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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: COPPER QUEEN MINE

ALTERNATE NAMES:

COCHISE COUNTY MILS NUMBER: 262

LOCATION: TOWNSHIP 23 S RANGE 24 E SECTION 9 QUARTER SW
LATITUDE: N 31DEG 21MIN 02SEC LONGITUDE: W 109DEG 54MIN 15SEC
TOPO MAP NAME: BISBEE - 7.5 MIN

CURRENT STATUS: PRODUCER

COMMODITY:

COPPER SULFIDE

COPPER OXIDE

GOLD

SILVER

BIBLIOGRAPHY:

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U OF A PRESS, 1966, P 189-204
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ADMMR 5 PLAN MAPS (INCLUDED IN FILE)
ADMMR 4 U/G PLAN MAPS (ABM MAP BOX)
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AIME TRANS VOL 29, P511-46, 1900
AGS 1988 FALL FIELD TRIP



Copper Queen Mine
T23S R4E Sec. 9 SW

Bisbee 7.5
YABM Lme
Mount 6320

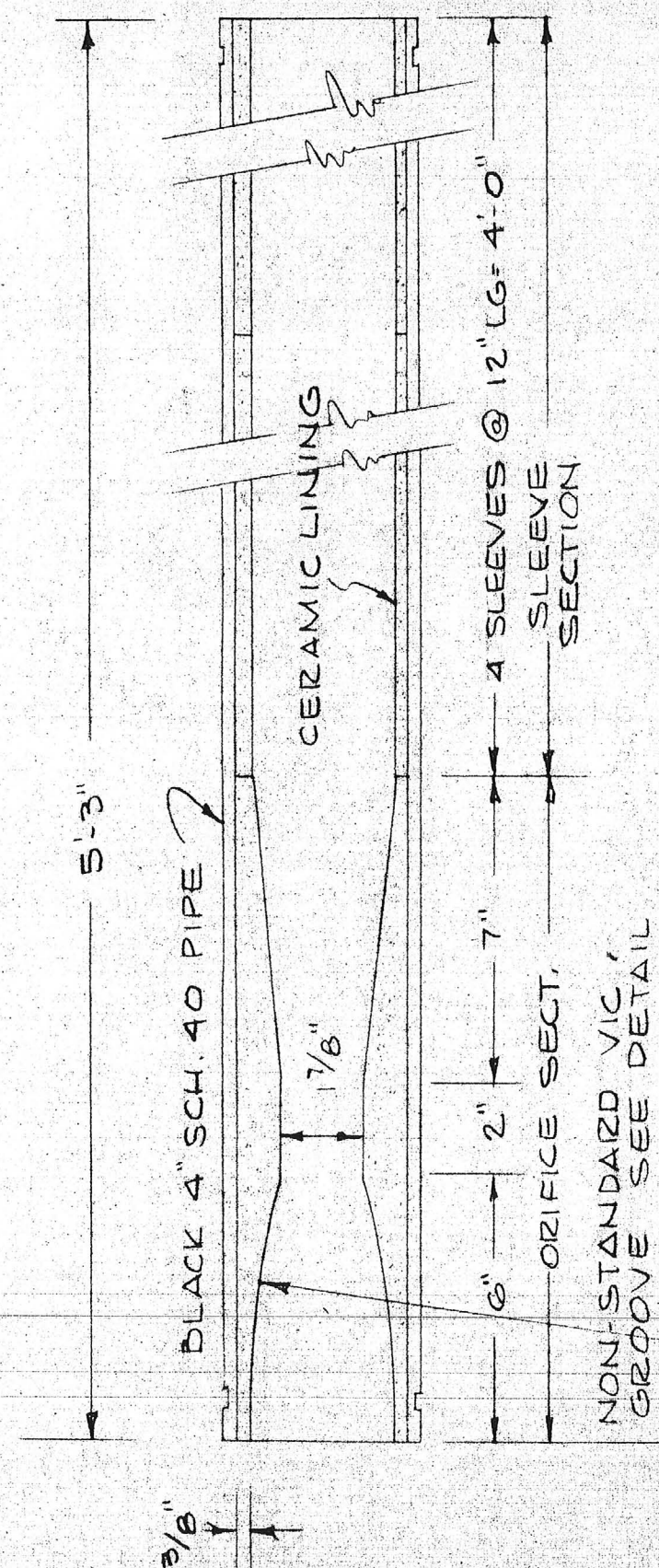
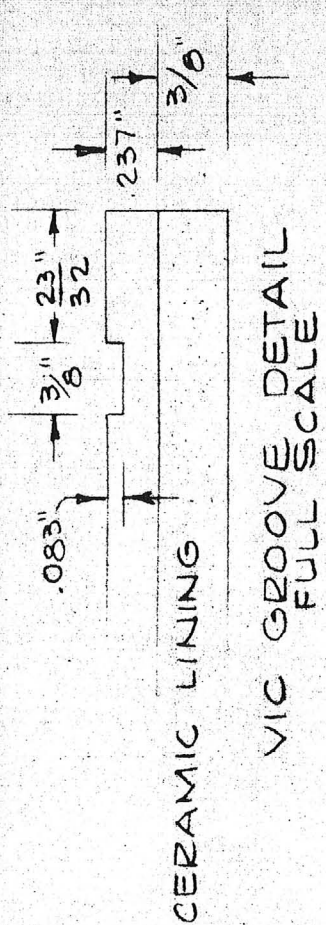


FIGURE 1

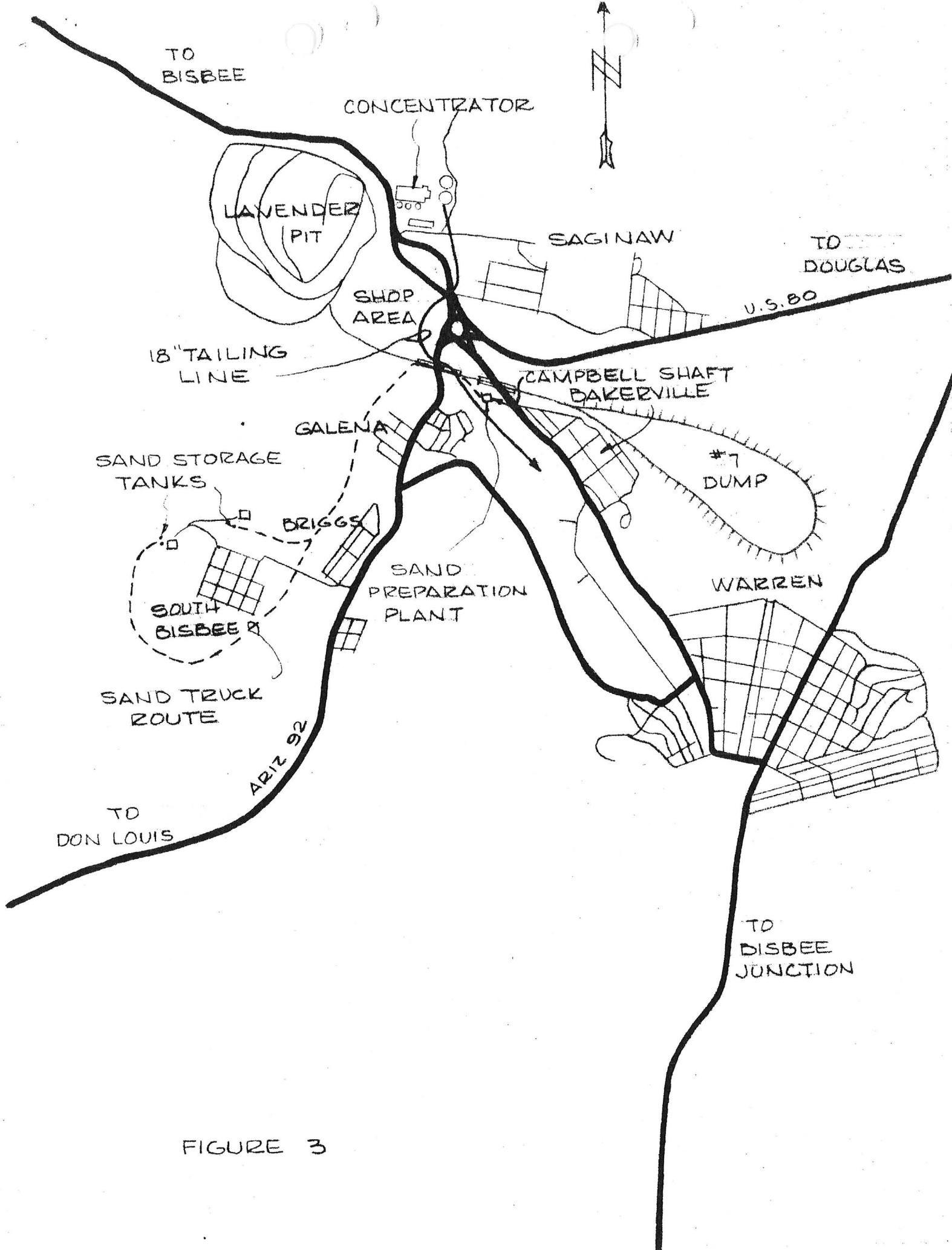


FIGURE 3

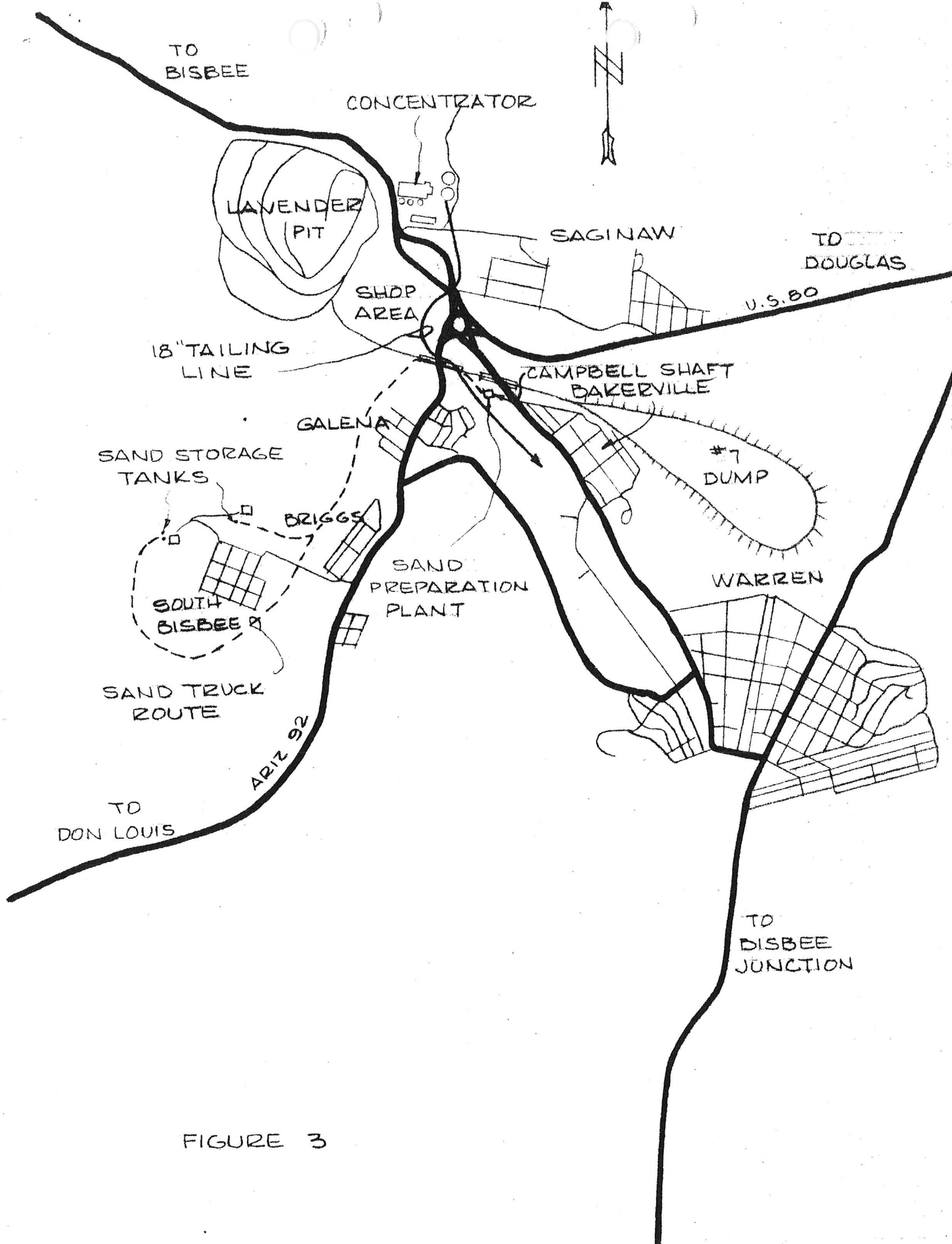


FIGURE 3

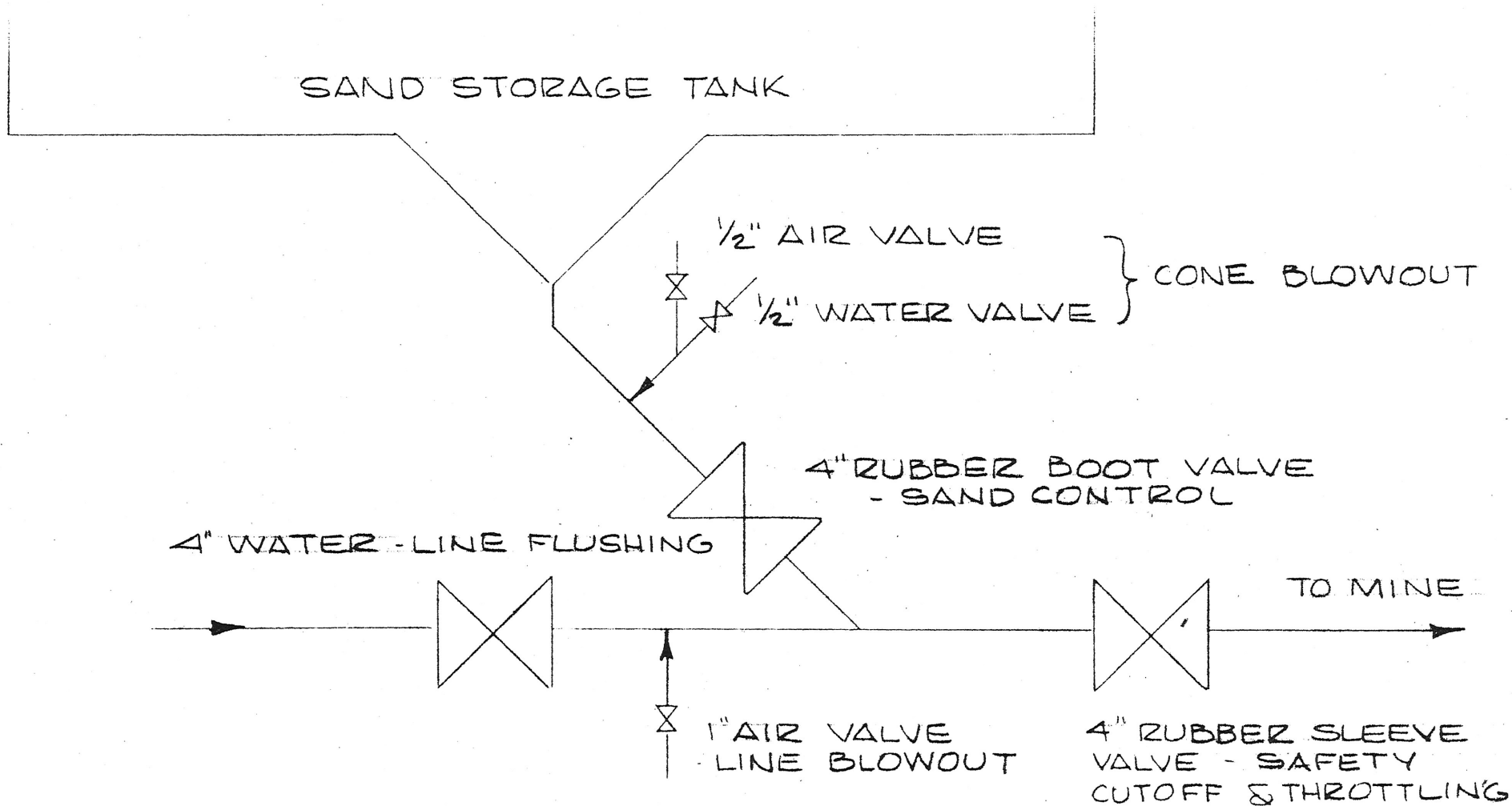


FIGURE 4

4" RUBBER BOOT VALVE OPERATED
BY COMPRESSED AIR AT 90 PSI

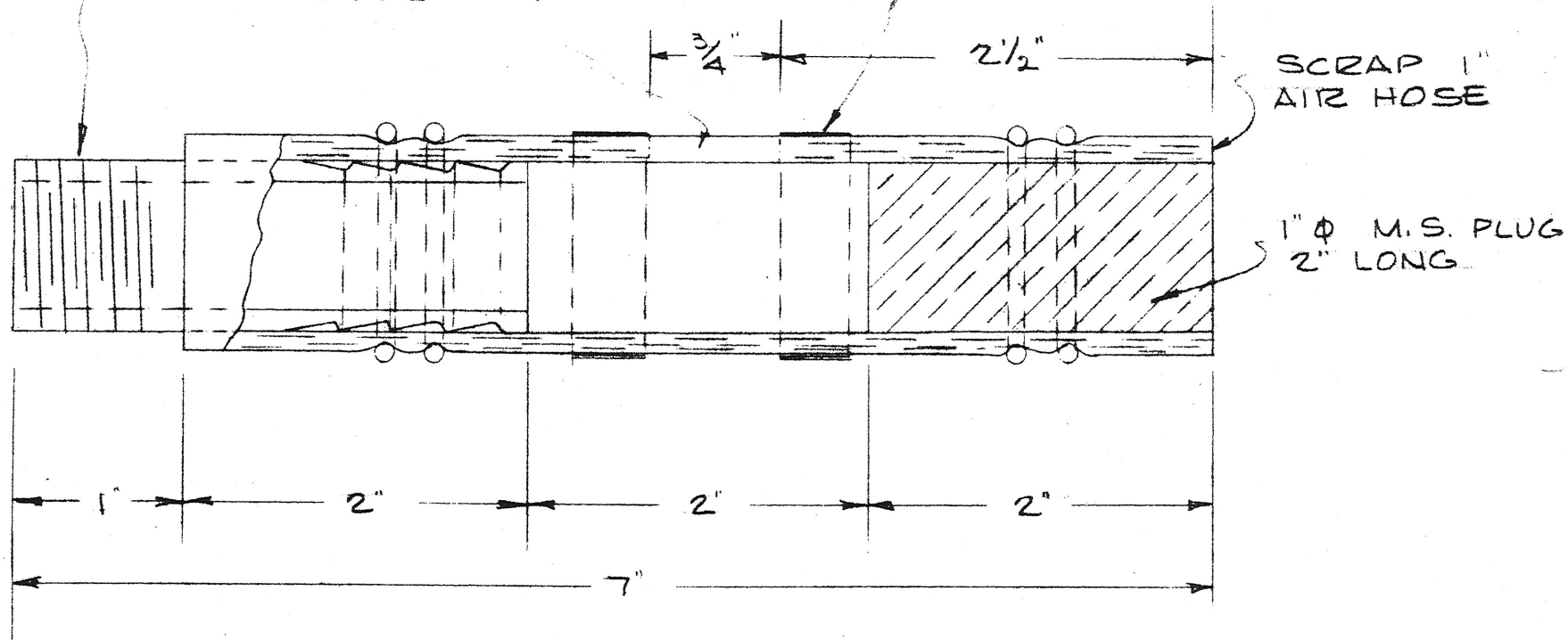
COMPRESSED AIR TO BLOWOUTS
REDUCED TO 60 PSI

3/4" NIPPLE 3" LG.
1 END THREADED
1 END SERRATED

PLUG & NIPPLE ARE
HELD IN PLACE BY
WIRE BANDS AROUND
HOSE

SLIT IS PREVENTED
FROM TEARING BY 3
CIRCULAR WRAPS OF 3/4"
PLASTIC TAPE ON
EACH SIDE

3/4" LONG
KNIFE SLIT

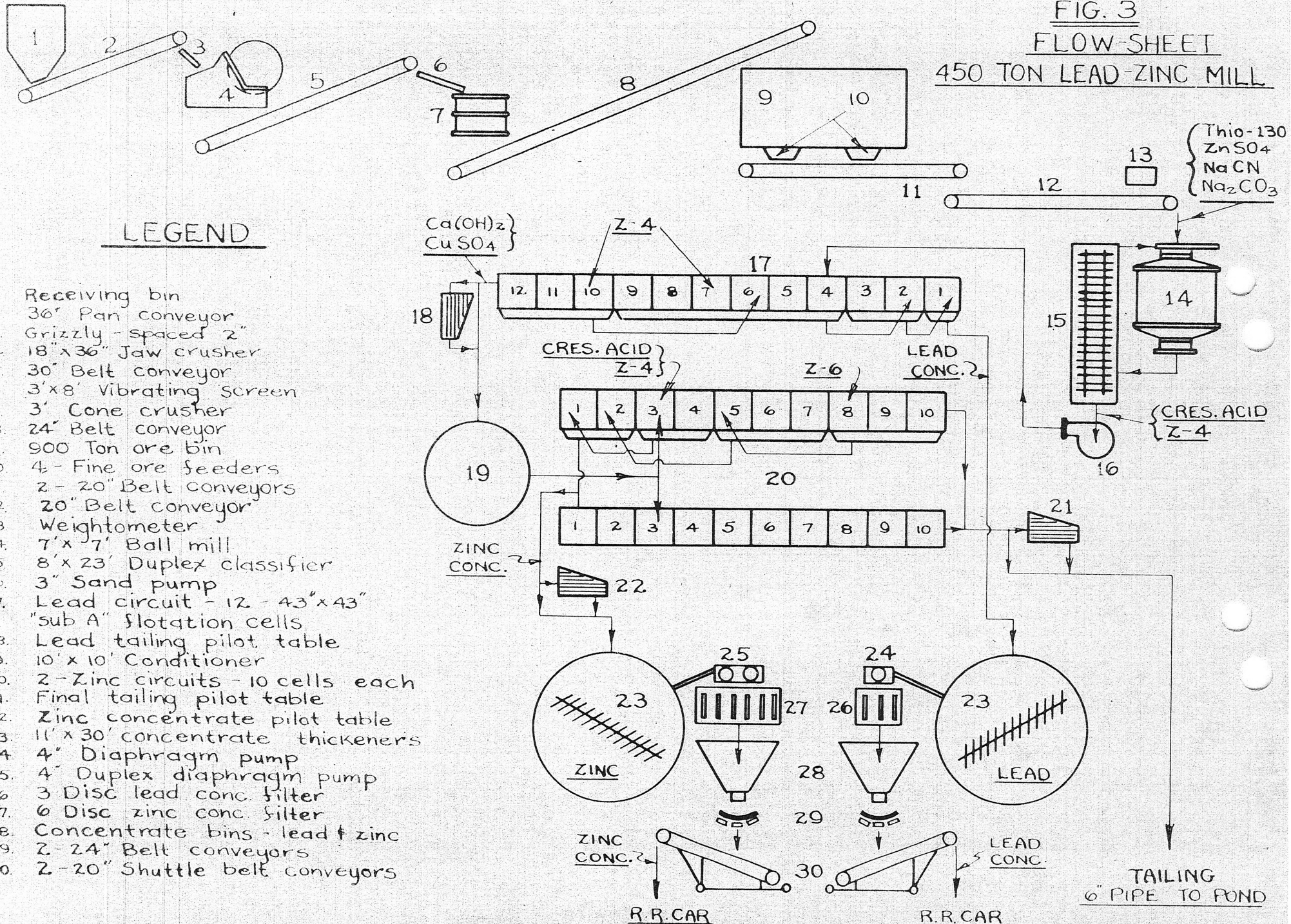


STANDARD HOSE JET

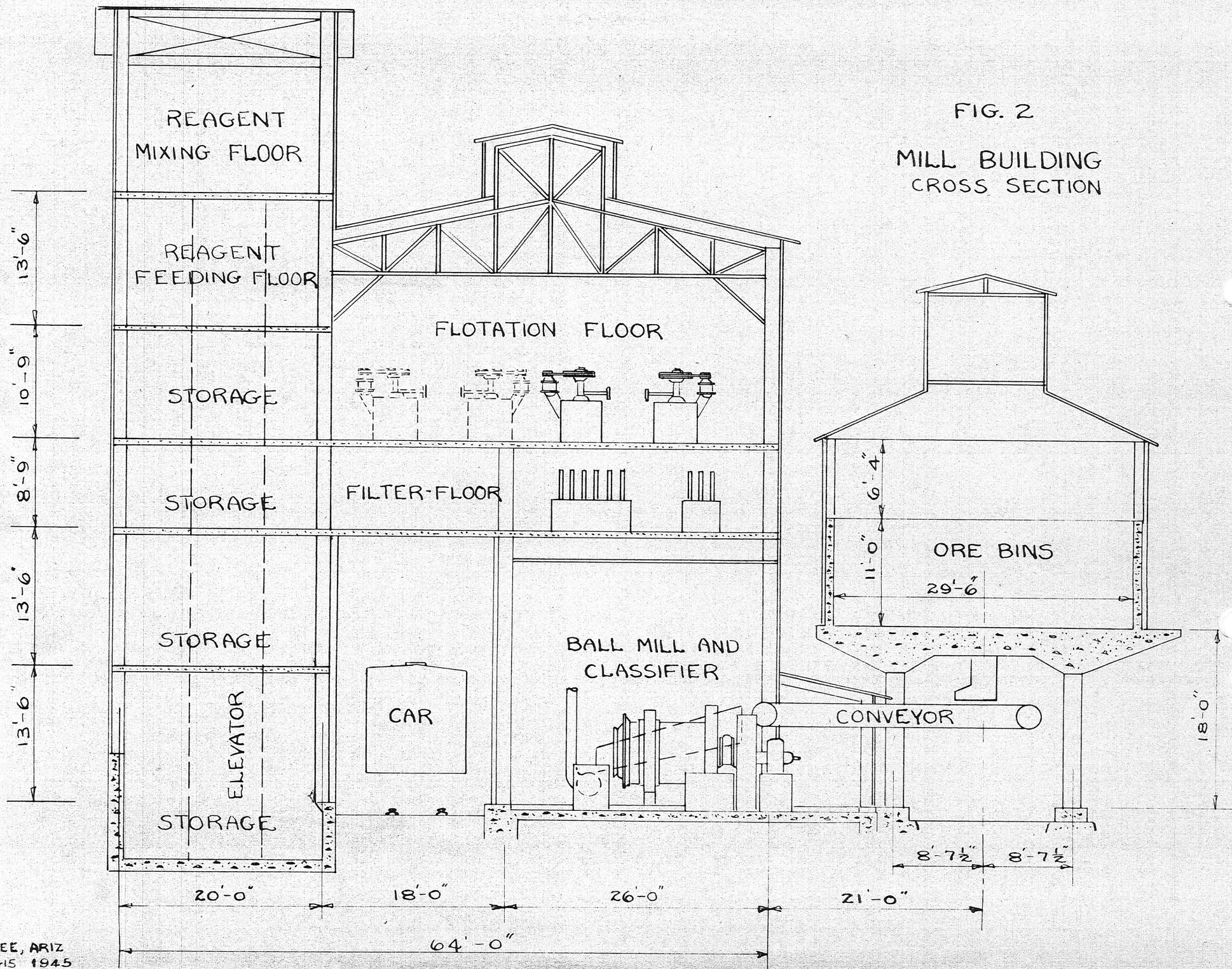
FIGURE 5

PHELPS-DODGE CORPORATION COPPER QUEEN BRANCH - MINES DIVISION

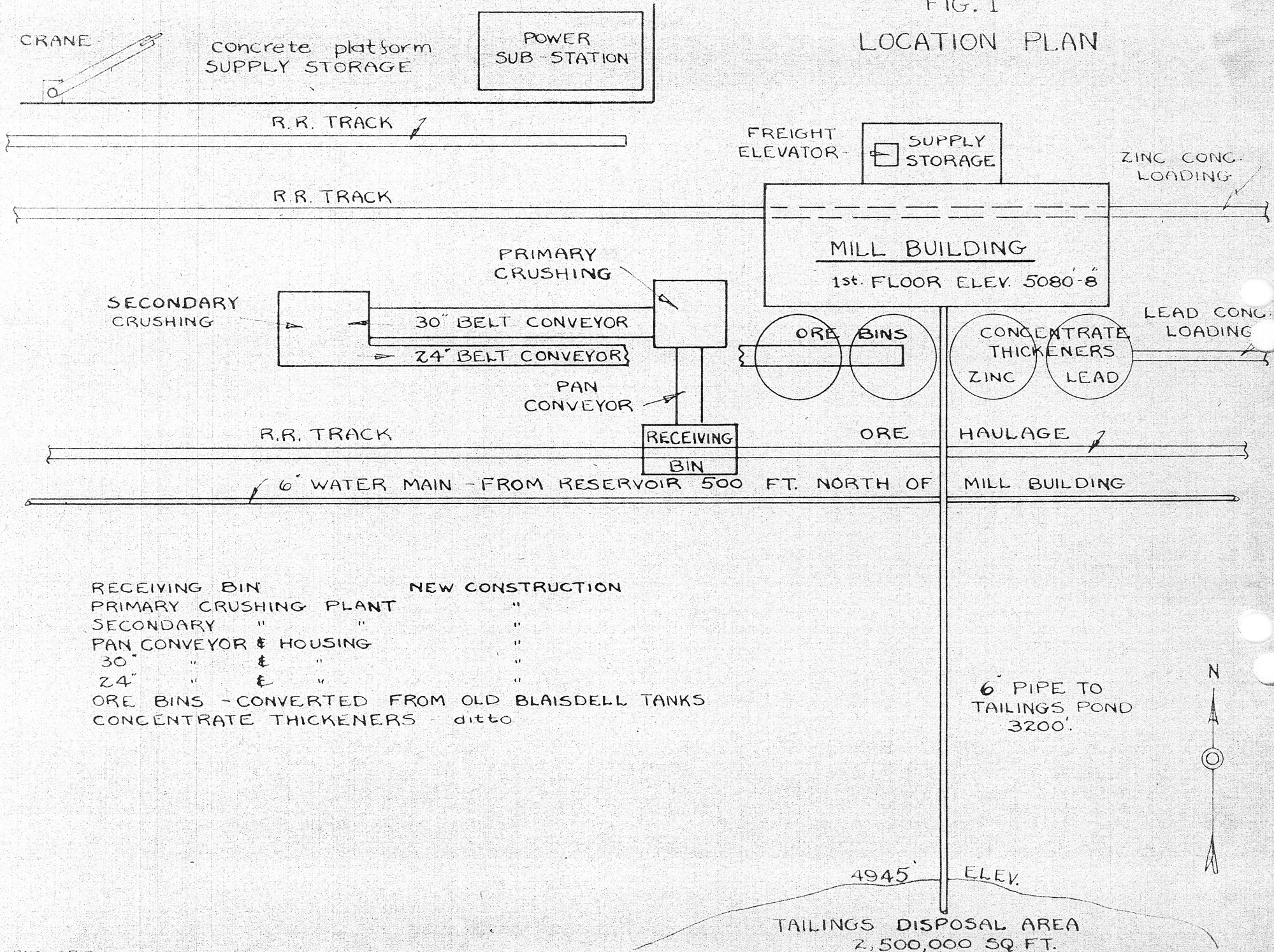
FIG. 3
FLOW-SHEET
450 TON LEAD-ZINC MILL



PHELPS-DODGE CORPORATION - COPPER QUEEN BRANCH - MINES DIVISION



LOCATION PLAN



RECEIVING BIN	NEW CONSTRUCTION
PRIMARY CRUSHING PLANT	"
SECONDARY " "	"
PAN CONVEYOR & HOUSING	"
30" " & "	"
24" " & "	"
ORE BINS - CONVERTED FROM OLD BLAISDELL TANKS	
CONCENTRATE THICKENERS - ditto	

History and Development of the Denn Mine

By C. E. Bronson and J. A. Wilcox

The history and development of the Denn Mine is just another record of the faith, hope and courage of the pioneer prospector of the old West. Amongst the men connected with its location and early history were L. C. Shattuck, Maurice Denn and Joseph Muheim. That the early pioneer was not devoid of sentiment and the finer traits of human nature is shown by the fact that when Joe Muheim located the Ophir Claim he ran his line around the part of ground that had been set aside as a cemetery, although it was open for mineral location, leaving out of the Ophir Claim a fraction that has since proved to be one of the richest of the district.

The 188 acres comprising the Denn holdings are located about a mile east of Sacramento Hill. The main surface geological features are the Dividend fault and the Mexican Canyon fault, and their intersection east of the

present Denn shaft. The Dividend fault is the main fault of the district, running east and west from the porphyry of Sacramento Hill, bringing the underlying schist on the north into contact with the sedimentaries on the south. The known ore bearing area of the property is that portion lying south of the fault, the schist being considered barren. The most favorable ore bearing sedimentaries are the Naco and Escabrosa limestone; however, ore has been found in the other limestones. The Naco and Escabrosa limestones are found below the 1,000 level in the Denn mine and have an eastern dip of some 20 degrees. Normally these limestones would be at a prohibitive mining depth if it were not for a series of north and south breaks cutting the Dividend fault and step faulting the limes to a higher position east of the breaks.

The Mexican fault is one of the major north and south breaks and dips to the west at roughly 60 degrees, and is estimated to have raised the limestones from 300 to 500 ft. The Campbell fault, along which the C. & A. Mining

Company have found the Campbell orebody, is similar to the Mexican Canyon fault and would cut the Denn ground further to the east if it persists in its indicated strike.

A tongue of porphyry comes east from the Sacramento Hill along the Dividend fault and forms the chief rock in the west end of the property. These main geological features will give a background on which the Denn ground may be described. The accompanying sketch shows the relation of the Denn mine to the Bisbee District.

The outcroppings of these two major faults and the association of the porphyry with limes; also several siliceous outcroppings with some copper showing, was undoubtedly the principal reason for the location. One of these prospects was the old Saginaw inclined shaft operated by Lem Shattuck. The first real work was started on the Denn property on June 14, 1907, at the time of the formation of the Denn Arizona Copper

Company, incorporated under the laws of Minnesota. Among the prime movers in this incorporation were L. C. Shattuck, Thomas Bardon, Sr., and Archie M. Chisholm. This organization sunk the present Denn shaft to the 1,800 level. At that time this was the deepest shaft in this end of the district and the water problem was a serious handicap. The mine was flooded several times as new water courses were cut. The faith the developers had in this property is shown by the fact that for months at a time the power bill for pumping alone ran over two thousand dollars per day. Developments from the 1,000 to the 1,800 level disclosed what is known as the sideline orebody south of the shaft and near the C. & A. property line. This orebody was continuous more or less from the 1,250 to the 1,800 level along the sideline west of the Mexican Canyon fault, and had a dip to the west about the same as the fault. It consisted mostly of oxide ores following the limestone beds. The sulphides came in on the 1,800 level.

On the 1,000, 1,100 and 1,250 levels were two rather isolated orebodies which lay east of the Mexican Canyon fault and which may be the faulted end of the sideline orebody.

The company managed to keep going until 1920, when a large water course was broken into on the 1,800 level and the mine flooded. Due to the copper slump of 1920, no further attempt was made to operate the Denn mine until May, 1925. During this intervening period the C.& A. had carried on their developments in an adjacent area and at a lower horizon. On resuming operations in 1925, a pumping agreement was entered into with the company, whereby the C.& A. handled the water from the Denn. The Denn shaft was repaired and sunk to the 2,000 level with the expectation of finding the downward extension of the sideline orebody. In 1927 the top of an entirely new orebody was found lying directly against the Dividend fault while the downward extension of the sideline orebody has not yet been determined. No 1,900 level was opened, as the Dividend and Mexican Canyon

faults intersect the shaft at this point. The new discovery is known as the Dividend orebody. Its western end lies directly against the Dividend fault and diverges slightly to the southeast.

Lateral developments and downward drilling show that it extends below the 2,200 level, dipping with the Dividend fault and ranking to the east about 45 degrees, butting up against the Mexican Canyon fault on the 2,100 and 2,200 levels. The ore on the 2,000 level was a capping of oxides, glance and copper bearing pyrite at various stages of oxidization. After the discovery of the Dividend orebody, drifting was continued to the west into the Ophir claim. Here the apex of some high grade ore was found and a winze sunk 50 ft. in ore, giving reasons to prospect this claim at greater depth. Work to this end was started on the 2,000 level.

This orebody, which at present is being developed on the 2,000 level, is known as the Ophir orebody and lies in vertical lenses against and near the Dividend fault, and in

this respect resembles the Dividend orebody farther to the east. It differs in that it is associated with porphyry, being at the contact of the limes and porphyry which extend in and over the ore. This porphyry is probably a part of the Sacramento Hill intrusion, and its contact with the lime or other rock is often called "contact breccia," due to its admixture with the contact rock. These ore chutes are from 10 to 30 ft. wide and lie south and parallel to the Dividend fault, the low-grade pyrite and mineralized porphyry separating them.

In 1928 the shaft was sunk to the 2,200 level, and stations were cut on the 2,100 and 2,200 levels and drifting done to the west in the footwall schist lateral to the orebody. Crosscuts were driven at regular intervals to define the limits of the ore and prepare it for extraction. On the 2,100 level the orebody was found to have an average width of 60 ft., and extended as far east as the Mexican Canyon fault, making its length on this level 400 ft. The eastern end lies against the fault and

appears to have been cleanly sheared off by it. On the 2,200 level the ore extends to the Mexican Canyon fault.

There was also found farther to the west the apex of two orebodies which lie in the same relative position to the fault as the Dividend orebody. The apparent shearing of the orebody by the Mexican Canyon fault has brought about much discussion as to the location of the faulted end. If there has been a throw of 300 ft. on the fault as has been brought out in district geology, the faulted end of 2,100 orebody should be on the 1,800 level in an area that at this date has not been prospected. Similarly, if any ore deeper than the Dividend orebody had been cut off by the fault it would be expected to be found east of the fault and below the 1,800 level. Development work is now being carried on in this area east of the fault. This development to date has shown stringers of copper, lead and zinc. On the 2,200 level a lens of massive copper bearing pyrite was found lying against the Dividend fault. Its western end terminated at the Mexican Canyon fault and shows a displacement with the Dividend ore at

the west end of the fault. Its eastern end has dipped to the east below the level. This body assays from 1 to 5 percent in copper, and is entirely different in character from the ore of the Dividend orebody west of the fault. This orebody, while of small dimensions, tends to prove the theory that the Mexican Canyon fault is post mineral. The block of sedimentaries lying east of the shaft and east of the Mexican Canyon fault comprises four-fifths of the sedimentary or limestone area of the Denn mine. Comparatively little work has been done in this area up to this date. However, recent strikes of the C. & A. Mining Company to the north of the Campbell orebody on levels above the 2,200 both east and west of the Campbell fault, make this country in the Denn property a most interesting area, and on the results of the developments here depends the future of the Denn mine.

Location: 23S, 24E

COPPER QUEEN MINE

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COPPER QUEEN MINE

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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

COCHISE COUNTY

BISBEE- COPPER QUEEN MINE

~~Campbell~~ ^(F) MILS 259
Cole - MILS - 260
Dallas - MILS # 264
Briggs - # 258
Junction # 277
Sacramento UG # 288
Sacramento Pit - # 526

MM 3147 Brochantite
MM-3872 Malachite on Travertine
MM-3899 Chalcocite
MM 4184 Azurite, malachite, cuprite, tenorite, limonite

MM 4185 Azurite, malachite, cuprite, tenorite, limonite

MM 4190 Calcite on Malachite
MM 4192 Malachite on Calcite
MM 1837 Malachite & Brochantite
MM-6533 Calcite w. limonite

MM-L131 Cuprite
MM- L132 Cuprite
MM-L133 Native Copper
MM-L134 Native Copper
MM-L135 Native Copper

MM-L137 Native Copper

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA

COCHISE COUNTY

BISBEE (Card # 1)

Coli - mls #265 (F)
~~*Sample - mls #265 (F)*~~
Dallas - mls #265
junction - mls #277

MM 1155 Delafossite
 1158 Higginsite
 1203 Malachite & Azurite
 1204 Digenite
 1210 Stalactite
 1218 Sphalerite (Fluorescent)
 1253 Turgite
 1314 Bisbeeite
 1394 Murdochite, Delafossite
 1406 Aurichalcite
 1446 Aragonite
 1616 Turquoise with Copper Veinlets
 2955 AZURITE
 2958 Malachite
 2426 MALACHITE, Azurite, & Chalcocite
 3811 Pryrite Dodecahedron
 3812 Azurite Crystals
 3813 Malachite
 525 Azurite crystals
 M 400 Aragonite

ARIZONA

COCHISE COUNTY

BISBEE (card# 2)

MM 3814 Malachite
 3815 Malachite
 3816 Calcite Crystals
 3817 Quartz Crystals
 3818 Calcite Crystals
 3819 Calcite Crystals
 3820 Calcite Crystals
 3821 Calcite Crystals
 3822 Copper Crystals, Native
 3823 Copper Crystals, Native
 3824 Calcite Crystals
 3825 Chalcotrichite(?)
 3826 Calcite Crystals
 3827 Cuprite Crystals
 3828 Calcite Crystals on Malachite
 3829 Calcite Crystals on Malachite
 3830 Calcite Crystals on Malachite
 3831 Calcite Crystals
 4024 Azurite & Malachite
 4025 Azurite & Malachite
 4026 Azurite & Malachite

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA

COCHISE COUNTY

BISBEE (card #3)

MM 2832 Calcite crystals on Psilomelane
 2833 Cuprite Crystals
 2834 Siderite
 2835 Adamite (?) on Chrysocolla
 2836 Calcite Crystals
 2837 Unidentified as yet
 4172 Malachite
 4173 Azurite
 4174 Malachite
 4176 Turquoise
 4178 Turquoise
 4202 Turquoise
 4207 Bornite
 4214 Azurite & Malachite
 4218 Aragonite-Stalactite
 4221 Sphalerite
 4222 Sphalerite
 4223 Galena
 4226 Atacamite
 4228 Goethite
 4233 Psilimelane

ARIZONA
 Cochise County
Bisbee

(Card # 4)

2602 Copper minerals (misc.) Geode
 2603 " " "
 971 Turquoise
 975 "
 3154 "
 4191 Limestone, drill core, near Bisbee
 4312 Aurichalcite
 5000 Azurite Crystals on Malachite
 5001 Malachite & Calcite
 5006 Copper, Native
 5007 Cuprite
 5008 Copper, native
 5011 Cuprite on native copper
 5012 Aurichalcite
 5015 Chalcotrichite
 5018 Sphalerite
 5019 Chalcotrichite
 5020 Chalcotrichite
 5028 Malachite xls. on Hematite

5028

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INFORMATION FROM MINE CARDS IN MUSEUM

COCHISE COUNTY

BISBEE

(Card #5)

ARIZONA

MM-5036 Rosasite
MM-5037 Rosasite
MM-5041 Native Copper & Calcite
MM-5045 Calcite on Malachite
MM-5046 Quartz & Pyrite
MM-5047 Malachite & Quartz Xls.
MM-5048 Drusy Malachite on Matrix
MM-5050 Copper Native in Cuprite
MM-5051 Copper Native in Cuprite

MM- 5059 Calcite & Malachite
MM- 5060 Turgite
MM- 5061 Turgite
MM- 5062 Turgite
MM- 5063 Turgite
MM- 5064 Azurite Xls. Group
MM- 5065 Malachite (Botryoibal)
MM-5069 Malachite (Botryoidal on Hematite)
MM-5079 Turgite
MM-5085 Malachite on Hematite
MM-5086 Malachite on Hematite
MM-5087 Malachite

ARIZONA

COCHISE COUNTY

BISBEE

(CARD # 6)

MM 5081 Native Silver
MM-5107 Malachite & Azurite
MM-5108 Malachite & Azurite
MM-5109 Malachite
MM-5102 Hydrozincite & Calcite
5123 Marcasite
5124 Native Copper in Calcite
5125 Bornite
5126 Calcite
5131 Azurite
5132 Cuprite
5110 Calcite
5113 Calcite
5114 Malachite on Native Copper
5115 Malachite, Calcite, Hydrozincite
5116 Calcite, Malachite, Limonite
5144 Atacamite
5157 Rosasite
MM-5349 Malchite

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA	MM 5158	Rosasite
COCHISE COUNTY	MM 5163	Chalcoalumite & Azurite
<u>BISBEE</u>	MM 5165	Calcite, Rosasite, Brochantite, Hematite
(CARD # 7)	MM 5172	Copper, Native (Crystalized)
MM M 192 Malachite	MM 5174	Chalcotrichite
M 193 "	MM 5176	Azurite & Malachite
M 194 "	MM 5177	Pyrite
M 197 Malachite	MM 5179	Pyrite & Sphalerite
	MM 5184	Brochantite
	MM 5199	Argentite (Silver Glance)
	MM 5198	Copper, Native Xls.
	MM 5197	Galena, Marcasite, Sphalerite
	MM 5193	Chalcothrichite, Cuprite, Calcite
	MM 5192	Cuprite & Malachite 1 Face Polished
	MM 5188	Aurichalcite
	MM 5189	Calcite Xls.
	MM 5191	Copper, Native on Calcite
	MM M 184	Malachite
	M 185	Chrysocolla
	M 186	"
	M 187	"
ARIZONA	MM 721	Iron Candleholder- Handmade
<u>Bisbee CARD 8</u>	MM5378	Copper Mineral Complex
<u>Cochise County</u>	MM-5380	Chalcocite
(card No.8)	MM-5381	Chalcocite
	5953	Siderite
	5954	Malachite, Calcite, & Hematite
	5956	Malachite
	5960	Calcite
	5967	Siderite
	5968	Siderite
	5969	Siderite
	5972	Siderite
	5974	Native Copper, & Cuprite on Limestone
	5976	Calcite
	5978	Malachite
	5979	Azurite
	5988	Quartz
	5999	Siderite
	6027	Turquoise

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA
Cochise County
Bisbee
(Card No. 9)

MM-6028 Turquoise
6029 Turquoise
6030 Turquoise
6031 Turquoise
6039 Calcite Stalactite
6131 Cuprite, after Native copper
6132 Copper, native wire
6133 Copper, Native on Calcite
6134 Copper, Native in Calcite
6135 Silver, Native
6183 Chalcopyrite and lead on matrix
6186 Pyrite, massive
6190 Pyrite, x-tals in matrix
6191 Pyrite, x-tals in matrix
6194 Native copper on calcite
6196 Native copper on calcite
6197 Native copper and chalcotrichite
6198 Native copper and cuprite in adamite
6199 Sphalerite
6200 Galena
6201 Galena in matrix

ARIZONA
COCHISE COUNTY
BISBEE
(card no.10)

MM 5246 Copper - Leaching Formation
MM 5248 Copper - Native
MM 5249 Copper - "
MM 5250 Copper - "
MM 5251 Copper - "
MM 5252 Copper - Smelter Dripping
MM 5253 Copper - " "
MM 5254 Copper - " "
MM 5255 Copper - " "
MM 5256 Copper - " " (2 speci.)
MM 5257 Copper Burrs - Leaching Process
MM 4733 Copper - Native
MM 414 Cuprite
6204 Lead and zinc ores, massive
6208 Copper, native, on calcite
6209 Copper, native, on calcite
6212 Atacamite and delafossite
6213 Copper wire on calcite x-tals
6214 Copper, native
6215 Copper, native
6216 Turquoise with cuprite, copper
and azurite

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA

COCHISE COUNTY

Bisbee

(card no. 11)

- MM 6217 Turquoise
- 6219 Cuprite, native copper, and calcite
- 6225 Copper, native
- 6226 Turquoise, chalky
- 6227 Turquoise, chalky
- 6230 Copper, native on matrix
- 6231 Copper, native
- 6232 Copper, native, and galena
- 6233 Copper, native
- 6234 Copper, native
- 6235 Variscite
- 6236 Chalcotrichite on calcite
- 6237 Chalcotrichite in matrix
- 6239 Copper, native, on calcite
- 6240 Malachite on native copper
- 6241 Malachite on native copper
- 6242 Malachite on native copper

ARIZONA

COCHISE COUNTY

Bisbee (card no. 12)

- MM 6245 Chalcotrichite and native copper in calcite
- 6246 Chalcotrichite and native copper in calcite
- 6247 Malachite on cuprite and copper
- 6248 Malachite on cuprite and copper
- 6249 Native copper on calcite
- 6250 Hematite, specular
- 6251 Calcite and native copper
- 6252 Calcite on copper ore matrix
- 6261 Native copper, cuprite, malachite, and azurite w/hematite
- 6262 Aragonite with coating
- 6263 Native copper on calcite
- 6264 Pyrite, chalcopyrite, & calcite
- 6560 Malachite
- 7161 Malachite, botryoidal
- 7162 " "
- 7171 Azurite
- 7174 Cuprite on Copper
- 7216 Atacamite
- 6619 Azurite and malachite
- 6620 azurite

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA

Card 13

MM 7278

COCHISE COUNTY

Bisbee

8045 Turquoise cab
8046 Turquoise cab
8048 Native copper
8051 Malachite cab
8052 " "
8054 Azurite & Malachite
8268 Calcite, dogtooth
8270 Turquoise & Chrysocolla
8271 Calcite
8272 Malachite & Brochantite
8274 Malachite on limonite
8276 Copper, native in selenite
8277 Calcite, mold of fabric
8278 Native copper & silver
8280 Copper & Chalcotrichite
8282 Pyrite
8284 Malachite in Calcite
8285 Malachite, tenorite
8286 Copper
8288 Calcite

ARIZONA

Card 14

MM-8290 Gold, native

COCHISE COUNTY

Bisbee

8291 Chalcocite
8292 Rhodochrosite
8293 Calcite with copper
8295 Cuprite
8296 Chalcotrichite
8297 Silver, native
8300 Calcite
8301 Calcite
8308 Calcite
8310 Hematite
8313 Calcite
8354 Calcite Crystal
8365 Cuprite
8318 Chalcocite
8321 Calcite
8322 Calcite
8325 Aragonite
8326 Copper, native
8327 Schist bornite
8330 Calcite
8331 Calcite

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA

Card 15

Cochise County

Bisbee

MM M 216 Calcite
M 217 Calcite
M 218 Calcite
M 219 "
M 220 Aurichalcite
M 264 Azurite
M 265 Azurite
M 266 Malachite
M 270 Malachite
M 274 Azurite
M 275 Chrysocolla
M 291 Malachite
M 292 "
M 293 "
M 294 "
M 295 "

MM-8332 Calcite
8334 Cuprite *chalc-*
8335 Turquoise in pyrite
8336 Malachite on calcite
8337 Calcite
8341 Quartz
8342 Tyuyamunite
8344 Quartz
8351 Calcite on Malachite
8354 Calcite
1500 Chrysocolla
977 Turquoise
6690 Copper replacement of Cuprite
MM 7714 Azurite
7863 Azurite
7900 Covellite
MM 8772 Calcite with Goethite
7983 Digenite
8612 Copper with malachite
8613 Copper (native)
8620 Cuprite
9423 Turquoise

USA Arizona , Cochise
Bisbee

16

MM M 296 Malachite
MM M 297 Malachite
M 298 "
MM N 280 Malachite
N 281 "
N 282 "
N 283 "
N 284 "
N 285 "
N 286 "
N 287 "
N 288 "
N 291 Turquoise
N 292 "
N 293 Chrysocolla
N 294 "
N 295 "
N 307 Turquoise
N 308 "
N 309 "
MM M 089 Malachite
M 092 Cuprite
M 102 Malachite

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

<u>ARIZONA</u>	Card <u>14</u>	MM-9908	Siderite
		MM-9917	Malachite
Cochise County		MM-9964	Malachite
		MM-9965	Malachite
<u>Bisbee</u>		MM K-857	Copper in cuprite, tenorite, chrysocolla
		MM K-748	Malachite
		MM K-754	Malachite
		MM K-772	Malachite
		MM-L144	Native Copper
		MM M 325	Quartz, Jasper
		MM M 179	Copper
		MM M 171	Azurite
		MM M 172	Azurite
		MM N 060	Malachite
		MM N 157	Aurichalcite
		N 162	Cuprite
		M 138	Malachite
		M 139	Azurite

USA ARIZONA	# <u>18</u>	MMO 211	Malachite
Cochise Co.		0 218	Azurite
Bisbee		0 219	"
		0 221	Azurite
MM 0 600		0 222	"
0 601		0 223	Malachite
0 602		0 224	Azurite
0 603		0 232	Malachite
0 604		0 233	Azurite
0 605		0 235	Azurite
		0 248	Malachite
0 620			Calcite
0 622			Quartz
0 621			"
0 623			Sphalerite
0 624			Gypsum
0 625			"
0 626			Fluorite
0 627			Dinosaur Bone

COPPER QUEEN MINE

COCHISE COUNTY

JHJ MEMO FOR FILE 6/18/85: Phelps Dodge at Bisbee stopped mining their pyritic gold ores. The area involved is in the area to be flooded. As of June 19, flooding in the Campbell Mine was 10" above the shaft turn sheet on the 2900. There was 12,000 tons of the pyritic gold ore stockpiled on the dump. I was told it would run almost one half ounce. the smelter quit taking the ore since each ton displaced a ton of 25-30% copper concentrate. At this time the in-situ leaching will continue. A division will be made later as to its "flooding" or continuing. The first layoff will reduce personnel to 25-30. The second layoff is expected to reduce personnel to approximately 7.

JHJ MEMO FOR FILES 6/18/85: Phelps Dodge at Bisbee is selling pyrite concentrates (removed from tailings to be used for stope sandfill) to Ironite at Humbolt for incorporation into their mix.

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1992

Copper Queen file

PHELPS DODGE CORPORATION

Corporate Headquarters

2600 N. Central Ave., Phoenix, AZ 85004-3014 - Phone 234-8100.

Chairman of the Board and President D. C. Yearley

Senior Vice President and President Phelps Dodge Mining Company J. S. Whisler

Senior Vice President and Executive Vice President Phelps Dodge Mining P. J. Ryan

Phelps Dodge Mining Company

2600 N. Central Ave., Phoenix, AZ 85004-3014 - Phone 234-8100.

Vice President & General Manager J. L. Madson

Vice President Engineering Services R. W. Rice

Controller, Phelps Dodge Mining R. G. Peru

Director, Employee Relations S. L. Marcus

Manager, Employee Relations D. E. Brooks

Assist. Director, Materials Management C. R. Jennings

Traffic Manager J. Sheridan

Copper Queen Branch T23S R24E Sec. 15

Highway 92, Bisbee, AZ 85603 - Phone 432-3621 - Employees: 34 - Mine dump leaching - Copper precipitation plant.

Area Supervisor J. H. Zamar

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1991

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President, Phelps Dodge Corporation L.R. Judd

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Vice President, Manager Engineering Services R.W. Rice

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Assistant Director of Employee Relations T.D. McWilliams

Director, Materials Management R.G. Mock

Purchasing Agent C.R. Jennings

Traffic Manager

J. Sheridan

Western/US Exploration

P.O. Box 50427, Tucson, AZ 85703-1427 Phone 792-4981.

Manager, US Exploration D.E. Ranta Manager,

Western Exploration Office R. B. Ludden

Exploration and Development Group

2600 N. Central Ave., Phoenix, AZ 85004-3015 - Phone 234-8100.

Senior Vice President

P.J. Ryan

Copper Queen Branch T23S R24E Sec. 15

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dump leaching - Copper precipitation plant.

General Superintendent J.H.

Ladd

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Senior Vice President P.J. Ryan

Copper Queen Branch

T23S R24E Sec. 15

Highway 92, Bisbee 85603 - Phone 432-3621 - Employees 34 - Mine dump
leaching - Copper precipitation plant.

General Superintendent J.H. Ladd

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

VERBAL INFORMATION SUMMARY

1. Mine file: COPPER QUEEN
2. Mine name if different from above:
3. County: Cochise
4. Information from: Steve Eady

Company: Phelps Dodge Corp.

Address: Hwy. 92

Bisbee, AZ 85603

Phone: 432-3621

5. Summary of information received, comments, etc.:

Exploration during the early 1980's in the Campbell portion of the Copper Queen Mine resulted in production of 100,000 tons of high grade gold, silver, pyritic material and definition of an additional 200,000 tons grading .4 oz/ton Au plus silver. This latter material was drilled underground but not produced before the water pumps were turned off during the lean copper price years of the middle 1980's. Additional gold pyrite areas are likely to occur but were not drill tested.

Date: October 22, 1988

Nyal J. Niemuth, Mining Engineer

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1988

PHELPS DODGE CORPORATION

Corporate Headquarters

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President, Phelps Dodge Mining L.R. Judd

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Vice President, Manager Engineering Services R.W. Rice
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Assistant Director of Employee Relations T.D. McWilliams
Director, Materials Management R.G. Mock
Purchasing Agent C.R. Jennings
Traffic Manager J. Sheridan
Manager, Western Exploration Office D.R. Ranta
(P.O. Box 50427, Tucson, AZ 85703-1427)

Exploration and Development Group

2600 N. Central Ave., Phoenix 85004-3015 - Phone 234-8100.

Senior Vice President P.J. Ryan
Agent Andrew Peterson

Copper Queen Branch

T23S R24E Sec. 9

Highway 92, Bisbee 85603 - Phone 432-3621 - Employees 34 - Mine dump
leaching - Copper precipitation plant.

General Superintendent J.H. Ladd

Office of State Mine Inspection

705 West Wing, Capitol Building
Phoenix, Arizona 85007
602-255-5971

STATE MINE INSPECTOR

FEB 4 1988

NOTICE TO ARIZONA STATE MINE INSPECTOR

In compliance with Arizona Revised Statute Section 27-303*, we are submitting this written notice to the Arizona State Mine Inspector (705 West Wing, Capitol Building, Phoenix, Arizona 85007) of our intent to start/stop (please circle one) a mining operation.

COMPANY NAME W. A. Morris Sand & Gravel Co.

CHIEF OFFICER Shirley L. Gilbert

COMPANY ADDRESS P. O. Box 789, Safford, AZ 85546

COMPANY TELEPHONE NUMBER 428-1371

MINE OR PLANT NAME Phelps Dodge - Copper Queen Branch

MINE OR PLANT LOCATION (including county and nearest town, as well as directions for locating by vehicle)

Bisbee, Cochise County, Arizona

TYPE OF OPERATION Dump Moving,
Hauling PRINCIPAL PRODUCT Ore

STARTING DATE 2/2/88 CLOSING DATE 4/2/88

DURATION OF OPERATION Approx. 2 months

PERSON SENDING THIS NOTICE Shirley L. Gilbert

TITLE OF PERSON SENDING THIS NOTICE President

DATE NOTICE SENT TO STATE MINE INSPECTOR 2/2/88

*A.R.S. Section 27-303 NOTIFICATION TO INSPECTOR OF BEGINNING OR SUSPENDING OPERATIONS: When mining operations are commenced in any mine or when operations therein are permanently suspended, the operator shall give written notice to the inspector at his office prior to commencement or suspension of operations.

Send

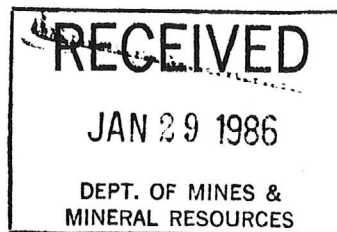


1C Stop,
MAY
STATE MINE INSPECTOR

DEC 6 1985

Office of State Mine Inspector

705 West Wing, Capitol Building
Phoenix, Arizona 85007
602-255-5971



NOTICE TO ARIZONA STATE MINE INSPECTOR

In compliance with Arizona Revised Statute Section 27-303*, we are submitting this written notice to the Arizona State Mine Inspector (705 West Wing, Capitol Building, Phoenix, Arizona 85007) of our intent to start stop (please circle one) a mining operation.

COMPANY NAME The City of Bisbee

CHIEF OFFICER Mayor Frank N. Peters

COMPANY ADDRESS 118 Arizona Street, Bisbee, Arizona 85603

COMPANY TELEPHONE NUMBER 602-432-3312

MINE OR PLANT NAME City of Bisbee Screening Plant

MINE OR PLANT LOCATION (including county and nearest town, as well as directions for locating by vehicle)

Cochise County, City of Bisbee, Phelps Dodge Corporation,

Copper Queen Branch, Mine Site #7 Dump

TYPE OF OPERATION Screening PRINCIPAL PRODUCT Slag

STARTING DATE April 85 CLOSING DATE Dec. 3, 1985

DURATION OF OPERATION 8 months

PERSON SENDING THIS NOTICE James A. Gillen

TITLE OF PERSON SENDING THIS NOTICE Director, Public Works

DATE NOTICE SENT TO STATE MINE INSPECTOR December 4, 1985

*A.R.S. Section 27-303 NOTIFICATION TO INSPECTOR OF BEGINNING OR SUSPENDING OPERATIONS: When mining operations are commenced in any mine or when operations therein are permanently suspended, the operator shall give written notice to the inspector at his office prior to commencement or suspension of operations.

COPPER QUEEN MINE

COCHISE

Mine visit. Copper Queen Branch PD Corp. GWI WR 4/6/72

Mine visit. Copper Queen Branch, Bisbee. GWI 6/15/72

Active Mine List - October 1972 - Lavender Pit 4,575,000 T Ore, 6,733,000 T Waste, 24,017 T Cu, empl. 1560.

Mine visit. Copper Queen mine of PD. Chief Engineer was not in. GWI WR 12/14/72

Jack Pierce (Iron King) said Occidental was doing some work at the Copper Queen. FTJ WR 3/9/73

Met with Henry Clark, General Supt., Phelps Dodge, Copper Queen Branch. Discussed the mining operation, the recent slide, mineral specimens and rockhound groups. Mr. Clark said the oxide material that has possible value to rockhounds has been placed in a special area on the dump and is available for organized groups wishing to collect specimens. Groups must make advance arrangements with P.D. through Mr. Clark. KAP Report 4/19,20/73

Mine visit to the Bisbee underground project; mine visit - Copper Queen branch PD Corp. GWI WR 4/29/76

WR MG 1/12/78 - Harry Metz of Phelps Dodge said efforts to dewater the Copper Queen mine after the recent flooding had been difficult but lowest level should be clear by the end of the week. 2/27/78 sef

WR MG 1/24/78 - Harry Metz, Superintendent of the Copper Queen Branch, said the underground leach operation should continue 5 to 10 years. 2/28/78 sef

MG WR 4/2/82: Visited Copper Queen Branch in Bisbee, of the Phelps Dodge Corp. Manager of this operation is now Mr. Jack Ladd who has taken over for Mr. Keith Coke, deceased.

WR MG 8/27/82: The Bisbee Salvage Co. continues mining with 21 men at the Campbell Shaft, producing precious metal-bearing pyrite that is shipped to the Douglas smelter. There are four PD geologists assigned to the Warren district, trying to locate other suitable precious metal deposits.

William Hogue, manager of the Copper Queen Branch of PD Corp., has announced the promotion of two men. A.E. Himebaugh has been appointed superintendent of the Lavender Pit, replacing Glen Simmons, who recently retired. William Gidley has been named supervisor of employment and safety. He replaces W.J. Hunt, who has been transferred to the Phelps Dodge Tyrone, N.M. branch. Brewery Gulch Gazette 1/5/67

The possible closing of its Lavender pit in Bisbee, in about six years is being studied by Phelps Dodge Corporation. Walter C. Lawson, V.P. and Gen. Mgr. of Western Operations is quoted as saying that present reserves will last about that long at the present rate of production. The company had previously announced it might begin phasing out its underground mines in the Copper Queen branch in Bisbee in about four years. Worl Mining Nov. 1968, p. 50

Phelps Dodge announced the expected life for the Bisbee operations, the Copper Queen branch just included Bisbee operations headed by a general supt. and the Douglas smelter headed by a general supt. GWI QR 12/68

Active Mine List April 1969 - 1825 men - H. D. Clark, Gen. Supt.

The Douglas Smelter was separated from the Copper Queen Branch and is known as the Douglas Reduction Works with its own superintendent, Fred M. Winkler. The job of manager of the Copper Queen Branch has been discontinued with H. D. Clark, Jr. as General Supt. It has been announced that the Bisbee operations will be phased out within a few years. GWI QR 9-1969

Active Mine List Oct. 1969 - 1750 men - H. D. Clark Jr. (Mgr.) Gen. Supt.

Visited Copper Queen Branch of PD - Drilling on east slope of pit to determine movement under mill and Lowell business district. GWI WR 6-6-70

Active Mine List May 1970 - 1690 men - H. D. Clark, Gen. Supt.

The Copper Queen Branch of Phelps-Dodge at Bisbee continues to be the major source of copper. The Douglas Smelter continues as the largest U.S. Copper smelter in terms of gross input. GWI QR 6-30-70

The Copper Queen Branch continues as the county's major producer. GWI QR 10-1-70

Active Mine List Oct. 1970 - 1710 men - H. D. Clark Jr. Gen. Supt.

Mine visit - Copper Queen. Harry Metz wanted to be on Dept. mailing list. GWI WR 2-8-71

Mine visit - Copper Queen Mine. GWI WR 4-12-71

Mine visit - Copper Queen branch. GWI WR 6-7-71

Directory of Mining - August 1971 - 1,600 men.

COPPER QUEEN MINE

COCHISE COUNTY
BISBEE (WARREN) DISTRICT

W. W. Little, Mgr., Copper Queen Branch, Bisbee, Ariz. 1966
(Now Mgr. at Tyrone, N. M. 10-1-66.)

William G. Hogue, Mgr. 10-1-66.

H. E. Metz, Bisbee, Arizona, Chief Engineer, Copper Queen Branch (Skillings, 5-6-67)

K. J. Coke, Chief Geologist, Copper Queen Branch (Skillings 5-6-67)

A. E. Himebaugh, Warren, Ariz., Mine Supt., Copper Queen Branch (Skillings 4-29-67)

Ellis O. Melton, Jr. has been transferred from the Douglas Reduction Works to the Copper Queen in Bisbee. He is now Chief Chemist and supervises the Assay Laboratory. Min. Engrs. 10-67.

Active - Oct. 1963 & Oct. 1965

Active Mine List Nov. 1967 - 2,500 men

Active Mine List April 1967 - 2,414 men

Active Mine List April 1968 - 2,500 men

Active Mine List Oct. 1968 - 1,800 men

William G. Hogue, who has been manager of the Copper Queen branch in Bisbee, on September 16, 1968 became manager at Ajo.

Henry D. Clark, general superintendent of the Copper Queen Branch, has assumed charged of that position. Stanley C. Holmes has been promoted from assistant mine superintendent to mine superintendent of the Copper Queen Branch.

Effective September 16, 1968, the Douglas Reduction Works, which had been part of the Copper Queen Branch, was established as a separate branch with Superintendent Arthur H. Kinneberg continuing in charge.

Taken from Pay Dirt 9/ 1968

Stanley C. Holmes, E. M. has been promoted from assistant mine supt. to mine superintendent at the Phelps Dodge Corp., Bisbee, Arizona See Clipping from The Mines Magazine Nov. 1968.

COPPER

The Copper Queen mine, at Bisbee, Cochise Co., has been the largest producer, followed closely by the United Verde, of Jerome, Yavapai County, then, in order, by the Old Dominion, of Globe, Gila County, the Arizona Company, of Clifton, Graham Co, the Holbrook and Cave, of Bisbee, and the Detroit, of Globe (not working in 1893). The unworked districts contain deposits which experts regard as equal in value to those which have been already worked. There is good reason to believe that Arizona will maintain at least her present rank as a copper producer for many years to come. The quality of the bullion is second only to the unapproachable Lake brand itself.

COPPER QUEEN 1896 - TAKEN FROM THE REPORT OF THE GOVERNOR

The fame of the Copper Queen group of claims and mines at Bisbee extends far beyond the limits of Arizona. It is the chief producer of copper.

The company is now running four blast furnaces and smelting about 400 tons per twenty-four hours. The product from these furnaces is all matte. This matte is bessemerized, or treated by the penumatic method in two stands of trough converters of the Copper Queen or Williams type. These converters give a product assaying 99.3 percent fine copper. This product is shipped as fast as made. The production for the fiscal year ending June 30, 1896, was 10,492 510/2000 tons, or 20,984,510 pounds of bessemer pig copper, averaging 99.2 percent fine copper. The production for the year ending June 30, 1897, will be somewhat larger. About 800 men are employed in the mines and at the smelting works.

17

COPPER QUEEN 1899 - TAKEN FROM THE REPORT OF THE GOVERNOR OF ARIZONA

The Copper Queen mine at Bisbee was discovered by Hugh Jones in 1877. The honor ~~th~~ of this discovery is also claimed for George Warren in 1878, who sold out his share in 1880.

For several years this mine was barely worked sufficiently to satisfy the requirements of the law. It was once sold with difficulty for \$1,250,000, and appeared at one time to be nearly worked out. It is now well known as one of the leading copper mines of the U.S., and is connected by rail with the Southern Pacific at Benson. The value of the ore extracted up to September 1, 1883, was reported as \$3,000,000. The value of the annual production is now (1899) believed to be not less than 25,000,000 pounds.

SELECTED NEW CONTRACTS, INVESTMENTS, EXPANSIONS, AND EXPLORATION ACTIVITIES: UNITED STATES

<u>Commodity and Company</u>	<u>Operation and/or Location</u>	<u>Notes</u>
ALUMINUM		
Alumax, Inc.	Ferndale, WA (Intalco).	On Sept. 24, workers at the 254,000-mt/yr primary aluminum smelter ratified a new 3-yr contract. Details on the new contract were not released. The plant employs 1,150 workers.
The Aluminum Company of America (Alcoa).	Warrick Operations near Evansville, Warrick Co., IN.	Announced in late July that it was restarting its last idle potline, which had been down since September 1984, bringing the total number of potlines back up to six. The Warrick operations, which employ about 2,700 workers, will be running at full capacity of 298,000 st/yr. Approximately 24 laid-off employees were recalled during the startup. Alcoa cited increased efficiencies at the Warrick operation and the company's need for additional metal units as reasons for restarting the line.
Commonwealth Aluminum Corp.	Goldendale, WA.	On July 31, Commonwealth announced the sale of its 168,000-mt/yr primary aluminum smelter to Columbia Aluminum Corp. Columbia energized the first of the smelter's three potlines at the end of August and expects to bring a second potline onstream by yearend. The smelter will be operated on a tolling basis using alumina input from Norsk Hydro A/S (Norway).
BENTONITE		
American Colloid Co.	Bentonite plant, Colony, WY.	Announced on July 23 the purchase of the Colony, WY, bentonite production facility from Applied Industrial Minerals Corp. The cash transaction, valued at approximately \$10 million, included the processing plant, inventories and mined bentonite, mineral rights, and certain liabilities.
CEMENT		
Mountain Cement Co.	Laramie, WY.	Lone Star Industries Inc. and Centex Corporation have formed a joint venture to manufacture and market cement in the Rocky Mountain region. The joint venture, Mountain Cement Company, will operate the Laramie, WY, cement plant contributed by Centex. The plant is presently being converted to the dry process, with an annual production capacity of 300,000 st, and is expected to be operational in December.
COPPER		
Cyprus Minerals Co. and The Goldfield Corp.	Pinos Altos, NM.	In late September announced a 3-yr joint venture between Cyprus' Cyprus Metals Co. and Goldfield's St. Cloud Mining Co. to develop and mine the ore bodies at the Pinos Altos projects. Production was expected to commence within 60 days at an annual rate of 100,000 st with an average grade of 5.2% copper, 7.46 tr oz/st and 0.017 tr oz/st. Acquired by Cyprus in July, the property was previously owned by Exxon Corp. and leased to Boliden Minerals AB of Sweden. Boliden curtailed its worldwide operations because of depressed earnings and low metal prices.
<i>Copper Queen (P)</i> Phelps Dodge Corp.	Bisbee, AZ.	On Aug. 24, revealed that seven of nine exploration drill holes, located a few hundred yards north of its abandoned Lavender Pit Mine, hit a potentially significant copper deposit. Based on preliminary tests, the ore could be processed by the solvent extraction-electrowinning method being used successfully at its Tyrone, NM, operation. Average ore grades from the individual holes ranged from 0.3% to 0.65% copper, with an average thickness of the mineralized zones of 250 ft. Test holes were 1,000 ft apart. The exploration program could be continued to fully delineate the mineralization, depending upon the successful sinking of five additional holes to check the continuity of the ore body.
" " "	Morenci, AZ.	Began a test run of its 45,000-mt/yr solvent-extraction-electrowinning plant in late September. The plant was expected to be operating at full capacity by January 1988.
COPPER AND BRASS		
Plume & Atwood Brass Mill Div., a subsidiary of	Thomaston, CT.	The company is investing \$5 million in a continuous cast system at its copper and brass alloy strip mill at Thomaston. The installation of the first two 16-Diversified Industries Inc.'s twin strand casters is expected to be completed by the end of 1987 with the second to be online in the first quarter of 1988.

10 IA DEPARTMENT OF MINES & REOURCES

Mineral Building, Fairgrounds
Phoenix, Arizona

1. Information from: A I M E Sub section papers & Questions
Address: _____
2. Mine: Copper Queen & Lavender Pit 3. No. of Claims - Patented _____
Unpatented _____
4. Location: Bisbee Ariz
5. Sec _____ Tp _____ Range _____ 6. Mining District _____
7. Owner: P. D. Corp.
8. Address: _____
9. Operating Co.: P. D. Corp.
10. Address: Bisbee Ariz
11. President: _____ 12. Gen. Mgr.: H. D. Clarke
13. Principal Metals: _____ 14. No. Employed: 1825
15. Mill, Type & Capacity: _____
16. Present Operations: (a) Down ☐ (b) Assessment work ☐ (c) Exploration ☒
(d) Production ☒ (e) Rate _____ tpd.
17. New Work Planned: _____

18. Misc. Notes: _____

Date: 6-28-69

JW Iwan
(Signature)

(Field Engineer)

These maps have been microfilmed and are stored up stairs in the flat storage.

COPPER QUEEN CONSOLIDATED MINING COMPANY.

No.	Description of Map.
1	100 Level,
2	200 Level,
3	300 Level,
4	400 Level,
5	500 Level,
6	600 Level,
7	700 Level,
8	800 Level,
9	900 Level,
10	1000 Level,
11	1100 Level,
12	1200 Level,
13	1300 Level,
14	1400 Level,
15	1500 Level,
16	1600 Level,
17	1st Int. Southwest
18	3rd Int. Southwest
19	4th Int. Southwest
20	5th Int. Southwest
21	6th Int. Southwest
22	A Level,
23	B Level,
24	M Level,
25	N Level,
26	Baxter Tunnel and Neptune Tunnel,
27	Vertical Section North and South through Garbarino Vein
28	Quartz Stope and Tripod Raise,
29	Assay Plan of Garbarino and Tripod Tunnel Level
30	Assay Plan of Smelter Hill Tunnel Levy.

These maps have been microfilmed and are stored upstairs in the flat file. ✓

CALUMET & ARIZONA MINING COMPANY.

OLIVER MINE. - *Envelope #1.*

No.	Description of Map.
1	Sill Floor, 850 Level,
2	Sill Floor, 950 Level,
3	Sill Floor, 1050 Level,
4	Sill Floor, 1150 Level,
5	Sill Floor, 1250 Level,
6	Sill Floor, 1350 Level,
7	Sill Floor, 1450 Level,
8	950 Level, Floor 1,
9	950 Level, Floor 2,
10	950 Level, Floor 3,
11	950 Level, Floor 4,
12	950 Level, Floor 5,
13	950 Level, Floor 6,
14	950 Level, Floor 7,
15	950 Level, Floor 8,
16	950 Level, Floor 9,
17	950 Level, Floor 10,
18	1050 Level, Floor 1,
19	1050 Level, Floor 2,
20	1050 Level, Floor 3,
21	1050 Level, Floor 4,
22	1050 Level, Floor 5,
23	1050 Level, Floor 6,
24	1050 Level, Floor 7,
25	1050 Level, Floor 8,
26	1050 Level, Floor 9,
27	1050 Level, Floor 10,
28	1050 Level, Floor 11,
29	1050 Level, Floor 12,
30	1150 Level, Floor 1,
31	1150 Level, Floor 2,
32	1150 Level, Floor 3,
33	1150 Level, Floor 4,
34	1150 Level, Floor 5,
35	1150 Level, Floor 6,
36	1150 Level, Floor 7,
37	1150 Level, Floor 8,
38	1150 Level, Floor 9,
39	1150 Level, Floor 10,
40	1150 Level, Floor 11,
41	1150 Level, Floor 12.

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CALUMET & ARIZONA MINING COMPANY.

OLIVER MINE. - *Envelope #2.* ✓

No.	Description of Map.
1	1250 Level, Floor No. 1.
2	1250 Level, Floor No. 2.
3	1250 Level, Floor No. 3.
4	1250 Level, Floor No. 4.
5	1250 Level, Floor No. 5.
6	1250 Level, Floor No. 6.
7	1250 Level, Floor No. 7.
8	1250 Level, Floor No. 8.
9	1250 Level, Floor No. 9.
10	1250 Level, Floor No. 10.
11	1250 Level, Floor No. 11.
12	1250 Level, Floor No. 12.
13	1250 Level, Floor No. 13.
14	1350 Level, Floor No. 1.
15	1350 Level, Floor No. 2.
16	1350 Level, Floor No. 3.
17	1350 Level, Floor No. 4.
18	1350 Level, Floor No. 5.
19	1350 Level, Floor No. 6.
20	1350 Level, Floor No. 7.
21	1350 Level, Floor No. 8.
22	1350 Level, Floor No. 9.
23	1350 Level, Floor No. 10.
24	1350 Level, Floor No. 11.
25	1350 Level, Floor No. 12.
26	1450 Level, Floor No. 6.
27	1450 Level, Floor No. 7.
28	1450 Level, Floor No. 8.
29	1450 Level, Floor No. 9.
30	1450 Level, Floor No. 10.
31	1450 Level, Floor No. 11.
32	1450 Level, Floor No. 12.
33	1450 Level, Floor No. 13.

Note: See Envelope for Irish Mag and Powell Mines.

15 Irish Mag and Oliver Mines.

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SUPERIOR AND PITTSBURG COPPER COMPANY.

BRIGGS MINE.

No.	Description of Map.
1	Sec. 7, 770 Level,
2	Sec. 7, 1000 Level,
3	Sec. 7, 1100 Level,
4	Sec. 7, 1200 Level,
5	Sec. 7, 1300 Level,
6	Sec. 7, 1400 Level,
7	Sec. 7, 1500 Level,
8	1200 Level, Floor 1,
9	1200 Level, Floor 2,
10	1300 Level, Floor 1,
11	1300 Level, Floor 2,
12	1300 Level, Floor 3,
13	1300 Level, Floor 4,
14	1300 Level, Floor 5,
15	1300 Level, Floor 6,
16	1300 Level, Floor 7,
17	1300 Level, Floor 8,
18	1400 Level, Floor 3,
19	1400 Level, Floor 4,
20	1400 Level, Floor 5,
21	1400 Level, Floor 6,
22	1400 Level, Floor 7,
23	1400 Level, Floor 8,
24	1400 Level, Floor 9,
25	1400 Level, Floor 10,
26	1400 Level, Floor 11.

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SUPERIOR AND PITTSBURG COPPER COMPANY.

JUNCTION LINE.

No.	Description of Map.	No.	Description of Map.
1	Section 6, 1200 Level,	60	1500 Level, Floor 8, Sec. 2,
2	Section 6, 1300 Level,	61	1500 Level, Floor 9, Sec. 2,
3	Section 6, 1400 Level,	62	1500 Level, Floor 10, Sec. 2,
4	Section 6, 1500 Level,	63	1500 Level, Floor 11, Sec. 2,
5	Section 2, 900 Level,	64	1500 Level, Floor 12, Sec. 2,
6	Section 2, 1000 Level,		
7	Section 2, 1100 Level,		
8	Section 2, 1200 Level,		
9	Section 2, 1300 Level,		
10	Section 2, 1400 Level,		
11	Section 2, 1500 Level,		
12	770 Level,		
13	850 Level,		
14	1300 Level, Floor 1, Sec. 2,		
15	1300 Level, Floor 2, Sec. 2,		
16	1300 Level, Floor 3, Sec. 2,		
17	1300 Level, Floor 4, Sec. 2,		
18	1300 Level, Floor 5, Sec. 2,		
19	1300 Level, Floor 6, Sec. 2,		
20	1400 Level, Floor 1,		
21	1400 Level, Floor 2,		
22	1400 Level, Floor 3,		
23	1400 Level, Floor 4,		
24	1400 Level, Floor 5,		
25	1400 Level, Floor 6,		
26	1400 Level, Floor 7,		
27	1400 Level, Floor 8,		
28	1400 Level, Floor 9,		
29	1400 Level, Floor 10,		
30	1400 Level, Floor 11,		
31	1400 Level, Floor 1, Sec. 2,		
32	1400 Level, Floor 2, Sec. 2,		
33	1400 Level, Floor 3, Sec. 2,		
34	1400 Level, Floor 4, Sec. 2,		
35	1400 Level, Floor 5, Sec. 2,		
36	1400 Level, Floor 6, Sec. 2,		
37	1400 Level, Floor 7, Sec. 2,		
38	1400 Level, Floor 8, Sec. 2,		
39	1400 Level, Floor 9, Sec. 2,		
40	1400 Level, Floor 10, Sec. 2,		
41	1400 Level, Floor 11, Sec. 2,		
42	1500 Level, Floor 1,		
43	1500 Level, Floor 2,		
44	1500 Level, Floor 3,		
45	1500 Level, Floor 4,		
46	1500 Level, Floor 5,		
47	1500 Level, Floor 6,		
48	1500 Level, Floor 7,		
49	1500 Level, Floor 8,		
50	1500 Level, Floor 9,		
51	1500 Level, Floor 10,		
52	1500 Level, Floor 11,		
53	1500 Level, Floor 1, Sec. 2,		
54	1500 Level, Floor 2, Sec. 2,		
55	1500 Level, Floor 3, Sec. 2,		
56	1500 Level, Floor 4, Sec. 2,		
57	1500 Level, Floor 5, Sec. 2,		
58	1500 Level, Floor 6, Sec. 2,		
59	1500 Level, Floor 7, Sec. 2,		

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These maps have been microfilmed and are stored upstairs in the flat file.

CALUMET & ARIZONA MINING COMPANY.

IRISH MAG AND

POWELL MINE.

No.	Description of Map.
IRISH MAG.	
1	450 Level.
2	Stope Map, 550 Level, Floor O.
3	Stope Map, 650 Level, Floor O.
4	Stope Map, 750 Level, Floor O.
5	Stope Map, 850 Level, Floor O.
6	Stope Map, 950 Level, Floor O.
7	Stope Map, 1050 Level, Floor O.
8	1150 Level, Floor O, Stope Map.
9	Stope Map, 1250 Level, Floor O.
10	Stope Map, 1350 Level, Floor O.
POWELL MINE.	
11	400, 500, & 600 Level.
12	400 Level.
13	500 Level.
14	600 Level.
IRISH MAG & OLIVER MINES.	
15	Irish Mag & Oliver Mines.

These maps have been microfilmed and are stored upstairs in the flat files.

SUPERIOR & PITTSBURG COPPER COMPANY.

COLE MINE.

No.	Description of Map.
1	800-Level.
2	850-Level, Sec. 4.
3	900-Level, Sec. 3.
4	900-Level, Sec. 4.
5	1000-Level, Sec. 3.
6	1000-Level, Sec. 4.
7	1000-Level, Sec. 5.
8	1100-Level, Sec. 3.
9	1100-Level, Sec. 4.
10	1200-Level, Sec. 3.
11	1200-Level, Sec. 4.
12	1300-Level,
13	1300-Level, Sec. 4.
14	1400-Level, Sec. 3.
15	900-Level, Floor 1, Sec. 4.
16	900-Level, Floor 2, Sec. 4.
17	900-Level, Floor 3, Sec. 4.
18	900-Level, Floor 4, Sec. 4.
19	900-Level, Floor 5, Sec. 4.
20	900-Level, Floor 6, Sec. 4.
21	900-Level, Floor 7, Sec. 4.
22	900-Level, Floor 8, Sec. 4.
23	1000-Level, Floor 1,
24	1000-Level, Floor 2,
25	1000-Level, Floor 3,
26	1000-Level, Floor 4,
27	1000-Level, Floor 5,
28	1000-Level, Floor 6,
29	1000-Level, Floor 7,
30	1000-Level, Floor 8,
31	1000-Level, Floor 9,
32	1000-Level, Floor 10,
33	1000-Level, Floor 11,
34	1000-Level, Floor 12,
35	1100-Level, Floor 1, Sec. 4.
36	1100-Level, Floor 2, Sec. 4.
37	1100-Level, Floor 3, Sec. 4.
38	1100-Level, Floor 4, Sec. 4.
39	1100-Level, Floor 5, Sec. 4.
40	1100-Level, Floor 6, Sec. 4.
41	1100-Level, Floor 7, Sec. 4.
42	1100-Level, Floor 8, Sec. 4.
43	1100-Level, Floor 9, Sec. 4.
44	1100-Level, Floor 10, Sec. 4.
45	1100-Level, Floor 11, Sec. 4.
46	1100-Level, Floor 12, Sec. 4.

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CALUMET & ARIZONA MINING COMPANY & SUPERIOR & PITTSBURG COPPER COMPANY,
GENERAL MAPS.

No.	Description of Map.
1	Map of Claims and Underground Workings - Key Map.
2	Oliver Mine, Section N. 81° W, through Buckeye Ore Bodies.
3	Section N. 85° W. through Oliver Mine.
4	Section N. 62° E. 25 ft. North of Briggs' Shaft.
5	Section N. 27° 30' W. through Hoatson Mine & Briggs' Shaft.
6	Section N. 62° E. through Hoatson and Junction Mines.
7	Section N. 86° W. through Junction South Ore Body. 65' S. Sec. 23.
8	Section N. 86° W. through Junction South Ore Body. 120' S. Sec. 2
9	Section N. 85° W. 240 ft. North of Junction Shaft.
10	Section N. 55° W. through Junction South Ore Body.
11	Section E' - E' N. 47° 15' West through Cole Mine.
12	Briggs, Hoatson and Junction Mines.
13	American Saginaw.

File: Copper
Queen Mine

City of Bisbee

118 Arizona Street
BISBEE, ARIZONA 85603

October 1, 1977

QUEEN UNDERGROUND COPPER MINE & LAVENDER OPEN PIT COPPER MINE TOURS

Telephone: Area Code 602 - 432-2071

Effective this date the admission fees for the historic Queen Underground Copper Mine tour will be:

Time: From 10:00 A.M. through 5:00 P.M., 7 days a week
Length: Approximately 1½ hours
Rates: \$3.50 - 12 and over
\$1.75 - 7 through 11
\$1.00 - 3 through 6

Special Rates: Must be in groups of 10 or more.
\$2.50 - 12 and over
\$1.25 - 7 through 11
.50 - 3 through 6

Reservations must be made at least 1 week in advance.

The City of Bisbee is presently conducting tours through the historic Queen Underground Mine. The tour is on level ground except for a visit into one stope which requires walking up a few wooden steps. Tourists are led into the tunnel by a tour guide and walk in approximately 1800 feet. This is a ground level tunnel, not an underground shaft. Visitors are then transported out of the tunnel by mancar. The Queen Mine is usually 47-49 degrees year round, so we suggest visitors bring sweaters or jackets and walking shoes regardless of when they visit. We do furnish slickers, hard hats and lights.

The Lavender Open Pit Bus Tour

Time: At 12:00 Noon only, 7 days a week
Length: Approximately 1½ hours.
Rates: \$1.50 all ages

Special Rates: Groups of 10 persons or more: \$1.00
Reservations must be made at least 1 week in advance. Special arrangements on times can be made for special tours, we have a 28 passenger tour bus but groups touring with their own bus line may take the tour on their own bus and we will provide the tour guide.


The City of Bisbee is conducting a narrated bus tour of the Lavender Pit area. This tour covers approximately 11 miles and you see one of the copper dumping areas, the leaching plant, and the rim of the Pit. The driver stops for picture taking also. The bus does not go into the Pit or to the bottom of the Pit. This tour leaves from the Queen Mine.

The Queen Mine is located on U.S. Highway 80 by Old Bisbee, and the Chamber of Commerce office is located at the Lavender Pit Viewpoint on U.S. Highway 80 also. Admission criteria and fees subject to change.

Reservations and information can be obtained by contacting the Queen Mine Underground Tour or:

City of Bisbee
Queen Mine Tour
118 Arizona Street
Bisbee, Arizona 85603

COME ENJOY BISBEE!


CHARLES E. EADS, Mayor

GREATER BISBEE CHAMBER OF COMMERCE
In the County of Cochise
CITY OF BISBEE, ARIZONA

The Queen Underground Mine Tour

Time: From 10:00 a.m. through 5:00 p.m., 7 days a week (every half
Length: Approx. 1 hour + hour)
Rates: \$3.50 for ages 13 and over
\$1.75 for ages 6 through 12
\$1.00 for ages 3-6

Special Rates: For groups of 10 or more
\$2.50 for ages 13 and over
\$1.50 for ages 6 - 12
.50 for ages 3 - 6

The City of Bisbee is currently conducting tours through the historic Queen Underground Mine. The tour is on level ground except for a visit into one stope which requires walking up a few wooden steps. Tourists are led into the tunnel by a tour guide and walk in approx. 1800 ft. This is a ground level tunnel, not an underground shaft. Visitors are then transported out of the tunnel by mancar. The Queen Mine is usually 47-49 degrees year round, so we suggest visitors bring along a sweater or a jacket regardless of when they visit. We do furnish slickers, hard hats and lights. The mine tunnel is not damp or dusty.

The Lavender Pit Bus Tour

Time: At 12:00 Noon only, 7 days a week
Length: Approx. 1½ hrs.
Rates: \$1.50 for all ages
Special arrangements on times can be made for special tours, we have a 28 passenger tour bus but groups touring with their own bus line may take the tour on their own bus and we will provide the tour guide. Advance reservations are required.

Special Rates: \$1.00 for groups of 10 or more

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Special Rates: \$1.00 for all ages with groups of 10 or more

Reservations and information can be obtained by contacting the Bisbee Chamber of Commerce at: Drawer BA

Bisbee, AZ. 85603 or phone (602) 432-2141

You may contact the Queen Mine directly at (602) 432-2071

The Queen Mine is located on U.S. Highway 80 by Old Bisbee, and the Chamber office is located at the Lavender Pit Viewpoint on U.S. Highway 80 also.

COME ENJOY BISBEE!