UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

224 New Customhouse
Denver 2, Colorado

January 15, 1952

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, DMEA, Region IV

Subject: Final Report, DMA Docket 2124, Sunrise Mining Company, Clown Lead-Zinc Mine, Santa Cruz County, Arizona

Enclosed herewith are the original and two copies of the Final Report on the subject docket.

The application is for Government assistance in exploration work estimated to cost $68,000 and involved the construction of surface facilities and an unspecified amount of drifting along contacts and to extend existing drifts.

The principal workings are 4 shafts and about 1500 feet of lateral workings. The lateral workings have been driven from the shafts as well as adits from the surface.

Many limestone and shales of Paleozoic age have been intruded by monzonite sills that generally follow the bedding of the sedimentary rocks.

Ore mineralization occurs as widely scattered lenses and is confined to the fault zones at the sill-limestone contacts and in the sediments.

The mine contains little or no measured ore.

A study of indicated and inferred ore reserves indicates that the ore is too low in grade to be of economic significance.

Conclusions of the examining team were that chances of

developing deposits of economic ore at greater depth are unfavorable, therefore they recommend that the application for Government assistance in exploration work be denied, with which we concur.

The brochure is also enclosed.

for W. H. King
J. R. East, Jr.

A. H. Koschmann
L. R. Bachman

Enclosures

JWTroe

cc: WRStorms w/copy of Final Report
CAAnderson " " " "
Mining Div. " " " "
AHKoschmann " " " "
DMA Final Report

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

January 15, 1952

Memorandum

To: DMA Field Team, Region IV

From: Acting Chief, Mining Division, Region IV

Subject: Final Report, DMA Docket 2124, Sunrise Mining Co., Glove Lead-Zinc Mine, Santa Cruz County, Arizona

Enclosed herewith are the original and seven copies of the section on Summary, Conclusions and Recommendations by the Geological Survey and Bureau of Mines examining team, and the Engineering Section by the Bureau of Mines.

The brochure is also enclosed.

It has been recommended that the application be denied.

W. H. King

W. H. King

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

200 New Customhouse
Denver 2, Colorado

January 2, 1952

Memorandum

To: DMA Field Team, Region IV

From: A. H. Koschmann

Subject: DMA Docket 2124, Glove Mine (Lead-Zinc), Sunrise Mining Company, Santa Cruz County, Arizona

Enclosed are the original and 7 copies of the geologic report by J. N. Faick and J. A. MacKallor of the U. S. Geological Survey covering the above docket.

It has been recommended that the loan be denied.

A. H. Koschmann
A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (8)

Arizona-New Mexico Branch
SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

TUCSON, ARIZONA

MINING DIVISION
REGION IV

December 10, 1951

Memorandum

To : Paul T. Allsman, Denver, Colorado

From : Chief, Arizona-New Mexico Br., Mining Division, Region IV

Subject: Final Report, DMA Docket 2124, Sunrise Mining Co's. Glove Lead-Zinc Mine, Santa Cruz County, Ariz.

Enclosed are original and 7 copies of the section on Summary, Conclusions and Recommendations by J. N. Faick of the Geological Survey and T. M. Romslo of the Bureau of Mines, and the section on Engineering by Romslo for the above report.

This report has my approval.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

CC: P.T. Allsman (7)
C.A. Anderson
DMA-2124
DF

W.R.K.

Mining Division
Date Rec'd.
DEC 13 1951
BUREAU OF MINES
Denver, Colorado

JME

FOR VICTORY
BUY
UNITED STATES SAVINGS BONDS AND STAMPS

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P.O.Box 4126, University Station
Tucson, Arizona

December 26, 1951

Memorandum

To: Field Team, Region IV, Denver, Colorado
Through: Mr. A. H. Koschmann

From: Mr. A. F. Shride, Tucson, Arizona

Subject: Geologic Report, DMA 2124, Glove Mine (Lead-Zinc), Sunrise Mining Company, Santa Cruz County, Arizona

The original and 7 copies of the above geologic report by J. N. Faick and J. A. MacKallor of the Geological Survey are enclosed.

This report and the conclusions that an exploration loan be denied for lack of geologic probability of significant discoveries of lead-zinc have my approval.

A. F. Shride

A. F. Shride
Acting District Supervisor
Arizona-New Mexico

Enclosures 8

RECEIVED
DEC 1951
Atomic Energy Commission
Boston Branch

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMA-2124 - Sunrise Mining Company's Glove Lead-Zinc Mine Santa Cruz County, Ariz.

J. M. Faick, Geologist
U. S. Geological Survey

T. M. Rennie, Mining Engineer
U. S. Bureau of Mines

December 1951

ala

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By J. N. Faick[1] and T. M. Fomslo[2]

The Glove lead-zinc mine, Santa Cruz County, Ariz. was examined in connection with an application by the Sunrise Mining Co. for Governmental aid on a proposed exploratory project. The examination was made by the Defense Minerals Administration, under docket DMA-2124, as part of a program authorized by the Defense Production Act of 1950.

The Sunrise Mining Co. proposed an exploratory project that was designed to develop reserves of lead-zinc ore. The project involved the driving of lateral headings from existing underground workings. Estimates prepared by the applicant indicated the project could be completed in one year at a cost of $68,350.

The Glove mine has a recorded production of 683 tons of ore of which 612 tons contained an average of about 26 percent lead, 15.5 percent zinc, and 7.5 ounces of silver a ton. The remaining production, 71 tons, contained 32 percent lead, and about 6 ounces of silver a ton. Total production was probably not over 1,000 tons. The ore was largely of the oxidized type and was shipped for its lead and silver values.

At the mine, steeply dipping limestone and shale beds are cut by sills of quartz monzonite. The sills generally follow the beds, and their contacts with the sedimentary rocks are delineated by faults. Faults also occur in the sediments where they follow the strike of the bedding. The dip of these faults is the same or slightly steeper than the dip of the sediments.

1/ Geologist, U. S. Geological Survey.
2/ Mining Engineer, U. S. Bureau of Mines.

The deposits that were originally worked from the surface, were marked by outcrops of manganese and iron oxides and a small amount of copper carbonate. These deposits, and zones of ore mineralization in the mine workings are present at widely scattered places in the fault zones. The ores were largely oxidized to a depth of about 100 feet from the surface. Ore that is mainly of the sulfide type, galena and sphalerite, is presently exposed at this depth on the 23-foot level of the west-adit workings and in a drift from the east adits. It occurs as lenses that range in thickness from 1 inch to 3 feet, and average less than 1 foot. The most extensively mineralized zone, now essentially worked out, yielded several hundred tons of ore.

The mine has been developed by 4 shafts and about 1,500 feet of lateral workings. At present, a contractor is engaged in driving 2 exploratory headings and also is sinking a winze on sulfide ore.

There is little or no measurable ore in the 4 widely scattered deposits exposed on the property. These deposits have a total of 2,200 tons of indicated ore, containing 3.6 percent lead, 10.3 percent zinc, and 0.8 ounces of silver a ton. Inferred reserves above the adit levels are estimated at 800 tons of ore containing 21 percent lead, 18 percent zinc, and 4 ounces of silver a ton. The inferred reserves below the adit levels are estimated at 30 to 40 tons of ore per foot of depth.

About 2,000 of the 2,200 tons of indicated reserves are present as oxides that are not readily amenable to concentration. This ore would have to be shipped to a smelter. It does not constitute economic ore because the base smelting charge plus freight and royalty would

exceed the value of the ore. Estimates also show that the remaining indicated reserves and the inferred reserves could not be exploited at a profit. This ore, part oxide and part sulfide, would have a market value of $70 to $75 a ton. It would yield smelter payments of about $40 a ton, an amount insufficient to defray the estimated development and mining costs of about $70 a ton.

It is recommended that the requested exploratory loan be denied because the chances of developing deposits of economic ore are unfavorable.

THE SUNRISE MINING COMPANY
GLOVE LEAD-ZINC MINE
SANTA CRUZ COUNTY, ARIZONA
IMA 2124

Geology

By
John N. Faick
and
Jules A. MacKallor
Geologists, U. S. Geological Survey

THE SUNRISE MINING COMPANY
GLOVE LEAD-ZINC MINE
SANTA CRUZ COUNTY, ARIZONA
IMA 212½

CONTENTS

	Page
Introduction	1
General Geology	1
Ore Deposits	3
Development, Production and Exploration	4
Ore Reserves	5
Measured Ore	5
Indicated Ore	5
Inferred Ore	7
Summary of Reserves	7
Summary	8
Conclusions and Recommendations	9

ILLUSTRATIONS

Fig. 1	Location Map of Glove (Sunrise) Mine	See Engineering Report
Fig. 2	Principal Workings of Glove Group of Claims	Following Page 1
Fig. 3	Cross Section A-A of Glove (Sunrise) Mine	" " 1
Fig. 4	Cross Section B-B of Glove (Sunrise) Mine	" " 1

INTRODUCTION

The Sunrise mine, formerly known as the Glove mine, and also the Sheehy-O'Donnel, is located in the Tyndall Mining District on the western slope of the Santa Rita Mountains, in Sec. 30, T. 30 S., R. 14 E. From Amado, Arizona, a station on the Southern Pacific Railroad, the mine can be reached by about 10 miles of fair dirt road.

The mine is in an area studied by Schrader and Hill[1] and also by Anthony[2], and it has been the subject of several private reports. It was examined by a field team for the Defense Minerals Administration in November, 1951. Accompanying this geological report is a composite mine map, Figure 2, and two cross sections, Figures 3 and 4. These are modified from private maps prepared by Robert Lanon, Registered Mining Engineer, Patagonia, Arizona.

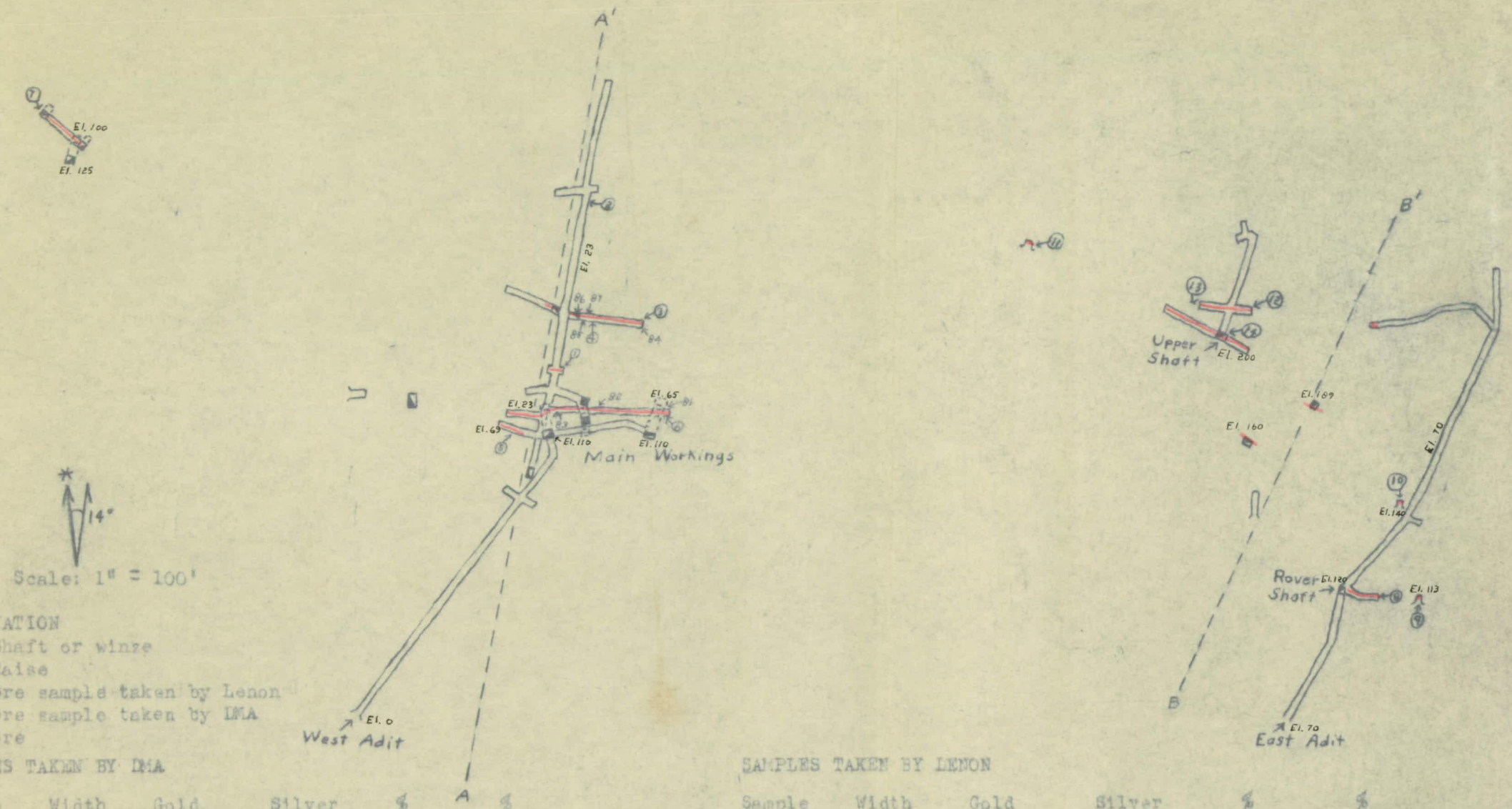
GENERAL GEOLOGY

The mine is at an altitude of about 4500 feet in an area of moderate relief which is bounded on the north by a steep hill rising to an altitude of about 5,000 feet; on the south by Cottonwood Wash, which drains westward toward the Santa Cruz valley. The mine is developed in thick bedded to massive Naco limestone of Pennsylvanian age. This limestone strikes N. 70° W. with northeasterly dips ranging from 25 to 40 degrees on the western side of the mine area and 55 to 75 degrees on the eastern side. The formation is thought to be from 1200 to 1500 feet thick, but it is doubtful if a full section is exposed near the mine. The formation appears rather uniform in character with no indication that

---

1/ Schrader, F. C. and Hill, J. M., Mineral Deposits of the Santa Rita and Patagonia Mountains, Arizona: U. S. Geol.Sur.Bull. 582, pp.185-187, 1915.
2/ Anthony, J. W., Geology of the Montosa-Cottonwood Canyons Area, Santa Cruz County, Arizona: Univ. Ariz. Thesis, p. 84, 1951.

PRINCIPAL WORKINGS ON GLOVE GROUP OF CLAIMS, SANTA CRUZ CO., ARIZONA
Fig. 2 DMA 2124



EXPLANATION

- Shaft or winze
- Raise
- Ore sample taken by Lenon
- Ore sample taken by DMA
- Ore

SAMPLES TAKEN BY DMA

Sample No.*	Width Ft.	Gold Oz/T	Silver Oz/T	% Pb	% Zn
81	3.5	0.005	0.4	0.17	0.12
82	3.5	Trace	0.3	0.12	4.55
83	3.5	0.005	0.9	3.95	0.43
84	5.0	0.005	0.7	2.00	3.35
85	0.8	0.01	3.0	16.50	14.15
86	2.5	0.01	3.4	12.10	18.10
87	3.7	Trace	0.3	0.85	1.05

*U.S.B.M. Nos. 14581 - 14587

SAMPLES TAKEN BY LENON

Sample No.	Width Ft.	Gold Oz/T	Silver Oz/T	% Pb	% Zn
1	3.0	Trace	1.8	6.7	8.6
2	15.0	Trace	0.3	1.2	2.0
3	4.0	0.20	4.3	7.5	9.2
4	4.0	Trace	3.2	19.3	13.2
5	1.7	Trace	2.3	8.1	31.5
6	3.5	Trace	3.3	9.8	25.3
7	0.7	Trace	3.3	9.8	25.3
8	4.5	Trace	Trace	4.5	9.3
9	8.0	Trace	Trace	1.2	10.2
10	2.0	Trace	2.0	17.3	28.6
11	1.0	Trace	3.7	19.0	6.2
12	2.0	Trace	2.8	27.2	13.5
13	3.0	Trace	9.8	35.0	26.4
14	1.5	Trace	1.3	17.1	10.5

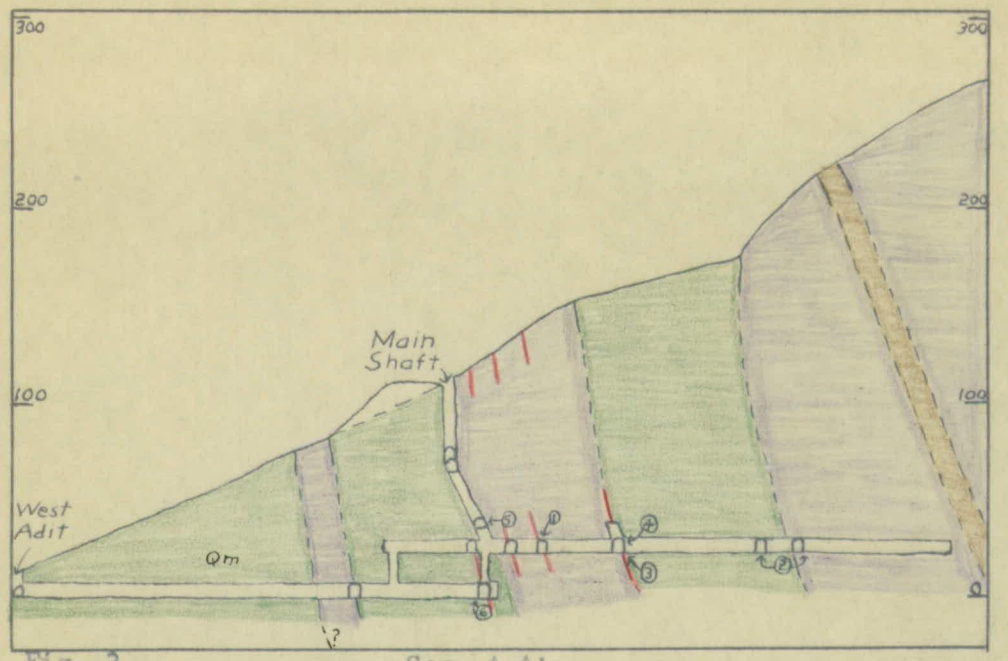


Fig. 3 Sec. A-A'

CROSS-SECTIONS OF GLOVE MINE

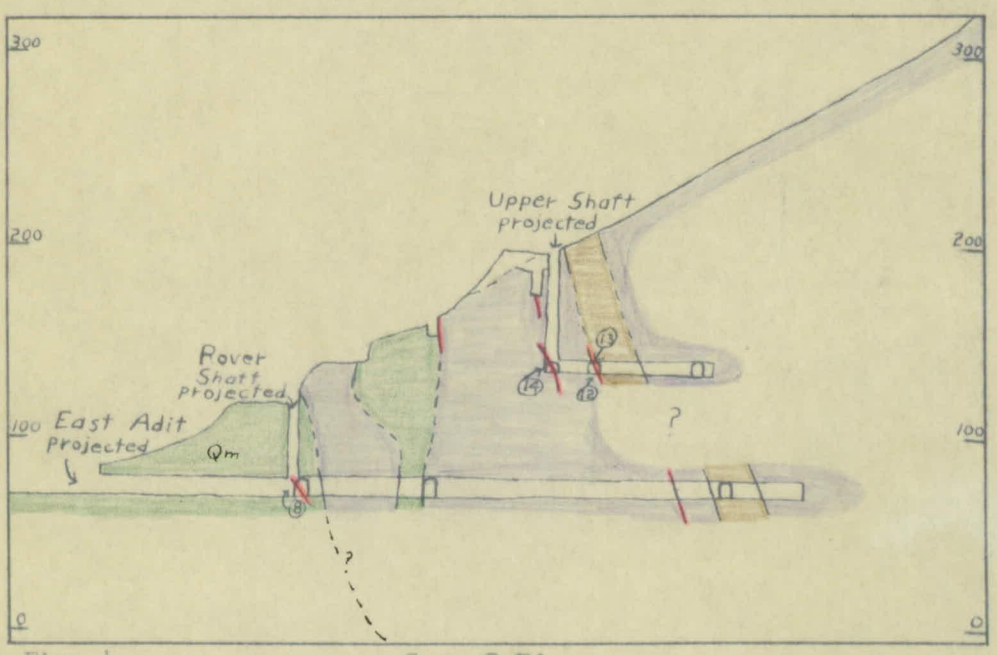


Fig. 4 Sec. B-B'

Scale: 1" = 100'
DMA 2124

Explanation
- Limestone
- Porphyry
- "Birdseye" porphyry
- Ore
- Sample taken by Lenon

any one bed may be more favorable for ore deposition than another and all of the known ore is confined to about the lower one-third of the section. The Pennsylvanian limestone at this locality appears to be conformable with the overlying Permian limestone and quartzite formations exposed on the hill several hundred feet north of the mine.

According to Anthony[3] these formations compose the upper plate of a gigantic thrust fault that has developed by compressive forces from the southwest. This fault has thrust the Pennsylvanian and Permian sediments over the upturned edges of a westerly dipping Cretaceous formation which is not exposed in the vicinity of the mine.

Exposed in Cottonwood Gulch and several hundred feet south of it is a fine-grained, equigranular, pinkish quartz monzonite (Qm porphyry of figs. 3 and 4). This is intrusive in character and is thought to have found access along the thrust fault that brought the Pennsylvanian and Permian limestones to their present position overlying the Cretaceous formations. Both adits of the Sunrise mine penetrate a few tens of feet of this quartz monzonite before entering the Naco limestones, and the contact between the two formations can be seen on the surface between the adits. Along the contact faulting has produced gouge and breccia, and flexed the limestone beds in a zone 2 to 12 feet thick. This fault strikes nearly parallel to the strike of the limestone beds and dips from 30 to 60 degrees to the northeast, and is possibly a component of the main thrust fault. The depth of the main thrust fault below the principal workings of the mine is unknown but it is thought to be about 200 feet.

3/ Op. cit., pp. 37-39.

The steep easterly dipping Kaco limestone beds have been cut by faults dipping 60 to 80 degrees to the northeast and these may locally follow bedding planes or cut obliquely across the formation. Little displacement has taken place along these faults but their presence is often emphasized by the occurrence of mineralization and by dikes or sills intruded along them. These dikes or sills are grayish green and fine grained, and both equigranular and porphyritic types are present. An easily recognized type of dike, called "Birdseye" porphyry by the miners, lies along the northern boundary of the main mineralized zone. This dike is about 12 feet thick and is characterized by feldspar phenocrysts as large as ½ inch long set in a felsitic groundmass.

ORE DEPOSITS

The ores of the Sunrise mine are lead and zinc with traces of copper, silver and very small amounts of gold. The primary minerals are black and honey yellow sphalerite and galena accompanied by relatively rare pyrite and chalcopyrite, and are generally associated with inconspicuous quartz and carbonate gangue. Specularite is closely associated with the lead-zinc mineralization and usually occurs in tiny veinlets in shattered limestone, and in lenticular masses and nodules usually measuring less than 2 or 3 inches across, but a 2000-ton body of specularite containing low values in lead and zinc is exposed by the Rover shaft and East adit. Garnet float occurs near the most westerly mine workings but was not seen associated with the ore, however it is thought to be related to the same period of mineralization.

The sulfide minerals have been strongly but incompletely oxidized throughout the vertical extent of the zone exposed by the

mine workings. Oxidation has yielded anglesite and cerussite associated with limonite and copper stains. The ores, both sulfides and carbonates, tend to be massive with a high content of lead and zinc.

The minerals mentioned commonly form veins from 1 to 8 inches wide on subparallel fractures in limestone or on obscure bedding planes or along contacts between limestone and dikes. These veins frequently intersect at small angles both along the strike and along the dip and at these intersections there is commonly a sufficient increase in mineral content to form small lenticular shaped bodies of ore. A typical ore body may be as large as 25 feet long, 30 feet thick and from 1 to 4 feet wide and the largest exploited prior to this examination yielded about 400 tons. Ore bodies are erratically distributed throughout the zone cut by faults and dikes and are not confined to any particular limestone bed or to any special set of structural conditions.

Alteration associated with mineralization appears unusually intense for this type of deposit. The limestone has been partially recrystallized to pink marble, and in other places is stained grayish and brownish. This area of discoloration is quite pronounced and occupies an area extending about 400 feet north of the quartz monzonite-limestone contact and 1500 to 2000 feet along the strike of the beds.

DEVELOPMENT, PRODUCTION, AND EXPLORATION

Fifteen or twenty scattered outcrops of mineralized material are exposed in an area 400 feet by 1500 feet, elongated along the strike of the beds. The outcrops have been explored by test pits, trenches, shafts, and adits, most of which are shown on Figures 2, 3, and 4. The mine has been explored and developed by four shafts, which are 45, 50, 67, and 110 feet deep; and by 1700 feet of adits, drifts, and crosscuts.

Location and assays of samples are shown on Figure 2. Most of the 17 samples taken by Lemon indicate that the ore is high grade, but they are misleading because they do not represent actual mining widths nor do they indicate the marketing difficulties inherent in the extremely oxidized ore.

The Sunrise mine has produced about 680 tons of ore from three small stopes and scattered occurrences of minor importance. The shipments were as follows:

613 tons	26% lead	15.5% zinc	7.5 oz./ton silver
71 tons	32% lead	---	6.0 oz./ton silver

Other ore bodies similar to these previously discovered may remain above the adits; but because of their small size and erratic distribution, they would not repay the cost of exploration, development, and mining. Combined production and reserves above the adits amount to from 30 to 40 tons per foot of depth, and the same ratio is expected to persist downward to the thrust fault. From the exposures in the adits, it does not appear that the limestone near the thrust is particularly favorable for ore deposits, and the underlying quartz monzonite and shales are unfavorable hosts.

ORE RESERVES

Measured Ore

There is no measured ore.

Indicated Ore

About 2200 tons of oxide and sulfide lead-zinc ore are indicated in 3 places. At the east adit a 25 foot drift and the Rover shaft partially explore a body of specular hematite that is about 65 feet long, 6 feet wide and 50 feet thick and estimated to

contain about 2000 tons of low grade lead-zinc ore. This assays 2.8 percent lead and 9.7 percent zinc, present as carbonates. The ore is too low grade to be shipped to either a custom smelter or a pigment plant, and is not amenable to present methods of beneficiation, therefore, must be regarded ad non-commercial. It is probable that the ore will terminate at the thrust fault, near the adit level.

An ore body that produced about 400 tons of oxidized ore was exploited through the upper shaft. This is essentially mined out but another small ore body 20 feet north of it has been partly developed on the 65 foot level from this shaft. This second ore shoot is from 6 to 18 inches wide and has been exposed by about 40 feet of drifts, and is thought to extend vertically about 40 feet above the level. It is estimated to contain 150 tons of oxidized ore with a grade of 30 percent lead, 20 percent zinc and 6 ounces of silver per ton. This ore is to be developed through a drift now being driven from the east adit, which at the time of this examination had found 10 to 20 tons of partially oxidized ore about 100 feet east of the ore being sought.

A small ore body about 35 feet long, 3 feet wide, and 20 feet in vertical dimension is being developed by a winze from the 23 foot level in the west adit workings. Part of the ore body was mined out and was found to pinch out about 10 feet below the 23 foot level and a few feet above the level. It is estimated to contain about 50 tons of sulfide ore containing 14.3 percent lead, 16.1 percent zinc, and 3.2 ounces of silver.

Inferred Ore

The ore body exposed on the 65 foot level of the upper shaft is assumed to extend downward to the level of the east adit, a distance of about 60 feet. It is about 1 feet wide, 40 feet long, and is thought to contain about 250 tons of strongly oxidized ore estimated to contain about 20 percent lead and 20 percent zinc and about 4 ounces of silver per ton.

The ore body now being developed on the 23 foot level of the west adit may contain about 50 tons of inferred ore, in addition to the indicated ore mentioned above. A 20 foot westerly extension of the known ore body is assumed. The ore contains 14 percent lead and 16 percent zinc and about 3 ounces of silver per ton.

An estimated 500 tons may eventually be produced from as yet undiscovered ore bodies above the adit. This should be approximately the same grade as previously discovered and is expected to contain about 21 percent lead, 18 percent zinc and 4 ounces of silver per ton.

Summary of Reserves

Summarized below are the ore reserves of the Sunrise or Glove mine:

Class	Location	Percent Lead	Percent Zinc	Ounces Silver	Tons	Comments
Measured ore					None	
Indicated ore						
	Hematite ore body	2.8	9.7	---	2000	Not commercial
	Upper shaft	30	20	6	150	Oxidized
	West adit	14.3	16.1	3.2	50	Sulfide
Total indicated ore (grade weighted)		3.8	10.3	0.8	2200	Mixed sulfide and oxide
Inferred ore						
	Upper shaft	20	20	4	250	Oxidized
	West adit 23 level	14	16	3	50	Sulfide
	Undiscovered ore bodies	21	18	4	500	Mixed sulfide and oxide

Summary of Reserves, Cont'd.

Class	Location	Percent Lead	Percent Zinc	Ounces Silver	Tons	Comments
Total inferred ore		20	18	4.	800	Mixed sulfide and oxide
GRAND TOTAL					3000	

SUMMARY

The Sunrise (Glove) mine is developed in a 1200 to 1500 foot thick series of massive to thick bedded limestones, composing the upper plate of a gigantic thrust fault that isunderlain by quartz monzonite and Cretaceous shales at an unknown depth, but thought to be about 200 feet. The limestones strike N. 70° W. and dip from 25 to 75 degrees northeast and have been cut by several faults with nominal displacement; and have been intruded by 2 or 3 dikes or sills that strike parallel to the strike of the beds and dip steeply to the northeast.

The ores have a high content of lead and zinc, associated with a few ounces of silver per ton, and usually consist of mixed sulfides and carbonates thus making beneficiation and marketing difficult and expensive. The ores are localized as veins on faults and bedding planes and along contacts between limestone and sills and dikes. Veins are 1 to 8 inches wide but increase appreciably in size at intersections of favorable structure and at these places form small ore bodies. The distribution of the ore is erratic and favorable structures are not everywhere mineralized, and no limestone bed appears more favorable than any of the others.

The mine has been developed by about 2000 feet of workings which have resulted in a production of about 680 tons. Reserves of commercial grade ore of all classes are estimated at 1000 tons. It is improbable that any significant discoveries would result from additional exploration.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that the Sunrise (Glove) mine does not justify additional exploration of development because of : (1) the inadequate ore reserves, (2) the improbability of making any significant new discoveries, (3) the high cost of exploitation.

For these reasons it is recommended that the application for Government assistance be denied.

SUNRISE MINING COMPANY'S
GLOVE LEAD-ZINC MINE
SANTA CRUZ COUNTY, ARIZ.
DMA-2124

Engineering Report

By T. M. Romslo
Mining Engineer
U. S. Bureau of Mines

December 1951

SUNRISE MINING COMPANY'S
GLOVE LEAD-ZINC MINE
SANTA CRUZ COUNTY, ARIZ.
DMA-2124

CONTENTS

Engineering Report	Page
Introduction	1
Physical features and climate	2
Location and accessibility	2
History and production	3
Property and ownership	3
Geology and deposits	4
Ore reserves	5
Present status	6
Proposed exploration	7
Conclusions	7
Recommendations	7

ILLUSTRATIONS

Figure	Following page
1 Location map	2
2 Principal workings (see Geological report)	
3 Cross-sections of Glove mine (see Geological report).....	

INTRODUCTION

The Glove lead-zinc mine, Santa Cruz County, Ariz. was examined in connection with an application by the Sunrise Mining Co. for Governmental aid on a proposed exploratory project. The examination was made by the Defense Minerals Administration under docket DMA-2124, as part of its program authorized by the Defense Production Act of 1950. It was carried out to determine if the Government should participate with the company in financing the cost of the proposed work. This report contains information obtained during the course of the investigations and also presents conclusions and recommendations regarding the merits of the proposed work.

The proposed work was designed to develop reserves of lead-zinc ore by driving cross-cuts and drifts from existing underground workings. The company's estimates indicated that the work could be completed in one year at a cost, including purchase and rental of equipment, of $68,350.

The examination was made November 8 and 9, 1951, by J. N. Faick and J. McKallor, Geological Survey, and T. M. Romslo, Bureau of Mines. Robert Lenon, a mining engineer of Arizona and an agent for the applicant, accompanied the engineers during the first day of the examination. Samples were obtained from the mine on November 13 by McKallor, and B. C. Brown, Bureau of Mines. Brown, Faick and Romslo revisited the mine November 21 to examine an ore occurrence that had been encountered subsequent to November 13.

PHYSICAL FEATURES AND CLIMATE

The property is at the southwest base of the Santa Rita Mountains. It is in an area of moderately rugged topography at an altitude of about 4,500 feet. Cottonwood Canyon heads near the property and drains west to the Santa Cruz river.

The climate is characteristic of the intermediate altitudes of Southern Arizona. The summers are hot and the winters are mild. Precipitation of about 15 inches annually is confined mainly to heavy rainfalls during July, August and September, and to light rainfalls and a little snow during the winter months.

There are no permanent streams in the district.

Vegetation on the property consists of native grasses and a variety of shrubs and cacti.

LOCATION AND ACCESSIBILITY

The property is about 6 air-miles east of the village of Amado, Ariz. Amado is on paved U. S. Highway #89, about 35 miles south of Tucson. The property may be reached from Amado by traveling 6 miles easterly on a county-maintained road and thence southeasterly for 3.8 miles on an unimproved road to the mine.

The nearest railroad shipping point is about 4 miles south of Amado at Chavez Siding on the Tucson-Nogales Branch of the Southern Pacific Railroad. A road from Chavez Siding to the property, distance about 6 miles, is not readily negotiable by automobile at present.

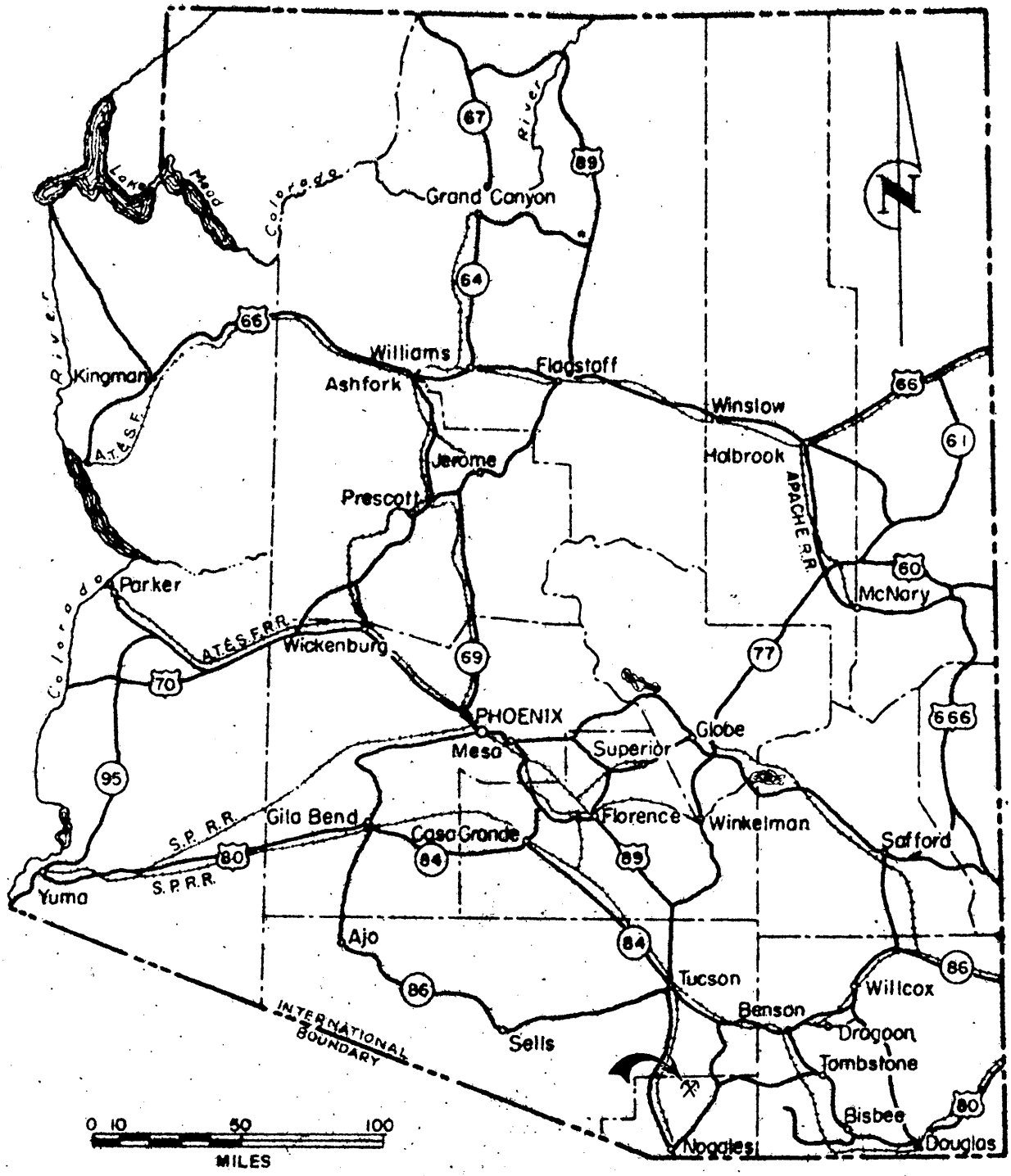


Fig. 1 Location Map, Sunrise Mining Company's Glove Pb-Zn Mine, Santa Cruz County, Arizona

DMA 2124

HISTORY AND PRODUCTION[1]

The property was located in 1907 by Edward T. Sheehy, Nogales, Ariz. It has been owned since then by Sheehy and various associates. Most of the present development work was done during the period, 1911-17. In 1914, Thomas M. Park produced the largest quantity of ore mined from the property. Most of Park's production was from the 125-foot shaft, but he also mined ore from the 50-foot and 67-foot shafts.

Activity at the mine from 1917 to 1951 was confined to operations in 1925 by Jerry Sheehy and in 1949 by E. J. Sikes. The Sunrise Mining Co. started operations shortly after obtaining control of the property in May 1951. It has carried out some exploratory work and has produced about 30 tons of ore. This ore is stored at the mine for future shipment.

Estimates indicate that at least 683 tons of ore have been shipped from the property. Incomplete records for the period from 1911 to 1917 show shipments of approximately 612 tons of ore that averaged about 26 percent lead, 15.5 percent zinc, and 7.5 ounces of silver a ton. The remaining 71 tons, shipped during 1925 and 1949, averaged about 32 percent lead and about 6 ounces silver a ton of ore.

PROPERTY AND OWNERSHIP

The property, known as the Glove or the Sheehy-O'Donnel group, consists of 15 unpatented mining claims in Sec. 30, T. 20 S., R. 14 E., San Cayetana Mining District, Santa Cruz County, Ariz. It is owned by Johanna O'Donnell, Edward T. Sheehy, Jerry Sheehy, Pat J. Sheehy, and Katherine Sheehy, all of the State of Arizona.

1/ Anthony, John W., Geology of the Montosa-Cottonwood Canyons Area, Santa Cruz County, Ariz., Master's Thesis, Univ. Arizona, 1951.

The Sunrise Mining Co., a corporation, holds the property under a purchase agreement. The agreement is for a period of 5 years from May 8, 1951. The principal terms of the agreement are: (1) payment of $16,000 before initiating stoping operations; (2) royalty payments of 15 percent on ore with a value to $30 a ton, and 20 percent on ore with a value in excess of $30; and (3) a total purchase price of $135,000, payable before May 8, 1956.

GEOLOGY AND DEPOSITS

Naco limestone and shales of Paleozoic age have been intruded by monzonite sills that generally follow the bedding of the sedimentary rocks. The formations have a westerly strike and dip northward at steep angles. Faults occur at the sill-limestone contacts and also are present in the sediments, where they normally follow the bedding.

Ore mineralization is confined to the fault zones at the sill-limestone contacts, and in the sediments. It occurs as widely scattered lenses. The most extensively mineralized zone was at the upper workings. There mining has left an opening that averages about 3 feet wide, and 30 feet long, and that extends from about 15 feet below the surface to a depth of about 55 feet. This zone is reported to have yielded 300 to 400 tons of hand-sorted oxidized ore.

Gossan outcrops of manganese dioxide, iron oxides and a little copper carbonate occur at each of the deposits that were originally worked from the surface. The ore occurred largely as oxidized lead and zinc minerals to a depth of at least 98 feet. This depth corresponds with the 23-foot level at the west adit where the ore at one

place is mainly of the sulfide type. The sulfide ore consists of galena, sphalerite, and a little chalcopyrite. Pyrite also is present in small amounts.

ORE RESERVES

The mine contains no measured ore.

The indicated reserves are present in 4 widely scattered deposits. These reserves have been estimated at 2,200 tons containing 3.8 percent lead, 10.3 percent zinc and 0.8 ounce of silver a ton.

The inferred reserves above the adit levels, ore that could possibly be developed by the proposed exploratory work, has been estimated at 800 tons. This ore would be mainly of the oxidized type and would contain an estimated 21 percent lead, 18 percent zinc, and 4 ounces of silver a ton. Inferred reserves below the adit level have been estimated at 30 to 40 tons per foot of depth.

Approximately 2,000 tons of the indicated reserves are present in the deposit at the Fover shaft. This deposit appears to be bottomed at a thrust fault exposed in the adit level. The ore, containing an indicated 2.8 percent lead, 9.7 percent zinc, and 0.6 ounce silver a ton, is highly oxidized. It is not amenable to concentration and would have to be marketed as a direct shipping ore. It does not constitute economic ore because smelting charges alone exceed the market value. Furthermore, the remaining 200 tons of indicated ore and the 800 tons of inferred ore above the adit levels could not be developed and mined at a profit. This ore, containing an estimated 22 percent lead, 18 percent zinc, and 4 ounces of silver a ton, has a smelter value of

$70 to $75 a ton. It would yield about $40 a ton to the shipper after royalty payments of $15 and smelter charges of about $20. To develop the ore would require a minimum of 1,500 feet of lateral workings at an estimated cost of $60,000, or $40 a ton. Mining costs, estimated at $30, would bring the total cost a ton to over $100. Similar estimates indicate that development of economic ore below the adit levels cannot reasonably be expected.

PRESENT STATUS

Mine Workings

The principal workings are 4 shafts and about 1,500 feet of lateral workings (fig. 2). The lateral workings have been driven from both the shafts and from the surface. The adits are equipped with track.

Present Operations

A contractor is advancing the east adit, driving a drift westerly from near the end of the same adit and sinking a winze from the most northerly drift on the 23-foot level of the west adit. The work is being done by 3 miners. The contractor receives $32.50 a foot for lateral headings. He furnishes all equipment and supplies. The principal equipment consists of 2 portable compressors, 3 pneumatic drills, and 2 mine cars. Water for drilling and domestic use is hauled to the mine in barrels.

Structures on the property consist of 2 tent houses, 1 small storage shed, and a light headframe at the Rover shaft.

PROPOSED EXPLORATIONS

The applicant proposed to extend the east adit, the west adit, and the 23-foot level to the "Birdseye" porphyry, to drift along the porphyry-limestone contact, and to extend existing drifts. It was estimated the work could be completed in one year at a cost of 68,350.

CONCLUSIONS

Less than 1,000 tons of oxidized lead-zinc ore have been produced from 2 zones that have been rather extensively developed and exploited. The largest deposit, now essentially mined out, yielded 300 to 400 tons of ore.

Areas of gossan indicated the presence of the 2 productive zones. Other mineralized zones may be present but there are no criteria for determining where they may occur.

The 4 widely scattered and partially exposed deposits have an indicated 2,200 tons containing 3.8 percent lead, 10.3 percent zinc, and 0.8 ounce of silver a ton, and an inferred 800 tons containing 21 percent lead, 18 percent zinc, and 4 ounces of silver a ton. These reserves, confined to the zone that would be influenced by the proposed exploration, do not constitute economic ore. Furthermore, there is no reason to believe that economic ore would be encountered at lower horizons.

RECOMMENDATIONS

A Governmental loan for exploration at the Clove lead-zinc mine should be denied because the proposed work cannot be expected to develop economic ore.

Mr. Frank W. Jessen
3111 Tom Green Street
Austin, Texas

Re: Docket No. DMEA 2124
Sunrise Mining Company

Dear Mr. Jessen:

With reference to your recent letter and the application of the Sunrise Mining Company for an Exploration Project Contract, we have been advised that the field report on the project was forwarded to Washington under date of January 15th. As soon as this report is received, it will be reviewed and you will be advised as soon as possible as to the final action.

Sincerely yours,

D. E. Moulds

D. E. Moulds, Acting Chief
Base Metals Division
Defense Minerals Exploration
Administration

DEMoulds/mah 1/18/52
cc to: Adm. R. File
Docket File Copy
Mr. Moulds
Mr. Bishop
Mr. McKnight
Region IV (2)
Chron.

January 15, 1952

Air Mail

Memorandum

To: D. E. Moulds, Acting Chief, Base Metals Division

From: Regional Director, Region IV

Subject: DMEA 2124 - Sunrise Mining Company

Your teletype of January 14 requested status of Sunrise Mining Company, Arizona, Docket DMEA 2124.

The report was forwarded to Washington today, and the Field Team recommended denial of the application.

J. H. East, Jr.

JHE:ftm

DMA Files

WASH DC BU MINES 310 1-14-52 3.55PM

recommends denial.
To Washington today
W. H. K.

J H EAST, JR.

SUBJECT.... DMEA 1XXX 2124, SUNRISE MINING COMPANY

ADVISE STATUS OF SUNRISE MINING COMPANY, ARIZONA DOCKET 2124, REFERRED TO YOUR OFFICE FOR FIELD EXAMINATION OXXX IN OCTOBER.

D E MOULDS, ACTING CHIEF BASE MDTALS DIVISION
3.57PM END MSGS ACK PLS CW

THREE MSGS RECED OK FTM

WASH DC DU MINES 310 1-14-52 3.55PM

J H EAST, JR.

SUBJECT.... DMEA 1XXX 2124, SUNRISE MINING COMPANY

ADVISE STATUS OF SUNRISE MINING COMPANY, ARIZONA DOCKET 2124, REFERRED TO YOUR OFFICE FOR FIELD EXAMINATION OXXX IN OCTOBER.

D E MOULDS, ACTING CHIEF BASE MDTALS DIVISION
3.57PM END MSGS ACK PLS CW

THREE MSGS RECED OK FTM

Mining Division
Region IV

January 15, 1952

Memorandum

To: DMA Field Team, Region IV
Acting
From: Chief, Mining Division, Region IV

Subject: Final Report, DMA Docket 2183, Sunrise Mining Co., Glove Lead-Silver Mine, Santa Cruz County, Arizona

Enclosed herewith are the original and seven copies of the section on Summary, Conclusions and Recommendations by the Geological Survey and Bureau of Mines examining team, and the Engineering Section by the Bureau of Mines.

The brochure is also enclosed.

It has been recommended that the application be denied.

W. H. King

JWT:oc

cc: DMA Subject, Chron.
AHKoschmann

[illegible] Bldg. Centennial
Denver 2, Colorado

January 15, 1952

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, DMEA, Region IV

Subject: Final Report, DMA Project [illegible], Paradise Mining Company, Clara Lead-Silver Mine, Santa Cruz County, Arizona

Enclosed herewith are the original and two copies of the Final Report on the subject project.

The application is for Government assistance in exploration work estimated to cost $60,000 and involved the construction of surface facilities and an unspecified amount of drifting along contacts and to extend existing drifts.

The principal workings are a shaft and about 1500 feet of lateral workings. The lateral workings have been driven from the shaft as well as adits from the surface.

Rare limestone and shales of Paleozoic age have been intruded by monzonite dike that generally follow the bedding of the sedimentary rocks.

Ore mineralization occurs as widely scattered lenses and is confined to the fault zones at the dike-limestone contacts and in the sediments.

The mine contains little or no measured ore.

A study of indicated and inferred ore reserves indicates that the ore is too low in grade to be of economic significance.

Conclusions of the examining team were that chances of

developing deposits of economic ore at greater depth are unfavorable, therefore they recommend that the application for Government assistance in exploration work be denied, with which we concur.

The brochure is also enclosed.

for W. H. King
~~J. H. East, Jr.~~

A. H. Koschmann
~~A. H. Koschmann~~

Enclosures

JWT:cs

cc: NRStorms w/copy of Final Report
CAAnderson " " " "
Mining Div. " " " "
AHKoschmann " " " "
DMA Final Report
DMA Subject, ~~Sunbeam~~ Chron.
AHKoschmann (2)

Form 6-95

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

REFERENCE SLIP

DATE 1/21/52

REFERRED TO:

1. ~~King~~ W.H.K.
2. Mailed 1/23/52
4.

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	..... Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

REMARKS: Confirmation copy of teletype/Sunrise Mining Co., Docket 2124

1

Check (X) before the items needing attention.

Initials of sender.

GPO 16—51162-1

1-1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

AGENCY D. M. E. A.

Originator: D. E. Moulds
Ext.: 5369 Room: 4070

TELETYPE

Appro.: 1480137 Salaries & Expenses
Date: Defense Production Activities, Interior 1952. "100.0000 (400)
Time: 1-14-52
No.:
To: Mr. J. H. East, Jr., Exec. Officer, Reg. IV, 224 New Customhouse Bldg. Denver, Colorado.
Subject: DMEA 2124, Sunrise Mining Company

ADVISE STATUS OF SUNRISE MINING COMPANY, ARIZONA DOCKET 2124, REFERRED TO YOUR OFFICE FOR FIELD EXAMINATION IN OCTOBER.

Signed)
D. E. MOULDS, ACTING CHIEF
BASE METALS DIVISION

SENT
JAN 14 1952
Central Service Section

Authorized:

Sign original message and transmit to Room ..... in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

NOV 2 1951

DMA-2124
Sunrise Mining Company
of Tucson, Arizona

OFFICE
REGION IV
NOV 5 - 1951
BUREAU OF MINES
DENVER, COLORADO

Hon. Lyndon B. Johnson
United States Senate
Washington 25, D. C.

My dear Senator Johnson:

This is to acknowledge receipt of your letter of October 20, 1951 with attached letter from Mr. Frank W. Jessen, consulting engineer, Austin, Texas relative to the status of the Sunrise Mining Company application DMA-2124. Mr. Jessen's letter is returned herewith.

This application is a recent one and as noted in Mr. Jessen's letter was sent to the DMA-field office at Denver, Colorado on October 9, 1951. It was sent to the field team to get the benefit of more detailed information available at the Denver office. It is also desirable to obtain their recommendations on this project.

At the moment there is nothing further we require in the processing of this application. However, questions may develop at a later date in which case either the field team or this office will contact the applicant.

If I can be of further assistance to you at any time, please do not hesitate to call upon me.

Sincerely yours,

(signed) FRANK E. JOHNSON

Acting Administrator

Enclosure

GEJOHNSON:ks
10/25/51

cc: Administrator
DMA Docket File 2124
T. Lyon
2 copies to Mr. J. H. East, Jr. Region IV
Bishop
McKnight
GE JOHNSON

CHEMICAL ENGINEERING

REC'D OCT 20 1951

PETROLEUM ENGINEERING

FRANK W. JESSEN
CONSULTING ENGINEER
3111 Tom Green St.
AUSTIN, TEXAS

October 17, 1951

Hon. Homer Thornberry
House Office Building
Washington, D. C.

Dear Homer:

I should like very much to acknowledge receipt of a letter you recently sent to me and also a letter of October 9 addressed to Tayler Glass. All of these concerned the application of Sunrise Mining Company of Tucson, Arizona for an exploration loan.

As previously advised you the Sunrise Mining Company has been advised that the exploration application has been given a docket no--DMA-2124 by the Defense Minerals Administration. I am sending you herewith copies of letters received by us both dated October 9, 1951. One of these letters as you will note was from Mr. Tom Lyon, Director, Supply Division of the Defense Minerals Administration and the other from Mr. C. O. Mittendorf, Acting Administrator of the Defense Minerals Administration.

You will note from the letter from Mr. Lyon's office that the application has been referred to the Denver office of the Defense Minerals Administration. You will note further that we are not told what additional information is required and we would be most appreciative of learning what additional information should be furnished. It is our feeling that if the general plan of the Defense Minerals Administration is to secure direct recommendations and observations on applications from the field office having jurisdiction over the particular area in which the property may be located, that we should be advised of the same, whereas, if the company itself can expedite the processing of the application, it is our opinion that some time might be saved by having the Washington office advise specifically of any other information required.

J.F.J.

Since the company already has an active operation going forward on the property and a miner with complete rigging, etc., employed, I would certainly like to get underway on the proposed exploration program as soon as possible.

CHEMICAL ENGINEERING

PETROLEUM ENGINEERING

FRANK W. JESSEN
CONSULTING ENGINEER
1706 WESTOVER ROAD
AUSTIN, TEXAS

For your information may I say that a Landlord's Subordination Agreement which I understand is also to be completed by the Lessor is now being secured by Sunrise Mining Company and will be forwarded to the Defense Minerals Administration immediately upon receipt. This, however, we felt should not substantially affect any commitment by the Defense Minerals Administration in approving the application for the exploration loan.

Your kind attention to this matter will be deeply appreciated.

With kindest personal regards and best wishes, I remain

Very sincerely yours,

Frank

Frank W. Jessen

FWJ:HMY

CC: Mrs A. N. McCallum
702 Scarbrough Bldg.

Hon. Lyndon B. Johnson
Washington, D. C.

Aluminum

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

OCT 31 1951

DMA-2124
Sunrise Mining Company
of Tucson, Arizona

REGIONAL DIRECTOR'S OFFICE
REGION IV
NOV 5 - 1951
BUREAU OF MINES
DENVER, COLORADO

Hon. Homer Thornberry
House of Representatives
Washington 25, D. C.

My dear Mr. Thornberry:

This is to acknowledge receipt of your letter of October 23, 1951 with attached letter from Mr. Frank E. Jessen, consulting engineer, Austin, Texas, and a copy of letter to Mr. A. H. McCollum, Jr. from Tom Lyon, Director, Supply Division Defense Minerals Administration, relative to the status of the Sunrise Mining Company application DMA-2124. Mr. Jessen's letter and copy of Tom Lyon's letter are returned herewith.

This application is a recent one and as noted in Mr. Jessen's letter was sent to the DMA field office at Denver, Colorado on October 9, 1951. It was sent to the field team to get the benefit of more detailed information available at the Denver office. It is also desirable to obtain their recommendation on this project.

At the moment there is nothing further we require in the processing of this application. However, questions may develop at a later date in which case either the field team or this office will contact the applicant.

I hope this information will be sufficient for your reply to Mr. Jessen's letter; if not, please advise me.

Sincerely yours,

(signed) FRANK E. JOHNSON

Acting Administrator

Lyon
P.S.

GEJOHNSON:ks
10/29/51

cc: Administrator
Domket File DMA-2124
T. Lyon
2 copies to Mr. J. H. East, Jr.
Bishop
McKnight
G E Johnson

GEJ

C O P Y

C O P Y

FRANK W. JESSEN

Consulting Engineer

AUSTIN, TEXAS

October 17, 1951

Hon. Homer Thornberry
House Office Building
Washington, D. C.

Dear Homer:

I should like very much to acknowledge receipt of a letter you recently sent to me and also a letter of October 9 addressed to Taylor Glass. All of these concerned the application of Sunrise Mining Company of Tucson, Arizona for an exploration loan.

As previously advised you the Sunrize Mining Company has been advised that the exploration application has been given a docket no. DMA-2124 by the Defense Minerals Administration. I am sending you herewith copies of letters received by us both dated October 9, 1951. One of these letters as you will note was from Mr. Tom Lyon, Director, Supply Division of the Defense Minerals Administration and the other from Mr. C. O. Mittendorf, Acting Administrator of the Defense Minerals Administration.

You will note from the letter from Mr. Lyon's office that the application has been referred to the Denver office of the Defense Minerals Administration. You will note further that we are not told what additional information is required and we would be most appreciative of learning what additional information should be furnished. It is our feeling that if the general plan of the Defense Minerals Administration is to secure direct recommendations and observations on applications from the field office having jurisdiction over the particular area in which the property may be located, that we should be advised of the same, whereas, if the company itself can expedite the processing of the application, it is our opinion that some time might be saved by having the Washington office advise specifically of any other information required.

Since the company already has an active operation going forward on the property and a miner with complete rigging, etc., employed, I would certainly like to get underway on the proposed exploration program as soon as possible.

J.F.J.

For your information may I say that a Landlord's Subordination Agreement which I understand is also to be completed by the Lessor is now being secured by Sunrize Mining Company and will be forwarded to the Defense Minerals Administration immediately upon receipt. This, however, we felt should not substantially effect any commitment by the Defense Minerals Administration in approving the application for the exploration loan.

Your kind attention to this matter will be deeply appreciated.

With kindest personal regards and best wishes, I remain

Very sincerely yours,

s/ Frank

t/ FRANK W. JESSEN

FWJ:HMY
Enclosure

C
O
P
Y

C
O
P
Y

UNITED STATES DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

Washington 25, D. C.

Re: Docket DMA 2124

Mr. A . N. McCallum, Jr., Secretary
Sunrise Mining Company
702 Scarbrough Building
Austin, Texas

Dear Mr. McCallum:

The application of the Sunrise Mining Company for a loan to explore the Glove mine, Santa Cruz County, Arizona, has been reviewed by the Lead-Zinc Branch. Because more information is required before further action can be taken on the application, it has been referred to Mr. J. H. East, Jr., Executive Officer, DMA Field Team, 224 New Customhouse, Denver 2, Colorado.

Very truly yours,

S/
Tom Lyon, Director
Supply Division

STANDARD FORM No. 14
APPROVED BY THE PRESIDENT
MARCH 10, 1926

TELEGRAM

OFFICIAL BUSINESS—GOVERNMENT RATES

FROM Walter R. Storms

BUREAU of Mines

CHG. APPROPRIATION ~~Sy Day letter - DMA~~

Tucson, Arizona, Nov. 6, 1951

U. S. GOVERNMENT PRINTING OFFICE 10—1723

Mining Division
Date Rec'd.
NOV 8 1951
BUREAU OF MINES
Denver, Colorado

Phoned 9.25 a.m. frj

Mr. A. N McCallum, Jr.
Sunrise Mining Co.
702 Scarbrough Bldg.
Austin, Texas.

Re DMA Docket 2124 our engineers expect to examine your property in Santa Cruz County, Arizona on November 7 and 8. Do you have a representative at mine? Wire answer.

Walter R. Storms
U. S. Bureau of Mines

CC Confirmation
P. T. Allsman
C. A. Anderson
DMA-2124
TG(2)
DF

WRStorms:frj

224 New Customhouse
Denver 2, Colorado

October 17, 1951

Memorandum

To: W. R. Storms (with brochure)

(Through Chief, Mining Division, Region IV)

C. A. Anderson

From: DMA Field Team, Region IV

Subject: DMA Docket 2124, Sunrise Mining Company, applicant, Globe Lead-Zinc Mine, Santa Cruz, Arizona

Enclosed herewith is the application of the subject docket for an exploration loan and a review by the Coordinating Committee.

The proposed work is mainly drifting at several levels of the mine at an estimated cost of $68,000, but the footage is not stated.

Field examination is required to determine the geological probability of discovery and the engineering phases of the proposed work. There is also some doubt as to the amenability of the ore to concentration.

Please return the brochure with your report.

J. H. East, Jr.

for A. H. Koschmann

Enclosure

WDM:oj
cc: DMA Subject and Chron.
AHKoschmann

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

DMA

REGIONAL DIRECTOR
OFFICE
REGION IV
OCT 11 1951
BUREAU OF MINES
DENVER, COLORADO

OCT 9 1951

Hon. Lyndon B. Johnson
United States Senate
Washington 25, D. C.

My dear Senator Johnson:

This will acknowledge your letter of September 25, 1951 requesting information respecting DMA-2039 Sunrise Mining Company, Tucson, Arizona. The letter to you from Frank . Jessen is returned herewith.

As you were previously advised in our letter of September 25, 1951 the applicant's request for a development loan was denied. However, it was suggested to him that his property might qualify for an exploration loan and the necessary forms for such an application were forwarded to him.

We have been awaiting the new application for an exploration loan which has just been received. This accounts for the tardiness of our reply to you.

This new application for an exploration loan has been assigned docket number DMA-2124. We will give this application due consideration and make every effort to expedite processing for final action.

If I can be of further assistance, kindly call upon me.

Sincerely yours,

C. O. Mittendorf

Acting Administrator

Enclosure
TPBILLINGS:ks
10/3/51

cc: Administrator
Deputy Administrator
Docket File DMA-2124
Mote
McKnight
Billings
Moon
2 copies Mr. J. H. East, Region IV

File

COPY COPY

FRANK W. JESSEN
3111 San Gregan St.
Austin, Texas

Hon. Lyndon Johnson
Senate Office Building
Washington, D. C.

Dear Lyndon,

I should like to advise you that we have received a letter from the Defense Minerals Administration to the effect that the application of the Sunrise Mining Company had been turned down on a basis that not sufficient reserve ore was indicated to justify the loan requested.

In accordance with a suggestion from the Defense Minerals Administration, we are submitting an application for an exploration loan while at the same time we are modifying our original application to include data on estimated reserves of ore.

We wish to advise you of this so that you will be sufficiently informed and not spend any unnecessary time following up our present application.

Thanking you very much for your interest and trusting that the information submitted on the exploration loan will be satisfactory to secure such a loan, I remain

Very sincerely yours,

W-7M

/s/ Frank
Frank W. Jessen

FWJ:md

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

DMA

REGIONAL DIRECTOR
OFFICE
REGION IV
OCT 9 1951
OCT 11 1951
BUREAU OF MINES
DENVER, COLORADO

Hon. Homer Thornberry
House of Representatives
Washington 25, D. C.

My dear Mr. Thornberry:

This will acknowledge your letter of September 25, 1951 requesting information respecting DMA-2039 Sunrise Mining Company, Tucson, Arizona.

As you were previously advised in our letter of September 25, 1951 the applicant's request for a development loan was denied. However, it was suggested to him that his property might qualify for an exploration loan and the necessary forms for such an application were forwarded to him.

We have been awaiting the new application for an exploration loan which has just been received. This accounts for the tardiness of our reply to you.

This new application for an exploration loan has been assigned docket number DMA-2124. We will give this application due consideration and make every effort to expedite processing for final action.

If I can be of further assistance, kindly call upon me.

Sincerely yours,

C. O. Mittendorf

Acting Administrator

TPBILLINGS:ks
10/3/51

cc: Administrator
Deputy Administrator
Docket File DMA-2124
Mote
McKnight
Billings
Moon
2 copies to Mr. J. H. East, Region IV