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PRIMARY NAME: KING COPPER GROUP

ALTERNATE NAMES:
HARRY HAWSER PROPERTY

GILA COUNTY MILS NUMBER: 90
LOCATION: TOWNSHIP 1 S RANGE 14 E SECTION 24 QUARTER SW LATITUDE: N 33DEG 19MIN 40SEC LONGITUDE: W 110DEG 53MIN 30SEC TOPO MAP NAME: PINAL RANCH - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
COPPER

BIBLIOGRAPHY:
ADMMR KING COPPER GROUP FILE

TINO COPPER GROUP
of 10 Unpatented claims
Globe - Miami.

## ance 2819.43

A. Macfarlane

Report after Investigetion
The "King Copper Group" of ten unpatented daims is located in the lobe-Mismi district about thirteen miles Southerly from the sity of mami on the Northeasterly slope of the Pinal Mountains.

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MIEE KORINGS: Consists principally of a main tunnel about 450 feet from portel, thence Northwesterly to heading. At a point about 150 feet Northwest of tunnol portal a series of copper stringers were opened and drifted on for nearly 200 lineal feet along their Northwesterly course and this mineralization widened to over 20 feet by a breciating of the vein gangue and its impregnation by copper bearing solutions end attendant deposition along the fractured course.

A main hanging wall pay streak varying from six inches to one foot wide, is presistent in its course and an important copper feeder for a mineralized body of about 160 feet in length along the Horthwesterly course of aid mineralization.

In this breociated and mineralized area, two winses, were sunk, stated to depth of over fifty feet each below tunnel floor, the ore stringers seem to be stronger and more pronounced along the tunnet floor than coiling and again some shallow stoping along tunnel floor is evident.

In short distance after cutting the above hanging wall lad other stringers with a forth 21 degrees Heat course made up distinct F. . W. mineralization fully twenty feet North of the hanging wall, thus making the entire mineralized mass to have a width of more than twenty feet, the footwall yet not fully defermined. A total of about 600 lineal feet of developwent has been made in this main tunnel and this footage has opened a body of copper 160 feet long by 20 feet wide to yet unknown depth and apparently this mineralization will carry an average copper content of $1.2 \%$ to $1.8 \%$ per ton.

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Immediately south of King workings body of surface Gossanized Quartzite is prominent, this in turn is ended against a monzonitic and Dacite mas covering most of the King ground.

KING COPPRR GROUP
Of 10 Unpatented Claims
Globe - Miami
Report after Investigation
Page two - Bineralization continued

Between the Quartate and Monzonite is a body of Pinal schist, silicated by veiniets of quartz, carryin copper mostly in the dzurite form and zeneral copper carbonization.

In the seams are depositions of black Oxides and secondary glance, these occurrences enriching the gangue in close proximity to the veinlets.
mis breceiation within certain zones of the King tunnel may have formed commercial aized ore boiles of $3 \%$ to $4.5 \%$ cu., depending entirely on degree of brecciation, plus the presence of a definite pay streak with a general vein course along which the ores are laid down.

SAMPLING: Of the principal elements forming the apparent ore shoots and the assays thereof gives the following:

| Sample No. 1. At a point where henging wall pay streak is well defined one foot in tunnel back | $\begin{aligned} & \text { Assays } \\ & 9.64 \% \text { cu. } \end{aligned}$ |
| :---: | :---: |
| Composite of six samples, no gold or silver | 6.78 |
| Sample No. 2. F.w. Stope general sample 4 feet wide | 1.01 |
| Sample No. $3, \mathrm{~F}$.v.Stope, heading Northwest, 3 feet wide | 3.18 |
|  | 1.77 |
| Sample No. 5, F.W.of Winze No. 2 12 feet wide | 1.36 |
| Sample No. 6, H.W.Pay Streak \%est of Winze $2 / 3$ foot wide | 11.72 |

Grade of ore stope width four feet, including a pay streak; assume:
1 foot of $9 \% \mathrm{cu}$. per I foot equals 180 pounds cu.
3 feet of $1.5 \%$ cu 30 pounds $\times 3$ feet equals 90 pounds ou. Divide $4 f^{t}$. ) 270 ( 67.5 pounds, divided by 20 equals $3.35 \%$ ou. as an average over a four foot width where a one foot is a pay streak of 9 cu.
AVAILABLE COPPER ORES: It is proposed to muck and repair Mo. 2 Winze to its full depth of fifty feet or more and to stope that block of ground as marked $A-B$ on sketch maps, following the paystreak and enrichmen s thereof with a mining width of about four feet.
It is estimated 2,200 tons of about $3.5 \% \mathrm{cu}$. is below tunnel floor and another 1,000 tons of about the same grade above the tunnel back.

The attached smelter analysis sheet stated to be of a carlot of ore sold an mined from the area above the winzes shows $8.29 \%$ cu. No doubt this material was obtained largely from the fracture mineralization or enriched veinlets and lenzes.
This valuation of 3 友 cu. for a width of four feet may be lower than the ores to be actually produced by mining along the widest and enriohed veinlet or stringer ore system; however, 3 壳\% ou. is taken in this report as a minimum coper content of the ores to be mined and sold that will produce the largest tonnage of marketable ores from this mine. This proposed stoping is of ores limited to a width of four to five feet found within mioh wider mineralized area.

KING COPPER GROUP
Of 10 Unpatented Claims
Globe - Miami
Report after Investigation
Page three - Available Copper Ores, Continued.

Former stoning along the back of the main tunnel was carried to fully twenty feet from hanging to footwall. Samples taken now of the mineralized body shows that the deposit gangue exclusive of the enriched veinlets contains from about one per cent to two percent copper, while assays of the ore bands show values of eight per cent to twelve per cent copper.

The total mineralized area new as exposed by tumel and the two wines represents a body 160 feet along the strike of the fractures by twenty feet in width and assuming a depth of 100 feet gives a block of 320,000 cubic feet or about 21,333 tons of potential copper bearing material.

It is quite reasonable to assume this intensely fractured area will extend to depth and that the copper content may increase.

In the event the ore deposition as opened along the fifty foot level of inge 2 is of fair copper content, then the short tunnel now sixty feet to heading and about 200 feet lower than the main tunnel should be advanced to explore the above potential copper body.

Daily output after the instalation of a two drill compressor plant, should be about ten tons deity, this initial output should be attained within sixty days after beginming the plan of operation, es of $f$ froth.
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 tide, Cudobers mall mu l labor a moil hitive and
too Frailer houri than to drift on the $55^{\circ}$ hove
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ASSAY CERTIFICATE


# Department of Mineral R. , ources <br> state of arizona <br> FIELD ENGINEERS REPORT 

| Mine | KING COPPER GROUP | Date August 28, 1943 |
| :--- | :--- | :--- |
| District | GIobe-Miami | Engineer A. Macfarlane |
| Subject: | REPORI AFTER INVESTIGATION |  |

> The "King Copper Group" of ten unpatented claims is loceted in the Globe-Miami District about thirteen miles Southeriy from the City of Miami on the northeasterly slope of the Pinal Mountains.

OWNERSHIP: Mr. Frank E. Carrow and Mr. M. P. Carrow of Globe, Arizona, by location of the claims and quiet claim given by previous owner. This group was known formerly as Harry Hawser Mine, Transfer of $1 / 4$ interest made in favor of John G. Russell of Globe, Arizona.

ROADS: Connecting the mine to rail head at Miami and the bins of the International Smelter, seven miles paved Highway No. 70 to opposite Castle Dome Junction, thence Southeasterly fiveto six miles over county highway to Dr. Little's ranch, thence one mile over stub road to King Mne. This last mile should be repaired before starting to truck the ores.

MINE WORKINGS: Consists principaliy of a main tunnel aoout 450 feet from portal, thence Northwesterly to heading. At a point about 150 feet northwest of tunnel portal a serious of copper stringers were opened and drifted on for nearly 200 lineal feet along their northwesterly course and this mineralization widened to over 20 feet by a breciating of the vein gangue and its impregnation by copper bearing solutions and attendant deposition along the fractured course.

A main hanging wall pay streak varying from six inches to one foot wide, is persistent in its course and an important copper feeder for a mineralized body of about 160 feet in length along the northwesterly course of said mineralization.

In this brecciated and minerlized area, two winzes were sunk, stated to depth of over fifty feet each below tunnel floor, the ore stringera seem to be stronger and more pronounced along the tunnel floor than ceiling and again some shallow stoping along tunnel floor is evident.

In short distance after cutting the abowe hanging wail lead other stringers with a North 2 ㅇ west course made up a distinct F. W. mineralization fully twenty feet north of the hanging wall, thus making the entire mineralized mass to have a width of more than twenty feet, the footwall yet not fully determined. A total of about 600 lineal feet of development has been made in this main tunnel and this footage has opened a body of copper 160 feet long by 20 feet wide to yet unknown depth and apparently this mineralization will carry an average copper content of $1.2 \%$ to $1.8 \%$ per ton.

MINERALIZATION Of the Eing Claims is conformable to this entire area of Miami. The copper deposition found in agangue of fingl schist often in contact with quartzite, Diabase and Dacite flows.

Immediately south of King workings a body of surface Gossanized quartzite is prominent, this in turn is ended against a monzonitic and Dacite mass covering most of the King ground.

Between the Quartzite and Monzonite is a body of Pinal Schist, silicated by veinlets of Quartz, carrying copper mostly in the Azurite form and general copper carbonization.

In the seams are dppositions of black Oxides and secondary glance, these occurrences enriching the gangue in close proximity to the veinlets.
This brecciation within certain zones of the King tunnel may have formed commercial sized ore bodies of $3 \%$ to $4.5 \%$ cu., depending entirely on degree of brecciation, plus the presence of a definite pay streak with a generel vein course along which the ores are laid down.
SAMPLING: Of the principal elements forming the apparent ore shoots and the asseys thereof gives the following.

Sample No. I. At the point where hanging wall pay streak is $9.64 \%$ cu. well deffined one foot in tunnel back
$\begin{array}{ll}\text { Composite of six samples, no gold or silver } & 4.78\end{array}$
Sample No. 2. F. W. Stope general sample 4 feet wide 1.01
Sample No. 3. F. W. Stope heading Northwest, 3 feet wide 3.18
Sample No. 4. H. W. of Winze No. 2, $2 \frac{1}{2} \mathrm{ft}$. wide 1.77
Sample No. 5. F. W. of Winze No. 2, lif ft. wide 1.36
Sample No. 6. H. W. Pay Streak West of Winze $2 / 3$ foot wide 11.72
Grade of ore stope width four feet, including a pay streais; assume:
I foot of $9 \%$ cu. per I foot equels 180 pounds cu.
3 feet of $1.5 \%$ cu. 30 pounds $x 3$ feet equals 90 pounds cu. Divide 4 ft .) 270 ( 67.5 pounds, divided by 20 equels $3.35 \% \mathrm{cu}$. as an average over a four foot width where a one foot is a pay streak of " $9 \% \mathrm{cu}$.

AVAILABLE COPPER ORES: It is proposed to muck and repair No. 2 Winze to its full depth of fifty feet or more and to stope that block of ground as marked $A-B$ on sketch maps, following the paystreak and enrichment thereof with a mining width of about four feet.
It is estimated 2,200 tons of about $3.5 \%$ cu. is below tunnel floor and another 1,000 tons of about the same grade above the tunnel back.
The attached smelter analysis sheet stated to be of a carlot of ore sold and mined from the area above the winzes shows $8.29 \%$ cu. No doubt this material was obtained largely from the fracture mineralization or enriched veinlets and lenzes.
This valuation of $3 \frac{1}{2} \% \mathrm{cu}$. for a width of four feet may be lower than the ores to be actually produced by mining along the widest and enriched veinlet or stringer ore system; however, $3 \frac{1}{2}$ cu. is taken in this report as a minimum copper content of the ores to be mined and sold that will produce the largest tonnage of marketable ores from this mine. This proposed stoping is of ores limited to a width of four to five feet found within a much wider mineralized area.

Former ctoping along the back of the main tunnel was carried to fully twenty feet from hanging to footwall. Samples taken now of the mineralized body shows that the deposit gangue exclusive of the enriched veinlets contains from about one per cent to two per cent copper, while assays of the ore bands show values of eight per cent to twelve per cent copper.
The total mineralized area now as exposed by tunnel and the two winzes represents a body 160 feet along the strike of the fractures by twenty feet in width and assuming a depth of 100 feet gives a block of 320,000 cubic feet or about 21,333 tons of potential

## copper bearing material.

It is quite reasonable to assume this intensely fracturad area will extend to depth and that copper content may increase.

In the evert the ore deposition as opened along tie fifty foot level of Winze 2 is of fair copper content, then the short tunnel now sixty feet to heading and about 200 feet lower than the main tunnel should be advanced to expiore the above potential copper body.

Daily output after the installati $n$ of a two arill compressor plant, shouid be about ten tons, this initial output should be attained within sixty days after beginning the plan of operation as set forth.

During the past four months work of rehabilitating this mine has proceeded and the property has now installed a compressor, air fan, air and water lines for ürilling, trackage from portal and tunnel dump to main counter shait, head frame above the counter shaft, skids, ladders, smell mine tools, etc.

For accomodation of lebor, two small houses and two trailer houses have been built and installed.

It is now proposed to orift on the 55 level below the tunnel to block out and mine the ores of this area.

The owners have taken additional samples of the pay strcsks ir crder to guide them in the mining of such areas of the mineralization as will yield a smelter grade of ore. See sketch for tonnage and assays, tabulated as follows.


登
The road to mine has been improved and an ore bin built just below the tunnel, all to the end of copper production from this mine.
A. Macfarlane Field Engineer

# DEPAK TMENT OF MINERAL RESOURCES <br> STATE OF ARIZONA <br> FIELD ENGINEERS REPORT 

| Mine | KING COPPZR, Cu. |
| :--- | :--- |
| District | Globe-Miami |
| Subject: | Reconstruction Finance Corporation <br> $M i n e ~ L o a n ~$ |

Date

Engineer
April 6, 1943
Eacl T. Hastings

Docket No.
Date Application Received
Date of Field Examination
Date of Report

Phx C-175
April 2, 1943
谓arch 26, 1943
April 5, 1943

1. Name and address of applicant (correspondent): Jack G. 'Russell, Box 1433, Globe, Arizona.
2. Character of project and estimated cost thereof:

- Copper. To reopen ene rehabilitate main tunnol level and \#2 winze; to arift on ore from winze bottom, stope ore from above tunnel and from mew drift.

3. Location of property:

Globe-idami Halng District, Sec. 24, T IS, R I4 E, Gila County, Arizona.
4. Applicant's interest in or omsrship of property:

A limited partnership of whici applicant holds a one-fourth interest.
5. Loan requested:
\$5,000.00.
6. Loan recommended:数5,000.00.
7. Comments:
(A) Added to the docket is the report including maps by A. Macfarlane, Field Engineer, Department of Mineral Resources, dated March 26, 1943.
(B) The above report indicates a possible production of 3,200 tons of $3.5 \%$ copper ore along a $160-100$ shoot to the depth of the present workings. This tonnage can be materially increased by wider stoping with a resultant lower grade product. The Macfarlane report is brief and deacriptive; it is therefore unnecessary to revisw the points contained therein.
(c) On the besis of this report, coupled inth the favorable geological and geographical conditions to be found, this loan is recomended.

ARTZONA DEFARTMEAT OF MINERAL RZQOURCES

Earl F. Hastings, Projeats Engineer

# Department of Mineral F , ounces state of arizona FIELD ENGINEERS REPORT 

Mine KING COPPER GROUP<br>Of 10 Unpatented Claims<br>District Globe - Miami<br>Subject: Report after Investigation

Date March $26,1943 \mathrm{kM}$
Engineer A. Macfarlane


The "King Copper Group" of ten unpatented claims is located in the Globe - Miami District about thirteen miles Southerly from the City of Miami on the Fortheasterly slope of the Pineal Mountains.

OWNERSHP: Mr. Frank E. Carrow and Mr. M. P. Carom of Globe, Arizona, by location of the claims and quilt claim given by previous owner. This group was know formerMy as Harry Hawser kine.

ROADS: Connecting the mine to rail head at Miami and the bins of the International Smelter, seven miles paved highway No. 70 to opposite Castle Dome Junction, thence Southeasterly five to six miles over county highway to Dr. Little's ranch, thence one mile over stub road to King Mine, this last mile should be repaired before starting to truck the ores.

MINE WORKINGS: Consists principally of a main tune about 450 Feet from portal, thence Northwesterly to heading. At a point about 150 Feet Northwest of tunnel portal a series of copper stringers were opened and drifted on for nearly 200 lineal feet along their Northwesterly course end this mineralization widened to over 20 feet by a brecieting of the vein gangue and its impregnation by coper bearing solutions and attendant deposition alone the fractured course.

A main hanging wall pay streak varying from six inches to one foot wide, is prosistent in its course and an important copper feeder for a mineralize body of about 160 feet in length along the Northwesterly course of said mineralization.

In this brecciated and mineralize area, two winze mere sunk, stated to depth of over fifty feet each, below tunnel floor, the ore stringers seem to be stronger and more pronounced along the turizel floor than cieling and again some shallow stomping along tunnel floor is evident.

In short distance after cutting the above hanging wall lead other stringers with a North 21 degrees West course made up a distinct F. W. mineralization fully twenty feet Worth of the hanging wail, thus making the entire mineralize mass to have a width of more than twenty feet, the footwall yet not folly determined. A total of about 600 lineal feet of development has been made in this main tun mel and this footage has opened a body of copper 160 feet long by 20 feet wide to yet unimom depth and apparently this mineralization will carry an average cooper content oi $1 . \mathcal{X}_{\beta}$ to $1.8 \%$ per ton.

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Immediately south of King workings a body of surface Gossanized Quartzite is prominent, this in turn is ended against a monzonitic and Dacite mass covering most of the King ground.

# Department of Mineral $\mathbf{K}$ ．jOURCEs <br> STATE OF ARIZONA <br> FIELD ENGINEERS REPORT 

Mine KIIT COPPER GROUP
Of 10 Unpatented Claims
DistrictGlobe－Miemi

Date
Engineer

Subject：Report after Investigation
Page two－Hineralization Continued

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Composite of six semples，no gold or silver
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1.01

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# Department of Mineral fo ources <br> state of arizona <br> FIELD ENGINEERS REPORT 

Mine KING COPPER GROUP
Date
Of 10 Unpatented Claims
DistrictGlobe - Miami
Engineer
Subject:Report after Investigation Page three - Available Copper Ores, Continued

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