October 13, 1953

3062

MEMORANDUM

To: Administrator

From: Iron and Ferro-Alloys Division, DMEA

Lead-Tungsten-Cobalt

Subject: Denial of application by Field Team Region IV
Docket No. DMEA 3062 (Lead-Tungsten-Cobalt)
B and H Mining Company, Inc.
Madeline No. 2 mining claim
Gunnison County, Colorado

The applicant requested exploration assistance in the amount of $15,885.00 to explore for lead, tungsten and cobalt ore on the Madeline No. 2 patented claim, Gunnison County, Colorado.

The Madeline No. 2 claim covers an area of approximately 10 acres underlain by granitic, gneissic and schistose rocks, regarded as pre-cambrian in age and correlated with the Idaho Springs formation.

The predominant rock of this series is a quartz-plagioclase-biotite gneiss. . The mineralization, consisting of galena, sphalerite, pyrite, chalcopyrite, barite and quartz has been deposited in fracture or shear zones in the gneiss. These minerals are in small lenticular bodies and narrow discontinuous stringers in the shear zones. Minor amounts of fluorescent calcite and hydro-zincite are present and have been confused with scheelite and the ore was reported to contain tungsten.

The claim has been developed by a number of shallow pits and two shafts on shear zones that range from two feet to seven feet in width. It is reported, but not verified, that the following shipments of ore have been made from the property.

Year	Tons	Oz. Ag/ton	% Pb.
1902	5.75	289.83	-
1905	1.65	233.03	14.8

It is presumed that this production came from concentrates from an old mill found near the main shaft.

Five samples taken on the property by the examing team gave the following results:

Sample No.	Description	% Co	% Pb	%Zn	Oz. Au
H-688	7½' sample on shear zone under cabin	>0.05	>0.01	>0.05	>0.01
H-689	1' on hanging wall of shear under cabin	>0.05	>0.01	>0.05	>0.01
H-690	Grab sample of dump from Pit No. 4	>0.05	>0.01	>0.05	1.20
H-691	5' chip sample across shear in Pit No. 3	>0.05	>0.01	>0.05	0.04
H-692	2' Channel across back of drift 33' below collar of No. 2 shaft	>0.05	>0.01	>0.05	0.04

Composite >0.02 % Co >0.01 % WO_3

No cobalt or tungsten was found in a composite of the five samples taken on the property.

It is therefore concluded that discovery of significant amount of lead, zinc, copper, tungsten or cobalt ore is unlikely and denial of the application for exploration assistance, Docket No. DMEA-3062, is recommended.

We concur in the denial.

W. S. Martin, Chief
Iron and Ferro-Alloys Division

JHopkins:foc
10-13-53
cc: Docket
Code 400
Adm. Reading File

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

October 13, 1953

MEMORANDUM

To: Administrator

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of application by Field Team Region IV
Docket No. DMEA 3062 (Lead-Tungsten-Cobalt)
B and H Mining Company, Inc.
Madeline No. 2 mining claim
Gunnison County, Colorado

The applicant requested exploration assistance in the amount of $15,885.00 to explore for lead, tungsten and cobalt ore on the Madeline No. 2 patented claim, Gunnison County, Colorado.

The Madeline No. 2 claim covers an area of approximately 10 acres underlain by granitic, gneissic and schitose rocks, regarded as pre-cambrian in age and correlated with the Idaho Springs formation.

The predominant rock of this series is a quartz-plagioclase-biotite gneiss. The mineralization, consisting of galena, sphalerite, pyrite, chalcopyrite, barite and quartz has been deposited in fracture or shear zones in the gneiss. These minerals are in small lenticular bodies and narrow discontinuous stringers in the shear zones. Minor amounts of fluorescent calcite and hydro-zincite are present and have been confused with scheelite and the ore was reported to contain tungsten.

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No cobalt or tungsten was found in a composite of the five samples taken on the property.

It is therefore concluded that discovery of significant amount of lead, zinc, copper, tungsten or cobalt ore is unlikely and denial of the application for exploration assistance, Docket No. DMEA-3062, is recommended.

We concur in the denial.

W S Martin

W. S. Martin, Chief
Iron and Ferro-Alloys Division

FILE COPY
SURNAME:

Hopkins
Martin

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

October 13, 1953

MEMORANDUM

To: Administrator

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of application by Field Team Region IV
Docket No. DMEA 3062 (Lead-Tungsten-Cobalt)
B and H Mining Company, Inc.
Madeline No. 2 mining claim
Gunnison County, Colorado

The applicant requested exploration assistance in the amount of $15,885.00 to explore for lead, tungsten and cobalt ore on the Madeline No. 2 patented claim, Gunnison County, Colorado.

The Madeline No. 2 claim covers an area of approximately 10 acres underlain by granitic, gneissic and schistose rocks, regarded as pre-cambrian in age and correlated with the Idaho Springs formation.

The predominant rock of this series is a quartz-plagioclase-biotite gneiss. . The mineralization, consisting of galena, sphalerite, pyrite, chalcopyrite, barite and quartz has been deposited in fracture or shear zones in the gneiss. These minerals are in small lenticular bodies and narrow discontinuous stringers in the shear zones. Minor amounts of fluorescent calcite and hydro-zincite are present and have been confused with scheelite and the ore was reported to contain tungsten.

The claim has been developed by a number of shallow pits and two shafts on shear zones that range from two feet to seven feet in width. It is reported, but not verified, that the following shipments of ore have been made from the property.

Year	Tons	Oz. Ag/ton	% Pb.
1902	5.75	289.83	-
1905	1.65	233.03	14.8

It is presumed that this production came from concentrates from an old mill found near the main shaft.

R. C. G.
10-15-53

Five samples taken on the property by the examing team gave the following results:

Sample No.	Description	% Co	% Pb	%Zn	Oz. Ag
H-688	7½' sample on shear zone under cabin	>0.05	>0.01	>0.05	>0.01
H-689	1' on hanging wall of shear under cabin	>0.05	>0.01	>0.05	>0.01
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Composite >0.02 % Co >0.01 % WO_3

No cobalt or tungsten was found in a composite of the five samples taken on the property.

It is therefore concluded that discovery of significant amount of lead, zinc, copper, tungsten or cobalt ore is unlikely and denial of the application for exploration assistance, Docket No. DMSA-3062, is recommended.

We concur in the denial.

W. S. Martin, Chief
Iron and Ferro-Alloys Division

JHopkins:foc
10-13-53
cc: Docket
Code 400
Adm. Reading File

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

224 New Customhouse
Denver 2, Colorado

October 2, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Report of Examination - DMEA Docket 3062 (Lead-Tungsten-Cobalt), B and H Mining Company, Inc., Madeline #2 Mine, Gunnison County, Colorado.

Enclosed are four copies of the Report of Examination on the subject docket, a copy of the letter of denial to the applicant and two copies of Form 3b.

W. H. King
W. H. King
Field Team, Region IV

E. N. Haschmann
for A. H. Koschmann
Field Team, Region IV

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
10-9-53
(date)

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

224 New Customhouse
Denver 2, Colorado

October 2, 1953.

Mr. S. R. Hukle, Vice President
B and H Mining Company, Inc.
236 Brotherhood Building
Kansas City, Kansas

Re: Docket DMEA-3062

Dear Mr. Hukle:

Reference is made to your application for Government aid on the Madeline No. 2 Mine.

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

A careful study of your property and data available to this agency, reveals that the probability of disclosing mineable reserves of lead, tungsten or cobalt is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Very truly yours,

W H King

W. H. King
Field Team, Region IV

HMC:cwm

cc: Docket
Administrator, DMEA
WMTraver
AHKoschmann (2)
Chron.

E. N. Hackman
for A. H. Koschmann
Field Team, Region IV

Reviewed by
DMEA OPERATING COMMITTEE

10-9-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

October 2, 1953.

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Report of Examination - DMEA Docket 3062 (Lead-Tungsten-Cobalt), B and H Mining Company, Inc., Madeline #2 Mine, Gunnison County, Colorado.

Enclosed are eight copies of the Report of Examination on the subject docket.

The examiners found no tungsten or cobalt as claimed by the applicant, and they concur that exploration on this property is not justified.

We recommend that the application be denied.

W. H. King

W. H. King

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE

10-9-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
September 16, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3062, Madeline No. 2 mine (Lead-tungsten-cobalt) B and H Mining Company, Inc., Gunnison County, Colo.

Submitted herewith are the original and eight copies of the "Summary, Conclusions, and Recommendations," by C. M. Harrer and E. N. Harshman, and of the engineering report by C. M. Harrer on the above docket.

Harrer concludes there is slight possibility of the discovery of significant bodies of base metal ores and sampling failed to indicate the existence of either cobalt or tungsten, as claimed by the applicant. He recommends denial of the loan request.

I approve his conclusions and recommendations.

W. M. Traver

W. M. Traver

enclosures

cc
DMEA 3062
DMEA Chron.

WMT/pam

Reviewed by
DMEA OPERATING COMMITTEE
10-9-53
(date)

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

September 9, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3062, B and H Mining Company, Inc., Gunnison County, Colorado

Attached are 8 copies of the geologic report by E. N. Harshman covering DMEA Docket 3062, B and H Mining Company, Inc., Gunnison County, Colorado.

The applicant has applied for a loan to explore for lead, tungsten, and cobalt on subject property in the Tincup Mining District.

Galena, sphalerite, and chalcopyrite with pyrite, barite, and quartz occur in fracture or shear zones in gneiss of pre-Cambrian age. Small amounts of fluorescent calcite and hydrozincite are present. Those minerals evidently were confused by the applicant with scheelite and the ore was reported to contain tungsten. No cobalt or tungsten was found in a composite of five samples collected on the property.

Harshman concludes that discovery of significant amounts of lead, zinc, copper, tungsten, or cobalt ore is unlikely and recommends that the application be denied.

I concur in this recommendation.

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

Enclosures (8)

Reviewed by
DMEA OPERATING COMMITTEE
10-9-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

Madeline No. 2 Mine

DMEA 3062, N and N Mining Company, Inc.

Gunnison County, Colo.

Lead-Tungsten-Cobalt

C. M. Barrer, Mining Engineer
Bureau of Mines

E. N. Harshman, Geologist
Geological Survey

September 16, 1953

Reviewed by
DMEA OPERATING COMMITTEE

10-9-53
(date)

DMEA 3062

MADELINE NO. 2 MINE
B AND H MINING COMPANY, INC.
GUNNISON COUNTY, COLO.

Summary, Conclusions, and Recommendations

By C. M. Harrer
Mining Engineer
Bureau of Mines

E. M. Burchman
Geologist
Geological Survey

Reviewed by
DMEA OPERATING COMMITTEE

10-9-55
(date)

DMEA 3062

MADELINE NO. 2 MINE
B AND H MINING COMPANY, INC.
GUNNISON COUNTY, COLO.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By C. M. Harrer and E. N. Hershman

The B and H Mining Company, Inc., of 236 Brotherhood Building, Kansas City, Kansas, has applied for a Defense Minerals Exploration Administration loan of $15,885.00 to explore the Madeline No. 2 lode for lead, tungsten, and cobalt. They propose to unwater and rehabilitate the Madeline No. 2 shaft and levels and freshen vein exposures for examination and sampling. If the examination and sampling show promise of finding substantial ore bodies, an indeterminate amount of core drilling and underground exploration is proposed. In addition, the access road and living quarters would be improved.

B and H Mining Company, Inc., claims are in the basin of a glacial cirque at the head of Magdalena Gulch in sec. 20, T. 13 S., R. 80 W., Tincup Mining District, Gunnison County, Colo., at an altitude of 13,000 feet.

The Madeline No. 2 claim is underlain by a quartz-biotite-plagioclase gneiss correlated with the pre-Cambrian Idaho Springs formation. Barite, quartz, and very minor amounts of galena, sphalerite, pyrite, and chalcopyrite occur along several shear zones that strike northeast and dip steeply northwest. The sulfide minerals make up a relatively insignificant part of the material found in the shear zones.

All evidence points to the conclusion that there is little possibility of discovering significant bodies of lead, zinc, or copper ore, and there is no evidence to substantiate the applicant's statement that cobalt or tungsten may occur in the vein material.

The B and H Mining Company, Inc., application for a Defense Minerals Exploration Administration loan of $15,885.00 is recommended for denial.

The B and H Mining Company, Inc., application for a Defense Minerals Exploration Administration loan of $15,885.00 is recommended for denial.

B AND H MINING COMPANY INC.

MADELINE NO. 2 MINE

GUNNISON COUNTY, COLORADO

DMEA DOCKET 3062

Geologic Report

By E. N. Hershman
U. S. Geological Survey

MADELINE NO. 2 MINE
GUNNISON COUNTY, COLORADO

INTRODUCTION

The B and H Mining Company, 236 Brotherhood Building, Kansas City, Kansas, represented by S. R. Hukle, Vice President, has applied to the Defense Minerals Exploration Administration, DMEA Docket 3062, for a loan of $15,885.00 to explore for lead, tungsten, and cobalt ore on the Madeline No. 2 patented claim. The property is located in the Tincup Mining District in section 20, T. 13 S., R. 80 W., 6 P.M., Gunnison County, Colorado.

The property was examined on August 3-4, 1953, in company with C. M. Harrer of the U. S. Bureau of Mines and Maurice I. Biggs, president of the B and H Mining Company. It is located in Magdalene Basin at an elevation of about 13,000 feet. Access is by way of State Highway No. 306 to a point 12 miles west of Buena Vista, Colorado, and then by a 10 mile pack trail passing over the Continental Divide at Brown's pass and following up Texas Creek and Magdalene Gulch to the property.

The work proposed by the applicant consists of improving the present trail for access by jeep, rehabilitating the Madeline No. 2 shaft, erecting a new head-frame, installing a hoist, draining a small lake that may be connected with the old mine workings by fissures, and, if necessary, drilling the deposit.

It is concluded that there is little chance to discover significant bodies of ore on the Madeline No. 2 claim, and denial of the application for exploration assistance is recommended.

GEOLOGY

The Madeline No. 2 claim is located on the relatively flat floor and steep slopes of a glacial cirque high in the Sawatch Range. In this area, the range consists of steep bluffs and sharp ridges eroded in granitic, gneissic, and chistose rocks, regarded as pre-Cambrian in age and correlated with the Idaho Springs formation.

The predominant rock underlying the Madeline No. 2 claim is a light-grey, medium to fine grained, quartz-plagioclase-biotite gneiss. It is closely jointed and breaks into large angular blocks, giving rise to extensive talus slopes. Glacial action has kept pace with weathering and fresh unaltered rock is exposed in most outcrops.

Galena, sphalerite, pyrite, chalcopyrite, barite, and quartz have been deposited in fracture or shear zones in the gneiss. These minerals are in small lenticular bodies and narrow discontinuous stringers that constitute a very small part of the total volume of rock included in the shear zones. Minor amounts of fluorescent calcite and hydrozincite are present. These minerals were confused with scheelite and the ore was reported to contain tungsten.

The claim has been developed by a number of shallow pits, trenches, and 2 shafts (figure 1). Although almost all of the exploration work is along a line bearing N. 80° E., at least seven different shear zones have been explored. The zones strike in a northeasterly direction, dip steeply north, and consist of moderately fractured rock between well defined walls. Gouge, if present, is limited to the walls of the zones. The shear zones range from two feet to seven feet in width.

The discovery shaft was flooded and could not be examined. The extent of any lateral workings from this shaft is unknown.

At the time of the examination the Madeline No. 2 shaft was unwatered to a depth of 33 feet below the collar. Lack of pump discharge hose made further unwatering impossible. The shaft is on a strong shear zone containing stringers and lenticular masses of barite and very minor amounts of pyrite, galena, sphalerite, and chalcopyrite. The zone strikes N. 75°-80° E, and dips 70°-75° N.

At a depth of 23 feet a short drift was driven northeast along the shear zone. It was not accessible and was so filled with muck that the character of the shear zone could not be observed.

The water level stood about one foot below the back of a lower drift that extended both northeasterly and southwesterly from the shaft. This drift was not accessible but the shear zone could be observed along the back of the drift in the immediate vicinity of the shaft.

SAMPLES AND REPORTED PRODUCTION

Five samples were taken at the time of the examination. Their location is shown on figure 1 and the results of assays by the U. S. Bureau of Mines follow:

Sample No.	Description	% Cu	% Pb	% Zn	% Ag
H-688	7½ foot sample on shear zone under cabin	>0.05	>0.01	>0.05	>0.01
H-689	1 foot sample on hanging-wall of shear under cabin	>0.05	>0.01	>0.05	>0.01
H-690	Grab sample of dump from Pit No. 4	>0.05	>0.01	>0.05	1.20
H-691	5 foot chip sample across shear in Pit No. 3	>0.05	>0.01	>0.05	0.04

H-692	2 foot channel sample across back of drift 33 feet below collar of Madeleno No. 2 shaft	>0.05	>0.01	>0.05	0.04

Composit >0.02% Co >0.01% MoS_2

The applicant reports shipments as follows:

Year	Tons	oz. Ag/ton	% Pb
1902	5.75	289.83	-
1905	1.65	233.03	14.8

The shipments could not be verified. It is believed that the material shipped was table concentrate, for the remains of an old concentrating table and a large pile of course tailings were found near the Madeline No. 2 shaft.

CONCLUSIONS AND RECOMMENDATIONS

Very minor amounts of sulfide minerals are associated with barite lenses and stringers in shear zones on the Madeline No. 2 claim. No cobalt or tungsten was found in a composite of the five samples taken on the property.

It is therefore concluded that discovery of significant amounts of lead, zinc, copper, tungsten, or cobalt ore is unlikely and denial of the application for exploration assistance, DMEA Docket 3062, is recommended.

DMEA 3062

MADELINE NO. 2 MINE
B AND H MINING COMPANY, INC.
GUNNISON COUNTY, COLO.

Engineering Report

By C. M. Harrer
Mining Engineer
Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
10-9-53
(date)

DMEA 3062

MADELINE NO. 2 MINE
B AND H MINING COMPANY, INC.
GUNNISON COUNTY, COLO.

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ILLUSTRATIONS

Figure	Follows Page
1. Surface plan of Madeline No. 2 claim, B and H Mining Co.	*
2. Location map, Madeline No. 2 lode, B and H Mining Company, Inc., Gunnison County, Colo.	1
3. Claim and exploration map, Madeline No. 2 lode, B and H Mining Company, Inc., Gunnison County, Colo.	2

*With geologic report.

DMEA 3062

MADELINE NO. 2 MINE
B AND H MINING COMPANY, INC.
GUNNISON COUNTY, COLO.

ENGINEERING REPORT

By

C. N. Barrer

INTRODUCTION

The B and H Mining Company, Inc., has applied for a Defense Minerals Exploration Administration loan of $15,885.00 to explore the Madeline No. 2 mine for lead, cobalt, and tungsten. The property was examined by an engineer of the Bureau of Mines and a geologist of the Geological Survey on August 3 and 4, 1953.

ACKNOWLEDGMENTS

Maurice I. Biggs, president of B and H Mining Company, Inc., was contacted at the mine and cooperated fully with all information available on the property.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

B and H Mining Company, Inc., claims are at the head of Magdalena Gulch in sec. 20, T. 13 S., R. 80 W., Tincup Mining District, Gunnison County, Colo. (fig. 2). The claims are in the basin of a glacial cirque at an altitude of about 13,000 feet, well above timber line.

The property is now serviced by pack trains which start from the junction of Denny Creek with County Highway 106. This point is 12 miles west of Buena Vista over County Highways 306 and 106. Pack trains proceed northwesterly up Denny Creek and then northeasterly across the divide to South Texas Creek and the valley of Texas Creek. At the

junction of Texas Creek with Magdalene Gulch, the trail continues northwesterly up Magdalene Gulch to its head. Terrain is very steep and rugged. Nearest point of supply is Buena Vista.

HISTORY AND PRODUCTION

Very little is known of the early history of the property and the last operators are deceased. Production data could not be verified; however, the Madeline No. 2 mine was supposed to have made a shipment of 11,505 pounds of concentrates during 1902, which assayed 289.83 ounces silver per ton. On November 2, 1905, concentrates totaling 30,306 pounds were reported shipped, which assayed 233.03 ounces silver per ton and 14.8 percent lead. Old equipment on the property indicates that the ore was sorted, crushed, jigged, and tabled before transportation out by pack train.

OWNERSHIP AND EXTENT

B and H Mining Company, Inc., of 236 Brotherhood Building, Kansas City, Kansas, has leased the patented Madeline No. 2 lode claim for a term of 10 years, dating from April 18, 1952. The claim is 300 feet wide by 1,500 feet long and encloses about 10 acres. It is identified under mineral survey number 3932.

Since applying for Defense Minerals Exploration Administration assistance, the company has acquired the adjoining Black Veil claim (survey number 3519) and two standard claim locations, B and H No. 1 and 2. The claims are all shown on figure 3.

DESCRIPTION OF THE DEPOSITS

Surface exploration consisted of prospecting a series of stained and weakly mineralized shears and fractures in pre-Cambrian gneissoid granite with pits and trenches 4 to 12 feet deep. In addition, a discovery shaft was sunk to an unknown depth. Another shaft, which is now being unwatered and rehabilitated, is about 50 feet deep. Surface exploration is shown on figure 3 as pits 1 through 6 and two shallow trenches, also shown on figure 1 with the geologic report.

Pit number 1 exposes two sets of fractures in gray granite. The hanging wall shear strikes N. 72° E. and dips 58° northwest. The footwall shear zone strikes N. 48° E. and dips 66° northwest. There is no evidence of strategic minerals.

Pit number 2 exposes a slight iron staining in a series of parallel fractures in gray granite which strikes N. 70° E. and dips 80° northwest. There is no evidence of strategic minerals.

Fracturing of gray granite exposed in pit number 3 strikes N. 57° E. and dips 69° northwest. Galena is present in low-grade and discontinuous stringers less than 1/2 inch thick. A sample, K-691, was cut across the face of 5.0 feet and assayed 0.4 ounce silver per ton, less than 0.05 percent copper, less than 0.1 percent lead, and less than 0.05 percent zinc.

Pit number 4 exposes a shear pattern, in gray granite, which strikes N. 56° E. and dips 70° northwest. The center 4 feet of the face is most intensely sheared. There is little evidence of concentration of minerals of economic importance. A grab sample, K-690, was taken of the most promising material which assayed 1.2 ounces silver per ton, less than 0.05 percent copper, less than 0.1 percent lead, and less than 0.05 percent zinc.

Pit number 5 is in gray granite and exposes a prominent shear zone over a width of 7.5 feet. It strikes N. 50° E. and dips 78° northwest. The most intensely sheared portion of the 7.5-foot zone is adjacent to the walls. Sample H-688 was taken across the full width of 7.5 feet and assayed less than 0.1 ounce silver per ton, less than 0.05 percent copper, less than 0.1 percent lead, and less than 0.05 percent zinc. Sample H-689 was taken across the most intensely sheared portion of 1.0 feet, adjacent to the hanging wall. It assayed exactly the same as sample H-688.

Pit number 6 is also in gray granite. Fracturing strikes N. 45° E. and dips 78° northwest. There is no evidence of minerals of economic or strategic importance.

The two trenches to the west were very poorly mineralized and only one small spot of galena was noted. The shear structure is exposed in gray granite. It strikes N. 75° E. and dips 78° northwest.

Occasional spots of malachite and azurite were noted on the dumps around the shaft now being unwatered and rehabilitated. About 1 ton of sorted dump rock, principally rusty barite and quartz, contained small amounts of galena, sphalerite, chalcopyrite, and pyrite. There was no visible evidence of cobalt or tungsten.

The shaft now being unwatered was sunk on a prominent shear zone containing small lenticular masses of barite and very minor amounts of galena, sphalerite, chalcopyrite, and pyrite. A 2-foot sample (H-692) taken just above water level in the shaft, 33 feet below the collar, assayed 0.4 ounce silver per ton, less than 0.05 percent copper, less than 0.1 percent lead, and less than 0.05 percent zinc.

A composite of the above samples assayed less than 0.02 percent cobalt and less than 0.01 percent tungsten (WO_3) and bears out earlier conclusions that cobalt and tungsten do not occur in mineable concentrations in the vein material.

Recapitulation of Sampling Data

Sample No.	Ounces per ton Ag	Percent Cu	Percent Pb	Percent Zn
H-688	<0.1	<0.05	<0.1	<0.05
H-689	<0.1	<0.05	<0.1	<0.05
H-690	1.2	<0.05	<0.1	<0.05
H-691	0.4	<0.05	<0.1	<0.05
H-692	0.4	<0.05	<0.1	<0.05

< = less than

A composite of the above samples assayed <0.02 cobalt and <0.01 WO_3.

MINEABLE ORE RESERVES

There are no mineable ore reserves.

PRESENT STATUS

Exploration and Development

The present accessible development is centered along the centerline of the Madeline No. 2 claim, figure 3. The B and H Mining Company, Inc., is now unwatering and rehabilitating the main shaft on the Madeline No. 2 claim for examination and sampling. At present, one level is exposed 23 feet below the shaft collar, but is completely inaccessible. A second level is indicated whose top is at the present water level, 33 feet below the shaft collar. This level appears to be in solid rock.

Development on the Madeline No. 2 claim from west to east includes a water-filled, 3- by 4-foot cribbed discovery shaft partly buried in encroaching talus.

Trenches between the discovery shaft and the main shaft were inaccessible.

The main shaft has a 3- by 6-foot, inside cribbing, cross section and was pumped out to a depth of 33 feet when visited. The first level was exposed at 23 feet below the shaft collar and was entirely inaccessible. The top of the second level was uncovered at a depth of 33 feet below the shaft collar.

A dilapidated but usable 20- by 30-foot log cabin is used by the applicant as crude living quarters. A 7.5- by 20-foot excavation (pit number 5) was sunk beneath the cabin floor to a depth of 7 feet.

Pit number 6 is very shallow and of no consequence.

Pit number 4 has a 6- by 7-foot cross section and is 10 feet deep.

Pit number 3 has a 5- by 7-foot cross section and is 7 feet deep.

Pit number 2 has a 4- by 5-foot cross section and is 7 feet deep.

Pit number 1 has a 6- by 6-foot cross section and is 12 feet deep.

A ditch has been blasted through to drain a small lake which is believed to connect to mine workings.

Mining and Milling Equipment and Other Facilities

There is no serviceable mining or milling equipment on the property. A very old steam hoist and compressor and home-made jigs and

tables are completely useless. An old headframe over the main shaft is in very bad condition.

PROJECT PROPOSALS, WITH COSTS

The B and H Mining Company, Inc., proposes to unwater and rehabilitate a 3- by 6-foot cribbed shaft on the centerline of the Madeline No. 2 claim, located 740 feet east of the west endline of the claim, for examination and sampling of the vein. This shaft is surrounded by dumps which show the best indications of silver, lead, zinc, and copper. Should exposures of the vein indicate promise of finding substantial ore bodies, it is also proposed to build a new headframe, improve living quarters, and drain a small lake adjacent to the mine. In addition, an indeterminate amount of core drilling and underground exploration is proposed. An access road to Texas Creek is also contemplated. Costs, while vague, are distributed as follows:

Rough access road to Texas Creek, about	$ 2,500.00
Headframe, hand hoist, and mine timber	850.00
Small tools	275.00
Rental of horses, bulldozer, pumps, compressor, pneumatic drilling equipment and an unspecified amount of diamond drilling	4,760.00
Labor costs	7,500.00
Total	$15,885.00

CONCLUSIONS AND RECOMMENDATIONS

All evidence indicates that there is very little possibility of discovering significant bodies of lead, zinc, or copper ore, and there is no evidence to substantiate the applicant's statement that cobalt and tungsten may occur in mineable concentrations in the vein material.

The proposed exploration program of the B and H Mining Company has no merit as a Defense Minerals Exploration Administration project and is recommended for denial.

pam

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

224 New Customhouse
Denver 2, Colorado

October 2, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Report of Examination - DMEA Docket 3062 (Lead-Tungsten-Cobalt), B and H Mining Company, Inc., Madeline #2 Mine, Gunnison County, Colorado.

Enclosed are four copies of the Report of Examination on the subject docket, a copy of the letter of denial to the applicant and two copies of Form 3b.

W. H. King
W. H. King
Field Team, Region IV

E. M. Hardeman
for A. H. Koschmann
Field Team, Region IV

Enclosures

DENIED

C
O
P
Y

October 2, 1953

224 New Customhouse
Denver 2, Colorado

Mr. S. R. Hukle, Vice President
B and H Mining Company, Inc.
236 Brotherhood Building
Kansas City, Kansas

Re: Docket DMEA-3062

Dear Mr. Hukle:

Reference is made to your application for Government aid on the Madeline No. 2 Mine.

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

A careful study of your property and data available to this agency, reveals that the probability of disclosing mineable reserves of lead, tungsten or cobalt is not considered sufficiently promising to justify Government particiapation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Very truly yours,

W. H. King
Field Team, Region IV

A. H. Koschmann /s/ E. N. Harshman
Field Team Region IV

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

October 2, 1953.

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Report of Examination - IMMA Docket 3062 (Lead-Tungsten-Cobalt), B and H Mining Company, Inc., Madeline #2 Mine, Gunnison County, Colorado.

Enclosed are eight copies of the Report of Examination on the subject docket.

The examiners found no tungsten or cobalt as claimed by the applicant, and they concur that exploration on this property is not justified.

We recommend that the application be denied.

W H King
W. H. King

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
September 16, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3062, Madeline No. 2 mine (Lead-tungsten-cobalt) B and H Mining Company, Inc., Gunnison County, Colo.

Submitted herewith are the original and eight copies of the "Summary, Conclusions, and Recommendations," by C. M. Harrer and E. H. Harshman, and of the engineering report by C. M. Harrer on the above docket.

Harrer concludes there is slight possibility of the discovery of significant bodies of base metal ores and sampling failed to indicate the existence of either cobalt or tungsten, as claimed by the applicant. He recommends denial of the loan request.

I approve his conclusions and recommendations.

W. M. Traver

W. M. Traver

enclosures

cc
DMEA 3062
DMEA Chron.

WMT/pcm

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

September 9, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3062, B and H Mining Company, Inc., Gunnison County, Colorado

Attached are 8 copies of the geologic report by E. M. Harshman covering DMEA Docket 3062, B and H Mining Company, Inc., Gunnison County, Colorado.

The applicant has applied for a loan to explore for lead, tungsten, and cobalt on subject property in the Tincup Mining District.

Galena, sphalerite, and chalcopyrite with pyrite, barite, and quartz occur in fracture on shear zones in gneiss of pre-Cambrian age. Small amounts of fluorescent calcite and hydrozincite are present. These minerals evidently were confused by the applicant with scheelite and the ore was reported to contain tungsten. No cobalt or tungsten was found in a composite of five samples collected on the property.

Harshman concludes that discovery of significant amounts of lead, zinc, copper, tungsten, or cobalt ore is unlikely and recommends that the application be denied.

I concur in this recommendation.

A. H. Koschmann

A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (8)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

Madeline No. 2 Mine

DMEA 3062, B and H Mining Company, Inc.

Gunnison County, Colo.

Lead-Tungsten-Cobalt

C. M. Harrer, Mining Engineer
Bureau of Mines

E. N. Harshman, Geologist
Geological Survey

September 16, 1953

DMEA 3062

MADELINE NO. 2 MINE
B AND H MINING COMPANY, INC.
GUNNISON COUNTY, COLO.

Summary, Conclusions, and Recommendations

By C. M. Harrer
Mining Engineer
Bureau of Mines

E. N. Harshman
Geologist
Geological Survey

DMEA 3062

MADELINE NO. 2 MINE
B AND H MINING COMPANY, INC.
GUNNISON COUNTY, COLO.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By C. M. Harrer and E. N. Harshman

The B and H Mining Company, Inc., of 236 Brotherhood Building, Kansas City, Kansas, has applied for a Defense Minerals Exploration Administration loan of $15,885.00 to explore the Madeline No. 2 lode for lead, tungsten, and cobalt. They propose to unwater and rehabilitate the Madeline No. 2 shaft and levels and freshen vein exposures for examination and sampling. If the examination and sampling show promise of finding substantial ore bodies, an indeterminate amount of core drilling and underground exploration is proposed. In addition, the access road and living quarters would be improved.

B and H Mining Company, Inc., claims are in the basin of a glacial cirque at the head of Magdalene Gulch in sec. 20, T. 13 S., R. 80 W., Tincup Mining District, Gunnison County, Colo., at an altitude of 13,000 feet.

The Madeline No. 2 claim is underlain by a quartz-biotite-plagioclase gneiss correlated with the pre-Cambrian Idaho Springs formation. Barite, quartz, and very minor amounts of galena, sphalerite, pyrite, and chalcopyrite occur along several shear zones that strike northeast and dip steeply northwest. The sulfide minerals make up a relatively insignificant part of the material found in the shear zones.

All evidence points to the conclusion that there is little possibility of discovering significant bodies of lead, zinc, or copper ore, and there is no evidence to substantiate the applicant's statement that cobalt or tungsten may occur in the vein material.

The B and H Mining Company, Inc., application for a Defense Minerals Exploration Administration loan of $15,885.00 is recommended for denial.

B AND H MINING COMPANY INC.

MADELINE NO. 2 MINE

GUNNISON COUNTY, COLORADO

DMEA DOCKET 3062

Geologic Report

By E. N. Harshman
U. S. Geological Survey

DEPARTMENT OF THE INTERIOR
Denver Laboratory Mineral Resources
RECEIVED
OCT 6 1953

MADELINE NO. 2 MINE
GUNNISON COUNTY, COLORADO

INTRODUCTION

The B and H Mining Company, 236 Brotherhood Building, Kansas City, Kansas, represented by S. R. Hukle, Vice President, has applied to the Defense Minerals Exploration Administration, DMEA Docket 3062, for a loan of $15,885.00 to explore for lead, tungsten, and cobalt ore on the Madeline No. 2 patented claim. The property is located in the Tincup Mining District in section 20, T. 13 S., R. 80 W., 6 P.M., Gunnison County, Colorado.

The property was examined on August 3-4, 1953, in company with C. M. Harrer of the U. S. Bureau of Mines and Maurice I. Biggs, president of the B and H Mining Company. It is located in Magdalene Basin at an elevation of about 13,000 feet. Access is by way of State Highway No. 306 to a point 12 miles west of Buena Vista, Colorado, and then by a 10 mile pack trail passing over the Continental Divide at Brown's pass and following up Texas Creek and Magdalene Gulch to the property.,

The work proposed by the applicant consists of improving the present trail for access by jeep, rehabilitating the Madeline No. 2 shaft, erecting a new head-frame, installing a hoist, draining a small lake that may be connected with the old mine workings by fissures, and, if necessary, drilling the deposit.

It is concluded that there is little chance to discover significant bodies of ore on the Madeline No. 2 claim, and denial of the application for exploration assistance is recommended.

GEOLOGY

The Madeline No. 2 claim is located on the relatively flat floor and steep slopes of a glacial cirque high in the Sawatch Range. In this area, the range consists of steep bluffs and sharp ridges eroded in granitic, gneissic, and chistose rocks, regarded as pre-Cambrian in age and correlated with the Idaho Springs formation.

The predominant rock underlying the Madeline No. 2 claim is a light-grey, medium to fine grained, quartz-plagioclase-biotite gneiss. It is closely jointed and breaks into large angular blocks, giving rise to extensive talus slopes. Glacial action has kept pace with weathering and fresh unaltered rock is exposed in most outcrops.

Galena, sphalerite, pyrite, chalcopyrite, barite, and quartz have been deposited in fracture or shear zones in the gneiss. These minerals are in small lenticular bodies and narrow discontinuous stringers that constitute a very small part of the total volume of rock included in the shear zones. Minor amounts of fluorescent calcite and hydrozincite are present. These minerals were confused with scheelite and the ore was reported to contain tungsten.

The claim has been developed by a number of shallow pits, trenches, and 2 shafts (figure 1). Although almost all of the exploration work is along a line bearing N. 80° E., at least seven different shear zones have been explored. The zones strike in a northeasterly direction, dip steeply north, and consist of moderately fractured rock between well defined walls. Gouge, if present, is limited to the walls of the zones. The shear zones range from two feet to seven feet in width.

The discovery shaft was flooded and could not be examined. The extent of any lateral workings from this shaft is unknown.

At the time of the examination the Madeline No. 2 shaft was unwatered to a depth of 33 feet below the collar. Lack of pump discharge hose made further unwatering impossible. The shaft is on a strong shear zone containing stringers and lenticular masses of barite and very minor amounts of pyrite, galena, sphalerite, and chalcopyrite. The zone strikes N. 75°-80° E. and dips 70°-75° N.

At a depth of 23 feet a short drift was driven northeast along the shear zone. It was not accessible and was so filled with muck that the character of the shear zone could not be observed.

The water level stood about one foot below the back of a lower drift that extended both northeasterly and southwesterly from the shaft. This drift was not accessible but the shear zone could be observed along the back of the drift in the immediate vicinity of the shaft.

SAMPLES AND REPORTED PRODUCTION

Five samples were taken at the time of the examination. Their location is shown on figure 1 and the results of assays by the U. S. Bureau of Mines follow:

Sample No.	Description	% Cu	% Pb	% Zn	% Ag
H-688	7½ foot sample on shear zone under cabin	>0.05	>0.01	>0.05	>0.01
H-689	1 foot sample on hanging-wall of shear under cabin	>0.05	>0.01	>0.05	>0.01
H-690	Grab sample of dump from Pit No. 4	>0.05	>0.01	>0.05	1.20
H-691	5 foot chip sample across shear in Pit No. 3	>0.05	>0.01	>0.05	0.04

H-692	2 foot channel sample across back of drift 33 feet below collar of Madelene No. 2 shaft	>0.05	>0.01	>0.05	0.04

Composit >0.02% Co >0.01% WO_3

The applicant reports shipments as follows:

Year	Tons	oz. Ag/ton	% Pb
1902	5.75	289.83	-
1905	1.65	233.03	14.8

The shipments could not be verified. It is believed that the material shipped was table concentrate, for the remains of an old concentrating table and a large pile of course tailings were found near the Madeline No. 2 shaft.

CONCLUSIONS AND RECOMMENDATIONS

Very minor amounts of sulfide minerals are associated with barite lenses and stringers in shear zones on the Madeline No. 2 claim. No cobalt or tungsten was found in a composite of the five samples taken on the property.

It is therefore concluded that discovery of significant amounts of lead, zinc, copper, tungsten, or cobalt ore is unlikely and denial of the application for exploration assistance, DMEA Docket 3062, is recommended.

DMEA 3062

MADELINE NO. 2 MINE
B AND H MINING COMPANY, INC.
GUNNISON COUNTY, COLO.

Engineering Report

By C. M. Harrer
Mining Engineer
Bureau of Mines

DMEA 3062

MADELINE NO. 2 MINE
B AND H MINING COMPANY, INC.
GUNNISON COUNTY, COLO.

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ILLUSTRATIONS

Figure	Follows Page
1. Surface plan of Madeline No. 2 claim, B and H Mining Co.	*
2. Location map, Madeline No. 2 lode, B and H Mining Company, Inc., Gunnison County, Colo.	1
3. Claim and exploration map, Madeline No. 2 lode, B and H Mining Company, Inc., Gunnison County, Colo.	2

*With geologic report.

DMEA 3062

MADELINE NO. 2 MINE
B AND H MINING COMPANY, INC.
GUNNISON COUNTY, COLO.

ENGINEERING REPORT

By

C. M. Harrer

INTRODUCTION

The B and H Mining Company, Inc., has applied for a Defense Minerals Exploration Administration loan of $15,885.00 to explore the Madeline No. 2 mine for lead, cobalt, and tungsten. The property was examined by an engineer of the Bureau of Mines and a geologist of the Geological Survey on August 3 and 4, 1953.

ACKNOWLEDGMENTS

Maurice I. Biggs, president of B and H Mining Company, Inc., was contacted at the mine and cooperated fully with all information available on the property.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

B and H Mining Company, Inc., claims are at the head of Magdalene Gulch in sec. 20, T. 13 S., R. 80 W., Tincup Mining District, Gunnison County, Colo. (fig. 2). The claims are in the basin of a glacial cirque at an altitude of about 13,000 feet, well above timber line.

The property is now serviced by pack trains which start from the junction of Denny Creek with County Highway 106. This point is 12 miles west of Buena Vista over County Highways 306 and 106. Pack trains proceed northwesterly up Denny Creek and then northeasterly across the divide to South Texas Creek and the valley of Texas Creek. At the

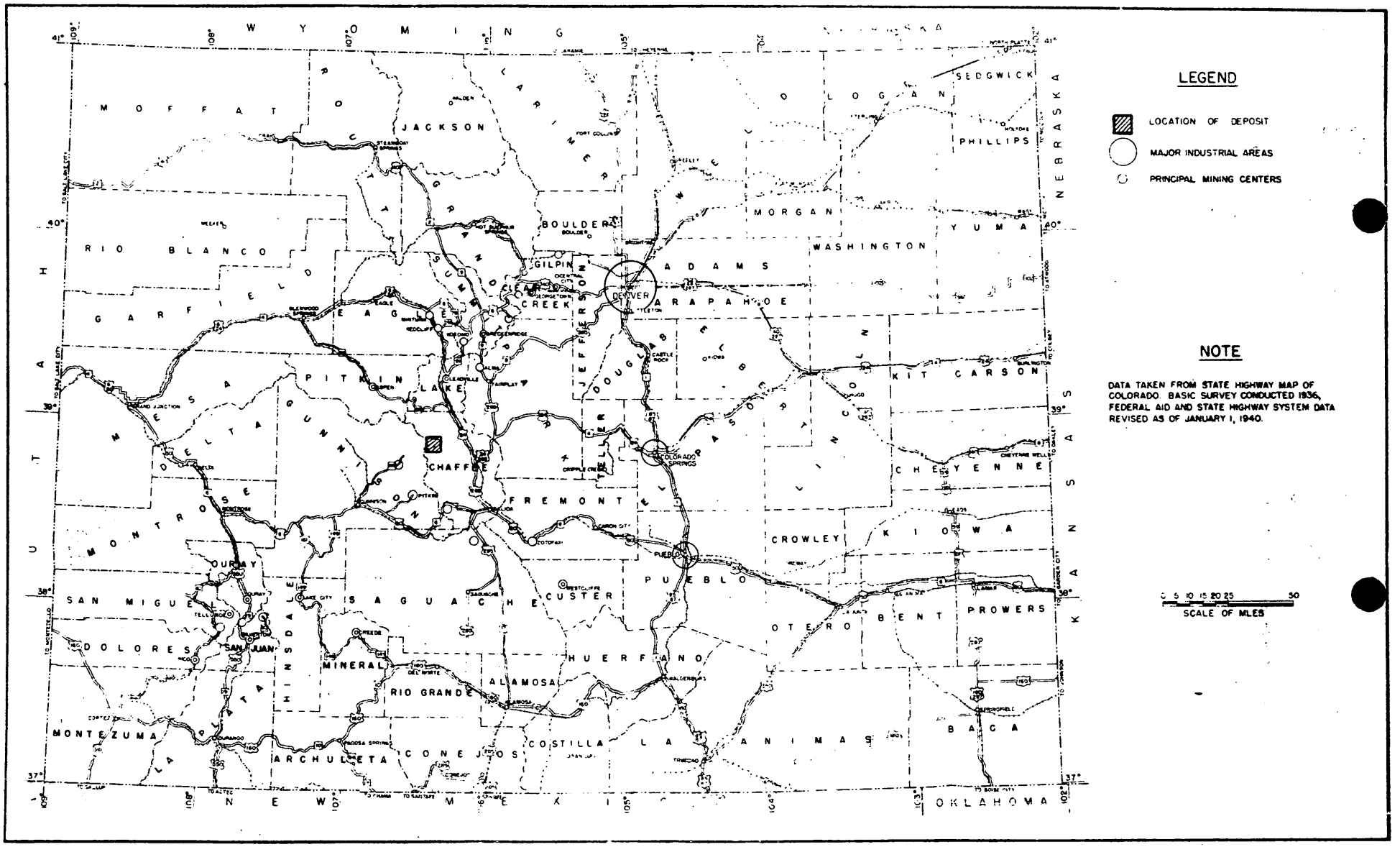

FIGURE 2. - LOCATION MAP, MADELINE NO. 2 LODE, B & H MINING COMPANY, INC., GUNNISON COUNTY, COLO. (DMEA 3062)

junction of Texas Creek with Magdalene Gulch, the trail continues northwesterly up Magdalene Gulch to its head. Terrain is very steep and rugged. Nearest point of supply is Buena Vista.

HISTORY AND PRODUCTION

Very little is known of the early history of the property and the last operators are deceased. Production data could not be verified; however, the Madeline No. 2 mine was supposed to have made a shipment of 11,505 pounds of concentrates during 1902, which assayed 289.83 ounces silver per ton. On November 2, 1905, concentrates totaling 30,306 pounds were reported shipped, which assayed 233.03 ounces silver per ton and 14.8 percent lead. Old equipment on the property indicates that the ore was sorted, crushed, jigged, and tabled before transportation out by pack train.

OWNERSHIP AND EXTENT

B and H Mining Company, Inc., of 236 Brotherhood Building, Kansas City, Kansas, has leased the patented Madeline No. 2 lode claim for a term of 10 years, dating from April 18, 1952. The claim is 300 feet wide by 1,500 feet long and encloses about 10 acres. It is identified under mineral survey number 3932.

Since applying for Defense Minerals Exploration Administration assistance, the company has acquired the adjoining Black Veil claim (survey number 3519) and two standard claim locations, B and H No. 1 and 2. The claims are all shown on figure 3.

DESCRIPTION OF THE DEPOSITS

Surface exploration consisted of prospecting a series of stained and weakly mineralized shears and fractures in pre-Cambrian gneissoid granite with pits and trenches 4 to 12 feet deep. In addition, a discovery shaft was sunk to an unknown depth. Another shaft, which is now being unwatered and rehabilitated, is about 50 feet deep. Surface exploration is shown on figure 3 as pits 1 through 6 and two shallow trenches, also shown on figure 1 with the geologic report.

Pit number 1 exposes two sets of fractures in gray granite. The hanging wall shear strikes N. 72° E. and dips 58° northwest. The footwall shear zone strikes N. 48° E. and dips 66° northwest. There is no evidence of strategic minerals.

Pit number 2 exposes a slight iron staining in a series of parallel fractures in gray granite which strikes N. 70° E. and dips 80° northwest. There is no evidence of strategic minerals.

Fracturing of gray granite exposed in pit number 3 strikes N. 57° E. and dips 69° northwest. Galena is present in low-grade and discontinuous stringers less than 1/2 inch thick. A sample, H-691, was cut across the face of 5.0 feet and assayed 0.4 ounce silver per ton, less than 0.05 percent copper, less than 0.1 percent lead, and less than 0.05 percent zinc.

Pit number 4 exposes a shear pattern, in gray granite, which strikes N. 56° E. and dips 70° northwest. The center 4 feet of the face is most intensely sheared. There is little evidence of concentration of minerals of economic importance. A grab sample, H-690, was taken of the most promising material which assayed 1.2 ounces silver per ton, less than 0.05 percent copper, less than 0.1 percent lead, and less than 0.05 percent zinc.

Pit number 5 is in gray granite and exposes a prominent shear zone over a width of 7.5 feet. It strikes N. 50° E. and dips 78° northwest. The most intensely sheared portion of the 7.5-foot zone is adjacent to the walls. Sample H-688 was taken across the full width of 7.5 feet and assayed less than 0.1 ounce silver per ton, less than 0.05 percent copper, less than 0.1 percent lead, and less than 0.05 percent zinc. Sample H-689 was taken across the most intensely sheared portion of 1.0 feet, adjacent to the hanging wall. It assayed exactly the same as sample H-688.

Pit number 6 is also in gray granite. Fracturing strikes N. 45° E. and dips 78° northwest. There is no evidence of minerals of economic or strategic importance.

The two trenches to the west were very poorly mineralized and only one small spot of galena was noted. The shear structure is exposed in gray granite. It strikes N. 75° E. and dips 78° northwest.

Occasional spots of malachite and azurite were noted on the dumps around the shaft now being unwatered and rehabilitated. About 1 ton of sorted dump rock, principally rusty barite and quartz, contained small amounts of galena, sphalerite, chalcopyrite, and pyrite. There was no visible evidence of cobalt or tungsten.

The shaft now being unwatered was sunk on a prominent shear zone containing small lenticular masses of barite and very minor amounts of galena, sphalerite, chalcopyrite, and pyrite. A 2-foot sample (H-692) taken just above water level in the shaft, 33 feet below the collar, assayed 0.4 ounce silver per ton, less than 0.05 percent copper, less than 0.1 percent lead, and less than 0.05 percent zinc.

A composite of the above samples assayed less than 0.02 percent cobalt and less than 0.01 percent tungsten (WO_3) and bears out earlier conclusions that cobalt and tungsten do not occur in mineable concentrations in the vein material.

Recapitulation of Sampling Data

Sample No.	Ounce per ton	Percent		
	Ag	Cu	Pb	Zn
H-688	<0.1	<0.05	<0.1	<0.05
H-689	<0.1	<0.05	<0.1	<0.05
H-690	1.2	<0.05	<0.1	<0.05
H-691	0.4	<0.05	<0.1	<0.05
H-692	0.4	<0.05	<0.1	<0.05

< = less than

A composite of the above samples assayed <0.02 cobalt and <0.01 WO_3.

MINEABLE ORE RESERVES

There are no mineable ore reserves.

PRESENT STATUS

Exploration and Development

The present accessible development is centered along the centerline of the Madeline No. 2 claim, figure 3. The B and H Mining Company, Inc., is now unwatering and rehabilitating the main shaft on the Madeline No. 2 claim for examination and sampling. At present, one level is exposed 23 feet below the shaft collar, but is completely inaccessible. A second level is indicated whose top is at the present water level, 33 feet below the shaft collar. This level appears to be in solid rock.

Development on the Madeline No. 2 claim from west to east includes a water-filled, 3- by 4-foot cribbed discovery shaft partly buried in encroaching talus.

Trenches between the discovery shaft and the main shaft were inaccessible.

The main shaft has a 3- by 6-foot, inside cribbing, cross section and was pumped out to a depth of 33 feet when visited. The first level was exposed at 23 feet below the shaft collar and was entirely inaccessible. The top of the second level was uncovered at a depth of 33 feet below the shaft collar.

A dilapidated but usable 20- by 30-foot log cabin is used by the applicant as crude living quarters. A 7.5- by 20-foot excavation (pit number 5) was sunk beneath the cabin floor to a depth of 7 feet.

Pit number 6 is very shallow and of no consequence.

Pit number 4 has a 6- by 7-foot cross section and is 10 feet deep.

Pit number 3 has a 5- by 7-foot cross section and is 7 feet deep.

Pit number 2 has a 4- by 5-foot cross section and is 7 feet deep.

Pit number 1 has a 6- by 6-foot cross section and is 12 feet deep.

A ditch has been blasted through to drain a small lake which is believed to connect to mine workings.

Mining and Milling Equipment and Other Facilities

There is no serviceable mining or milling equipment on the property. A very old steam hoist and compressor and home-made jigs and

tables are completely useless. An old headframe over the main shaft is in very bad condition.

PROJECT PROPOSALS, WITH COSTS

The B and H Mining Company, Inc., proposes to unwater and rehabilitate a 3- by 6-foot cribbed shaft on the centerline of the Madeline No. 2 claim, located 740 feet east of the west endline of the claim, for examination and sampling of the vein. This shaft is surrounded by dumps which show the best indications of silver, lead, zinc, and copper. Should exposures of the vein indicate promise of finding substantial ore bodies, it is also proposed to build a new headframe, improve living quarters, and drain a small lake adjacent to the mine. In addition, an indeterminate amount of core drilling and underground exploration is proposed. An access road to Texas Creek is also contemplated. Costs, while vague, are distributed as follows:

Rough access road to Texas Creek, about	$ 2,500.00
Headframe, hand hoist, and mine timber	850.00
Small tools	275.00
Rental of horses, bulldozer, pumps, compressor, pneumatic drilling equipment and an unspecified amount of diamond drilling	4,760.00
Labor costs	7,500.00
Total	$15,885.00

CONCLUSIONS AND RECOMMENDATIONS

All evidence indicates that there is very little possiblity of discovering significant bodies of lead, zinc, or copper ore, and there is no evidence to substantiate the applicant's statement that cobalt and tungsten may occur in mineable concentrations in the vein material.

The proposed exploration program of the B and H Mining Company has no merit as a Defense Minerals Exploration Administration project and is recommended for denial.

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(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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. 3062
Metal or Mineral
Date Received 4/7/53
Estimated Cost
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: B + H Mining Co. Inc.
936 Brotherhood Bldg.
Kansas City, Kan.

(*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

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

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

(*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

(*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.

(*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 proje* (*a*) State the mineral or minerals for which wish to explore .....

(*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.

(*c*) The work will start within ..... days and be completed within ..... 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)?

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

☐ 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 June 23, 1952

D & H Mining Company, Inc.
(Applicant)

By S. R. Hubble, Vice Pres.

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.

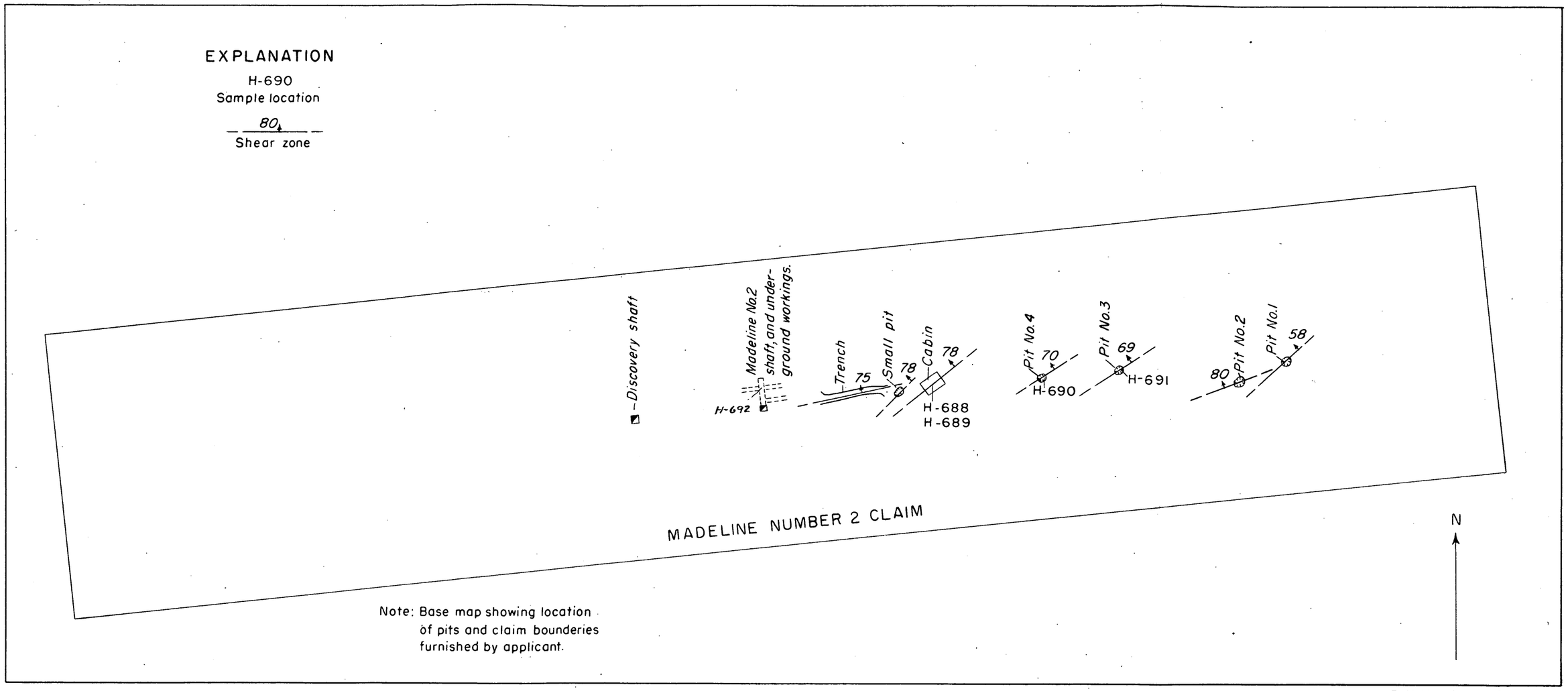
U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

Answer Sheet to Form-M[illegible]03

1. B & H Mining Co. Inc. 236 Brotherhood Bldg. - Kansas City, Kansas
1b. A corporation incorporated in the State of Kansas May 9, 1952
1c. Maurice I. Diggs, President- 3737 North 55- Kansas City, Kansas
S. R. Hukle, Vice President- 2016 Oakland Ave. - Kansas City, Kansas
George J. Harris, Sec. & Tres.- 1716 North 41st Terrace- Kansas City, Kans.
1d. Does not apply
2. ---
3. Madeline #2, Lode, US Survey 3932, Tincup Mining District, Located in Section 20, Township 13 South, Range 80 West, Gunnison County Colorado, containing 10 acres more or less.
3b. Madeline No. 2
3c. Lessee
3d. See photostat of lease (previously sent)
3e. ---
3f. Land is patented
4. Mine was worked in 1905 and photostat of smelter report is enclosed
4b. See (4) Two small shafts were started
4c. (map previously sent) The mineral deposit is in a vein and we believe it will body out also according to firm but unvarifiable information we may find some cobalt and tungsten
4d. A trail exists for 10 miles from regular highway which could be improved with road equipment. App. 60 miles to smelter- 20 miles to residence and supply point.
4e. Maybe obtained in Buena Vista and Leadville, Colo.
5. Lead, tungsten and cobalt
5b. We propose to rehabilitate the discovery shaft which is 4'X 6' X app.40' Erect a new head frame-install a hoist-emprove the living accomodations-drain a small lake adjacent to the mine property which we think drains into the mine thru faults-core drill if necessary
5c. 10 days---2 months
5d. Mr. Diggs of our corporation will remain on the job and supervise proceedings. Other members will be available should the project warrant full-time attention. Mr. Diggs has worked on the project for three years during the time permitted by weather conditions.
6.
6a. None
6b. Local prevailing pay scale will be applied. Expenditures for labor to be established persuant to information obtained from DMEA office (estimated working capital $ 10,000.00
6c. Hand tools 275.00
6d. Bulldozer, horses, pumps, compressor & drill tools, core drill 4670.00
6e. Head frame, hand hoist and timbering 850.00
6f. Not able to estimate
6g. Not able to estimate

$ 15,885 .00

7.
7a. Yes
7b. Money



Note: Base map showing location of pits and claim bounderies furnished by applicant.

E.N. Harshman Aug. 1953

FIGURE 1.–SURFACE PLAN OF MADELINE NO. 2 CLAIM B AND H MINING CO.

100 50 0 300 Feet

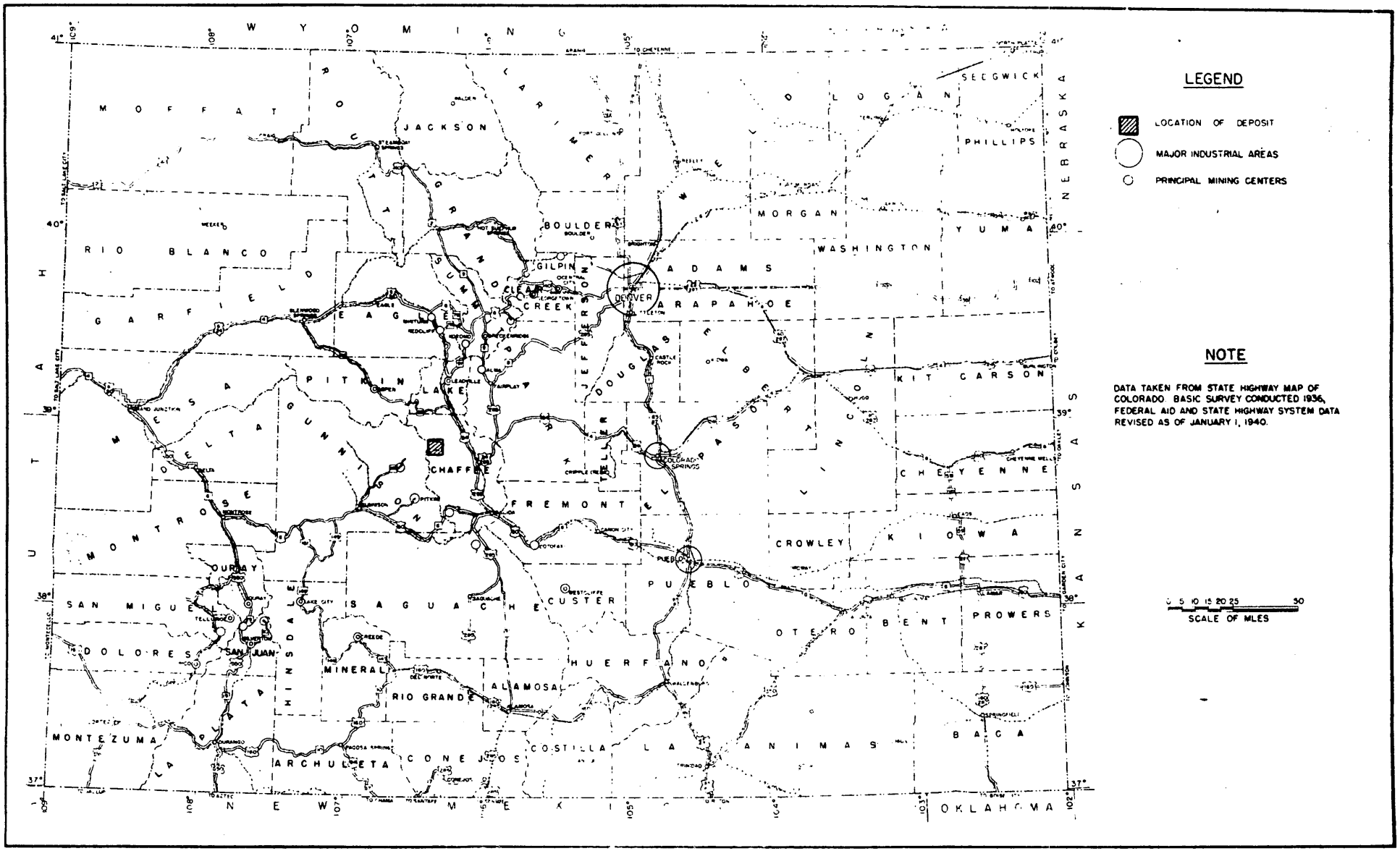
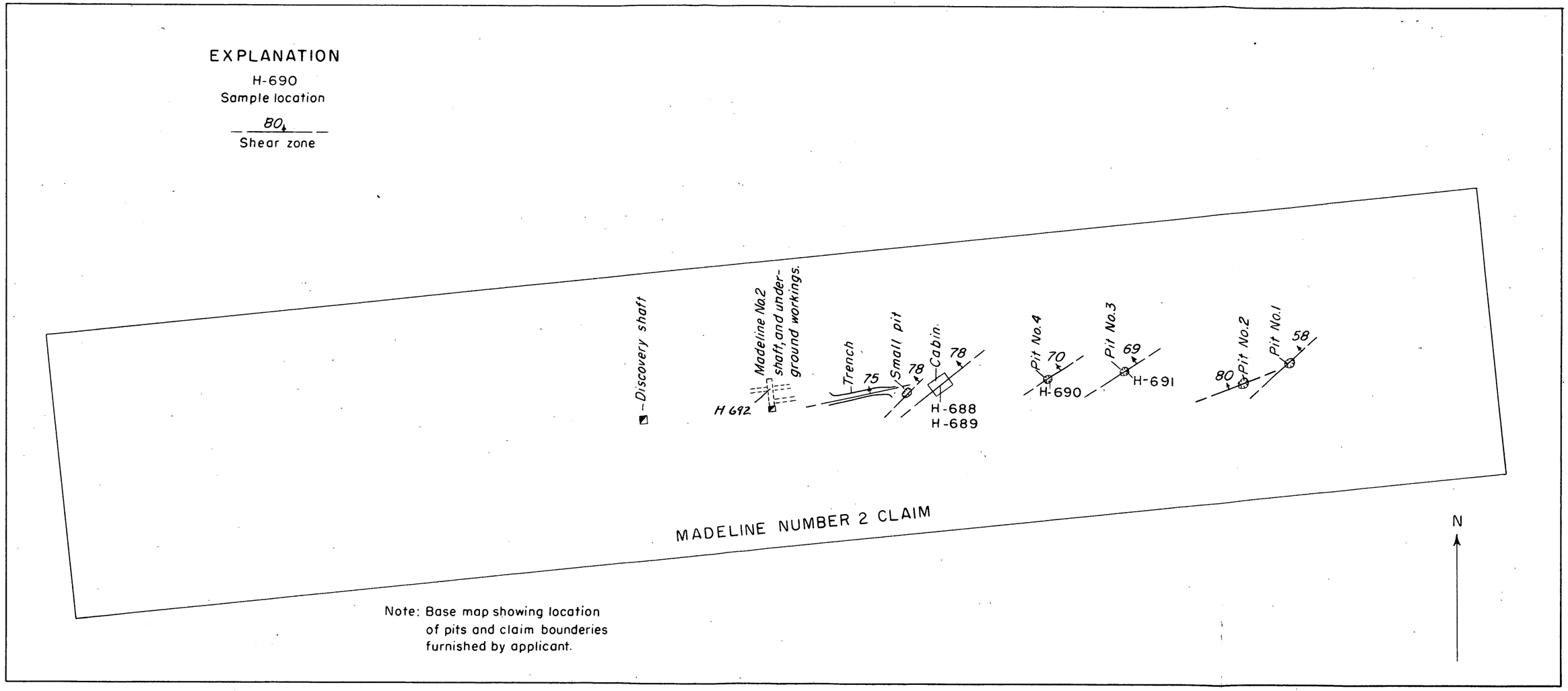


FIGURE 2. - LOCATION MAP, MADELINE NO. 2 LODE, B & H MINING COMPANY, INC., GUNNISON COUNTY, COLO. (DMEA 3062)



E.N. Harshman Aug. 1953

FIGURE 1.–SURFACE PLAN OF MADELINE NO. 2 CLAIM B AND H MINING CO.

100 50 0 300 Feet

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

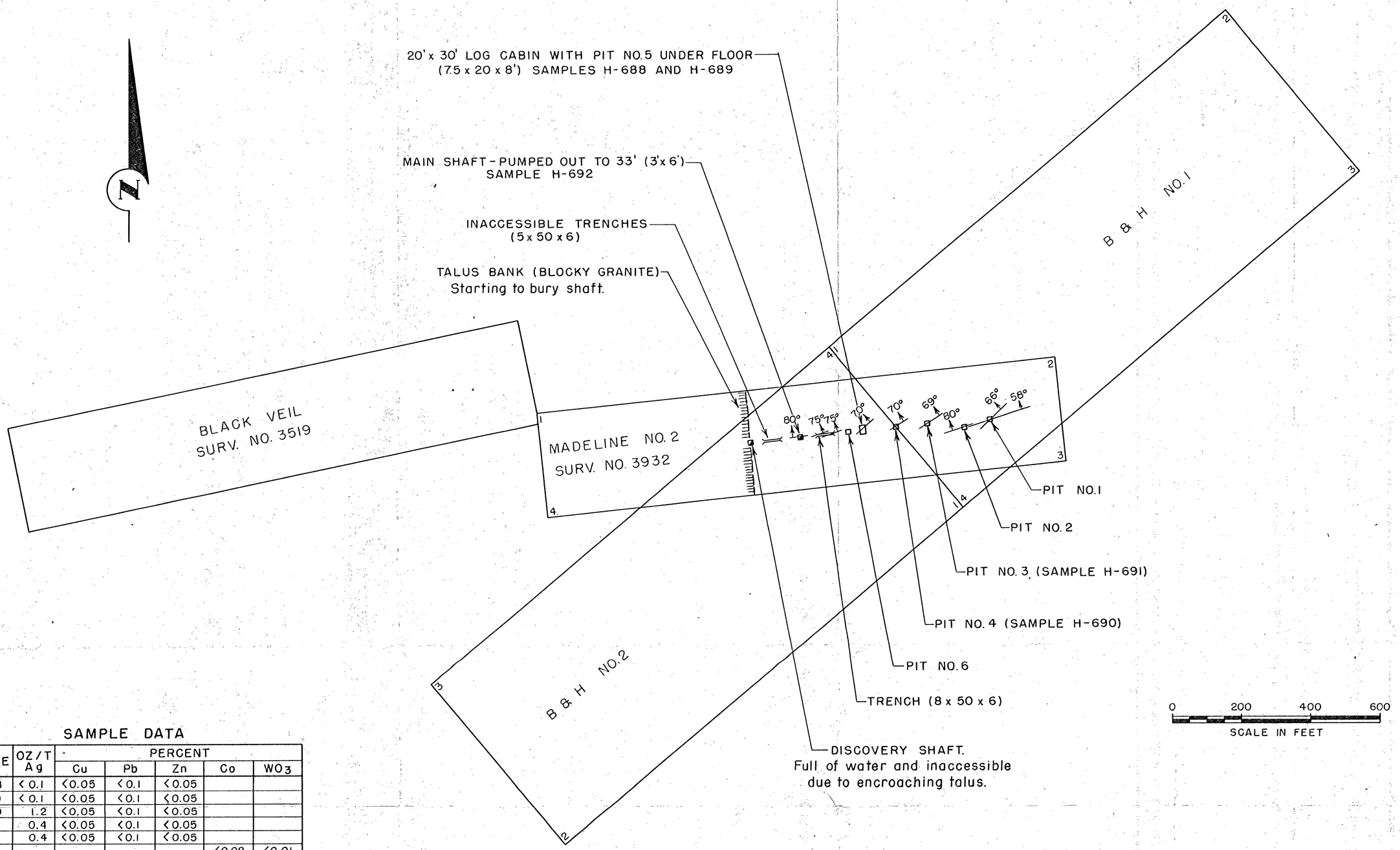
OFFICIAL BUSINESS

PAYMENT OF POSTAGE, $300
(PMGC)

U. S. GEOLOGICAL SURVEY
[illegible]
[illegible] WASHINGTON

DMEA 3062

Mr. George C. Selfridge, Chairman
Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.



SAMPLE DATA

SAMPLE	OZ/T Ag	PERCENT				
		Cu	Pb	Zn	Co	WO_3
H-688	<0.1	<0.05	<0.1	<0.05		
H-689	<0.1	<0.05	<0.1	<0.05		
H-690	1.2	<0.05	<0.1	<0.05		
H-691	0.4	<0.05	<0.1	<0.05		
H-692	0.4	<0.05	<0.1	<0.05		
*					<0.02	<0.01

*COMPOSITE OF SAMPLES H-688 TO H-692 INCLUSIVE.
<LESS THAN

MINERAL RESOURCES BRANCH - MINING DIVISION
REGION IV
BUREAU OF MINES

FIGURE 3 - CLAIM AND EXPLORATION MAP, MADELINE NO. 2 LODE, B & H MINING COMPANY, INC., GUNNISON COUNTY, COLO. (DMEA 3062)