224 New Customhouse
Denver 2, Colorado

February 2, 1955

Memorandum

To: S. R. Wilson

From: Executive Officer, DMEA Field Team, Region III

Subject: DMA Docket 1615X, Golden Sunset Mining Company (Copper), Juab County, Utah

Enclosed are the maps submitted with the original brochure as requested in your memorandum dated January 17, 1955.

Please return them to the applicant.

W. M. Traver

Enclosures

RDB:pw

cc: Subject
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

DMEA
FEB 7 1955

February 4, 1955

Thm
TW
C
B
Bark

Mr. Axel Wahlberg
Mammoth, Utah

Re: Docket No. DMA-1615X
Golden Sunset Mining Co.
Juab County, Utah

Dear Mr. Wahlberg:

Attached are maps that accompanied your original application under the above-referenced docket. These maps were requested at the time of your recent visit to this office.

Very truly yours,

Stephen R. Wilson

Stephen R. Wilson
Supervising Mining Engineer

Enclosure

cc: W. M. Traver

file

df

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

DMA

AIR MAIL

OFFICE
REGION IV
FEB 11 1952
BUREAU OF MINES
DENVER, COLORADO

Mr. Axel Wahlberg
President and General Manager
Golden Sunset Mining Company
Mammoth, Utah

Re: Docket No. DMA-1615X (Copper)

Dear Mr. Wahlberg:

Your application for an exploration contract on your Golden Sunset Mining Company prospect in the Tintic District, Juab County, Utah, has been carefully reviewed by this agency.

The geologic evidence and analytical results of the samples taken at your property discount the promise of a significant discovery of copper ore which would contribute materially to the National Defense. Under the circumstance we regret to inform you that your application is denied.

If future work at your property reveals additional evidence which could alter this opinion, please be assured we will be glad to reconsider your application.

Sincerely yours,

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
Administration

W.H.K.

FARutledge/jem
1/31/52
cc to: Adm. Reading File
Docket
Messrs. Johnson, CH Rm. 3621
Nelson, Ned Rm. 4216 G.S.
Ellis
Rutledge
Field Team, Region IV (2)

Mining Division
Region IV

January 14, 1958

Memorandum

To: DMA Field Team, Region IV

From: Acting Chief, Mining Division, Region IV

Subject: Final Report, DMA Project 1415X, Golden Summit Mining Company, (Copper), Tintic District, Juab County, Utah

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

The brochure is also enclosed.

It has been recommended that the application for government assistance in exploration work estimated to cost $100,000 be denied.

W. H. King

JWT:oc

cc: DMA Subject, Chron.
AHKoschmann

[redacted]
Denver 2, Colorado

January 14, 1952

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, DMEA, Region IV

Subject: Final Report, DMA Project 1453X, Golden Sunset Mining Company (Copper) Tintic Mineral, Juab County, Utah

Enclosed herewith are the brochure and the original and two copies of the Final Report on the subject project. The application was for government assistance in exploration work estimated to cost $100,000.

The Golden Sunset Mining Co. property lies in close proximity to mines which have had large production of lead, zinc, copper, gold and silver ores, chiefly from deposits which replace limestone. However, rocks on the immediate property are quartzite almost entirely of the Centennial Tintic quartzite. The Tintic quartzite has yielded significant tonnages of high-grade gold and silver ores with small amounts of copper, lead and zinc in the eastern part of the Tintic district, but no commercial ore bodies have been found in the quartzite near the Golden Sunset property.

It seems to be the conclusion of the examining team that the chances for discovery of copper or lead are bodies of commercial size are not promising, and agreed with their recommendation that the request for government assistance in exploration work on the property of the Golden Sunset Mining Company be denied.

cc: SRWilson w/copy of final report
RROberts w/copy of final report
Koschmann w/copy of final report
Min. Divl w/copy of final report
DMA Final Report

for W. H. Kerig
[redacted]

G. H. Koschmann
[redacted]

JWT:oc
cc: DMA Subject, Chron.
Koschmann

6-303
(March 1947)

cc: P. T. Allsman
S. R. Wilson

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Salt Lake City, Utah

Mining Division
Date Rec'd.
NOV 16 1951
BUREAU OF MINES
Denver, Colorado

No. 15

Report to Mr. Merwin H. Howes

Chemical Laboratory Report

Date received Nov. 13, 1951

Date reported Nov. 14, 1951

Serial No.	DESCRIPTION	Lot No.	Au	Ag	Cu	Pb	Zn
	Golden Sunset Mining Co., Juab County, Utah 1615						
99048	Dalla Shaft Dump Grab Sample	G.S. 1	<.005	<0.1	<.05	<.1	<.05
49	do.	G.S. 2	<.005	0.1	<.05	<.1	<.05
99050	Dalla Discovery Grab Sample	G.S. 3	<.005	<0.1	<.05	<.1	<.05
51	3' Cut at Tunnel Sta. A	G.S. 4	<.005	<0.1	<.05	<.1	<.05

U. S. GOVERNMENT PRINTING OFFICE 16—33553-3

Signed A. E. Peterson

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

REGIONAL DIRECTOR'S OFFICE REGION IV
OCT 18 1951
BUREAU OF MINES DENVER, COLORADO

Mr. Axel Wahlberg
Golden Sunset Mining Company
Mammoth, Utah

OCT 12 1951

Re: Docket No. DMA-1615X

Dear Mr. Wahlberg:

This is to acknowledge your letter of August 28, 1951 enclosing some additional information on your property which has been added to your file and will be used in the processing of your application.

This is also to inform you that your application for exploration aid has been referred to the field team for further study. You will hear from Mr. J. H. East, Jr., Executive Officer, DMA Field Team, Region IV, Bureau of Mines, 224 New Customhouse Building, Denver 2, Colorado or one of his staff when they are ready to visit your property.

Very truly yours,

SIGNED

A.B. Parsons, Acting Director
Supply Division

RVWaugh:es
10/5/51
Copy to: Administrator's Reading File
Executive Officer, Region IV
J.B.Cowen,
C.H.Johnson
D.MacLaren
Files - DMA Docket

72h New Customhouse
Denver 2, Colorado

October 17, 1951

Memorandum

To: S. R. Wilson (with brochure)

(Through Chief, Mining Division, Region IV)

Ralph Roberts

From: DMA Field Team, Region IV

Subject: DMA Docket 1615X, Golden Summit Mining Company, applicant; Della Copper Mine, Juab County, Utah

Enclosed herewith is the application of the subject docket for an exploration loan of $100,000 and a review by the Coordinating Committee.

The proposed work is not adequately described, and the estimated costs are questionable. Field investigations are required to determine the geological probability of discovery and the feasibility of the proposed project.

Please return the brochure with your report.

J. H. East, Jr.

J. H. East, Jr.

for A. E. Kossiman

Enclosure

WEN:fmp
cc: DMA docket, chron, Kossiman

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

REGIONAL DIRECTOR'S
OFFICE
REGION IV
AUG 9 1951
BUREAU OF MINES
DENVER, COLORADO

Mr. Axel Wahlberg
Golden Sunset Mining Company
Mammoth, Utah

Re: DMA Docket No. 1615X

Dear Mr. Wahlberg:

This is to acknowledge your letter of July 30, 1951 submitting more information.

We wish to inform you that this new additional material will be incorporated with your application and will further help in processing it.

Very truly yours,

J. B. Gowen

J. B. Gowen, Chief
Copper Branch

Copy to: Administrator's Reading File
Reports and Records Branch
Executive Officer, DMA Field Team IV
Copper Branch
Files - DMA Docket

RVWaugh:rw
8-7-51

Golden Sunset Mining Co.

Mammoth, Utah

July 30, 1951.

U. S. Dept of Interior Re: Docket No. DMA 1615X

Defense Minerals Administration
Washington 25, D. C.

Mr. J. B. Gowan, Chief, Copper Branch

Dear Mr. Gowan:

We received your letter asking for more details regarding the installation of equipment, cost of repairing drift, and total amount of drifting to be done.

It is rather difficult to arrive at a definite figure so the estimate in this report can only be done in plus or minus figures.

In our original request, Form MF 103, we outlined the approximate cost of necessary materials. The installations and repairs are as follows:

Storeroom, compressor house, electric switchhouse -	$4000.00
Electric transformers and switches (cost and installation)	1500.00
Installation of power line	1000.00
Base and installation of compressor (360 cubic feet)	250.00
Retimbering and cleaning up the debris in drift 15 sets @ $25.00 per set	375.00
Installation of 2" pipe, outside to face of drift	125.00
Installation of track 12 lb. rail	350.00
Drifting - 400 feet @ 30.00 per foot	12,000.00

The objective of this drift is to strike what we think a favorable contact which may be 300 to 400 feet away. On contact of this fault it may be necessary to either sink or raise depending upon such conditions as are found.

So far we have not made a definite decision as to disposal of stock, but are absolutely sure if there is the least encouragement from your department that this is a feasible project, the stockholders will immediately take the necessary steps for sale of capital stock and assessments to meet their part of this job. This is a strategic location and it is due to the lack of interest in smaller properties there has been no work done since 1941.

We appreciate your response to this project, also the enclosures sent to us, as they are of value to read the answers to the questions which are always coming up in this sort of a venture.

We hope the information enclosed is sufficient to make a more clear picture of this project to you.

Thanking you very much for your attention in this matter we remain

Very truly yours,

(sgd) Axel Wahlberg
President and General Manager

Golden Sunset Mining Co.

Mammoth, Utah

C O P Y

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

REGION IV
JUL 27 1951
BUREAU OF MINES
DENVER, COLORADO

July 24, 1951

Re: Docket No. DMA-1615X

Mr. Axel Wahlberg, President
Golden Sunset Mining Company
Juab County
Mammoth, Utah

Dear Mr. Wahlberg:

In your letter of May 29, 1951 to Mr. J. H. East, Jr., 224 New Customhouse Bldg., Denver 2, Colorado which was attached to your application for government aid for your company's exploration project, you ask the question and we quote: "If property is worthy of the loan from the Government must the company have the cash ready or could operators start on government money until sale of stock is completed?" In answer to this question it will be necessary for you to have sufficient money to meet your operating costs for the first month and at the end of each month the government will pay its share. The answer to your question is best stated in the press release of May 14, 1951 and for your information we are enclosing a copy of this release, also a copy of the April 11, 1951 press release. We also believe that prior to negotiating a contract with the government you should be assured of sufficient funds to carry out the project.

To process your application we would need more detailed information on your costs such as the cost of installing equipment, cost of preparing drift and the total amount of drifting to be done with the cost.

Upon the receipt of this information we will procede with the processing of your application.

Very truly yours,

J. B. Gowen

J. B. Gowen, Chief
Copper Branch

Enclosures:

JWAlt:ez

Copy to: Executive Officer, DMA Field Team Region IV, w.c.i.
Reports & Records Branch, w.c.i.
Copper Branch, w.c.i.
Files

Eureka, Utah,
May 29, 1951

Mr. J. H. East, Jr.,
224 New Customhouse, Building.,
Denver 2, Colo. (Bureau of Mines)

Dear Sir:

Enclosed is a request from the Golden Sunset Mining Co., Utah, (This property formerly called the Pasadena) asking financial assistance to get this property into operation.

On this particular area we refer you to professional paper 107 by Waldemar Lindgren, 1919.

Since his report rich ore bodies, in the quartzite, have been discovered in this district and showings made in this property indicate rich potential ore bodies.

The stockholders of this company are willing to put up from 50 to 75 thousand dollars as their part (50%) which will come from sales of treasury stock and assessments of outstanding stock.

This property is open and accessible and have made formal application at the Bureau in Salt Lake City for examination.

All questions have been answered to the best of our knowledge, also cost estimates and are enclosing such maps itc. that are availabel.

If property is worthy of the loan from the Government must the company have the cash ready or could operations start on Goverment mongy until sale of stock is completeed?

We are very anxious to get into operation and will appreciate anything you may be able to do to expedite the project.

Yours very truly,

s/ Axel Wahlberg

J. E. f. wm

Copy

REGIONAL DIRECTOR'S OFFICE REGION IV JUL 2 1951 BUREAU OF MINES DENVER, COLORADO

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

DMA

July 18, 1951

Re: Docket No. 1615X

Mr. A Waklbert
Eureka, Utah

Dear Mr. Waklbert:

This is to acknowledge your letter of July 6, 1951 with its enclosure of additional information on your property.

We wish to thank you for submitting this new material which will help in the processing of your application. This information will be incorporated with your application which we have on file.

Very truly yours,

J. B. Gowen

J. B. Gowen, Chief
Copper Branch

RVWaugh:jp

Copy to: Region IV, J. H. East, Jr., DMA Field Team
Copper Branch, w.c.i.
Reports and Records Branch, w.c.i.
Files

J.H.E.
file
pfa
WOM

noted.
WOM

Eureka, Utah,
July 6, 1951.

Mr. J. B. Gowen, Chief, Copper Branch,
U. S. Department of the Interior,
Defense Minerals Administration,
Washington 25, D. C.

Dear Sir:

The enclosed Engineers Report on the Golden Sunset Mining Company was not available at the time the original application for a loan was made by this company.

I trust this report will give you a clearer picture of the property we are trying to develope.

This report will be a part of the papers in connection with the original application mailed to you about May 30, 1951.

Respectfully yours,

Fred Johnson
Eureka, Utah.
/s A Waklberg
President & Gen. Mgr.

Project # D.M.A.-1615X

COPY

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

224 New Customhouse
Denver 2, Colorado

January 16, 1952

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, DMEA, Region IV

Subject: Final Report, DMA Docket 1615I, Golden Sunset Mining Company (Copper) Tintic District, Juab County, Utah

Enclosed herewith are the brochure and the original and two copies of the Final Report on the subject docket. The application was for government assistance in exploration work estimated to cost $100,000.

The Golden Sunset Mining Co. property lies in close proximity to mines which have had large production of lead, zinc, copper, gold and silver ores, chiefly from deposits which replace limestone. However, rocks in the immediate property area consist almost entirely of the Cambrian Tintic quartzite. The tintic quartzite has yielded significant tonnages of high-grade gold and silver ores with small amounts of copper, lead and zinc in the eastern part of the tintic district, but no commercial ore bodies have been found in the quartzite near the Golden Sunset property.

We concur in the conclusions of the examining team that the chances for discovery of copper or lead ore bodies of commercial size are not promising, and concur with their recommendation that the request for government assistance in exploration work on the property of the Golden Sunset Mining Company be denied.

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

A. H. Koschmann
A. H. Koschmann

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

January 16, 1952

Memorandum

To: DMA Field Team, Region IV

From: Acting Chief, Mining Division, Region IV

Subject: Final Report, DMA Docket 1615X, Golden Sunset Mining Company, (Copper), Tintic District, Juab County, Utah

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

The brochure is also enclosed.

It has been recommended that the application for government assistance in exploration work estimated to cost $100,000 be denied.

W. H. King

W. H. King

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

Mining Division
Date Rec'd.
JAN 7 - 1952
BUREAU OF MINES
Denver, Colorado

January 5, 1952

Memorandum

To: Paul T. Allsman, Chief, Mining Division, Region IV

From: Chief, Utah-Wyoming Branch, Mining Division

Subject: DMA-1615X, Golden Sunset Mining Co., Juab County, Utah

Enclosed are the original and 7 copies of an engineering report covering the subject property. Also attached are a section on Summary, Conclusions and Recommendations and the original brochure.

I concur with the recommendations of the examiners.

Stephen R. Wilson

Stephen R. Wilson

Enclosures - 3

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
200 New Customhouse
Denver 2, Colorado

November 30, 1951

Memorandum

To: DMA Field Team, Region IV

From: A. H. Koschmann

Subject: DMA Docket 1615X, Golden Sunset Mining Company, Mammoth, Utah

Enclosed are 8 copies of the geologic report by R. M. Smith and H. R. Craig, Jr. of the U. S. Geological Survey covering the above docket. It has been recommended that the loan be denied.

The U. S. Bureau of Mines engineering report, accompanied by the brochure, will follow.

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

Enclosures (8)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Room 307, 320 South Main
Salt Lake City 1, Utah
28 November 1951

Memorandum

To: A. H. Koschmann, Field Team, Region IV

From: Ralph J. Roberts

Subject: Docket DMA 1615X, Golden Sunset Mining Company, Mammoth, Utah.

Enclosed are eight copies of a geologic report on Docket DMA 1615X, Golden Sunset Mining Company, Mammoth, Utah.

The property of the Golden Sunset Mining Company is in the extreme west part of the Tintic Mining Company, Juab County, Utah. Most of the ore deposits of the district are replacement deposits in limestone and dolomite.

Rocks exposed on the property of the Golden Sunset Mining Company are the Tintic quartzite of lower Cambrian age, a dike of rhyolite porphyry, and a sill of altered andesite. Geologic mapping has indicated that there are only traces of copper mineralization in the workings and that there are no favorable units or structures on the property that would form a sound basis for an exploration program.

It is therefore recommended that the application for an exploration loan be denied. The U. S. Bureau of Mines engineering report, accompanied by the brochure, will follow.

I concur with the conclusions and recommendations of the examining geologists.

Ralph J. Roberts

NOV 1951
RECEIVED
U.S. Geological Survey
Mineral Deposits Branch
Denver

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

Docket DMA-1615X, Golden Sunset Mining Company

Mammoth, Utah

R. H. Smith and R. R. Craig, Jr., Geologists
U. S. Geological Survey

November 27, 1951

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By R. M. Smith,
H. R. Craig and
M. H. Howes

The Golden Sunset Mining Co. property in the Tintic district, Juab County, Utah, was examined November 6 and 7, 1951, by Survey and Bureau of Mines personnel. The company has requested an exploratory loan of $100,000 under docket DMA-1615X.

Rocks in the immediate property area consist almost entirely of the Cambrian Tintic quartzite. Near the central part of the property, a narrow rhyolite porphyry dike has intruded the quartzite. Scattered fractures and bedding slips occur in the quartzite at the surface and throughout the underground workings, particularly in the vicinity of the rhyolite porphyry dike. Many of the fractures are slightly mineralized with iron oxide, barite and quartz. Samples taken at the time of examination contain small quantities of lead, zinc, copper, gold and silver.

Although the Golden Sunset Mining Co. property lies in close proximity to mines which have had large production of lead, zinc, copper, gold and silver ores, chiefly from deposits which replace limestone, no mineralization of sufficient strength to be termed ore has been found on the property. The Tintic quartzite has yielded significant tonnages of high-grade gold and silver ores with small amounts of copper, lead and zinc in the eastern part of the Tintic district, but no commercial ore bodies have been found in the quartzite near the Golden Sunset property.

It is concluded that chances for discovery of copper or lead ore bodies of commercial size are not promising, and it is therefore recommended that the request for an exploratory loan on the property of the Golden Sunset Mining Co. be denied.

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Summary and Conclusions	3

LIST OF ILLUSTRATIONS

Figure 1. Index map of Utah.

Figure 2. Geologic map of Quartzite Ridge.

Figure 3. Geologic map of tunnel.

Docket DMA-1615, Golden Sunset Mining Company

Nemenith, Utah

GEOLOGY

The Golden Sunset Mining Company property is on Quartzite Ridge, in the extreme west part of the Tintic Mining District, Juab County, Utah. An adit, the portal of which is approximately 3,800 feet northwest of the town of Robinson, is the only accessible opening.

The district is underlain by sedimentary rocks of Paleozoic age, ranging in age from lower Cambrian (Tintic quartzite) to upper Mississippian (Humbug formation). The Paleozoic rocks are folded into an asymmetrical syncline, plunging to the north; the west limb is slightly overturned to the west. The sedimentary rocks in the southern part of the district are intruded by the Silver City monzonite porphyry and the Dunnsen rhyolite porphyry, both of Tertiary age. On the northeast, the older rocks are overlain by the Packard quartz-latite and tuff, and on the east by andesite, also both of Tertiary age.

The adit is in the Tintic quartzite formation. A dike of Dunnsen rhyolite porphyry, approximately 30 feet thick, is exposed near the end of the adit and on the surface. A sill of altered andesite 23 feet thick is exposed in the adit, 260 feet from the portal. The intrusive body is also exposed at the surface, where it is 18 feet thick.

The quartzite strikes from N. 10° - 20° E. and dips 56° - 86° SE. Bedding plane faults are very numerous, and nearly all contain clay gouge, from 1 to 13 inches thick; quartzite breccia is generally found mixed with

the clay. About 550 feet from the portal of the adit there is a zone of crushed and brecciated quartzite, which is associated with a small fold. Iron oxide and some clay are present in the crushed zone. The contacts of the quartzite with the altered sill and with the rhyolite porphyry are marked by gouge, and there may have been some movement along them.

ORE DEPOSITS

There is little evidence of mineralization. Gold values are reported at several places, but no shipments have been made.

No ore minerals were seen anywhere in the workings, except for staining by iron oxides in the crushed zones in quartzite and rhyolite. Four samples of iron-stained rock were taken and assayed by the U. S. Bureau of Mines. The results are as follows:

	Au	Ag	Cu	Pb	Zn
Dalia Shaft Dump, selected grab sample - quartzite:	<.005	<0.1	<.05	<.1	<.05
Dalia Shaft Dump, selected grab sample - rhyolite:	<.005	0.1	<.05	<.1	<.05
Dalia Discovery grab sample - rhyolite:	<.005	<0.1	<.05	<.1	<.05
3-foot cut at tunnel station A - rhyolite:	<.005	<0.1	<.05	<.1	<.05

Most of the ore deposits in the Tintic district are replacement deposits in limestone and dolomite. Many of these deposits are blind, i.e. they do not crop out at the surface. It is the applicants' hope that such replacement deposits will be found in quartzite and rhyolite on their ground, but none of

the samples collected show more than a trace of base metals or precious metals, and there is no sound basis for planning an exploratory program.

PROPOSED EXPLORATION

The exploration program originally proposed by the applicant was modified at the time of examination. He now proposes the following three projects:

1. Drift 150 feet north along the quartzite-rhyolite contact beneath the Bella shaft; if no ore is found there, continue drift 1,200 feet toward end line of property, crosscut each 100 feet through dike.
2. Crosscut 400 feet east to intersect contact of Tintic quartzite and Ophir shale.
3. Drift south 900 feet to end line of property.

As there is little likelihood that the ground north, east, and south of the present workings is more favorable than ground already explored, the projects appear to be unsound. No significant copper mineralization has been found in the area, and the chance for the discovery of commercial deposits of base metals is not good.

SUMMARY AND CONCLUSIONS

The Golden Sunset Mining Company property is in the lower Cambrian Tintic quartzite. The quartzite is intruded by a dike of Sunset rhyolite porphyry and an older sill of altered andesite. The quartzite strikes about N. 15° E. and the average dip is 80° - 85° E. No ore is apparent in the workings, although some gold values have been reported on the surface.

The examining geologists conclude that the outlook for the discovery of copper deposits of significant size on the property is small, and therefore recommend that the applicant's request for an exploration loan be denied.

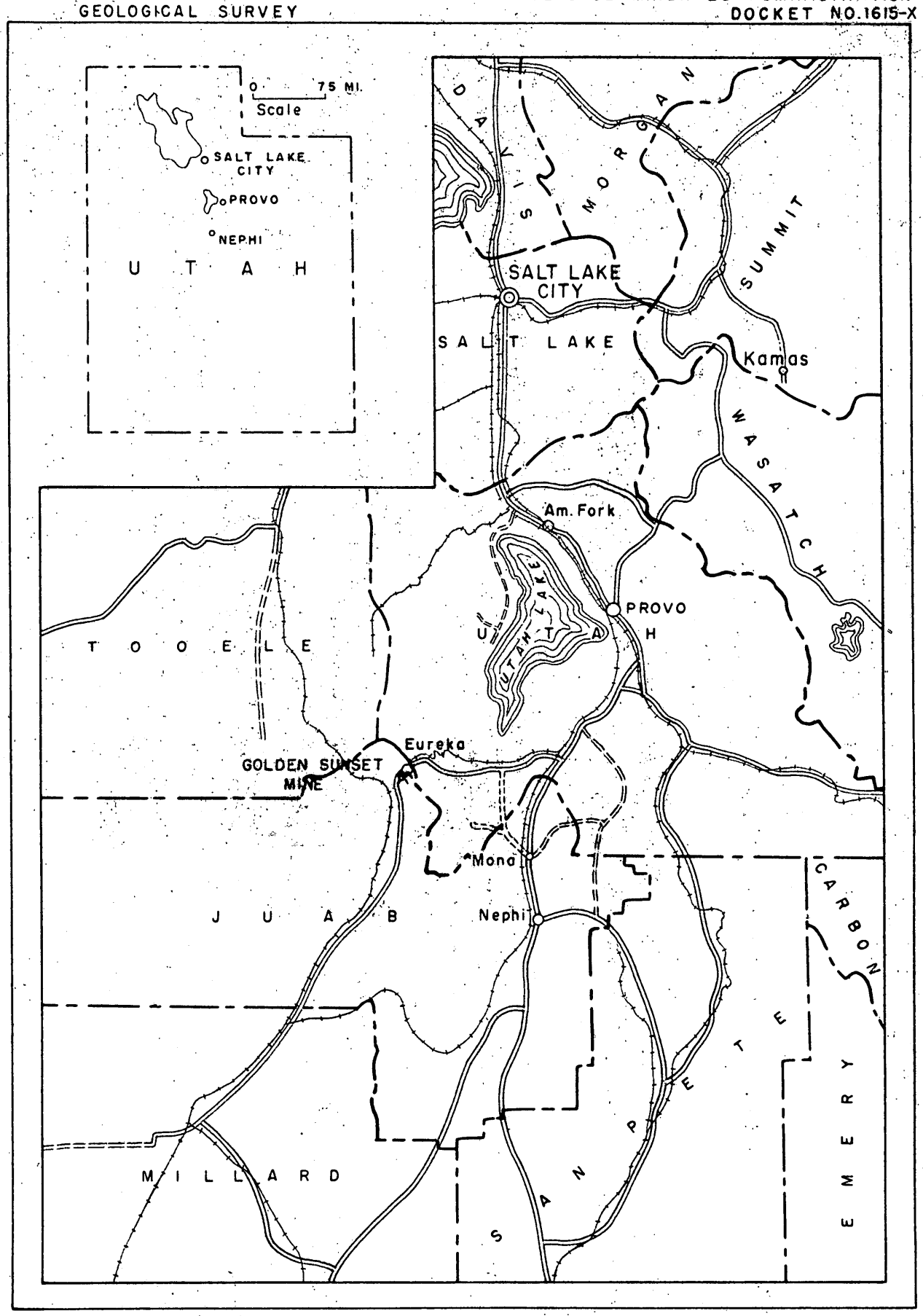

FIG. 1 INDEX MAP OF CENTRAL UTAH

0 5 10 15 20 MILES
Scale

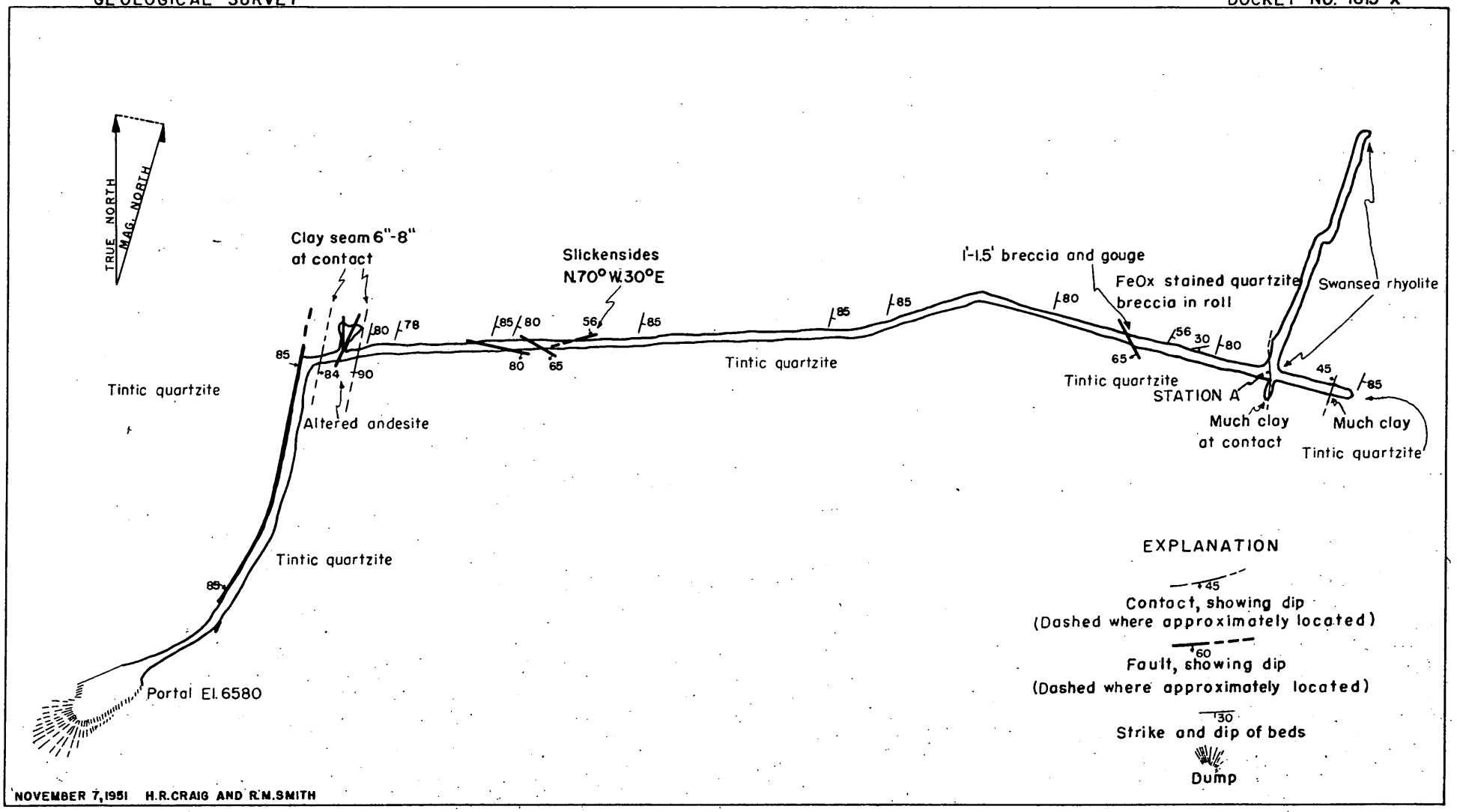

FIG. 3

GOLDEN SUNSET MINING CO.

MAMMOTH, UTAH

PROSPECT TUNNEL

0 100 200 FEET
Scale

GOLDEN SUNSET MINING CO.
JUAB COUNTY, UTAH
DMA-1615X
Copper-Lead

Engineering Report

By M. H. Howes
Mining engineer
Bureau of Mines

GOLDEN SUNSET MINING CO.
JUAB COUNTY, UTAH

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ILLUSTRATIONS

Fig. 1 Location map, Golden Sunset Mining Co., Juab County, Utah
Fig. 2 Plan of claims and proposed exploration projects.

INTRODUCTION

Application for government aid for an exploratory project, planned for a search for copper and lead ores, was made May 31, 1951, by the Golden Sunset Mining Co., Mammoth, Utah, under Docket DMA-1615X.

A field examination of the property was made by M. H. Howes, mining engineer, Bureau of Mines, and R. M. Smith and H. R. Craig, geologists, Geological Survey, November 5 through November 8, 1951, for the purpose of determining the geological probability of discovery and the feasibility of the proposed project.

ACKNOWLEDGMENTS

Officials of the Golden Sunset Mining Co. were helpful in submitting data pertinent to this report.

Harry Pitts, chief engineer, Chief Consolidated Mining Co., Eureka, Utah, provided much useful data concerning the history, geology, production and properties of the Tintic district.

Reference was made to U.S.G.S. Professional Paper 107.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The property is on Quartzite Ridge, 2 miles southeast of Eureka and about 1 mile northwest of Mammoth in Juab County, Utah, T. 10 S., R. 3 W., S.L.B. & M. Quartzite Ridge is a rugged, elongated, steep-sloped hill rising from an altitude of 6,100 feet at its toe on the south to 7,300 feet at its peak to the north.

The climate is semiarid. Summers are hot and dry and winters are cold with moderate snowfall. Snow melts rapidly on the south slopes and

all-year mining operations are easily conducted.

Scanty vegetation consists of low sage brush and scattered, scrubby pinion pines and cedars.

HISTORY AND PRODUCTION

Exploration, started in 1905 from surface indications of copper, lead, gold, and silver, and conducted intermittently through 1941, consists of a shaft sunk 155 feet on the Della claim, an adit driven easterly for more than 1,200 feet from the West Side Contact claim to the Della claim, a 350-foot inclined shaft sunk at the south end of the West Side Contact claim, and numerous pits, shafts, and trenches scattered over the property. Samples taken from small mineralized areas on the property assayed as high as 4 percent copper and 20 ounces silver per ton.

No production has been recorded.

OWNERSHIP AND EXTENT

The Golden Sunset Mining Co. is a corporation which owns seven patented and four unpatented lode mining claims with no liabilities or liens. The patented claims are the West Side Contact, Good Fraction, Thomas, Sun Set Number Four, Topic Mining Claim No. 2, Rising Sun, and Della, totaling 92.062 acres.

DESCRIPTION OF THE DEPOSITS

Sedimentary rocks on the property are of Cambrian age and consist entirely of the Tintic quartzite series. The only igneous body observed is an intrusive rhyolite porphyry dike, 40 to 50 feet thick, appearing near the central part of the property. Quartzite Ridge is on the east

limit of a great, northerly-striking anticline, the top of which has been removed by erosion. The beds, slightly overturned, strike slightly east of north and dip from vertical to 80° westerly. Numerous scattered fractures and bedding slips occur on the surface and throughout the underground workings, especially in the vicinity of the rhyolite porphyry dike. Many of these breaks are vuggy and slightly mineralized with iron oxide, barite and quartz.

Four samples were taken on the property. The assay results are listed as follows:

Sample No.	Location and description	Assay, percent				
		Cu	Pb	Zn	Au	Ag
1	Della shaft dump, selected grab sample of quartz	<.05	<0.1	<.05	<.005	<0.1
2	Della shaft dump, selected grab sample of rhyolite	<.05	<0.1	<.05	<.005	<0.1
3	Della discovery pit, grab sample of rhyolite	<.05	<0.1	<.05	<.005	<0.1
4	Station A in tunnel, 3-foot cut across quartzite-rhyolite contact	<.05	<0.1	<.05	<.005	<0.1

MINABLE ORE RESERVES

No minable ore reserves have been developed on the property.

PRESENT STATUS

No exploration or development is being carried on at present.

No mining or milling equipment or other facilities are on the property.

PROJECT PROPOSALS WITH COSTS

No specific proposals for exploratory work were outlined in the application for assistance. However, discussions with representatives of the company resulted in proposals as shown.

It is proposed that exploratory work for the purpose of discovery of copper and lead ores on the Golden Sunset Mining Co.'s property be conducted and divided into three projects as follows: (fig. 2)

Project 1

The north drift, from the adit driven westerly from the West Contact claim, will be extended northerly in or along the intrusive rhyolite porphyry dike for a distance of 1,200 feet. Crosscuts will be driven through the dike from the drift at intervals of 100 feet. It is estimated that 600 feet of crosscutting will be required.

Project 2

A crosscut 400 feet long will be driven easterly from the east face of the tunnel to the boundary line of the property.

Project 3

The south drift from the tunnel will be extended southerly in or along the dike for a distance of 900 feet to the boundary line of the property.

Time Schedule (26 work days per month)

Access Road

1/4 mile grading and 300 feet rock excavation	2 men, 10 days or 2 weeks

Construction

Building for compressor, store room, switches, and office	2 men, 30 days or 5 weeks

Compressor

Base and installation	2 men, 6 days or 1 week

Tunnel Rehabilitation

Clean up, retimbering, enlarging and straightening, laying of track and pipe	2 men, 30 days or 5 weeks
Total ————————	6 men, 26 days or 1 month

Project 1

1,800 feet drifting and crosscutting at 10 feet per day advance (2 shifts)	8 men, 180 days or 7 months

Project 2

400 feet crosscutting at 10 feet per day advance (2 shifts)	8 men, 40 days or 1½ months

Project 3

900 feet drifting at 10 feet per day advance (2 shifts)	8 men, 90 days or 3½ months
Total time for entire program —	336 days or 13 months
Plus 1 month for delays ———	14 months

Costs

Labor

1 laborer (trammer, mechanic, carpenter, or other classification, same base pay as for miner) at $12.05 per day plus overtime plus 11 percent payroll taxes	$14.50 per day

Supervision

Includes engineering, bookkeeping, sampling, etc. at $400 per month plus 11 percent payroll taxes $442 per month, or	$17.00 per day

Materials

Mine track (two 12-lb. rails, splice bars, spikes, bolts, and ties)	$ 0.80 per foot
2-inch pipe	.35 per foot

Other Costs (work day consists of two shifts)

Power (compressor, battery charger, lights)	$ 6.00	per day
Explosives (powder, caps and fuse)	3.60	per ft. advance
Drill steel and bits	1.10	do.
Timber	.80	do.
Assaying	.50	do.
Transportation of supplies	.50	do.
Maintenance and repairs of equipment	.50	do.
Miscellaneous	.50	do.

Equipment

2 drifters, used at $300 each		$600.00	
1 jackhammer, used		75.00	
1 stoper, used		100.00	
1 360-cu. ft. compressor	$5,000.00		
Base (concrete and labor)	200.00		
Installation	50.00	5,250.00	
1 water tank and pump for compressor		300.00	
1 air receiver, used		150.00	
2 drill columns, used, at $60 each		120.00	
2 water pressure tanks, used, at $30 each		60.00	
150 feet, 1-inch air hose at $1.00 per foot		150.00	
150 feet, 3/4-inch water hose at $1.00 per foot		150.00	
1 Eimco loader, used		1,500.00	
8 mine cars, used, at $125 each		1,000.00	
1 Mancha trammer with batteries and charger, used		2,000.00	
1 Pickup truck		2,500.00	
Miscellaneous small tools		500.00	
Total equipment costs			$14,455.00
Transportation of equipment			$ 250.00

Facilities

Power

1,250 feet power line (cost and installation)	$1,000.00	
Transformers (cost and installation)	1,500.00	
Switches (cost and installation)	500.00	
		$3,000.00

Building for compressor, storeroom, switches, office

Labor, 2 men, 30 days at $14.50 per day each	$ 870.00	
Materials	1,130.00	
		$2,000.00

Access Road

Labor, 2 men, 10 days at $14.50 per day each	$ 290.00	
Explosives	75.00	
Compressor, steel, bits, etc.	135.00	
Bulldozer, 5 days at $100 per day	500.00	
		$1,000.00

Rehabilitation of Tunnel

Labor, 2 men, 30 days at $14.50 per day each	$ 870.00	
Explosives	100.00	
Compressor, steel, bits, etc.	180.00	
1,250 feet mine track at $0.80 per foot	1,000.00	
1,250 feet of 2-in. pipe at $0.35 per foot	437.50	
Timber	500.00	
		$3,087.50
Total facilities cost		$9,087.50

Project 1

Labor, 8 men at $14.50 per day each	$20,880.00
Supervision at $17 per day	3,060.00
1,800 feet mine track at $0.80 per foot	1,440.00
1,800 feet 2-inch pipe at $0.35 per foot	630.00

Power at $6 per day	$ 1,080.00	
Explosives at $3.60 per foot	6,480.00	
Drill steel and bits at $1.10 per foot	1,980.00	
Timber at $0.80 per foot	1,440.00	
Assaying at $0.50 per foot	900.00	
Transportation of supplies at $0.50 per foot	900.00	
Maintenance and repairs of equipment at $0.50 per foot	900.00	
Miscellaneous at $0.50 per foot	900.00	
Cost, project 1		$40,590.00

Cost per foot advance, $22.55

Project 2 (400 feet, 40 days)

400 feet at $22.55 per foot advance	$ 9,020.00

Project 3 (900 feet, 90 days)

900 feet at $22.55 per foot advance	$20,295.00
Total cost entire program	$93,697.50
Total cost per foot advance	$30.23

Transportation, Access Roads

U. S. paved highway No. 6 and the Mammoth branch line of the Denver and Rio Grande Western Railroad are about 1/4 mile air line from the portal of the tunnel. About 3/4 mile of access road has been constructed from Highway 6 toward the mine, but lacks 300 feet of reaching the mine dump, and the last 1/4 mile needs grading.

Manpower

Although manpower is not in excess in the Eureka area, it is believed possible to acquire a sufficient number of miners to complete the proposed exploration and to carry on any subsequent mining operation.

Power

Power is available from a Utah Power and Light Co. transmission line within 1,200 feet of the mine workings.

Water

Sufficient water for mine operation can be obtained from the main Mammoth supply line about 1/4 mile distant.

PRODUCTION PLAN

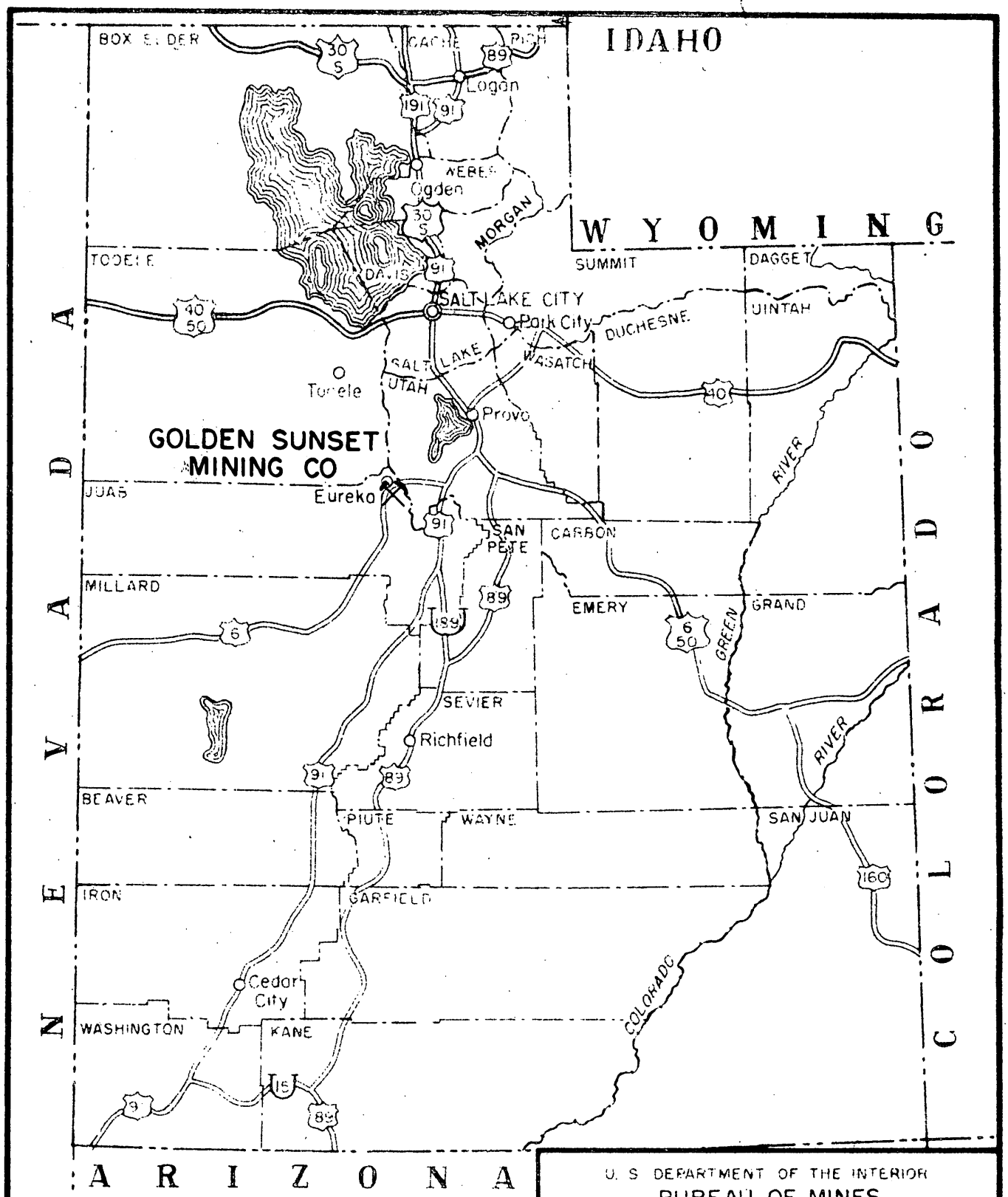
No definite production plan has been devised. However, it is believed that standard underground mining methods will be used if ore bodies of commercial size and value are discovered.

CONCLUSIONS AND RECOMMENDATIONS

Property of the Golden Sunset Mining Co. lies in close proximity to mines which have had large production of lead, zinc, copper, gold, and silver ores, chiefly from replacement of limestone and to a lesser extent from fissure deposits in quartzite and intrusive rocks. The Golden Sunset Mining Co. claims cover outcrops of Tintic quartzite which has not been notably productive except in the eastern part of the Tintic district in the Eureka Standard, Tintic Standard, Eureka Lily and North Lily properties. Here the deposits yielded high-grade gold and silver ores with small amounts of copper, lead and zinc.

No mineralization of sufficient strength to be termed ore has been found on the property. Samples taken at the time of examination carry small amounts of copper, lead, zinc, gold and silver. The company reports that significant quantities of gold have been found in samples

taken at the surface. It is concluded that chances for discovery of copper or lead deposits of commercial size are not promising. It is therefore recommended that the request for an exploratory loan on the property of the Golden Sunset Mining Co. be denied.



U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

FIG. 1. PROJ. NO.

Location Map

GOLDEN SUNSET MINING CO.

JUAB COUNTY, UTAH

ENGINEER M. H. HOWES	DATE NOV. 30, 1951
TRACED NOV., 1951; A.P.T.S.	1400-127-E
CHECKED	

224 New Customhouse
Denver 2, Colorado

January 20, 1953

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: DMA Docket No. 1615x, Golden Sunset Mining Company, (Copper), Juab County, Utah

The subject applicant has requested the return of maps submitted with the original brochure.

Our records indicate that the brochure was returned to your office together with three copies of the Report of Examination on January 16, 1952.

If you will return the maps submitted by the applicant in the original application to this office, we will forward them to the applicant.

W. M. Traver

W. M. Traver

WMC:pw

cc: Subject
Chron
Wilson

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

Date Rec'd.
JAN 19 1955
BUREAU OF MINES
Denver, Colorado

January 17, 1955

Memorandum

To: W. M. Traver, Executive Officer, DMEA Field Team, Region IV

From: Stephen R. Wilson

Subject: Docket No. DMA-1615X (Copper), Golden Sunset Mining Co., Juab County, Utah

A representative of the subject company called at this office last week to request the return of maps submitted with the original brochure. If the maps are available in your file, will you please return them to this office for mailing to the applicant?

Stephen R. Wilson
Stephen R. Wilson

Required from W. O. 1-20-55 Hmc

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

January 17, 1955

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Stephen R. Wilson
Stephen R. Wilson

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

Date Rec'd,
JAN 31 1955
BUREAU OF MINES
Denver, Colorado

JAN 27 1955

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
Bureau of Mines
224 New Customhouse Building
Denver 2, Colorado

Dear Mr. Traver:

This will acknowledge your memorandum dated January 20, 1955, requesting that we forward to you the maps submitted with the application of the Golden Sunset Mining Company, (Copper), Juab County, Utah, DMA Docket No. 1615X, for return to the applicant.

In accordance with your request, the maps are enclosed herewith.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

Enclosures

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

JAN 27 1955

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
Bureau of Mines
224 New Customhouse Building
Denver 2, Colorado

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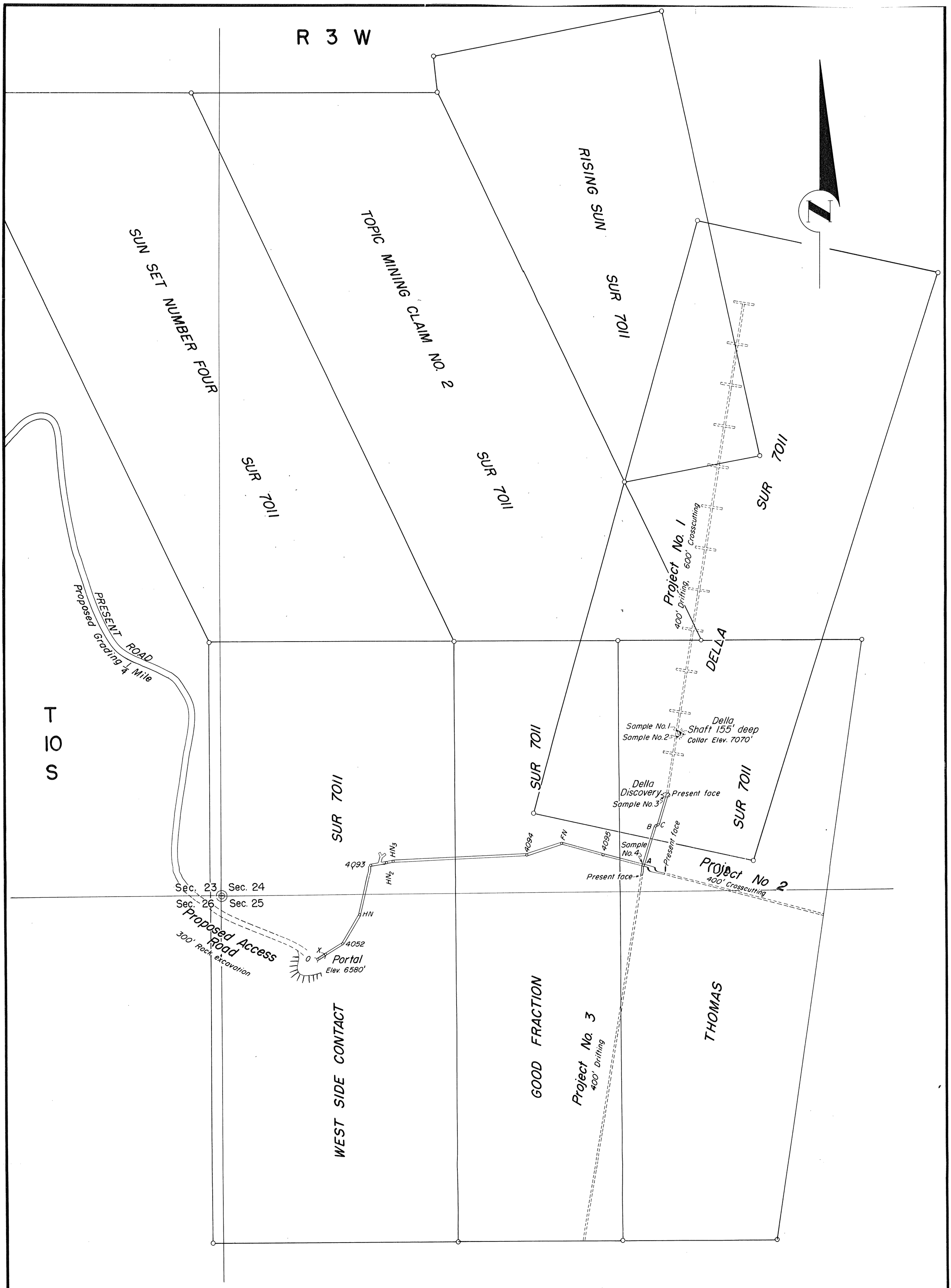
ROBERT E. ADAMS

Robert E. Adams, Chief
Operations Control and
Statistics Division

Enclosures



U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 2 Proj. No.

Plan of Claims and Proposed Exploration Projects

GOLDEN SUNSET
MINING COMPANY

JUAB COUNTY, UTAH

ENGINEER: M. H. HOWES	DATE: DEC. 3, 1951
TRACED: DEC., 1951; BY: A. P. T. S.	1400 - 128 - B
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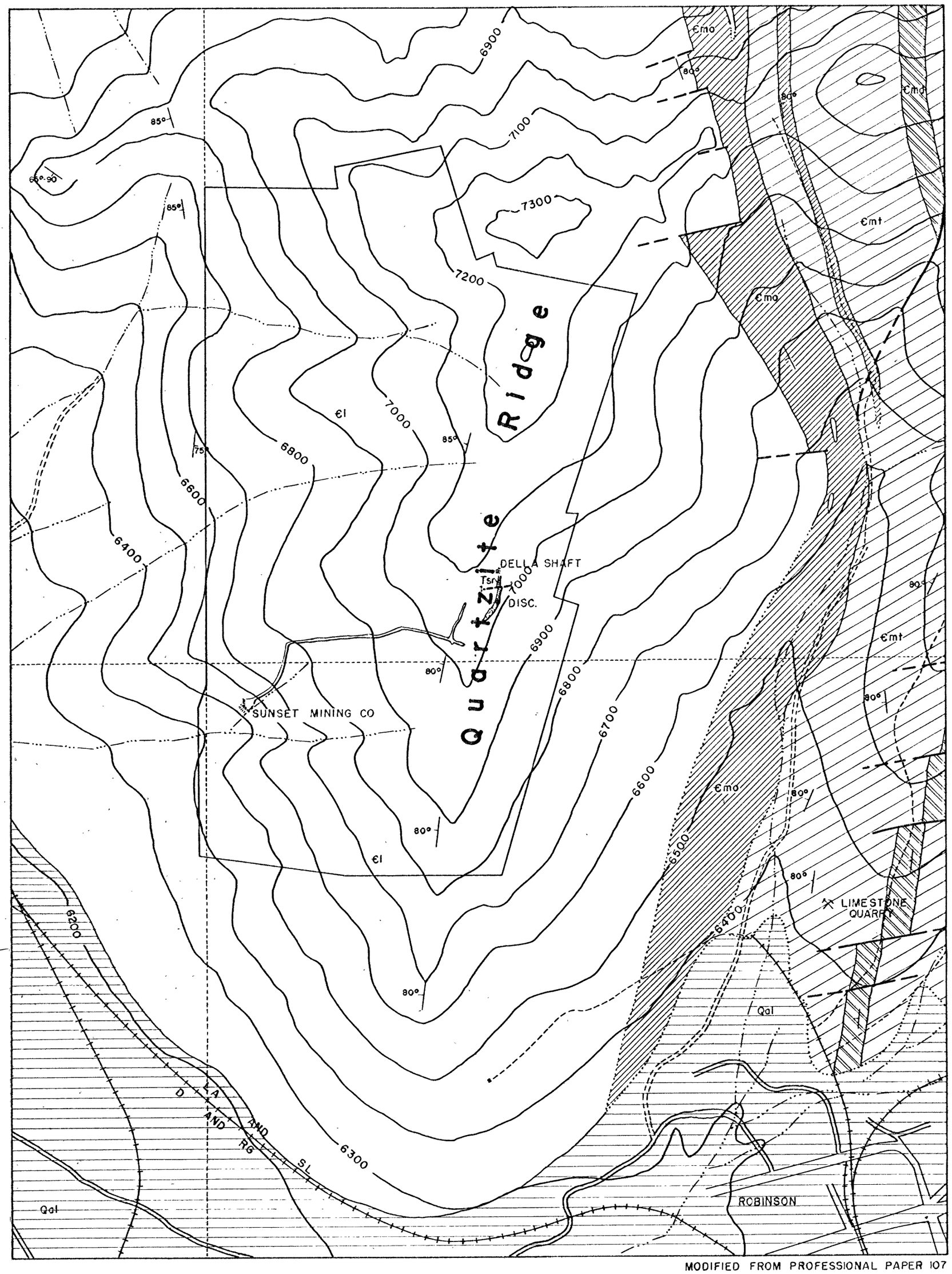

MODIFIED FROM PROFESSIONAL PAPER 107

EXPLANATION

Qal — Alluvium

€md — Dagmar limestone

€mt — Teutonic limestone

€mo — Ophir formation

€l — Tintic quartzite

Tsr — Swansea rhyolite

20 — Contact (Dashed where approximately located)

Concealed contact

55 — Fault (Dashed where approximately located)

30 — Strike and dip of beds

Portal of tunnel or adit

Dump

FIG. 2 GEOLOGIC MAP OF QUARTZITE RIDGE, TINTIC MINING DISTRICT UTAH SHOWING SUNSET MINING CO. PROPERTY AND WORKINGS

0 400 800 FEET
Scale