



CONTACT INFORMATION

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Arizona Department of Mines and Mineral Resources Mining Collection

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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: GRAND UNION

ALTERNATE NAMES:

CONSOLIDATED GRAND UNION GROUP
PATENTED CLAIMS MS 2274
PATENTED CLAIMS MS 2594
O'BRIEN GROUP (F X)

YAVAPAI COUNTY MILS NUMBER: 886

LOCATION: TOWNSHIP 9 N RANGE 1 W SECTION 18 QUARTER SE
LATITUDE: N 34DEG 07MIN 18SEC LONGITUDE: W 112DEG 23MIN 39SEC
TOPO MAP NAME: COPPEROPOLIS - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:

COPPER
SILVER
GOLD

BIBLIOGRAPHY:

USGS COPPEROPOLIS QUAD
BLM MINING DISTRICT SHEETS 207 & 208
ADMMR GRAND UNION FILE
ADMMR MAP CASE
ADMMR INFORMATION
CLAIMS EXTEND INTO SEC 24 T9N-R2W & SEC. 8,
9, 17 & 19 T9N-R1W

Duncan, Arizona, July 25, 1941.

Mrs V.L. McDonald,
Arrowhead Station,
Congress, Arizona.

Dear Adalaide:-

I was a long time in getting the information I wanted about the Union Grand copper property but finally succeeded. The information is not very much in detail but may assist you in getting some one interested in the property.

I have always thought the Union Grand would develop in a very large copper mine if properly financed and developed.

I will be glad to write any one about the property if they wish to ask me any questions about it.

Yours truly,

O.W. Mitchell

Prescott, Arizona, June 1, 1905

Gentlemen:-

At your request I hereby submit the following report on the CONSOLIDATED UNION-GRAND COPPER COMPANY mines.

This property is situated in Yavapai County, Arizona, about 8 miles from Crown King, a railroad station on the P. & E. Railway. There are some (9) claims or 180 acres of mineral bearing ground in this group, running for a distance of two miles along the gossan, or iron capping. This iron capping shows continually for the above distance and is of great width, being in places over 200 ft. wide. At many places along this two miles of iron capping is encountered copper in the form of blue and green carbonates, Malachite and Azurite and the different Sulphides of copper as Chalcocite, Bornite and Chalcopyrite, Sulphide of iron is also found contiguous to the copper ores, which is characteristic of the copper mines of Arizona such as the United Verde and the Copper Queen Mines.

In several places where shafts of varying depths have been sunk in the iron capping the surface carbonate ores are beginning to change to the yellow sulphide of copper ore Chalcopyrite, which character of ore is producing three-fourths of the copper mined in Arizona. At one place a tunnel has been run for a distance of 350 ft. in the ledge matter and shows copper carbonate stains for the entire distance. A sample along 60 ft. of this distance assayed 13% copper and 12.6 oz. in silver. Three winzes have been sunk in this tunnel and in all of them Sulphide ore Chalcopyrite is being found with the carbonate ores showing that but little depth at this place would no doubt encounter the permanent sulphide zone, which this exceptionally large iron capping covers and in my judgment 100 ft. in depth here would reach the permanent Chalcopyrite ore body and from the surface

conditions I would expect to find it over fifty (50) ft. in width.

At several other places along the two miles of ore cropping surface indications point to every expectation of encountering the permanent ore zone and water level with a reasonable depth.

The copper sulphides so far as found are of a concentrated form and free from iron sulphide carrying no copper.

The surface carbonate ores and also the sulphide ores found with depth, are identical to those found in the big copper mines of the West, such as the United Verde, Copper Queen and Cananea properties. The iron gossan is also alike in looks and composition to the capping rock of the above and other copper mines of the West, but it is more extensive than most of them.

I took six assays along the ore outcrop and from some of the shafts and tunnels with the following results:

<u>Marked</u>	<u>Gold</u> <u>Ounces Value</u>	<u>Silver</u> <u>Ounces Value</u>	<u>Copper</u> <u>Per Ct.</u>	<u>Copper</u> <u>Value</u>	<u>Total</u> <u>Value</u>	
#1	Trace	12.60	37.56	13.2	39.60	47.16
#2				36.8	110.40	110.40
#3	Trace	89.00	53.40	30.0	90.00	143.40
#4				19.4	58.20	58.20
#5				8.8	26.40	26.40
#6	Trace	1.50	.90	12.4	37.20	38.10

All of the above ores would pay to ship to the Bradshaw Mountain Copper Co.'s 600 ton Smelter, now being erected near this property, and as the mine was being developed could be shipped and

smelted at this plant until such time as sufficient ore was opened up as to justify the erection of a smelter on this property. As to the best place to quickly develop the permanent sulphide ore bodies of this property, I recommend the continuation of the shaft where #4 assay came from, as the bottom of this shaft is now in this rich class of yellow sulphide of copper ore, and it is apparently getting to be richer and more of it as the shaft attains depth, and with my experience with the big copper mines of the West and Mexico I believe the bottom of this shaft is just entering the permanent ore zone.

There are several other shafts and tunnels in ore but I consider this the most promising place for quick results.

This property is in the same mineral bearing belt as W. A. Clark's famous United Verde Copper mines, and the Bradshaw Mountain Copper Company mines only a few miles north of this property, with the same formation and character of ore, has been developed sufficiently to warrant the erection of a 600 ton Smelting Plant.

I believe the CONSOLIDATED UNION-GRAND COPPER COMPANY mines with judicious development would soon show us enough ore to warrant the erection of its own Smelting Plant and in time to be one of the great copper mines of Arizona which territory is now producing more copper than any other State or Territory in the United States.

C. W. Mitchell

(Signed) C. W. Mitchell, E.M.

DEPARTMENT OF MINERAL RESOURCES

State of Arizona

MINE OWNER'S REPORT

Grand Union

Date Feb 25 1966

1. Mine: Consolidated Union Grand Copper Co. adjoined Pacific Mine

2. Location: Sec. Twp. 9N Range 10W Nearest Town Distance Direction Nearest R.R. Distance

Road Conditions

3. Mining District and County: Silver Mt. Mining District

4. Former Name of Mine: O'Brien Group + Cons. Un. Gr. Copper

5. Owner: Mrs. Adelaide O'Brien McDonald Address: 316 East Windsor Ave. Phoenix

6. Operator: none Address:

7. Principal Minerals: Silver, Copper, Gold

8. Number of Claims: Lode 16 Patented Unpatented Placer Patented Unpatented

9. Type of Surrounding Terrain:

10. Geology and Mineralization:

11. Dimension and Value of Ore Body:

Please give as complete information as possible and attach copies of engineer's reports, shipment returns, maps, etc. if you wish to have them available in this Department's files for inspection by prospective lessors or buyers.

12. Ore "Blocked Out" or "In Sight":

Ore Probable:

13. Mine Workings—Amount and Condition:

No.	Feet	Condition
Shafts.....		
Raises.....		
Tunnels.....		
Crosscuts.....		
Stopes.....		

14. Water Supply:

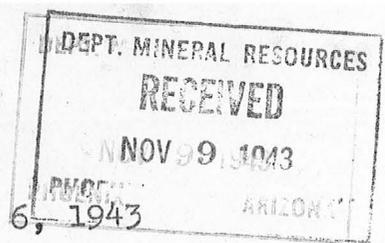
15. Brief History:

16. Remarks: *adjoins Pacific*

17. If Property for Sale, List Approximate Price and Terms:

18. Signature: *For Sale*
or negotiations can be discussed

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT



Mine GRAND UNION Patented Group

Date November 6, 1943

District Silver Mtn. Mining District of
Yavapai County, Arizona

Engineer B. W. Brown

Subject:

Examination of the Grand Union Patented Group mines for Mr. W. B. Hammer, owner, whose address is 339 North 1st Ave., Phoenix, Arizona.

The Grand Union Group of patented mining claims is situated in the Silver Mountain mining district of Yavapai county, Arizona in a rugged belt of altered and structurally faulted schist. The claims lie roughly in a northeasterly direction and are mainly in sections 18 and 19 of T 9 N-R 1 W, G&SRB&M. The property extends from the southwest slope of Silver Mountain across its high ridge and onto the northeast slope where it adjoins the Pacific Group of patented mining claims.

The property is reached from Tussock Springs, the nearest point of accessibility, by about a mile to a mile and a half of mule trail. Tussock Springs is located about 35 miles by road from Kirkland, a station on the Sante-Fe railroad. Approximately 20 miles of this distance is graded and maintained by the county.

The property, which was formerly owned and developed by F.X. O'Brien, is reported to contain numerous workings, including shafts, tunnels and open cuts. Three of these workings were visited at the time of examination and this report is based on the findings therein. A tunnel on one of the southernmost claims was visited first. It is often referred to as the lower tunnel. This tunnel lies about a mile east of Tussock Springs. Its portal opens upon the bottom of a steep ravine that drains from the southwest slope of Silver Mountain. Next visited was a tunnel on the Copper-Ash claim, which is commonly referred to as the upper tunnel. This was reached from Tussock Spring by about a mile and a half of steep mule trail. It is situated at the head of a V shaped canyon, close to the summit of Silver Mountain. Finally, a shaft was visited on the Buffalo claim, which lies on the eastern slope of the Silver Mountain and overlooks the Humbug Valley.

The mineralization occurs in quartz veins within a heavily faulted dyke of jasper schist. In the lower tunnel the ore was found to occur in a two foot quartzose vein bearing beautiful crystallization of chalcopyrite and polybasite together with some fine marmatite of zinc. The vein and dyke here strike N 35 E and dip to the West with an approximate 45 degree inclination. The 450 foot tunnel follows the vein persistantly to within 50 feet of the face where it is lost completely in faulting. In the upper tunnel, following the same or similar structure, a partially oxidized vein from 3 to 4 feet wide was found to be carrying some fine chalcopyrite and azurite. The strike of the upper tunnel, which again follows the jasperoid structure, is roughly N 75 E, dipping to the North with an

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine GRAND UNION

Date

District

Engineer

Subject: Continued

inclination from 50 to 60 degrees. This tunnel was driven some 650 feet. A fault was encountered about 210 feet from the portal and the tunnel was continued for its full length through barren schist. This post-mineral fault strikes roughly N 75 W and dips to the South at about 35 degrees. Three winzes, spaced from 50 to 75 feet apart were offset from the tunnel, each sinking to an estimated depth of 50 feet.

An average of four samples, taken from the upper tunnel by W. B. Hammer, cut across the width of the vein shows values as follows:

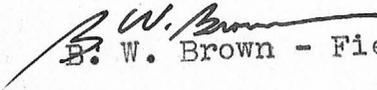
Au	Ag	Cu
.07 oz	4.3 oz	4.1%

This ratio of 1oz silver to each % copper seems to hold for the most part in the assays which were taken by Mr. W. B. Hammer from this property.

The shaft, which was visited, was entirely inaccessible and in an unsafe condition. The old battered headframe was hanging inverted from the collar. This shaft is situated at the fork of two ravines on what is probably a continuation of the same jasper schist belt. The depth of the shaft was not known and has been variously estimated from 90 feet upwards. The shaft dump contains about 1500 tons of dyke material. Some fine specimens of chalcopyrite were found on the dump.

Some water has been developed on the property, though none on the western slope is sufficient for mining. It is estimated that ample water could be developed by extending the lower tunnel workings. The property is covered by a growth of heavy brush and scrub-timber, but timber of mining grade is lacking. There is about 300 feet of serviceable 12 pound rail in the lower tunnel.

In conclusion, it may be pointed out that the chief obstacles in the advancement of this property are its inaccessibility, distance from rail transportation, and heavy faulting of the orebody.


B. W. Brown - Field

Duncan, Arizona
July 25, 1941

To Whom it May Concern:

Since writing the above report on the Union Grand Copper Property I have traveled extensively in the United States and Mexico in examining mines. I have seen a number of big developed and producing copper properties, their surface formations and geology of the same.

The above experiences and knowledge gained therefrom has given me a better opinion of what I believe the Union Grand Copper Property will develop into as a large producer of a commercial grade of copper ore, together with appreciable values in gold and silver, if the proper knowledge and understanding of the surface geology is used in the development of such an extensive surface outcrop.

For several years I had charge of the development of a nearby property to the Union Grand mine with similiar surface gossan outcrop and geology. In this property we developed large widths of a commercial grade of concentrating ores that tests showed concentrated 16 to 1. The ore was a chalcopryrite carrying good gold-silver values.

For several years I was connected with the Nacosari and Copper Queen mines of the Phelps-Dodge Corporation in the Laboratories and Metallurgical Departments and saw what the surface formation and geology lead to. These experiences make me have a good opinion of what the Union Grand will develop into. I was a young man when with Phelps-Dodge Corporation and those with whom I was working for, or associated with, have passed on.

Yours truly,

S/ C. W. Mitchell

GRAND UNION

REFERENCE PAGE

Yavapai County
Silver Mountain Dist.
(Wagner)

T9N RLW

See: Silver Mountain Property (file)
Map in file upstairs

GRAND UNION

Ag, Cu

Yavapai 13-7 T 9 N, R 1 W

W. B. Hammer 339 N. 1st Ave., Phoenix '43



Grand Union Mine

Mr. W. B. Hammer
339 North 1st Ave.
Phoenix, Arizona

meta 1/20/58



TRY-1631 Palmer Mr S. 5:18-58

October 9, 1943

Mr. William Hammer
The Messenger Printing Company
339 North First Avenue
Phoenix, Arizona

Dear Mr. Hammer:

I am returning the copies of the report and assays on the Union Grand Copper Mine together with an additional copy for your use.

I would appreciate two or three copies of the printed assays made by the Arizona Testing Laboratory to file with the reports of your property which I would like to keep in our permanent office files.

Yours very truly,

J. S. Coupal, Director

JSC:LP
Enc.

*assays &
1 copy given
to Shanblier*

MEMORANDUM

September 25, 1943

TO: B. W. BROWN

FROM: J. S. COUPAL

SUBJECT: Consolidated Union, Grand Group
also known as F. X. O'Brien Group

Mr. William Hammer of the Messenger Printing Company in Phoenix, and family own this whole group of claims located Township 9 North, range 1 West, Sections 19, 18, 17, and 8. Two of the claims, the Eagle and the Wellington, sideline on the northwest of the Pacific Group. There are then nine claims end to end in a southwest direction. As soon as an opportunity presents itself, I would like to have you plan to go in and examine this property with Mr. Hammer.

First, you might find out if you can drive in to the Pacific Group. You will recall I gave you a note to look up one of the owners located in Prescott. Mr. Hammer believes the best way to approach the property is from the Wagoner road to the Tussics Springs range or it may now be called the Brown ranch.

Please let me know what you find out regarding access by the way of the Pacific Mine and we can then plan on having you meet Mr. Hammer on an early date and look them over.

J. S. Coupal

Prescott, Arizona
June 1, 1905

Gentlemen:

At your request I hereby submit the following report on the
CONSOLIDATED UNION-GRAND COPPER MINES.

The property is situated in Yavapai County, Arizona, about 8 miles from Crown King, a railroad station on the P & E Railway. There are some (9) claims or 180 acres of mineral bearing ground in this group, running for a distance of two miles along the gossan, or iron capping. This iron capping shows continually for the above distance and is of great width, being in places over 200 feet wide. At many places along this two miles of iron capping is encountered copper in the form of blue and green carbonates, Malachite and Azurite and the different sulphides of copper as Chalcocite, Bornite and Chalcopyrite, Sulphide of iron is also found contiguous to the copper ores, which is characteristic of the copper mines of Arizona such as the United Verde and the Copper Queen Mines.

In several places where shafts of varying depth have been sunk in the iron capping the surface carbonate ores are beginning to change to the yellow sulphide of copper ore Chalcopyrite, which character of ore is producing three-fourths of the copper mined in Arizona. At one place a tunnel has been run for a distance of 350 ft. in the ledge matter and shows copper carbonate stains for the entire distance. A sample along 60 ft. of this distance assayed 13% copper and 12.6 oz. in silver. Three winzes have been sunk in this tunnel and in all of them sulphide ore Chalcopyrite is being found with the carbonate ores showing that but little depth at this place would no doubt encounter the permanent sulphide zone, which this exceptionally large iron capping covers and in my judgment 100 ft. in depth here would reach the permanent Chalcopyrite ore body and from the surface conditions I would expect to find it over fifty (50) ft. in width.

At several other places along the two miles of ore croppings surface indications point to every expectation of encountering the permanent ore zone and water level with a reasonable depth.

The copper sulphides so far as found are of a concentrated form and free from iron sulphide carrying no copper.

The surface carbonate ores and also the sulphide ores found with depth are identical to those found in the big copper mines of the West, such as the United Verde, Copper Queen and Cananea properties. The Iron gossan is also alike in looks and composition to the capping rock of the above and other copper mines of the West, but it is more extensive than most of them.

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July 25, 1941

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Yours truly,

C. W. MITCHELL

Marked	Gold		Silver		Copper Per Ct.	Copper Value	Total Value
	Ounces	Value	Ounces	Value			
#1	Trace		\$12.60	\$7.56	13.2	\$39.60	\$47.16
#2					36.8	110.40	110.40
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All of the above ores would pay to ship to the Bradshaw Mountain Copper Co.'s 600 ton smelter, now being erected near this property, and as the mine was being developed could be shipped and smelted at this plant until such time as sufficient ore was opened up as to justify the erection of a smelter on this property. As to the best place to quickly develop the permanent sulphide ore bodies of this property, I recommend the continuation of the shaft where #4 assay came from, as the bottom of this shaft is now in this rich class of yellow sulphide of copper ore, and it is apparently getting to be richer and more of it as the shaft attains depth, and with my experience with the big copper mines of the West and Mexico I believe the bottom of this shaft is just entering the permanent ore zone.

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This property is in the same mineral bearing belt as W. A. Clark's famous United Verde Copper Mines, and the Bradshaw Mountain Copper Company mines only a few miles north of this property, with the same formation and character of ore, has been developed sufficiently to warrant the erection of a 600 ton smelting plant.

I believe the CONSOLIDATED UNION-GRAND COPPER COMPANY mines with judicious development would soon show us enough ore to warrant the erection of its own smelting plant and in time to be one of the great copper mines of Arizona which territory is now producing more copper than any other State or Territory in the United States.

G. W. MITCHELL, E. M.

Prescott, Arizona, June 1, 1905

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2

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#5				8.8	26.40	26.40
#6	Trace	1.50	.90	12.4	37.20	38.10

All of the above ores would pay to ship to the Bradshaw Mountain Copper Co.'s 600 ton smelter, now being erected near this property, and as the mine was being developed could be shipped and smelted at this plant until such time as sufficient ore was opened up as to justify the erection of a smelter on this property. As to the best place to quickly develop the permanent sulphide ore bodies of this property, I recommend the continuation of the shaft where #4 assay came from, as the bottom of this shaft is now in this rich class of yellow sulphide of copper ore, and it is apparently getting to be richer and more of it as the shaft attains depth, and with my experience with the big copper mines of the West and Mexico I believe the bottom of this shaft is just entering the permanent ore zone.

There are several other shafts and tunnels in ore but I consider this the most promising place for quick results.

This property is in the same mineral bearing belt as W. A. Clark's famous United Verde Copper Mines, and the Bradshaw Mountain Copper Company mines only a few miles north of this property, with the same formation and character of ore, has been developed sufficiently to warrant the erection of a 600 ton smelting plant.

I believe the CONSOLIDATED UNION-GRAND COPPER COMPANY mines with judicious development would soon show us enough ore to warrant the erection of its own smelting plant and in time to be one of the great copper mines of Arizona which territory is now producing more copper than any other State or Territory in the United States.

C. W. MITCHELL, E. M.

Duncan, Arizona
July 25, 1941

To Whom it May Concern:

Since writing the above report on the Union Grand Copper property I have traveled extensively in the United States and Mexico in examining mines. I have seen a number of big developed and producing copper properties, their surface formations and geology of the same.

The above experiences and knowledge gained therefrom have given me a better opinion of what I believe the Union Grand Copper property will develop into as a large producer of a commercial grade of copper ore, together with appreciable values in gold and silver, if the proper knowledge and understanding of the surface geology is used in the development of such an extensive surface outcrop.

For several years I had charge of the development of a nearby property to the Union Grand mine with similar surface gossan outcrop and geology. In this property we developed large widths of a commercial grade of concentrating ores that tests showed concentrated 16 to 1. The ore was a chalcopyrite carrying good gold-silver values.

For several years I was connected with the Nacosari and Copper Queen mines of the Phelps-Dodge Corporation in the laboratories and metallurgical departments and saw what the surface formation and geology lead to. These experiences make me have a good opinion of what the Union Grand will develop into. I was a young man when with Phelps-Dodge Corporation and those with whom I was working for, or associated with, have passed on.

Yours truly,

G. W. MITCHELL