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Arizona Department of Mines and Mineral Resources Mining Collection

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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: AJAX MINE

ALTERNATE NAMES:

AJAX & AJAX NO. 1
AJAX-BLUE CRYSTAL PROPERTY
ORPHAN BOY
JUNO
JUMBO
SILVER PEAK
MINERAL BUTTE MILL

PINAL COUNTY MILS NUMBER: 191A

LOCATION: TOWNSHIP 2 S RANGE 11 E SECTION 35 QUARTER SE
LATITUDE: N 33DEG 12MIN 27SEC LONGITUDE: W 111DEG 10MIN 58SEC
TOPO MAP NAME: MINERAL MTN - 7.5 MIN

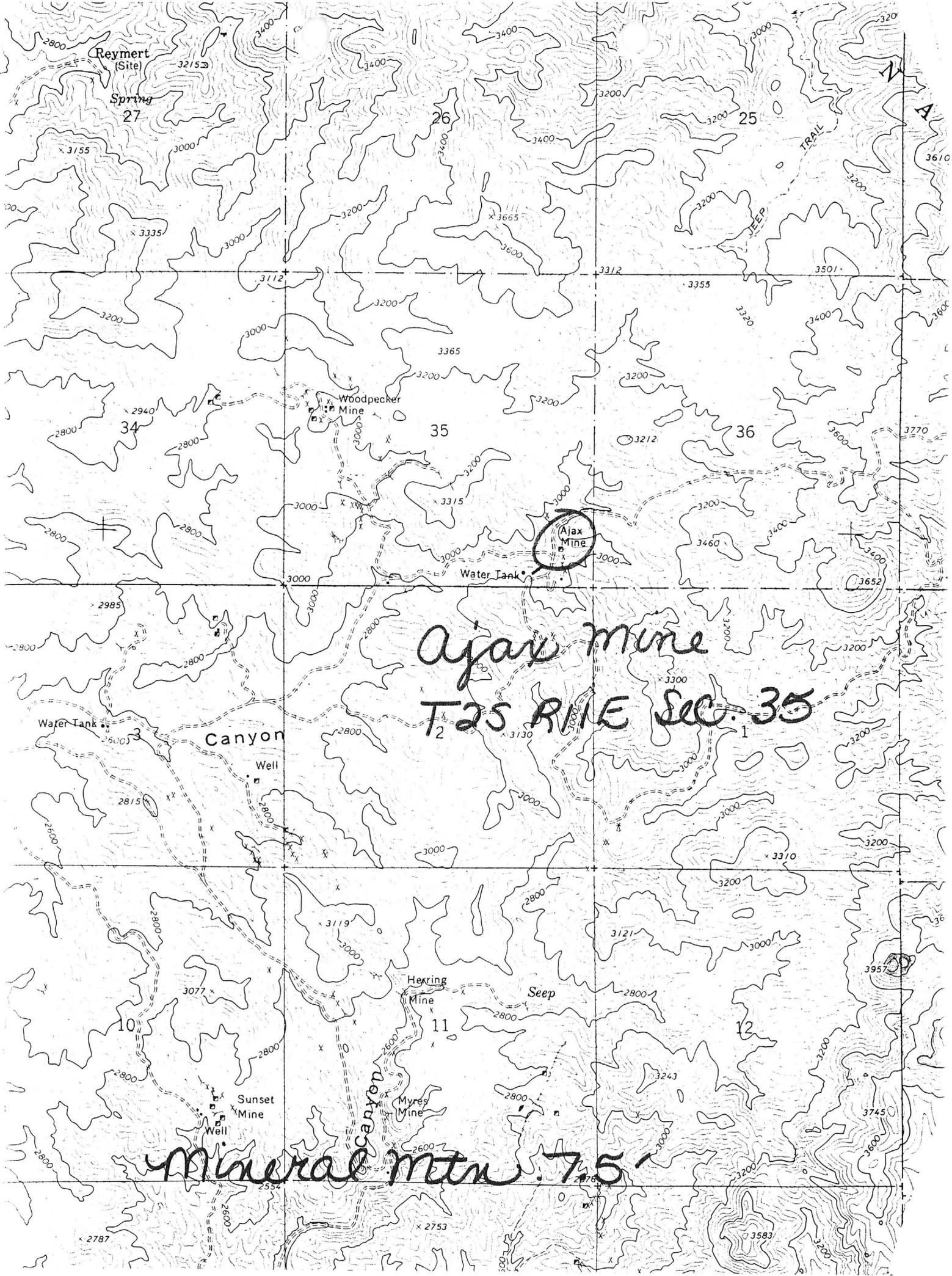
CURRENT STATUS: PAST PRODUCER

COMMODITY:

LEAD
ZINC
SILVER
COPPER OXIDE
DIATOMITE

BIBLIOGRAPHY:

ADMMR AJAX MINE FILE
BLM MINING DISTRICT SHEET 597
ADMMR MOON CLAIMS FILE
ADMMR WOODPECKER MINE FILE
ADMMR ORPHAN BOY FILE
ADMMR AMERICANA MINE FILE
ADMMR BLUE CRYSTAL MINE FILE
CLAIMS OVERLAP THE WOODPECKER CLAIMS
ADMMR "U" FILE PINAL PB-14
ADMMR MAPS (UPSTAIRS DRAWER 4-FLAT)
CONTRACT AND NONCONTRACT DOCKETS IN AZ. 1952,
P. 36
DIATOMITE NOT FOUND IN REFERENCES KAP 12-8-86
BLM MINERAL SURVEY MS 3949
SEE: ADMMR OKLAHOMA GROUP FILE (SILVER BAR
MINE REPORT, P. 11)



Reymert (Site)
Spring 27

Woodpecker Mine

Ajax Mine

Ajax mine
T25 R11E Sec. 35

Canyon

Herring Mine

Myres Mine

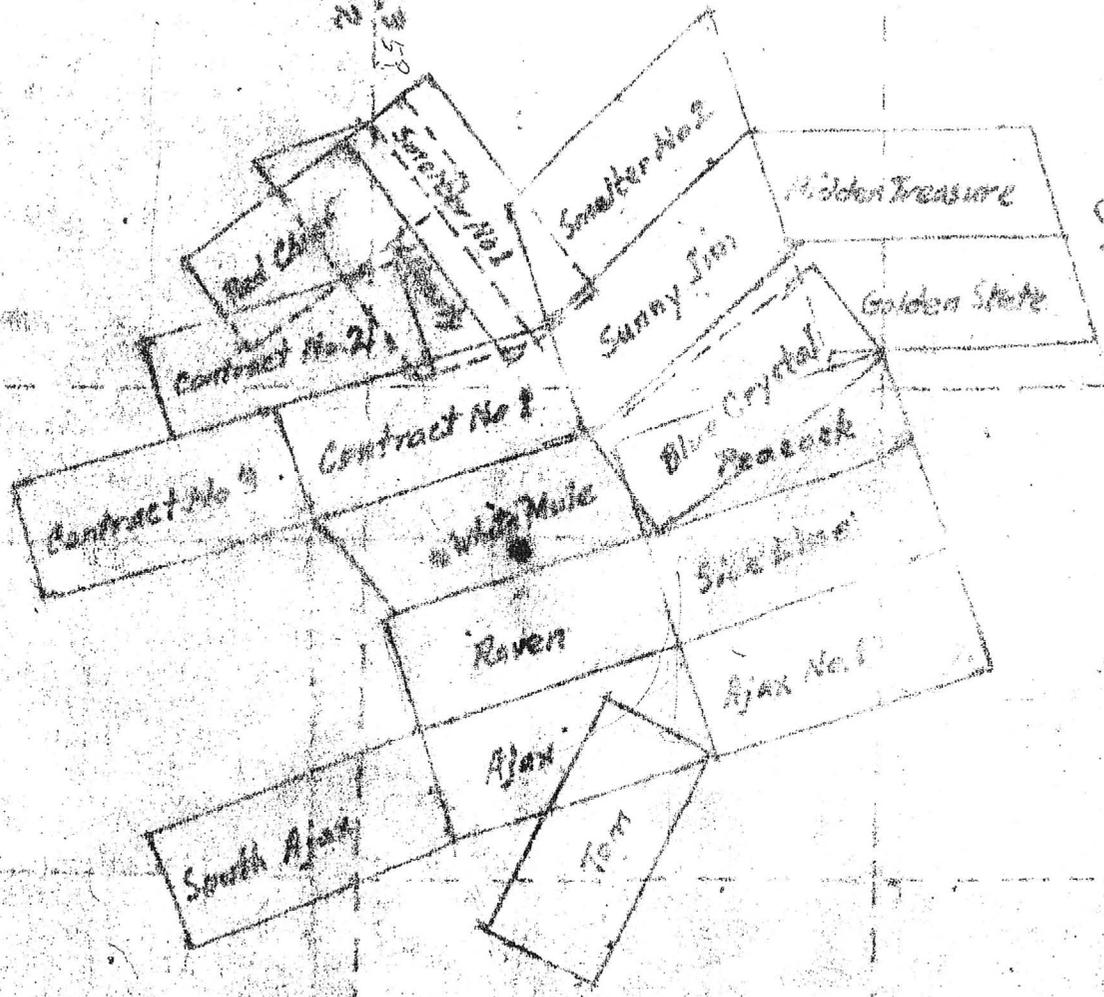
Sunset Mine

Mineral mtn. 7.5'

T. 2 S. R. 11 E.
113

Sec. 35
Sec. 2

U.S. Mineral Monument



Ajax & Blue Crystal

Magnum King Manganese Mining Co.

Ajax-Blue Crystal Mine

Joe Walton, Ajax Group Atty

LAS
5/65

* GENERAL REFERENCES

- REFERENCE 1 F1 < USBM - ABGHT PRODUCTION DATA FILE
- REFERENCE 2 F2 < ABGHT CLIPPINGS FILE
- REFERENCE 3 F3 < ARIZONA DEPARTMENT OF MINERAL RESOURCES FILE DATA
- REFERENCE 4 F4 < BLM DISTRICT SHEET # 597, SE 1/2, T. 25, R. 11E

A12 < COPPER CO. (1925), W.C. SMITH (1953),

F5 < USGS OPEN FILE REPORT 78-468, 1978

miles 1914

U.S. CRIB-SITE FORM

RECORD IDENTIFICATION

* RECORD NUMBER B10 < _____ > * RECORD TYPE B20 < X, I, M >

* REPORT DATE G1 < 82, 03, > * INFORMATION SOURCE B30 < 1, 2, > * DEPOSIT NUMBER B40 < _____ >

YR. MO.

* REPORTER (SUPERVISOR) G2 < LARABA PETER > (GEST, DON) * FILE LINK IDENT. B50 < USBM-004021 >

(last, first, middle initial) (last, first, middle initial) (021)

* REPORTER AFFILIATION G5 < ABGHT > * SITE NAME A10 < AJAX MINE >

* SYNONYMS A11 < _____ >

LOCATION

* MINING DISTRICT/AREA A30 < MINERAL HILL DISTRICT >

* COUNTY A60 < PINAL > * STATE A50 < AZ > * COUNTRY A40 < U.S. >

* PHYSIOGRAPHIC PROV A63 < 1, 2, >

* DRAINAGE AREA A62 < 1, 50, 50, 1, 0, 0, >

* QUADRANGLE NAME A90 < MINERAL MOUNTAIN, (196, 4), > * LAND STATUS A64 < 0, 1, 4, 9, > (1, 9, 7, 8,)

* SECOND QUAD NAME A92 < _____, (, ,) > * QUADRANGLE SCALE A100 < 2, 4, 0, 0, >

* ELEVATION A107 < 3, 0, 0, 0, > FT. * SECOND QUAD SCALE A91 < _____ >

UTM * ACCURACY

* NORTHING A120 < 3, 6, 7, 4, 1, 4, 0 > ACCURATE (circle) * GEODETTIC

* EASTING A130 < 4, 8, 2, 9, 6, 0 > ESTIMATED EST < _____ > * LATITUDE A70 < _____ N >

* ZONE NUMBER A110 < 1, 1, 2 > * LONGITUDE A80 < _____ W >

CADASTRAL

* TOWNSHIP(S) A77 < 0, 0, 3, 5, > * RANGE(S) A78 < 0, 1, 1, E, >

* SECTION(S) A79 < 35 >

* SECTION FRACTION(S) A76 < SE OF SE OF SE >

* MERIDIAN(S) A81 < GILA AND SALT RIVER >

* POSITION FROM NEAREST PROMINENT LOCALITY A82 < 4 MILES NE OF MINERAL MOUNTAIN (ELV. 3351), >

* LOCATION COMMENTS A83 < _____ >

* ESSENTIAL INFORMATION
 - ESSENTIAL SOMETIMES OR HIGHLY RECOMMENDED

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Mineral Butte Mill and Consolidated Date 3-2-62
Properties
District Mineral Hill District, Pinal Co. Engineer Lewis A. Smith
Subject: Interview with Lee Boyer, assayer & chemist, 1010 Lemon St., Tempe (WO 7-3445)

Owners or Optioners: J. Wesley Wingfield, Independent Machinery Co. 1265 E. Cambridge, Phoenix, (BR 5-5392).
Im Co. *5550 E. Washington - Ph 34*
Vernon Owens (AM 6-2194) (also Independent Machinery Co.).

Properties: Optioned under a cooperative agreement or bought properties include the Woodpecker Group, Silver Bell-Martinez, Orphan Boy and the Ajax 1, Ajax 2 and Ravin.* (patented Ajax claims bordering the Woodpecker group).

Location: S. 35-36, T. 2 S., R. 11 E., S. 6, T. 3 S., R. 12 E.

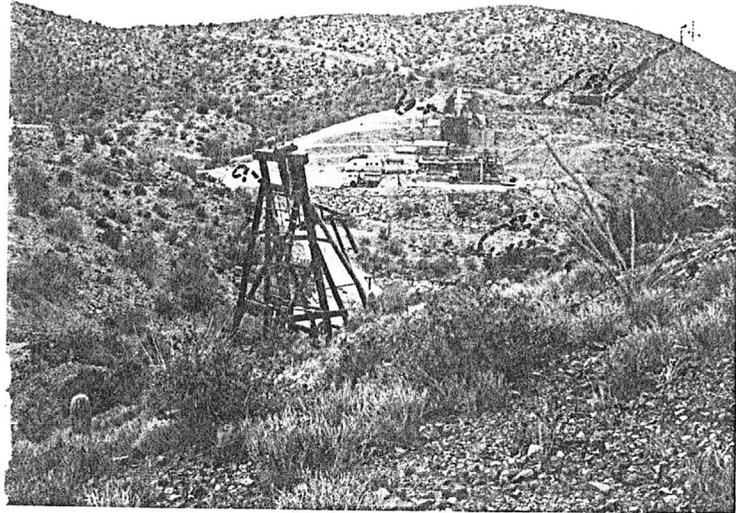
Work: Present work consists of the erection of a mill and dams for water impaction across the deep canyon through the Ajax claims.

Mill: According to Boyer the mill consists of an 18 x 24 inch Dynamic crushing machine, 6 Deister tables, a sink and float machine, and Gardner Denver flotation cells plus screens, etc. The initial mill capacity will be 150 TPD but will be increased up to 500 tons if the ore is available and if water also is obtainable. The 150 TPD rate will use 65 gallons per minute water, and will require 50 gallons per minute of fresh water. The sink and float will use octo-tetra bromide instead of ferro-silicon which is more expensive and mostly is obtained from W. Germany. The octo-tetra bromide has a specific gravity of 2.9 whereas the ferro-silicon ranges from 3-3.5. Power is furnished by a 115 KW diesel operated generator. At present lead ore will principally be treated.

Mining: As now set up the mining will to a considerable extent be done by lessees. Each lessee will have to accumulate 300 tons of ore of \$10 or more in grade or two days mill run. The lessee will be paid by a sliding scale on grade and character of the concentrates produced by the mill. Some of the ore will be obtained from a 90 foot shaft on the Ajax No. 1 claim. While at first, much near surface lead-silver ore will be treated, as deeper ore is used zinc and copper may be separated. The ore in the shaft has been sampled and run by Boyer who reports that the vein is 29 feet wide and carries 4 per cent lead and 9 per cent zinc, with small amounts of copper and gold and silver, the latter being mainly with the lead. The country rock is schist. The separation of this lead probably will largely be done by tables depending upon extraction results. Should this not be satisfactory, selective flotation or sink and float or both, may be necessary. It is not yet known when operation will start.

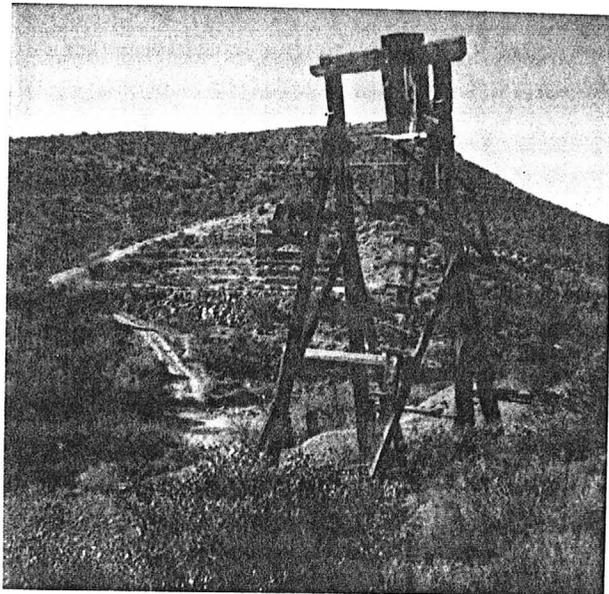
Some properties (Woodpecker and Orphan Boy) were owned by Mineral Mountain Mining Co., in which Lee Boyer is one of the principals.

Recent metallurgical tests were run by George Roseveare, Arizona Bureau of Mines and Colorado Equipment Co., of Denver. Lee Boyer did much test work also.



7-27 Mine
 Mineral Hill Dist, Pinal Co
 a Head frame at top shaft
 of Mill
 (1) few buildings, and 25 to 30
 (2) water supply tanks.

11-7-34



April 11, 2/20/34

NAME OF MINE: AJAX

COUNTY: PINAL E
DISTRICT: JUMBO
METALS: LEAD

OPERATOR AND ADDRESS:

MINE STATUS

DATE:	✓	DATE:	
5/1/44	Jess French, Fl. Junction	5/1/44	Unknown
		5/15/44	Idle
		5/16/44	Sporadic Developing according to Macfarlane
		5/45	Idle

✓ ✓
Ajax - Jess French
Florence Junction (9-44)



Mr. Ralph Pomeroy
532 Security Bldg
Phoenix, Arizona

REASON FOR NON-DELIVERY

- Not Forwardable _____
- Temporarily Away _____
- Recipient _____
- Out of Business _____
- No Mail Receptacle _____
- Building Razed _____
- Other _____

Rt. No. 102

See: MINERAL BUTTE MILL (file) Pinal County

DEPARTMENT MINERAL RESOURCES

News Items

Date 1-23-53

Mine AJAX 725, R 1/2 335

Location Mineral Hill Dist., Pinal County

Owner W. C. Smith, Coolidge

Address

Operating Co. ^{mail net 9-17-65} Ralph Pomeroy & Associates

Address 532 Security Building, Phoenix

Pres.

Genl. Mgr.

Mine Supt.

Mill Supt.

Principal Metals Lead, zinc

Men Employed 8

Production Rate

Mill, Type & Capacity

Power, Amt. & Type

Signed A.L. Flagg

(Over)

Present Operations Exploring on the 200-ft.
Propose about 400-ft drifting. later will
diamond drill from the 200-ft level. Some
copper showing in present face on 200-ft level

New Work Planned
W. G. Smith, Coolidge
Mineral Hill Dist. Pinal County

Misc. Notes
Ralph Powers & Associates
222 Security Building, Phoenix

Lead, zinc
8
A. J. ...

DEPARTMENT OF MINERAL RESOURCES

News Items

Date

April, 1928

Mine

Rademeyer

Location

John H. Whitlock

Owner

Address

Frank W. Hack

Operating Co

Hack Machine Co

Address

Des Plaines, Ill.

Pres.

Genl. Mgr.

Mine Supt.

Mill Supt.

Principal Metals

Men Employed

Production Rate

Mill, Type & Capacity

Power, Amt. & Type

Signed

(Over)

4-1-49
AJay

Present Operations

~~Prza Co Schist~~

~~calcite & schist~~

~~Now Division~~

~~65 mile~~

New Work Planned
65

~~hardt~~

TRIPZS
RILE

Misc. Notes

Land Office

Survey #3949

Ajax Property 1975

This property, about 20 miles from Florence and 8 miles from Superior and about 2 miles from the Reymart mine has again been bonded to eastern parties. The property has produced some rich lead-silver ores on the surface and has some zinc contents in association with the ores. Frank Benedict had the last option upon the property and to all accounts opened up some very good ground. But on account of an inrush of water and an inadequate machinery to handle same, he abandoned the property. The property is apparently meritorious and ought to make good if developed in a practical and systematic manner.

JOHN H. WHITLOCK
MANAGER

ALLA WHITLOCK
ASS. MANAGER

WHITLOCK MINING CO.

OWNERS AND OPERATORS

BICYCLE LAKE IRON, BULL CANYON LIME STONE

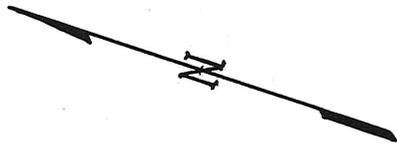
U.S. GOV'T OIL AND GAS LEASES

PHONE
MADISON 6-4464

ROOM 435 - 206 SO. SPRING ST.
LOS ANGELES 12, CALIF.

Min 5410 1485 1/4 Scott Ave

69°- 4x5 Shaft on Ajax Claim
Mineral Survey No. 3949
Arizona Land District



4' Face
Ave. Assay Zn. 13.4
Pb. 5.6

4' Face
Ave. Assay Zn. 7.2
Pb. 2.7

47'

57'

Note:
Approx. 250' Drifting
All in ore with total Ave
Content of Zn. 7.5
Pb. 2.0

28' Cross Cut - width vein
Ave Assay - 13' - Zn. 4.3
Pb. 0.4

90' L.

Compiled from Report of
R. D. O. Johnson

Scale $\frac{1}{4}'' = 8'$

15' X Cut
Ave. Assays. Zn. 7.5
Pb. 0.6

4' Face
Ave. Assay Zn. 6.6

15' X Cut
Ave Assays Zn. 6.6
Pb. 0.8

50'

48'

190' L.

1
AJAX MINE AND MILL

MINERAL HILL DISTRICT

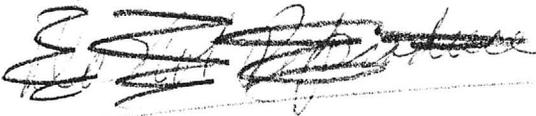
PINAL COUNTY

*do not
reproduce*

Mrs. Waughtel reported that a shipment of concentrates is ready, pending confirmation to Tooele, Utah. The concentrates total about 30 tons that assay 49 percent lead, 8 ounces silver, and 5-6 percent zinc. ARSCO at El Paso, does not pay for the zinc, but Tooele does. The concentrates were obtained by gravity methods from Orphan Boy ores. The flotation section is now being completed. The mill will then produce separate lead-silver and zinc concentrates. Arrangements were made whereby R. W. Ferrin contracted to mine silver-lead ores from the Grandfather Silver Pick and Jumbo mines for the mill. Most of the "bugs" are said to have been ironed out of the mill. 5 men are currently working. Heavy rains in the area, have hampered operations. At the Orphan Boy, bulldozer work has opened a good vein. A double-drum slusher and Jack Leg has been purchased for use there as the workings deepen.

MEMO - LAS Interview with Mrs. Roy Waughtel, 9/26/63

AJAX MINE AND MILL


MINERAL HILL DISTRICT
PINAL COUNTY

A visit was made to the Ajax mill and conferences held with Roy Waughtel and Russell Rennick. The mill is currently treating 100 tons of dump material on a test run for lessees Ferrin and A. Thalman from the Woodpecker dumps. This ore is low grade and contains lead-silver values in a schist gangue that is well impregnated with a specularite. The ore is crushed, then rolled and screened to 35 mesh, and then tumbled. Four Wilfley tables were running in the preliminary battery. The middling concentrate is then sent to cleaner tables. The discard from the cleaner tables with the minus 35 mesh from the screens was being tested for further extraction in a series of 4 Denver flotation cells. The concentrate on the tables appeared to contain a large proportion of anglesite with some cerussite and galena as well as the high percentage of specularite. According to Waughtel the separation on the tables was going well. (Thalman is moving the dump to get at a vein which is reported to be much better than the dump material).

According to Waughtel, at the Orphan Boy a four foot vein has been further uncovered by a bulldozer cut and a 35 foot incline. This vein has a 4 to 5 inch high grade galena filled stringer that runs 45-55 per cent lead and 8 ounces silver. The entire 4 feet runs 6-8 per cent lead, good zinc values, and 3-5 ounces silver. This high grade streak is on the footwall portion of the vein. A gouge streak lies on the hangingwall. A second incline has been started at a lower elevation on the vein structure on the hill that contains the vein and is calculated to gain considerable more vein depth. The last shipment of 20 tons of concentrate is now being trucked to Toelle, Utah. According to Waughtel, his samples of the concentrates showed about 45-48 per cent lead, 10-12 per cent zinc and about 7-8 ounces silver. These concentrates are being sent to Toelle because that smelter pays for the part of the zinc, whereas the El Paso smelter does not. The zinc return is counted upon to help toward paying the milling cost. A previous small shipment to El Paso carried a similar grade of lead and silver but carried less zinc. Later, it is planned to add a ball mill for regrind of the table concentrate middlings and screen fines, and another two sets of flotation cells will be added to selectively produce separate lead and zinc concentrates. A test run had been previously made on 20 tons of Silver Pick dump material. This was reported by Waughtel to contain relatively higher silver and zinc values as compared to the other Woodpecker ores thus far tested. The Silver Pick shaft is over 100 feet deep and its collar is lower than most of the other Woodpecker openings. The water supply for the mill is at present adequate. As soon as the present 100 ton run is completed, the mill will again treat Orphan Boy ore. The new road from the Ajax to the Orphan Boy, though steep, is in good condition. Heavy rains during the late summer caused considerable delay at times.

Memo - LAS - 11-27-63

Active Mine List Oct. 1963 - 5 men

Do Not Reproduce

Roy Waughtel et al are erecting a mill at the Ajax Mine, Mineral Hill District. (The mill will have 50 tpd capacity and will employ flotation and gravity methods.) The property controlled by the group is reported to contain nearly 60 claims.

Waughtel hopes to obtain ore from the Ajax, Tom Boy, Sunset and Gilbert Groups. The area is noted for manganiferous silver ore which years ago was used for smelter flux. The Reymert is perhaps the main producer of this, although, appreciable production was also obtained from the Woodpecker, Ajax and Talley-Wall properties. Mr. Waughtel thinks that adequate reserves are available in the district to feed the mill. He will supplement the Ajax production with custom ore.

Mrs. Waughtel said she had leased the Tom Boy which lies next to the Ajax to the south. This is a gold mine with some copper.

According to Mining World, January 1963, p. 37, previous drilling had disclosed ore running 10 ounces of silver to the ton and 18 percent lead.

Memo LAS 1-28-63

Arizona Silver, Inc. has started mining and milling a high grade silver-lead ore from two small mines and 58 claims on the east slope of Mineral Mountain, 18 miles northeast of Florence, Arizona. Earlier diamond drilling had reportedly disclosed mineralization averaging better than 10 ounces of silver per ton and 18 percent lead. The small flotation mill, now being completed, is expected to have a capacity of about 50 tons per day. Mining World Jan. 1963 p. 37

The higher silver price spurred two small mining companies - B.O.W. Mining Co., and Arizona Silver, Inc. - to start mining and shipping. Mining World Feb. 1963 p. 13

Mr. Waughtel said that the mill at Ajax was progressing and that two Wilfley tables were soon to be installed. The mill will employ gravity methods, since the ore is composed of galena, anglesite and cerussite. Three men working out here now. The road was severely damaged by recent rains. An attempt to reach the Ajax was frustrated by a washout. Memo LAS 2-20-63

Mrs. Waughtel stated that the men at the Ajax had made a few trial runs, with good results. The dump material, being tested, has been better thus far in grade than had been indicated by the preliminary sampling. The accompanying article tells much of the history of the project. Apache Sentinel, 5-16-63, Vol 4, No. 50, p. 1&8 (Apache Junction)

Mrs. Waughtel said the mill has Denver flotation cells, and 5 tables, in addition to crushing, thickening, etc. equipment. Memo LAS 5-27-63

AJAX MINE & MILL

PINAL COUNTY
MINERAL HILL DIST.

Conference with Roy Waughtel, at Florence Junction, 5/20/64.

Mr. Waughtel said he had feeler relative to the Ajax but no definite word as yet. He was to have a conference with a New York Group Friday. Meanwhile, he did a little exploratory work on the Orphan Boy. Waughtel said he had a conference with Metler Bros., of Tucson (Drilling contractors), who reported that they had drilled one short hole in the face of the bottom Ajax N. drift. This assayed 20 per cent of combined lead and zinc and 1 per cent copper. Some gold and silver were also present. The drift is presently under water. Richard Pappa, Engineer for Copper States Mining Co., of Calif., had made a preliminary examination and Waughtel reported that he plans to return for a closer look. Dorman O'Leary, of Wickenburg, had a look also. Waughtel said that Miami Copper Co., is reported to have drilled a test hole at the Ajax, but they were not giving the results.

MEMO Lewis A. Smith, Field Engineer 5/20/64

Do Not Reproduce

Study of reports by *Gerald A. Russell, Consultant, in 1951 and 1956 and conferences with Roy Waughtel - 6-23-64

*Russell was representing Alba Mines, Ltd., Toronto, Canada

The Ajax vein trends N 40° W at 90° apparent to the schist laminae trend. The vein dips 60°W. The vein has been traced continuously for 2700 feet to the north from the shaft and for 400 feet to the south. It is 15 feet wide at the shaft and the same width was measured at 475 feet north of the shaft. Branch veins split off of the Ajax vein and these range from veinlets to 10 feet wide. On the 178 foot level a drift, to the north is 380' long and another is 50 feet to the south. The shaft, below this is reported to have left the vein. A 90 foot crosscut, according to Meyers (who reportedly drove it) is said to have intercepted 21 feet of vein that had a footwall streak, 2 feet wide, of nearly solid galena. The vein, according to Waughtel, appears to flatten down dip. On the north drift face, the vein is reportedly 15 feet wide. The ore is oxidized down for 50 feet, at the shaft, the principal minerals being cerussite, anglesite, and probably cerargyrite, and sporadic copper oxides. Below this galena and sphalerite predominated, with probable argentite. Table concentrates made from the shaft dump showed some bornite and chalcopryrite. Waughtel said these were taken from the last material dumped so that he presumed they came from the lower part of the mine. Ajax reserves were estimated by Russell, are 30,000 tons valued at \$30 per ton. LAS 6-23-64

Mr. Waughtel said that little progress has been made in financing the mill revision needed to separate lead and zinc sulphides. He needs a ball mill, 2 batteries of flotation cells and a settling tank, along with accessory small items. Most of the Ajax and Orphan mines ore is sulphide down below 60 feet. Further tests by Denver Equipment Company's laboratory revealed that a recovery of 92% of the lead and zinc can be made from sulphide ore. El Paso Natural Gas Company's geologist spent a week in the area and will soon submit his report. He does not have any idea what they found out. LAS 9-16-64

No work was in progress and no one was on the property.

The Ajax vein outcrop was traced for 600 feet in a NW direction to a point where it changed strike to a more westerly direction. (The change in strike was roughly 30°). At the Ajax shaft the vein crosscuts the schist and consists of severely brecciated schist and possible fine grained "dike" material. It lies on the hanging wall of the suspected dike. The breccia is cemented by quartz and calcite as stringers and pods and both vein walls are lined by quartz vein material 1-3 feet wide. The dip is about 60-65 degrees west. The altered zone east from the footwall, is at least 100 feet wide. The vein outcrop is bold standing in relief at least 2-4 feet above the bordering country rock. The schist fragments or bands within the vein zone are chloritized and epidotized. To the NW the zone between the hanging wall and footwall of the quartz vein, 600 ft. north of the shaft, appear to be less altered. At the shaft the vein zone is 15-16 feet wide (according to Roy Waughtel the vein is about this wide on the bottom level.) The vein seems to be persistent, outcrop being visible for well over 1000 feet to the NW from the shaft (see photo)

The mill has not worked for at least 6 months but the mill reservoir (300 ft. north of the mill) still held a few feet of water. The September rain runoff overflowed the 15 foot dike and nearly blocked the access road.

Mine and mill visit with George A. Tweedy, Tax Review Commission - 11-9-64 LAS

Conference with Roy Waughtel at Florence Junction 1/29/64.

Mr. Waughtel reported that a third concentrate shipment has been made to El Paso. This carried 46 percent lead, 8-10 percent zinc, and some silver. Since the zinc proportion at the Orphan Boy mine is increasing with depth, it was decided to curtail operations until more flotation cells and a regrind mill can be acquired. This would permit the production of separate lead and zinc concentrates. As it is, it has proven out that the El Paso smelter pays, only for the lead-silver, whereas, Tooele pays 75 percent of 30 percent of the zinc (3.5 to 4.0 cents per pound). This will no more than pay its way, with the longer haul to Utah. The mill, meanwhile, has done well, extraction wise.

Waughtel said that a group of New York men would be in Saturday, 2/1/64, to see if they would be interested in giving financial help. Roy is now doing development work at the Orphan Boy.

MEMO Lewis A. Smith 2/3/64

Conference with Roy Waughtel, Florence Junction

Mr. Waughtel reported that he was contemplating a small business administration loan in order to revise his mill flowsheet. He needs additional flotation units and a regrind ball mill. His ore tests have revealed an intimate mixture of galena and sphalerite. His tables do not make a close enough segregation.

Meanwhile he has reopened part of the old workings at the Woodpecker, Jumbo and Grandfather properties and has sunk the Orphan Boy incline to 70 feet. The channel samples, according to Waughtel, on these openings indicate an average grade of around 11-13 per cent of combined lead and zinc. The silver runs about 3-4 ounces per ton giving a value of about \$35.00. At the Orphan Boy the vein, in the bottom of the incline, is four feet wide with good walls. Three samples across this vein averaged \$35-\$40 per ton at present prices, principally in lead silver values, although zinc was increasing.

Dannelly

Waughtel stated that Robert Donelli, 3443 N. 35th Ave., who drove the 300 feet of drift at the bottom of the Ajax shaft, reported that the south drift shows values in lead and zinc. The north, or longer drift, shows 18 feet of vein width that assayed 20 per cent of lead and zinc with some copper and silver. Donelli also stated that a 1450 foot inclined hole had been drilled some years ago, and reportedly crossed 16 feet of good grade zinc ore. No log is available.

Waughtel reported that table tests run by George Roseveare, Arizona Bureau of Mines, showed recoveries of lead and zinc of up to 90 per cent. However, the problem of close separation of the lead and zinc is still there. Waughtel thinks selective flotation, following a regrind to 75 to 100 mesh will give the best results. He estimated that the plant revision, including a thickener would require \$25,000 to \$30,000.

Donelli had a lease several years ago, but although he did much development work, did not ship.

Metzler Bros. of Tucson reportedly did some shorthole drilling out from the bottom Ajax drifts, but Waughtel said he had been unable to obtain to date confirmation of this.

Memo - LAS - 3-25-64

1
AJAX MINE - Mineral Hill Dist. S35 T2S R11E

PINAL COUNTY

~~W. A. Payne~~

W. A. Payne, Director Mineral Mountain Mining & Milling Co., Inc. (also called 4-M's) advised that a group, comprising the owners of the Woodpecker, Silver Pick, Badger, Grandfather, Jumbo, Apache, Ajax and Orphan Boy, Mineral Hill District, will hold a meeting May 28, to determine what to do about a \$19,000 royalty deficit incurred by Roy Waughtel et al, which group had optioned the preceding mines. It is expected that the \$19,000 will be written off. The option has been dropped by Waughtel's group. In the process, Payne, et al, acquired the Ajax mill and this is held as collateral for certain unpaid loans against the equipment. While Payne, et al, are not involved in the latter indebtedness, they are anxious to remove the deficit stigma so as to make their properties more attractive to investors.
LAS WR 5-21-65

Mr. J. Nicholas, called to get a recommendation for a lead-zinc mill man. He reported that Roy Waughtel had a stroke and wanted to lease the Ajax mill.
LAS WR 6-30-65

RRB WR 2/5/82: Visited the Ajax Mine in Sec. 35, T2S R11E. Old wooden headframe on inclined shaft dipping 73° due west and mill foundations. No activity evident.

RRB WR 2/24/84: Visited the Ajax Mine, Sec 35, T2S R11E, Pinal County, no activity

COPY

A J A X P R O P E R T Y

Mineral Hill Mining District of

Pinal County, Arizona

LOCATION: The Ajax Claims (2) are located ten miles southwest of Superior, twenty miles north-east from Florence, and ten miles from Price Station (nearest point) on the Arizona and Eastern Railroad.

ACCESSIBILITY: The wagon roads to these points are good on the desert and are fair only where they enter the mountains. Present hauling distance of 16 miles can be reduced to 10 by the building of a two mile stretch over a low pass between two canyons. This will cost \$1,200.00.

ORE BODY AND MINE WORKINGS: The quartz out-croppings stand high and rugged and are clearly traceable for 3,000 feet the length of the two claims. The out-croppings contain no metal minerals but at a depth of 50 feet twenty-eight tons of solid galena were taken from the south drift in driving 57 feet. This ore assayed 68% lead, 8 ozs. silver and 80 cents in gold. This drift shows much light colored zinc blend along the sides and the face assays: Lead, 217% and Zinc, 7.2%.

The north drift at this level is in 47 ft. and shows a four foot face of mixed galena and zinc blend assaying Lead, 5.6% and Zinc, 13.4%. This ore has maintained its high quality from the start.

At the 90 ft. level a cross-cut has been completed showing the ore body to be 28 ft. in width. The first 13 ft. of this showing assays: Zinc, 4.3% and Lead, 0.4%. This sample was taken before the cross-cut had been completed.

At the 190 ft. level the vein is 15 ft. in width and assays: Zinc, 7.5% and Lead, 0.6%. Fifty ft. in from the mouth of this drift the vein is 15 ft. in width and assays over this width: Zinc, 6.6% and Lead 0.8%. This north from the shaft.

THE AJAX: The south drift on the 190 ft. level is in 48 ft. and shows a four foot face of ore assaying: Zinc 6.6%. This drift is driven in material very much leached.

The single compartment shaft inclined to an angle of 69 degrees from the horizontal, is sunk through the vein and shows the same average values.

The ore developed between the 50 ft. and the 190 ft. levels will average 15 ft. in width and amounts to 20,000 tons. Since the shaft and the 250 ft. of drifting have entered nothing but good concentrating ore

hundred thousand dollars in lead and silver. The Raymurt mine situated about three miles northeast has a long production record dating back many years. It is at present producing at a nice profit. The predominating values being silver. The Blue Crystal mine joining the Ajax is producing a high grade lead and zinc ore. Immediately to the south lies the old Silver Bell Martinez which also has an old production record of lead, silver and zinc ores.

From my preliminary examination I am of the belief that the Ajax being centrally situated in a proven area is well worth the capital outlay necessary to determine its possibilities as a large producing lead and zinc mine.

In conclusion I would like to say that the Ajax property is situated favorably as to transportation facilities. A fair truck road runs from the highway 60 to the property. There is ample water for both milling and domestic purposes. I believe that the large Ajax vein is the main fissure or lode which runs through the country. All indications are that a large tonnage of milling ore may be developed.

I wish to say that this is a very remarkable property. The size of the ore body exposed on the surface and in the shaft and the values contained therein, which most camps find it necessary to sink several hundred feet to obtain; the fact that the ore is of a high sulphide which indicates persistency and great depth; accessibility to transportation and to water; and the fact that the formation requires very little timbering; and accessibility to ample power all add attractiveness to the property. I do not believe that the most exacting engineer could find fault with his opportunity here.

Climatic conditions are ideal. I would advise practical management, of course, and more development work done to definitely establish a tonnage justifiable for the installation of a mill. All main factors give every encouragement toward the making of a mine and I can without reservations recommend the exploration of this property.

Respectfully submitted,

(Signed) L. Lee Boyer

Metallurgical Engineer

C O P Y

SUPERIOR ASSAY OFFICE

Superior, Arizona

December 19, 1942

✓
Mr. Cliff T. Carpenter
1510 E. Thomas Road
Phoenix, Arizona

Dear Mr. Carpenter:

As per your request I hereby submit a brief report on the Ajax mine situated in the Mineral Hill mining district, County of Pinal, State of Arizona.

My preliminary examination was made in 1935. At the time of my visit the shaft was equipped with an old fashioned cornish water pump. This pump was used in dewatering the shaft down to the 90 foot level but was not sufficient to handle the water from that level on to the bottom in the time allotted for my examination. Therefore, I am not familiar with either the physical or geological condition of the shaft from that point throughout the balance of the workings. Nor am I familiar with the early history of the property.

Due to the time in which the shaft refilled from the 90 foot level back to the permanent water level of the shaft (which was around 50 feet from the surface) I am of the opinion that the shaft is making ample water to supply necessary milling requirements.

The geology for the most part overlies an area which consists principally of rhyolite and schist. The Ajax break or vein apparently cuts the rhyolite series which extends from North to South through mineral mountain. I believe that the Ajax vein is a true fissure and by far the largest in the entire district. Most of the smaller veins throughout the area seem to branch off from the main Ajax vein or run into it.

The Ajax vein is the oldest in the district, geologically speaking. The vein is well defined and can be traced through the country for a great distance. The width averages from 8 to 10 feet on the surface and widening mildly as it attains depth. The width at 90 feet is about 31 feet carrying silver, lead and zinc predominating.

Samples taken across the vein from the surface down to the 90 foot level average \$11.12 per ton in silver, lead, zinc and gold. The gold values being of little importance.

The topography of the country is undulating and for the most part rugged. The ridges run mainly in an northerly and southerly direction and rise to a height of 800 to 1000 feet above the desert level. The properties adjacent or surrounding the Ajax have quite some production record. The old Woodpecker mine which lies about a mile North has produced several

and all of the drifts are in good ore, I have estimated the "probable" ore at 10,000 tons, or 30,000 tons in all, immediately available. Up to date \$22,000.00 have been expended upon the property in building roads, purchasing equipment and in the development operation so far extended.

WATER SUPPLY: The mine, at present, is producing about 50,000 gallons of water per 24 hours. With proper conservation, this is an adequate supply for the concentration of the ores.

POSSIBILITIES: I desire to call particular attention to the fact that all of the ore so far developed lies within the leached portion of the vein. The vein shows marked evidence of the extensive removal of metal minerals through the action of weathering agencies. There are many evidences of the former existence of the copper minerals. These are the first to yield to weathering. It is, therefore, certain that the metallic content of the vein will increase with depth. At the line of permanent water level a zone secondarily enriched copper ore may be reasonably expected. Such is the history of the neighboring Magma Mine to which the Ajax presents many points of similarity.

(Signed) R. D. O. Johnson, E. M. 1917

MEMO

AJAX MINE
MINERAL HILL DISTRICT
PINAL COUNTY

Information from "Red" Williams, Field Eng. for Dept. of Mineral Resources,
1-24-63

William Sloan, Chief Engineer for Iron King, (Shattuck Denn Corp.)
has been examining the Ajax Mine south of the Reymert, now under option
to Charles Wingfield and Roy ~~Wassell~~^{WAGGONER} who are now operating the Silver Bell
and Martinez mines in the Martinez District, southeast of the Mineral Hill
area.

Lewis A. Smith - 1-25-63

- 14 -
DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine AJAX - Zn., Pb. Date December 24, 1942
District Mineral Hill Engineer Earl F. Hastings
Subject: Reconstruction Finance Corporation
Preliminary Development Loan

Docket No. C-ND-Phx 116
Date Application Received December 24, 1942
Date of Report December 24, 1942

1. Name and address of applicant (correspondent):
Cliff T. Carpenter, 1510 E. Thomas Road, Phoenix, Arizona.
2. Character of project and estimated cost thereof:
Zinc, lead. Unwater 190 foot shaft and 200 foot (plus) of lateral workings to expose and sample lead-zinc vein. \$3,000.00.
3. Location of property:
T2S, R11E, Sec. 35. Eleven miles NE of Florence, Pinal County, Arizona.
4. Applicant's interest in or ownership of property:
Applicant has 15 year lease from November, 1942 with option to purchase within 5 years. Royalty 5% to \$14 net ore value (net value being calculated after smelting, freight and hauling charges are deducted) and 10% on ore values above \$14.00 F/T.
5. Loan requested:
\$3,000.00.
6. Loan recommended:
\$3,000.00. (See 7 below).
7. Comments:
(A) The Ajax Mine is well situated geographically and geologically, being accessible by truck road from a nearby rail shipping point and located in a prominent mineral bearing district.

(B) The Ajax vein is strong and prominent; its surface continuity is established far beyond the confines of the two claims under consideration. Production has been, and is being, obtained on what is believed to be the extension of this vein and on veins which intersect it.

(C) The Johnson report indicates all work has been done in ore and the Boyer letter confirms this to the 90 foot level, the lowest point Boyer examined. No stoping has been done so all developed ore is still in place. One shipment was made from the 50 foot level drift advance aggregating 28 tons and assaying 68% lead and 8 ounces silver. Some ore has been sorted and shipped from the dumps by unknown parties and in unknown quantities.

(D) The Johnson report indicates an average stoping ore containing 7.5% zinc and 2% lead. Boyer's sampling to the 90 foot level was slightly higher. In verbal communication Boyer stated the silver content to vary from 2 to 6 ounces with an average of approximately 3 ounces.

(E) Based upon the most recent available A.S.&R. Co. settlement sheets, the following returns were calculated. Calculations were predicated upon milling on the premises with a recovery of 85% of the lead-zinc values. While tailings losses would undoubtedly be less than 15%, there would be unpaid lead loss in zinc concentrates and vice versa.

On a 55% zinc concentrate at 85% recovery, after smelter charges and reductions and after freight, the assay value of the raw ore can be calculated on the basis of \$0.0593 per pound of zinc. Smelter pay is \$0.0318 per pound and premium pay is \$0.0275 per pound.

A 69% lead concentrate, calculated on the same basis, would yield \$0.0597 per pound of lead in the assay value of raw ore. Of this the smelter pay is \$0.0322 per pound and the premium pay \$0.0275.

The ore then, at an assay content of 7.5% zinc and 2.0% lead, has a net value of \$9.56 at railroad shipping point. From this must be deducted operating charges, amortization, depreciation and royalty..

The silver distribution and association is unknown, but a minimum of \$1.05 (2 ounces per ton if all in zinc concentrates) and a maximum of \$1.92 (3 ounces per ton if all in lead concentrates) per ton of raw ore can safely be estimated.

The net value of the ore will therefore approach \$11.00 per ton.

(F) The block between the 50 and 190 foot levels contains approximately 1,000 tons per foot of width. The average width cannot be ascertained definitely but appears in excess of 10 feet. Considerable mill tonnage therefore exists and possibilities of rapid addition through development is favorable. On the 190 foot level development would yield a high ratio of stoping area per foot of advance.

(G) It is recommended that this loan be granted for the purpose of making accessible and sampling the workings. It is considered that the amount of the loan requested may be inadequate for the purpose and it is suggested that the loan be approved in a larger amount that funds may be available on request. Lateral workings between the 50 and 190 foot levels are limited, and the 190 foot level must be reached to prove this property.

ARIZONA DEPARTMENT OF MINERAL RESOURCES

Earl F. Hastings, Assistant Director
and Projects Engineer

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine AJAX MINE AND MILL

Date 6/19/63

District MINERAL HILL, PINAL CO.

Engineer LEWIS A. SMITH

Subject: MINE AND MILL VISIT AND CONFERENCES WITH ROY WAUGHTEL AND FRANK ELLIOTT

PROPERTY: 52 claims, some of which are patented.

OWNER: Arizona Silver Inc. (Composed of Roy Waughtel, Frank Elliott, both of Florence Junction, although Elliott now resides at the mill) and Ernie Anderson. Waughtel is President, Elliott is Vice President and Anderson is Secretary-Treasurer. The 52 claims include lease-optioned groups such as Orphan Boy, Ajax, Grandfather, Jumbo, Silver Pick, Woodpecker, Silver Crystal and others.

MINERALS: (a) Silver-lead, (b) Silver-lead-zinc, (c) Copper (potential) and some Gold.

Work: (1) Mill: The mill will be completed upon the arrival of a ball mill, 2 more batteries of Denver flotation cells, a set of rolls and other smaller equipment from the Hillside Mill. The gravity section has been test run. All foundations appear to be in except those for the rolls and ball mill.

(2) Ajax shaft: The Ajax shaft was partly dewatered and a pump installed in it. For the present the Ajax shaft will only be operated for water. The pump is now being connected to a steel storage tank, that is located on the hill above the mill, by a 2-inch pipe line. The tests so far reveal that the shaft will furnish 60 gallons per minute. The shaft is reported to have lateral workings on several levels (see reports in file). A stope is reported north of the shaft, and above the uppermost level (to north from shaft) and a drift along a transverse fault that crosses the dike was the last work done. The 200-foot level is reported to have struck a zone of banded chalcocopyrite-pyrite ore. Some of this is now seen on the shaft dump. A little of this material was treated in the present mill with reportedly good results. This chalcocopyrite-bearing material is reported to be in a series of more or less parallel stringers in the vein (or in the bordering schist laminae). Another pump is also connected to a 4-inch pipe line that would deliver water to the storage tank from two small dirt reservoirs constructed in the canyon below the mill, and also from the mill water recovery system.

(3) The old road, from the Ajax to the Orphan Boy, has been reconditioned for truck haulage and access.

MILL: The Mill Consists of:

- (1) 1000-ton, reinforced concrete head bin with dumping ramp.
- (2) Feeder
- (3) "Alloy Steel" roller-bearing type of jaw crusher (16x34 inches) driven by a 50 H.P. motor. The ~~size of the~~ average discharge will go into a belt-feeder hopper.
- (4) Inclined 12-inch belt conveyers lead to the Tornado impact machine feeder and to the rolls feeder.
- (5) Secondary Crushing:-

(a) Impact machine: This Tornado machine has a peripheral speed of 1750 r.p.m. and 26-inch disc. It can be regulated to produce various sizes of ~~average~~ discharge. Ordinary hammers, so far as now tested, last only 8 hours of continuous running before having to be rebuilt. The ore is siliceous and quite abrasive. Waughtel has obtained some hammers, lined with alloy steel, (from National Castings, Capitol Foundry) that originally were made for George Freeman, at Lakeshore.

According to Waughtel the Lakeshore Tornado is the same size and design as the Ajax machine.

(b) Rolls: The rolls are to be installed next to the impact machine and will be used in preference to it on most ores, the Tornado being used for standby service. The rolls are 16x34 inches and will be driven by a 50 H.P. motor. The rolls product will be $\frac{1}{4}$ -inch in maximum size.

(6) Inclined 12-inch belt conveyer assemblies will deliver the secondary crushed ore to a 2-deck shaking screen assembly that has two sizes (1) $\frac{1}{4}$ -inch and (2) minus 1/10-inch. The coarse screen product down to plus 1/10-inch product will go to the ball mill. The "fines" will go directly to the tables.

(7) Ball Mill: The ball mill will grind the material to 100 mesh and will be in closed-circuit with a classifier. The ball mill product will be sent to a flotation conditioner. The oversize will be returned to the ball mill for regrinding.

(8) Tables: There are 6 - 16-foot Diester tables with rubber riffle decks. The discard, after the concentrate is removed, will be pumped back to the ball mill. The tables are required for the separation of the anglesite, cerussite and wulfenite all three minerals being present in the ore. Some galena will also be separated here. Tests, thus far, indicate that a good extraction of the lead oxidized minerals can be obtained.

(a) Flotation: After conditioning, the 100-mesh product is delivered to 4 batteries (4 cells each) of Denver type flotation cells (two cleaner batteries and two rougher batteries).

(b) Concentrate and Tailings: The flotation concentrate will be filtered and partially dried on a concrete slab at the bottom of the mill. Tailings will be thickened and the recoverable water returned to the mill water supply tank. The tailings will be deposited behind two small earth dams in the canyon below the mill. It is hoped that further water can be recovered from these tailings ponds. These ponds may also impound run-off water from the wash.

Power: Power for the mill and pumps is produced by a combined Murphy Diesel Engine and Generator that produces 175 KW with 220 amperes capacity.

Note: The mill equipment was acquired from the Tungstonia and Hillside mills, near Bagdad and same was rebuilt or improvised at the mill site. Mr. Waughtel does not know, as yet, what minimum ore grade can be hauled in the mill. Such factors as amenability of the ore to treatment, haulage costs, water supply stability, mining costs & etc., will only be known after the operations have been stabilized.

The Ore Supply; As now contemplated most of the mill feed will come from development of the Orphan Boy Mine, supplemented by dump material from the Ajax and other nearby mines. 1000 tons of dump at the Ajax Mine is calculated to run \$12-16 in lead and silver, with some zinc. A 12-foot wide vein at the Orphan Boy, is said to average (as now opened) about \$16-22 in lead-silver values and 4 percent zinc in places. The mining and ore haulage from the Orphan Boy, as now setup, will be handled by R. W. Ferrin, who previously did considerable manganese mining during the Programs. Most of the mining equipment will be Ferrin's, supplemented by Waughtel's. It was indicated that Ferrin will bring in a 500 CuFt compressor, Front loader, cat, trucks and smaller equipment. Much of the mill feed will be obtained, for now, from development work at the Orphan Boy. The truck will haul over a reasonably good, but steep road. Reports in the file show considerable data on the ore in the Ajax on the upper levels. The assays show that there is a considerable vertical variation between the lead and zinc values. The top level predominates in silver-lead values and others in zinc values. Some very good silver-lead ore was reported to have been extracted from a small stope on the top level during the earlier operations.

(The reported copper bearing material from the bottom of the shaft, and some leached capping showings suggest zonal distribution of the ore minerals. However, in some other places in the area the silver-lead mineralization appears to have come in considerably later, suggesting the possibility of two metallagenetic epochs rather than true zonal deposition). The ore lies in a strong quartz vein that appears to generally strike in a northerly direction and to dip about 60 degrees to the westward. The quartz outcrop stands in bold dike-like relief as compared to the inclosing schist country rock. The ore concentration near the shaft may have been influenced by a transverse fracture, that crosses the vein near to the shaft, and which shows evidence of being pre-mineral in age, since it is also mineralized. Time did not permit a close look at the surrounding geology. Certainly a close geological mapping job is in order here.

STATE OF ARIZONA
DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX, ARIZONA



Sept. 10, 1948.

Mr. Werner Rademacher,
Blue Diamond, Nev.

Dear Mr. Rademacher:

In reply to your letter regarding the Ajax Mine, I called your attorney who has just returned to Phoenix, and told him what little I knew in regard to this property. I would be willing to act as a witness insofar as my knowledge of the conditions in your mine go. This, however, is rather limited as I spent only a short time underground, as you no doubt recall, and although I do remember some muck piled in the drift, I could not give any details regarding the mining systems pursued by your lessees.

Many thanks for the offer of the use of your two extra bedrooms in the event that I should come to Las Vegas, but since my vacation is over and my employment does not permit out of state travel it is unlikely that I will be in that neighborhood any time in the near future.

With kindest regards,

Yours very truly,

RICM:mh

Roger I. C. Manning
Field Engineer

Arizona Department of Mines and Mineral Resources

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA

PINAL COUNTY

Ajax Mine

MM 4566 Lead Ore
4567 Lead Ore

MILS 5191A

J-ARAC

Ajax m. no. 101

Blue Diamond, Nev.
August 7, 1948.

Mr. Roger K. C. Manning
Field Engineer, Southern Dist.
Ariz. Dept. of Mineral Resources
Mineral Bldg., State Fair Grounds
Phoenix, Arizona.

Dear Mr. Manning:

I am writing to you in reference to the Ajax Mine which you examined for Bill Allison some time ago. Shortly after I met you, I have been forced, by circumstances beyond my control, to abandon mining operations at the Ajax, and I would like to give you a brief picture of what happened:

Because my partner, John H. Whitlock, of the Whitlock Mining Company, Los Angeles, failed to provide the necessary capital agreed upon in writing, I was forced to make a deal with John P. Starbuck, wherein Starbuck contracted by sub-lease to do the mining, for certain payments to be made each month by him. During the first month Starbuck was on the property with a mining crew headed by Floyd Edmunson, of Phoenix, Arizona, and during this time he not only defaulted on his payments to myself, but wrote letters to the owners of the property, expressing a desire to make some arrangements regarding obtaining the property, if my leases came to an end. He then proceeded to work to that end by leaving the underground workings choked with muck, completely blocking the north drift, as you remember, and constructing a rat's-nest of insecure timbering which the mine inspector would condemn; and finally, he started blasting and gophering on the thirty-five foot level at the shaft, caving in the ceiling of the 50-foot level, and almost wrecking the mine by the time I threw him off the property. In addition, he deliberately covered up the main vein.

As a result I was unable to consummate any other deals with interested parties, and I am now suing Starbuck for damages and default in payments; as among other things, the contract called for him to conduct mining operations in a workmanlike fashion, and in the presence of Edmunson, he had agreed to run a clean drift on the direction of the high-grade vein exposed, for a minimum distance of 100 feet.

The unfortunate aspect of this situation is that I am several thousand dollars in debt in Arizona, because of Whitlock's statements by letter, phone, and wire, that he was sending the necessary money, (which never arrived). The only hope I have of paying up those debts this year is to win this lawsuit, and I am wondering if you would be so kind as to lend a helping hand by your testimony.

The case is set for December 2nd, in Phoenix, and my attorney is Bob Armstrong, of Armstrong & Spector, 905 Title & Trust Building,

Phoenix. I would appreciate it very much if you would get in touch with him, and to let me know if you will help. Starbuck is a new-comer to Arizona, from Chicago, and has since fouled up two mining deals, one near Wickensburg, and one near Apache Junction, leaving unpaid wages and a large unpaid grocery bill at Apache Junction, and subsequently skipping the country. I have reason to believe that he also attempted to smear my reputation with one creditor that I know of, Mr. J. P. Kellar of Western Machinery. His attorneys are Kitchel & Ross, etc. (Ross is now deceased), who had filed a general denial as an answer, and who have succeeded in getting the trial postponed until December.

Since that time, my man John Bartlett, spent considerable time, with the aid of Frank Hack, whom you met at the Ajax, in cleaning out the mine, so it is in a little better shape than when you saw it.

I am at present employed as a project engineer at a large gypsum mine & processing plant operated by Blue Diamond Corporation, 24 miles from Las Vegas, Nevada. I am at present very discouraged, as it will take many years to pay off those debts working for wages, if I cannot get Whitlock to do so.

My wife and I extend our greetings, and inasmuch as the company has furnished us with a large house with two extra bedrooms, we extend a cordial invitation to you and your family to visit us at any time.

Very sincerely yours,

Werner Rademacher

1510 East Thomas Road
Phoenix, Arizona
February 4, 1943

Cyan

Mr. D. M. Rait
Chief, Mining Section, R. F. C.
Washington, D. C.

Ref: Cliff T. Carpenter
Docket No. C.N. D. 8011

H.

Dear Mr. Rait:

By reason of the new schedules, A, B and C, for premium prices on zinc, I herewith request that my application for a preliminary loan be reconsidered.

There is a considerable tonnage of zinc sulphides available which can be successfully treated.

Your favorable decision means more zinc for the war needs.

Very truly yours,

(Signed) Cliff T. Carpenter

CTC-epc

with suggested

April 14, 1943

Mr. Neil C. Clark
Heard Building
Phoenix, Arizona

Dear Neil:

I am enclosing a copy of a report on the Ajax Mine, also an analysis by Earl F. Hastings which was made on the loan application on this property. This analysis is strictly confidential and I hope you will treat it so.

In regard to the Ajax property, I have just talked with Mr. Cliff Carpenter, 1510 East Thomas Road, Phoenix, who has a lease. This lease runs for fifteen years, a price of \$60,000, no cash payments, and performance of sixty shifts per month. The property payments are to be made out of royalties as follows: 5 percent on ores up to and including \$14 in value, 10 percent on ores over \$14 in value.

Cliff Carpenter would turn over his lease on an agreement for you to pay $7\frac{1}{2}$ percent royalty on \$14 ores and $12\frac{1}{2}$ percent royalty on ores over \$14.

I believe the property is worthy of investigation. If you think so, I would suggest that you have Mr. West examine it at an early date. I am sure that Mr. Carpenter would accompany him to the property.

My suggestion for a deal on this property would be to buy the lease from Carpenter at, say, \$1,000 which should be paid after examination has been made and after an RFC loan has been granted. I believe it will cost \$1200 to \$1500 to unwater the property and with the showing of sulphide ores in depth, I believe an RFC loan could be obtained to further develop the property to such an extent that it would warrant the erection of a mill. At this stage I believe RFC money could be made available to put in the mill.

With best wishes and kindest regards, I am

Very truly yours,

J. S. Coupal, Director

JSC:kk
Enclosures



Park Hotel

FRED J. PERRA, MANAGER

GREAT FALLS, MONTANA

RECEIVED
JAN 14 1943
PHOENIX, ARIZ.

Jan 12 1943

Dear Sam,

Was certainly pleased to get your letter. Also had note from Carl Franzen about a mining meeting in Helena on the nineteenth.

Are there any bore meter projects in Arizona, that you know of, that are worth looking into? If you have any dates on such things would appreciate publication.

If your department has any literature or maps prepared would like to look them over.

This town is real busy just now. Have a big "Ferry Command" base here also big bombing school. At night the town is full of soldiers.



Park Hotel

FRED J. PERRA, MANAGER

GREAT FALLS, MONTANA

Looks like the war is going to last a long time. If they can develop Hellen Oil supply in Romania it would help shorten the conflict. Those 'Japs' are going to take some 'wiping' too.

If I can get away would certainly like to take a trip through the S.W. again. It's a long time since I had a look at the section. Mexico might be in pretty good shape after the war is over.

With kindest regards and wishes you the best of everything.

Yours sincerely,

P. H. Wilson

428 Park Hotel.

CHECK SERVICE DESIRED OTHERWISE MESSAGE WILL BE SENT AT FULL RATE	
DOMESTIC	FOREIGN
FULL RATE	FULL RATE
DAY LETTER	CDE RATE
NIGHT LETTER	URGENT
SERIAL	DEFERRED
RESERVATION	NIGHT LETTER
TOUR-RATE	SHIP RADIO

Postal Telegraph

Mackay Radio
Commercial Cables



All America Cables
Canadian Pacific Telegraphs

CHARGE ACCOUNT NUMBER	
CASH NO.	TOLLS
CHECK	
TIME FILED	(STANDARD TIME)

Form 2

Send the following message, subject to the Company's rules, regulations and rates set forth in its tariffs and on file with regulatory authorities

Phoenix, Ariz., February 16, 1943

DAY LETTER

W. C. Broadgate
Hotel Harrington
11th & E Sts., N.W.
Washington, D. C.

Cliff Carpenter application preliminary loan C-ND-Phoenix 116 approved this office rejected Gohrings office. See my memo December 31. Carpenter has written Don Rait asking reconsideration due recent increased premiums. Rejection does not reflect property valuation. Try get reconsideration.

J. S. Coupal

Dept. of Mineral Resources

PHONE 4-2407

128 N. FIRST AVE.

PHOENIX BLUE PRINT CO.

WM. H. AND ELIZABETH ELLIS BECKER
PHOTOSTAT PRINTING — DRAWING MATERIAL — BLUE PRINTERS
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CITY, COUNTY AND STATE MAPS—SECTION AND TOWNSHIP SUBDIVISIONS AND OWNERSHIP PLATS
LOCAL AGENT FOR U. S. G. S. TOPOGRAPHIC MAPS

PHOENIX, ARIZONA, April 19, 1943

M Arizona State Dept. of Mineral Resources OUR INVOICE No. 599

ADDRESS Home Builders Bldg.

DELIVERED TO Camp ORDERED BY Camp YOUR ORDER No. _____

ORIGINALS FURNISHED			PRINTS ORDERED FROM EACH ORIGINAL						SQ. FT. EACH	TOTAL SQ. FT.	PRICE PER SQ. FT.	AMOUNT		
CLOTH TRACINGS	PAPER TRACINGS	NEGATIVES	BLUE PRINTS		NEGATIVES	BLUE LINE PRINTS		BROWN LINE PAPER						BLACK LINE PAPER
			PAPER	CLOTH		PAPER	CLOTH							
<u>1</u>			<u>2</u>									<u>0.25</u>		

*Part
P.P.O.
By WMB*

ORDER RECEIVED _____ WANTED To-day

Friday March 22, 1968

It is rumored that Silver Pick Mines, Inc. Norman Locatis, Pres.
are interested in this property (as per LP)

March 10, 1943

Mr. Cliff T. Carpenter
1510 East Thomas Road
Phoenix, Arizona

Dear Cliff:

I have received the following memorandum from Bill Broadgate in Washington:

"I have your memorandum of March 2nd on the subject Mine (Ajax), and I am informed by the Reconstruction Finance Corporation that they have reports indicating that these ores are of an oxide type with very small sulphide showings.

Unless we had a definite report indicating that the RFC is misinformed the information contained in my prior memorandum stands, as there is not much chance of disposing of oxides or carbonates the way things are at the present moment."

I phoned Lee Boyer and he states that as far down as he examined the property the carbonate ores constituted the major part of the mineral showing even though there are some sulphides present. The showing on the lower level may vary from this, but on the basis of the oxides, it seems as though the property is not favorably considered, due to the fact that there is no market at the present time for the oxide or carbonate ores.

We are trying to enter into some arrangement with the smelters at Copperville and through Metals Reserve whereby a stockpile can be created at that point for oxide ores.

Very truly yours,

J. S. Coupal, Director

JSC:kk

March 2, 1943

MEMORANDUM

SUBJECT: Mine Loan, Ajax Mine
Cliff T. Carpenter
Docket No. Phoenix C-ND-116
Washington C-ND-8011

TO: W. C. Broadgate

FROM: J. S. Coupal

In regard to your memorandum of February 21 on this subject, I looked over the Hastings report and note that there is nothing in it definitely stating that the ore is a sulphide nor is there anything in the report stating that it is an oxide or a carbonate ore.

To the best of my knowledge the ores are sulphides. I have not been on the Ajax Mine myself but have been on the adjoining property which is in the same formation. The ores are sulphides and from Mr. Walter Smith, one of the owners of the property, I am given to understand that the ore vein material is sulphide.

February 19, 1943

MEMORANDUM

SUBJECT: Docket C-ND-8011
Our Docket Number
C-ND-Phoenix 116
Class "C" Loan
Ajax Mine
Cliff T. Carpenter

TO: W. C. Broadgate

FROM: J. S. Coupal

I do not know whether or not there is confusion in the docket numbers but your memorandum was on Docket C-ND-8011 and the docket number on our analyses of preliminary development loan for the Ajax Mine, Cliff C. Carpenter, is C-ND-Phoenix 116.

In reference to your second and third paragraphs,

"The grade of ore and price is not in question."

"Were it sulphide, everything would be OK."

On this particular property the ore is sulphide. From our conversation with the RFC office here in Phoenix, this loan was turned down due to the ore being too low-grade. The premium price on zinc would make this ore over the marginal value, as on a 8.25 cents per pound for zinc with the single premium of 2-3/4 cents, the net value of the ore is estimated at \$11 per ton.

I am enclosing a copy of the analyses which this office submitted to the RFC Mine Loan Division, Phoenix, prepared by Earl F. Hastings.

I believe this property warrants reconsideration and a loan at this time.

C O N F I D E N T I A L

February 19, 1943

MEMORANDUM

SUBJECT: Docket C-ND-8011
Our Docket Number
C-ND-Phoenix 116
Class "C" Loan
Ajax Mine
Cliff T. Carpenter

TO: W. C. Broadgate

FROM: J. S. Coupal

Cliff Carpenter called yesterday and there are engineers representing a Nevada company who have milling equipment available, who are in the field today examining the Ajax Mine with a tentative contract all prepared with Cliff Carpenter.

After examination of the property they may take it over so that our work trying to get this property reconsidered will be wasted, if the new group decide to go ahead.

We felt, after serious discussion, that the Phoenix office had turned this property down for personal reasons rather than from a cold-blooded analysis of the data available. There has been ill feeling on the part of Bill Gohring toward Cliff Carpenter, and whereas I hesitate to state it except in a strictly confidential manner, I believe this personal feeling influenced the rejection of this loan by the RFC office in Phoenix.

Please hold this matter in abeyance until we get a decision as to the signing of a contract which we should have in a few days.

February 19, 1943

MEMORANDUM

SUBJECT: Docket C-ND-8011
Our Docket Number
C-ND-Phoenix 116
Class "C" Loan
Ajax Mine
Cliff T. Carpenter

TO: W. C. Broadgate

FROM: J. S. Coupal

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C O N F I D E N T I A L

February 19, 1943

MEMORANDUM

TO: W. C. Broadgate
FROM: J. S. Coupal

SUBJECT: Docket C-ND-8011
Our Docket Number
C-ND-Phoenix 116
Class "C" Loan
Ajax Mine
Cliff T. Carpenter

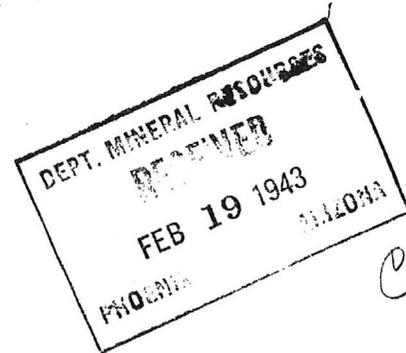
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Please hold this matter in abeyance until we get a decision as to the signing of a contract which we should have in a few days.

Washington, D.C.
Feb. 17, 1943



SUBJECT: Mine Loans
Class C,
Cliff T. Carpenter
Docket C-ND-8011

Dear Sam,

Your wire received and there is an understandable misapprehension about the turndown in this case.

The grade of ore and price is not in question.

Were ~~it~~ sulphide, everything would be OK.

The WPB has decided some time ago, and I talked it over with them in reference to another case last month, that as long as zinc smelters are running full blast on sulphides, they do not want oxides.

Due to the general situation, oxides are a drug on the market and would reduce the grade of the charges, and thus smelter capacity, due to low grade concentrates, etc. Oxide and carbonate ores throughout the country are receiving no encouragement whatever from WPB. Most of them have in the past gone to the paint industry via Coffeyville, which is down, I understand, to one-third capacity because of the difficulty of disposing of the product, paints being cut down for the duration.

The information accompanying the application and the report indicated that recovery of the mineral in this ore will be very difficult in any case. Furthermore, the time between development, mill building, getting into production, and then the possibility of bad recoveries, together with the probability that the smelters might refuse the concentrates does not make the deal attractive to RFC, especially due to the WPB zinc branch policy of not developing oxide and carbonate ores, which they told RFC.

I am giving you this as the overall picture.

If there is evidence that is convincing that there is a substantial body of sulphides to be exposed by the expenditure of the C loan, it will be readily granted. The evidence submitted does not suggest this and they got the impression that Carpenter might want to prospect with the loan to try and turn up some sulphides.

With the above in mind, perhaps you can get together some information which will form the basis for appeal.

Bill Broadgate

H.

January 15, 1943

Mr. R. W. Wilson
428 Park Hotel
Great Falls, Montana

Dear Bob:

I was very glad to get your letter of January 12, and I am sorry to say that our list of mines available was published in March, 1941 and it is now obsolete as a great many changes have occurred.

There is one base metal mine which I would like to call to your attention, namely, the Ajax, and I am enclosing a copy of a report on this property. I am also enclosing a map.

This property is at present under water and it would probably take about \$1,500 to unwater it. I feel confident that when unwatered the size of ore body and the values indicated on the map will be found as represented. These were compiled by Walter Smith who is a Yale '07 miner, a close friend of mine and also a fraternity brother.

Smith has held on to this property for years and I know from some of his work that his judgment is excellent. He is now operating the Reymert Mine which is a few miles away and which has been a long steady producer and has kept him so busy that he is unable to give attention to this property.

One of the men who was looking for a property, Cliff Carpenter, whom I have known for years, has straightened out leases and options on this property and at my suggestion applied for a government loan to unwater. The loan was not granted but I feel sure it was rejected for personal reasons and not on the merit of the property (I say that in strictest confidence).

I believe this property justifies your coming down at your earliest convenience and looking it over, and if the property appeals to you the way it does to me, I feel sure you will be ready to tackle the unwatering and further development and if, and when, sufficient ore is opened up, I believe you could get government aid, if necessary, or private capital to go ahead and put in a 100-ton mill.

October 4, 1942.

Walter Smith,
Vah-Ki Inn,
Coolidge, Arizona.

Dear Mr. Smith:-

I called on Sam Coupal the other day and he stated he had seen you. Upon his suggestion, I went to Gilbert. Allen was working but I talked with his wife. It was very evident why I had not heard from you for she stated that she had received a letter from you but didnot intend to answer.

They are cooking up some deal with his brother-in-law, O'Dell from Winkleman. She stated that a government engineer was due to look at the property (from her conversation I donot think the Ajax Shaft was included.)

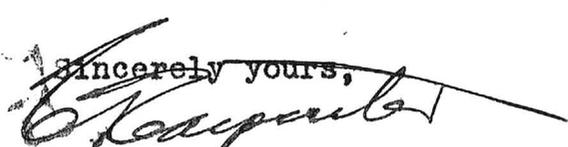
I held a lengthy conversation with her endeavoring to get her to look at this proposition strictly as a business deal whereby if she and her husband would cooperate with me on a basis satisfactory to them and that Mr. Smith would also, that the probabilities are that we could get the property in production and both interested parties would profit thereby.

She promised to write O'Dell and let me know in a few days. I will not wait for her reply but will drive to Gilbert again maybe tomorrow.

I thought you would be interested in having this information.

If there is anything that you would care to write me in confidence that may assist in getting the parties together, I would appreciate hearing from you.

Sincerely yours,


Cliff Carpenter,
1510 E. Thomas Road,
Phoenix, Arizona.

December 31, 1942

MEMORANDUM

SUBJECT: Preliminary Development Loans
"C" Loans

TO: Bill Broadgate

FROM: J. S. Coupal

We recently made a favorable report on a loan application for Cliff Carpenter on the Ajax Mine located between Florence and Superior. The information submitted with the application showed conclusively that there was a sizeable ore body available twelve or more feet in width and running around 7½% zinc, 2% lead, and 2 ounces silver. Analysis showed the ore would net around \$11 if concentrated on the premises. We recommended very favorably that a loan be granted to unwater it.

The RFC office here in Phoenix turned the application down. Bill Gohring, in commenting on it, stated that his conception of the "C" loans was that the mine should show shipping ore on examination after unwatering and that on this basis he felt as though this particular loan should be refused.

This is far from my conception of the aims and objects of the "C" loan. Undoubtedly, any properties can be unwatered and show a sizeable tonnage of ore which if milled would show a profit and a substantial production.

I do not want to get Bill Gohring in wrong on this, so I am passing this information along to you hoping that you may be able to put it across with some of the RFC loan men and find out whether or not this type of instruction is being given to the officials. If it is not, I believe some steps should be taken to have the examining engineer notified of just what the requirements of a "C" loan should be. This same type of restriction seems to be permeating the whole system particularly on the access roads, and undoubtedly, it will reach into all other branches so that it may absolutely nullify most of our good work accomplished to date.

P. S. Bill Gohring has been very cooperative with us in all of this work. For this reason I am only citing this as a general instance and hope that you will take extreme care to see that it doesn't bounce back on us as a complaint on Bill Gohring. The principle is the only question involved and I do hope that Gohring's name will be brought into the case at all.

October 5, 1942

Mr. Walter Smith
Vahki Inn
Coolidge, Arizona

Dear Mr. Smith:

We are preparing some data for the Army
Navy Munitions Board and would like to submit
information on your Ajax Mine. Will you please
fill out and return the enclosed Mine Owner's
Report form at your earliest convenience?

Yours very truly,

Earl F. Hastings
Assistant Director
and Projects Engineer

EFH:LP
Enc.

August 28, 1942

Mr. Walter Smith
Vahki Inn
Coolidge, Arizona

Dear Walter:

I asked Cliff Carpenter to contact you regarding the Ajax Mine. Carpenter is a capable operator and I would like to see him in position to get an accessibility loan on a good property and then follow through with a "B" loan or possibly a general mining loan for installing the proper mill if developments warrant.

Carpenter has written you for an appointment so that he may look over the Ajax property with you. I will appreciate your advising Carpenter and hope that we may get him into the producing ranks again. As stated, he is a good operator and I believe we can be of great assistance to him if you can sell him the idea and agree to a lease and option under which he can apply for the necessary "B" or "G" loans.

With best wishes, I am

Yours very truly,

J. S. Coupal, Director

JSC:LP

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

MA-47

Date October 15, 1942

1. Mine Ajax
2. Mining District & County Mineral Hill-District,
Pinal County
3. Former name Ajax
4. Location T.2S,R11E. 11 miles N.E. of
Florence, 7 miles S.W. Superior.
Reached by Sunset Mine Road, Junction
4 miles E. of Florence Junction.
5. Owner Thomas Fraser Estate, F. M. Allen
Estate; Walter C. Smith
6. Address (Owner) Walter C. Smith,
Coolidge, Arizona.
7. Operator None
8. Address (Operator)
9. President
10. Gen. Mgr. None
11. Mine Supt. None
12. Mill Supt. None
13. Principal Metals Lead, zinc, copper, silver,
gold.
14. Men Employed None
15. Production Rate
16. Mill: Type & Cap. None
17. Power: Amt. & Type
18. Operations: Present None
19. Operations Planned Attempting to interest an operator.
20. Number Claims, Title, etc. Three claims. Fraser Estate and Smith, one-half interest in
two claims; Allen Estate, one-half interest in two claims; Smith, full interest
in three claims.
21. Description: Topography & Geography Three patented claims near head of Cottonwood
wash in T.2S.,R.11E, G&SR B&M, rugged topography, elevation late.
22. Mine Workings: Amt. & Condition Water below 50 foot level. 190 foot inclined
shaft. One 200 foot drifting and crosscutting. 200 foot adit.

23. Geology & Mineralization Pressure vein (siliceous gangue) country rock schist. Faulting generally E-W. Minerals in sulphides, galena and zinc blend. Some chalcopryrite. Outcropping very similar to that on reymert mine $1\frac{1}{4}$ miles north.
24. Ore: Positive & Probable, Ore Dumps, Tailings R.D.O. Johnson report states 10,000 tons positive, 20,000 probable (lead-zinc).
- 24.A Vein Width, Length, Value, etc. Vein on shaft bottom, approximately 20 feet wide; on 50 foot level, 6 feet wide. Johnson figured value at \$6.00 per ton after treatment with lead and zinc around 6¢ to 8¢.
25. Mine, Mill Equipment & Flow Sheet
26. Road Conditions, Route Fair to within $\frac{1}{4}$ mile of mine. Maximum 6% grade gravel road. Last $\frac{1}{4}$ mile from Pacific Lead (Selman Lead) Mine in creek bottom obstructed by water falls (Rock Reef).
27. Water Supply Good. 50,000 gallons per day in shaft.
28. Brief History Operated in or about 1915 by Johnson who estimated 10,000 tons positive and 10,000 tons probable lead, zinc ore. Later in 1926 leased by Wallace Brothers who were driven out by court action so pseudo owner could collect \$100,000 instead of \$65,000. Inaction since then.
29. Special Problems, Reports Filed
30. Remarks
31. If property for sale: Price, terms and address to negotiate. Property is for sale or lease. Difficulty in setting price due to differences in owners' ideas (too many heirs). Last price, on time, nothing down, \$45,000.00 on royalty basis (10%).
32. Signed.....Walter C. Smith.....
33. Use additional sheets if necessary.

DEPT. MINERAL RESOURCES
RECEIVED
OCT 20 1942
PHOENIX, ARIZONA

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNER'S REPORT

Date OCTOBER 15, 1942

1. Mine AJAX
3. Mining District & County MINERAL HILL DIST.
PINAL COUNTY
4. Former name AJAX
5. Owner THOS. FRASER ESTATE
 F. ALLEN ESTATE
WALTER C. SMITH
6. Address (Owner) WALTER C. SMITH
COOLIDGE, ARIZ.
7. Operator NONE
8. Address (Operator) _____
9. President, Owing Co. _____
- 9A. President, Operating Co. _____
10. Gen. Mgr. NONE
14. Principal Minerals LEAD, ZINC, COPPER
SILVER, GOLD
11. Mine Supt. "
12. Mill Supt. "
13. Men Employed "
15. Production Rate _____
16. Mill: Type & Cap. NONE
17. Power: Amt. & Type _____
18. Operations: Present NONE

19. Operations: Planned ATTEMPTING TO
INTEREST AN OPERATOR

20. Number Claims, Title, etc. THREE CLAIMS.

- FRASER ESTATE $\frac{1}{2}$ INT. IN TWO CLAIMS
SMITH
- ALLEN ESTATE - $\frac{1}{2}$ INT. IN TWO CLAIMS
SMITH - FULL INTEREST IN THIRD CLAIM

21. Description: Topography & Geography THREE PATENTED CLAIMS NEAR HEAD OF
COTTONWOOD WASH IN T.L.S., R. 11 E, G. & S. B. & M. RUGGED TOPOGRAPHY, ELEVATION
LATE

22. Mine Workings: Amt. & Condition - WATER BELOW 70 FOOT LEVEL

{ 190 FOOT INCLINED SHAFT
± 200 FEET DRIFTING + CROSS CUTTING

200 FOOT ADIT

(over)

DEPARTMENT OF MINERAL RESOURCES

State of Arizona

MINE OWNER'S REPORT

3-29-48

Date 3/29/48

1. Mine: Ajax

2. Location: Sec. Twp 25 Range 11 E Nearest Town Superior

Distance 8 mi Direction Road Condition Good

3. Mining District & County:

4. Former Name of Mine:

5. Owner: F.M. Allen Estate & Walter C. Smith

Address: Smith's address is Coolidge, Arizona

6. Operator: John H. Whitlock & Werner R. Rademacher

Address: Box 585, Superior

7. Principal Minerals: Lead, Zinc & Silver

8. Number of Claims: 20 Lode Placer

Patented 3 Unpatented 17

9. Type of Surrounding Terrain:

10. Geology & Mineralization:

11. Dimension & Value of Ore Body:

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

Ore Probable:
.....
.....

13. Mine Workings—Amount and Condition:

No.	Feet	Condition
Shafts..... 1	200	1/2 Camp 69° Good
Raises..... 0		
Tunnels Drifts..... 1	250'	Good
Crosscuts..... 1	28	90' level
Stopes..... 0		

14. Water Supply: plenty in shaft claimed 50,000 gal per day.

15. ~~Brief History~~ Remarks:
Has merit. Still in prospect stage. Recommend driving west on 90' level to intersection at crossissue about 150'.

16. Signature: visited by Manning

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

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

Date July 26, 1948

1. Mine: Ajax
2. Location: Sec. 35 Twp. 25 Range 11 E Nearest Town Superior
Distance..... Direction..... Road Condition F.G.R.
3. Mining District & County: Mineral Hill - Pinal County
4. Former Name of Mine:
5. Owner: Walter C. Smith, Co. Ledge; F.M. Allen, Gilbert; Aloba Stewart
Address: Mr. & Mrs. Helen Clark, Agent, G. O'Dell, 93 W. Willetta, Phoenix
6. Operator: W. R. Rademaker (RADEMACHER)
Address: Superior, Ariz.
7. Principal Minerals: Pb, Ag, Zn
8. Number of Claims: ~~18~~ 19 Lode L Placer.....
Patented 3 Unpatented 16
9. Type of Surrounding Terrain: Pough.
10. Geology & Mineralization: Vein strikes N 12° W D 69° SW
Country rock schist vein is fissure (siliceous gangue) 10' wide on 90' level.
11. Dimension & Value of Ore Body: 10' wide exposed 60' on
90' level 6' wide 100' long on 50' level.
reported to be 20' wide on 120' level.
Pb 5 1/2% Zn 7% on 90' level.

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

Ore Probable:

13. Mine Workings—Amount and Condition:

No.	Feet	Condition
Shafts 2	200 x 300	Open for examination
Raises		
Tunnels		
Crosscuts		
Stopes		

14. Water Supply:

15. ~~Brief History~~

Property now includes Blue Crystal mine

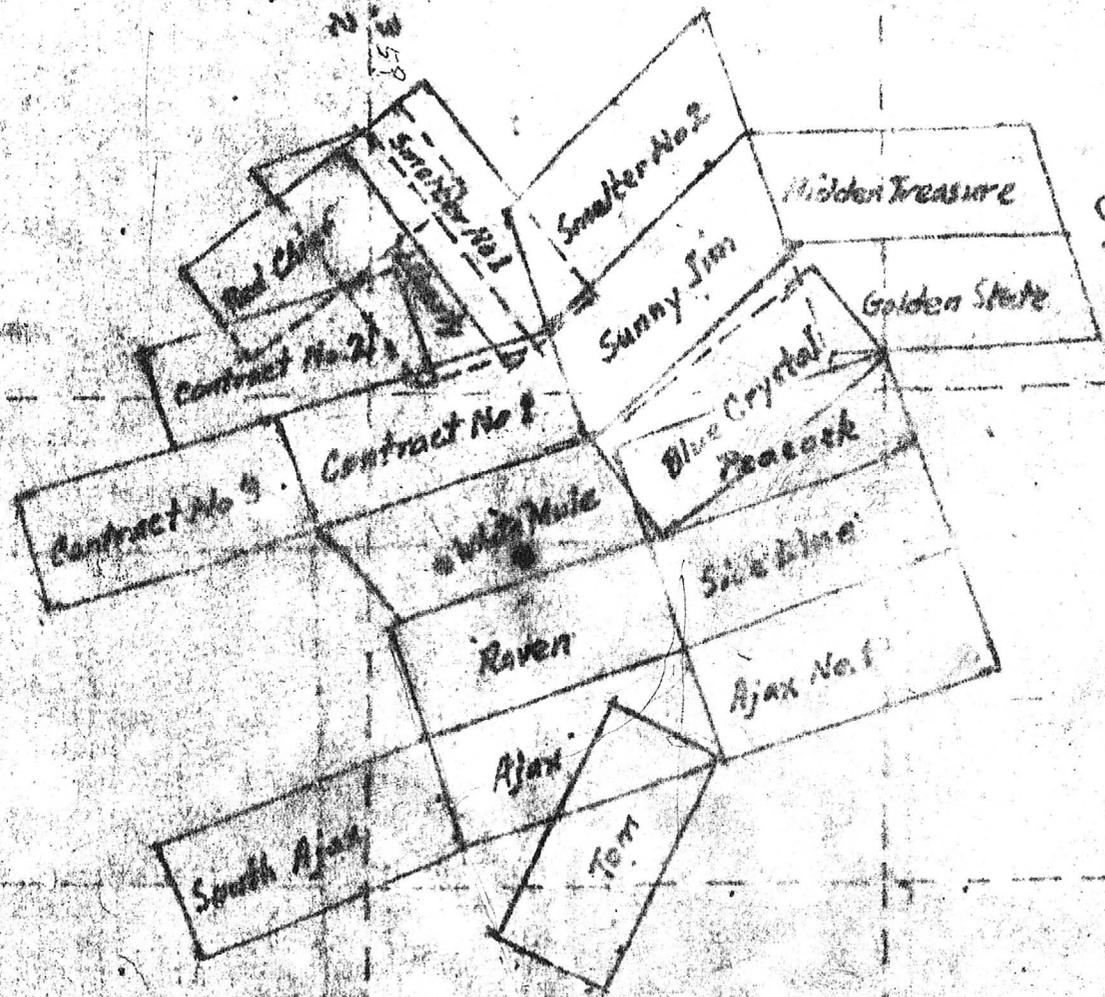
16. Signature:

17. If Property for Sale, List Approximate Price and Terms: Have 8 yrs. remaining on lease & option to purchase. Want to sell.

T. 25. RNE
T. 35
112

Sec. 359
Sec. 2

U.S. Mineral Monument



Ajax + Blue Crystal

Magnum King Manganese Mining Co.

Ajax-Blue Crystal Mine

Joe Walton, Ajax Group AMY

from LAS
5/65

DEPT. MINERAL RESOURCES
RECEIVED
OCT 20 1942
PHOENIX, ARIZONA

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNER'S REPORT

Date

OCTOBER 17, 1942

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3. Mining District & County MINERAL HILL DIST.
PINAL COUNTY
4. Former name AJAX
5. Owner THOS. FRASER ESTATE
 FM ALLEN ESTATE
 WALTER C. SMITH
7. Operator NONE
9. President, Owing Co. _____
10. Gen. Mgr. NONE
11. Mine Supt. "
12. Mill Supt. "
13. Men Employed "
18. Operations: Present NONE
2. Location T. 25. R. 11 E. 11 MILES NE OF
FLORENCE, 7 MILES SW SUPERIOR. REACHED E
SUNSET MINE ROAD, JCT. 4 MI. E. OF FLORENCE
JCT.
6. Address (Owner) WALTER C. SMITH
COOLIDGE, ARIZ.
8. Address (Operator) _____
- 9A. President, Operating Co. _____
14. Principal Minerals LEAD, ZINC, COPPER
 SILVER, GOLD
15. Production Rate _____
16. Mill: Type & Cap. NONE
17. Power: Amt. & Type _____

19. Operations: Planned ATTEMPTING TO
INTEREST AN OPERATOR

20. Number Claims, Title, etc. THREE CLAIMS.

- FRASER ESTATE } 1/2 INT. IN TWO CLAIMS
 SMITH
- ALLEN ESTATE - 1/2 INT. IN TWO CLAIMS
 SMITH - FULL INTEREST IN THIRD CLAIM

21. Description: Topography & Geography THREE PATENTED CLAIMS NEAR HEAD OF
COTTONWOOD WASH IN T. 25., R. 11 E., G. 4 SR B. 4 M., RUGGED TOPOGRAPHY, ELEVATION
LATE

22. Mine Workings: Amt. & Condition WATER BELOW 70 FOOT LEVEL

{ 190 FOOT INCLINED SHAFT
± 200 FEET DRIFTING + CROSS CUTTING

200 FOOT ADIT

(over)

Use additional sheets if necessary.

23. Geology & Mineralization

FLORE VEIN (SILICEOUS LANGUE) COUNTRY
ROCK SCHIST. FAULTING GENERALLY E-W. MINERALS IN
SULPHIDES GALENA AND ZINC BLENDE. SOME CHALCOPYRITE. OUTCROPPING
VERY SIMILAR TO THAT ON REYMERT MINE 1/4 MI. NORTH.

24. Ore: Positive & Probable, Ore Dumps, Tailings R.D.O. JOHNSON REPORT STATES 10000 TONS
POSITIVE, 20000 TONS PROBABLE (LEAD-ZINC)

24A. Dimensions and Value of Ore body VEIN ON SHAFT BOTTOM, APPR. 20' WIDE; ON
JO FT. LEVEL + 6 FT. WIDE. JOHNSON FIGURED VALUE AT \$6.00/TON AFTER
TREATMENT WITH Pb AND ZINC AROUND 6% TO 8%.

25. Mine, Mill Equipment & Flow-Sheet

26. Road Conditions, Route FAIR TO WITHIN 1/4 MILE OF MINE. MAX. 6% GRADE
GRAVEL ROAD. LAST 1/4 MILE FROM PACIFIC LEAD (SELMAN LEAD) MINE IN CREEK
BOTTOM - OBSTRUCTED BY WATER FALLS (ROCK REEF)

27. Water Supply GOOD - ± 10000 GALLON/DAY IN SHAFT

28. Brief History OPERATED ON OR ABOUT 1915 BY JOHNSON WHO ESTIMATED
10000 TONS POSITIVE AND 20000 TONS PROBABLE LEAD, ZINC ORE. LATER IN 1926
LEASED BY WALLACE BROS. WHO WERE DRIVEN OUT BY COURT ACTION SO PSEUDO OWNER
COULD COLLECT \$100,000 INSTEAD OF \$65,000. IN ACTION SINCE THEN.

29. Special Problems, Reports Filed

30. Remarks

31. If property for sale: Price, terms and address to negotiate. PROPERTY IS FOR SALE ~~OR LEASE~~ DIFFICULTY IN
SETTING PRICE DUE TO DIFFERENCES IN OWNERS' IDEAS. (TOO MANY HEIRS)
LAST PRICE ON TIME - NOTHING DOWN - \$75,000.00 ON ROYALTY BASIS - (10%)

32. Signature *Walter Smith*

33. Use additional sheets if necessary.

DEPARTMENT OF MINERAL RESOURCES

State of Arizona

MINE OWNER'S REPORT

3-29-48

Date 3/29/48

1. Mine: Ajax

2. Location: Sec Twp 25 Range 11 E Nearest Town Superior

Distance 8 mi Direction Road Condition Good

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5. Owner: F.M. Allen Estate & Walter C. Smith

Address: Smith's address is Coolidge, Arizona

6. Operator: John H. Whitlock & Werner R. Rademacher

Address: Box 585, Superior

7. Principal Minerals: Lead, Zinc & Silver

8. Number of Claims: 20 Lode Placer

Patented 3 Unpatented 17

9. Type of Surrounding Terrain:

10. Geology & Mineralization:

11. Dimension & Value of Ore Body:

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

Ore Probable:
.....
.....

13. Mine Workings—Amount and Condition:

No.	Feet	Condition
Shafts. 2	200 & 302	Open for examination
Raises.....		
Tunnels.....		
Crosscuts.....		
Stopes.....		

14. Water Supply:
.....
.....

15. ~~Brief History~~:

Property now includes Blue Crystal mine

16. Signature:
.....

17. If Property for Sale, List Approximate Price and Terms: Have 8 yrs. remaining on lease & option to purchase. Want to sell.

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

Date July 26, 1948

1. Mine: Ajax
2. Location: Sec. 35 Twp. 25 Range 11 E Nearest Town Superior
Distance..... Direction..... Road Condition F.G.R.
3. Mining District & County: Mineral Hill - Pinal County
4. Former Name of Mine:.....
5. Owner: Walter C. Smith, Coolidge; F.M. Allen, Gilbert; Alaba Stewart
Address: Mr. Mrs. Helen Clark, Agent, G. O'Dell, 93 W. Willetta, Phoenix
6. Operator: W. R. Rademaker (RADEMACHER)
Address: Superior, Ariz.
7. Principal Minerals: Pb, Ag, Zn
8. Number of Claims: ~~18~~ 19 Lode L Placer.....
Patented 3 Unpatented 16
9. Type of Surrounding Terrain: Pough.
10. Geology & Mineralization: Vein strikes $N 12^{\circ} W D 69^{\circ} SW$
Country rock schist vein is fissure (siliceous gangue) 10' wide on 90' level.
11. Dimension & Value of Ore Body: 10' wide exposed 60' on
90' level. 6' wide 100' long on 50' level.
reported tube 20' wide on 180' level.
Pb $5\frac{1}{2}\%$ Zn 7%. on 90' level.

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

Ore Probable:

13. Mine Workings—Amount and Condition:

No.	Feet	Condition
Shafts..... 1	200	1/2 Comp 69° Good
Raises..... 0		
Tunnels Drifts..... 1	250'	Good.
Crosscuts..... 1	28	90' level
Stopes..... 0		

14. Water Supply: plenty in shaft claimed 50,000 gal. per day.

15. ~~Brief History~~ Remarks.

Has merit. Still in prospect stage. Recommend driving west on 90' level to intersection at crossissue about 150'.

16. Signature: visited by Manning

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

23. Geology & Mineralization Pressure vein (siliceous gangue) country rock schist. Faulting generally E-W. Minerals in sulphides, galena and zinc blend. Some chalcopyrite. Outcropping very similar to that on reymert mine 1 1/4 miles north.

24. Ore: Positive & Probable, Ore Dumps, Tailings R.D.O. Johnson report states 10,000 tons positive, 20,000 probable (lead-zinc).

24-A Vein Width, Length, Value, etc. Vein on shaft bottom, approximately 20 feet wide; on 50 foot level, 6 feet wide. Johnson figured value at \$6.00 per ton after treatment with lead and zinc around 6¢ to 8¢.

25. Mine, Mill Equipment & Flow Sheet

26. Road Conditions, Route Fair to within 1/4 mile of mine. Maximum 6% grade gravel road. Last 1/4 mile from Pacific Lead (Selman Lead) Mine in creek bottom obstructed by water falls (Rock Reef).

27. Water Supply Good. 50,000 gallons per day in shaft.

28. Brief History Operated in or about 1915 by Johnson who estimated 10,000 tons positive and 10,000 tons probable lead, zinc ore. Later in 1926 leased by Wallace Brothers who were driven out by court action so pseudo owner could collect \$100,000 instead of \$65,000. Inaction since then.

29. Special Problems, Reports Filed

30. Remarks

31. If property for sale: Price, terms and address to negotiate. Property is for sale or lease. Difficulty in setting price due to differences in owners' ideas (too many heirs). Last price, on time, nothing down, \$45,000.00 on royalty basis (10%).

32. Signed..... Walter C. Smith.....

33. Use additional sheets if necessary.

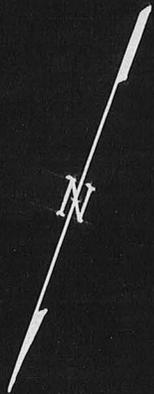
DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

MA-47

Date October 15, 1942

1. Mine Ajax
2. Mining District & County Mineral Hill District,
Pinal County
3. Former name Ajax
4. Location T.2S,R.11E. 11 miles N.E. of
Florence, 7 miles S.W. Superior.
Reached by Sunset Mine Road, Junction
4 miles E. of Florence Junction.
5. Owner Thomas Fraser Estate, F. M. Allen
Estate, Walter C. Smith
6. Address (Owner) Walter C. Smith,
Coolidge, Arizona.
7. Operator None
8. Address (Operator)
9. President
10. Gen. Mgr. None
11. Mine Supt. None
12. Mill Supt. None
13. Principal Metals Lead, zinc, copper, silver,
gold.
14. Men Employed None
15. Production Rate
16. Mill: Type & Cap. None
17. Power: Amt. & Type
18. Operations: Present None
19. Operations Planned Attempting to interest an operator.
20. Number Claims, Title, etc. Three claims. Fraser Estate and Smith, one-half interest in
two claims; Allen Estate, one-half interest in two claims; Smith, full interest
in three claims.
21. Description: Topography & Geography Three patented claims near head of Cottonwood
wash in T.2S.,R.11E, G&SR B&M, rugged topography, elevation late.
22. Mine Workings: Amt. & Condition Water below 50 foot level. 190 foot inclined
shaft. One 200 foot drifting and crosscutting. 200 foot adit.

69° - 4x5 Shaft on Ajax Claim
 Mineral Survey No. 3949
 Arizona Land District



4' Face
 Ave. Assay Zn. 13.4
 Pb. 5.6

4' Face
 Ave. Assay Zn. 7.2
 Pb. 2.7

57'

28' Cross Cut - width vein
 Ave Assay - 13' Zn. 4.3
 Pb. 0.4

90' L.

47'

Note:
 Approx. 250' Drifting
 All in ore with total Ave
 Content of Zn. 7.5
 Pb. 2.0

Compiled from Report of
 R. D. O. Johnson

Scale $\frac{1}{4}$ " = 8'

15' X Cut.
 Ave. Assays. Zn. 7.5
 Pb. 0.6

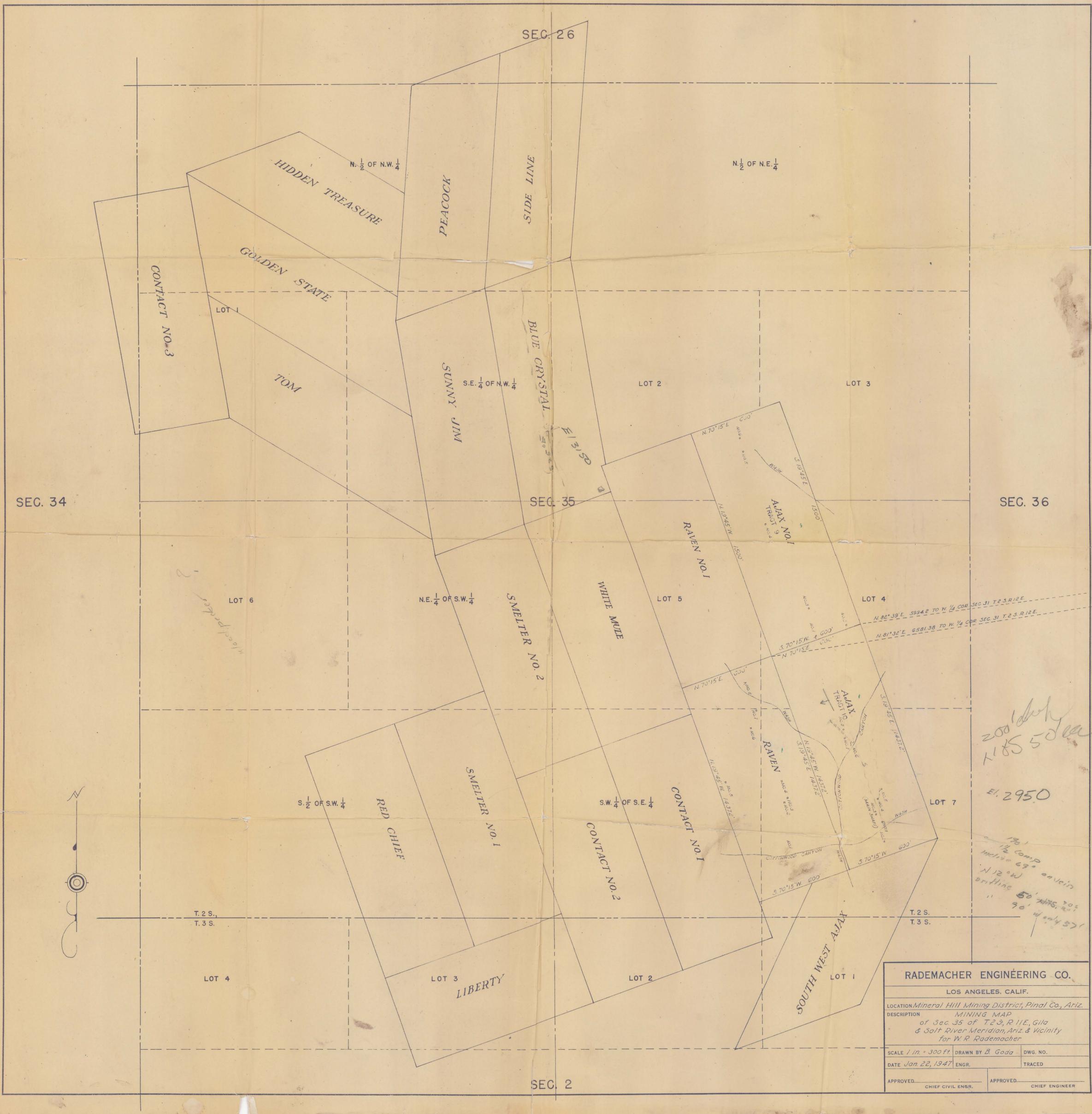
4' Face
 Ave. Assay Zn. 6.6

48'

190' L.

15' X Cut
 Ave Assays Zn. 6.6
 Pb. 0.8

50'



200' deep
 1855' dia
 El. 2950
 1/2 Comp
 incline 69° incline
 N 12° W
 drilling 50' H.S. 205
 " 90' W only 57'

RADEMACHER ENGINEERING CO.		
LOS ANGELES, CALIF.		
LOCATION Mineral Hill Mining District, Pinal Co., Ariz.		
DESCRIPTION MINING MAP of Sec. 35 of T.2S., R.11E., Gila & Salt River Meridian, Ariz. & Vicinity for W. R. Rademacher		
SCALE 1 in. = 300 ft.	DRAWN BY B. Goda	DWG. NO.
DATE Jan. 22, 1947	ENGR.	TRACED
APPROVED	CHIEF CIVIL ENGR.	APPROVED
		CHIEF ENGINEER