DMA Form 1

DEFENSE MINERALS ADMINISTRATION
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DMA Docket No. 3616

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

JUL 11 1955

Mr. Paul C. Lyon, Jr.,
Secretary
Grand Deposit Mining Co.
409 Ness Building
Salt Lake City 1, Utah

Re: Docket No. DMEA-3616 (Lead)
Grand Deposit Mining Co.
Grand Deposit Mine
White Pine County, Nevada

Dear Mr. Lyon:

Your application for aid for an exploration project and other reports available to us in Washington concerning the above-named property have been reviewed.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding materials of acceptable grade in quantities that will significantly improve the mineral supply position for the National Defense Program.

Careful study of all our information, although noting a small amount of lead mineralization on your property, indicates to us that the probability of disclosing minable ore reserves by your proposed program is not sufficiently promising to justify Government participation. We regret to advise you, under these circumstances, that your application for exploration assistance is denied.

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

Sincerely yours,

C. O. Mittendorf

Administrator

WRGriswold/er 7/6/55
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Hillsgaards, USGS
Region II (2)
Chron.

R.C.L.

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

July 6, 1955

Memorandum

To: The Administrator

From: Chief, Base Metals Division

Subject: Denial of Application for Docket No. DMEA-3616 (Lead), Grand Deposit Mining Company, Grand Deposit Mine, White Pine County, Utah.

The property in question had a DMEA contract (DMA-145) which gave negative results. The Field Team in their final report, stated ". . . no further request for exploration should be approved."

Nevertheless, the Applicant requested a new project, claiming that the main fissure had been discovered after the conclusion of the prior project. Hence, a new field examination was made but nothing of much interest was found.

A very small production (382 tons of 30 percent lead ore) has been made from an open fissure in limestone since the completion of the DMA project in 1952. The examiners could see little expectancy of ore bodies of any substance, probably small high grade pockets of residual lead carbonate could be expected but nothing beyond that.

We concur with the field in their recommendation for denial.

W. R. Griswold

W. R. Griswold

File Copy
Surname

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

July 6, 1955

Memorandum

To: The Administrator

From: Chief, Base Metals Division

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WRG/er

Copy to: Docket
Base Metals
Chron.

IN REPLY REFER TO:

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

RECEIVED
JUN 29 1955

June 27, 1955

Re: DMEA-3616
Grand Deposit Mining Co.
Grand Deposit Mine
White Pine County, Nev.

Memorandum

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

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

Subject: Review of Field Team report

In view of the results of work under DMA-145X and Idm-E201 the conclusions of the Field Team appear to have been well taken.

I concur with denial recommendation of the Field Team.

N. E. Nelson

N. E. Nelson

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
O. M. Bishop, 3617

IN REPLY REFER TO:

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

RECEIVED
JUN 29 1955

June 27, 1955

Re: DMEA-[illegible]
Grand Deposit Mining Co.
Grand Deposit Mine
White Pine County, Nev.

Memorandum

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

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NENelson:iml
G-6/27/55

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
O. M. Bishop, 3617

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

RECEIVED
JUN 28 1955

June 22, 1955

Re: DMEA-3616
Grand Deposit Mining Co.
Grand Deposit Mine
White Pine County,
Nevada

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, Branch of Base Metals

Subject: Concurrence in Field Team recommendation for denial

The field team note that the applicant has produced about 400 tons of 30 percent lead ore from some 300 feet of open fissure on the 800-foot level and now proposes an exploration program costing $31,898 with which to drive 630 feet of drift and crosscut, 100 feet of raise and undertake repairs on the shaft. The exploration target is the high grade pockets of lead carbonate in the walls and floor of the open limestone fissures, such as have been mined in the past along the fissure on the 800-foot level.

The field team recognizes that some additional ore may be discovered by exploration to the northwest and southeast of existing workings. The examination team and the field team believe the potential for ore discovery will not, however, justify the cost of the proposed work. I concur with them in this view.

O. M. Bishop

O. M. Bishop

Copy to - Division of Minerals
Mr. Kiilsgaard, Rm. 5224
O. M. Bishop
Files

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

RECEIVED
JUN 23 1955

June 22, 1955

Re: DMEA-3616
Grand Deposit Mining Co.
Grand Deposit Mine
White Pine County,
Nevada

Memorandum

To: W. R. Griswold, DMEA

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Mr. Kiilsgaard, Rm. 5224
O. M. Bishop
Files

RmEa

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

RECEIVED
JUN 13 1955

1605 Evans Avenue
Reno, Nevada

June 10, 1955

Memorandum

To: Operating Committee, DMEA, Interior Building
Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-3616 - (Lead)
Grand Deposit Mining Company
Grand Deposit Mine
White Pine County, Nevada

Reference is made to your letter of January 19, 1955 regarding above subject docket.

Attached are four copies of a report on the property by H. W. Jones and G. G. Gentry, Bureau of Mines and H. C. Stager, Geological Survey in which it is concluded that the application for exploration aid be denied.

Roscoe Smith and I concur in the conclusions as set forth in the report and do not believe that sufficient additional ore that would justify the expense of exploration could be discovered by the proposed work.

S. Ricker

Reviewed by
DMEA OPERATING COMMITTEE
6-17-55
(date)

Attach.

BUREAU OF MINES
WASHINGTON, D. C.
JUN 13 9 09 AM '55

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

RECEIVED
JUN 13 1955

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION II

APPLICATION REPORT

DMEA-3616 - (Lead)
Paul E. Lyons, Jr.
Grand Deposit Mine
White Pine County, Nevada

H. W. Jones
G. G. Gentry
Mining Engineers
U. S. Bureau of Mines

H. K. Stager
Geologist
U. S. Geological Survey

June 1, 1955

Reviewed by
DMEA OPERATING COMMITTEE
6-17-55

RECEIVED
JUN 13 1955

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Ore reserves	7
Proposed exploration	8

ILLUSTRATIONS

Fig. 1 Location map, Grand Deposit Mine
Fig. 2 Geologic map of the 800 level

Docket No.: DMEA-3616 - Lead

Name and address of applicant: Paul E. Lyons, Jr.,
Grand Deposit Mining Co.,
409 Ness Bldg.,
Salt Lake City, Utah

Name and location of property: Grand Deposit Mine
White Pine County, Nevada

INTRODUCTION

Mr. Paul E. Lyons, Jr., Grand Deposit Mining Co., 409 Ness Bldg., Salt Lake City, Utah, applied for Government assistance in a $85,855 program under the Defense Minerals Exploration Administration, docket number 3616, to explore for lead ore at the Grand Deposit mine, White Pine County, Nevada. The applicant has produced about 400 tons of lead ore from a northwest trending fissure on the 800 level of the Grand Deposit mine and wishes to further explore this fissure by drifting, raising, and winzing.

A field examination was requested by the Operating Committee, and was made by H. W. Jones and G. G. Gentry of the Bureau of Mines and H. K. Stager of the Geological Survey on April 20 and 21, 1955, accompanied by Mr. Paul E. Lyons, Jr.

Inasmuch as the mine workings had been mapped in detail, no attempt by the field examiners was made to remap or resample the property. A sketch map of the accessible parts of the ore-bearing fissure on the 800 level was made and 9 samples were taken.

The 800 level of the Grand Deposit mine was explored under DMA contract Idm-E201, docket number DMA-145X, in 1952, but did not discover minable deposits of ore.

CONCLUSIONS AND RECOMMENDATIONS

Since the completion of contract Idm-E201 in 1952, the mine has produced 382 tons of ore containing 30 percent lead from an open fissure in limestone encountered by DMA work on the 800 level. Accessible ore in this fissure has been mined out.

The applicant proposed to further explore the fissure on the 600 and 800 levels. The program would require two years to complete and the total cost would be $85,855. Subsequently, this amount was reduced to $31,898.00.

The inferred reserves do not justify the cost of exploration. It is recommended that Government assistance under the DMEA program be denied.

LOCATION, ACCESSIBILITY, LOCAL RESOURCES

The Grand Deposit mine is on the east flank of the northern part of the Schell Creek range, White Pine County, Nev. It is in the Silver Mountain mining district, in sec. 9, T. 20 N., R. 66 W., M.D.B.&M., and is reached from Ely by traveling west on Highway U.S. 50/6 for 29 miles past the Pioche turnoff to the oiled Spring Valley road; turn north and follow this road 41 miles to where the mine and buildings can be seen; turn left and follow the graveled road for one mile to the mine.

The property is generally accessible the year around, except for short periods when occasional deep snows blanket the area during the winter months. Water piped from a local spring is available for domestic and mine use. All necessary timber, mine equipment and supplies must be obtained in Ely, Nev., or Salt Lake City, Utah, some 250 miles distant.

HISTORY AND PRODUCTION

The claims were located by a Mr. Noe in the early 1880's and have been worked intermittently since. The properties were acquired by the present owners in 1937.

Past production has been from marginal to sub-marginal ore. Only the premium prices paid for lead and zinc by the Government from 1942 to 1945 enabled the property to operate at a profit.

Most of the mining since the acquiral by the Lyon family has been done by leasers, and a consequent deterioration of the mine is evident.

Production from the mine, including some from the nearby Kansas mine, between 1942 and 1950, is totaled as follows: 25,935 tons containing 800,987 lbs. lead, 6,992,686 lbs. zinc, 779,264 lbs. copper, 62.23 oz. gold and 31,072 oz. silver. The ore averaged 13.5 percent zinc, 1.5 percent lead, 1.5 percent copper, 1 ounce of silver and a trace of gold. From May 1954 to April 1955, leasers mined 382 tons of ore averaging 30 percent lead and 1.5 percent zinc from the floors, walls, and ledges along 300 feet of open fissure on the 800 level.

PROPERTY AND OWNERSHIP

The property consists of a large group of patented and unpatented lode claims, owned and held by the Grand Deposit Mining Co., Paul C. Lyon, president, Paul C. Lyon, Jr., secretary-Treasurer, of 409 Ness Building, Salt Lake City 1, Utah.

The patented lode claim "Grand Deposit" survey No. 4566 was the only one upon which exploration work was requested.

The applicant disclosed that funds used for their part of the costs would be made available through sale of mine stock.

GENERAL GEOLOGY

The oldest rocks in the mine area are limestones of Cambrian age that are locally overlain by andesites of Tertiary age. The limestones strike northeast and dip gently northwest. Geologic work by DMA field examiners in 1951 indicates that the andesite is an extrusive flow.[1/] The limestones and andesites have been intruded by small granitic bodies.

The deposit is in thin bedded to massive limestones that have been cut by the Grand Deposit fault which strikes northwest and dips steeply southwest. The displacement on the fault is over 1,000 feet, but the exact displacement is not known. In the limestone throughout the mine area, there are also many faults forming two sets nearly at right angles to each other. One set strikes northwest and dips steeply northeast and the other set strikes northeast and dips southeast. Gash fractures cut the rocks adjacent to the Grand Deposit fault.

ORE DEPOSITS

There are three types of oxidized replacement ore bodies in the Grand Deposit mine. All are in the limestone footwall of the Grand Deposit fault. The largest ore bodies are near

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1/ Report of Examination by Field Team Region III, Docket DMA-145 (lead-zinc), Grand Deposit Mining Company, White Pine County, Nevada, June 26, 1951.

the surface and are associated with large fissures along which solution cavities have formed; the ore is for the most part on the floors of the cavities. A second type of ore body is localized at the junction of mineralized fissures and thin bedded limestone. Small stringers of ore extend from the fissures out along the bedding planes. Some of these bedding deposits constitute ore, especially in proximity to the large fissures. The third type of ore body is localized in some of the gash fractures. The deposit being mined and explored on the 800 level is of the first type but is much smaller in size than the deposits that have been mined on the upper levels.

Cerusite and anglesite are the principal lead minerals and locally enclose a small residual kernal of galena. Calamine is the principal zinc mineral in the ore bodies on the upper levels and is associated with smithsonite and sphalerite. A little copper occurs locally as malachite, azurite, chrysocolla, and aurichalcite. Gangue minerals are limonite, hematite, calcite, and siderite.

The ore bodies range in size from small pods of sandy residual lead carbonate material on the floors, walls, and ledges of small solution cavities, containing a few pounds of ore, to deposits containing several thousand tons of ore in large cavities from 3 to 10 feet wide, 80 feet long and 200 feet high.

Nine samples were taken; the distribution of which is shown on figure 2. Results are as follows:

Sample No.	Width, feet	%, Pb	%, Zn	Remarks
213	0.8	0.3	0.4	Fault filling
214	0.3	0.2	0.4	Fault filling
215	0.7	20.6	1.4	Sandy material in open fissure.
216	3.9	27.8	2.2	Sandy material in limestone ribs
217	Grab	31.2	1.0	Sand in fissure
218	2.0	28.1	1.6	Sand in fissure
219	2.3	16.5	1.0	Oxide filling in fissure
220	Grab	18.5	2.3	Oxide filling in flat beds off main fissure
221	Grab	21.4	1.4	Fissure filling

ORE RESERVES

The ore bodies discovered on the upper levels of the mine and the small high grade pods of ore in the accessible parts of the fissure on the 800 level have been mined out. The 330 tons of measured, indicated, and inferred ore estimated at the end of contract Idm-E201 has been found and mined. Except for a few pockets of oxidized ore too low in grade or too small in size to mine and ship, there are no measured or indicated ore reserves remaining in the mine. Several hundred tons of lead ore comparable in grade to the ore mined is inferred to be concentrated in small pockets along the 800 level fissure and may be discovered by additional exploration to the northwest and southeast of existing workings.

PROPOSED EXPLORATION

The applicant's original submitted program consisted of a ten stage project outlined essentially as follows:

Repair of shaft and shaft pockets on the 6th and 8th levels

Construction of new pocket on 8th level

800 feet of drifting on the 6th and 8th levels

300 feet of raising and 420 feet of winzing on favorable showings on both levels; and

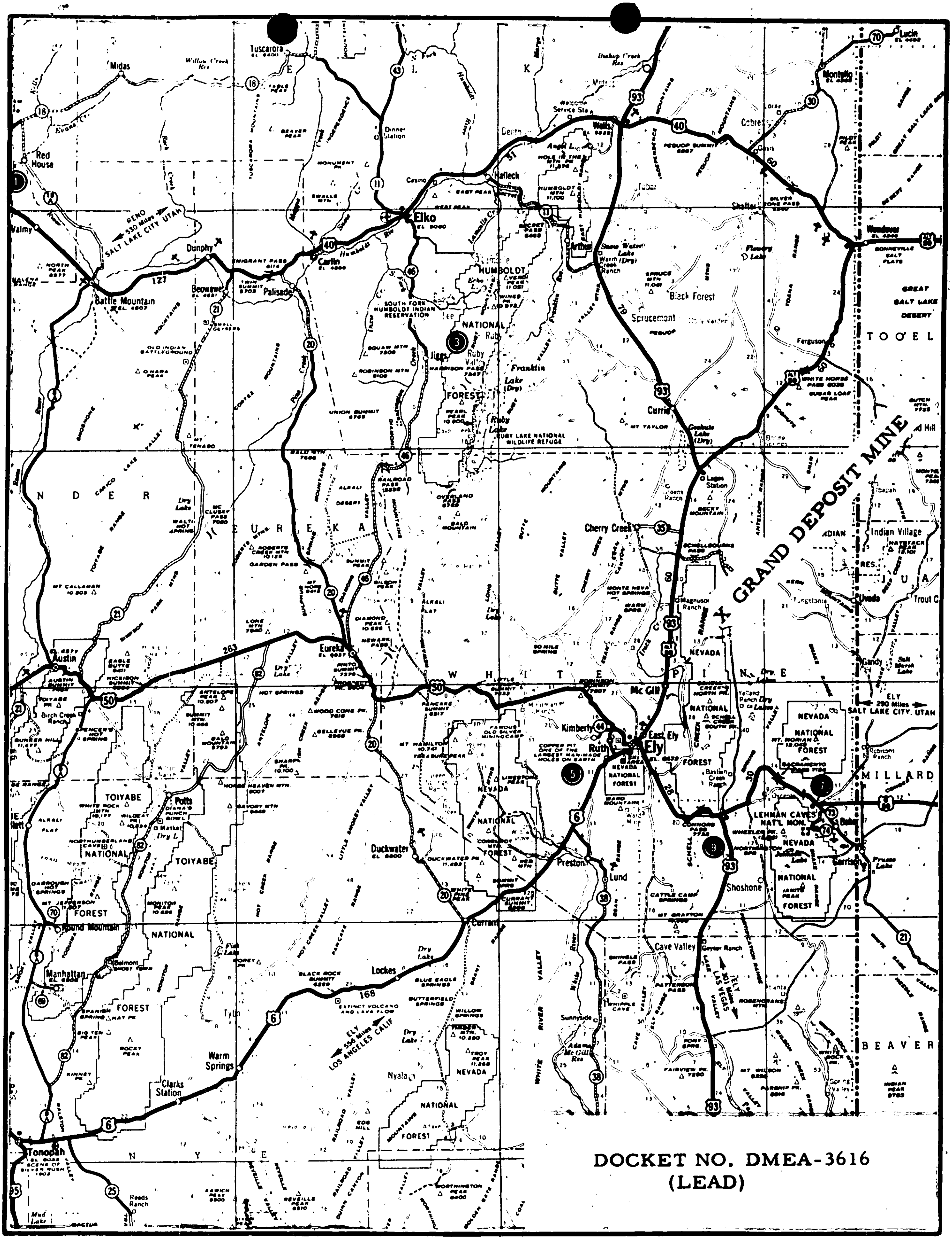
driving 500 feet of jackhamer holes for exploration of either side of the drifts.

Total estimated costs were $85,855.00.

A second revised program was submitted to the field office at Reno, Nev., confining the work to the 8th level. Work proposed consisted of drifting and crosscutting 630 feet, raising 100 feet on favorable beds, and shaft repair. The total cost of this program was estimated at $31,898.00.

The target of the exploration is the small high grade pockets of residual lead carbonate ore on the walls and floors of open fissures in limestone. Diamond drilling for these targets in this type of ground is not practical. Work in the open fissure itself is difficult and dangerous. All digging must be done cautiously by hand methods, as any blasting or jarring of the ground causes large quantities of

loose material to fall from the walls of the fissure. Mining is by pick and shovel with all material carried out of the fissure in small buckets. The cost of the proposed program, or of any substitute program that might be suggested, would probably greatly exceed the value of the small quantities of ore that can be inferred to exist along the fissure.



DOCKET NO. DMEA-3616
(LEAD)

FIG. 1. LOCATION MAP NEVADA

Sriwold
Betty

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

RECEIVED
JUN 13 1955

1605 Evans Avenue
Reno, Nevada

June 10, 1955

Memorandum

To: Operating Committee, DMEA, Interior Building
Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-3616 - (Lead)
Grand Deposit Mining Company
Grand Deposit Mine
White Pine County, Nevada

Reference is made to your letter of January 19, 1955 regarding above subject docket.

Attached are four copies of a report on the property by H. W. Jones and G. G. Gentry, Bureau of Mines and H. C. Stager, Geological Survey in which it is concluded that the application for exploration aid be denied.

Roscoe Smith and I concur in the conclusions as set forth in the report and do not believe that sufficient additional ore that would justify the expense of exploration could be discovered by the proposed work.

S. Ricker

Attach.
SRicker:gh

cc: R. M. Smith
File

RECEIVED
JUN 13 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION II

APPLICATION REPORT

DMEA-3616 - (Lead)
Paul E. Lyons, Jr.
Grand Deposit Mine
White Pine County, Nevada

H. W. Jones
G. G. Gentry
Mining Engineers
U. S. Bureau of Mines

H. K. Stager
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U. S. Geological Survey

June 1, 1955

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Fig. 1 Location map, Grand Deposit Mine
Fig. 2 Geologic map of the 800 level

Docket No.: DMEA-3616 - Lead

Name and address of applicant: Paul E. Lyons, Jr.,
Grand Deposit Mining Co.,
409 Ness Bldg.,
Salt Lake City, Utah

Name and location of property: Grand Deposit Mine
White Pine County, Nevada

RECEIVED
JUN 1 8 1955

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The deposit is in thin bedded to massive limestones that have been cut by the Grand Deposit fault which strikes northwest and dips steeply southwest. The displacement on the fault is over 1,000 feet, but the exact displacement is not known. In the limestone throughout the mine area, there are also many faults forming two sets nearly at right angles to each other. One set strikes northwest and dips steeply northeast and the other set strikes northeast and dips southeast. Gash fractures cut the rocks adjacent to the Grand Deposit fault.

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There are three types of oxidized replacement ore bodies in the Grand Deposit mine. All are in the limestone footwall of the Grand Deposit fault. The largest ore bodies are near

1/ Report of Examination by Field Team Region III, Docket DMA-145 (lead-zinc), Grand Deposit Mining Company, White Pine County, Nevada, June 26, 1951.

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213	0.8	0.3	0.4	Fault filling
214	0.3	0.2	0.4	Fault filling
215	0.7	20.6	1.4	Sandy material in open fissure.
216	3.9	27.8	2.2	Sandy material in limestone ribs
217	Grab	31.2	1.0	Sand in fissure
218	2.0	28.1	1.6	Sand in fissure
219	2.3	16.5	1.0	Oxide filling in fissure
220	Grab	18.5	2.3	Oxide filling in flat beds off main fissure
221	Grab	21.4	1.4	Fissure filling

ORE RESERVES

The ore bodies discovered on the upper levels of the mine and the small high grade pods of ore in the accessible parts of the fissure on the 800 level have been mined out. The 330 tons of measured, indicated, and inferred ore estimated at the end of contract Idm-E201 has been found and mined. Except for a few pockets of oxidized ore too low in grade or too small in size to mine and ship, there are no measured or indicated ore reserves remaining in the mine. Several hundred tons of lead ore comparable in grade to the ore mined is inferred to be concentrated in small pockets along the 800 level fissure and may be discovered by additional exploration to the northwest and southeast of existing workings.

PROPOSED EXPLORATION

The applicant's original submitted program consisted of a ten stage project outlined essentially as follows:

Repair of shaft and shaft pockets on the 6th and 8th levels

Construction of new pocket on 8th level

800 feet of drifting on the 6th and 8th levels

300 feet of raising and 420 feet of winzing on favorable showings on both levels; and

driving 500 feet of jackhamer holes for exploration of either side of the drifts.

Total estimated costs were $85,855.00.

A second revised program was submitted to the field office at Reno, Nev., confining the work to the 8th level. Work proposed consisted of drifting and crosscutting 630 feet, raising 100 feet on favorable beds, and shaft repair. The total cost of this program was estimated at $31,898.00.

The target of the exploration is the small high grade pockets of residual lead carbonate ore on the walls and floors of open fissures in limestone. Diamond drilling for these targets in this type of ground is not practical. Work in the open fissure itself is difficult and dangerous. All digging must be done cautiously by hand methods, as any blasting or jarring of the ground causes large quantities of

loose material to fall from the walls of the fissure. Mining is by pick and shovel with all material carried out of the fissure in small buckets. The cost of the proposed program, or of any substitute program that might be suggested, would probably greatly exceed the value of the small quantities of ore than can be inferred to exist along the fissure.

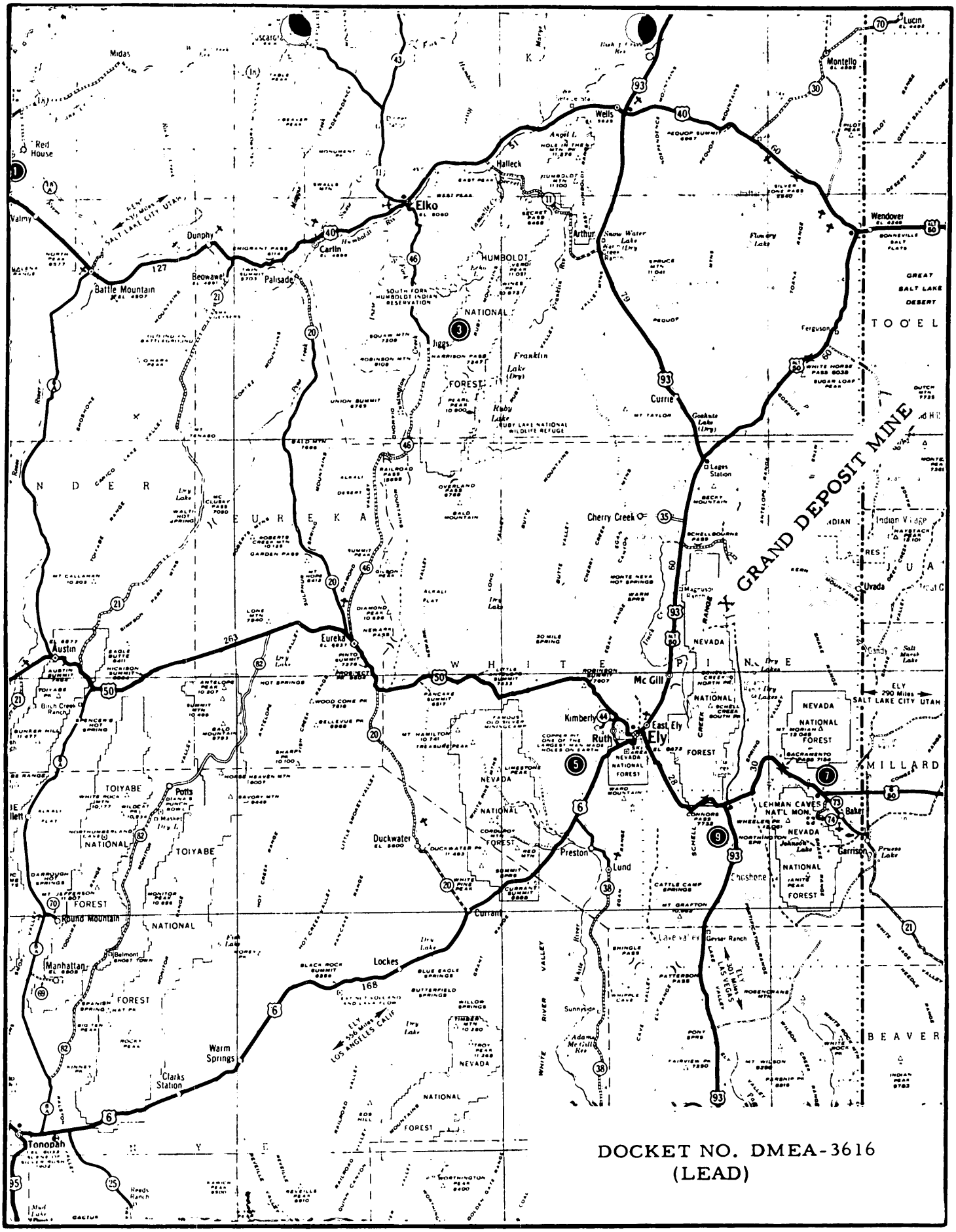

FIG. 1. LOCATION MAP NEVADA

File Copy
Surname

Griswold
Selfridge
Fitzwater

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

JAN 19 1955

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region II
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Docket No. DMEA-3616 (Lead)
Grand Deposit Mining Company
Grand Deposit Mine
White Pine County, Nevada

Dear Mr. Ricker:

We are referring the cited application to you for your consideration and recommendations. We are also enclosing copies of memorandums of Mr. J. H. Hedges, USBM, dated January 13 and of Mr. E. L. Newcomb, USGS, dated January 4, 1955.

We note that, in the final field report for project No. DMA-145 on this same property, the statement is made, "no further request for exploration should be approved". Yet the Applicant now states that the main fissure has since been discovered on the 8th level from which production has been made. We question whether this would be of sufficient importance to warrant additional Government participation but, nevertheless, we feel that we should have your ideas before making a denial.

We shall leave it to your good judgement as to whether or not a field examination is warranted.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JHB)

WRGriswold/er 1/17/54
Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

Enclosures

APPROVED:

J. H. Hedges
Member, Bureau of Mines (JHB)

E. L. Newcomb
Member, Geological Survey (JHB)

R.C.R.

File Copy
Surname
Simons
Hedgpo
Newcomb
Selfridge
Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

JAN 19 1955

Mr. Paul C. Lyon, Jr. Secretary
Grand Deposit Mining Company
409 Ness Building
Salt Lake City 1, Utah

Re: Docket No. DMEA-3616 (Lead)
Grand Deposit Mining Company
Grand Deposit Mine
White Pine County, Nevada

Dear Mr. Lyon:

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 for consideration to:

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region II
420 Custom House
555 Battery Street
San Francisco 11, California

Sincerely yours,

C. O. Mittendorf (for)

Administrator

WRGriswold/er 1/17/55

Copy to: Docket
Region II
Admr. File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Killsgaard, USGS
Chron.

P.C.L.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 13 1955

January 13, 1955

Memorandum

To: W. R. Griswold
Base Metals Division, DMEA

From: J. H. Hedges

Subject: Docket 3616 - Grand Deposit Mining Co. (Lead)

Refer to field. The field team may have sufficient information based on the previous contract (Idm-E201) to evaluate the application without a field examination.

J. H. Hedges

J. H. ~~Hedges~~

~~Attachments~~

C
O
P
Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Mines
Washington 25, D. C.

January 13, 1955

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Base Metals Division, DMEA

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Subject: Docket 3616 - Grand Deposit Mining Co. (Lead)

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Bureau of Mines
Washington 25, D. C.

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Bureau of Mines
Washington 25, D. C.

January 13, 1955

Memorandum

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From: J. H. Hedges

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UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Mines
Washington 25, D. C.

January 13, 1955

Memorandum

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Base Metals Division, DMEA

From: J. H. Hedges

Subject: Docket 3616 - Grand Deposit Mining Co. (Lead)

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J. H. Hedges

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UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Mines
Washington 25, D. C.

January 13, 1955

Memorandum

To: W. R. Grisweld
Base Metals Division, DMEA

From: J. H. Hedges

Subject: Docket 3616 - Grand Deposit Mining Co. (Lead)

Refer to field. The field team may have sufficient information based on the previous contract (Idm-E201) to evaluate the application without a field examination.

J. H. Hedges

IN REPLY REFER TO:

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 5 1955

January 4, 1954

Re: DMEA-3616
Grand Deposit Mining Company
(Grand Deposit Mine)
White Pine Co., Nev.
$85,855 - Lead

Memorandum

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

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of application

This property was granted a DMA exploration contract (DMA-145X -- Idm-E201) on November 2, 1951. The contract was terminated on November 1, 1952. No certificate of discovery was issued.

The DMA-145X application proposed the following work:

1.) 1500 feet of drifting, raising, and winzing on the 800 level.

2.) 800 feet of drifting, raising, and winzing on the 600 level.

The Field Team examination report of June 26, 1951, recommended a limited program for approval. This modified project was planned for the 800 level and included the following items of work:

1.) 340 feet of diamond drilling.

2.) 200 feet of drifting and crosscutting.

A revised exploration program was submitted by the Field Team on August 7, 1951. This new program apparently was the result of a request for a different project by the Commodity Committee in Washington. The revised project included:

1.) 450 feet of drifting on 800 level.

2.) 100 feet of raising from 800 level.

3.) 200 feet of diamond drilling.

4.) rehabilitation of shaft and completion of "air course" raise from 800 to 600 level.

This revised project was incorporated in an exploration contract.

The objectives of the exploration work were to explore mineralized fractures by drifting at the northeast end of the 800 level and to test the hanging wall of the Grand Deposit fault by diamond drilling.

Completed work under the terminated contract consisted of the following items:

1.) rehabilitation of part of shaft

2.) completion of air raise between 800 and 600 levels

3.) 450 feet of drifting northwesterly on the 800 level

4.) 40 feet of raising from end of 450 foot drift

5.) 14 foot crosscut from 800 level shaft pocket for drill station

6.) 201 foot hole (+2° - S. 43° W.) into hanging wall of Grand Deposit fault from shaft pocket crosscut.

The Grand Deposit mine has been developed in the footwall of the Grand Deposit fault in thin-bedded limestones of Cambrian age which strike northeast and dip northwest. Most of the ore in the mine consists of residual bodies of lead carbonate and iron oxides which occur as wall coatings and partial fillings of open fissures, and as oxidized lead-zinc replacement deposits near large fissures. Two small fissures were explored by the 450 foot drift and 40 foot raise. Total reserves have been estimated by the Field Team to be 10 tons of measured ore, 20 tons of indicated ore, and 300 tons of inferred ore. All of these reserves are lead carbonate ores which average about 9 percent lead. Although small amounts of these limited reserves may be minable, the majority of the deposits are too low grade for a successful mining operation.

The Field Team's final report recommended that further exploration was not warranted and that any new requests for exploration assistance should be denied.

Sufficient work has been done to indicate the average tenor of the oxidized lead ores on and near the 800 level. These oxide deposits are limited in size and too low grade to warrant further exploration. A significant discovery of minable ore or a large reserve of low grade ore which may be minable in the future is unlikely to be found by the work proposed by the applicant.

I recommend this application be denied.

E. L. Newcomb

E. L. Newcomb

IN REPLY REFER TO:

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

Department of the Interior
Defense Minerals Administration
RECEIVED
JAN 5 1955

January 4, 1954

Re: DMEA-3616
Grand Deposit Mining Company
(Grand Deposit Mine)
White Pine Co., Nev.
$85,855 - Lead

Memorandum

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

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of application

This property was granted a DMEA exploration contract (DMEA-145X -- Idm-8201) on November 2, 1951. The contract was terminated on November 1, 1952. No certificate of discovery was issued.

The DMEA-145X application proposed the following work:

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2.) 800 feet of drifting, raising, and winzing on the 600 level.

The Field Team examination report of June 26, 1951, recommended a limited program for approval. This modified project was planned for the 800 level and included the following items of work:

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3.) 200 feet of diamond drilling.

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4.) 40 feet of raising from end of 450 foot drift

5.) 14 feet crosscut from 800 level shaft pocket for drill station

6.) 201 feet hole (+2° - S. 43° W.) into hanging wall of Grand Deposit fault from shaft pocket crosscut.

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The Field Team's final report recommended that further exploration was not warranted and that any new requests for exploration assistance should be denied.

Sufficient work has been done to indicate the average tenor of the oxidized lead ores on and near the 800 level. These oxide deposits are limited in size and too low grade to warrant further exploration. A significant discovery of minable ore or a large reserve of low grade ore which may be minable in the future is unlikely to be found by the work proposed by the applicant.

I recommend this application be denied.

E. L. Newcomb

CC: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
O. M. Bishop, 3617 Interior

ELNewcomb:hlm
1/4/55

December 30, 1954

Grand Deposit Mining Co.
409 Ness Bldg.
Salt Lake City 1, Utah

Subject: DMEA-3616
Re: Exploration Assistance
Grand Deposit Mine

Gentlemen:

The receipt of your application dated December 23, 1954 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3616 and referred to the Base Metals.

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

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

60932

GRAND DEPOSIT MINING COMPANY

409 NESS BUILDING ● PHONE 3-2623 ● SALT LAKE CITY 1, UTAH

RECEIVED

December 23, 1954

Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Gentlemen:

We are enclosing herewith four (4) copies of our application for government aid in our exploration program, Form MF-103.

We will appreciate early action on this application.

Our property is accessible for examination by the representatives of the government at any time. We will appreciate it if we are advised when to expect their visit at our mine.

Inasmuch as our property is in eastern Nevada, only 240 miles by the usual route from Salt Lake City, we hope that the examination will be made and the project supervised by the DMEA representatives here, as far as possible.

Thanks.

Very truly yours,

GRAND DEPOSIT MINING COMPANY

Paul E. Lyons Jr.
Secretary-Engineer

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1085.2.

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. 3616
Metal or Mineral Lead
Date Received
Estimated Cost $85,885
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: GRAND DEPOSIT MINING COMPANY, (a Nevada corporation) 409 Ness Building, Salt Lake City 1, Utah President: Paul C. Lyon; Vice Pres: Walter J. Eldredge; Secretary and Treasurer: Paul C. Lyon, Jr. Address same as above.

(*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.

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 GRAND DEPOSIT Lode Mining Claim, patented, Survey No. 4566, T 20N, R 66E, White Pine County, Nevada.

(*b*) State any mine name by which the property is known. GRAND DEPOSIT MINE

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise OWNER

(*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.

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. (attached)

(*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.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore LEAD

(*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. Attached

(*c*) The work will start within 10 days and be completed within 24 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. Attached

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: Attached

(*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 [X] 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 DEC 23 1954, 195__

GRAND DEPOSIT MINING CO.
(Applicant)

By Paul C. Lyon Jr.
Paul C. Lyon, Jr., Secretary

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

4. (a) The mine has produced considerable ore intermittently for years, however production has been limited to leasers since 1947. The mine is developed through a 60 degree inclined shaft, which has been extended from the 6th to the 8th level since 1947. In 1954, a strong mineralized fissure, believed to be the main fissure was discovered on the 8th level, and this fissure has been explored somewhat, however more exploration will be necessary to determine its extent and the ore associated therewith. A DMA exploration project was performed on the 8th level in 1951-52 (Cont. No. Idm-E201) and was carried out as recommended by U.S.G.S. engineers, however the main ore structure was not found, in fact the DMA drift missed it by a few feet at one place. See the attached composite map of the mine. The mine is open and accessible for examination purposes.

(b) Approximately 300 tons of ore have been shipped from the 8th Level from the newly found fissure in the last few months. The ore shipped in 1954 averages about 30% plus of lead, .07 oz. gold per ton, 3½ oz. silver per ton, 30% iron, 7% insoluble, and insignificant amounts of other minerals. Our records of past production are incomplete, however 26,315 tons shipped since 1942 carried 32,168 oz. silver, 783,999 lb. copper, 986,609 lb. lead and 7,003,435 lb. zinc. Ore shipped from the 6th and 8th levels has been lead, with no zinc. Ore reserves are small at this time, however it is felt that the proposed exploration program should provide ore reserves.

(c) The ore occurs principally as replacements in paleozoic limestone, probably of cambrian period. The sediments strike approx. N 30°E and dip northwesterly approx. 30° at the mine, flattening to the north. The sediments are cut by an intrusive body of andesite, lying NW of the limestone; the contact is a N50°W fault contact, the fault being earlier than the intrusion and dipping to the SW. The ore mineralization did not enter the area along the fault contact; the principal structure appears to be a N 20°W fissure, easily seen on the 6th and 8th levels. The ore bodies occur principally as replacements in a 300-ft section of thin-bedded limestones and also in other favorable limestones and NE fissures. Another strong feature in the area is the Muncy Fault, about 4000 ft. north from the mine striking 30 to 40° E and dipping 75° E. There is a great amount of horizontal movement on this fault. A late fault, known as the East Fault, is 2300 ft. north form the mine shaft and it strikes N 70° E and dips about 85° N; this fault displaces the other two, and brings a block of Mississipian limestone down against the Cambrian limestone and andesite. There is a good lead-silver-iron showing on the East Fault N 20°W from the mine and there is considerable additional mineralization along the fault, especially in a 300 ft. wide zone 1200 ft. east of the showing mentioned. The intersection of these three strong features should make ore in the 300-ft. section of favorable bedding 700 ft. below the surface, and undoubtedly will be an important part of some future exploration program. See attached surface map.

(d) The mine is easily accessible, except after heavy snows for a time. It may be reached by a paved road ~~XXXX~~ going north from U.S. 50 in Spring Valley, the last 7 miles being dirt road to the mine. It may also be reached via Schellbourne Pass by turning east from Alt. U.S.50 27 miles north of McGill, Nevada for 27 miles of good graded road. Contact our office before visiting the property. Easily accessible for shipping by truck, or 33 miles haul to the railroad.

(e) Manpower available. Mine equipped and supplies available.

5. (b) Please refer to the attached composite map of the lower levels of the mine. Upper levels and stopes are SE from the the main shaft, mostly. Note that the new and proposed exploration on the 6th and 8th levels is situated northwesterly from all of the old workings of the mine. This is to be expected, since the ore occurs principally in a 300 ft. section of thin-bedded limestones dipping approx. 30° to the northwest. On the 8th level, these favorable limestone beddings have not been intersected yet, however they appear to be exposed in an ore bedding approximately 100 feet above the 8th level, and some high-grade ore has been shipped from there, however bad air circulation has necessitated suspention of work there until an ~~ix~~ air connection is made to the 6th level from the main fissure in that area. These favorable beddings are cut by a series of NE faults which raise them toward the northwest; the beddings flatten to the northwest. The proposed work includes the following: 300 ft. of drifting on the 6th level to intersect and explore the main fissure for ore beddings north of the present workings, plus loo feet of raising on favorable ore showings; a 120 ft. winze to connect with the main fissure as explored from the 8th level to date, to provide adequate air circulation so that blasting fumes can be carried away to provide for further exploration from the 8th level; 400 ft. of drifting, 200 ft. of raising and 100 ft. of winzing to explore the main fissure on and from the 8th level; a 200-ft. winze to explore for ore beddings in favorable horizons below the 8th level, plus 100 ft. of drifting from the winze, this winze to follow a mineralized fissure; and a shaft pocket for storage of waste. In addition, a small amount of repair and maintenance work is required. These projects are all believed to be geologically advisable, and should prove sufficient ore to be economically sound. A strong structural feature is present and the mineralization therein is exceptionally high in quality.

(d) The applicant has been operating for many years, and can carry out the project. The work will be supervised by Paul C. Lyon, Jr., who is a graduate mining engineer and metallurgical engineer who is thoroughly familiar with the mine. We also refer to the satisfactory completion of a previous contract as mentioned under 4 (a).

6. See next sheet for detailed estimate of costs.

(b) Each project will require 2 men underground; these will be paid on a per-foot basis where possible; drifting labor is estimated at $15.00 per foot, raises @ $15.00/ft. and winzes @ $25.00/ft. Hoistman's wages will be $15.00 per day. Supervision, engineering, accounting and clerical work will be performed by Paul C. Lyon, Jr. @ $600.00 per month, his full time being devoted to same.

(d) The following equipment will be used with use allowance (rental if starred*) as follows: 1 Jaeger 315 compressor @ $167.00 per month, 1 IR 105 compressor* @$100.00/mo., 1 3-ft mine hoist powered by 115hp Chrysler engine @ $150.00/mo., 2 or 3 air slusher units @ $40.00/mo. 1 air hoist* @ $40.00/ mo. plus skip, mine cars, stopers, jackhammers, jackleg(to be purchased), and misc tools @ an average of $150.00/ mo. Total average monthly allowance for equipment estimated @ $600.00 per month.

GRAND DEPOSIT MINING CO.
409 Ness Building
Salt Lake City 1, Utah

6. (cont'd) **Costs:**

Labor & Supervision

Underground labor	$30,800	
Hoisting labor	9,600	
Engineering & Supervision	14,400	$54,800

Operating materials & supplies:

Explosives	3,350	
Rail, pipe & fittings	2,240	
Timber & ties	1,850	
Fuel (diesel & gasoline)	5,645	
Steel, bits, misc.	2,500	15,585
Equipment use-allowance & rental		14,400
Misc. Expense (payroll taxes & insurance and contingencies)		1,100
	TOTAL	$85,885

****

Costs by Projects:

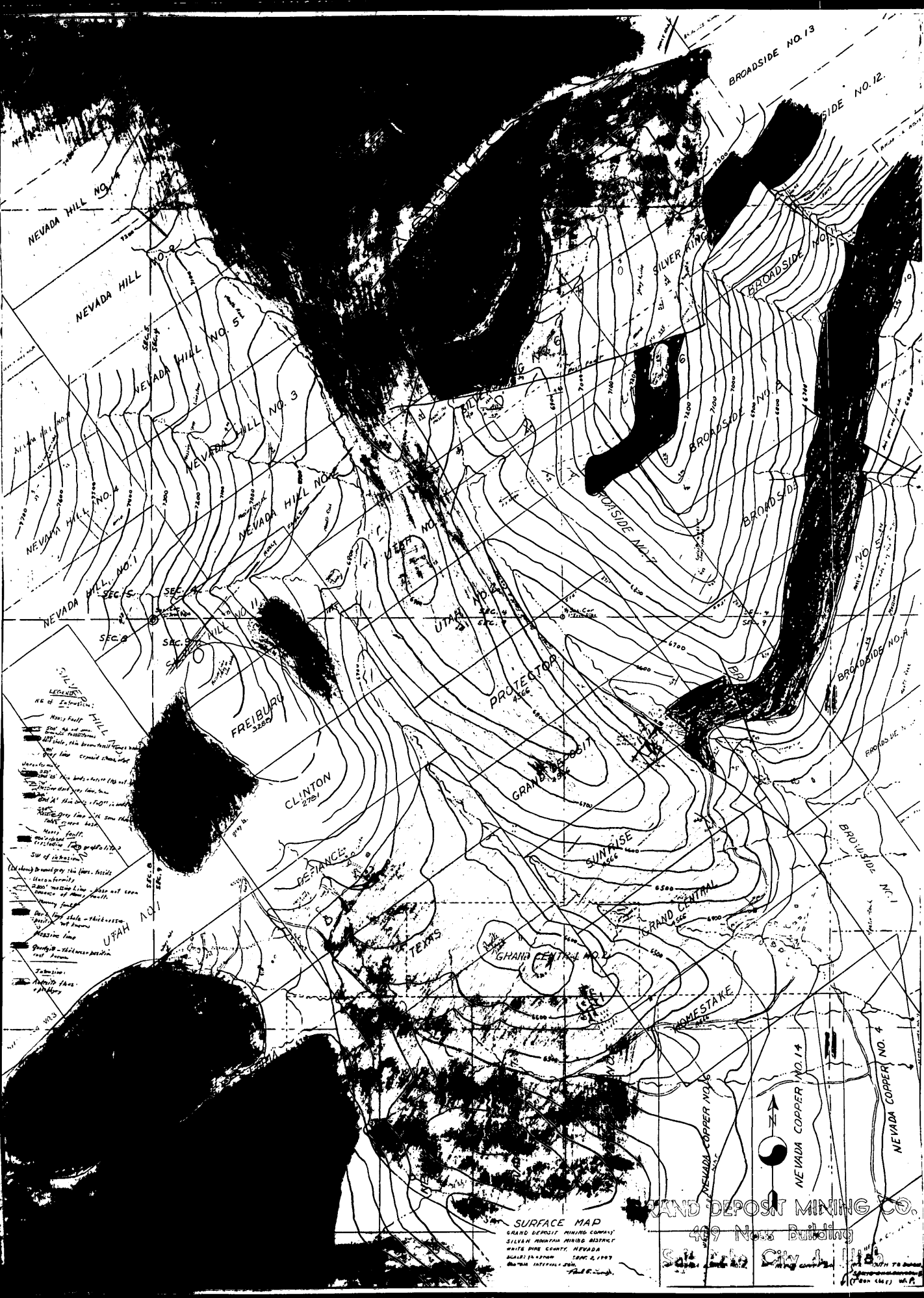
1. Repair 6th level pocket, clean 6th level drift, lay rails, clean & repair main shaft	$ 2,425
2. 300 ft. drifting on 6th level to intersect and explore main fissure	13,225
3. 100 ft. raising on favorable showing, 6th level	3,300
4. 120 ft. winze from drift (2) to connect with fissure from 8th level for ventilation	7,510
5. 8th level shaft pocket and connections thereto	2,925
6. 200 ft. winze from 8th level to explore mineralized fissure (end of crosscut from shaft) and 100 ft. of drifting to explore favorable showings	19,450
7. 400 ft of drifting to explore main fissure NW on 8th level	20,200
8. 200 ft of raising from 8th level on favorable showings	8,300
9. 100 ft. winzing on favorable showings, 8th level	6,850
10. 500 ft. long jackhammer holes to explore from 6th and 8th level drifts	1,700
TOTAL	$85,885

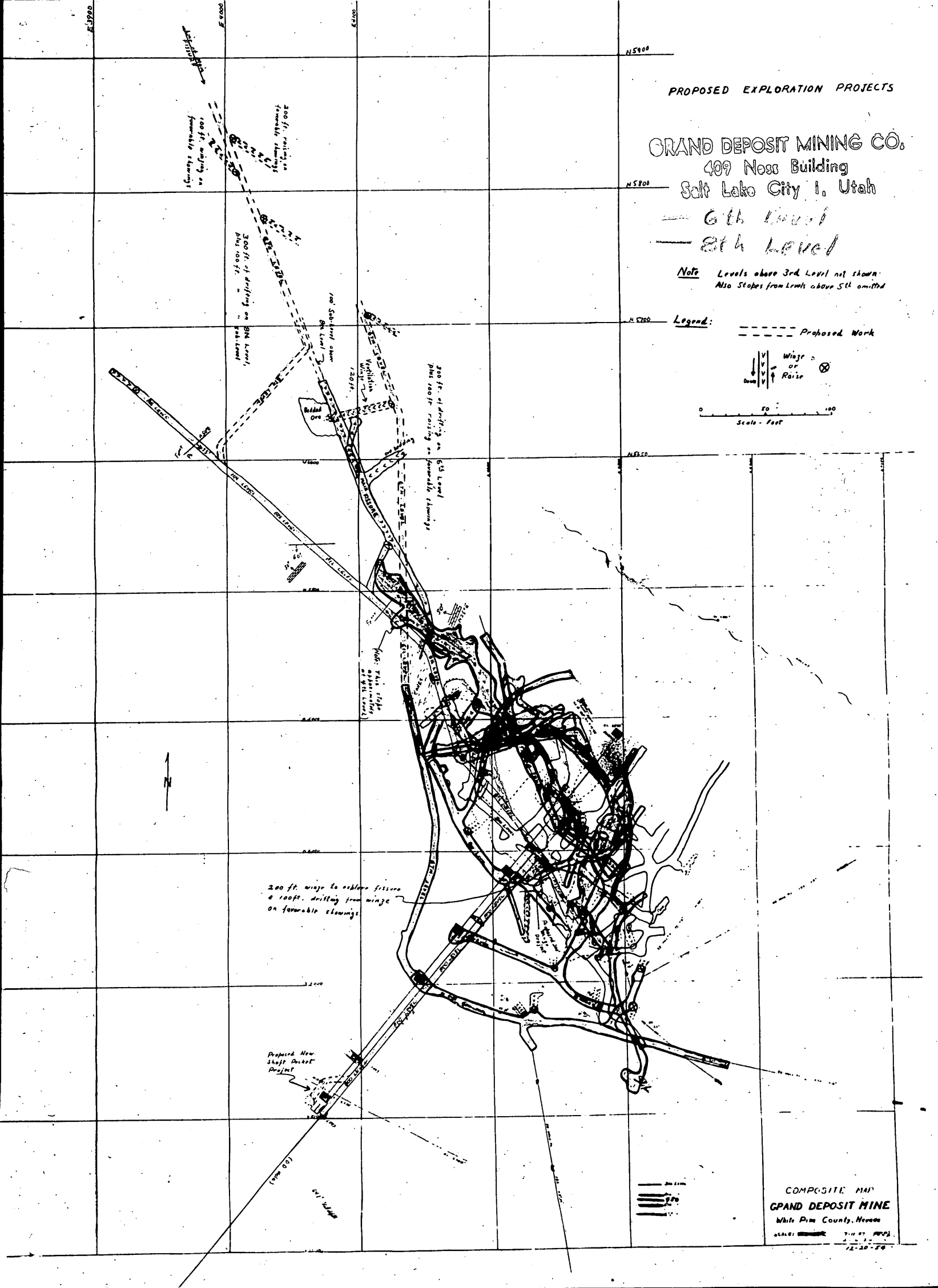
GRAND DEPOSIT MINING CO.
409 Ness Building
Salt Lake City 1, Utah

1201 N. DIVISION STREET
SPOKANE 2, WASHINGTON

OFFICIAL BUSINESS

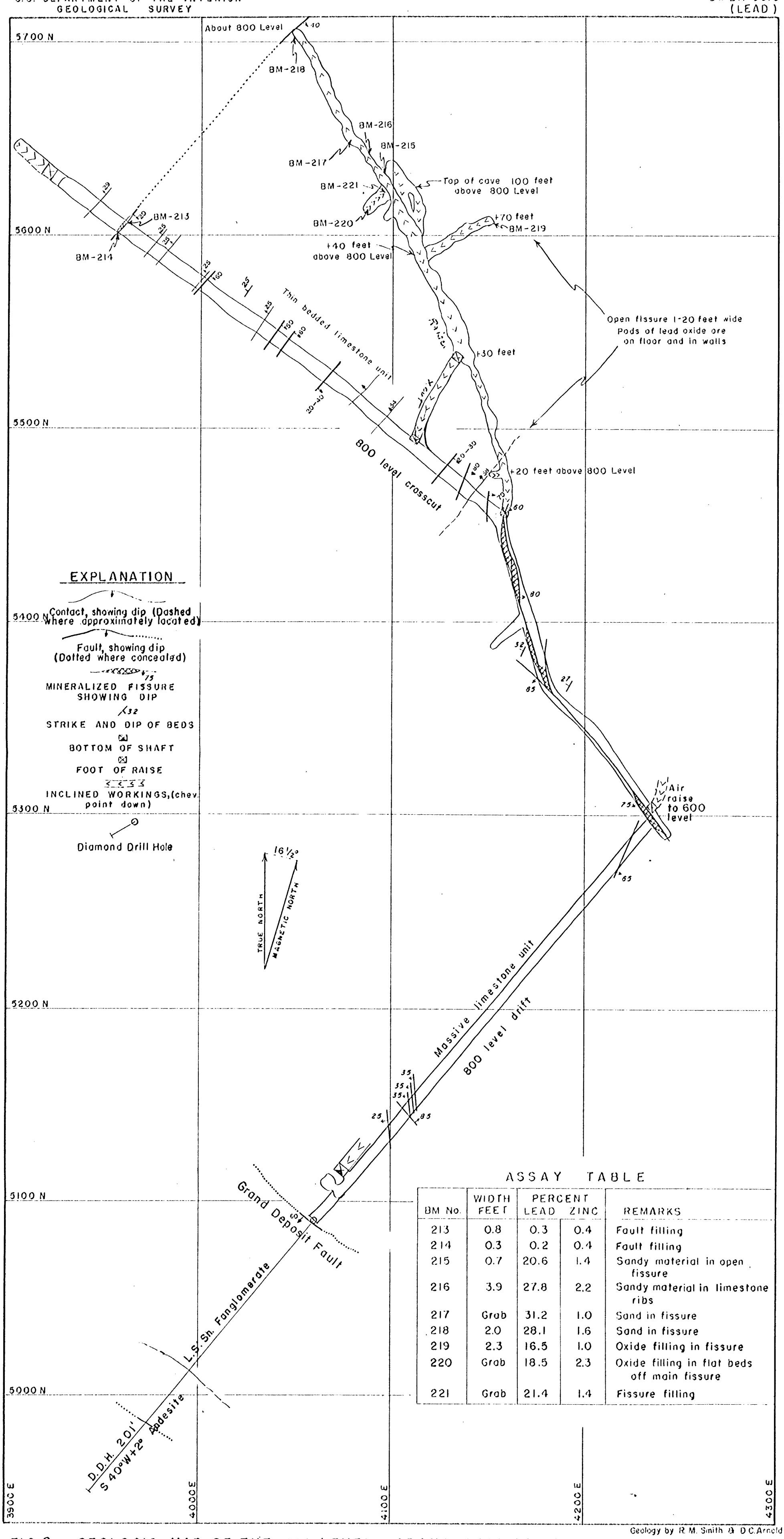
Mr. George C. Selfridge, Chairman
DMEA Operating Committee
Department of the Interior
Washington 25, D. C.


BROADSIDE NO. 13
BROADSIDE NO. 12
NEVADA HILL NO. 14
NEVADA HILL NO. 9
NEVADA HILL
NEVADA HILL NO. 5
NEVADA HILL NO. 3
NEVADA HILL NO. 4
NEVADA HILL NO. 1
NEVADA HILL NO. 11
SILVER KING
BROADSIDE NO. 10
BROADSIDE NO. 9
BROADSIDE NO. 7
BROADSIDE NO. 8
BROADSIDE NO. 1
UTAH NO. 2
UTAH NO. 1
PROTECTOR
GRAND DEPOSIT
FREIBURG
CLINTON
DEFIANCE
SUNRISE
GRAND CENTRAL
GRAND CENTRAL NO. 2
TEXAS
HOMESTAKE
NEVADA COPPER NO. 14
NEVADA COPPER NO. 4
NEVADA COPPER NO. 6
SILVER HILL
SEC. 5
SEC. 8
SEC. 9
SEC. 4
SEC. 3
SEC. 10
SEC. 14
SURFACE MAP
GRAND DEPOSIT MINING COMPANY
SILVER MOUNTAIN MINING DISTRICT
WHITE PINE COUNTY, NEVADA
GRAND DEPOSIT MINING CO.
409 Nos. Building
Salt Lake City, Utah


PROPOSED EXPLORATION PROJECTS
GRAND DEPOSIT MINING CO.
409 Noss Building
Salt Lake City 1, Utah
6th level
8th level
Note Levels above 3rd Level not shown
Also Stopes from Levels above 5th omitted
Legend:
Proposed Work
Winze or Raise
Down
Scale - Feet
0
50
100
E 3900
E 4000
E 4100
N 5900
N 5800
N 5700
N 5600
200 ft. raising on favorable showings
100 ft. winze on favorable showings
300 ft. of drifting on 8th Level, plus 100 ft. " " Sub-Level
100 Sub-Level above 8th Level
Ventilation Winze
Bedded ore
300 ft. of drifting on 6th Level plus 100 ft. raising on favorable showings
Note: This stope approximately at 4th Level
200 ft. winze to oxblow fissure & 100 ft. drifting from winze on favorable showings
Proposed New Shaft Pocket Project
Proposed Winze Project
(100 mile)
COMPOSITE MAP
GRAND DEPOSIT MINE
White Pine County, Nevada
12-20-58

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA 3616
(LEAD)



ASSAY TABLE

BM No.	WIDTH FEET	PERCENT LEAD	PERCENT ZINC	REMARKS
213	0.8	0.3	0.4	Fault filling
214	0.3	0.2	0.4	Fault filling
215	0.7	20.6	1.4	Sandy material in open fissure
216	3.9	27.8	2.2	Sandy material in limestone ribs
217	Grab	31.2	1.0	Sand in fissure
218	2.0	28.1	1.6	Sand in fissure
219	2.3	16.5	1.0	Oxide filling in fissure
220	Grab	18.5	2.3	Oxide filling in flat beds off main fissure
221	Grab	21.4	1.4	Fissure filling

Geology by R. M. Smith & D.C. Arnold

FIG. 2 GEOLOGIC MAP OF THE 800 LEVEL, GRAND DEPOSIT MINE, WHITE PINE CO., NEV.

0 40 80 FEET
Scale