.

This means you can count on 27-cent copper for your shipments and it makes the margin a little better for you to work on.

Yours very truly,

J. S. Coupal, Director

JSC:LP

April 21, 1944

Mr. George Spry
Yuma Copper Mine
Vicksburg, Arizona

Dear George:

I am having Mr. Brown, our field engineer at Prescott, investigate the condition at the Clarkdale Smelter. There have been rumors that a number of the shippers have been cut in their shipments from 50 to 75% of the amount of ore that they could ship and this condition may prevail for 30 or 60 days or more. If view of this, it might be necessary to ship your Yuma ore to Hayden.

I would like to see a representative sample of either the broken ore in the stope to the west of the incline taken and sent to Brent N. Rickard, American Smelting and Refining Company, Tucson, asking him what the treatment charges would be on such ore and find out whether or not the Hayden Smelter would receive this ore.

You may prefer to mail a representative sample from the ore in this stope exposed in the backs rather than the broken ore in the stope and I suggest that you use your own discretion. If a good sized sample is taken and properly mixed and broken, sending from 5 to 10 pounds by express or parcel post to Mr. Rickard, I feel sure he would get an early reply to you.

I may possibly try to get to the mine on Sunday.

Very truly yours,

J. S. Coupal, Director

JSC:JES

Washington, D.C.
Jan. 5, 1944

SUBJECT: Yuma Copper ... George Spry
Preference Rating P-56, Serial 48-208

The Eimco Finlay loader, being approved, and, I trust, the premium being satisfactory, we should be able to close this case?

Bill Broadgate

Washington, D.C.
Dec. 29, 1943

SUBJECT: Yuma Copper Company, George Spry

You will be pleased to know that we have this approved by OPA and WPB and the Quota Committee and that it went over to MRC today. I see no reason why it should not be approved there.

Bill Broadgate

December 20, 1943

MEMORANDUM

YUMA COPPER COMPANY
George Spry
Advanced Copper Premium

TO: W. C. Broadgate

FROM: J. S. Coupal

I visited the Yuma Copper Mine out of Vicksburg yesterday with Miss Haskell, secretary and treasurer of the Arizona Eastern Gold Mines Company, which company has entered into working arrangement to provide about $20,000 in new work.

The Yuma Copper has been granted an advanced premium which gives them 21.6 cents per pound for their copper. This 21.6 cents per pound will call for more or less selective mining in order to ship a product which will pay expenses.

Along with mining this ore there will be exposed considerable tonnage running around two percent which cannot be moved at a profit. The ore carries a high lime and fairly high silica content and if a 27 cent price were granted or the 10 cents advanced premium, cost could be lowered and a considerable tonnage shipped.

The Yuma Copper group already have invested some $20,000, they have a $5,000 R.F.C. loan to pay off and the present operations plan for an additional $20,000. If the advanced premium was granted for sufficient time to permit repayment of the capital investment, it would mean that this group could be bailed out before the inevitable cutback takes place.

If you can assist in calling this to the attention of the Quota Committee and get favorable action, it will be appreciated.

JSC:LP

CC: Miss Florence Haskell

December 16, 1943

Local Allocation Office
304 Security Building
Phoenix, Arizona

Gentlemen:

I understand that application has been made for a pick-up truck for the Yuma Copper Company, George Spry, Manager, Vicksburg, and wish to certify to the need of this equipment for the operations now underway.

The property consists of a large showing of oxidized siliceous copper ores above the water level and has a substantial showing of sulphide ores below. The present plant contemplate shipping the oxidized ores and at a future date to unwater, to consider shipping or treatment of the sulphide ores.

I have discussed the operating plans and procedure with M. E. Pratt, who is the engineer in charge of the present operations under a financial working agreement made by the Liberator Mining Company, under which name operations will be carried on after January 1.

For your information I am enclosing a copy of a report made by Elgin B. Holt, Field Engineer for the Department of Mineral Resources.

As stated, I have discussed the operating plans now being carried out by Mr. George Spry, Mr. M. E. Pratt and Miss F. E. Haskell, representing the new money undertaking the present operations, and can certify as to the need of this equipment.

Very truly yours,

J. S. Coupal, Director

JSC:LP
Enc.

December 17, 1943

MEMORANDUM

NEW EQUIPMENT
YUMA COPPER MINE

TO: W. C. Broadgate

FROM: J. S. Coupal

Today the Western Machinery, Phoenix, is submitting a request from the War Production Board, Mining Division, on Form WPB 2910 for the purchase of one No. 12 Eimco Findley mucking machine for the Yuma Copper Mine, George Spry, operator, P. O. Box 655, Phoenix, or Vicksburg, Arizona.

The Yuma Copper had a $5,000 loan, opened up a substantial ore body and made a few shipments and were then refused an additional loan. I called the attention of the Arizona Eastern Gold Mines Company, owners of the Octave Mine, to this property and they have concluded negotiations with George Spry to take over the management, supply the necessary capital and go ahead on production. You may remember M. E. Pratt who was superintendent at the Octave Mine when I was there and remained in charge under the A.S. & R. until '39.

I have always kept in close contact with the Arizona Eastern and Miss Haskell, the secretary and treasurer, who caused an examination by Pratt to be made of the property and was influential in having the company take it over, is here at present.

This is a marginal copper and in order to show a profit it is necessary for them to use all labor saving equipment they can, particularly due to the fact that there is a labor shortage. Pratt believes the property can be put into very early production provided he is not hampered for equipment.

You will, of course, remember that our old friend, Carl Barth, was at the Octave. For sentimental, if no other, reasons I would like to see the Arizona Eastern make money on these operations and would appreciate any and everything you can do to get an immediate approval of this request for a preference rating which will give early delivery to this equipment.

You may wish to know the location of the Yuma Copper Mine which is about six or seven miles north and west of Quartzsite.

Any special attention you can give on this will be appreciated.

/

JSC:LP

November 16, 1943

Mr. Harvey J. Waters
910 North Buena Vista
Burbank, California

Dear Harvey:-

I am enclosing a copy of a memorandum from Elgin B. Holt, our field engineer in the western district and also a copy of his report on the Yuma Mine.

At the present time, the Arizona Eastern Gold Mines Company has an engineer on the property examining it and are considering a deal with the operators whereby they will furnish money to increase the operations on the property.

There is a large zone of oxidized ores above the water level and a large body of sulphide ores, averaging a close 2%, below the water level. I believe this property would be of interest to the people you mentioned.

Very truly yours,

J. S. Coupal
Director

JSC:JES
ENC

MEMORANDUM

TO: C. F. WILLIS

December 10, 1943

FROM: J. S. COUPAL

Miss Florence E. Haskell, representing Eastern financial interests, has concluded negotiations for a working contract with George Spry and R. R. McDonald on the Yuma Copper property on which they hold lease and option from H. J. Waters of Vicksburg whereby the Eastern interests take over operating management.

M. E. Pratt, formerly superintendent of the Octave Mine, is at present in charge organizing the operating work.

The Yuma Copper has exposed a large tonnage of oxidized ores above the water level and it is planned to commence shipment from these ores and at a later date develop and get production from the lower sulfide ores.

Yuma Copper was opened up by an RFC mine accessibility loan and has made some shipments of the oxidized silicious copper ores.

J. S. Coupal

JSC:JES

December 16, 1943

Local Allocation Office
304 Security Building
Phoenix, Arizona

Gentlemen:

I understand that application has been made for a pick-up truck for the Yuma Copper Company, George Spry, Manager, Vicksburg, and wish to certify to the need of this equipment for the operations now underway.

The property consists of a large showing of oxidized siliceous copper ores above the water level and has a substantial showing of sulphide ores below. The present plant contemplate shipping the oxidized ores and at a future date to unwater, to consider shipping or treatment of the sulphide ores.

I have discussed the operating plans and procedure with M. E. Pratt, who is the engineer in charge of the present operations under a financial working agreement made by the Liberator Mining Company, under which name operations will be carried on after January 1.

For your information I am enclosing a copy of a report made by Elgin B. Holt, Field Engineer for the Department of Mineral Resources.

As stated, I have discussed the operating plans now being carried out by Mr. George Spry, Mr. M. E. Pratt and Miss F. E. Haskell, representing the new money undertaking the present operations, and can certify as to the need of this equipment.

Very truly yours,

J. S. Coupal, Director

JSC:LP
Enc.

YUMA COPPER MINE

To: J. S. Coupal

From: Elgin B. Holt

I am herewith enclosing my report on the old Yuma Copper Mine, now being operated by George Spry and associates.

I spent a very interesting day last Sunday, February 2nd, looking this mine over. I went over this property some two years ago with Mr. C. H. Waters, owner, of Vicksburg. Was well impressed then with the surface showings; but at that time the mine was idle and I could not get under ground.

Briefly, this property has all the ear-marks of a sizeable copper mine in the making. If this ore occurrence were in granite or schist, I would not think so much of it. But the main ore zone consists of a huge upturned strata of limestone, flanked by quartzites and other sedimentary rocks; and this whole sedimentary series is intruded with basic dike material at frequent intervals.

Also, the ore-bearing zone, with copper in the outcroppings, is traceable for 4500 feet; the width of zone being much wider up on the mountain one-half mile to the east of main workings.

Again, the veins in the limestone reef, consist of altered brecciated porous limestone material, the vein being or having been produced originally by shearing action; hence copper can "live" in this kind of vein. Copper can also be leached and can migrate downward in this kind of vein; and this is exactly what happened: we have two or three hundred feet of oxidized copper sulphide ore below water level--bornite, chalcopyrite, etc. I would rather think it likely t at the entire zone, from 100 feet wide to much wider in places, would turn into milling ore below water; also with bands of shipping ore, as has been reported.

This is the best showing for a copper mine in my district, not even excluding Emerald Isle -- for Emerald Isle is merely a surface deposit mine that out and the mine is finished. The Yuma Copper mine has the ear-marks as stated. It will make a large producing mine, copper producer, if adequately developed. Also, it is in good hands, as all the lessees, three of them are miners with splendid production records. Ray R. MacDonald shipped silicious gold ores from the Congress mine area for many years.

Lessees are drawing up an application for a $5000 "C" loan. I recommend strongly that it be granted.

Elgin B. Holt

cc--Chas. F. Willis

Yuma Copper Mine

June 3, 1943

5th ACE MINING CO.,
Vicksburg, Arizona.

To: Charles F. Willis

CONFIDENTIAL

From: Elgin B. Holt.

Reference is again made to your letter of May 14th, advising that there is a new mining company operating six miles north of McVay, near Vicksburg, Arizona - the 5th Ace Mining Co., and that Herman D. Hamilton was in charge, etc.

For your information, I visited this property on May 29th, 1943, in company with Mr. Edwin W. Mills, and found the facts to be as follows:

Several weeks ago, a bunch of sharpshooters by the name of A. A. Asher, A. A. Keller and Homer C. Dixon, Jr., jumped an iron deposit, located within the Yuma Copper Mine holdings, owned by C. H. Waters, of Vicksburg, Arizona; said property being now actively operated by Roy R. MacDonald, Robert Douglas and George Spry, Vicksburg, Arizona; and these lessees have been working there for the better part of this year, and are now unwatering the main shaft with an RFC loan.

Waters and Spry state that the said claim jumpers relocated the iron claim, stating that it had been improperly held and that the title was no good, etc., etc.

At the time of my visit, both Spry and Waters had just returned from Yuma, where they had gone to attend a law suit to quiet title brought by Waters. This trial was also attended by Asher, Keller and Dixon. The trial came to a close on May 28th and attorneys for each side were allowed 10 days to file their briefs in this case and that it will then be decided by the court in Yuma.

I would say, from what I could gather that the ones who relocated, the ground now in litigation, have no legal grounds to stand on, as Waters and his wife have lived on this property for over 25 years and I do not think there is any doubt but that they have kept up their annual work. Again, last year Waters filed, or recorded his intentions to hold all of these claims; and furthermore George Spry and associates have been working this group for some time, and they actually worked the iron claim itself last Spring.

Elgin

Elgin B. Holt

cc - J. S. Coupal

YUMA COPPER MINE

To: J. S. Coupal

From: Elgin B. Holt

I am herewith enclosing my report on the old Yuma Copper Mine, now being operated by George Spry and associates.

I spent a very interesting day last Sunday, February 2nd, looking this mine over. I went over this property some two years ago with Mr. C. H. Waters, owner, of Vicksburg. Was well impressed then with the surface showings; but at that time the mine was idle and I could not get under ground.

Briefly, this property has all the ear-marks of a sizeable copper mine in the making. If this ore occurrance were in granite or schist, I would not think so much of it. But the main ore zone consists of a huge upturned strata of limestone, flanked by quartzites and other sedimentary rocks; and this whole sedimentary series is intruded with basic dike material at frequent intervals.

Also, the ore-bearing zone, with copper in the outcroppings, is traceable for 4500 feet; the width of zone being much wider up on the mountain one-half mile to the east of main workings.

Again, the veins in the limestone reef, consist of altered brecciated porous limestone material, the vein being or having been produced originally by shearing action; hence copper can "live" in this kind of a vein. Copper can also be leached and can migrate downward in this kind of a vein; and this is exactly what has happened: we have two or three hundred feet of oxidized copper ore in the surface veins with a secondary enrichment of copper sulphide ore below water level - bornite, chalcopyrite, etc. I would rather think it likely that the entire zone, from 100 feet wide to much wider in places, would turn into milling ore below water; also with bands of shipping ore, as has been reported.

This is the best showing for a copper mine in my district, not even excluding Emerald Isle - for Emerald Isle is merely a surface deposit - mine that out and the mine is finished. The Yuma Copper mine has the ear-marks, as stated. It will make a large producing mine, copper producer, if adequately developed. Also, it is in good hands, as all the lessees, three of them, are miners, with splendid production records. Ray R. MacDonald shipped siliceous gold ores from the Congress mine area for many years.

Lessees are drawing up an application for a $5000 "C" loan. I recommend strongly that it be granted.

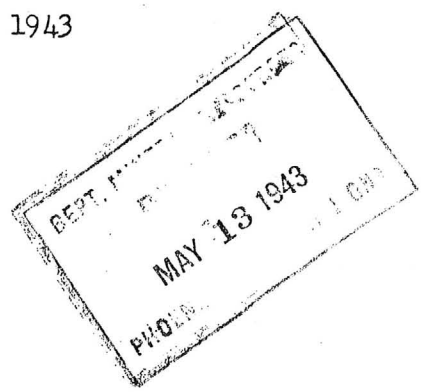
E.B.H.

Elgin B. Holt.

cc - Chas. F. Willis.

University of Arizona
Library
TUCSON

May 12, 1943



Mr. J. S. Coupal
State Department of Minerals Resources
Title and Trust Building
Phoenix, Arizona

Dear Mr. Coupal:

On January 25th the University of Arizona library received a letter from a Mr. George Spry of the Yuma Copper Mine at Vicksburg, Arizona requesting the use of the periodical listed below. Mr. Spry said he was interested in reports on copper deposits in Northern Yuma County and that you had suggested that he secure this particular reference.

In accordance with Mr. Spry's request, we sent him the volume accompanied by a notice that he might retain same until February 27th. To date, the periodical has not been returned even in response to two over-due notices and a letter. Since this constitutes a rather serious loss to the library, we feel that we must take all steps possible to secure the return of the book. For that reason we are appealing to you for information concerning Mr. Spry's whereabouts and any assistance you can give us in this matter.

Mr. George Fansett of the Arizona Bureau of Mines suggested that one of your engineers on a routine inspection trip might make inquiry regarding the volume for us. Your cooperation in this matter will be greatly appreciated.

Very truly yours,

Louise M. Milligan

Louise M. Milligan
Reference Librarian

MINING WORLD, volume 33, July - Dec. 1910.

May 14, 1943

Mr. George Spry
Yuma Copper Mine
Vicksburg, Arizona

Dear Mr. Spry:

I am in receipt of a letter from Louise M. Milligan, Reference Librarian, University of Arizona, Tucson, Arizona, in which it is stated that on my suggestion you wrote to the University of Arizona and secured a copy of the Mining World, Volume 33, July-December, 1910.

This copy was sent to you with a notice that you might retain it until February 27. The librarian writes that to date the periodical has not been returned even in response to two overdue notices and a letter.

The loss of one of these old issues is a serious loss to the library.

I am sending a copy of this letter to Elgin B. Holt asking that he assist me in contacting you and endeavoring to have this copy returned to the University of Arizona.

With best wishes and kindest regards, I am,

Very truly yours,

J. S. Coupal, Director

JSC:kk

cc - Mr. Elgin B. Holt

WAR PRODUCTION BOARD

WASHINGTON, D. C.

March 12, 1943

IN REPLY REFER TO:

4H - MJE

Mr. Earl F. Hastings
Projects Engineer
Department of Mineral Resources
413 Home Builders Bldg.
Phoenix, Arizona

Dear Mr. Hastings:

We thank you for your letter of February 24 relative to the Yuma Copper Company's property.

Mr. Willis has advised us that this mine produces a desirable fluxing ore but that it will require a higher price than 17¢ per pound of copper if substantial amounts of ore are to be produced. We have advised Mr. Willis that as yet we have been unable to obtain a higher price, but we shall continue in our efforts to do so as we believe that a higher price will mean an increase in copper production.

We thank you for your letter.

Very truly yours,

F. H. Hayes
Assistant Chief
Primary Production Branch
Copper Division

Washington, D.C.
March 3, 1943

SUBJECT: Yuma Copper Mine, Geo. Spry
Willis letter to Hayes, Mar. 1.

The Copper Production Branch had hard luck in trying to get thruogh their plan to get the extra money for copper in fluxing properties from Metals Reserve, although they are still working on it.

They are a little more optomistic on the proposition of getting a "B" premium of 5¢ additional on copper, in the manner of the zinc premium plan, and they are working hard on it.

Bill Broadgate

WAR PRODUCTION BOARD

WASHINGTON, D. C.

February 22, 1943

IN REPLY REFER TO:

4H - MJE

#1

C

Mr. Earl F. Hastings
Projects Engineer
413 Home Builders Bldg.
Phoenix, Arizona

Dear Mr. Hastings:

This is in reply to your letter of February 17 relative to the Yuma Copper Mine.

We will study Mr. Holt's report on this mine and shall be pleased to receive your analysis and recommendation relative to the loan application when you complete your review.

We thank you for your letter and Mr. Holt's report.

Very truly yours,

F. H. Hayes
Assistant Chief
Primary Production Branch
Copper Division

February 24, 1943

Mr. F. H. Hayes
Assistant Chief
Primary Production Branch
Copper Division
War Production Board
Washington, D. C.

Dear Mr. Hayes:

Subject: Yuma Copper Company

Enclosed is the summary and review which we made for the Reconstruction Finance Corporation on the application for a $5000 loan to make accessible the lower workings of the Yuma Copper Company.

The docketed information was not as complete as could be desired but we felt it had sufficient substantiation to warrant our recommendation of this loan.

With kindest personal regards, I am

Very truly yours,

Earl F. Hastings
Projects Engineer

EFH:kk
Enclosure

January 25, 1943

P. O. Box 188,
Kingman, Arizona.

Mr. George Spry,
Vicksburg, Arizona.

Dear Mr. Spry:

I am exceedingly sorry to advise that my itinerary into Yuma County has been changed again, per recent correspondence I have had with our Phoenix Office, inasmuch as I must attend to urgent matters in Yuma the first week in February.

However, per the attached copy of a wire I am now sending to Mr. Coupal, I have now planned to meet you in Vicksburg around 9 O'clock the morning of February 7th.

Trusting this change will not inconvenience you and with very kind regards, I am

Very sincerely yours,

Elgin B. Holt,
Field Engineer.

cc - J. S. Coupal

January 25, 1943

P. O. Box 188,
Kingman, Ariz.

Yuma Copper Mine
Vicksburg, Arizona

Mr. George Spry,
Vicksburg, Arizona.

Dear Mr. Spry:

Your attention is called to a letter I wrote Mr. Willis, under date of January 21, advising him that I would arrive at Vicksburg the morning of February 9, with the object of meeting you and looking over your property, as per cc of said letter which I mailed you.

However, in looking over my itinerary for February, I find I made a mistake in stating I would reach there on February 9, as I should have stated that I will arrive at Vicksburg, around 9 A. M., on February 2, instead of on the 9th.

I now suggest that you either write or wire me letting me know if the last date mentioned will be suitable to you.

Very sincerely yours,

Elgin B. Holt,
Field Engineer.

cc - Chas F. Willis
J. S. Coupal.

January 21, 1943

P. O. Box 188,
Kingman, Ariz.

YUMA COPPER MINE,
Vicksburg, Arizona.

Mr. Charles F. Willis, Chairman,
Board of Governors,
Department of Mineral Resources,
Title & Trust Bldg.,
Phoenix, Arizona.

Dear Charlie:

Attention is called to your letter of January 18th, asking me to investigate the Yuma Copper mine, near Vicksburg, Arizona, now being operated by Mr. George Spry, of that place. That you want to find out just what is the best thing to do to get this property into production and its possibilities of large scale operation.

I also note that I am scheduled to be in the Vicksburg-Salome area during the second week in February; but if there is any possibility of me getting down there sooner, for me to please communicate with Mr. Spry, letting him know the date of my arrival.

Kindly be advised that I will be able to clean up pending work here by the last of this month. Also, I will not have to attend any council meetings in this county the first week in February, inasmuch as I attended all council meetings around here the first week in January.

Hence, I have decided to leave here for Salome, on Monday, February 8, where I will stay, as there are no accommodations at Vicksburg, and early the morning of February 9, I will drive from Salome to Vicksburg, around 10 miles, where I can meet Mr. Spry at the store and Post Office there, and then go on out to the mine. By proceeding in this manner, I will be able to put in several days with Mr. Spry, in order to get together all the data you mention.

Again, as I am today mailing a copy of this letter to Mr. Spry, this will be the means of letting him know the date and hour of my arrival in Vicksburg - about 9 A. M., on February 9.

With kindest regards, I am

Very sincerely yours,

Elgin B. Holt,
Field Engineer.

cc - George Spry
J. S. Goupal

January 18, 1943

Dear Elgin:

The next time you are in the Vicksburg section, which I understand will not be later than the second week of February, will you kindly investigate and make a report upon the Yuma Copper mine which is located about 11 miles from Vicksburg. George Spry is the operator and if you have to reach him by mail, address him at Vicksburg.

This property apparently has a considerable supply of carbonate ores above the water level which are too low grade to ship but may possibly be in sufficient quantity to justify a leeching plant. Below the water level there are supposed to be good sulphide ores.

We want to find out just what is the best thing to do to get it into production and its possibilities of large scale operation. Please let me have complete data on it as to the various possibilities and what can and cannot be done; also probable costs of development, plant construction, and probable operating capacity.

If there is any possibility of getting down there earlier than that, please communicate with Mr. Spry, letting him know the date of your arrival.

With kindest personal regards, I am

Yours very truly,

CHARLES F. WILLIS, Chairman
Board of Governors

CFW:MH