DMEA Form 7
(12-56)

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Date	Surname	Code
3/8	Klugescheid	500
3/8	Selfridge	130
"	Fleman	110
"	Mittendorf	100
		225

Bishop
Kiilsgaard

MAR 11 1957

Mr. D. Howe Moffat, Agent
Flare Mining Company
801 Continental Bank Bldg.
Salt Lake City, Utah

Re: Docket No. DMEA-4404 (Copper-Lead-Zinc)
Flare Mining Company
Sunbeam Mine
Juab County, Utah

Dear Mr. Moffat:

In accordance with your request, dated February 12, 1957, we wish to advise you that the cited application has been withdrawn and placed in the inactive files.

We wish to thank you for your interest in the Defense Minerals Program and for bringing your property to our attention.

Sincerely yours,

G. O. Mittendorf

Administrator

WPKlugescheid/er 3/8/57
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. McMahon, USBM
Mr. Kiilsgaard, USGS
Region III (2)
Chron.

8623

DMEA Form 7
(12-56)

500

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Date	Surname	Code
3/8	Klugescheid Linnell	500
3/8	Selfridge	130
		110
		100
3/12	C	220
		225

Bishop
Kulsgaard

March 8, 1957

Memorandum

To: Chief, Operations Control and Statistics Division

From: Chief, Base Metals Division

Subject: Withdrawal of Application, Docket No. DMEA-404, Flare Mining Company, Sunbeam Mine, Juab County, Utah, Copper-Lead-Zinc.

Will you please withdraw the cited application from the active files. This project has now been taken over by Western Resources Inc., and the active file in the future will be Docket No. DMEA-4653.

W. R. Griswold

W. R. Griswold

WPKlugescheid/er
Copy to: Docket (2)
Admr R File
Chron.

8623

224 New Customhouse
Denver 2, Colorado

March 7, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 11 1957

DATE	INITIALS	CODE
12	C	220
		500

Mr. D. Howe Moffat
Fabian, Clendenin, Moffat & Mabey,
Attorneys and Counselors at Law
Continental Bank Building
Salt Lake City 1, Utah

Re: Docket No. DMEA-4404
Flare Mining Company

Docket No. DMEA-4653
Western Resources, Inc.

Dear Mr. Moffat:

Receipt is acknowledged of the instrument dated March 5, 1957, signed by you as Secretary of Western Resources, Inc., and also as the Authorized Agent of Flare Mining Company, pertaining to the processing of application, Docket No. DMEA-4404.

You also enclosed four photo copies of an instrument executed by Flare Mining Company, assigning to Western Resources, Inc. all right, title and interest in a certain agreement dated the 1st day of July, 1956, between New United Sunbeam Mining Company and Flare Mining Company.

Attached to, and made a part of the brochure DMEA Docket 4404, and pertaining to the aforementioned agreement between New United Sunbeam Mining Company and Flare Mining Company, is an instrument dated July 12, 1956, executed by New United Sunbeam Mining Company, Kearns-Tribune Corporation and Flare Mining Company wherein it is expressly stipulated that "said agreement may not be assigned or the lease therein assigned or sublet without the written consent of the undersigned," which being New United Sunbeam Mining Company.

Under the circumstances and in conjunction with material forwarded under date of March 5, 1957, please forward four signed copies or four photo copies of the original signed instrument, whereby New United Sunbeam Mining Company agrees to the assignment of the agreement between themselves and Flare Mining Company dated July 1, 1956, to Western Resources, Inc.

Very truly yours,

Original signed by
J. W. TOWNSEND

J. W. Townsend
Alternate Acting Executive Officer,
DMEA Field Team, Region III.

JWT:bh
cc-Chairman, Op. Comm. (2)
Harshman
Wilson
Docket DMEA-4404) w/copy Instrument
Docket DMEA-4653) dated 3/5/57
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2/28/57	Klugescheid	500
2/28/57	Hirsewel	500
2/28	Selfridge	130
2/28	Hotchkiss	110
"	Mitchenson	2690
2/28	C	500

FEB 28 1957

WPKlugescheid/er Rm. 4444, Ext. 2690

T E L E T Y P E

XXX DMEA - Base Metals Division 226

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

14X4401(01) Revolving Fund, Defense Production Act, Interior (allocated Working Fund to Office of Secy.)

Date:

To: Mr. E. N. Harshman, Acting Executive Officer, DMEA Field Team, Region III, Denver, Colorado

Re Docket DMEA-4404, Flare Mining Co., Sunbeam Mine. Docket DMEA-4653 is new number assigned to Western Resources, Inc. No new application necessary. Instruct Western Resources, Inc., to write us a letter stating they wish to have the Flare project, Docket DMEA-4404, substituted for the one in their application. Letter in quadruplicate, two copies for your office and two for us. Written consent of lessors required for assignment of lease.

George C. Selfridge

Chairman, Operating Committee (245)

WPKlugescheid/er (2/27/57)
Rewritten 2/28/57
Copy to: Docket
Admr R Rile
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.
Confirmation Copy

8623

Mr. George Selfridge

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RECEIVED FEB 26 1957

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2/26	C	220
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DN 235 BUR MINES 2-25-57 4-20

CHAIR MAN, OPERATING COMMITTEE, DMEA

RE DOCKET DMEA-4404, FLARE MINING CO., /SUNBEAM MINE/, JUAB COUNTY, UTAH. A NEW COMPANY, WESTERN RESOURCES, HAS OBTAINED PROPERTY RIGHTS OF FLARE MINING CO. AND WISH TO PURSUE EXPLORATION WORK IN AXXX ACCORDANCE WITH ORIGINAL APPLICATION. SHOULD THEY SUBMIT A NEW APPLICATION IN THEIR OWN NAME OR REQUEST THAT DOCKET NO DMEA-4404 BE NOW PROCESSED IN THE NAME OF WESTERN RESOURCES. PLEASE TELETYPE ADVICE.

E N HARSHMAN, ACTING EXECUTIVE OFFICER

New Number 4653

Denver Colo.

FEB 26 8 51 AM '57
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D.C.

LAWRENCE P. PADIAN
DONALD C. GLENDENNIN
D. HOWE MOFFAT
RANDOLL N. MABRY
PETER W. CRAMER
SANFORD M. STOODARD
ALBERT J. COLTON
O. WOODFIN ADAMS, JR.
RAY HOLDSWORTH
RICHARD N. MOFFAT

PADIAN, GLENDENNIN, MOFFAT & MABRY
ATTORNEYS AND COUNSELORS AT LAW
CONTINENTAL BANK BUILDING
SALT LAKE CITY 1, UTAH

February 12, 1957

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DMEA
RECEIVED FEB 18 1957

DATE	INITIALS	CODE
DMEA		

Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

Attention: W. M. Traver, Executive Officer,
Field Team, Region III

Re: Docket DMEA 4404 (copper-lead-zinc)
Sunbeam Mine, Juab County, Utah

Dear Sir:

Please withdraw the above numbered DMEA application heretofore made by Flare Mining Company.

Very truly yours,

FLARE MINING COMPANY

By [signature]
Its authorized agent.

DHM:abc

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

OFFICIAL FILE COPY DMEA RECEIVED JAN 29 1957		
DATE	INITIALS	CODE
1-29	cw	220
1-29	WPK	500

January 28, 1957

Memorandum

To: W. R. Griswald, Defense Minerals Exploration Administration

From: Commodity Specialist, Branch of Base Metals

Subject: Review of Examination Reports, Docket No. DMEA-4404 (copper-lead-zinc), Flare Mining Company, Sunbeam Mine, Tintic Mining District, Juab County, Utah, $31,451.00

The field examiners in their engineering and geologic reports of examinations covering the above-cited property conclude that the probability of finding significant amounts of copper-lead-zinc ore is favorable in the deeper exploration of the Sunbeam vein. Accordingly, they recommend approval of the application for assistance in a drilling program consisting of six diamond drill holes totaling 3,600 feet at a cost of $31,451.00.

I concur in that recommendation.

In connection with Flare Mining Company's assignment of their lease to Western Resources, Inc., it is believed that substitution of one applicant for another could be handled administratively without requiring a new application for a desirable exploration project.

A. D. McMahon

A. D. McMahon

Copy to: Division of Minerals
Branch of Base Metals (2)
Thor Kiilsgaard, U. S. G. S.
F. D. Lamb
F i l e s

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 31 1957

DATE	INITIALS	CODE
1·31	C	220
1-31	WPK	500

January 29, 1957

Re: DMEA 4404
Flare Mining Co.
Sunbeam Mine,
Juab Co., Utah
App. Est. $34,602.50
Rec'd Est. $31,451.00
Copper-lead-zinc

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team Report.

The applicant requested assistance in exploring by deep non-core and core drilling the downward extension of the Sunbeam vein system which occurs in monzonite and has a known length of from 3,000 to 4,000 feet. Mining has been done at many points in the vein system, but is believed to have stopped generally at the ground water level and the drilling is planned to intersect and explore the vein below the water level.

The examiners recommend that 6 holes averaging 600 feet be drilled to test the vein. The justification rests largely on surmise and inference as maps especially assay maps of the old mines are not available, but the work appears warranted.

I concur with the recommendation of the examiners and Field Team.

N. E. Nelson

N. E. Nelson

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

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DMEA
RECEIVED JAN 22 1957

DATE	INITIALS	CODE
1-22	cw	220
January	18, 1957	
		130
1-25	cw	220
1/28	WPK	500

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee

From: DMEA Field Team, Region III

Subject: Report of Examination Docket DMEA 4404 (copper-lead-zinc) Flare Mining Company (Sunbeam Mine) Juab County, Utah.

Enclosed are the original and three copies of an engineering and geologic report of examination covering the subject property.

The examiners recommend a drilling program to consist of six holes at a total estimated cost of $31,451.00, Government participation $15,725.50.

We concur in this recommendation, provided that the Flare Mining Company withdraws their application and Western Resources, Inc. submits a new application, and complies with our letter of January 17, 1957 to D. Howe Moffat, Agent for Flare Mining Company and Western Resources, Inc. Copies of this letter were forwarded your office.

This office had no knowledge of the Assignment of Lease from Flare Mining Company to Western Resources, Inc., until we received the Report of Examination. The field advises that they were not notified of the assignment until the Report of Examination was near completion.

DMEA Field Team, Region III

By W. M. Traver
Executive Officer

Reviewed by
DMEA OPERATING COMMITTEE
1-25-57
(date)

Enclosures

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D M E A
RECEIVED JAN 22 1957

DATE	INITIALS	CODE
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		220

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 12, UTAH

DMEA
DEPARTMENT OF THE INTERIOR
JAN 17 1957
REGION III
DENVER, COLORADO
TRANSMITTED JAN 18 1957

January 14, 1957

Memorandum

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

From: Stephen K. Wilson

Subject: Docket No. DMEA-4404 (Copper-lead-zinc), Flare Mining Co. (Sunbeam mine), Juab County, Utah

Enclosed are the original and eight copies of an engineering report covering examination of the Sunbeam mine in the Tintic district, Juab County, Utah. The property was examined by M. N. Howes with F. B. Moore of the Geological Survey. Also included is a copy of the brochure.

The applicant has proposed a diamond drilling program to intersect the Sunbeam vein approximately 500 feet below the surface. Six holes totaling 3,600 feet of core and noncore drilling, and estimated to cost $34,602.50, are included in the applicant's proposals.

The Sunbeam vein occurs in an intrusive body composed of monzonite and monzonite porphyry. The vein trends northeast and may be followed on the surface for 3,000 feet. No sedimentary rocks are present in the immediate area. Shattering and fissuring of the host rock and change in strike of the vein are believed to be favorable conditions for mineral deposition. Ores have been mined from the Sunbeam vein to the water level and slightly below. The proposed project is planned for the purpose of cutting the vein 75 feet or more below the water.

The Silver Moon claim, Survey 2953, actually is not included in the original lease agreement between New United Sunbeam Mining Co. and Flare Mining Co. The claim is controlled by New United Sunbeam Mining Co., and this company has indicated that, under certain conditions, an agreement will be made with Flare Mining Co. to allow Flare to explore the property. The examining engineer's report includes the Silver Moon claim with other claims designated in the original lease between New United Sunbeam Mining Co. and Flare Mining Co. Although the acreage in the Silver Moon claim is small, the claim covers approximately 300 feet along the strike of the Sunbeam vein. It appears that the claim should be encumbered if a contract is prepared to permit exploration of the Sunbeam vein.

Reviewed by
DMEA OPERATING COMMITTEE
1-25-57
(date)

The examining engineer estimates that the cost of 3,600 feet of core and noncore drilling will total $31,451. The possibility that commercial ore will extend some distance below the water level is believed to be favorable. The examining engineer recommends that a loan be granted to perform exploration as outlined in the engineering report. I concur with this recommendation.

Stephen R. Wilson

Stephen R. Wilson

Enclosure

cc: W. H. King
J. B. Clemmer

FOR UNITED STATES GOVERNMENT USE ONLY

TRANSMITTED

JAN 18 1957

ON-SITE REPORT

FLARE MINING CO.
NEW UNITED SUNBEAM MINING CO. PROPERTY
JUAB COUNTY, UTAH
DMEA-4404
Copper-Lead-Zinc

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 22 1957

DATE	INITIALS	CODE
		130
		220

Engineering Report

By M. H. Howes
Mining Engineer
Bureau of Mines

January 14, 1957

Reviewed by
DMEA OPERATING COMMITTEE
1-25-57
(date)

FLARE MINING CO.
NEW UNITED SUNBEAM MINING CO. PROPERTY
JUAB COUNTY, UTAH

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Location, topography, and physical features	3
History and production	4
Ownership and extent	5
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Minable ore reserves	7
Present status	7
Project proposals	8
Alternate project proposals	8
Estimated cost of project proposals	9
Proposed financing	11
Conclusions and recommendations	11

APPENDIX

I Assignment of Flare Mining Co. interests to Western Resources, Inc.
II Lease Agreement between Empire Mines Co. and Western Resources, Inc.
III Drilling bid by Sprague and Henwood, Inc.
IV Drilling bid by Boyles Bros. Drilling Co.

ILLUSTRATIONS

Fig. 1 Location map, Flare Mining Co., Juab County, Utah
Fig. 2 Claim map

FILE COPY
DMEA
RECEIVED JAN 22 1957
DATE | INITIALS | CODE

SUMMARY

Flare Mining Co., on July 27, 1956, made application for DMEA assistance designed to explore for copper-lead-zinc ores by core drilling below the water table in the Sunbeam vein on property leased from New United Sunbeam Mining Co., Tintic mining district, Juab County, Utah. This property consists of eight patented lode mining claims. Flare Mining Co. assigned all of its rights and interests in the property to Western Resources, Inc., on October 17, 1956. The collar locations of three of the proposed drill holes lie beyond the west boundary of the Sunbeam property. In order to legally obtain permission to drill into the Sunbeam claims, Western Resources, Inc. acquired a lease on three additional claims covering the collar locations.

The Sunbeam vein occurs in a stock composed principally of monzonite and monzonite porphyry. It varies in thickness from a fraction of an inch to more than 10 feet, has an average strike of N. 25° E., and generally dips steeply to the west or is vertical. Production of copper-lead-zinc-gold-silver ores has been made in the oxide zone, above the water level, throughout the vein's length of approximately 3,000 feet.

The applicant proposes six core drill holes near the north end of the property to explore the vein below the water level, because of favorable geologic conditions prevailing in this area. Old, filled stopes underneath a vein filling of loose, vuggy quartz show past production. Shattering and fissuring along the vein at this place,

and sulfide minerals observed on the Sunbeam shaft dump, indicate the downward extension of ore in the vein.

Estimated cost of the proposed project is $31,451. Government participation at 50 percent will be $15,725.50.

Recommendation is made that the project proposals be approved.

INTRODUCTION

An application, dated July 27, 1956, has been submitted by Flare Mining Co. for Government aid in an exploratory project under docket No. 4404. The mining claims involved are located in the Tintic mining district, Juab County, Utah. The proposed program consists of 3,600 feet of diamond drilling in six inclined holes, at a total estimated cost of $34,602.50, for the purpose of exploring the Sunbeam vein for copper-lead-zinc ores below the water table.

A field examination of the property was made September 11, 1956, by Frank B. Moore, Geological Survey, and M. H. Howes, Bureau of Mines, for the purpose of determining the feasibility of the proposed exploration and for appraisal of the estimated costs and engineering aspects of the job. The field examiners were accompanied to the property by James Quigley, representative of the applicant.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The property is held under lease from the New United Sunbeam Mining Co. and is situated approximately 3 airline miles south of Eureka, Utah, in Sec. 31, T. 10 S., R. 2 W., and Sec. 6, T. 11 S., R. 2 W., S.L.B. and M.,

in the Tintic mining district, Juab County, Utah. The claims lie along a low, north-south ridge to the south of Mammoth peak in the East Tintic mountains, at altitudes ranging from 6,150 to 6,680 feet. The property may be reached by traveling approximately 3 miles southwesterly on U. S. Highway 6 from Eureka, Utah, to its junction with road to Silver City, thence approximately 2 miles southeasterly on Silver City road and along old L. A. and S. L. Railroad grade to the mine.

The climate is semiarid. Summers are warm and winters are cold, with moderately heavy snowfall. Access to the mine ordinarily is maintained by infrequent snow removal from the roads.

HISTORY AND PRODUCTION

The Sunbeam lode is reported to be the first mining claim located in the Tintic mining district (location date as shown on patent plat is January 10, 1870). This claim, overlying a portion of the Sunbeam vein, produced oxidized copper-lead-silver ores having a value in excess of $500,000 as reported in USGS Nineteenth Annual Report, 1897-98. The group of claims comprising the present property covers approximately 3,000 feet of the Sunbeam vein. The applicant states that from 1903 to 1939 production from the property was 7,371 tons of ores containing 287,294 pounds of lead, 261,406 pounds of copper, 92,077 ounces of silver, and 191 ounces of gold. The average grade of the ores is 1.95 percent lead, 1.77 percent copper, and 12.491 ounces silver and 0.026 ounce gold per ton.

OWNERSHIP AND EXTENT

Flare Mining Co., 801 Continental Bank Building, Salt Lake City, Utah, is a partnership composed of:

General partners

Arnold and James M. Feuerstein, 1220 North Palm, Anaheim, Calif.

Limited partners

Eli, Edith, and Isador Reinhard, 1220 North Palm, Anaheim, Calif.

On October 17, 1956, Flare Mining Co. assigned all of its rights and interests in the property of the New United Sunbeam Mining Co. to Western Resources, Inc., 801 Continental Bank Building, Salt Lake City, Utah. Western Resources, Inc. is a Utah corporation (Appendix I).

James Quigley, President, Eureka, Utah

D. Howe Moffat, Secretary, 801 Continental Bank Building, Salt Lake City, Utah

At the time of application for DMEA assistance, Flare Mining Co. held an option, dated July 1, 1956, on a group of patented lode mining claims owned by New United Sunbeam Mining Co., 1017 Kearns Building, Salt Lake City, Utah. The option includes a clause that at any time within 120 days, a lease on the claims could be acquired for 1 year from the date of exercise of the option, and for additional periods of 1 year until 7 years shall have lapsed. The option to hold the following patented lode mining claims was exercised October 26, 1956:

Name	Survey or Lot No.
Sunbeam and First Southern Extension Sunbeam Consolidated	Lot 61
First Southern Extension Sunbeam	Lot 64
Elmer Ray	Lot 66
Sunbeam	Lot 165
Silver Moon	Sur. 2953
West Sunbeam	Sur. 3820
Iron Spar	Sur. 4015
Triangle	Sur. 4090

DESCRIPTION OF THE DEPOSITS

Rocks exposed in the vicinity of the property are composed principally of monzonite and monzonite porphyry. No sedimentary rocks were observed in the immediate area. Mineralization occurs within the zone of the Sunbeam vein, which has been traced almost continuously for 3,000 feet on the claims, and to exposed depths of 490 and 650 feet. The vein has an average strike of N. 25° E., with dips generally steep to the west or vertical. South of the Sunbeam shaft the vein strikes northeasterly. At the shaft the vein swings to the north, continuing for approximately 200 feet, and then turns northeasterly through the north end of the property. It varies in thickness from a fraction of an inch to more than 10 feet. The vein has been productive throughout its length. In the past, mining activities were almost entirely confined to the oxide zone, between the surface and the water level. The Sunbeam shaft was driven to a probable depth of 490 feet,

encountering water at 425 feet. Apparently the water level is somewhat deeper at the south end of the property than at the north end. Sulfides of iron, copper, and lead were observed on the Sunbeam shaft dump. The position of the minerals in the dump indicates that they were found in the lower part of the shaft below the water level.

At the north end of the property, where the Sunbeam vein turns from a northerly to a northeasterly strike, a large mass of loose, vuggy quartz fills the vein. Old, filled stopes underneath the quartz mass indicate past production from this area.

Shattering and fissuring of the rock, where the vein changes strike, appear to be favorable conditions for mineral deposition. The applicant has chosen the north end of the property, where this condition prevails, for location of proposed drill holes.

MINABLE ORE RESERVES

Known minable ore reserves on the property are negligible.

PRESENT STATUS

The Sunbeam property is accessible by a fair dirt road. Workings on the vein include four major shafts and many small shafts, pits, and open stopes. Most of the workings are not accessible; few are partially accessible.

The old Sunbeam shaft was rehabilitated for a few sets below the collar. This work was stopped pending results of the proposed drilling project.

PROJECT PROPOSALS

The applicant proposes to explore the Sunbeam vein zone below the water level, both to the north and to the south of the Sunbeam shaft. The proposal includes drilling six diamond drill holes, as shown on figure 2, from points in the bottom of the gulch west of the vein. The holes as planned are inclined 65°, with an average length of 600 feet, to cut the vein zone at a depth of approximately 500 feet. Holes No. 1, 3, and 5 are collared to the west of the New United Sunbeam Mining Co. property. The company was required to obtain a lease on three patented lode mining claims, lying west of Sunbeam, Lot No. 165, in order to legally obtain permission to place drill rigs on the property and drill into the Sunbeam claims. The three claims are as follows: Home Rule, Garnet, and Guardian, U. S. Survey No. 3852 (Appendix II).

ALTERNATE PROJECT PROPOSALS

The three northernmost holes are planned to explore the north-striking portion of the vein where the easterly dips vary from 70° to 65° at the surface. In case the vein continues to dip easterly in its downward course, it is suggested that the first of the northerly holes, and, if necessary, the subsequent two northerly holes, be flattened from 65° to 50° to cut the vein at the estimated 500-foot depth. No other change in the original project proposals is recommended.

The proposed program shall include the following general provisions:

1. The minimum size of drill core will be AX.

2. Drill core will be split, one-half retained by the operator for study or analysis, and one-half properly stored for the use of the Government.

3. Approximately 450 feet of noncore drilling and 150 feet of core drilling (through the zone of the Sunbeam vein) will be performed in each of the 6 proposed holes.

4. A maximum of 120 samples (average of 20 per hole) will be allowed for analysis. Certified copies of assays will be submitted with monthly statements.

5. Holes will be geologically logged and copies of the logs will be submitted with the monthly statements.

ESTIMATED COST OF PROJECT PROPOSALS

Bids for the proposed drilling were submitted to the applicant by two drilling contractors, Sprague and Henwood, Inc., and Boyles Bros. Drilling Co. (Appendix III and IV). A third drilling contractor declined to bid.

The following estimated costs have been checked and appear to be reasonable:

1. Contracts

Drilling (6 holes at 600 feet average depth - 3,600 feet)

Estimated cost of 600-foot hole

450 feet, noncore, at $6.00 per foot --	$2,700.00
150 feet, core, at $7.50 per foot -----	1,125.00
100 feet reaming and installing casing at $4.50 per foot ----------	450.00
6 hours cementing at $15.00 per hour --	90.00
24 feet casing lost at $2.25 per foot -	54.00
Proportion mobilization cost ----------	100.00
Total cost for 600 feet of drilling --------	$4,519.00

Total 6 holes at $4,519.00 each	$27,114.00
Bulldozing (drill site preparation) 48 hours at $15.00 per hour	720.00
Total contracts	$27,834.00

2. Labor and Supervision

Supervising and engineering, 4 months at $550.00 per month	$ 2,200.00
Sample bucking and core splitting, 1 man, 5 days at $20.00 per day	100.00
Total	$ 2,300.00

3. Operating Materials and Supplies

Core boxes, 900 feet core space at $.10 per foot	$ 90.00
Miscellaneous (sample sacks, gasoline, oil, etc.)	125.00
Total	$ 215.00

4. Operating Equipment

Rental, 1 pickup truck, 4 months at $100 per month	$ 400.00

5. Initial Rehabilitation and Repairs

None

6. New Buildings, Improvements, etc.

None

7. Miscellaneous

Repairs to truck (minor)	$ 100.00
1/Assaying (including freight), 120 samples at $3.35 each	402.00
Accounting, 4 months at $50.00 per month	200.00
Total	$ 702.00

1/ Assaying will include analyses for copper, lead, zinc, gold, and silver, as required, at an average estimated cost of $3.25 per sample. Transportation of samples is estimated to cost 10 cents each.

Cost Summary

1.	Contracts	$27,834.00
2.	Labor and Supervision	2,300.00
3.	Operating Materials and Supplies	215.00
4.	Operating Equipment	400.00
7.	Miscellaneous	702.00
	Total cost of project	$31,451.00
	Government participation at 50 percent	$15,725.50

PROPOSED FINANCING

The applicant is prepared to invest $15,725.50 in the proposed exploratory project, which is 50 percent of the total estimated cost of $31,451.00, in accordance with the regulations on Government participation, as stated in Section 7, DMEA Order 1.

CONCLUSIONS AND RECOMMENDATIONS

The probability that commercial ore will extend below the water level in the project area is considered good. Sulfide minerals appearing on the Sunbeam shaft dump must have been excavated below the water level from the lower shaft workings. Some of the best ore mined on the property came from stopes above the water level in the vicinity of the Sunbeam shaft. Other veins within the monzonite have yielded ore below the water level. The discovery of a sufficient quantity of ore to repay the Government's share of the cost of the project is believed possible. Recommendation is therefore made that the alternate proposals, as described above, be approved.

APPENDIX I

A S S I G N M E N T

For and in consideration of the sum of Ten Dollars (10.00) and other good and valuable consideration, receipt of which is hereby acknowledged, FLARE MINING COMPANY, a co-partnership, does hereby sell, assign and transfer to WESTERN RESOURCES, INC., a Utah corporation, all of its right, title and interest in and to said agreement dated the 1st day of July, 1956, between NEW UNITED SUNBEAM COMPANY, a Utah corporation, and FLARE MINING COMPANY, a co-partnership, giving and granting unto said WESTERN RESOURCES, INC., all of the rights, privileges and benefits which accrued to FLARE MINING COMPANY by, under and pursuant to said agreement hereinbefore referred to.

Dated this 17th day of October, 1956.

FLARE MINING COMPANY

By /S/ Arnold Feuerstein
Arnold Feuerstein, Partner

STATE OF CALIFORNIA)
: SS
COUNTY OF LOS ANGELES)

On this 17th day of October, 1956, personally appeared before me ARNOLD FEUERSTEIN, the signer of the within and foregoing instrument, who duly acknowledged to me that he executed the same.

/S/ Helen Callahan
Notary Public
Residing at: 8804 True Ave.
Rivera, Calif.

My commission expires:
August 2, 1957

APPENDIX II

A G R E E M E N T

THIS AGREEMENT, made and entered into this 1st day of November, 1956, by and between EMPIRE MINES COMPANY, a corporation with its principal place of business at Salt Lake City, Utah, hereinafter referred to as "LESSOR," and WESTERN RESOURCES, INC., a Utah corporation with its principal place of business at Salt Lake City, Utah, hereinafter referred to as "LESSEE,"

WITNESSETH:

WHEREAS, the LESSEE is the owner of and entitled to all of the benefits of a certain Lease Agreement, bearing date the 1st day of July, 1956 between New United Sunbeam Mining Company and Flare Mining Company, (the interest of said Flare Mining Company having heretofore been assigned to Western Resources, Inc., the LESSEE herein), under and pursuant to said Lease Agreement the following described patented lode mining claims situated in the Eureka Mining District, State of Utah, are leased and let to said LESSEE, to-wit:

Juab Lawrence Lode and Mining Claim (also known as Sunbeam and First Southern Extension Sunbeam Lode Consolidated), Lot 61.

First Southern Extension Lode and mining claim, Lot #64.

The Kinsey, Beaman, Stubbs and Triangle Lodes and mining claims, Lot No. 4090.

The Woodmansee Lode, (also known as Sunbeam Lode), Lot No. 165.

The West Sunbeam Lode and Mining Claim, Lot No. 3820.

agreement on
other claims

The Iron Spar Lode and Mining Claim, Lot No. 4015.

The West Elmer Ray Lode and Mining Claim, Lot No. 66.

and,

WHEREAS, the LESSEE, as successor to Flare Mining Company, has applied to DMEA for a loan under and pursuant to which it proposes to drill certain exploratory holes for the purpose of exploration of the Sunbeam lode at depths generally of 500 feet or more below the surface, and

WHEREAS, said Sunbeam lode, as it projects below the surface of the earth, dips under certain patented mining claims owned by the LESSOR, to-wit:

Home Rule	Patent No. 3852
Garnet	Patent No. 3852
Guardian	Patent No. 2852

and in order to economically drill the Sunbeam lode it is necessary that the drill rigs be located upon the mining claims last hereinbefore described, and that the surface and subsoils of said claims be penetrated by said drills.

NOW, THEREFORE, for and in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, receipt of which is hereby acknowledged, the LESSOR does hereby let and lease to the LESSEE the right to place drilling rigs and to drill on the surface of the following described mining claims:

Home Rule	Patent No. 3852
Garnet	Patent No. 3852
Guardian	Patent No. 3852

for a term of one (1) year, commencing November 1, 1956 for the purpose of drilling holes to the Sunbeam lode and for no other

purpose whatsoever, and that the rights granted hereby shall include the right to construct roads upon the surface of said mining claims for the purpose of moving machinery useful in drilling said holes on and off said property, for the purpose of establishing drill sites thereon and maintaining drilling machinery and for the purpose of drilling holes to the Sunbeam lode and for no other purposes whatsoever.

Said LESSEE further warrants to operate as an independent contractor and agrees to indemnify and hold harmless the LESSOR from any claims, actions at law or in equity arising out of or on account of LESSEE'S operations on said mining claims.

The LESSEE, for and in consideration of the grants hereby given, covenants and agrees:

1. To keep said mining claims free and clear of all liens, claims or demands of any nature whatsoever which might arise by reason of the conduct of said LESSEE upon or about said mining claims. The above described mining claims of LESSOR are not to be included as a part of the property in the DMEA loan and LESSOR does not consent to any lien or claim by reason of a DMEA loan or any other loan on said property.

2. To make available to and to report to said LESSOR any mineral discovery made upon the demised premises as a result of the drill holes to be drilled by said LESSEE and said LESSOR shall have the right to all geological data, drill hole logs, maps and other information as a result of drilling upon said premises.

3. It is understood and agreed between the parties hereto that this is a lease on the surface of the above described premises for the purpose of drilling and no rights to mine the demised premises are granted to LESSEE.

4. Upon the expiration of this lease to surrender said property to said LESSOR in the same condition in which it now is, aside from the road work, drill sites and drill holes hereinbefore referred to.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their officers hereunto duly authorized.

ATTEST: EMPIRE MINES COMPANY

/S/ Rom Warburton
Its Secretary-Treasurer

By /S/ Richard Knight
Its Vice President

ATTEST: WESTERN RESOURCES, INC.

/S/ D. Howe Moffat
Its Secretary

/S/ James Quigley
Its President

APPENDIX III

SPRAGUE & HENWOOD, INC.
Contractors for
DIAMOND DRILLING

P.O. Box 645
Grand Junction, Colo.

June 18, 1956

Centennial Development Co.
Eureka
Utah

Attn: Mr. James Quigley

Gentlemen:

In accordance with our conversations we herewith submit our proposal for exploratory drilling at the Sunbeam Mine near Silver City, Utah.

PROPOSAL:

Non-Core Drilling

Item 1.	(a)	From 0 to 500 ft.	$6.00 per ft.
	(b)	From 500 to 750 ft.	8.00 per ft.

Core Drilling

Item 2.	(a)	From 0 to 500 ft.	8.50 per ft.
	(b)	From 500 to 750 ft.	10.50 per ft.
	(c)	From 750 to 1000 ft.	13.00 per ft.

Reaming and Setting Casing

Item 3 . . . . . 4.50 per ft.

Cementing and drilling out cement

Item 4 . . . . . 15.00 per hr.

Casing

Item 5. Any casing lost in holes will be charged to the customer at the following prices:

NX	$ 3.00 per ft.
BX	2.25 per ft.
AX	1.75 per ft.

Transportation of crew and equipment

Item 6. Lump sum $600.00

This proposal is subject to the following conditions:

1. Any cement used will be charged to the customer at cost.

2. This proposal covers drilling in igneous formations and does NOT include any drilling in limestone formations. Any drilling required in limestone formation would be subject to a negotiated agreement made to cover drilling in limestone formation.

3. In the event that quartz veins or stringers are encountered in non-core portion of the hole, then the price schedule of Item 2 for core drilling will apply for drilling through quartz.

4. All drill hole locations and access roads to drill sites will be constructed and maintained to accommodate Sprague & Henwood, Inc. truck mounted drills and water trucks. Any bulldozer work required for preparation of sites and roads will be furnished by the customer at no cost to Sprague & Henwood, Inc.

5. Cores will be delivered at drill hole locations, and storage and preservation of cores will be the responsibility of the customer.

6. The minimum size core is to be AX (1-1/8") unless otherwise agreed to by the customer. Holes are to be started NX size and reduced to BX size and AX size as required by drilling conditions as determined by the contractor. The contractor also reserves the right to determine when reaming or cementing is required.

We thank you for the opportunity of submitting this proposal and hope to be favored with your order.

Very truly yours,

SPRAGUE & HENWOOD, INC.

/S/ R. R. Carver
R. R. Carver
Western Manager

RRC:jmt

cc: Scranton
File

APPENDIX IV

ORIGINAL FILE COPY
DWEA
RECEIVED JAN 22 1957

DATE	INITIALS	CODE

BOYLES BROS.
DRILLING COMPANY
1321 South Main Street
Salt Lake City 15, Utah

July 10, 1956

Mr. James Quigley
Centennial Development Company
Eureka, Utah

Dear Mr. Quigley:

We submit the following alternate proposals for drilling six holes approximately 600 feet deep on your Sunbeam Mine property near Silver City, Utah.

Proposal No. 1

1. Drilling rates, per foot.

	AX	BX	NX	Plug bits
0 - 400	$5.60	$6.30	$7.40	$6.00
400 - 700	6.90	7.60	9.00	7.00

2. Reaming.
   AX casing. $3.00 per foot.
   BX casing. 3.30 per foot.
   NX casing. 3.60 per foot.

3. Cementing, $10.60 per hour plus cost of cement and cement substitutes, including mud.

4. Lost casing to be paid for at list price f.o.b. the job.

5. Access roads and drill stations to be furnished at no cost to us.

6. Installing and pulling casing, $9.60 per hour.

7. Water to be hauled on the following basis; truck rentals of $225.00 per month plus 12¢ per mile, plus driver's wages including payroll taxes.

8. If quartzite or quartz is encountered, there would be a charge for actual cost of bits over and above the normal diamond cost, which for accounting purposes would be set at $1.15 per foot.

Proposal No. 2

1. Drilling rate will be $83.00 per shift plus $2.90 per foot for holes up to 700 feet deep. Shift rate to apply for all shifts worked, whether drilling, moving, or setting up. Equipment breakdowns of over one hour will not be charged for.

2. Reaming. Shift rate plus $2.00 per foot for all sizes.

3. Cementing. Shift rate plus cost of cement or cement substitutes including mud.

4. Access roads and drill stations at no cost to us.

5. Lost casing to be paid for at list price f.o.b. the job.

6. If quartzite or quartz is encountered, there would be a charge for actual cost of bits over and above the normal diamond cost, which for accounting purposes would be set at $1.15 per foot.

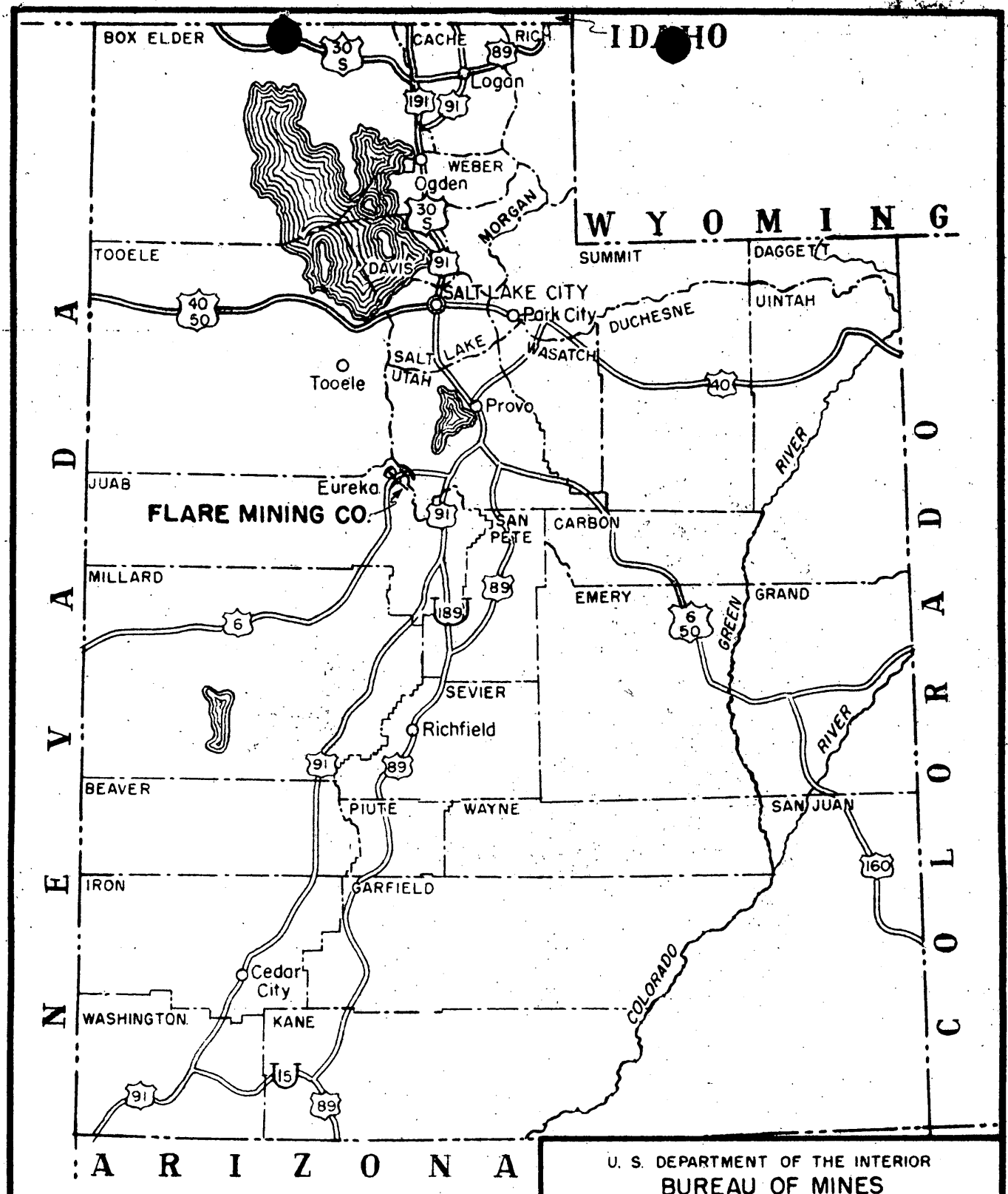
Should the foregoing rates be satisfactory, we would appreciate knowing as soon as possible, so that we may schedule the job for early starting.

Yours very truly,

/S/ P. A. Park

P. A. Park
Assistant Manager
Drilling Division

PAP:lm



U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 1 DMEA Docket No. 4404

Location Map

FLARE MINING CO.

NEW UNITED SUNBEAM MNG. CO. PROPERTY

JUAB COUNTY, UTAH

ENGINEER: *M. H. HOWES*	DATE: JAN. 10, 1957
TRACED: JAN., 1957; A.P.T.S.	1500-1183-G
CHECKED:	

RECEIVED
JAN 22 1957
D.M.E.A.

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

September 28, 1956

TRANSMITTED
JAN 18 1957

DMEA
DEPARTMENT OF THE INTERIOR
OCT 2 1956
REGION III
DENVER, COLORADO

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Harshman

Subject: DMEA Docket 4404 (Copper-lead-zinc), Flare Mining Company (Sunbeam mine), Juab County, Utah

Enclosed are the original and eight copies of a geologic report by Frank B. Moore, U. S. Geological Survey, in which he recommends a program of exploration on the subject property.

The applicant requests assistance to explore for base-metal sulfide ore beneath the old workings in the Sunbeam mine by drilling six holes to intersect the vein at a depth of about 500 feet below the surface.

Moore concludes, and I concur, that the exploration requested by the applicant is justified.

E. N. Harshman

E. N. Harshman

Enclosures (9)

ENHarshman:arh

OFFICIAL FILE COPY
D M E A
RECEIVED JAN 22 1957

DATE	INITIALS	CODE
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Reviewed by
DMEA OPERATING COMMITTEE
1-25-57
(date)

FOR UNITED STATES GOVERNMENT USE ONLY

TRANSMITTED
JAN 18 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON, SECRETARY

DMEA
DEPARTMENT OF THE INTERIOR
OCT 2 1956
DENVER COLORADO

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA 4404

Flare Mining Company

Sunbeam mine

Juab County, Utah

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 22 1957

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Copper-lead-zinc

Geologic Examination Report

by

Frank B. Moore

Reviewed by
DMEA OPERATING COMMITTEE
1-25-57
(date)

September 27, 1956

CONTENTS

	Page
Introduction and summary	1
Location and property.	2
Geology.	2
Proposed exploration	5
Conclusions and recommendations.	5

ILLUSTRATIONS

Figure	Follows page
1. Index map of Utah, showing location of Sunbeam mine, Tintic Mining district, Juab County, Utah.	2
2. Map of surface workings showing trace of Sunbeam vein, Tintic Mining district, Juab County, Utah.	6

DMEA 4404

FLARE MINING COMPANY
SUNBEAM MINE
JUAB COUNTY, UTAH

INTRODUCTION AND SUMMARY

The Flare Mining Company, 801 Continental Bank Building, Salt Lake City, Utah, applied on August 2, 1956, for aid to explore for copper, lead, and zinc in the Sunbeam mine, Tintic mining district, Juab County, Utah. The application was released by the Executive Officer for examination on August 15, 1956. The applicant proposes to drill six holes averaging 600 feet deep to cut the Sunbeam vein below the water table or at points about 500 feet below the outcrop. Total cost of the project is estimated at $34,602.50, Government participation 50 percent or $17,301.25.

The property was examined on September 11, 1956, by F. B. Moore, U. S. Geological Survey, and M. H. Howes, U. S. Bureau of Mines. The examining team was accompanied by James Quigley, consultant for the applicant. Hal T. Morris, U. S. Geological Survey, who is mapping in the Tintic district, was consulted regarding the geology of the Sunbeam area and the feasibility of the proposed drilling program. He concurs with the recommendations of the examining team.

The examining team believes that there is a good probability of finding significant amounts of copper-lead-zinc ore in the Sunbeam vein and, therefore, recommends that the application for exploration assistance be approved.

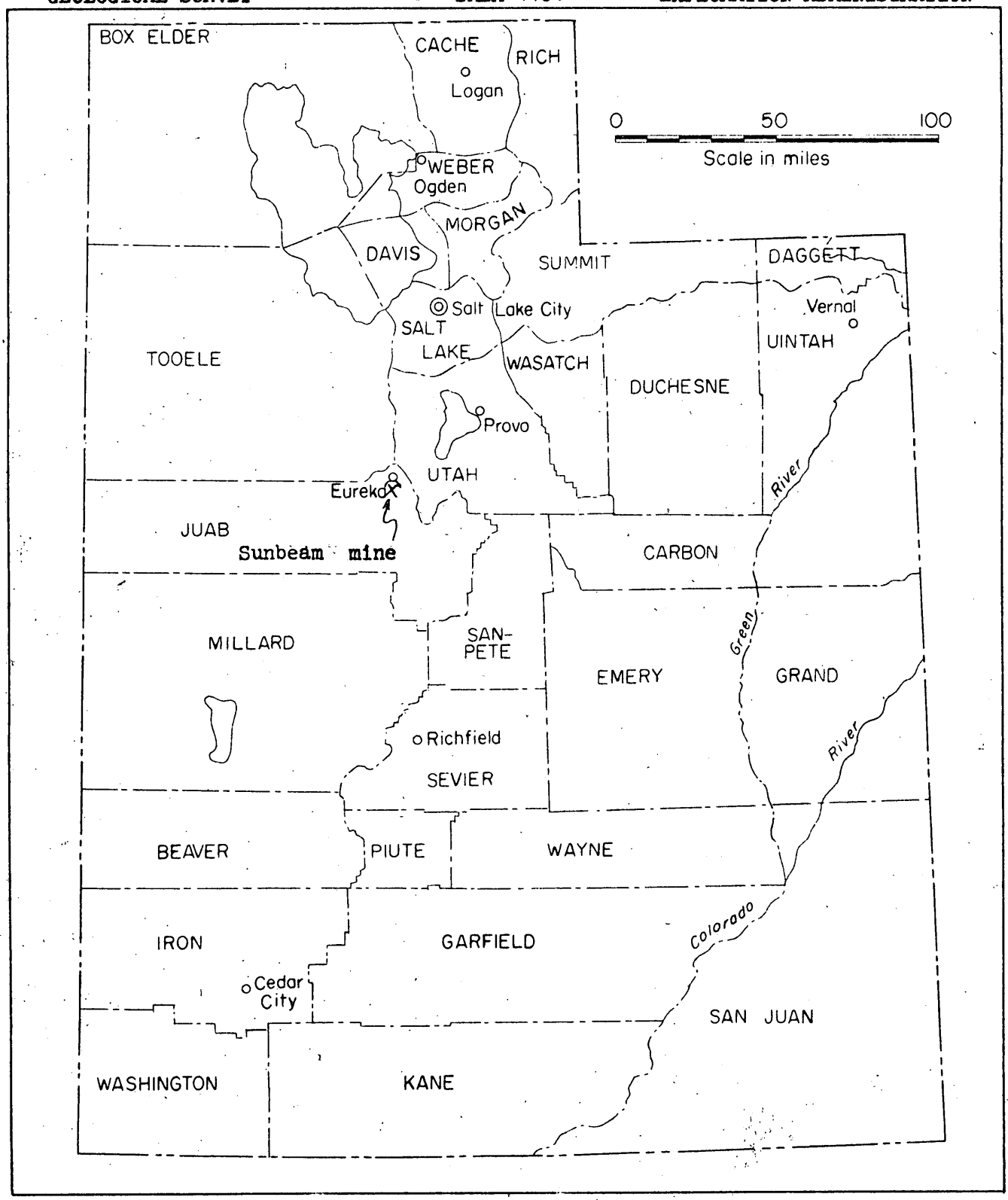

FIGURE 1—INDEX MAP OF UTAH **SHOWING LOCATION OF SUNBEAM MINE, TINTIC MINING DISTRICT, JUAB COUNTY, UTAH.**

LOCATION AND PROPERTY

The area to be explored is in sec. 31, T. 11 S., R. 3 W., Tintic mining district, Juab County, Utah. It is 1 mile east of Silver City and 3 miles south of Eureka (fig. 1).

The property consists of eight patented lode claims held under lease by the Flare Mining Company. The Sunbeam vein has been explored by numerous shafts, prospects, and adits, but the applicant proposes to explore by drilling only the area near and north of the Sunbeam' shaft (fig. 2). The three southernmost holes will be collared on company-owned claims not shown on figure 2; the three northernmost holes will be collared outside the company claims but written permission to drill will be granted by the owners of this ground.

GEOLOGY

The geology of the Tintic mining district has been described by G. W. Tower, Jr., and G. O. Smith (Geology and mining industry of the Tintic district, Utah: U. S. Geol. Survey Nineteenth Ann. Rept., pt. 3, p. 601-767, 1898), and by Waldemar Lindgren and G. F. Loughlin (Geology and ore deposits of the Tintic mining district, Utah: U. S. Geol. Survey Prof. Paper 107, 1919).

Two types of rocks occur in the Tintic district - Paleozoic sedimentary rocks and Tertiary igneous rocks. The sedimentary rocks are quartzite, over 6,000 feet thick, overlain by 6,500 to 7,000 feet

of limestone, including a small amount of shale. The igneous rocks are in part intrusive rhyolite, porphyry, and monzonite and in part effusive rhyolites and latites or andesites.

The sedimentary rocks have been folded into a series of northerly-trending anticlines and synclines. Faults, mostly northeast or east in strike, cut the sedimentary rocks and younger north-northeast striking faults cut the intrusive igneous rocks as well as the older sedimentary rocks. These faults have been one of the major factors in the localization of the Tintic ore deposits.

The ore deposits are of two types - replacement deposits in the limestones and fissure-filled deposits in the igneous rocks. The replacement deposits have accounted for most of the production from the Tintic district; however, several of the vein deposits, including the Sunbeam mine, have had notable production. The ores have been valued, in order of decreasing importance, for silver, lead, gold, copper, and zinc.

The Sunbeam claim is the earliest recorded location in the Tintic district. The vein has been worked through numerous shafts for a length of nearly 4,000 feet and to a depth of 700 feet in the El Ray shaft. Production records and mine maps for the various workings are not available. Tower (U. S. Geol. Survey Nineteenth Annual Report, 1897-98, p. 762) states that oxidized ores having a value of over $500,000 were produced from the Sunbeam claim alone. In 1902, a heavy flow of water in the bottom of the Sunbeam shaft (490 feet deep) forced

suspension of the deeper mining operations. From 1902 to 1915, numerous small lots of ore were shipped from above the water level at 425 feet. These ores contained as much as 26 percent lead, 18 percent copper, and 8 percent zinc. The workings have been inaccessible for many years.

The Sunbeam vein is in Tertiary intrusive rocks; the northern portion around the Sunbeam shaft is in monzonite. The vein strikes generally N. 30° E. except for a short segment near the Sunbeam shaft which strikes nearly due north. Dips are variable but steep. The vein generally appears to dip to the west at about 85° but in the north-striking segment surface dips are 70 to 85° to the east.

Surface exposures of the vein show a strong, persistent shear 1 foot to 8 feet wide. Quartz and barite are the chief gangue minerals; essentially no sulfide minerals are visible. Samples of vein material found on the dumps contained galena, sphalerite, gray copper, pyrite, and chalcopyrite.

The direction of movement along the Sunbeam vein is not known. However, in several northeast-trending faults 1-1/2 miles to the north, the northwest side moved southwest with respect to the southeast side. Such a movement, if applicable to the Sunbeam vein, would tend to open the north-striking segment of the vein near the Sunbeam shaft. Morris states that if similar fissures in the area can be used as criteria, such a movement in the Sunbeam vein is likely.

PROPOSED EXPLORATION

The applicant proposes to drill six holes averaging 600 feet deep to cut the vein below the water table or at a depth of about 500 feet on the vein. The holes would start in a gully along the west side of the property and are located for the purpose of exploring the vein at and near the change in strike (fig. 2). Total cost of the drilling program is estimated at ~~$34,602.50~~ 31,451.00; cost to the Government at 50 percent is ~~$17,301.25~~ 15,725.50.

It will be noted that the holes were to be drilled in an easterly direction at an angle of about 65° and that three of the holes were to be drilled in the north-striking portion of the vein. However, the vein in this portion dips 70 to 75° east at the surface. This point was discussed with Mr. Quigley who agrees that the first hole and, if necessary, the subsequent two holes in the north-striking portion of the vein should be flattened to about 50° in order to cut the structure at the 500-foot depth. Such flattening will make no change in the cost of the project.

CONCLUSIONS AND RECOMMENDATIONS

Although little direct information is available, due to inaccessibility of the workings and lack of records, the project appears to have a better than average chance for success. Reasons for this belief are as follows:

(1) The vein structure is strong and can be traced on the surface for nearly 4,000 feet. This indicates that it will probably extend to depths considerably below the proposed exploration depths.

(2) The failure of the early operators to explore the vein at depth was to a large extent because of inability to handle the water problem. This story apparently is true and not just a nice way of saying the ore had run out. Modern equipment should eliminate this problem.

(3) The applicant hopes to find considerable tonnages of medium-grade milling ore. He does not necessarily expect high-grade ore below the oxidized zone and therefore probably is willing and able to handle the lower class of ore.

(4) If the Sunbeam vein follows the pattern of similar veins in the area with the west side moving south with respect to the east side, the proposed drilling should explore an especially favorable part of the vein.

For the reasons given above, it is recommended that the application be approved.

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

OFFICIAL FILE COPY DMEA RECEIVED JAN 22 1957		
DATE	INITIALS	CODE
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1-22	~~WPK~~	500

224 New Customhouse
Denver 2, Colorado

January 17, 1957

Docket

Mr. D. Howe Moffat, Agent
Flare Mining Company
801 Continental Bank Building
Salt Lake City, Utah

Re: Docket DMEA 4404 (copper-lead-zinc) Sunbeam Mine, Juab County, Utah

Dear Mr. Moffat:

We are advised that, subsequent to the date of the captioned application, the Flare Mining Company assigned all of its rights and interests in the property to Western Resources, Inc. If it is the mutual desire of Flare Mining Company and Western Resources, Inc. for Western Resources, Inc. to be the Applicant for DMEA aid, the following will be required to be submitted to this office:

1. Two copies of the deed or agreement covering transfer, and a formal letter from Flare Mining Company withdrawing the application.

2. A new application (in quadruplicate) from the new owners, tying in the new application to the old docket number by reference, for the purpose of assigning a new docket number. Five copies of Form MF-103 are enclosed for this purpose.

3. All information on the organization of Western Resources, Inc.

4. If any new liens were created, due to the transfer of the property, additional Subordination Agreements will be required.

When we receive the above information, we will continue to process the application.

Yours very truly,

Original signed by
W. M. TRAVER
W. M. Traver
Executive Officer, DMEA
Field Team, Region III

Enclosures

HMC:ytl
cc
Sec. Op. Comm. (2)
Wilson
Harshman
Docket 4404
Chron.

DMEA
Date Rec'd
AUG 17 1956
BUREAU OF MINES
Denver, Colorado

August 16, 1956

Memorandum

To: S. R. Wilson

From: Superintendent, Denver Experiment Station, Reg. XII

Subject: DMEA 4404 (Copper Lead-Zinc), Flare Mining Company, (Sunbeam Mine), Juab County, Utah

The application for Flare Mining Company, Docket DMEA 4404, in the amount of $34,602.50, was received in this office on August 16, 1956.

A field examination and suitable report are required. The completed report should be forwarded directly to the Executive Officer with a copy of your memorandum of transmittal to this office.

W. H. KING
W. H. King

Enclosures

cc: W. M. Traver (3)
E. N. Marshman (2)
Sec. Op. Com (2)

RECEIVED
AUG 20 1956

DMEA
Date Rec'd.

AUG 17 1956

BUREAU OF MINES
Denver, Colorado

August 16, 1956

Memorandum

To: S. R. Wilson

From: Superintendent, Denver Experiment Station, Reg. III

Subject: DMEA 4404 (Copper Lead-Zinc), Flare Mining Company, (Sunbeam Mine), Juab County, Utah

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W. H. KING

W. H. King

Enclosures

cc: W. M. Traver (3)
E. N. Marshman (2)
Sec. Op. Com. (2)

RECEIVED
AUG 20 1956

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

August 15, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: J. F. Shaw (2) (With brochure)
E. N. Harshman

From: Field Team, Region III

Subject: Docket DMEA 4404 (Copper-Lead-Zinc) Flare Mining Company, (Sunbeam Mine) Juab County, Utah

Enclosed is the subject application in the amount of $34,602.50. A field examination and suitable report are requested.

Please note in the letter from the Chairman of the Operating Committee, dated August 13, 1956, copy of which is attached, that in the event the field examiners favorably consider the subject application, the Applicant should be asked to furnish two other bids from drill contractors. Also attached are copies of memoranda of review of the application by N. E. Nelson and J. W. Pennington.

Will you please return the brochure with the Report of Examination.

DMEA Field Team, Region III

W. M. TRAVER,

By W. M. Traver
Executive Officer

Enclosure

HMC:ab

cc: Sec. Op. Comm. (2)
Docket 4404
Chron.

RECEIVED
AUG 17 1956

File Copy
Surname

Klugescheid.
Swanson
Nelson
Lamb
Martin
Johnson

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

AUG 13 1956

Mr. D. Howe Moffat, Agent
Flare Mining Company
801 Continental Bank Bldg.
Salt Lake City, Utah

Re: Docket No. DMEA-4404 (Copper-Lead-Zinc)
Flare Mining Company
Sunbeam Mine
Juab County, Utah

Dear Mr. Moffat:

Your application for Government assistance to explore the cited property has been reviewed by the Base Metals Division of the Defense Minerals Exploration Administration and has been referred to:

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

If the Field Team requires additional information concerning your application, they will contact you at an early date.

Sincerely yours,

G. O. Mittendorf

Administrator

WPKlugescheid/er 8/9/56
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Pennington, USBM
Mr. Kiilsgaard, USGS
Chron.
Region III (2)

R.C.S.

File Copy
Surname
Klugeschied
Franzel
Martin
Nelson
Wattenberg

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

500

AUG 13 1956

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-4404 (Copper-Lead-Zinc)
Flare Mining Company
Sunbeam Mine
Juab County, Utah

Dear Mr. Traver:

The cited application for exploration assistance is being referred to your office for consideration, a field examination of the property if warranted, and recommendation.

If the project is favorably considered by the Field Team, two other bids from drill contractors should be obtained if possible. The prices, quoted by Sprague & Henwood, are probably the lowest obtainable, but it would be well to have the proof thereof.

The Centennial Development Company states in its report that the Silver Moon claim #2953 is included in the property under option, but it does not appear in the agreement between the New United Sunbeam Mining Company and the Flare Mining Company.

You will also note that proposed drill holes Nos. 1, 3, and 5 collar outside of the optioned ground. It will probably be necessary to option or lease additional land if the present program is to be followed.

Copies of memoranda dated August 3 and 6, 1956, by N. E. Nelson, Geological Survey, and J. W. Pennington, Bureau of Mines, respectively, relating to the project are enclosed for your information. We are also enclosing an extra copy of the application for the use of the Field Team.

Sincerely yours,

W. S. Martin

Enclosures

ACTING Chairman, Operating Committee (WSB)

APPROVED:

FRANK D. LAMB (WSB)
Member, Bureau of Mines

N. E. Nelson (WSB)
Member, Geological Survey

R.C.B.

wPKugeschedi/er 8/9/56
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Pennington, USBM
Mr. Kiilsgaard, USGS
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

IN REPLY REFER TO:

RECEIVED
AUG - 3 1956

August 3, 1956

Re: DMEA 4404
Flare Mining Co.
Sunbeam Mine
South Tintic District
Juab County, Utah
$34,602.50, Copper-Lead-Zinc

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of application.

The applicant requests assistance in exploring by deep core drilling the downward extension of the Sunbeam vein system. The long vein system has been the object of much prospecting, especially the southerly half, judging by the many shafts. The production from the several mines in the system is not known, but for the Sunbeam claim is estimated at $500,000 before 1894.

The proposed drilling will center in the Sunbeam section wherein the system is arcuate in plan, a feature that intrigues the applicant's consulting geologist.

The Tintic District is now being resurveyed by the U. S. Geological Survey and new information may be available to investigators.

Referral of the application to the Field Team is recommended.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

August 6, 1956

RECEIVED
AUG - 6 1956

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: Commodity Specialist, Branch of Base Metals

Subject: Review of Application, Docket No. DMEA 4404 (copper-lead-zinc). Flare Mining Company, Sunbeam Mine, Tintic Mining District, Juab County, Utah. $34,602.50

It is proposed to explore the downward extension of the mineralized area by 6 diamond drill holes, totaling 3600 feet, at an estimated total cost of $34,602.50. The exploration may discover up to 50,000 tons of ore.

Past records indicate that the proposed exploration may attain the objectives. Under the conditions stated, the drilling program appears to be sound.

I believe that an examination of the property and evaluation of the program are warranted and recommend that the application be referred to the Field Team.

J. W. Pennington

J. W. Pennington

Copy to: Division of Minerals
Branch of Base Metals (2)
R. W. Geehan
Thor Kiilsgaard, U.S.G.S.
F i l e s

August 2, 1956

Flare Mining Company
801 Continental Bank Bldg.
Salt Lake City, Utah

Subject: DMEA-4404
Re: Exploration Assistance
Sunbeam Mine

Gentlemen

The receipt of your application dated July 27, 1956 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-4404 and referred to the Base Metals Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

August 2, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned docket number to an application recently received from Region III.

DMEA
-440 Flare Mining Company
Sunbeam Mine

Robert E. Adams
Chief, Operation's Control
and Statistics Division

Standard Form 63
Jan. 1952

U. S. GOVERNMENT
MEMORANDUM OF CALL

Date 2/4 | Time 3:00

TO— Mr Rubin

☒ YOU WERE CALLED BY— ☐ YOU WERE VISITED BY—

Mr. Anderson

Telephone: | Number or code | Extension 2972

☒ PLEASE CALL
☐ WILL CALL AGAIN
☐ RETURNING YOUR CALL
☐ WAITING TO SEE YOU
☐ WISHES AN APPOINTMENT

Left This Message:

Received by— emd

☆ U. S. GOVERNMENT PRINTING OFFICE: 1955 O-367995 16—65931-1

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

RECEIVED
AUG 2 1956

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. 4404
Metal or Mineral Copper-Lead-Zinc
Date Received 8-2-56
Estimated Cost $34,602.50
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: FLARE MINING COMPANY --- A Partnership
801 Continental Bank Building
Salt Lake City, Utah

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

(See attached sheet)

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract All of the property of the New Sunbeam Mining Company, Tintic Mining District, Juab County, Utah, consists of eight patented mining claims shown on accompanying map and described in accompanying report

(*b*) State any mine name by which the property is known. Sunbeam Mine

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Held by lease, copy of which is attached from the New Sunbeam Mining Company.

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

(*e*) If you own the land, describe any liens or encumbrances on it None

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. Claims are patented.

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. (a-d) Described in report by Centennial Development Co., Eureka, Utah

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.
Work will be carried out by independent contractors.

16—66551-1

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Copper, lead, zinc, gold and silver.

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc. 3,600 ft. of diamond drilling as shown on accompanying map in report.

(*c*) The work will start within ~~xxx~~ /two weeks notice and be completed within 4 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.).

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)? Yes

(*b*) How do you propose to furnish your share of the costs?

[X] Money [ ] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated July 27, 1956

Flava Mining Co
(Applicant)

By D. Hector Moffat
agent

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

HAROLD P. FABIAN
BEVERLY S. CLENDENIN
D. HOWE MOFFAT
RENDELL N. MABEY
PETER W. BILLINGS
SANFORD M. STODDARD

ALBERT J. COLTON
O. WEBSTER ADAMS, JR.
K. JAY HOLDSWORTH

FABIAN, CLENDENIN, MOFFAT & MABEY
ATTORNEYS AND COUNSELORS AT LAW
CONTINENTAL BANK BUILDING
SALT LAKE CITY 1, UTAH

July 31, '56

RECEIVED
AUG - 2 1956

VIA AIR MAIL

Defense Minerals Act Administration
Washington 25, D. C.

Dear Sir:

We are enclosing herewith four (4) DMEA Applications in connection with the New Sunbeam property located in Eureka, Utah. Mr. Steve Wilson has indicated that we sould mail these directly to you, which we trust is correct.

Sincerely yours,

D. Howe Moffat

D. HOWE MOFFAT

DHM:lw

Enclosures

FLARE MINING COMPANY

NAMES AND ADDRESSES OF PARTNERS

General Partners

Arnold Feuerstein	1220 North Palm Anahiem, California
James M. Feuerstein	1220 North Palm Anahiem, California

LImited Partners

Eli Reinhard	1220 North Palm Anahiem, California
Edith Reinhard	1220 North Palm Anahiem, California
Isador Reinhard	1220 North Palm Anahiem, California

AGREEMENT

THIS AGREEMENT, made and entered into this 1st day of July, 1956, by and between NEW UNITED SUNBEAM MINING COMPANY, hereinafter referred to as "Sunbeam", a Utah corporation with its principal place of business at Salt Lake City, Utah, and FLARE MINING COMPANY, hereinafter referred to as "Flare", a limited partnership, with its principal place of business at Anahiem, California.

WHEREAS, Sunbeam is the owner of certain patented mining claims located in the Eureka Mining District in Juab County, Utah, more particularly hereinafter described, and Sunbeam is desirous of leasing said mining claims to Flare under the terms and conditions more particularly hereinafter set forth, and

WHEREAS, Flare is desirous of taking possession of said mining claims, performing the work all as more particularly described hereinafter.

Witnesseth:

NOW, THEREFORE, for and in consideration of the mutual promises and covenants hereinafter contained it is agreed by and between the parties hereto as follows:

1. That from date hereof for a period of 120 days Flare shall be entitled to the possession of the mining claims hereinafter described and during said time shall be entitled to explore said property, which shall include the right to go upon all of the same, including any of the workings now existing thereon, including shafts, tunnels and any and all other developemtn work; perform rehabilitation of old workings, prepare maps, have samples assayed. Sunbeam shall be supplied with copies of any maps so prepared and copies of all assays made of any samples taken of said workings. During this period Flare shall be entitled to mine and ship any ore discovered in out-croppings and pay to

Sunbeam the royalties provided for in the terms and conditions of the lease, hereinafter set forth.

2. During the 120 day period provided in paragraph 1 hereof Sunbeam shall have the right to at all times go upon said claims and inspect the same.

3. During said period of 120 days all work performed by Flare shall be in compliance with all of the laws of the State of Utah and the United States of America and particularly those with regard to the mining laws, workmen's compensation laws and the social security laws; and will at all times keep said property free and clear of any liens of mechanics or materialmen.

4. Flare may at any time within 120 days from date hereof by written notice delivered to Sunbeam at its office in the Kearns Building at Salt Lake City, Utah, acquire the rights under and pursuant to the lease hereinafter set forth.

5. The terms and conditions of said lease shall be as follows:

A. That Sunbeam lets and leases to Flare the following described patented lode mining claims, to-wit:

Juab Lawrence Lode and mining claim (also known as Sunbeam and First Southern Extension Sunbeam Lode Consolidated), Lot 61.

First Southern Extension Lode and mining claim, Lot #64.

The Kinsey, Beaman, Stubbs and Triangle Lodes and mining claims, Lot No. 4090.

The Woodmansee Lode, (also known as Sunbeam Lode), Lot no. 165.

The West Sunbeam Lode and Mining claim, Lot No. 3820.

The Iron Spar Lode and mining claim, Lot no. 4015.

The West Elmer Ray Lode and mining claim, Lot No. 66.

B. The term of said lease shall be for a period of one (1) year from date of exercise of the option hereinbefore set forth and for additional periods of one (1) year until a total of seven (7) years shall have lapsed; provided that Flare performs the work upon the demised claims and otherwise fully and completely complies with the obligations imposed upon Flare as more

particularly hereinafter set forth.

C. Within one (1) year of the exercise of the option hereinbefore referred to and annually thereafter for said seven (7) year period Flare will expend by way of exploration and development upon said demised claims an amount not less than Ten Thousand Dollars ($10,000.00) each year; provided, however, that if during said period merchantable ore is discovered, then the actual mining expense of said ore shall apply against said minimum work requirement.

D. Flare will pay to Sunbeam by way of royalty:

Ore sold at $20.00 a ton or less -- Royalty shall be 10%

Ore sold at more than $20 a ton, but less than $35 -- royalty shall be 15%

Ore sold at more than $35 per ton, but less than $50 there shall be paid a royalty of 20%, and

All ore sold for more than $50 per ton shall pay the Sunbem a royalty of 25%.

The values of the ore shall be determined at the point of sale, from which shall be deducted the transportation expense from the mine to point of sale for the purpose of determining the value for the royalty purposes herein set forth.

E. All ore shipped by the Lessee shall be shipped in the name of the Lessor. All checks and payments for ore, together with settlement sheets shall be delivered by the smelter to the Lessor. The Lessor, after deducting its royalties and such other sums as it may have expended for or in behalf of the Lessee pursuant to the terms hereof, shall remit the balance to the Lessee.

F. Flare will pay all taxes upon all personal property located upon the demised premises during the term of this lease. Mine occupation tax or any tax imposed in lieu thereof or in addition to said tax which shall be measured by the production from said mine shall be paid by the parties hereto as

FABIAN, CLENDENIN, MOFFAT & MABEY
ATTORNEYS AT LAW
CONTINENTAL BANK BUILDING
SALT LAKE CITY, UTAH

their respective interests may appear. Real property taxes will be paid by the Lessor.

G. Flare agrees to hold Sunbeam harmless from all liens, claims and demands and liabilities of every nature whatsoever which might arise out of its operations upon the demised premises.

H. It is agreed between the parties hereto that Flare may apply to the United States Government for a DMEA loan to assist in defraying the exploration costs upon said property, and it is agreed that said application will be submitted to Sunbeam for its approval and Sunbeam does not by this lease agreement agree to approve or enter into any DMEA loan agreement or arrangement.

I. Flare agrees annually to submit a written report of expenditures made under and pursuant to this lease agreement and should Flare in any year fail to make the expenditures herein provided for or after the discovery of ore, mine the same with due diligence or fail or refuse to make any of the reports herein provided for to said Sunbeam or in any other way violate any of the terms and conditions of this lease then and in that event this lease shall immediately terminate.

J. Flare shall have sixty (60) days after the termination of this lease, whether by default or otherwise, in which to remove all machinery, equipment and other personal property located upon the demised premises.

K. Flare shall at any time, while this lease is in good standing terminate the same upon giving thirty (30) days written notice to Sunbeam of its intention to so relinquish this lease.

L. Flare is hereby given an option to acquire shares of stock in the Lessor to the extent of forty per cent (40%) of

the issued and outstanding shares to be exercised as follows:

(1) If a merchantable ore body shall have been discovered upon the demised premises.

(2) To be exercised while the lease is in good standing and the Lessee shall have performed all of the terms and conditions imposed upon it.

(3) By paying to the Lessor the sum of Two Hundred Fifty Thousand Dollars ($250,000.00).

IN WITNESS WHEREOF, Flare Mining Company, a partnership has caused these presents to be executed by its general partner, Arnold Feuerstein and New United Sunbeam Mining Company has caused these presents to be executed by its officers thereunto duly authorized on the day and year first hereinbefore written

FLARE MINING COMPANY, a partnership

By /s/ Arnold D. Feuerstein
Arnold Feuerstein

NEW UNITED SUNBEAM MINING COMPANY
a Utah corporation

By _____
Vice President

ATTEST:

/s/ J. W. Gallivan

(Seal Affixed)

STATE OF CALIFORNIA)
: SS
COUNTY OF LOS ANGELES)

On the 2nd day of July, 1956, personally appeared before me Arnold Feuerstein, who being by me duly sworn did say that he is a general partner of FLARE MINING COMPANY, a partnership, and that the within and foregoing instrument was signed in behalf of said Company, and acknowledged to me that said Company executed the same.

/s/ Helen Calahan
Notary Public
Residing at Rivera, Calif.

My commission expires:
August 2, 1957.

STATE OF UTAH)
: SS
COUNTY OF SALT LAEK)

On the 12th day of July, 1956, personally appeared before me Thomas F. Kearns Jr., and J. W. Gallivan who being by me duly sworn did say, each for himself, that he, the said Thomas F. Kearns, Jr., is the President, and he, the said J. W. Gallivan is the Secretary of NEW UNITED SUNBEAM MINING COMPANY, a Utah corporation, and that the within and foregoing instrument was signed in behalf of said corporation by authority of a resolution of its board of directors and the said Thomas F. Kearns, Jr., and J. W. Gallivan each duly acknowledged to me that said corporation executed the same and that the seal affixed is the seal of said corporation.

/s/ P. J. Hession
Notary Public
Residing at Salt Lake City, Ut.

My commission expires:
11-21-56

COPY

July 12, 1956

Flare Mining Company
Anahiem, California

Gentlemen:

The undersigned has this day executed and delivered to Mr. D. Howe Moffat, your attorney, that certain agreement dated July 1, 1956, whereunder you are given an option to lease from the undersigned its mining claims as therein described, which provides an option to you to acquire shares of stock of the under signed to the extent of 40% of its issued and outstanding shares for $250,000, with the understanding that the undersigned will not be bound under the provisions for said option unless and until its articles of incorporation are amended to give its board of directors authority to sell or otherwise dispose of its treasury or unissued capital stock, in such amounts, to such persons or corporations for such consideration as it deems fit, without offering the same to its stockholders, and the undersigned and Kearns-Tribune Corporation who owns a majority of the outstanding stock of the undersigned, by signing this letter, agree to proceed diligently to effect such amendment. It is also understood that if at the time of the exercise of said option there may not be available treasury or unissued stock of this corporation in excess of 33-1/3% of its issued and outstanding shares, to the extent that the undersigned will have available under said option at least 33-1/3% but less than 40% of its issued and outstanding shares, said option shall be limited to the amount of shares so available and the option purchase price reduced in proportion to the amount of shares less than 40%, so available.

It is also understood that that portion of paragraph 5-D of said agreement referring to royalty is amended to read as follows:

"d. Flare will pay to Sunbeam by way of royalty:

Ore sold at $20.00 a ton or less -- royalty shall be 10%

Ore sold at more than $20 a ton, but not more than $35 -- royalty shall be 15%

Ore sold at more than $35 a ton, but not more than $50 -- royalty shall be 20%, and

All ore sold for more than $50 per ton -- royalty shall be 25%."

Flare Mining Company July 12, 1956

It is also understood that said agreement may not be assigned or the lease therein assigned or sublet without the written consent of the undersigned.

NEW UNITED SUNBEAM MINING COMPANY

By /s/ J. W. Gallivan, Secy.

The undersigned hereby agrees to vote its stock at a stockholders meeting of New United Sunbeam Mining Company to amend its articles of incorporation as above set forth.

KEARNS-TRIBUNE CORPORATION

By /s/ J. F. Fitzpatrick
President

The undersigned hereby accepts and approves the above reservations and conditions with respect to said agreement of July 1, 1956.

FLARE MINING COMPANY

By /s/ D. Howe Moffat

COPY

SPRAGUE & HENWOOD, INC.
Contractors for
DIAMOND DRILLING

P.O. Box 645
Grand Junction, Colo.

June 18, 1956

Centennial Development Co.
Eureka
Utah

Attn: Mr. James Quigley

Gentlemen:

In accordance with our conversations we herewith submit our proposal for exploratory drilling at the Sun~~dance~~ DEAM Mine near Silver City, Utah.

PROPOSAL:

Non-Core Drilling
Item 1. (a) From 0 to 500 ft. . . . . .$6.00 per ft.
(b) From 500 to 750 ft. . . . . 8.00 per ft.

Core Drilling
Item 2. (a) From 0 to 500 ft. . . . . 8.50 per ft.
(b) From 500 to 750 ft. . . . . 10.50 per ft.
(c) From 750 to 1000 ft. . . . . 13.00 per ft.

Reaming and Setting Casing
Item 3 . . . . . 4.50 per ft.

Cementing and drilling out cement
Item 4. . . . . 15.00 per hr.

Casing
Item 5. Any casing lost in holes will be charged to the customer at the following prices:
NX . . . . . $ 3.00 per ft.
BX . . . . . 2.25 per ft.
AX . . . . . 1.75 per ft.

Transportation of crew and equipment
Item 6. Lump sum $600.00

This proposal is subject to the following conditions:

1. Any cement used will be charged to the customer at cost.

2. This proposal covers drilling in igneous formations and does NOT include any drilling in limestone formations. Any drilling required in limestone formation would be subject to a negotiated agreement made to cover drilling in limestone formation.

3. In the event that quartz veins or stringers are encountered in non-core portion of the hole, then the price schedule of Item 2 for core drilling will apply for drilling through quartz.

4. All drill hole locations and access roads to drill sites will be constructed and maintained to accommodate Sprague & Henwood, Inc. truck mounted drills and water trucks. Any bulldozer work required for preparation of sites and roads will be furnished by the customer at no cost to Sprague & Henwood, Inc.

5. Cores will be delivered at drill hole locations, and storage and preservation of cores will be the responsibility of the customer.

6. The minimum size core is to be AX (1 1/8") unless otherwise agreed to by the customer. Holes are to be started NX size and reduced to BX size and AX size as required by drilling conditions as determined by the contractor. The contractor also reserves the right to determine when reaming or cementing is required.

We thank you for the opportunity of submitting this proposal and hope to be favored with your order.

Very truly yours,

SPRAGUE & HENWOOD, INC.

/s/ R. R. Carver
R. R. Carver
Western Manager

RRC:jmt

CC: Scranton
File

6.

(a) Sprague & Henwood's firm price bid is lowest in district for many years. Most drilling has been on daily rental plus footage fee. Estimating on average hole on S. & H. prices.

600 ft. hole

450 ft. non core	@ 6.00	2,700.00
50 ft. core	@ 8.50	425.00
100 ft. core	@ 10.50	1,050.00
Estimate casing 100 ft.	@ 4.50	450.00
Estimate Cementing time 6 hrs.	@ 15.00	90.00
Estimate casing bars 25 Ft.	@ 2.25	56.25
Proportion of mobilization charge		100.00
		4,871.25

Job Estimate
6 holes @ 4,871.25 — 29,227.50

(b) Supervision and Engineering - part time
550.00 per mo. including fringe
550.00 X 4 mo. — 2,200.00
Core boxes and core storage
900 ft. @ .10 per ft. for boxes — 90.00
Sample sacks 300 @ .25 — 75.00
Labor bucking samples
5 days @ 20.00 including fringe — 100.00
Assaying - 20 per hole
Average cost of 3.25 per sample
20 X 6 X 3.25 — 390.00
Freight on samples — 20.00

(c) Drill site preparation @ 200.00 per hole — 1,200.00

(d) Pick-up truck rental @ 100.00 per mo. — 400.00
Instrument rental @ 25.00 per mo. — 100.00
Expenses, gas, oil and minor repairs
@ 50.00 per mo. — 200.00

(e) None

(f) None

(g) None

(h) Estimated contingencies — 600.00

34,602.50

HAROLD B. SPENCER, PRESIDENT
JAMES QUIGLEY, VICE-PRESIDENT
ROBERT E. WATT, SEC'Y-TREASURER

CENTENNIAL DEVELOPMENT COMPANY

MINING ENGINEERS AND CONTRACTORS

EUREKA, UTAH

RECEIVED
AUG 1 1956

June 18, 1956

D. H. Moffat
Flare Mining Company
Continental Bank Building
Salt Lake City, Utah

Dear Mr. Moffat:

Enclosed please find a report covering our examination and exploration proposal on your lease on the property of the New Sunbeam Mining Company in the Tintic District, Juab County, Utah.

Very truly yours,

Centennial Development Co.

James Quigley

James Quigley

CENTENNIAL DEVELOPMENT COMPANY

SUNBEAM EXPLORATION PROJECT
TINTIC MINING DISTRICT
JUAB COUNTY, UTAH

SUMMARY

The Sunbeam vein occurs in an intrusive monzonite porphyry stock lying to the south of the limestone replacement orebodies of Tintic. The New Sunbeam Mining Company property covers about 3,000 feet along the strike of this vein, which has been worked along the length of the property through several shafts. Some of the workings extended below the water level at approximately 425 feet. The Sunbeam claim is the earliest recorded location in the Tintic District. The property has produced substantial amounts of gold, silver, copper and lead. Records are incomplete, but ores from the Sunbeam claim alone had a gross value of over $500,000.00 before 1894.

The purpose of the project is to test the favorable structure on the Sunbeam vein below the water level by diamond drilling to establish a tonnage to warrant reopening the Sunbeam Shaft. Six drill holes, averaging 600 feet deep and inclined to the vein below the water table will test the structure adequately.

LOCATION AND PROPERTY

The Sunbeam Mine is the property of the New Sunbeam Mining Company and includes the following patented lode mining claims, covering a total of 127 acres.

Sunbeam

Triangle

Sunbeam & 1st Southern Extension - Sunbeam

Silver Moon

First Southern Extension Sunbeam

Elmer Ray

West Sunbeam

Iron Spar

These claims lie in Sec. 31, R3W, T11S in the southern part of the Tintic Mining District, Juab County, Utah. The mine is connected to Silver City, 2 miles to the west on U.S. Highway 50-6 by a good gravel road. Silver City is 4 miles south of Eureka, a town of about 1,000, and a supply center for a wide area. The Sunbeam lies one-half mile southwest of the Dragon Mine, immediately west of the Undine and one mile south of the Mammoth Mine.

HISTORY

The Sunbeam vein on the property has been worked on through four major shafts ranging up to 650 feet in depth and through many smaller pits, incline shafts and open stopes. Records are very sketchy since most of the work was carried on shortly after the original discovery in 1870 until the early '80's. The notes and assay records attached as an appendix give all of the information on record. The Sunbeam was re-opened in 1934 by P. J. Fennell and Sons, local merchants, and was closed down after a short time. No records other than word of mouth are available. One story holds that there is eight feet of "low grade" ore with "high zinc" on the 350 level. Other stories tell of narrow high copper streaks. These type of stories are common about mines that have closed down. However, it is apparent that the production has been substantial, but that most of the ores mined were high grade and small. The Sunbeam shaft is probably 490 feet deep with the water at 425 feet.

GENERAL GEOLOGY

The geology of the Tintic District has been described by Tower & Smith in the 19th

annual report of the U.S.G.S., 1897-98: by Lindgren and Loughlin in the U.S.G.S. professional Paper (107) 1919; and by many others.

The district covers a range of mountains rising to 8,000 ft. elevation between Goshen Valley on the east and Tintic Valley on the west. The principal structural feature is a syncline of sediments ranging from Pre-Cambrian quartzites through Paleozoic limestones and shales which has been intruded by two large monzonite porphyry stocks and many smaller plugs. A thick series of Tertiary flows mask the range to the east and south.

The syncline has been broken by northeast trending tear faults and much minor fissuring and breaking. The ore masses seem to be related to fissuring and small faults subsidiary to these tears.

ORE DEPOSITS

Over $400,000,000.00 in gold, silver, copper, lead and zinc ores have been mined in Tintic from two types of orebodies. The principal production has came from irregular shaped limestone replacement bodies in the form of vertical pipes and chimneys, flat mantos and gently plunging pipes. A portion of the ores has been won from fissure veins in the igneous rocks. This vein production has come entirely from the older part of the district centering between Silver City and Diamond in the southern part of the range.

The limestone replacement bodies of Tintic have been adequately described in Professional Paper 107. Because the fissure veins in the igneous rocks were largely worked out by the 1890's, very little is known of occurrence of these ores. The mineralization varied from silver-lead, silver-lead-zinc, to gold-silver-copper and gold-silver-copper-lead. All the veins carried abundant pyrite.

The Swansea vein, which has the largest recorded production of the fissure veins, was worked to the 900 ft. level and abandoned when the pumps failed in about 1910. Approximately $800,000.00 in dividends was paid from high grade lead shoots in a pyrite vein. The vein

continues downward, but nothing is known of its nature. Most of the work was confined to the vein with little cross-cutting. The outcrop and the surface stopes are not conspicuous, although continuous ore was mined underneath them.

GEOLOGY OF SUNBEAM

The Sunbeam is the next largest deposit in igneous rock, and has been worked over a length of 3,000 ft. and to a maximum depth of 700 ft. in the El Ray Shaft. The ores were narrow gold-silver-copper-lead streaks enriched in silver and copper at the water level which stood at about 425 ft. in the central part of the property. Most of the work was in the vein with very little cross-cutting. The water level varies along the length of the vein, and the southernmost shaft, the El Ray, was apparently the deepest and the driest.

In the south, the vein is up to 5 ft. wide on the surface striking N 60 E, and dipping 70-80 degrees to the west. At the Sunbeam Shaft the vein swings northerly for 200 ft. turning northeasterly again at the northern end of the workings, where a large mass of quartz fills the fissure at the surface. This change in strike appears to have localized the best ores since the stopes on surface appear widest south of this swing. The deep El Ray Shaft lies well to the south of this area, and one drift on the 600 level appears to be well to the south of the downward projection of the good surface ore deposits.

The enclosed surface map shows this change in strike. No maps of the underground workings are known so any changes in strike and dip in the stoped portions of the vein cannot be projected. This abrupt change in strike north of the Sunbeam Shaft is of particular interest since it bears close resemblance to the cymoid loops discussed by McKinstry in his "Mining Geology". Chauncey Thornburg has described the position of cymoid loops in the vein structures at Pachuca in volume 40, pages 283-297 of Economic Geology.

The quartz outcrop at the surface north of the point where the vein swings northeasterly again is loose and vuggy. Some good ore has been mined from underneath this outcrop. It is

impossible to determine how much, since several stopes, tightly packed with gobs, have been encountered in an open cut on the south side of this quartz.

In a like manner, the vein south of the cymoid loop seems to have been almost continuously mined. The most favorable ground for replacement at depth would appear to be that portion of the vein structure immediately north of the cymoid loop and immediately south. The loop itself deserves some attention, since shearing and multiple veins crossing from one strand to another might offer a structure receptive to broad mineralization to make mill grade ore at depth.

Although there is no indication of direction of movement on the Sunbeam fissure on the surface, the U.S.G.S district office believes that the movement on similar fissures in the area is southward, on the west side, and northward on the east. Some of these displacements might be as much as 200 ft. This direction of movement would tend to open the cymoid loop area, and perhaps provide a favorable host structure for mineralization over a broad zone.

OTHER INFORMATION

The local office of the U.S.G.S. headed by Hal T. Morris, is familiar with the Sunbeam area and is interested in a test of the mineralization below the water table. Lindgren & Loughlin in Professional Paper 107 page 257 repeat the general information given by Tower & Smith and state, "such a vein would seem to have possibilities in depth, but a very heavy flow of water, encountered at 490 feet stopped operations." In private conversation, Martin Fennell, son of P. J. Fennell who opened the mine in 1934, stated that there was an 8 ft. face of ore on the 350 level which could not be shipped because of the high zinc content.

Notes, assays and miscellaneous papers representing all of the files of the New Sunbeam Mining Company and of the Old United Sunbeam Mining & Milling Company, have been summarized and are attached to this report as an appendix.

OBJECTIVES OF THE EXPLORATION PROGRAM

The first objective of the exploration is the development of substantial tonnages of mill grade copper-lead-zinc sulphide ores for shipment to custom mills in Salt Lake, or for treatment in a concentrator erected on or near the property.

A second objective, not properly part of the exploration program, but perhaps incidental to it, might be the discovery of oxidized ores above the water level which could be shipped directly to Salt Lake Smelters: and, or secondarily enriched copper-silver ores at or near the water table.

The order of importance of these objectives is clear. However, relative values are difficult to assign, since there is no way of telling how far under the quartz outcrop the operators, who had abandoned the venture by the time of Tower & Smith in 1898, carried their workings or how well they prospected the complexities of the cymoid loop.

EXPLORATION TARGETS

The water level in the Sunbeam Shaft stands at the 425 ft. level. How much work was carried out on this level or below is impossible to determine. The sulphide dump at the collar of the shaft indicates about 250 feet of drifting. This would not explore very much ground. Again whether or not the former operators thoroughly prospected the complexities of the cymoid loop cannot be determined. An examination of the old workings in the shaft shows a fissure peeling off the northeast and other strands turning northerly. The upper part of the shaft is being rehabilitated at the present time, but it is doubtful if this repair will proceed to a depth to throw much light on structure without undue expense.

MEANS OF EXPLORING TARGETS

Despite the lack of information regarding the underground workings, the evidence on the surface is sufficient to limit the target area to the downward projection below the water

table of the cymoid loop and the positions of the vein immediately north and south of the loop. Most ore shoots in Tintic rake to the north. The principal shoot in the Swansea, which is the only mine in the igneous rocks, described in detail in Professional Paper 107, shows a northerly rake. However, since no positive evidence on rake can be established, the first drill hole should be spotted immediately under the cymoid loop to a point about equal to the 500 ft. level of the Sunbeam Shaft. Depending on mineralization and geological evidence, holes south and north of this area can be placed to test the structure fully. The gulch to the west offers easy drilling locations for holes at about 65 degrees.

Although no comparable ratio of ore discovery to feet of drilling can be established for past production in the Sunbeam Mine, since no records exist, in the Swansea roughly 25% of the area opened up by levels was in ore. If the Sunbeam pattern is as consistent, the six holes might open up a block of ore 500 X 200 X 6 or 50,000 tons of ore. Development cost would be difficult to estimate since the Sunbeam Shaft could be rehabilitated to mine a small orebody; and, undoubtedly some upper level ore could be mined. However, a major operation would require a new vertical shaft and consequently a substantial orebody would have to be developed.

RECOMMENDATIONS

We recommend the drilling of six holes to an average depth of 600 feet to test the Sunbeam vein below the water table. After completion of these holes, if the results are favorable, the incline shaft can be reopened, and the oxidized and enriched ores remaining can be mined in conjunction with sinking to a new level to mine the ores discovered by drilling.

Respectfully submitted,

Centennial Development Company
Eureka, Utah

James Quigley

James Quigley

CENTENNIAL DEVELOPMENT COMPANY

UNITED SUNBEAM MINING COMPANY ASSAY'S

COMPANY & LEASER'S PRODUCTION & SAMPLES - 1903 & LATER

(From Miscellaneous Papers Loaned To Centennial Development Company)

Dates-Lessees-Weights Lot No's. - Buyers	% SiO_2	% Fe	% S	% Zn	% Pb	oz Ag	oz Au	% Cu	Notes-Settlements, Assays
Oct. 3, 1903 - Lot #10 54.5 Tons					26.6	50.4	.08	18.8	Grab Sample Assayed: F.E. Higson, Eureka
Oct. 10, 1903 - Lot #10 109,030 lbs.	15.1	9.0	23.3	3.5	21.2	52.4	.06	14.5	Union Assay Officer
					25.0	53.7	.07	13.3	
		9.8	16.2		22.3	54.9	.065	13.3	A. S. & R.
Aug. 22, 1904 Sorted Dump Ore Shipment					18.0	39.3	.10	7.0	Assays only by F.E.Higson, Eureka
					3.0	22.0	.14	3.2	
April 9, 1906 (S.E. Ware) Best Dump Samples					11.0	17.7	.06	4.5	Assay samples by F.E.Higson, Eureka
May 30, 1906 (S.E. Ware) Dump Sampling	67.4	8.8	19.2	0.0		7.7	.02	2.6	Union Assay
	9.8	12.9	18.0	3.2	13.0	32.0	.04	9.3	Union Assay
[illegible]y 6, 1906 - Lot #6 "Concentrates"					5.0	28.0	.04	6.5	
Aug 20, 1906 - Lot 21 S.E. Ware Lease					5.5	17.0	.06	6.7	Assays only by F.E.Higson, Eureka
Oct. 8, 1906 Lot #22 S.E. Ware Lease					7.0	17.0	.04	4.5	Assays only by F.E.Higson, Eureka
Jan 29, 1907 - Lot #24 62807 dry lbs					19.2	53.4	.05	7.7	Assays only-Ellis
	27.0	13.3	2.3	2.5	17.9	53.9	.05	7.2	Union Assay
Jan. 29, 1907 - Lot #23 39,616 dry lbs.	56.0	13.1	15.8	2.2	2.9	12.7	.03	3.7	Assays only-Ellis
					0.0	13.7	.025	3.5	Union Assay
Jan 31, 1907 - Lot #23 39,616 lbs.	56.0	13.1	1.58	2.2		13.2	.025	1.8	Sold to American Smelting & Ref.
May 18, 1907 - Lot #25 Grab Sample					3.5	19.5	.08	4.5	F.E. Higson, Assayor, Eureka
May 22, 1907 - Lot #25 [illegible]7,240 lbs.	44.6	17.6	19.3	0.0	2.7	18.5	.04	4.62	Union Assay, sold Bingham Mng-Smelt

UNITED SUNBEAM MINING COMPANY ASSAY'S

1903 & LATER - con't.

Dates-Lessees-Weights Lot No's. - Buyers	% SiO_2	% Fe	% S	% Zn	% Pb	oz Ag	oz Au	% Cu	Notes-Settlements, Assays
June 28, 1907 - Lot #26 53,751 dry lbs.	32.5	12.55	21.7	8.2	16.45	39.65	.55	4.08	U. S. Smelting Co.
June 31, 1907 - Lot #24 62087 dry lbs	27.0	13.3	2.3	2.5	18.55	53.65	.05	7.45	
July 16, 1907 - Lot #27 64,012 dry tons	46.4	17.6	20.7	1.3	4.1	16.5	.04	3.55	U.S.Smelting Co.
Aug. 10, 1907 - Lot #28 70,460 dry tons	59.6	13.3	15.5	4.7	9.25	9.9	.0225	2.5	Bingham Cons. Mng.&Smelting
Aug 10, 1907 - Lot #29 74,021 dry tons	38.9	14.3	20.8	4.7	9.25	29.0	.045	4.3	American Smelt & Refng Co.
Sept. 6, 1907 Lot #30 97,148 dry tons	46.2	19.3	24.2	0.0	1.15	10.2	.0325	3.405	Bingham Cons. Mng & Smelting
Oct. 10, 1907 - Lot 32 60,000 lbs (?)	30.8	14.3	22.3	4.9	19.2 17.0	40.2 34.0	.04 .12	3.7 4.0	F.E.Higson, Eureka - Assayer
Nov. 5, 1907 - Lot #32 61,336 dry lbs.	30.8	14.3	22.3	4.9	19.55	39.6	.035	3.9	
July 27, 1908	30.8	14.3	22.3	4.9	19.55	39.6	.035	3.9	Bid from AS&R.
July 27, 1908	30.8	14.3	22.3	4.9	19.55	39.6	.035	3.9	Bid - Bamberger & McMillan
Aug. 29, 1908 U.S.S.&R. Thornburg-Leaver Lease 23,957 tons	28.6	10.5	20.7	5.8	24.7	37.85	.043	3.85	Settlement
July 9, 1912 Dump Samples						15.0 11.9	.08 .06	3.0 2.3	P.N.Anderson P.N.Anderson
		21.1 7.9	2.1 9.9	0.0 1.0	3.2 1.1	7.7 5.8	.02 trace	0.83 2.25	Union Assay Union Assay
Nov. 15, 1912 - Dahle-Massion Lease, 78,902 lbs.	53.5	17.0	6.7	0.0	4.3	14.83	.045	1.88	International Smelting Co.

CENTENNIAL DEVELOPMENT COMPANY

UNITED SUNBEAM MINING COMPANY ASSAY'S

1903 & LATER - con't.

Dates-Lessees-Weights Lot No's. - Buyers	% SiO_2	% Fe	% S	% Zn	% Pb	oz Ag	oz Au	% Cu	Notes-Settlements, Assays
Nov. 21, 1912, I.S.& R. Settlement 90,736 lbs.	55.4	16.2	13.2		2.7	10.67	.03	2.3	
Feb. 20, 1913 - Lot #3 Dahle-Massion Lease 42,670 dry lbs.	36.55	12.85	21.4	2.5	19.04	39.75	.042	3.37	American Smelting Co.
July 1, 1913 - 8440 lbs.			21.9		21.0	42.5	.06	3.98	Chris. & Nichols
Southland Lease	29.7	12.6			20.3	41.5	.05	3.9	Tintic Smelting
N. E. Dahle Lease									
July 14, 1913 - Lot #4 41,060 lbs.	58.9	13.5				15.6	.04	2.41	Garfld Smelting
	59.4	14.0				15.4	.05	2.58	Garfld Smelting
	59.15	13.75				15.5	.045	2.49	Garfld Smelting
	59.4	14.0				15.4	.05	2.58	Tintic Smelting
Feb. 20, 1914 - Lot #1 Westburg Lease					7.75	31.5	.0425	8.67	
July 14, 1915 - 12,800 lbs. Andrew Baxter Lease	28.4	17.5	21.2	6.7	8.2	29.2	.07	7.91	Union Assay-sold to Utah Ore
Lot #31 - (N.G.)					4.5	8.0	.04	2.0	

CENTENNIAL DEVELOPMENT COMPANY

EXCERPTS FROM LETTERS WORTH NOTING

Letter - Feb. 1, 1907 - F. J. Westcott to S. E. Ware: "Lots 23 & 24 brought $1,530.62. Lot 24 brought $65.25 per ton."

Letter - Feb. 7, 1907 - S. E. Ware to F. J. Westcott: "Water in El Ray Shaft is within 375 ft. of top of shaft."

Letter - Jan. 26, 1911 - F. J. Westcott to C. H. Buller, Washington, D.C.: The United Sunbeam Mine was closed down about nine years ago on account of a heavy flow of water encountered in its working shaft, and there is to-day about 300 feet of water in the shaft, and it is permanent, neither rising or falling."

Letter - Frank Thornburg - May 3, 1915: "The boys are taking out some very good ore - small streak from drift just north of Woodmansee Shaft."

Letter - Frank Thornburg - April 4, 1915: "The Knight-Christensen Mill burned to the ground last night."

NOTE: Since the company operation of the United Sunbeam ceased in 1902, please note that the ore shown on the following sample sheets must have been a skinning job above the water level and does not necessarily represent the value of virgin shipped by the Company.

Most of the papers submitted are leases, bids, correspondence with leasers and smelters and railroad, etc.; They do not throw much light on the operations. Some one stole and destroyed the mining equipment which would now be obsolete.

Production (1903 - 1939)

U. S. Bureau of Mines Records dump and underground direct, shipping and cobbed ores.

7,371 tons containing
191 ounces gold
92,077 ounces silver
261,406 Pounds copper
287,294 pounds lead

Average grade
.026 ounces gold
12.491 ounces silver
1.77 % copper
1.95 % lead

S. Government Messenger Envelope

dard Form No. 65 (Rev. 1/46)

1. Use blocks consecutively, one at a time.
2. Void previous block.
3. Write clearly.

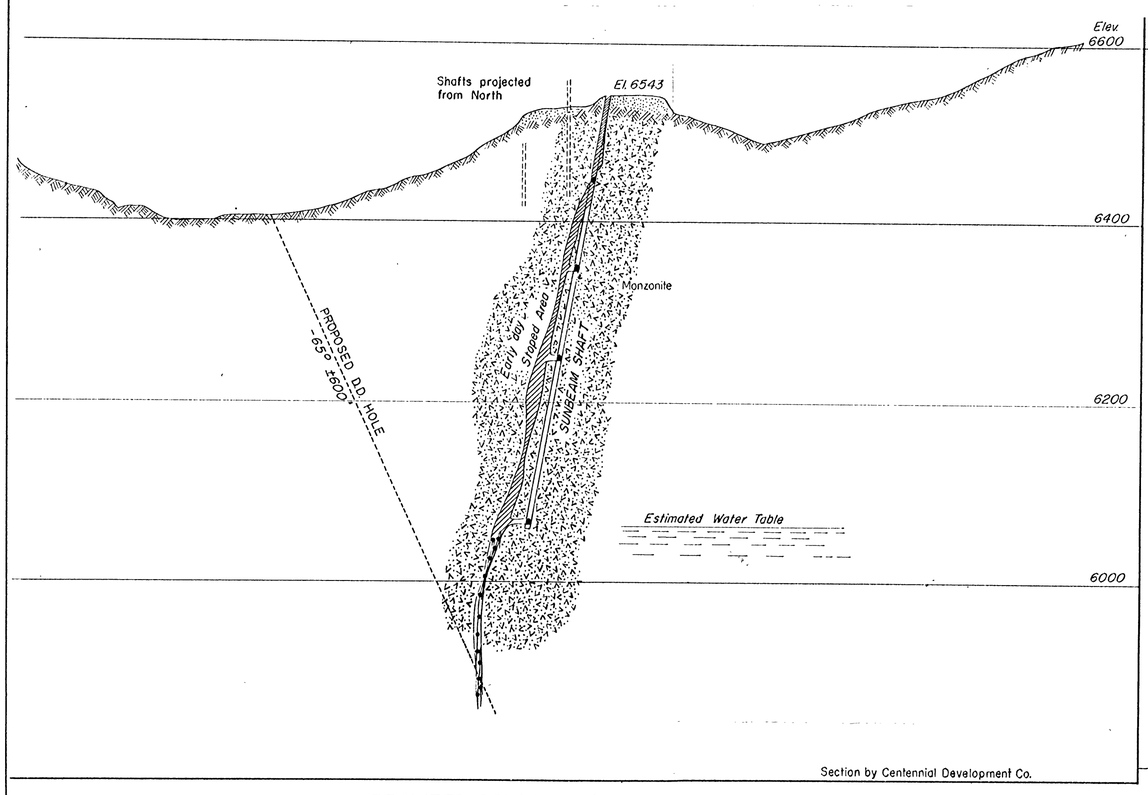
NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM		NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM	
r. Ellis m 4443 Int.	RUN STOP		RUN STOP
	RUN STOP		RUN STOP
	RUN STOP		RUN STOP
	RUN STOP		RUN STOP
	RUN STOP		RUN STOP
	RUN STOP		RUN STOP
	RUN STOP		RUN STOP
	RUN STOP		RUN STOP
	RUN STOP		RUN STOP
	RUN STOP		RUN STOP

urplus envelopes to room for reissue.

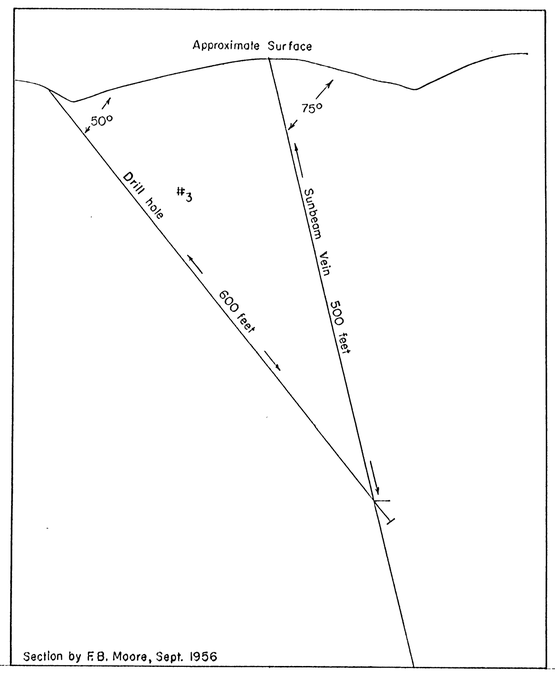
Use other side

Use RUN and STOP only when messenger service between Government buildings in Washington is required.
Your mail room has RUN and STOP information.

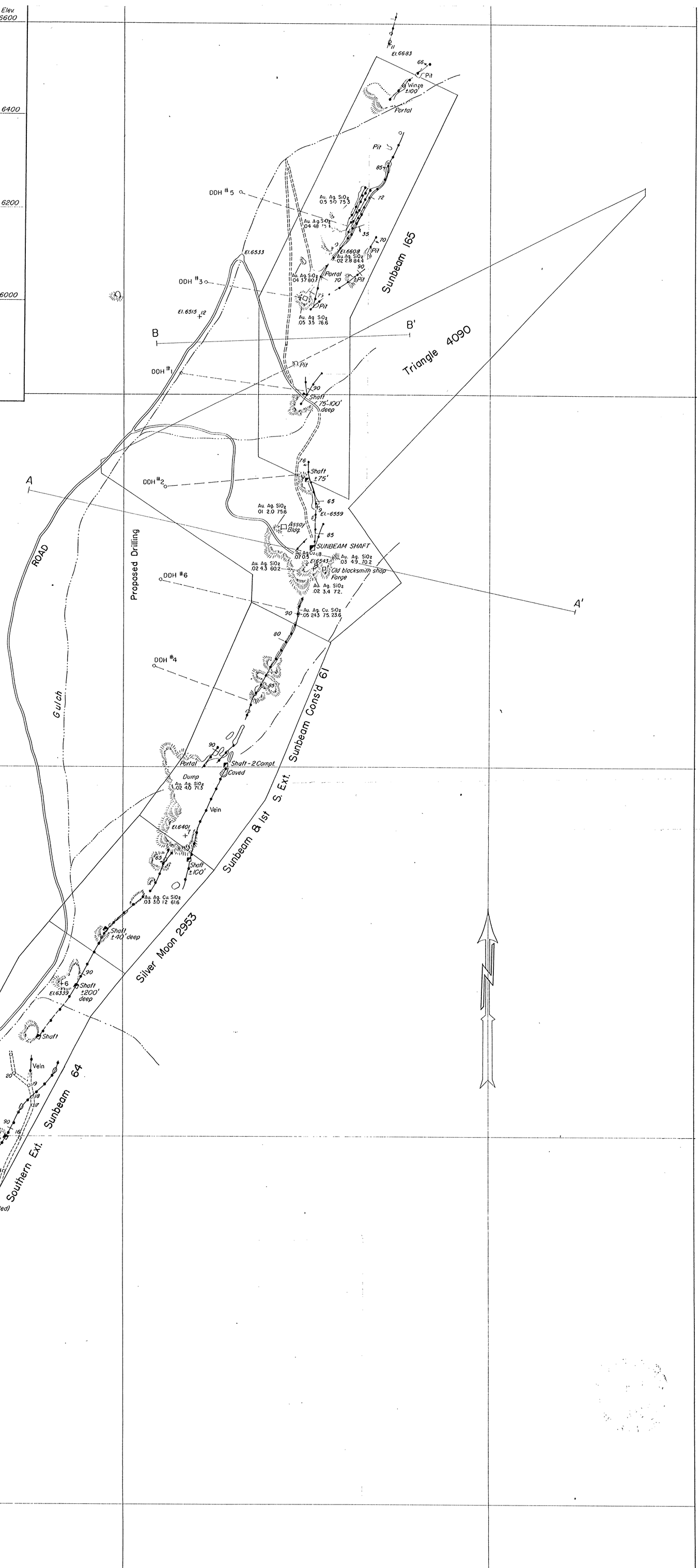
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY



IDEALIZED SECTION A-A' ACROSS THE SUNBEAM VEIN



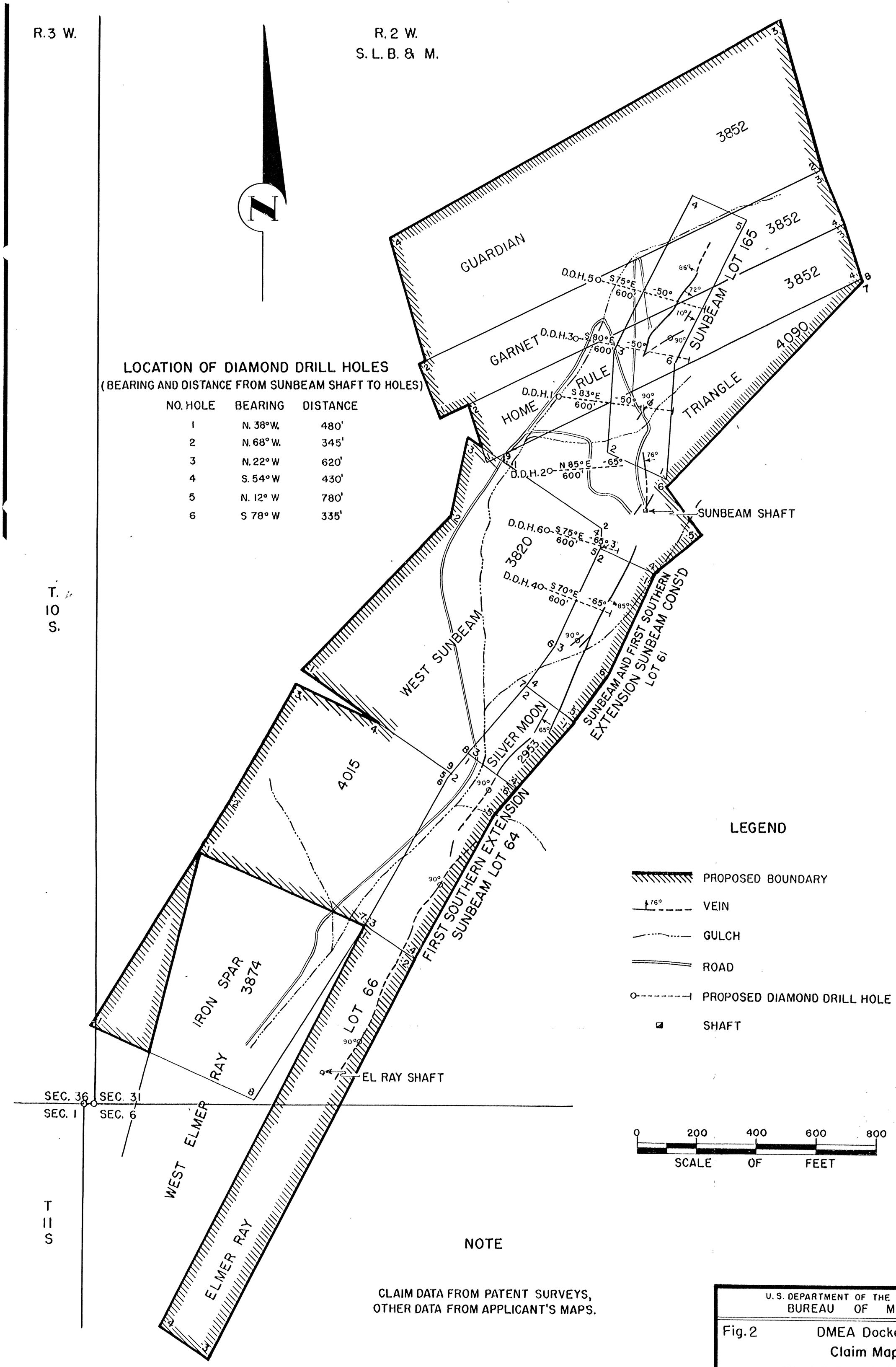
IDEALIZED SECTION SHOWING ANGLE OF HOLE FOR THE EAST DIPPING PORTION OF THE SUNBEAM VEIN SECTION B-B'



Map by Centennial Development Co., Eureka Utah, 1956

FIGURE 2—. MAP OF SURFACE WORKINGS SHOWING TRACE OF SUNBEAM VEIN, TINTIC MINING DISTRICT, JUAB COUNTY, UTAH.

100 0 100 200 Feet



NOTE

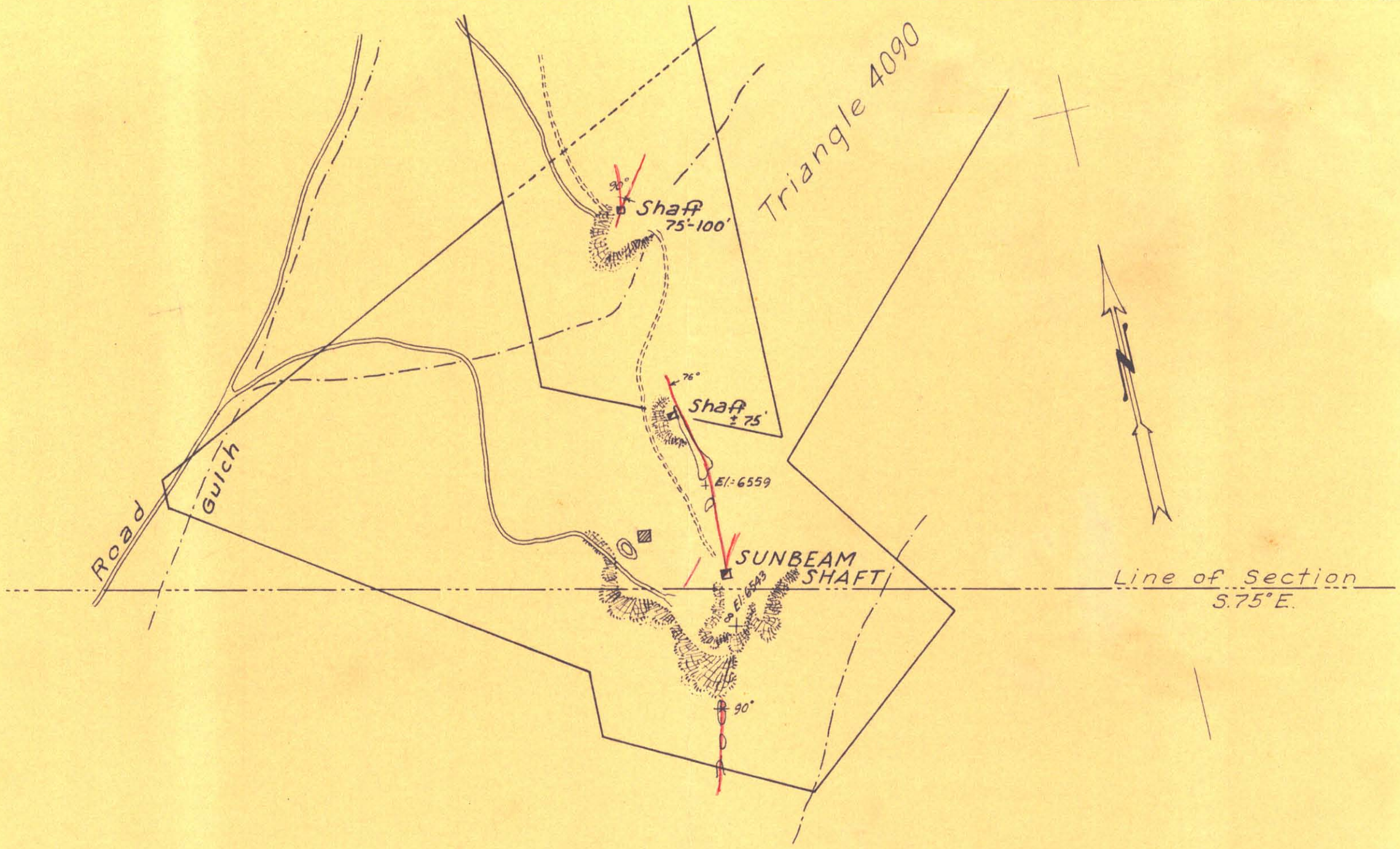
CLAIM DATA FROM PATENT SURVEYS,
OTHER DATA FROM APPLICANT'S MAPS.

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

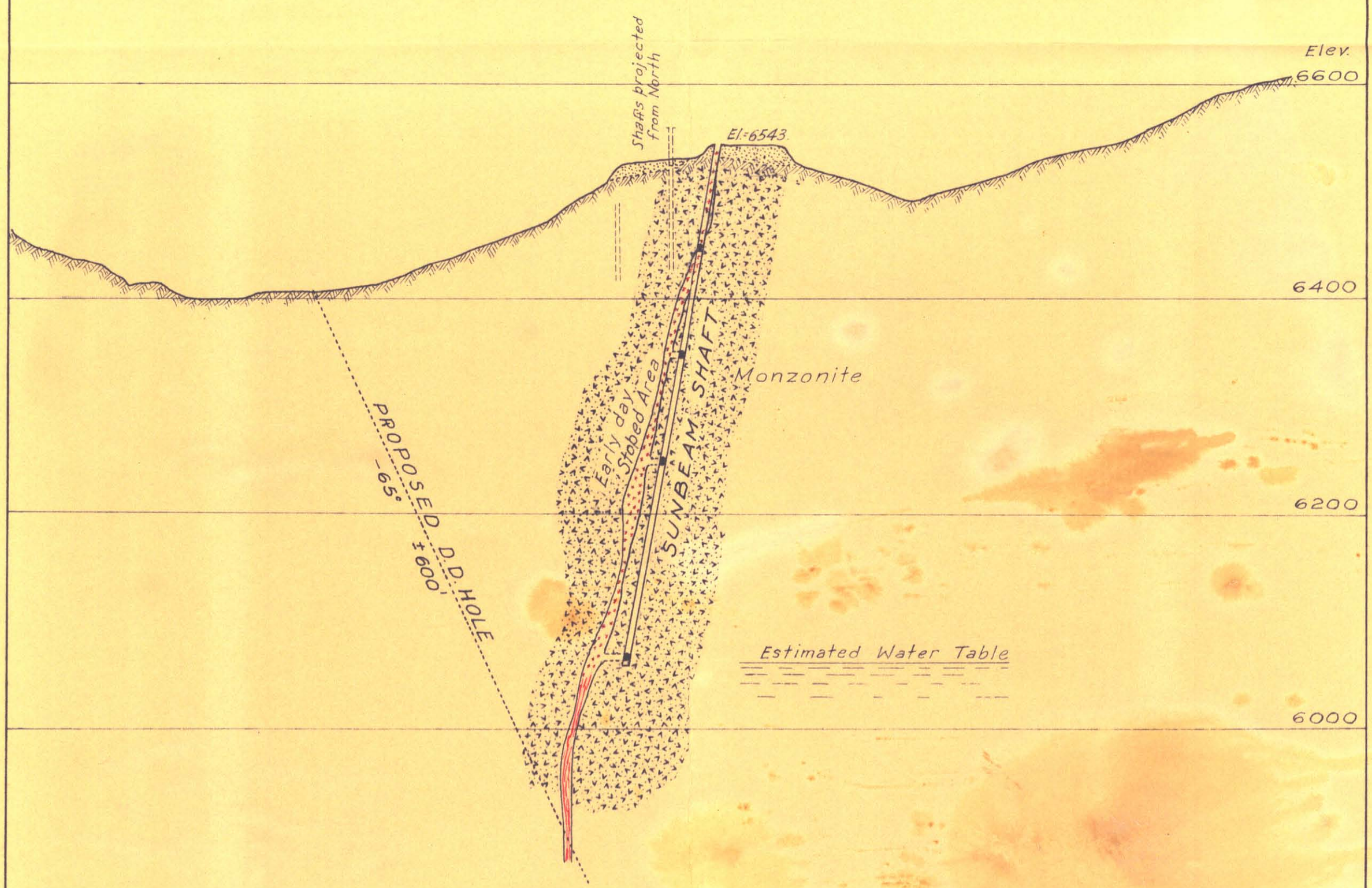
Fig. 2 DMEA Docket No. 4404
Claim Map

FLARE MINING CO.
(NEW UNITED SUNBEAM MINING CO. PROPERTY)
JUAB COUNTY, UTAH

ENGINEER: *M. H. HOWES*	DATE: JAN. 14, 1957
TRACED: JAN., 1957; BY: A.P.T.S.	1500-1184-D
CHECKED:	



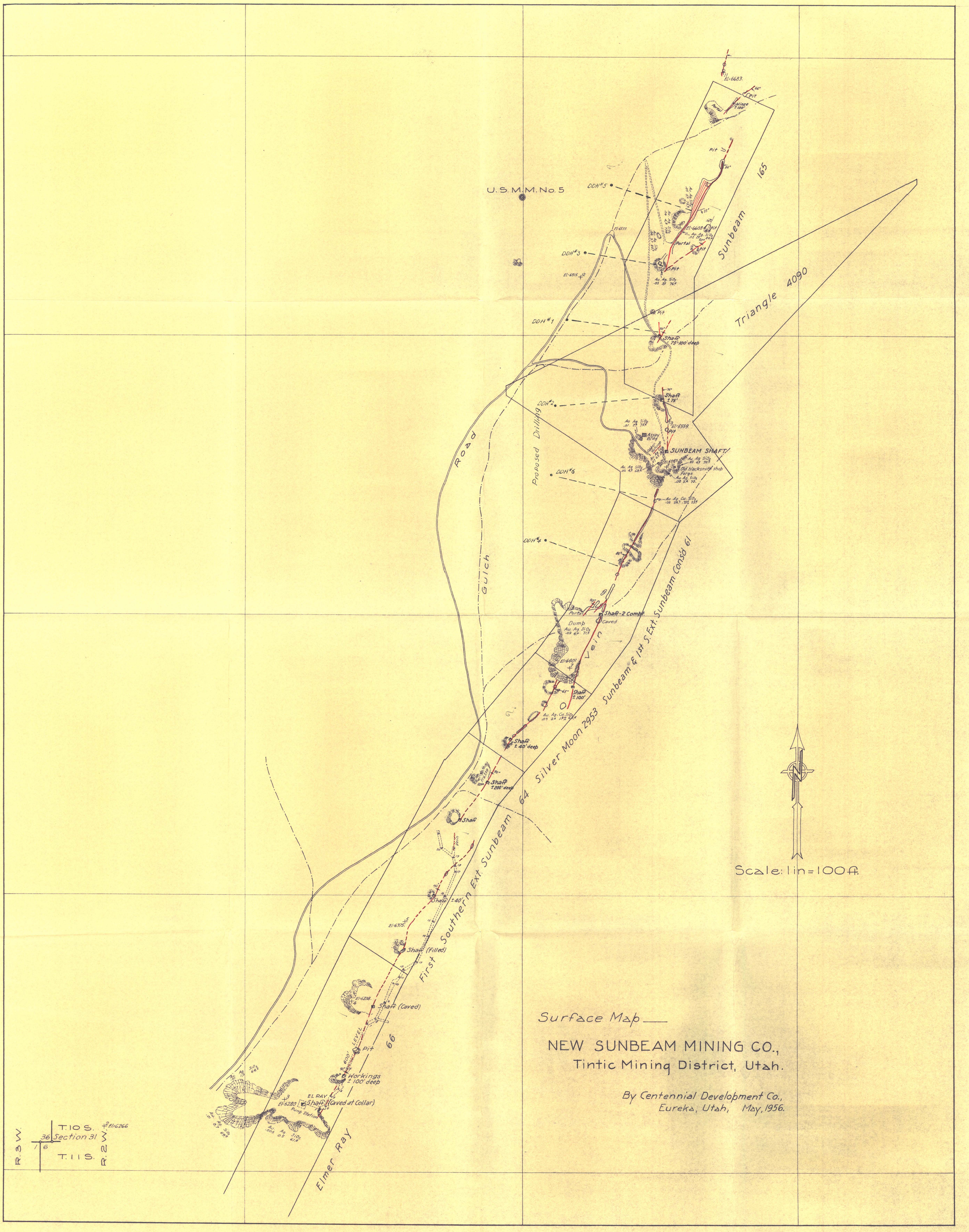
PLAN
Scale: 1"=100'



SECTION
Along Sunbeam Fissure.
—— S.75°E. → Looking Northward.
Scale: 1"=100"

Centennial Development Co.,
Eureka, Utah. May, 1956.

CHIEF CON.M.CO.
Owned by EUREKA CITY
CONSOLIDATED MINING COMPANY
UTAH JUAB COUNTY BOUNDARY
EUREKA
MAMMOTH CITY
SILVER CITY
HOMANSVILLE
INTERNATIONAL
TINTIC STANDARD M. CO.
TINTIC EASTERN
TINTIC UTAH MINING CO.
EAST STANDARD
DENVER AND RIO GRANDE WESTERN R.R.
LOS ANGELES AND SALT LAKE R.R.
TINTIC JUNCTION
Township 9 South
Township 10 South
Township 11 South
Range 2 West
Range 3 West



Surface Map ___

NEW SUNBEAM MINING CO.,
Tintic Mining District, Utah.

By Centennial Development Co.,
Eureka, Utah, May, 1956.