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

The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

ACCESS STATEMENT

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

CONSTRAINTS STATEMENT

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

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

QUALITY STATEMENT

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

PRINTED: 07/12/2001

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: GOLD BELT

ALTERNATE NAMES:
GOODMAN GROUP
SCOTT LODE

LA PAZ COUNTY MILS NUMBER: 114

LOCATION: TOWNSHIP 4 N RANGE 21 W SECTION 24 QUARTER SW
LATITUDE: N 33DEG 39MIN 52SEC LONGITUDE: W 114DEG 23MIN 17SEC
TOPO MAP NAME: LA PAZ MTN - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
GOLD LODE
SILVER
STONE DIMENSION
LEAD
THORIUM
RARE EARTHS

BIBLIOGRAPHY:
KEITH, S.B., 1978, AZBM BULL. 192, P. 159
AZBM BULL 137, P. 136
AZBM BULL 140, P. 104
USGS BULL 620, P. 55
ADMMR GOLD BELT FILE
ADMMR BOWYER MINE FILE (HISTORY OF GOODMAN)

NUMBER	FILE	CONT	CONT1	PRINAME
114	F	0	N	GOLD BELT

ALTNAME1	ALTNAME2
GOODMAN GROUP	SCOTT LODE
ALTNAME3	ALTNAME4
ALTNAME5	ALTNAME6

CURSTAT	MNAME	NLATDEG	NLATMIN
PAST PRODUCER	LA PAZ MTN - 7.5 MIN	33	39

NLATSEC	WLONGDEG	WLONGMIN	WLONGSEC	TOWN	RANGE	SECTION	QUARTER	COM1
52	114	23	17	4 N	21 W	24	SW	AU

MODI1	COM2	MODI2	COM3	MODI3	COM4	MODI4
LODE	AG		STN	DIMENSION	PB	

COM5	MODI5	COM6	MODI6	COM7	MODI7
TH		REO			

BIB1
KEITH, S.B., 1978, AZBM BULL. 192, P. 159

BIB2
AZBM BULL 137, P. 136

BIB3
AZBM BULL 140, P. 104

BIB4
USGS BULL 620, P. 55

GOLD BELT

LA PAZ COUNTY
T4N R21W Sec 12
La Paz District

MILS La Paz Index #114 (Yuma print out - Goodman MIne)

AKA: Goodman Mine
Scott Lode

ABM Bull 137, p. 136

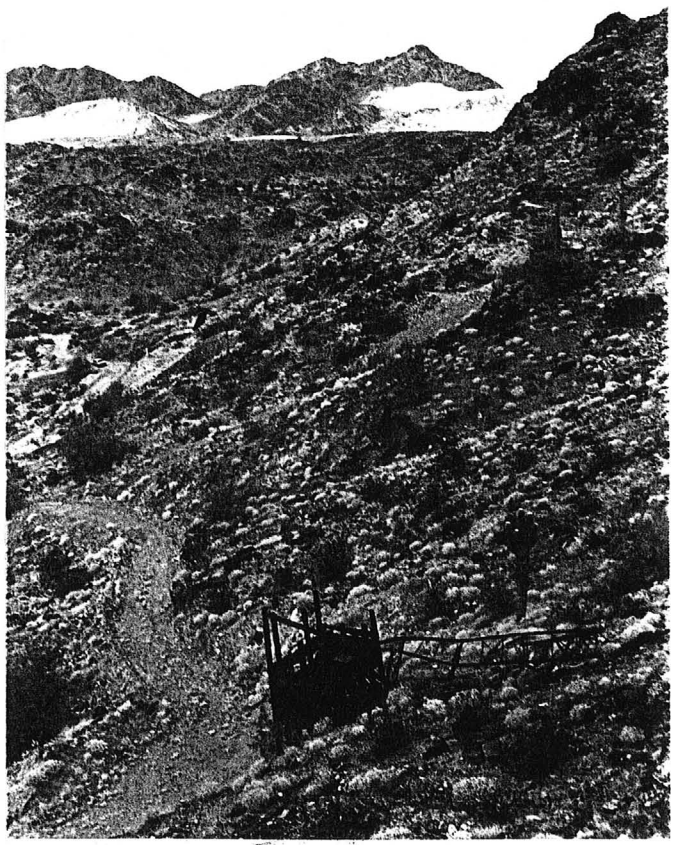
ABM Bull 140, p. 104

ABM Bull 192, p. 159

USGS Bull 620, p. 55

U.S.B.I.A. Status of Mineral Resource Information for the Colorado River Indian Reservation, p. 16, 17

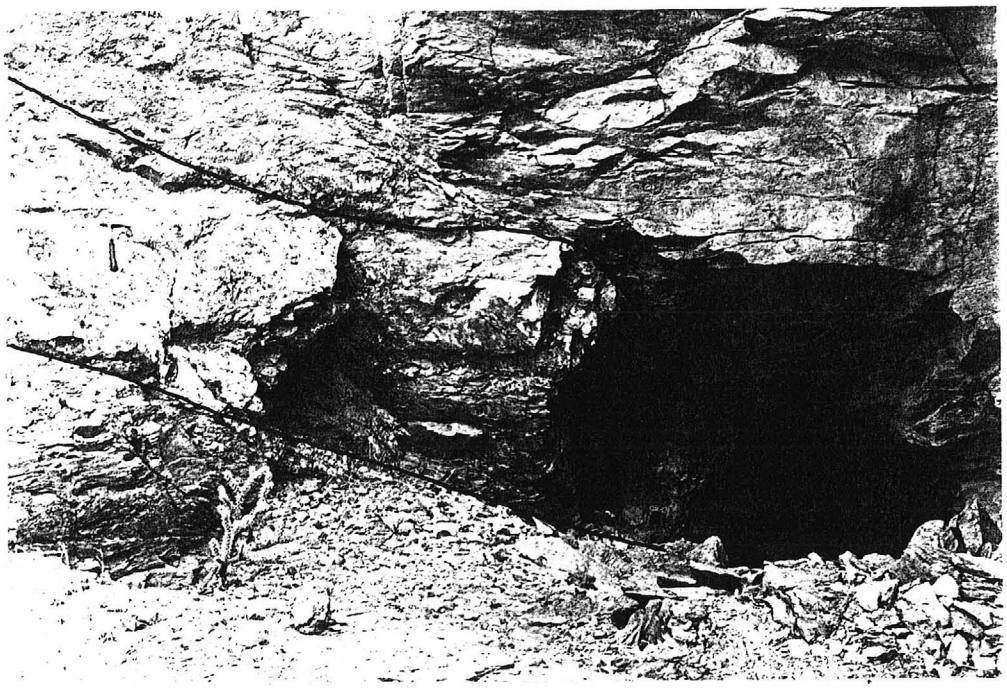
Bowyer Group (file) Bowyer Gold and Copper Company gives a good description of the property in the report.



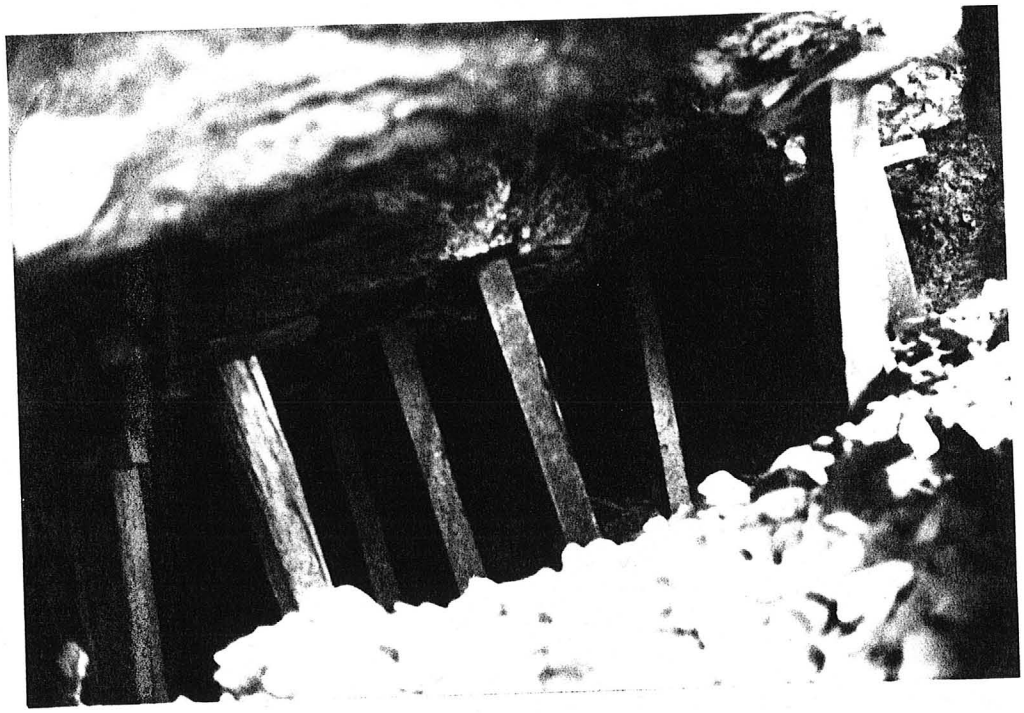
Goodman Mine (looking northeast)
March 19, 1987

Inclined shaft at
Goodman Mine
March 19, 1987

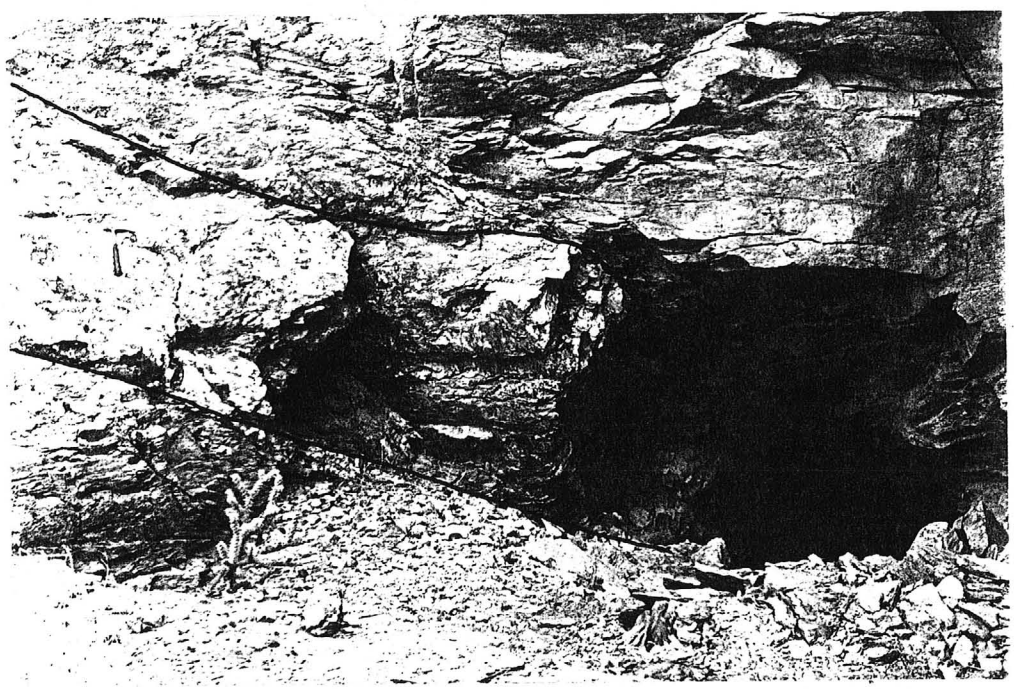
Stulled stope in Goodman Mine
March 19, 1987



Quartz vein at Goodman Mine
March 19, 1987

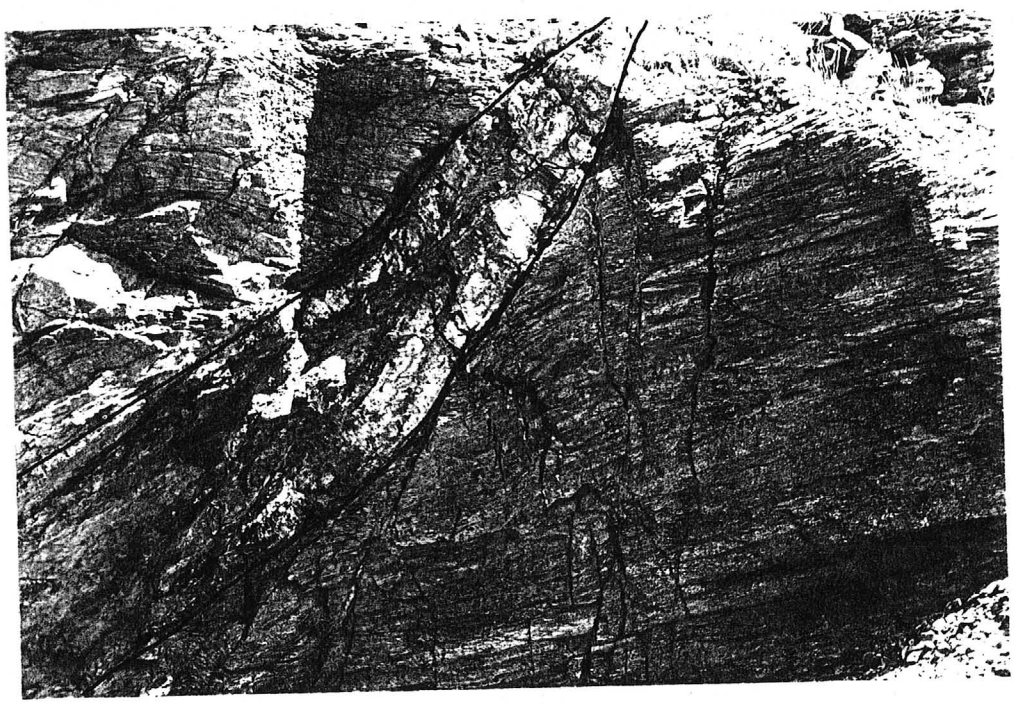


Stulled stope in Goodman Mine
March 19, 1987



Quartz vein at Goodman Mine
March 19, 1987

Quartz vein in Precambrian (?) schist
Goodman Mine, March 19, 1987



Quartz vein at Goodman Mine
March 19, 1987

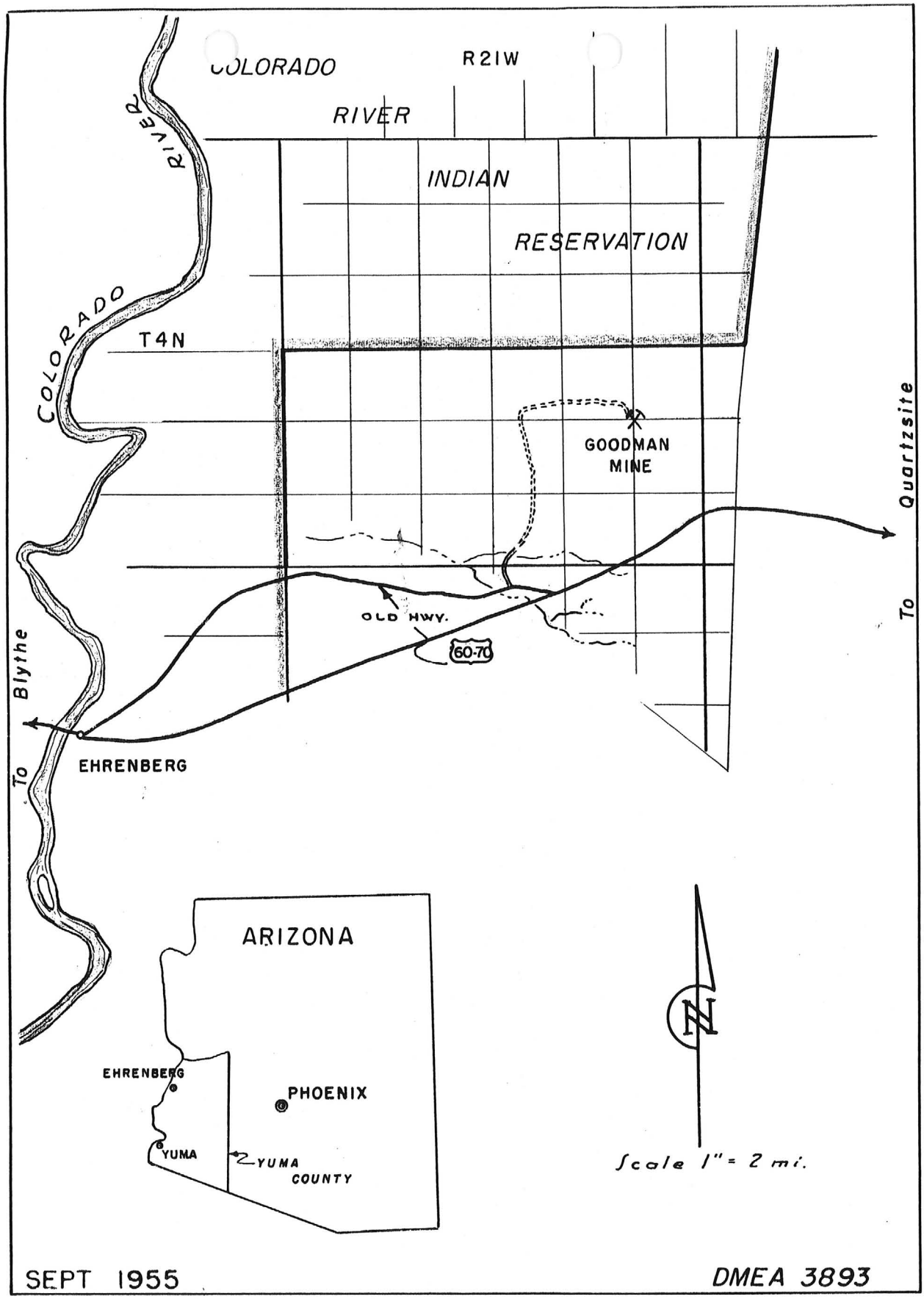


FIG.-1-LOCATION MAP, GOODMAN MINE, YUMA CO. ARIZ.

TUNGSTON-URANIUM

GOLD BELT LA PAZ COUNTY

RRB WR 10/24/86: Mr. Sommer reports that Homestake Mining Co (c) has picked up the Goodman claims (Gold Belt - file) that Haber held in La Paz Co.

NJN WR 10/10/86: Mason Coggin (c) reported that he looked at the Goodwin Property (Gold Belt - file) La Paz County with Dan Patch, owner. Haber (c) has dropped their lease on the property. Current terms are apparently 2 months free, then $8000 a month. There are about 2000 feet of underground workings that need to be sampled. Mr. Patch has only a few samples from the underground workings.

NJN WR 3/18/88: T. K. Krishman, Exploration Manager, Breakwater Resources Ltd, 1440-625 Howe Street, Vancouver BC V6C 2T6 (604) 669-1918 visited and reported that Breakwater has optioned the Gold Belt (file) La Paz County from Dan Patch (card). He reported that an unknown company has drilled 18 rotary holes in the property last year but only assayed the cuttings from 10 of them. Cuttings for the other holes remain in bags near the drill sites. Breakwater plans to conduct at least a 3-month review of the property.

NJN WR 6/25/88: Dan Patch (card) reported that Breakwater Resources has concluded their drilling program on the Goodman (Gold Belt - file) La Paz County. Their preliminary results are as follows: South portion of property - 250,000 tons 0.04 oz/ton Au with a high strip ratio and a possible 1 million tons grading 0.03 oz/ton Au. North portion of property 350,000 tons of 0.074. An additional west branch of the north portion was untested, but another million tons is possible there. Despite these encouraging results they have dropped the property as it has not met their size requirements. Mr. Patch would like to lease it.

GOLD BELT LA PAZ COUNTY

NJN WR 2/22/85: Hal Perry (c) called and reported he is working with a Dallas Texas Company interested in acquiring Arizona mining properties. At my suggestion, he had just spent 2 days in western Arizona with Dan Patch (c). One available property examined was the Goodman Mine Group (Gold Belt, file) La Paz County, where Mr. Patch has 55 claims.

RRB WR 5/3/85: Robert Friedman, a reporter for the "Wall Street Journal" phone (212) 285-5487 called for information about the Goodman Mine in La Paz County. (Gold Belt - file). He had seen the article in the "Western Prospector and Miner" and wanted to know what we knew about the property, the locator Dan Patch and the author of the story, Wayne Winters. He also asked about Haber, Inc, Towaco, NJ which has apparently acquired the rights to the property and are touting it as the greatest gold discovery of this century. Haber is reporting assays from 16 to 20 ounces per ton of gold and a new process that will make it feasible to mine. I tried to impart to Mr. Friedman how misleading a few high assays can be and that thousands of representative samples would have to be taken and assayed befor a determination of the value of the discovery could be made. I tried to get across to him that if all the reports he had were accurate then it was certainly a very good prospect but was a long way from being a gold mine.

KAP WR 7/5/85: A TV reporter wants to do a story on the Gold City (aka Goodman Mine) deposit discovery by Haber Inc (see Gold Belt - file) La Paz County.

NJN WR 2/28/86: Dan Patch (c) reported that Haber Inc. has drilled a water well and established a camp at the Gold Belt (f) La Paz Co. When Amoco Minerals leased the property a few years ago they drilled 3 holes of which 2 he believes had good intercepts.

RRB WR 4/11/86: Ed Andrews of "Over the Counter Review" of Orland, PA interviewed me by phone concerning Haber, Inc. and their gold discovery at "Tombstone, Arizona". What he was actually referring to was the Gold Belt Property near Quartzsite. He was trying to find out why Haber stock remained so high when he could find no evidence that they had never produced any precious metals on a commercial scale. I told him the little I know of the property and explained the general process of taking a raw prospect through the exploration, feasibility, development and construction phases to production. His report should appear in the June issue.

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

VERBAL INFORMATION SUMMARY

1. Mine file: GOLD BELT
2. Mine name if different from above:
3. County: La Paz
4. Information from: John Dowis

   Company: Callahan Mining Corp.

   Address: 11811 N. Tatum Blvd.

   Phoenix, AZ 85028

   Phone: 953-5965
5. Summary of information received, comments, etc.:

Callahan has dropped their lease on Dan Patch's Gold Belt (aka Goodman) after reveiwing all the data and examining the property. This included all the drill data of recent years. Mr. Dowis will see if he can send any copies to the department. While in the area, they also looked at Mr. Patch's Gold Reef property south of Copperstone. It was viewed as an early stage exploration prospect with little potential for an open pit situation as bedrock is 600-700' below the surface.

Date: November 8, 1988

Nyal J. Niemuth, Mining Engineer

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Goodman

Date Feb. 13, 1940.

District La Paz, Yuma County.

Engineer Elgin B. Holt,
P. O. Box 288,
Kingman, Ariz.

Subject:

SYNOPSIS REPORT

OWNER: Mrs. Adela G. Scott, Quartzite, Ariz.

METALS: Gold.

OPERATING CO.: National Mines, Inc., (Arizona). G. H. Allison, Gen. Manager; J. H. Marks, Engineer in charge. Address: Quartzite, Ariz.

AREA & LOC.: Property, consisting of 9 lode claims, 2 placer claims and a mill site, is located in the La Paz placer area, Yuma County.

OPERATIONS: Mine is now in the development stage. A pilot mill has been installed for testing the ore in order to determine the correct method to employ to recover gold values ~~in the ore~~; said testing plant being located near the Colorado River at La Paz wells, 5 miles from property.

REEF: Gold bearing quartz veins occur in a wide schist reef, which is one of the main sources of the La Paz placers below. These veins are parallel and strike NW - SE; dip NE from 40 to 60 degrees from horizontal. Ore bodies, now being developed, are of undetermined width; but seemingly very wide and will likely when developed furnish ore for a large mill.

DEV. WORK: Consists of 4 tunnels from 200 to 500 feet in length and a number of shafts from 10 to 100 feet deep. These workings develop the main ore zone for a length of 2,000 feet.

AV. VALUES: Owners estimate the general average of milling ore now developed in mine at $5.00 gold per ton; said ore being oxidized material and free milling. Large ore reserves are now indicated and operating company is carrying out careful and conservative work with view to determining tonnage, value of ore and method of treatment, before installing larger mill.

P. O. Box 288,
Kingman, Arizona,
April 1, 1940

M E M O R A N D U M

To J. S. Coupal:

Reference is made to letter of S. O. Hall, 332 South Michigan Avenue, Chicago, herewith returned.

I note Hall wants information relative to the Scott Lode Mining properties, and the Aplington lode mining properties, the former known as the Goodman mine, located 5 miles east of the Colorado River and 14 miles northeast of Blythe, Calif.

In reply, please refer to my field engineer's report on the Goodman mine, as of Feb. 13, 1940, which you have in your files. I know nothing of the Aplington lode mining properties by that name.

In answer to Hall's questions:

The Goodman mine is located in a gold-producing area, containing gold producing ores.

The Goodman mine is an old producing property; but heretofore has only been worked in a small way. The climate is hot in summer; but work can go on the year round if workmen are properly housed. Company has ample water developed for large milling operations.

The Goodman mine is being operated by the National Mines, Inc., headed by Dr. C. H. Stone of Blythe, Calif. Said company recently completed a three-months test run in a small pilot mill, and now plans construction of a mill with daily capacity of 150 tons. Large ore bodies of milling ore of fair grade indicated in the mine in which development work is now going on.

E. B. HOLT

ARIZONA DEPARTMENT OF MINERAL RESOURCES
Mineral Building, Fairgrounds
Phoenix, Arizona

1. Information from: Ms. Leah Trook, Caretaker
   Address: c/o Mr. Dan Patch (address below)
2. Mine: GOODMAN (La Paz Co.)
3. No. of Claims - Patented ____ Unpatented ____
4. Location: Approx. 4.7 miles by dirt road from old highway (LaPaz Mtn., AZ-CA 7½' Quad)
5. Sec NW¼ 25 Tp 4N Range 21W
6. Mining District La Paz
7. Owner: Mr. Dan Patch
8. Address: P.O. Box 1887, Quartzsite, AZ 85346, phone 927-6577
9. Operating Co.: ____
10. Address: ____
11. President: ____
12. Gen. Mgr.: ____
13. Principal Metals: Gold
14. No. Employed: ____
15. Mill, Type & Capacity: ____
16. Present Operations: (a) Down ☒ (b) Assessment work ☐ (c) Exploration ☐ (d) Production ☐ (e) Rate ____ tpd.
17. New Work Planned: ____
18. Miscl. Notes: Ms. Trook confirmed that Haber Inc. left the property on Nov. 2, 1986. She said they had trucked some ore to their plant facility in Tombstone.

    Ms. Trook lives in a small house; there are two water wells and a pressure tank. Power is provided by a generator.

    Most previous mining seems to have been off of approximately 45°-inclined shafts sunk on quartz veins 1 to 3 feet thick, dipping to the northeast. The veins are in a Precambrian(?) schist that has been intruded by a medium to coarse grained granite. Some veins are quite narrow and cut the schist at various angles.

    The mine workings are generally in fair to good condition.

Date: March 19, 1987

Michael N. Greeley
(Signature) (Field Engineer)

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine: Goodman Mine (Gold Belt file)

Date: December 5, 1985

District:

Engineer: Richard R. Beard

Subject: Mine Visit

Information from: Dan Patch, owner

Mr. Patch reports that there is 7500 feet of vein to the southeast with visible gold and that it extends also to the northwest. There is also a cross vein extending three to four thousand feet southwest to northeast and possibly several parallel vein . He says that it is persistant but that insufficient sampling has been done to determine if it will be economic to mine. He said that Haber was misquoted in the papers but that he did refer to it as a "world class discovery". The property is leased by Haber, Inc. of Towaco, N.J. who plan an extensive exploration program when funds are available.

Mr. Patch has also leased the Jackpot Placers southeast of Quartzsite to Haber, Inc. and they plan to operate the placers to generate exploration and development money for the Goodman Property. A conventional placer operation is planned using trommel, jigs, tables, etc. and then the tails will be treated by Habers proprietary process to completely extract the gold. A sufficient supply of water is available from wells on site.

PLOMOSA PLACERS (F) LA PAZ
GOLD BELT (F) LA PAZ
9 K

ARIZONA GOLD MINES

And Other Minerals

DAN AND ANGIE PATCH
Owners
PHONE 602-~~XXX-6577~~
483 8367

~~P.O. BOX 1887~~
~~QUARTZSITE, ARIZONA 85346~~
6850 N. 86th St.
Scottsdale, Az 85253

January 10, 1990

Nyal Niemuth
Arizona Dept. of Mines
Mineral Bldg. Fairgrounds
Phoenix AZ 85004

Dear Nyal:

Here are two photos of a few nuggets from the Quartzsite area, the smaller gold in three of the bottles is from the Jackpot mine, the larger nuggets are from near and around the old Goodman Mine area in the La Paz District. The round one weights 1/4 lb. troy.

Ferguson Graham did call me thanks to you and I believe he is coming to see me soon.

I do have my holdings for sale due to age and health if anyone inquires.

Sincerely,

Dan Patch

Dan Patch, President

RECEIVED
JAN 22 1990
DEPT. OF MINES &
MINERAL RESOURCES

GC BELT (A LA PAZ
PLOMOSA PLACERS (A) LA PAZ

HMCC
↓
ON NYBL
↓
MINE FILES

ARISTA RESOURCES INC. **Trading Symbol: "ART:V"**

"IMPORTANT NEWS RELEASE"

Directors:

Fleming Robert J. **Martin Richard T.** **Gutknecht Leroy H.** **Martin Walter C.**

Date: March 11, 1995

Mr. Walter Martin reports:

Arizona Gold Mines Inc.

The Company has acquired, subject to regulatory approval, a one hundred percent (100%) interest in a privately owned Arizona corporation, **Arizona Gold Mines Inc.**, This corporation owns two (2) gold mining properties in the southwest corner of Arizona, located approximately 150 miles west of Phoenix, Arizona. In addition to the two (2) gold mining properties, the acquisition also includes physical assets such as; several generators, 5 operating water wells with submersible pumps, water storage tanks and connecting lines, Caterpillar D-9 bulldozer with barrel rippers, Caterpillar grader, etc.

The Goodman Gold Mine

The Goodman claim group consists of 24 gold mining claims for a total of 480 acres, in the La Paz Mining District, and in the central part of the Dome Rock Mountains north of Interstate Highway 10 and east of the Town of Quartzsite. The La Paz Mining District was the first district to be formed in the Territory of Arizona somewhere around 1862

The topography consists of sharply incised, alluvium-filled valleys separated by steep-sloped ridges. The area is mostly made up of Middle Camp quartz monzonite with local areas of metavolcanics and metasediments. Mineralization of economic significance occurs in two modes. The development on this claim group occurs within the Goodman shear zone and in adjacent quartz veins and lenses containing limonite after pyrite with visible gold.

On **Jodi Hill** west of the Goodman Mine, a westerly-trending and northerly-dipping zone of fracturing and carbonate alteration within quartz monzonite host quartz veins which contain limonite pseudomorphs after pyrite with visible gold. This particular zone is 50 to 75 feet thick, and perhaps 1,000 feet long before it disappears under talus and colluvium.

In 1988, a geological engineer estimated by drilling and sampling, he had found 1,600,000 tons of gold bearing rock on part of the Goodman shear zone. Average production in La Paz County is estimated at .33 ounces per ton Au with most of it coming from the Goodman Mine. Visible gold is evident along a 2 mile shear zone and in several other places over a wide area on the Goodman claims.

GOLD BELT MD

K

Struby Associates
370 Lexington Avenue
New York, N. Y. 10017
212 - 889-2424

May 3, 1985

Dr. John Jett
Director
Arizona Department of Mineral Resources
Minerals Building
Fairgrounds
Phoenix, AZ 85007

Re: Haber, Inc.

Dear Dr. Jett:

As promised in our phone conversation yesterday I am enclosing a copy of the Haber press release and the resulting Wall Street Journal article of April 30 announcing Haber's acquisition of the gold property at the La Paz Mountain site.

Your help in supplying some of the background relative to this property was much appreciated, and we look forward to getting the item from Western Prospector. So far, I haven't been able to reach Dan Patch over in Quartzsite to see if he will provide further detail.

I missed seeing Bill Dresher today but will give him your regards hopefully next week. Thanks again for the assist.

Sincerely yours,

Peter V. Struby

PVS/st
Encl.

RECEIVED
MAY 06 1985
DEPT. MINERAL RESOURCES
PHOENIX, ARIZONA

Gold Rush (1)

HABER

NEWS NEWS NEWS NEWS

FOR IMMEDIATE RELEASE:
April 29, 1985

CONTACT: (201) 263-0990
Joan Harvey, Gabriel Berdé

HABER, INC. ANNOUNCES ACQUISITION OF MAJOR GOLD FIND

Towaco, New Jersey - Haber, Inc., a public company (HABE/National Market System), announced today that it has acquired the complete rights to a major gold find in the La Paz mountains of Western Arizona. The newly discovered deposit encompasses some 1500 acres, and is unusual in that exposed surface veins show visible gold continuously for 7500 feet. Independent experts who have been permitted to explore the recent find have expressed belief that this may be the richest gold strike in the century in the United States.

The Company's president, Norman Haber, together with Dan and Angie Patch, the discovery team, confirmed the extraordinary nature of the deposits by examining field specimens cracked fresh from the rock vein. Mr. Haber commented that: "What I saw was one mammoth museum specimen; it continued everywhere I looked, it covered miles." One primary vein was about 10 feet in width. The rule of thumb with this kind of mineralization is that the depth of the vein will equal about one half of the length. The Company's laboratory reported assays from these samples of 14 to more than 20 ounces of gold/ton. By comparison, the gold industry processes as little as 0.04 ounces of gold/ton. The Haber Gold Process, a non-cyanide extraction process, was evaluated to recover more than 95% of the gold in several hours.

Although visible gold started the California Gold Rush in January, 1848 and the Yukon Gold Rush in 1886, visible gold deposits of this kind have been a rare occurence. The extent of this gold find is still hard to assess. The Company has been quick, however, to claim an additional 300 acres adjoining certain sections of their property. Further exploration and study of the property will be undertaken. Production tests on tonnages of the ore using the Haber Gold Process will begin shortly.

HABER
470 Main Road, Towaco, NJ 07082/Telephone: 201/263-0990

BIOGRAPHICAL REFERENCES

Mr. Dan Patch, an internationally regarded independent prospector, whose recent work is noted for contracts with major companies, has, since 1980, leased to AMOCO what they considered to be its "#1" property, the Copperstone Gold Deposit, with an estimated $500 million in gold reserves. He considers this new find as the mother lode, and the crown of some 50 years experience in the field.

Norman Haber, President and Chairman of Haber, Inc., is noted for the development of a non-cyanide gold extraction technology, the Haber Gold Process (HGP), first announced in 1984. Based upon the sophistication of the HGP, the Company has acquired major joint partnership interests in gold properties in Lucerne Valley, California, and a working gold mine, Cripple Creek, Colorado. Also they have a toll processing agreement with high-grade gold and silver ore with a consortium, as well as silver and manganese reserves at their Silver Tech Mines in Tombstone, Arizona, based on exchange of technology for Haber's Alpha Process. The Haber Gold Process applied to the ore from the newly discovered site recovered more than 95% of the gold in several hours.

****

OK

DEPARTMENT OF MINERAL RESOURCES
State of Arizona
MINE OWNER'S REPORT

DEPT. MINERAL RESOURCES
RECEIVED
SEP 9 1946
PHOENIX, ARIZONA

Date SEPT. 5 - 1946

1. Mine: ~~GOODMAN~~ "GOLD BELT"
2. Location: Sec. 23-24-25 Twp. 4 N Range 21 W Nearest Town QUARTZSITE
   Distance 12 Direction EAST Road Condition FAIR
3. Mining District & County: LA PAZ - YUMA CO.
4. Former Name of Mine: GOODMAN
5. Owner: ANGELA G. SCOTT
   Address: P.O. BOX 2 - QUARTZSITE - ARIZ.
6. Operator: NONE - NONE
   Address:
7. Principal Minerals: GOLD -
8. Number of Claims: 4 - Lode ✓ Placer
   Patented Unpatented ✓
9. Type of Surrounding Terrain: MOUNTAINOUS -

10. Geology & Mineralization: GRANITE W/ SCHIST.
VEIN IS QUARTZ - IRON STAINED - HONEYCOMB -
SOME VISIBLE FREE GOLD -

11. Dimension & Value or Ore Body: ORIGINAL ORE BODY WAS 4 ft IN
SOME places. HAS BEEN WORKED OUT PRETTY WELL -
TO THE 50 FT. LEVEL - ORE PINCHED -
ON INCLINE IT WENT 100 FT DEEP - WHEN ORE
PINCHED WORK STOPPED -

12. Ore "Blocked Out" or "In Sight": about 3000 tons [illegible] out and milled by [illegible]

Ore Probable: unknown

13. Mine Workings—Amount and Condition:

	No.	Feet	Condition
Shafts	5	30-150 ft.	now filled up
Raises			
Tunnels	2	200'	not good condition - fallen panter
Crosscuts			
Stopes			

14. Water Supply: 6 miles W - from property - 1 well in river bottom

15. Brief History: Discovered in early days - about 1870 - worked by prospectors a little now and then. My husband milled about 100 tons about 1910 - fairly good values about $25.00 per ton. Have bonded & leased to several since then, but nobody seemed to have enough capital to do enough development - and last few years have been unfavorable for gold mining.

16. Signature: Mrs Angela G. Scott

17. If Property for Sale, List Approximate Price and Terms: $40,000 - TERMS TO SUIT

DEPARTMENT OF MINER RESOURCES.

News Items Yuma

Date 7/18/39.

Mine Goodwin.

Location 18 miles S.E. of

Owner Quartzite in the

Address Cave Creek Dist.

Operating Co. Chas. G. Willis has

Address completed prelim-

inary development wk

Pres. on property and is

Genl. Mgr. preparing to install

Mine Supt. a mill to treat the

Mill Supt. ore within 30 days.

Principal Metals = Gold.

Men Employed

Production Rate

Mill, Type & Capacity

Power, Amt. & Type

Signed E. B. Holt.

(Over)

DEPARTMENT OF MINERA RESOURCES

News Items

Date 11/16/39

Mine GOODMAN MINE

Location LA PAS - MINING DIST.

Owner MRS. ANGELA SCOTT

Address QUARTZSITE

Operating Co. DR. STONE & ASSOCIATES

Address MONTEREY AUTO COURT

BLYTHE - CALIF.

Pres.

Genl. Mgr.

Mine Supt.

Mill Supt.

Principal Metals AU.

Men Employed 8 MEN ERECTING

Production Rate PILOT MILL TO MAKE

Mill, Type & Capacity EXHAUSTING MINE TESTS

PREPARATORY TO LARGE MILL

Power, Amt. & Type

Signed JSC.

(Over)

CWK

GOLD BELT MINE (P)
La Paz County
(AZMILS 114)

ARIZONA GOLD MINES

And Other Minerals

DAN AND ANGIE PATCH
Owners
~~XXXXXXXXXXXXXXXX~~
Phone/FAX# (602)483 8367

~~XXXXXXXXXXXXXXXX~~
~~XXXXXXXXXXXXXXXXXXXXXXXX~~
6850 N. 86th St.
Scottsdale, Az 85250

ARIZONA GOLD MINES, INC.

an Arizona S Corporation

Arizona Gold Mines, Inc. owns the following assets in Arizona:

7-1994

Property #2

The Goodman group claims consist of 24 mining claims for a total of 480 acres of both placer and lode (hardrock) material and is located in the Dome Rock Mts. in the La Paz Mining District which was the first district formed in the territory of Arizona about 1862. This property is in and around the old Goodman Mine and Goodman Wash area as described in the Arizona Bureau of Mines Bulletin #137 on page 136 and in the Arizona Bureau of Geology and Mineral Technology Bulletin #192, pages 51-54 and page 159. Also Bulletin #168, pages 25-29.

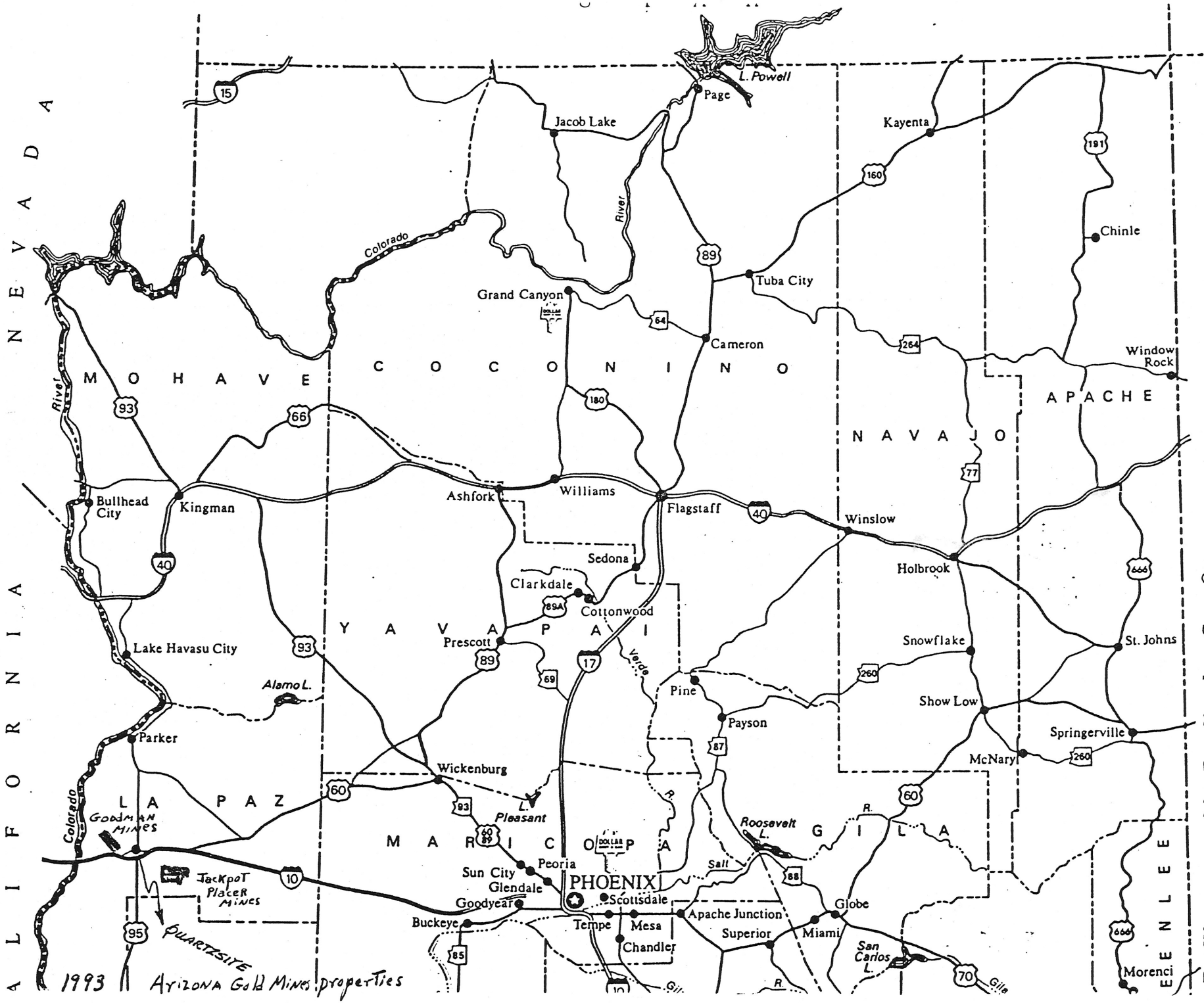
History tells of considerable gold production from this area and of nuggets up to several ounces in size. In the year of 1990, Arizona Gold Mines, Inc. found 120 ounces of gold nuggets with a metal detector on and around this property with many nuggets of 1/4 ounce to 1 and 2 ounces in size. Visible gold is evident along a 2 mile shear zone and other places over a wide area. In 1988, an educated geologist estimated by drilling and sampling that he had found 1,600,000 tons of gold bearing rock on part of the shear zone that, though, not economical at the time ran .05 ounces per ton in gold. At $370 per ounce this would be worth $29,600,000.

Arizona Gold Mines, Inc. has drilled 3 successful water wells on this property and they are all functional at this time. Placer gold was found near these wells.

Placer gold does exist on this property but to date is largely unexplored. During the 1930s to 1941 substantial amounts of gold was produced from the hardrock underground workings and was sold to the San Francisco Mint. Arizona Gold Mines, Inc. has copies of the gold receipts for inspection.

This property is located about 10 miles west of Quartzsite, Arizona, North of Interstate 10 and is very accessible by a year around road. A full time watchman lives on this property and Arizona Gold Mines, Inc. has some machinery on these claims.

Title to these properties is clear and all paper work is current.


NEVADA
CALIFORNIA
NEW MEXICO
MOHAVE
COCONINO
NAVAJO
APACHE
YAVAPAI
LA PAZ
MARICOPA
GILA
GRENLEE
L. Powell
Page
Jacob Lake
Kayenta
Chinle
Tuba City
Grand Canyon
Cameron
Window Rock
Colorado
River
Bullhead City
Kingman
Ashfork
Williams
Flagstaff
Winslow
Holbrook
Sedona
Clarkdale
Cottonwood
Prescott
Lake Havasu City
Alamo L.
Snowflake
St. Johns
Pine
Payson
Show Low
Springerville
McNary
Parker
Wickenburg
L. Pleasant
Roosevelt L.
Salt
Verde
Goodman Mines
Jackpot Placer Mines
Quartzsite
Peoria
Sun City
Glendale
PHOENIX
Scottsdale
Goodyear
Buckeye
Tempe
Mesa
Chandler
Apache Junction
Superior
Globe
Miami
San Carlos L.
Morenci
Gila
1993 Arizona Gold Mines properties

THE GOODMAN GROUP

PROPERTY #2

ARIZONA GOLD MINES, INC.

ARIZONA LODE GOLD MINES AND GOLD MINING

by

ELDRED D. WILSON, J. B. CUNNINGHAM, AND G. M. BUTLER

MR. DAN PATCH

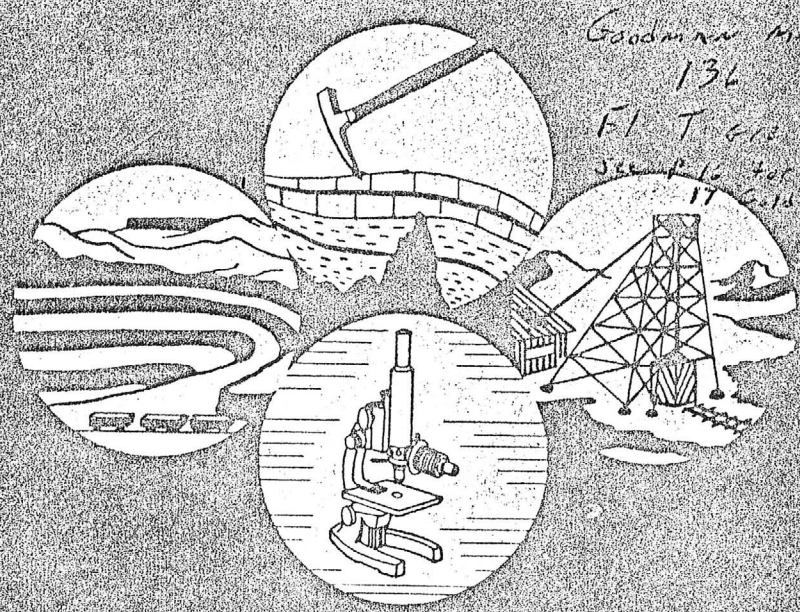
GS/R2850

THE ARIZONA BUREAU OF MINES

BULLETIN 137

Revised 1967

Goodman Mine
136
Fl T Gis 163
See p 16 for info on
17 Gold.



THE UNIVERSITY OF ARIZONA
TUCSON

trict, north of the middle of T. 4 N., is within the Colorado River Indian Reservation.

Gold-bearing quartz veins were discovered in this district during the sixties. Small-scale, intermittent work upon them has yielded a total of probably less than $100,000 worth of gold.

This portion of the Dome Rock Mountains is made up of sedimentary and igneous schists, locally intruded by granite. The larger and more persistent veins are generally parallel to the schistosity, and small gash veins cut across the schistosity.[197]

Goodman mine:[197] The Goodman mine is about 8 miles west of Quartzsite and a few miles north of U. S. Highway 60.

This mine, acording to Jones, produced about $40,000 worth of gold prior to 1900, and $9,000 more from 1900 to 1914. The ore was hauled 15 miles to Quartzsite and there treated in a small amalgamation mill. In 1934, the property was taken over by G. W. McMillen who reopened the mine and installed a small amalgamation mill on the property.

The Goodman vein strikes east-southeastward, dips from 30° to almost 90° N., and occupies a shear zone that is treaceable for more than 2 miles across the range, between La Paz placers on the west and the Middle Camp placers on the east. It occurs in quartz-epidote schist. In width, the vein ranges from less than an inch up to 40 feet and averages about 10 feet. Its filling consists of massive quartz with numerous cavities. In the oxidized zone, these cavities are more or less filled with iron oxide that contains visible free gold. Where oxidation has not been complete, gold-bearing pyrite is relatively abundant, particularly near the walls of the vein.

Underground workings include several inclined shafts and connecting tunnels. One of the inclines is 120 feet deep and connects with 260 feet of workings. One of the adit tunnels is 240 feet long.

Other properties: Jones[198] describes the Don Welsh and Mammoth prospects, on the Colorado Indian Reservation, the Golden Hope prospect, on the eastern portion of the Goodman vein, and the Mariquita prospect, north of the Oro Fino placers. So far as known, these prospects have made little or no production.

KOFA DISTRICT

Situation and accessibility: The Kofa district, at the southwestern margin of the S. H. or Kofa Mountains, is accessible from Yuma by a semi-improved road that branches eastward from the Quartzsite highway at the Stone Cabin. Unimproved roads lead from the Southern Pacific Railway at Wellton and Mohawk to

[197] Jones, E. L. Jr., Gold deposits near Quartzsite, Ariz.: U. S. Geol. Survey Bull. 620, p. 55, 1915.

[198] Work cited, pp. 55-57.

On Jodi Hill just west of the Goodman mine, a westerly-trending and northerly-dipping zone of fracturing and carbonate alteration within quartz monzonite host thin quartz veinlets which contain limonite pseudomorphs after pyrite with visible gold. This zone is 50 to 75 feet thick and, perhaps, 1,000 feet long before it disappears under talus and colluvium near La Paz Wash.

Nearly all of the washes contain gold-bearing gravels, especially downstream from the Goodman shear zone. Much of this gold is angular to sub-angular and some is admixed with quartz, hematite and limonite indicating relatively little transport. Farrar, Martinez, La Paz, Gonzales and Goodman washes have all yielded locally very rich placer. Total production of placer gold from this area is estimated at 100,000 ounces.

Recent exploration activity on the Goodman claim group consists of geological and geochemical surveys and trenching and rotary drilling conducted primarily by Amoco Minerals and Breakwater Resources. The results of these two programs will be discussed below.

In 1983 Amoco Minerals optioned the Goodman claims and undertook a detailed geological study of surface and underground, mapping all of the accessible workings, as well as the surface. In addition, a large part of the claims west from the Goodman shear zone was covered by a geochemical soil survey grid on 500-foot centers. Samples were analyzed for Au, Ag and Cu. Results were very low with only 5 reporting gold greater than 10 ppb.

Three angle diamond drill holes (LP-1, LP-2, LP-3) totalling 1507 feet were drilled: two to probe the downward extension of the Goodman shear zone and associated mineralization under the Goodman mine workings and the third under Jodi Hill to prospect for the downward projection of the mineralized zone exposed there. The two holes drilled at minus 30 degrees under the Goodman mine both penetrated the Goodman shear zone. LP-2 intersected 10 feet assaying .126 opt Au from 255`to 265 feet. LP-3 found only low-grade gold within the Goodman shear zone. LP-1 under Jodi Hill was inexplicably drilled parallel to the strike of the mineralized zone and underneath it so that no penetration was made, although several 10-foot intervals assaying from .01 to .028 opt Au were found.

In 1988, Breakwater Resources optioned the property and carried out an extensive mapping and drilling program under the direction of T.K. Krishnan. Breakwater drilled 15 reverse circulation rotary holes (GN 001 RC - GN 015 RC) totaling 3221 feet. All but one of these holes are angle holes sited so as to intersect the Goodman shear zone at approximately right angles, consequently the hole inclinations range from minus 50 to 69 degrees. Azimuths are 225 degrees except for GN 014 RC at 215 degrees. The strike length of Goodman shear zone prospected is about 12,400 feet.

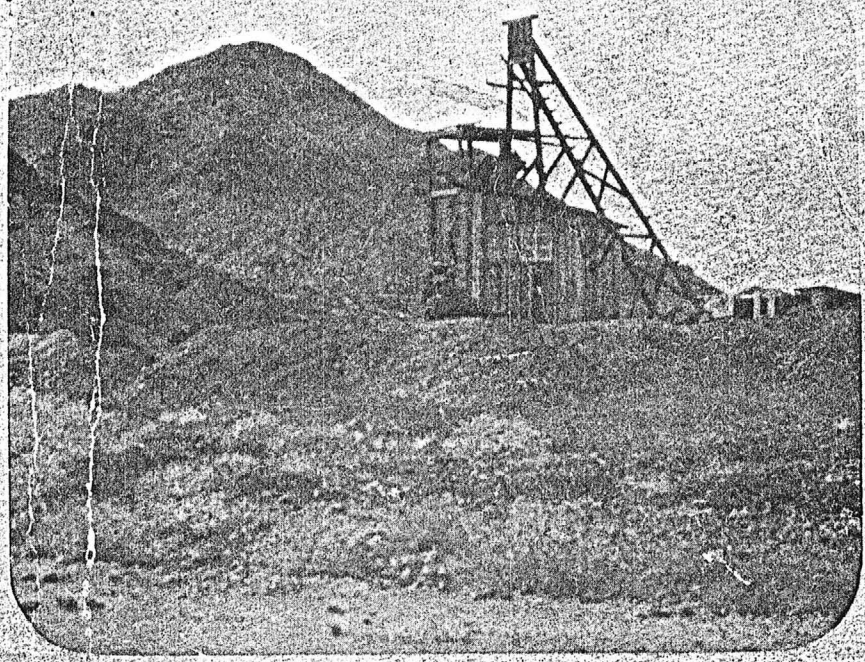
numerous surface cuts, pits and adits were sampled, in addition to the drillholes, to acquire assay data for geological ore estimates. Krishnan calculated geological reserves for three portions of the Goodman shear zone: Goodman mine area - 328,000 tons at .075 opt Au, "Quartz Valley" toward the southeast end of the Goodman shear zone between sections 100 and 122 has the potential for 1,000,000 tons at .039 opt Au and "Quartz Valley" between section 122 and 135 - 286,000 tons at .04 opt Au with a moderate to high stripping ratio for all three.

The relatively low grades found by Breakwater are perplexing in view of the grade of production from the Goodman mine and particularly in light of the large amount of gold which has been won from placer largely derived from the Goodman shear zone. Recent placer gold recovered in Goodman Wash and other washes in the area appears to represent free gold from the veins and not gold freed by oxidation of pyrite. The possibility exists that sampling techniques utilized to date to test the in place grade of the veins within the Goodman shear zone is not adequate to overcome the coarse gold or nugget effect. Consequently, it is possible that true grades might be higher than those found by Krishnan, for example; higher by a factor sufficient to substantially improve the overall grade of large tonnages.

By Richard Thomssen
Carson City Nv.
Consulting Geologist
1990

INDEX OF MINING PROPERTIES IN YUMA COUNTY, ARIZONA

by Stanton B. Keith · Geologist



Bulletin 192 · 1978

MR. DAN PATCH
GS/R2850

Goodman
PAGE 137

State of Arizona
Bureau of Geology and Mineral Technology
Geological Survey Branch

The University of Arizona
Tucson

e mountains. Volcanic rocks
g on the older metamorphics
y, poorly stratified, weakly-
d silt were found to occur on
Wilson believed they were
en the rivers were at higher
r the 1960 Geologic Map of
y showing the metamorphic
aramide, and the volcanics as
n the 1969 Geologic Map of
of the Yuma area as part of a
e basement gneiss and schist
Tertiary Laramide orogeny,
n Precambrian but metamor-
may be early Tertiary. Some
cks with locally interbedded
d from radiometric dating are

eins are the only economic
the Laguna district. In the
found in gravels covering the
, mostly in the inter-arroyo
s found in the gulches below
e eastern end of the Laguna
gneiss produced coarse-gold
River, some gold being re-
resent river. Most of the gold
old-bearing quartz veins are
morphic schist and are usually
shattered with iron oxides,
sum filling the fractures and
the quartz and iron oxides.
ilson that sulfides may have
tization and minor silicifica-

ound and prospected prior to
ration at Las Flores in 1870.
Dam location was carried out
on of the dredge in a flood.
workers found gold nuggets
he bedrock along the bank of
and placer operations have
luctive period was prior to

The total estimated and recorded gold and silver production through 1974 from placer deposits probably has amounted to some 5,700 ounces of gold with about 1,100 ounces of silver. Total estimated and recorded lode production through 1974 would amount to some 556 tons of ore containing about 324 ounces of gold, 661 ounces of silver, and 98 pounds of copper. The total value of the mineral production would be about $187,670.

Some placer gold may continue to be found, but in general, the lode deposits appear weak and spotty. A large part of the district is covered by the Yuma Proving Ground and thus is not open to mining activities.

La Paz (Weaver) Mining District

The La Paz or Weaver mining district, as arbitrarily outlined in this bulletin, includes most of the Dome Rock Mountains of west central Yuma County, excluding the La Cholla and Oro Fino-Middle Camp districts in the eastern central and southeastern sections of the range (Figure 10). The name "La Paz," meaning "peace" in Spanish, came from the early placer mining settlement of La Paz near the mouth of the La Paz Wash close to the former course of the Colorado River. This settlement had as many as several thousand inhabitants during the local gold rush of the 1860s and was the county seat of Yuma County until 1870. At present only relic adobe ruins mark its location. The settlement may have been named after the settlement of La Paz at the south end of Lower California or from the reported date of the discovery of the gold placers by Pauline Weaver, being on January 12, 1862, the day of the Feast of our Lady of Peace. Weaver's name often has been used for the district in the past.

The Dome Rock Mountains are a highly irregular, north-trending range some ten miles wide in the southern part and extending northward into several narrow and broken, rugged ridges, declining in height, and separated by alluvial washes and plains. The mountain areas rise sharply from the bordering, wide and relatively flat, dissected rock benches and pediments which in turn are coated by variable thicknesses of outwashed, alluvial gravel, sand, and clay, some of marine origin, and the rest from the washes, fanglomerates, and Colorado River deposition.

The geology of the Dome Rock Mountains has not been studied in detail. Bancroft (1911) briefly described the geology at the mining locations he visited in his reconnaissance. He noted and mapped the ranges consisting of a Precambrian granite-gneiss-schist complex with metamorphosed sediments and sedimentary schists. Jones (1916) studied the formations in the northern half of the range and noted that quartz-epidote, porphyritic schist made up a large part of the mountains but that there were large areas of later granite, probably Mesozoic. Ross (1923) considered the mountains as composed chiefly of Precambrian gneiss and schist but also containing probable Mesozoic granite and several intrusive, acidic rocks of probable Tertiary age. Darton (1925) summed up the observations of Bancroft and Jones, noting the

schistose porphyritic rock, a metamorphosed quartz monzonite, a quartz-diorite porphyry, and amphibolite and biotite schist derived from diabase and diorite. He noted that the granitic rock intruded the schists. At the north end of the range, he found schists, intercalated with thin lensing marble beds, that are cut by granite gneiss, amphibolite schist, quartz-epidote schist, and granite. Some schists are metamorphosed sediments with dikes of quartz porphyry or aplite. Later dikes are pegmatites, diabase, and minette. Darton believed that some of the marble and quartzite in the northern area might be Paleozoic or younger. The 1924 Geologic Map of Arizona shows local areas containing Carboniferous formations but most of the range is classified as Precambrian schist and does not show the probable Mesozoic and later intrusives. Wilson in the reconnaissance mapping for the Geologic Map of Yuma County, 1960, used also for the 1969 Geologic Map of Arizona, places the schist, gneiss, and metamorphosed sediments as Mesozoic and the intrusives as mainly Mesozoic with some small areas of Laramide granitic rocks. The lack of radiometric dating of the formations and the evidence from the more recent Miller (1970) study and mapping of similar formations in the Plomosa Mountains to the east, suggest that more detail study is needed to determine the ages and relationship of the formations in the La Paz district. The Cenozoic geologic history of the Colorado River area of this district has been well described in several government reports and those of individual investigators, but outside of the location of the placer gold deposits, the Cenozoic sediments have no importance relative to the mineral potential of the district.

Strong northwest, east-west, and some northeast-trending faults have been noted and the strong sheeting, development of schistosity, and metamorphism suggest strong deformation throughout the district. These features may be related to late Mesozoic or Cenozoic structural or intrusive events as numerous pegmatite and basic dikes and quartz lenses, veins and stringers may occur along or may cut across the structural grain of the pre-Cenozoic formations.

The gold placer deposits have been the most important economic mineral resource of the district. The gold was derived from numerous, mostly small and narrow, lensing quartz veins and stringers in the Mesozoic intrusive and metamorphic rocks of the range. Strong erosion liberated the gold and it was washed down and concentrated along gulches and washes as well as on benches and on the eroded pediment between drainage lines over a large area. The upper reaches of La Paz, Goodman, and Gonzales Washes and their tributaries, and Ferrar Gulch, contained the richest placer deposits. These deposits consisted of sand, gravel, and clay with angular rock fragments and boulders. Near the surface, the alluvium is unsorted and unconsolidated but 15 to 20 feet below, the material became more consolidated. When deeper, the alluvium was firmly cemented by calcium carbonate. The best values and nuggets were found on or close to igneous or metamorphic bedrock. The gold

particles were rough and angular, showing limited transport. Considerable magnetite is associated with the gold in the placers. To the west the gold-bearing material has been buried progressively deeper under more recent outwash gravels and boulders and the Colorado River sediments.

Some gold-bearing, quartz veins have been prospected and mined but usually the limited size at the deposits and the spotty characteristic of the gold restricted economic operations. Relict sulfides and their oxidation products are often associated with the gold in the veins. Also scattered throughout the district, vein-like deposits of oxidized copper mineralization with relic sulfides have been found and mined on a small scale. These deposits usually occur in quartz-fissure zones along faults or in skarn zones developed in thin beds or lenses of metamorphosed quartzite and limestone in schist, and sometimes in the granitic intrusive. Some lead mineralization also is found in some vein deposits. Spotty tungsten mineralization occurs locally in the metamorphosed bands or lenses of limestone in the schist, and manganese oxides have been mined from shallow deposits in fracture zones and replacement bodies in the limestone. Local zones of kyanite with quartz and rutile may be found in pegmatitic bands in the granitic intrusive.

Indians guided the trapper Pauline Weaver and his party to the gold placer deposits in January, 1862. News of the discovery spread rapidly, leading to an influx of miners and the establishment of the settlement of La Paz. Intense dry placer operations continued for about two years but the rapid depletion of the richer deposits and the discovery of other rich placer areas elsewhere led to a decline in placer operations in the La Paz area and the gradual desertion of the settlement. The county seat was moved from La Paz to Yuma in 1870, and from 1873 to 1876, much of the placer ground was included in the new Colorado River Indian Reservation, which restricted mining operations to a small portion of the productive area. In 1910, the south boundary of the Reservation was moved northward, opening up the old placer ground, and plans were made for hydraulic mining on a large scale, bringing water from wells along the Colorado River. Before operations were started, however, much of the area again was included in the reservation and the plan of operation was abandoned. In more recent times other large-scale placer operations have been considered but not carried out. Only minor, small-scale, and intermittent placering has taken place in the district in recent years. The discovery of the gold placers led to prospecting and small-scale mining of the gold-bearing, quartz veins and stringers. Few mining operations have been productive but intermittent work through the years on scattered occurrences have produced ore containing gold, silver, copper and lead. The tungsten and manganese ores were produced in the 1950s when premium prices were being paid by the Government for the products.

The total estimated and recorded production of placer gold from the La Paz district from 1862 through 1974 would be around 100,000 ounces of gold

with some 25,000 ounces of alloyed silver. Less than 2% of this amount has been recovered since 1900. The total mine production of precious and base metals for the same period would amount to some 11,200 tons of ore containing about 2,400 ounces of gold, 1,000 ounces of silver, 8 tons of copper and 2 tons of lead. The total value of the base and precious metal production, through 1974, would be about $2.1 million. About 5,000 tons of 0.4% WO_3 ore and some 400 long tons of 41–51% Mn ore have been produced from the district. The total value of the mineral production from the district would be about $2.2 million.

The La Paz district has not been sufficiently studied in detail, geologically or mineralogically, to rule out the possibility of hidden economic mineral deposits. The numerous prospects, a strong structural deformation, and the probable Laramide or Tertiary granitic intrusions all suggest favorable conditions in the district. Unfortunately, however, except for the central part of the mountains, the district is covered by the Colorado Indian Reservation to the north and the Yuma Test Station to the south, limiting the opportunities for mining activities.

La Posa (Wellton) Mining District

The La Posa or Wellton mining district covers an arbitrary area including the Wellton Hills and the Copper Mountains in south-central Yuma County (Figure 11). It might be extended southeastward to include the Cabeza Prieta Mountains where one small copper prospect occurs at the north end of that range. "La Posa" probably is a corruption of the Spanish word "pozo" meaning well, and the name "Wellton" came from the small settlement on the railroad where several wells were sunk for water. The Copper Mountains derived their name from the widespread copper staining found in the range. The Baker Peaks at the north end of the Copper Mountains were named after a stage driver. The district is presently included in the Luke-Williams Air Force Range and thus withdrawn from public access.

The Wellton Hills are an isolated group of irregular, scattered, steep-walled, and rugged hills and buttes covering a six square-mile area. They are surrounded and divided by flat, alluvium-covered pediments. Elevations range up to about 1,119 feet or some 500 feet above the desert plain. The Copper Mountains, to the east and southeast of the Wellton Hills, are a rugged, lenticular, sierra-type range, strongly dissected, three to four miles wide in the center, and having elevations up to 2,808 feet. They extend from the Baker Peaks at the north end, a cluster of angular, pyramid-shaped buttes, to a low divide to the south, which separates them from the Cabeza Prieta Mountains. Well-defined, alluvial-covered pediments occur on both flanks and the mountain mass has been deeply eroded into numerous buttes and ridges, often separated by alluvial-filled washes and canyons.

The first description of the ge
who noted that the Wellton Hills
faulted, elevated area of crystalline
schist. He also mentioned Tertiar
His description of Baker Peaks inc
line complex and arkosic sandston
Tanks. The Copper Mountains
granitoid rocks of a crystalline co
Tertiary and probably Precambria
the Baker Peaks, noting Bryan's
shows the Wellton Hills and Ba
brian schist with some Tertiary
Copper Mountains are shown as
in his more detailed sudy and map
describes the Wellton Hills as c
schist, cut by scattered dikes of
pronounced banding, jointing, an
Baker Peaks to be made up of well
erates of probable Tertiary age tha
beds were considerably affected b
Copper Mountains to include Pre
tites, and indurated Tertiary cong
and pegmatite intrude the gneiss
stained quartz were found. The so
reconnaissance mapping for the
Wilson classified the gneiss and
sedimentary beds as Laramide. Ra
mine the ages of the formation an
also is not clear at this time but
faulting played a large role in the
Hills and the Copper Mountains.

Wilson (1933) noted the many
northwest to west-striking brecci
quartz is coarsely crystalline, weak
specks of free gold and stained by i
tion, probably from primary sulfid
curs as a gangue mineral. The w
silicified. Wulfenite is found locall
Copper Mountains along with gyps
bunches of chrysocolla and mala
prospect at the north end of the
NE¼ Sec. 16 protracted) has simil

Laguna (Las Flores) District, Table 4 Cont.

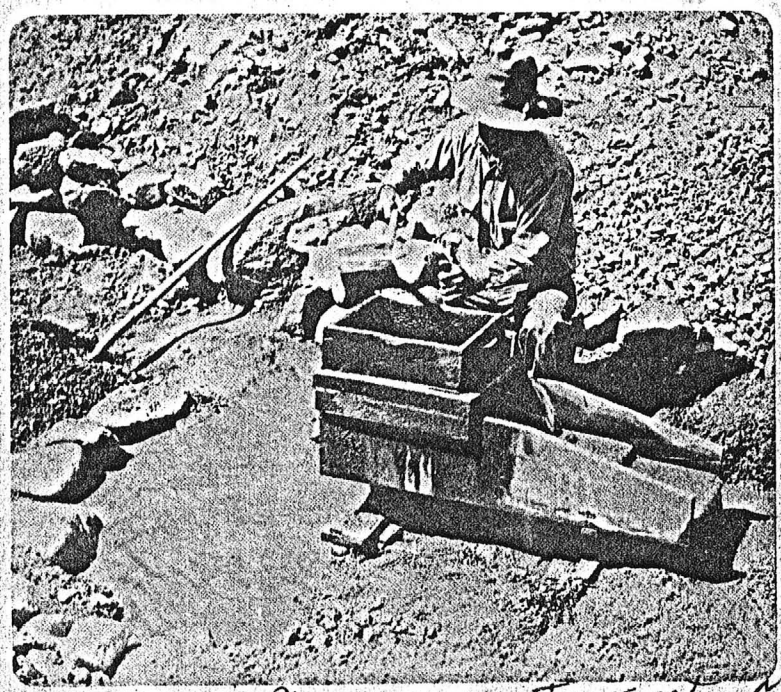
MINING DISTRICT AND MINES	LOCATION T.	R.	Sec.	MINERAL PRODUCTS	GEOLOGY	TYPE OF OPERATION AND PRODUCTION	REFERENCES
4. McPhaul area placers (San Pablo; McPhaul, various small operators in past)	7S 8S	21W 21W	S½ 33 N½ 4	Au, Ag	Scattered gold placer deposits in gulches, along old channels in pediment, and on inter-arroyo benches near base of gravels overlying tilted Tertiary sediments. Gold derived from local gold-quartz veins in Mesozoic schist.	Intermittent placer mining since about the late 1850's, mostly by dry washing. Total estimated and recorded production would be several thousand ounces of gold with minor silver.	Wilson, 1933, p. 216-217; 1961, p. 21 Mining Journal, 1941 ABM file data
XV. La Paz (Weaver) District (West side and northern Dome Rock Mountains) Figure 10	2N-6N	20W-21W	---	Au, Ag, W, Mn, Cu, Pb, Kyanite-, Th-, Rare Earth-.	1. Gold placer deposits, in gravels of numerous gulches and in terrace gravels bordering the washes, derived from small, lensing, gold-bearing quartz veins and veinlets in Mesozoic and early Tertiary metamorphic and granitic rocks. 2. Spotty gold and silver mineralization with some base metals in quartz fissure veins in Mesozoic metamorphic rock, intruded by Mesozoic or early Tertiary granitic rock. 3. Sporadic tungsten mineralization in contact metamorphic deposits along faults or intrusive contacts and associated with marble beds in Mesozoic metamorphic beds. 4. Manganese oxides in irregular bodies along bedding plane fractures in Mesozoic metamorphic rocks.	Extensive placer operations in gulches and on terraces from 1860's, mainly prior to 1900. Several relatively small scattered mining operations for precious and base metals from late 1800's to about 1960. Tungsten and manganese prospecting and mining carried on during periods of premium prices. Total estimated and recorded placer production would be around 100,000 ounces of gold with about 25,000 ounces of silver. Mine production of precious and base metals would amount to some 11,200 tons of ore containing about 2,400 ounces of gold, 1000 ounces of silver, 8 tons of copper, and 2 tons of lead. Some 5000 tons of tungsten ore containing about 0.4% WO_3 and some 400 long tons of 41-51% Mn also produced.	Bancroft, 1911, p. 78-86 Jones, 1916 b, p. 45-57 Wilson, 1934, (rev. 1967), p. 135-136 Wilson, 1961, p. 25-29 Johnson, 1972, p. 76-78 ABM file data
1. Apache mine (Ah-ve-Aha; Moon Mt. Gold Mg. Co., Mohave Mg. Co.)	6N	21W	SE¼ 35	Au, Ag	Spotty gold and silver mineralization with minor, partly oxidized sulfides in lensing quartz vein along a fracture zone in Mesozoic metamorphic rocks intruded by a small Laramide rhyolitic plug.	Shaft and tunnel operations, worked from 1935 through 1950, producing some 330 tons of ore averaging about 2.4 oz. Au/T and 0.4 oz. Ag/T.	ABM file data
2. Copper Giant mine (Farrow, Barrett & Robinson, O'Brien)	2N	21W	NW¼ 11 Protracted	Cu, Ag, Au	Gold-bearing quartz, impregnated with malachite, chrysocolla, and chalcocite, in lensing quartz fissure veins in Mesozoic schist having local thin beds of quartzite and marblized limestone.	Shaft operations. Patented in 1901 and ore originally shipped by boat to Selby. Worked in early 1900's and late 1950's, producing some 100 tons of ore averaging about 4% Cu, 3 oz. Ag/T and 0.2 oz. Au/T.	ABM file data
3. Darling mine (Copper Chief, Mountain Chief, Uncle Sam; Copper Chief Mines Co., Treuer)	5N	20W	NE¼ 33	W, Cu-, Au-	Weak copper carbonates and silicates, after cupriferous pyrite, and spotty scheelite, associated with contact metamorphic mineralization, especially epidote, along a fault contact of Mesozoic schist and marblized limestone.	Shaft and open cut workings. Prospected since 1910 but only mined for tungsten in 1955, producing some 180 pounds of 73.7% WO_3.	Dale, 1959, p. 21-23 ABM file data
4. Farrar Gulch placers (Many early individual operators)	4N	21W	S Cen 25 NW¼ 36	Au, Ag, Fe	Rough and angular gold nuggets and fine particles, often with iron oxide attached, and with magnetite concentrates in variable thicknesses of angular rock fragments, boulders, sand, and clay. Unsorted to consolidated near the surface but consolidated and cemented in depth. Source was gold-quartz veins near head of Farrar Gulch.	Richest and most productive placer of the area, with old excavations, shafts and tunnels. Mainly worked out prior to 1900, producing over 50,000 oz. of gold with considerable silver.	Browne, 1868 Jones, 1916 b, p. 50-51 Wilson, 1961, p. 26-28
5. Goodman mine group (Gold Belt, Scott Lode; Scott, Scott Lode Mines, Inc.)	4N	21W	SE¼ 23 to NW¼ 25	Au, Ag, Cu, Pb (Th, Rare Earths)	Spotty free gold and gold-bearing pyrite, with some copper and lead, in a lensing massive quartz vein with iron oxide in a long shear zone cutting Mesozoic quartz-epidote schist. Thorium and rare earths noted in shear zone.	Numerous shafts and tunnels worked from 1860 thru 1914 and intermittently through 1940. Total estimated and recorded production would be some 11,000 tons of ore averaging about 0.33 oz. Au/T and 0.02 oz. Ag/T. No copper and lead recovered.	Jones, 1916, p. 55 Wilson, 1934 (rev. 1967), p. 136 ABM file data
6. La Angora mine (Sandoval & Assoc.)	3N	21W	Cen 15	Mn	Irregular, lensing pods and stringers of pyrolustie with unreplaced wall rock and calcite in Mesozoic limestone along a bedding plane fracture.	Open pit operation. Produced some 150 tons of 44% Mn ore in mid-1950's.	Farnham & Stewart, 1958, p. 82-83 ABM file data
7. La Paz placers (Many early individual operators)	3N 4N	21W-22W 21W	---	Au, Ag	Gold-bearing gravels, often containing large nuggets, in various large and small washes throughout the area, with best values near a dissected pediment on Mesozoic metamorphics intruded by Laramide granitic intrusives. Source of gold was numerous gold-bearing quartz veins in the Mesozoic metamorphics.	Placers found in 1862 and worked extensively until 1864 and intermittently on small scale since then. Total estimated and recorded production would be over 50,000 oz. of gold plus some silver.	Browne, 1868 Heikes & Vale, 1913 Jones, 1916b, p. 45-52 Wilson, 1961, p. 25-29 Johnson, 1972 ABM file data
8. Metate & Confusion mine groups (Daniels, McFarland & Hullinger)	3N	21W	NE¼ 22 E Cen 23 NE¼ 27 NW¼ 26	Mn	Pyrolusite, psilomelane, and manganite in irregular, discontinuous, replacement deposits along minor folds and in fissures in Mesozoic limestone beds, often under caliche and fanglomerate cover. Some ore high grade.	Open cut and shallow shaft operations in mid- and late 1950's. Produced some 250 or more tons of 41-51% Mn.	Farnham & Stewart, 1958, p. 82 ABM file data

4.00

GOLD PLACERS AND PLACERING IN ARIZONA

by

Eldred D. Wilson



WAS PLOMOSA PLACERS, NOW JACKPOT MINE
SEE PAGE 32

Bulletin 168
Reprinted 1978

Professional Report
By John A Church
V.C. Heikes U.S. Geo. Survey
1912 Part 1 Pages 257-259

State of Arizona
Bureau of Geology and Mineral Technology
Geological Survey Branch

A Division of the University of Arizona
Tucson

Recent production from these areas has been practically negligible.

Trigo Placers

The Trigo placers are at the western base of the Dome Rock Mountains, in T. 2 N., R., 21 W., approximately 22 miles by road from Quartzsite. The gold-bearing gravels occur in arroyo bottoms and in ancient bars and channels. Most of the gold is in the form of flat grains. For many years, small-scale, intermittent dry-washing operations have been carried on in this field, but no record of the total production exists. Operations are greatly hampered by the scarcity of water and the cemented character of the gravels. Their output during 1936-49 was valued at $3,700.

La Paz Placers

Situation and accessibility: La Paz placers are south of the Colorado River Indian Reservation of west-central Yuma County, along the western foot of the Dome Rock Mountains, about 9 miles west of Quartzsite and 6 miles east of the Colorado River (Figure 4). The district is accessible by some 5 miles of unimproved road that branches northward from the Quartzsite-Blythe highway.

Topography: The Dome Rock Mountains rise steeply to approximately 2,900 feet above sea level or more than 2,000 feet above the adjacent plains and are extensively dissected by deep canyons. From their western foot, a wide dissected bench slopes gently westward to low bluffs that limit the Colorado River bottom lands. No perennial streams flow through the placer district, but branching arroyos drain the run-off of rainy seasons to the Colorado River. Water is hauled from Quartzsite or from shallow wells near the river. A scanty supply is afforded by Gonzales Wells or by natural rock tanks, such as Goodman Tank.

History: According to former State Historian Hall,[10] the presence of placer gold near the Colorado River was learned from Indians soon after establishment of the military post at Yuma. These Indians gave a few small nuggets of gold to a trapper, Capt. Pauline Weaver, and about 1862, according to Browne,[5] guided Weaver and his party to the rich gravels. The party picked up about $8,000 in nuggets, returned to Yuma for supplies, and spread news of the discovery. Several hundred miners soon rushed to the district, found the placers to be very rich, and established the adobe town of La Paz about 2¼ miles from the river. This town, which soon attained a cosmopolitan population of over 1,500, became a station on the Overland Trail from San Bernardino to Ft. Whipple and was the County seat until 1871.[12] The district flourished until about 1864 when apparent exhaustion of the higher-grade placers and discoveries of new diggings caused a decline in activity. In 1873, 1874, and 1876, additions to the Colorado River Indian Reservation included much of the placer ground and greatly restricted mining. La Paz be-

came practically deserted, and the site of this once flourishing town is now marked only by adobe ruins.

After the area was excluded from the Indian Reservation in 1910, New La Paz Gold Mining Company acquired control of a large portion of the placer ground and made preparations for large-scale hydraulic treatment of the gravels. Four shallow wells were drilled in the Colorado River flood plain some 4½ miles west of the placers. Water was to be pumped from these wells through a 12-inch pipe line to a reservoir 540 feet above the river or 225 feet above the placers. Part of the pipe line was installed, but from 1912 to 1915 the land was again included in the Reservation, and the project was not completed. Several other plans for large-scale operations have been outlined, but none of them have been carried out.

Production: Information on the earlier production of the La Paz placers is given by Browne,[5] who quotes a letter from A. McKay, a member of the Territorial Legislature from La Paz, as follows:

> Of the yield of these placers, anything like an approximation to the average daily amount of what was taken out per man would only be guess work. Hundreds of dollars per day to the man was common, and now and again a thousand or more a day. Don Juan Ferra took one nugget from his claim that weighed forty-seven ounces and six dollars. Another party found a chispa weighing twenty-seven ounces. Many others found pieces of from one to two ounces up to twenty, and yet it is contended that the greater proportion of the larger nuggets were never shown. . . . It is the opinion of those most conversant with the first working of these placers that much of the greater proportion of the gold taken out was in nuggets weighing from one dollar up to the size mentioned above. . . . . As has been said above, the gold was large and generally clear of foreign substances. . . . . All that was sold or taken here went for $16 to $17 an ounce. Since the year 1864 until the present, there have been at various times many men at work in these placers, numbering in the winter months hundreds, but in the summer months not exceeding 75 to 100; all seem to do sufficiently well not to be willing to work for the wages of the country, which are and have been for some time $30 to $65 per month and maintenance. No inconsiderable amount comes in from these placers now weekly, and only a few days ago I saw, myself, a nugget which weighed $40, clear and pure from foreign substance. . . . .
>
> Of the total amount of gold taken from these mines, I am at a loss to say what it has been. . . .I have failed to find any pioneer whose opinion is that less than $1,000,000 were taken from these diggings within the first year, and in all probability as much was taken out in following years.

According to Hall,[10] local gold nuggets and dust were the principal currency, particularly for gambling, in La Paz; but a large portion of the gold obtained by Mexican placer miners went to Mexico. these (was) mexica once,

On account of the crude methods of recovering the gold, entirely by dry washing in pans or wooden "bateas," only the coarser gold could be saved, and only extremely rich ground would be payable. Wet methods were out of the question, for, according to Jones,[14] water packed from La Paz to the placers brought $5 a gallon during the rush period. With the introduction of dry-washer machines in the late sixties, greater quantities of material could be handled and a greater percentage of

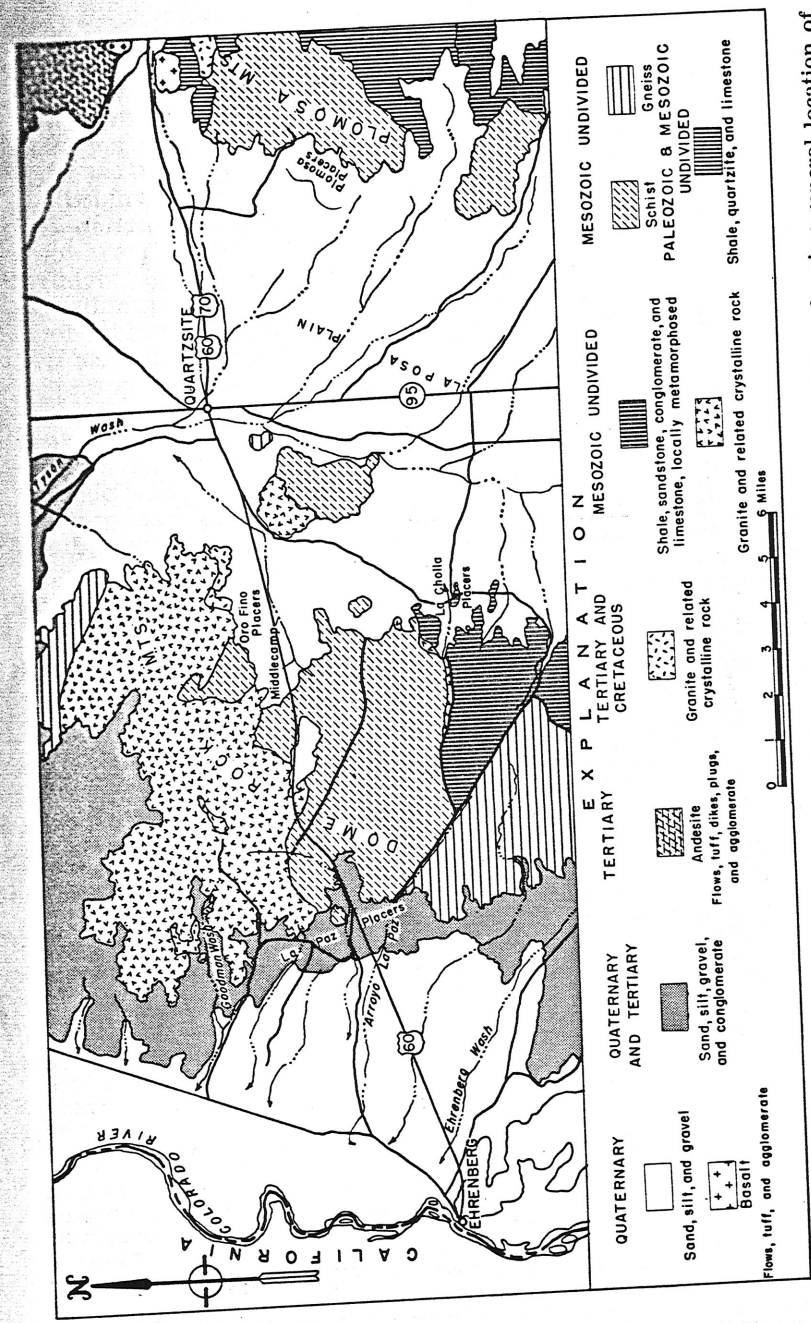


Figure 4.—Geologic reconnaissance map of part of the Dome Rock and Plomosa Mountains, showing general location of La Paz, Plomosa, La Cholla, Oro Fino, and Middle Camp placers.

recovery effected, but by that time most of the richer ground had been worked over.

During the winter of 1932-33, from fifty to sixty men were reported to be conducting small-scale, individual dry-washing operations in La Paz district. The average daily recovery per man was from 50 to 75 cents.

La Paz placers are credited with a gold output valued at $14,705 for 1934-37 and $805 for 1942-49. Their production for other recent years is not separately recorded.

Local geology: The Dome Rock Mountains in this vicinity (Figure 4) consist largely of metamorphic rocks and granite, of Mesozoic to early Tertiary age. For a short distance west of the foot of the range, these rocks floor a dissected pediment and constitute the bedrock of the principal placers. Westward, they disappear beneath extensive deposits of sand, gravel, and clay, which in turn are locally overlain by coarse outwash gravels and boulders.

Distribution and character of the placer gravels: The placers occur mainly in Goodman Arroyo and Arroyo La Paz, and in tributary gulches such as Ferrar, Garcia, and Ravenna. According to Jones,[13]

> Ferrar Gulch, tributary to Arroyo La Paz, contained the richest and most productive placers of the district. Evidences of former work are seen in the old excavations and . . . . in exposures of bedrock where the wash was shallow. . . . The thickness of the gold-bearing wash is variable, ranging from a few feet on the mountain slopes to an unknown measure in Arroyo La Paz and in the gulch traversed by the (old) Quartzsite-Ehrenberg road. Shafts have been sunk in the wash to depths of thirty feet without reaching bedrock and it is reported that in places the wash is at least sixty feet deep. By far the greater part of the auriferous material is unworked, especially that in the lower courses of the arroyos, where the wash is deep. Ferrar Gulch for most of its course has been practically worked out.
>
> The gold-bearing material consists of sand and clay inclosing angular rock fragments of greatly variable size. Tests indicate that about twenty per cent of the wash will pass through a quarter-inch screen, and the largest boulders weigh several hundred pounds. The material near the surface is unassorted and is unconsolidated, being readily worked with pick and shovel. That at depths of fifteen or twenty feet is consolidated, but the cementing substances readily disintegrate on exposure to air. Deposits of wash below the depths of test pits may prove to be similar to the outwash on the east slope of the Dome Rock Mountains and in the Plomosa placers, where the material is firmly cemented with calcium carbonate and requires crushing in order to free the gold. The ground stands sufficiently well to permit sinking of shafts without use of timber. The wash is readily worked in dry-washer machines, the only requirement being that the ground must be dry. The gold is said to be distributed throughout the wash, though in the early workings the richest yield was obtained near bedrock.
>
> No estimate could be made of the probable gold content of the wash in the La Paz district because of lack of detailed data and of uncertainty as to the limits of the wash, but in one area the deposit, said to contain values of 50 to 75 cents per yard and much of it thirty feet or more deep, occupies at least 640 acres, and considerable areas extend into the smaller gulches.
>
> The size of the gold now recovered from the deposits of the La Paz district probably averages only a few cents, but as already stated, the gold recovered from the early workings was much coarser. The gold is rough and angular, and particles of iron cling to some of the nuggets. Magnetite is always found in the concentrates, and boulders of magnetite, the largest weighing several pounds, are frequently found on the surface.

Heikes[14] states that the largest nugget found in this region was valued at $1,150 and assayed about 870 in fineness. Most of the gold particles or nuggets ranged in value from 5 cents to $10, although $20 and $40 nuggets were not uncommon.

La Paz placers were probably derived by the erosion of many gold-bearing veins in the Dome Rock Mountains.

Plomosa District

The Plomosa placer district includes the eastern and western margins of La Posa Plain. This plain, which separates the Plomosa Mountains on the east from the Dome Rock Mountains on the west, is approximately ten miles wide and from 1,000 to 1,300 feet in elevation. It is dissected, particularly in the marginal portions, by many shallow arroyos tributary to its northward-flowing axial channel, Tyson Wash. These arroyos contain no water except for short periods after heavy rains. Most of the water used in the western part of the district is hauled from shallow wells at Quartzsite.

Heikes[14] states: "Surrounding the post office of Quartzsite, in the Plomosa mining district, and extending in every direction, covering an area of about 7,500 acres, is found dry-placer ground with values to an average depth of fifteen feet and varying from five to fifty feet. The gold content per cubic yard is reported to average in coarse gold from ten cents to several dollars."

The most important placer fields in the Plomosa district are La Cholla, Oro Fino, and Middle Camp, which lie near the Dome Rock Mountains, and the Plomosa, near the Plomosa Mountains (Figure 4). These areas have been worked intermittently by individual dry-washers since the early sixties. Several large-scale operations have been planned or attempted. The 1901-31 value of production from the Plomosa placer district is given by the U.S. Mineral Resources as $44,826. During part of the winter of 1932-33 more than 100 men were reported to be placer mining in this district. The recorded yield during 1934-49 was valued at $176,042.

La Cholla Placer Area

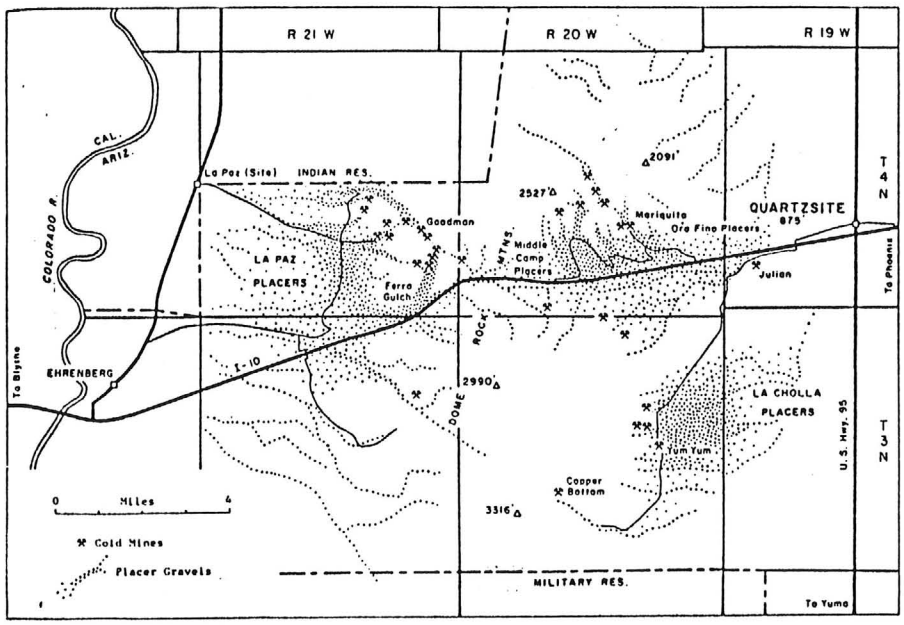
La Cholla placers comprise an area 4 or 5 miles long and of irregular width bordering the eastern foot of the Dome Rock Mountains south of the Quartzsite-Blythe Highway.

Here, a gently eastward-sloping pediment or rock floor, eroded largely on tilted bluish-gray slates, borders the mountains and, extending beneath the gravels of the plain, constitutes the bedrock of the placers.

The gravels in general consist of an unassorted aggregate of subangular to slightly rounded slate, schist, and quartzite fragments, more or less firmly cemented with lime carbonate. They

Placer Gold Near Quartzsite, Arizona

by Edgar B. Heylmun, Ph.D.



Quartzsite, a mining and retirement community of 1,500 (4,000 in the winter), is located in La Paz County, Arizona, 24 miles east of Blythe, California, via Interstate 10. The town's name was correctly spelled in the beginning, but a post office blunder led to the present spelling. Quartzsite is located on La Posa Plain at an elevation of 876 feet, where it is virtually surrounded by dry desert placer gold gravels. Annual precipitation is only 6 inches a year and there are no flowing streams except for the through-flowing Colorado River which forms the boundary between Arizona and California. Summer temperatures can soar to 119°F or more, so most placer mining efforts are conducted during the cooler months. The Copperstone open-pit gold mine, operated by Cyprus, is 18 miles north of Quartzsite, and there is active exploration for gold and other metals throughout the region. The area is also popular with rockhounds. Only the placer gold gravels in the Dome Rock Mountains, west of Quartzsite, will be discussed in this article.

owned by Dan Patch

History

In 1862, Indians led trapper Pauline Weaver and a party of prospectors to where there were gold nuggets on the west side of the Dome Rock Mountains, some 10 to 12 miles west of where Quartzsite is now located. The prospectors collected 450 ounces of gold in a short period of time, and a gold rush ensued. The adobe mining camp of La Paz (see map) sprung up, and it ultimately reached a population of 2,000. At the time, La Paz was on the Colorado River and had regular steamboat service to Yuma. The town flourished between 1862 and 1869, but a flood caused the river to change course and La Paz was left high and dry. As a result, many people moved to a nearby town, Ehrenberg, which remained on the river. Remnants of La Paz have disappeared but Ehrenberg still exists as a mining and retirement community. Placer mining has continued, off-and-on, on both the east and west sides of the Dome Rock Mountains ever since.

Lode Mines

owned by Dan Patch

There are a number of old lode mines and prospects in the Dome Rock Mountains, the most productive of which was the Goodman Mine group at an elevation of 1,150 feet on the west side of the mountains. The Goodman Mine group has been credited with the production of 3,630 ounces of gold, along with some silver, in the period between 1862 and 1941. Gold occurs in a massive quartz vein in a northwest-striking shear zone which cuts quartz-epidote schist of Mesozoic age. Other productive lode gold mines in the Dome Rock Mountains west of Quartzsite include the Copper Bottom, Julian, Mariquita (misspelled on most maps), and Yum Yum Mines, most of which have iron-stained gold-quartz veins in shear zones and fault zones which cut schist or quartz monzonite of Mesozoic age.

Placer Gold

The Dome Rock Mountains are best known for placer gold production on both sides of the range, most of which has been recovered by dry washing methods. In La Paz Mining District on the west side of the range (see map), 350,000 ounces of gold were reportedly recovered between 1862 and 1868 solely by means of winnowing dry gravels in pans and wooden bateas. In 1868, mechanical dry washers (dry blowers) were introduced.

Ferra Gulch (shown as "Farrar" or "Ferrar" Gulch on many maps) has been the most productive placer ground in La Paz District, located in sections 25 and 36, T. 4 N., R. 21 W., in a mineralized fault zone which heads in the same northwest-striking shear zone that the Goodman Mine group is in. The gold-bearing gravels are up to 800 feet in width, 10,000 feet in length, and up to 250 feet in depth at the lower end. Some rich channels have averaged 0.25 ounce of gold per cubic yard. The largest gold nugget recorded, found by Juan Ferra, weighed 64 ounces. Most of the gold is coarse and ragged, with numerous nuggets of an ounce or more. The average fineness is about 0.920, with the principal impurity being silver. Platinum-group metals, native silver, and native mercury have also been reported to occur in the gravels. At depth, the gravels are weakly cemented and, as a result, much of the gold has been recovered by means of shafts and drifts. Sometimes, concentrates have been taken by truck to the Colorado River for wet processing. A large dry washing plant operated for awhile in 1983 and efforts continue in the area. Rich surface gravels in Ferra Gulch have long since been worked-out, but it is estimated that up to 600,000 ounces of gold remain in deeper gravels, at bedrock, and under adjoining parts of Gonzales Wash.

Other productive gulches in La Paz Mining District, in alphabetical order, include Arroyo La Paz, Garcia, Gonzales, Goodman, La Paz, Martinez, Ravenna, and Sunshine Washes, most of which have had rich channels of gold. Rich placer gold has also been found in benches and pediment gravels between the washes. Most of the gravels are angular and poorly-sorted, with boulders and abundant black sand. Magnetite often occurs in

the form of cobbles, and much the placer gold has been found attached to fragments of iron oxide. Rich gold channels are often marked by the presence of iron oxides. The average tenor of placer gravels in La Paz District ranges between 0.02 and 0.08 ounce of gold per cubic yard. Up to 500,000 ounces of placer gold, plus considerable silver, have been recovered in La Paz Mining District since activity began in 1862.

The Middle Camp Mining District (see map) is primarily in sections 21, 27, and 28, T. 4 N., R. 20 W., some 7 miles west of Quartzsite, north of Interstate Highway 10, on the east side of the Dome Rock Mountains. Angular gravels, plus boulders, lie on schist with the average depth of gravels being 16 feet. The average tenor of gravels runs about 0.05 ounce of gold per cubic yard, with occasional rich channels occurring on bedrock. Since gravels are weakly cemented at depth, some of the gravel has been mined by means of shafts and drifts, then processed with trommels or crushers, plus dry washers. Wet jigs and spiral bowls have also been used with success. There is considerable black sand which carries some chromite and platinum-group metals. It is estimated that there are 1,500,000 ounces of placer gold under an area of approximately 1,300 acres, only a fraction of which has been produced to date. The district has remained active, off and on, up to the present.

The Oro Fino Mining District adjoins the Middle Camp District on the east and is primarily in sections 25, 26, and 27, T. 4 N., R. 20 W., north of Interstate Highway 10 some 5 miles west of Quartzsite. Gravels are richest below the Mariquita Mine (see map), but overall, gravels average only 0.02 ounce of gold per cubic yard. There are 12 feet of uncemented gravels which overlie 18 or more feet of cemented gravels. Galena and scheelite are also present in the gravels, with small nuggets of galena sometimes being found. Operators have claimed that over a million ounces of gold are present in the Oro Fino placer area, but much of the gold is finely-divided and not recoverable by existing dry washing methods. Perhaps better recovery could be obtained by using wet jigs or spiral bowls with a recirculating water supply.

Placer gravels in La Cholla (C[illegible]oo) Mining District underlie rather extensive areas some 4 to 8 miles southwest of Quartzsite, south of Interstate Highway 10, in the east half of T. 3 N., R. 20 W., and in sections 7, 18, and 19, T. 3 N., R. 19 W. Locally, gravels are quite rich and gold is often coarse and ragged, with crystals of gold being rather common. The average fineness of the gold is around 0.920. Gravels are angular, poorly-sorted, and cemented at depth, necessitating the use of a trommel or crusher in most areas. In the 1920s, Asarco examined and tested La Cholla placers and estimated that 2 million ounces of gold could be present, with the paydirt zone at bedrock being 6 to 10 feet in thickness. Schistose bedrock is close to the surface in the western part of the district, close to the mountains, but is as much as 160 feet deep further east. The upper two feet of bedrock often contains considerable gold. In the NE/4 of section 23, below the Yum Yum Mine, there was a gold channel over 100 feet wide and 7 feet thick which averaged about 0.2 ounce of gold per cubic yard. Overall, La Cholla placer gravels average around 0.08 ounce of gold per cubic yard, with richer channels often being present. Some placer gold occurs in arroyos, but the principal production has been from bench and pediment gravels between the arroyos. Some of the richest gravels are in sections 14 and 23, T. 3 N, R. 20 W., below lode gold mines at the eastern foot of the Dome Rock Mountains. Because of the cemented nature of most of the gravel, shafts were often sunk and drifts run on richer channels. Only a fraction of the placer gold in La Cholla Mining District has been recovered to date. Operations have been hampered by a lack of water and the cemented nature of much of the gravel. Some large dry washing plants have been used, along with trommels and crushers, and testing has been done with various wet methods, including jigs and spiral bowls. The district remains under claim and active as various devices and techniqes are tested.

Land Ownership

Most of the placer areas discussed here are on public lands administered by the Bureau of Land Management. Such lands are open to claiming if not already under claim. The four mining districts are more or less wedged in-

between the Indian reservation on the north and the Yuma Proving Grounds on the south. Status of the lands should be checked at BLM offices in Phoenix or Yuma in order to avoid trespassing on valid mining claims.

Conclusions

The town of Quartzsite is virtually surrounded by placer gold deposits, most of which are on public lands, and the deposits on the east and west flanks of the Dome Rock Mountains contain millions of ounces of gold, along with silver. Only a small fraction of the total amount of placer gold has been recovered, largely due to a lack of water and the fact that much of the gold-bearing gravel is weakly to firmly cemented, especially at depth. Some large dry washing plants have been used but gold recovery has been rather poor. Devices using recirculated water have been successful, but the volume of gravel treated has been small. If an economical method of large scale production can be devised, a significant tonnage of gold-bearing gravel is available. □

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Goodman

Date Feb. 13, 1940.

District La Paz, Yuma County.

Engineer Elgin B. Holt,
P. O. Box 288,
Kingman, Ariz.

Subject:

SYNOPSIS REPORT

OWNER: Mrs. Adela G. Scott, Quartzite, Ariz.

METALS: Gold.

OPERATING CO.: National Mines, Inc., (Arizona). G. H. Allison, Gen. Manager; J. H. Marks, Engineer in charge. Address: Quartzite, Ariz.

AREA & LOC.: Property, consisting of 9 lode claims, 2 placer claims and a mill site, is located in the La Paz placer area, Yuma County.

OPERATIONS: Mine is now in the development stage. A pilot mill has been installed for testing the ore in order to determine the correct method to employ to recover gold values ~~xxxxxxxx~~; said testing plant being located near the Colorado River at La Paz wells, 5 miles from property.

REEF: Gold bearing quartz veins occur in a wide schist reef, which is one of the main sources of the La Paz placers below. These veins are parallel and strike NW - SE; dip NE from 40 to 60 degrees from horizontal. Ore bodies, now being developed, are of undetermined width; but seemingly very wide and will likely when developed furnish ore for a large mill.

DEV. WORK: Consists of 4 tunnels from 200 to 500 feet in length and a number of shafts from 10 to loo feet deep. These workings develop the main ore zone for a length of 2,000 feet.

AV. VALUES: Owners estimate the general average of milling ore now developed in mine at $5.00 gold per ton; said ore being oxidized material and free milling. Large ore reserves are now indicated and operating company is carrying out careful and conservative work with view to determining tonnage, value of ore and method of treatment, before installing larger mill.

C O P Y

HAYDEN FILE - AHS, Tucson

Arizona Sentinel, 3/14/1885, ~~2x1~~ 3:3

Mining Claims Recorded.---Plomosa Mining District.

Thos. J. Goodman and M. Welz, New Years, recorded Feb. 4.

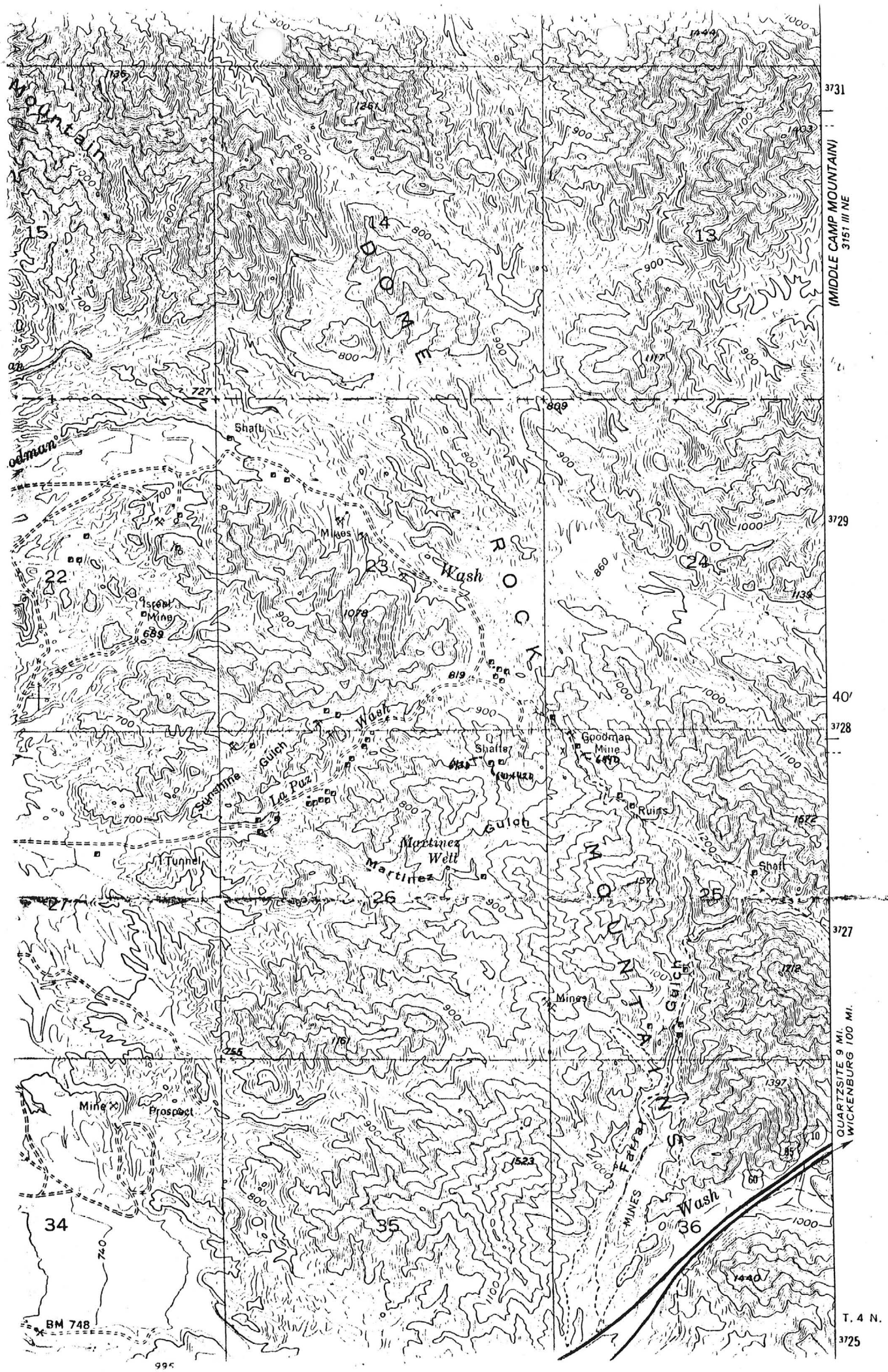
Arizona Sentinal, 6/6/1885, 2:4 (J. W. Dorrington, editor, once lived at La Paz.)

"Mining Musings."--Ehrenberg Gold Mines:

About ten miles northeast of Ehrenberg and eight miles east from the Colorado River near the abandoned town of La Paz, in Yuma county, is situated a promising group of gold mines, the property of Thos. Goodman of Ehrenberg. A number of 12 or 15, I think. A shipment of extremely rich gold ore was forwarded to England from the Revina Mine. (Owned by Manuel Ravenna, Italian born merchant in La Paz in the 1860's.) The result was a stampede for the new strike. $150,000 in cash and the erection of a 40 stamp mill was refused for a half interest. Revina (sic) the owner, a well to do Mexican (sic), worked in on the ledge and ran a tunnel about 300 feet in length, starting at the base of the mountain side, expecting to cut the ledge which had its source partially defined halfway up the mountain side.

The Arizona Sentinel, Yuma, 12/13/1890. 3:5

The steamer Gila brought down 111 tons of freight, a 10 stamp mill from Needles to the Old La Paz wash near Ehrenberg. The mill is a new one, (Sentinel, 8/9/1890, 3:3, said mill was being built in Chicago.), complete in every respect for the Mariposa and New Year's Gift mines, owned by Hopkins and Goodman. The mill will be erected about 1/2 mile from the Colorado river, a little below La Paz wash and about 8 miles from Ehrenberg.



(MIDDLE CAMP MOUNTAIN)
3151 III NE
3731
3729
40′
3728
3727
3725
T. 4 N.
QUARTZSITE 9 MI.
WICKENBURG 100 MI.
DOME ROCK MOUNTAINS
Wash
Shaft
Mines
Goodman Mine
Ruins
Martinez Well
Martinez Gulch
La Paz
Sunshine Gulch
Tunnel
Mine
Prospect
Fatral Gulch
MINES
BM 748

OK

DEPARTMENT OF MINERAL RESOURCES
State of Arizona
MINE OWNER'S REPORT

DEPT. MINERAL RESOURCES
RECEIVED
SEP 9 1946
PHOENIX, ARIZONA

Date SEPT. 5 - 1946

1. Mine: ~~GOODMAN~~ GOLD BELT
2. Location: Sec 23-I4-25 Twp. 4 N Range 21 W Nearest Town QUARTZSITE
   Distance 12 Direction EAST Road Condition FAIR
3. Mining District & County: LA PAZ - YUMA CO.
4. Former Name of Mine: GOODMAN
5. Owner: ANGELA G SCOTT
   Address: P.O. BOX 2 - QUARTZSITE - ARIZ.
6. Operator: NONE NOW
   Address:
7. Principal Minerals: GOLD -
8. Number of Claims: 4 - Lode ✓ Placer
   Patented Unpatented ✓
9. Type of Surrounding Terrain: MOUNTAINOUS -

10. Geology & Mineralization: GRANITE W/ SCHIST.
VEIN IS QUARTZ - IRON STAINED - HONEYCOMB.
SOME VISIBLE FREE GOLD -

11. Dimension & Value or Ore Body: ORIGINAL ORE BODY WAS 4 ft IN SOME places. HAS BEEN WORKED OUT PRETTY WELL.
TO THE 50 FT LEVEL - ORE PINCHED -
ON INCLINE IT WENT 100 FT DEEP - WHEN ORE PINCHED WORK STOPPED -

12. Ore "Blocked Out" or "In Sight": about 3000 tons lined out and milled by leasers

Ore Probable: unknown

13. Mine Workings—Amount and Condition:

	No.	Feet	Condition
Shafts	5	30-150 ft.	now filled up
Raises	2		
Tunnels	2	200'	not good condition - fallen panter
Crosscuts			
Stopes			

14. Water Supply: 6 miles W - from property - 1 well in river bottom

15. Brief History: Discovered in early days - about 1870 - worked by prospectors a little now and then. My husband milled about 100 tons about 1910 - fairly good values about $25.00 per ton. Have bonded & leased to several since then, but nobody seemed to have enough capital to do enough development - and last few years have been unfavorable for gold mining.

16. Signature: Mrs Angela G. Scott

17. If Property for Sale, List Approximate Price and Terms: $40,000 - TERMS TO SUIT

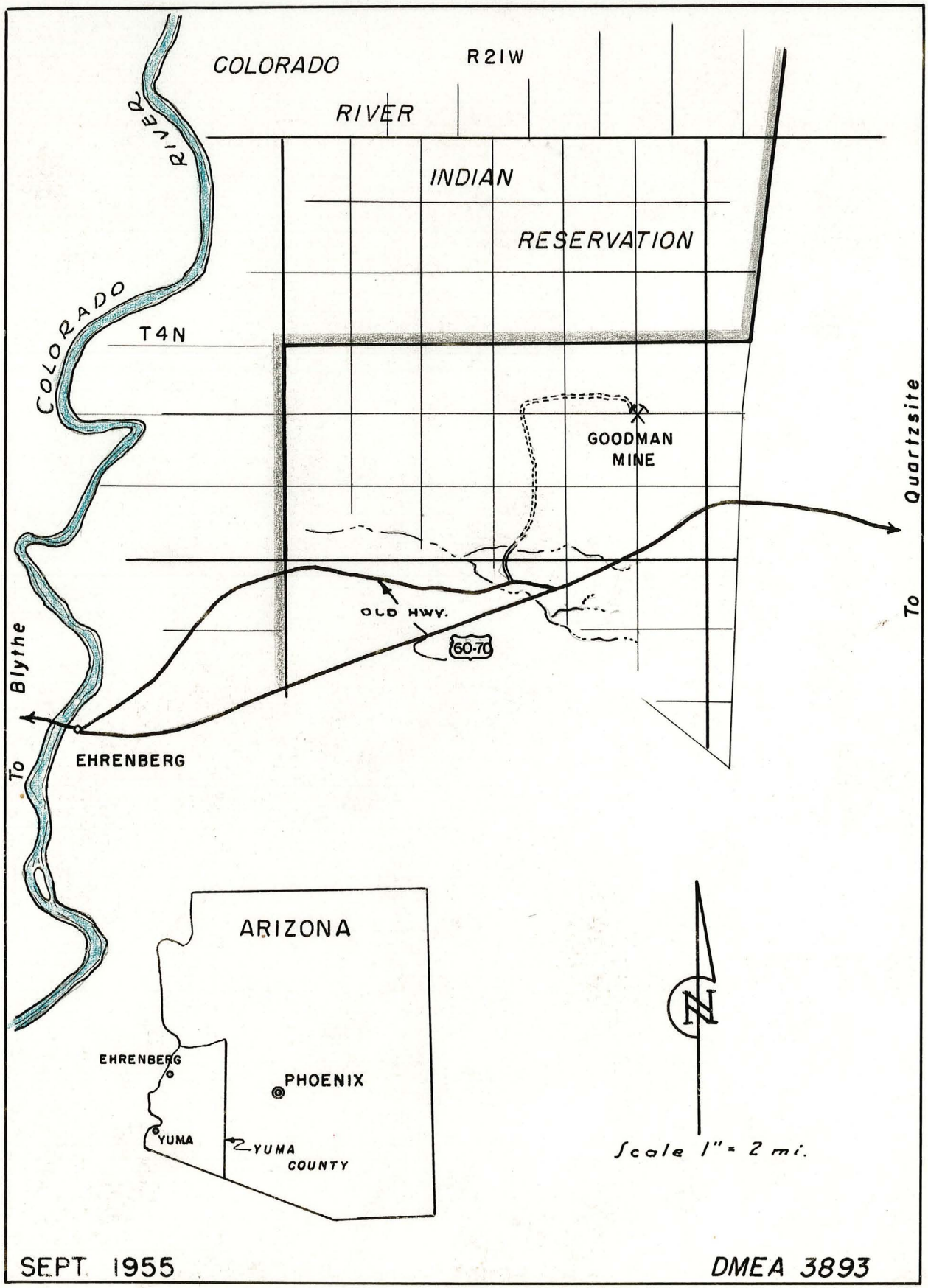


FIG. 1 - LOCATION MAP, GOODMAN MINE, YUMA CO. ARIZ.

TUNGSTON - URANIUM

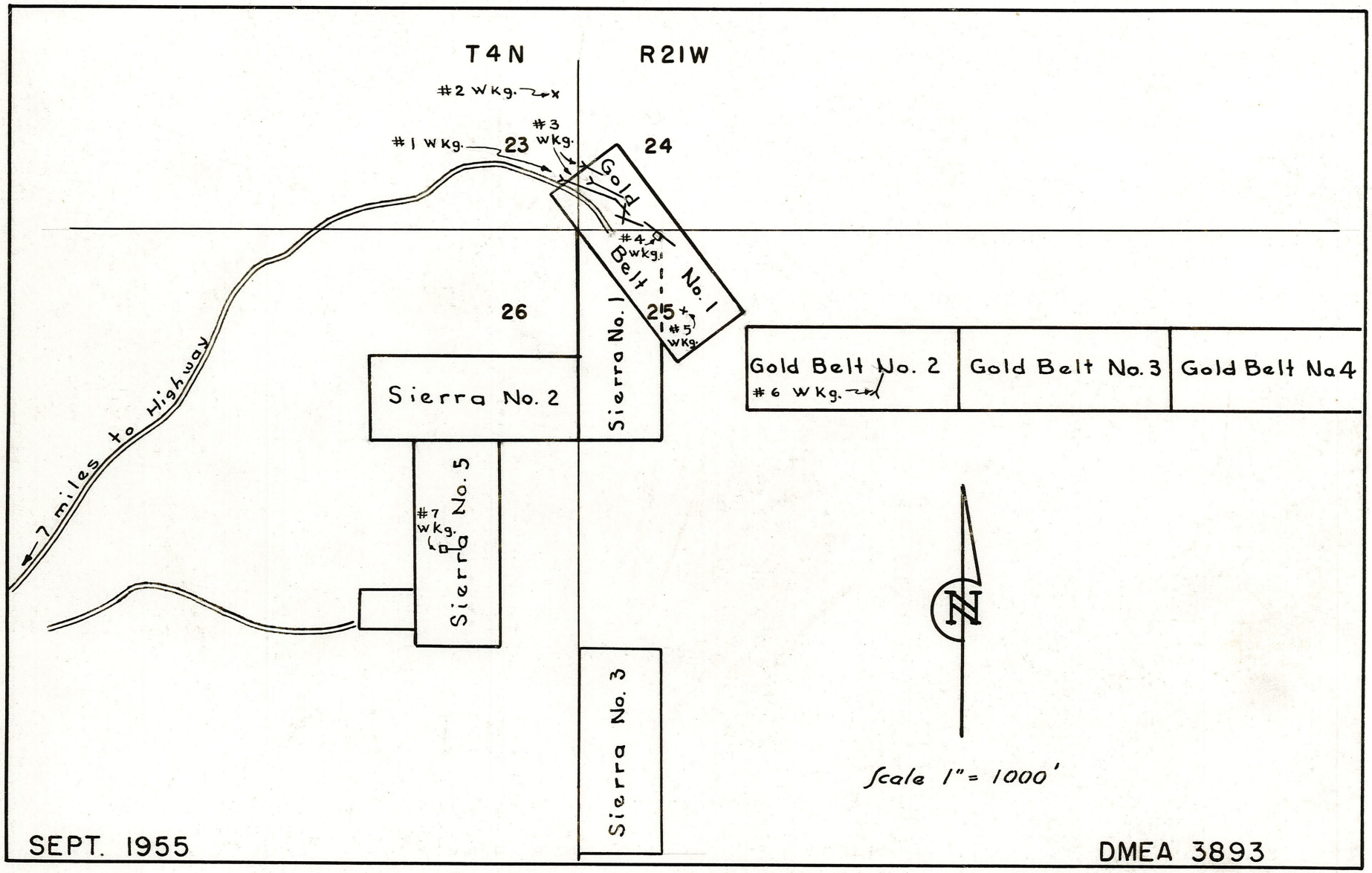


FIG.-2 - CLAIM MAP, GOODMAN MINE, YUMA CO. ARIZ.