DMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

DMEA NO. 4726

Application (Denied ✓
(~~Withdrawn~~
(After disposition, delete items not applicable)

Contract (Terminated - not Certified
(Cancelled
(Terminated - Certified
(Royalty Agreement

This is the official contract file containing all official records of the project. The records contained in the files are checked and are arranged in this order:

Left Side

Interim Royalty Audits
Reports of Royalty Review
Certification of Discovery
Certificate of Audit (Final)
Interim Audit(s)
Report of Review
Termination Notice or Agreement
Recision Notice
Assignment of Contract
Contract Amendments (latest on top)
Contract with all exhibits and annexes
Owner's Consent to Lien
Subordination Agreement
Leases and assignments of leases
✓ Application and attachments
(3) Envelope for maps

Right Side

Project summary
Work completed analysis
All other material is filed in chronological order with correspondence including the following reports as checked:

Final Field Team Report (Tab)
Operator's Final Report
(2R) Interim Reports
(2R) Operator's monthly reports and all attachments (latest on top)
X On-site Exam Report(s) (Tab)
(4) Settlement Sheets

When the volume of records is expected to warrant additional folders, or when convenience of reference warrants separate folders for certain records, they should be set up in this order:

Left Side

Folder No. 2: (In chron. order) Interim Summary Reports by W. O. Engineers

Right Side

Operator's Semi-Annual Report for Certified Project, Field Team Interim Reports, Operator's Monthly Report with transmittal, narrative, maps, and Field Team review.

Folder No. 3: Maps (Use pocket folder or envelope. Fold maps with title block out and show reference to related document or correspondence.)

Folder No. 4: Settlement Sheets

Folder No. 5: Drill Logs

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED APR 15 1957

DATE	INITIALS	CODE
DMEA		

April 11, 1957

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Application for DMEA Aid, (Copper) Harry J. Hagan (Monitor Group of Claims) Pinal County, Arizona

Enclosed are the original and two copies of the subject application. One copy of the application is being retained in our file.

The Applicant proposes to explore a mineralized target area by 7,200 feet of core drilling at a total estimated project cost of $56,196.00.

No drilling bids were submitted with the application.

E. N. Harshman

By E. N. Harshman
Acting Executive Officer

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DMEA

DEPARTMENT OF THE INTERIOR
APR 10 1957
REGION III
DENVER, COLORADO

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. 4726
Metal or Mineral copper
Date Received 4-15-57
Estimated Cost $56,196
Participation (Government %)

RECEIVED APR 15 1957 D.M.E.A.

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. Harry J. Hagen, Box 150 Globe, Arizona

(*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 The following unpatented Mining claims, Cumberland, Merrimac, Richmond, Richmond Annex, Monitor, Tucson, Mountain Maid, Admiral Dewey, Star, Black Eagle, Lincoln, ~~[illegible]~~, Tip top, Woodrow Wilson, Cilver Canyon No. 1, Lorain Cilver Canyon No. 2, Cilver Canyon No. 3, Recorded Pinal County in Sec. s 29, 30, 31, &32 T2S R14E.

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

(*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. See List attached

4. *Physical description.*—(*a*) See attached sheets 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.

Professional Engineer (Mining) STATE OF CALIFORNIA, ARIZONA, U.S.A. SHOW W. SMITH DEC. 31, 1957

16—66551-1

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

(*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 30 days and be completed within 1 yr 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.

See attached sheets

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?

[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 April 5, 1957

Harry J. Hagen
(Applicant)

By Harry J. Hagen

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

3 (f)

Name of Claim	Book	Page No.
Cumberland	42	194
Merrimac	42	191
Richmond	42	187
Richmond Annex	42	183
Monitor	42	199
Tucson	42	189
Mountain Maid	42	188
Admiral Dewey	42	193
Star	42	192
Black Eagle	42	190
Lincoln	42	180
Tip Top	28	99
Woodrow Wilson	30	11
Silver Canyon #1	42	269
Silver Canyon #2	42	270
Silver Canyon #3	42	271
Llorain	171	40

ORIGINAL FILE COPY
DMEA

4 (a) Presently no mining or exploration activities are being conducted on any of the claims. However, prior to my acquisition of the property, shipments of copper ore were made from two pits and one adit which are open for examination. In addition there is one pit on a shear zone in the diabase from which I shipped a carload of ore. This is open for examination. Also, there are numerous other prospect pits, adits and shafts. Nearly all are open except the shafts.

(b) Mining from the two main pits has produced nearly 10,000 tons of ore averaging two (2) percent copper and four (4) ounces of silver. This ore was mined prior to my acquisition of the property. However, I have copies of the smelter settlement sheets to verify this production. Since my acquisition of the claims I have shipped fifty-three tons of ore which assayed 4.46% copper and 22 ounces of silver. The gross value per ton was $40.00.
No ore reserves can presently be calculated though commercial ore is visible.

(c) The location of these claims, which is approximately four miles northeast of Ray, Arizona, places the group within a highly mineralized district. An examination of the included "Area Location Map" reveals that the group is within a triangle which has as its corners Superior, Globe and Ray. In addition, the Hayden-Winkelman area is just southward.
The Area is known specifically as the Mineral Creek Mining District and is located at the north end of the Dripping Springs range of mountains. F. N. Ransome in his Ray Folio (No. 217-U. S. Geological Survey) describes this range as having been carved from an almost chaotic assemblage of small fault blocks. A complete geologic description of the range is contained in the folio. Briefly however, the range appears to be -- "the result of collapse of a widespread inability of the deeper rocks of the earth's crust to support their load". This quotation from Ransome's Ray Folio.
The formations existing in the area covered by the claims, as mapped by J. E. Fowells, include Pre-Cambrian Pinal schist, the Cambrian Apache group--Pioneer shale, Barnes conglomerate, Dripping Springs quartzite and Mescal Limestone--and intruded diabase of late Paleozoic or early Mesozoic time. An examination of the included geologic map shows the approximate location of these formations.
Mineralization, consisting primarily of copper oxides, though some sulphides are visible, is confined predominantly to a series of northeast trending fissures. However, in two areas--the Monitor and Richmond pits--the mineralizing solutions apparently permeated into the adjacent Dripping Springs quartzite. It is from these two areas that the major production has come. Strong mineralization also occurs in a fissure in the diabase on the Admiral Dewey claim. The strike of this zone is N 88° E and dips 88° southeasterly. Probably extension of this zone can be traced in pits northeastward where some mineralization is visible. It is from this zone on the Admiral Dewey claim that fifty-three (53) tons of 4.46% copper ore were shipped.
Numerous other accurences of mineralization can be seen as evidenced by the prospect holes, adits and shafts that dot the claims.
It is because of these numerous outcrops of mineralization in northeastward trending fissures in Dripping Springs quartzite and the permeating into the quartzite of the mineral which produced two orebodies, it is my belief that this offers evidence of a potential orebody in the Pinal schist.
The orebody at Ray, four miles southwesterly, is in the Pinal schist.
It is the opinion of this writer that if the schist was subjected to the faulting action that appears on surface it would be crushed sufficiently to offer a very permeable host rock for mineralizing solutions. And we know from the orebodies at Ray the schist is nor-

mally favorable host rock in this area.

Though no definite relationship can be established between the orebodies on the Richmond and Monitor claims, it is believed that they, as well as the other mineralized zones, had a common source. In view of the closeness of the two highly mineralized areas (approximately 1,000 ft. separate the two areas) and their probable common source and the potentially favorable Pinal schist underlying these areas, it is proposed that at least three deep diamond core-drill holes be put down to and penetrating into the schist at least 150 ft. in the area between the Monitor and Richmond pits.

(d) The claim area is easily accessible by road. See the included "Area Location Map" for route to the claims from Globe. The distance from the latter to the property is only thirty-seven miles.

(e) Sufficient manpower, materials, supplies, equipment and water are available for exploration and mining purposes. Power for mining would have to be produced at the property.

5 (b) It is proposed that at least three diamond core drill holes be put down to a depth that will penetrate at least 150 ft. into the Pinal schist. The maximum amount of drilling in this stage to be 2,200 ft. Minimum depths of the holes can be established by summing the average thicknesses of the formations as given by Ransome - (Ray Folio #217) and adding 150 ft. for penetration into the schist. This approaches 650 ft. This figure can be altered however by variation in thicknesses of the formations, location of the position of the hole-collar within the Dripping Springs quartzite, dip of the beds and faulting.

The location of these holes shall be between the Richmond and Monitor pits as indicated on the included geologic map.

In addition to the above drilling, a second stage is proposed. This to include 5,000 ft. drilling and the decision to go ahead with it to be a joint agreement between DMEA and the operator, and to be based on the results of the first stage drilling.

(d) The applicant is the owner and operator of Hagen Construction Company, Inc. which carries on varied construction projects of considerable size on a contract basis. Should this loan be granted necessary engineering consultants will be hired to assist in supervision and geological correlation.

Stage 1:

6 (a) Independent Contracts

(1) Core Drilling

2,200 ft. @ $7.50/ft $16,500.00

(2) Drill Sites:

D-7 Tractor 8 hrs @ $14.00/hr $112.00

(b) Supervision & Consultants

(1) Engineering Consultant

$750/month prorated $30/day

Two Months - 10 days/month $600.00

(c) None

(d) "

(e) "

(f) "

(g) Miscellaneous

(1) Assaying

60 samples @ $2.00 each $120.00

$ 17,332.00 Total Stage 1

Stage II

6 (a) Independent Contracts:

(1) Core-Drilling

5000 ft @ $7.50/ft. $37,500.00

(2) Drill Sites

D-7 Tractor 16 hrs. @ 224.00

(b) Supervision - Consultants

(1) Engineering Consultant

$750/month Prorated $30/day

Three months 10 days/month x $30.00 day 900.00

(c) None

(d) "

(e) "

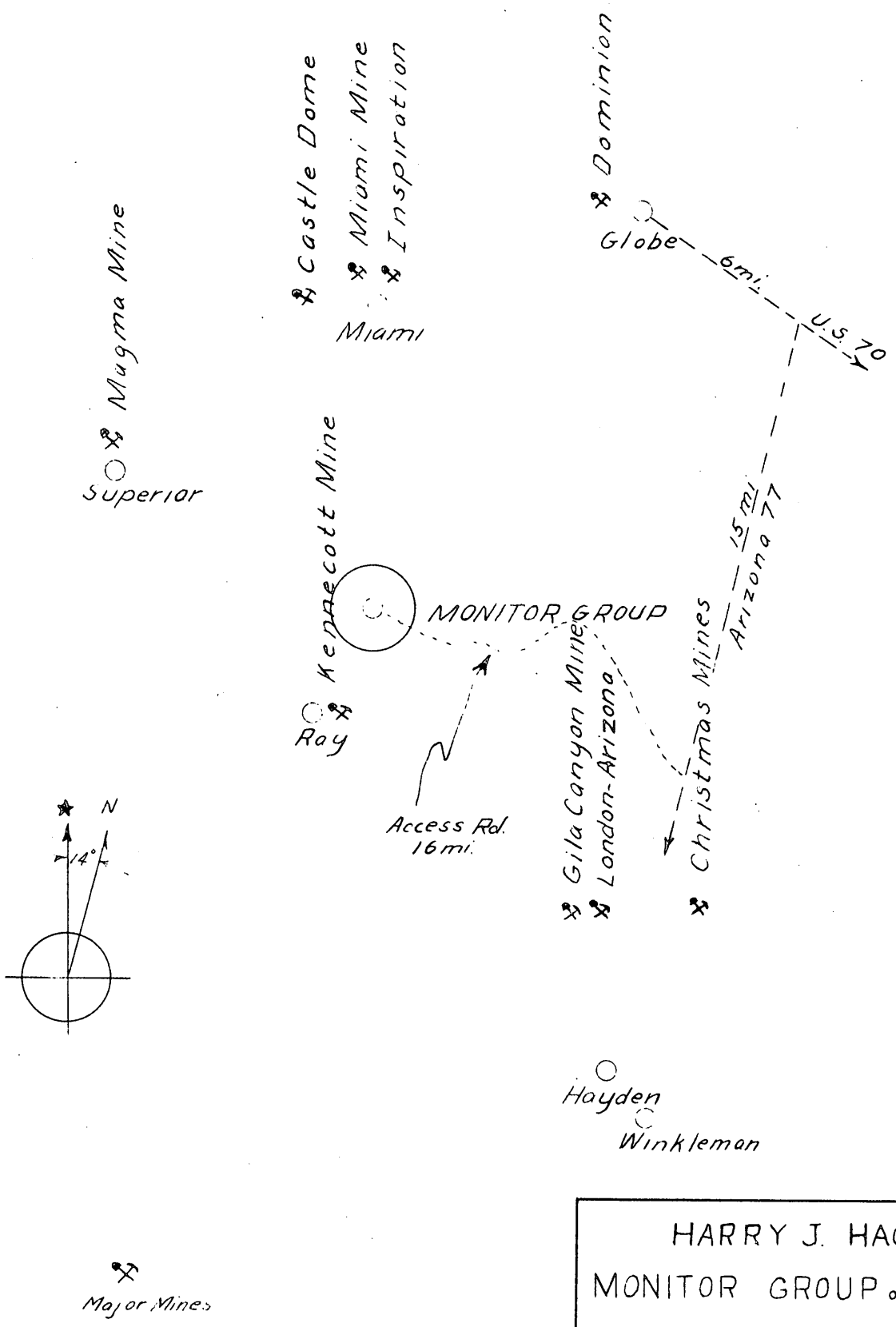
c (f) "

(g) Miscellaneous

(1) Assaying

120 samples @ $2.00 each 240.00

$38,864.00 Total Stage II



HARRY J. HAGEN

MONITOR GROUP of CLAIMS

AREA LOCATION MAP

Pinal County Arizona

Scale 1" = 5 miles March 26, 1957

Drawn by: H. W. SMITH, R.P.E.

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DATE		CODE

DMEA Form 7
(12-56)

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Date	Surname	Code
6/18	Mynine	320
6/19	Selfridge	30
6/19	Lamb	130
6/19	Nelson	130
"	Johnson	110
21	Mittendorf	100
		225
		[redacted]

JUN 24 1957

Mr. Harry J. Hagen
Box 150
Globe, Arizona

Re: Docket No. DMEA-4726 (Copper)
Harry J. Hagen
Monitor Claim Group
Pinal County, Arizona

Dear Mr. Hagen:

Your application for aid for an exploration project and other reports available to us in Washington referring to the claim 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 copper ore on your property, indicates to us that the probability of disclosing significant ore reserves 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 Mineral Program and for bringing your property to our attention.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

WRGriswold/er 6/18/57
Copy to: Docket
Admr R File
Op. Committee
Mr. McMahon, USBM
Mr. Kiilsgaard, USGS
Region III (2)
Chron.

8623

DMEA Form 7
(12-56)

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Date	Surname	Code

June 18, 1957

Memorandum for the File

From: Director, Division of Base Metals

Subject: Justification of Denial for Docket No. DMEA-4726, Harry J. Hagen, Monitor Claim Group, Pinal County, Arizona, Copper.

The area in question, in Pinal County, Arizona, is not far from the Ray Mine of the Kennecott Copper Corporation (4 miles to the south). Some 6,000 tons of oxide copper ore have been mined from two open pits, apparently there is patchy mineralization in the shales overlying the Pinal schist (host rock at Ray).

Wagon drill holes already completed give little expectancy, apparently the underlying schist is barren. Little vertical veinlets in the shales have been followed, with no significant results. Probably a small additional tonnage of ore could be found in the shales adjoining the two small pits but, from the data submitted, there appears to be little promise of anything more than that.

W. R. Griswold

WRG/er
Copy to: Docket
Chron.

8623

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DATE	INITIALS	CODE
6/14	C	220
6/14	WRG.	500

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

June 13, 1957

~~Memorandum~~

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

From: Commodity Specialist, Branch of Base Metals

Subject: Review of Report of Examination, Docket No. DMEA 4726 (copper) Harry J. Hagen, Monitor Claim Group, Pinal County, Arizona. $56,196.00

The applicant proposed a 2 stage exploration program consisting of a total of 7,200 feet of diamond drilling to test for promising copper occurrences in the precambrian Pinal schist and overlying sediments. A field examination and a study of previous drill hole logs indicate that copper deposits in the Monitor group of claims are small and discontinuous and that the Pinal schist underlying the applicants property is unfavorable and essentially barren of mineralization. Accordingly, the examiners recommend that the application be denied.

I concur in that recommendation.

A. D. McMahon

A. D. McMahon

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

IN REPLY REFER TO:

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

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DATE	INITIALS	AMOUNT
6/12	WRG	220
6/13	WRG	500
✓		

June 10, 1957

Re: DMEA 4726
Harry Hagen
Monitor Group
Pinal Co., Arizona
$56,196.00 - Copper

Memorandum

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

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

Subject: Review of Field Team Report

The applicant requested assistance in diamond drilling the Pinal schist (Precambrian) below near surface deposits of copper in the overlying Dripping Spring shale (Cambrian). The Pinal schist is the host rock of the large copper deposits at Ray, 4 miles to the south.

Various operators, from 1880 to 1957, have mined an estimated 6,047.2 tons of ore, averaging about 2 percent copper (oxide) and 4.5 Oz. silver per ton, from 2 open cuts in the 50-60-foot shaly member of the Dripping Spring formation. Wagon drill holes in the floor of the open cuts indicate the mineralization is irregular and uncertain.

The drill holes did not reach the Pinal schist whose only exposure is about 1000 feet from the Monitor pit, and the highest point on the schist is about 100 feet below the level of the bottom of the pit. The schist is essentially unmineralized, and in the opinion of the examiners the probability that the schist underlying the general pit area will be more favorable is small. The examiners and the Field Team recommend that the application be denied.

I concur with the recommendation.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

June 4, 1957

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DATE	INITIALS	CODE
6/7	JWS	220
		130
6-10	C	220
6/10	WRS	500
DMEA		

Memorandum

To: Secretary to the Operating Committee,

From: DMEA Field Team, Region III

Subject: Docket DMEA-4726 (Copper) Harry J. Hagen (Monitor Claim Group) Pinal County, Arizona - Joint Report of Examination

Enclosed are the original and three copies of the Joint Report of Examination on the subject property by T. M. Romslo, USBM, and W. L. Emerick, USGS.

The Field examiners conclude that the probability for making a significant discovery is not sufficiently promising to justify Government participation. Accordingly they recommend that the Applicant's work proposal be denied to which the Field Team concurs.

E. N. Harshman

E. N. Harshman
Acting Executive Officer

Reviewed by
DMEA OPERATING COMMITTEE
6-10-57
(date)

DMEA
DEPARTMENT OF THE INTERIOR
JUN 3 - 1957
REGION III
DENVER, COLORADO

TRANSMITTED

JUN 4 1957

Box 4126 University Station
Tucson, Arizona

May 31, 1957

Memorandum

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

From: T. M. Romalo
W. L. Emerick

Through: E. N. Harshman
W. R. Storms

Subject: Docket No. DMEA-4726 (Copper) Harry J. Hagen (Monitor claim group), Final County, Arizona

Enclosed is the original and 8 copies of a joint field examination report on the above docket recommending denial of the application.

Also enclosed is the Bureau copy of the docket. Survey copy of the docket is being sent under separate cover to E. N. Harshman's office.

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

W L Emerick
W. L. Emerick, Geologist
U. S. Geological Survey

TMR:WLE:ms

cc: Acting Executive Officer (8)
E. N. Harshman
W. R. Storms
W. H. King

RWLS.

OFFICIAL COPY
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RECEIVED JUN
130
220

Reviewed by
DMEA OPERATING COMMITTEE
6-10-57
(date)

FOR UNITED STATES GOVERNMENT USE ONLY

ON-SITE Report

DMEA
DEPARTMENT OF THE INTERIOR
JUN 3 - 1957
REGION III
DENVER, COLORADO

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

TRANSMITTED

JUN 4 1957

DMEA-4726 (Copper) Harry J. Hagen

(Monitor Claim Group)

Pinal County, Arizona

COPY
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RECEIVED

130 ~~26~~
220

W. L. Emerick, Geologist
U. S. Geological Survey

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

May 31, 1957

Reviewed by
DMEA OPERATING COMMITTEE
6-10-57
(date)

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The Monitor group of mining claims in Pinal County, Arizona were examined by the Defense Minerals Exploration Administration in connection with Harry J. Hagen's application for aid in proposed explorations for copper. The examination was made on May 13, 1957. The proposed explorations of the application, docket number DMEA-4726, comprised the diamond drilling of 2,200 feet of holes in 2 stages at an estimated cost of $56,196.00.

The Monitor group of claims was first located probably about 1880. During the following 20 to 30 years the property yielded small amounts of sorted silver ore from shallow shafts and short adits. The property was inactive to 1948, and was intermittently worked by lessees for copper to 1952, during which period approximately 1,000 tons of ore were produced from small open stopes mined from adits. During 1952 and 1953, approximately 5,000 tons of the ore was produced from open pits at each of 2 principal mineralized zones. The areas adjoining these zones also were tested by drilling numerous shallow holes. The last production was in March 1957, when Mr. Hagen mined 1 carload of ore from an open pit north of the principal workings. Total production from the property is believed to be about 6,000 tons of ore averaging approximately 2 percent copper, and 4.5 ounces of silver a ton.

Precambrian Pinal schist crops out in a small area of the Monitor group of claims. At other places it is unconformably overlain by all of the members of the Cambrian Apache group of sediments except the Scanlon conglomerate. Exposed members of the Apache group are the Pioneer shale, Barnes conglomerate, the Dripping Spring formation, and the Mescal limestone. The rocks of the area have been intruded by masses of diabase and quartz monzonite and have been displaced in varying degrees by normal faults.

Ore mineralization, essentially all as copper oxides, mainly occurs as incrustations along the crackled surfaces of a shaly member of the Dripping Spring formation and as disseminations in the shale. It also occurs along weak discontinuous fissures in the shale and locally along the contacts.

Field evidence and a study of drill hole logs indicates that the copper deposits of the Monitor group of claims are confined to small, local concentrations of limited extent in the Dripping Spring formation. Therefore, since there is little chance of finding significant reserves of copper ore, we recommend denial of the requested aid in exploration of the applicant's property.

DMEA-4726 (COPPER) HARRY J. HAGEN
(MONITOR CLAIM GROUP)
PINAL COUNTY, ARIZONA

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Topography, Physical Features and Climate	2
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Diamond Drill Hole No. 2 (Kennecott Copper Corp.)	14
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FIGURE 3 - Sketch map showing location of wagon drill holes --------- Followimg page	7

INTRODUCTION

The Defense Minerals Exploration Administration received an application from Harry J. Hagen for aid in exploration for copper on his Monitor Group of claims in Pinal County, Arizona. The application was given docket number DMEA-4726, reviewed by the Operating Committee and forwarded to the Field Team, Region III for a field examination of the property and recommendations.

The applicant proposed that the property be initially tested by diamond drilling a total of 2,200 feet in 3 holes. An additional 5,000 feet of diamond drilling was proposed for further explorations if found warranted by the initial testing. The total cost of the 7,200 feet of drilling was estimated at $56,196.00.

The field examination of the property was made May 13, 1957 by W. L. Emerick, geologist, U. S. Geological Survey, and T. M. Romslo, mining engineer, U. S. Bureau of Mines. They were accompanied by the applicant.

LOCATION AND ACCESSIBILITY

The Monitor Group of claims is situated about 15 air miles southeast of Globe, Arizona, in unsurveyed Secs. 29, 30, 31, and 32, T. 2 S., R. 14 E., Mineral Creek Mining District, Pinal County, Arizona, (fig. 1). Globe, the county seat of Gila County, is located on U. S. Highways 60 and 70 and is a station on a branch line of the Southern Pacific railroad.

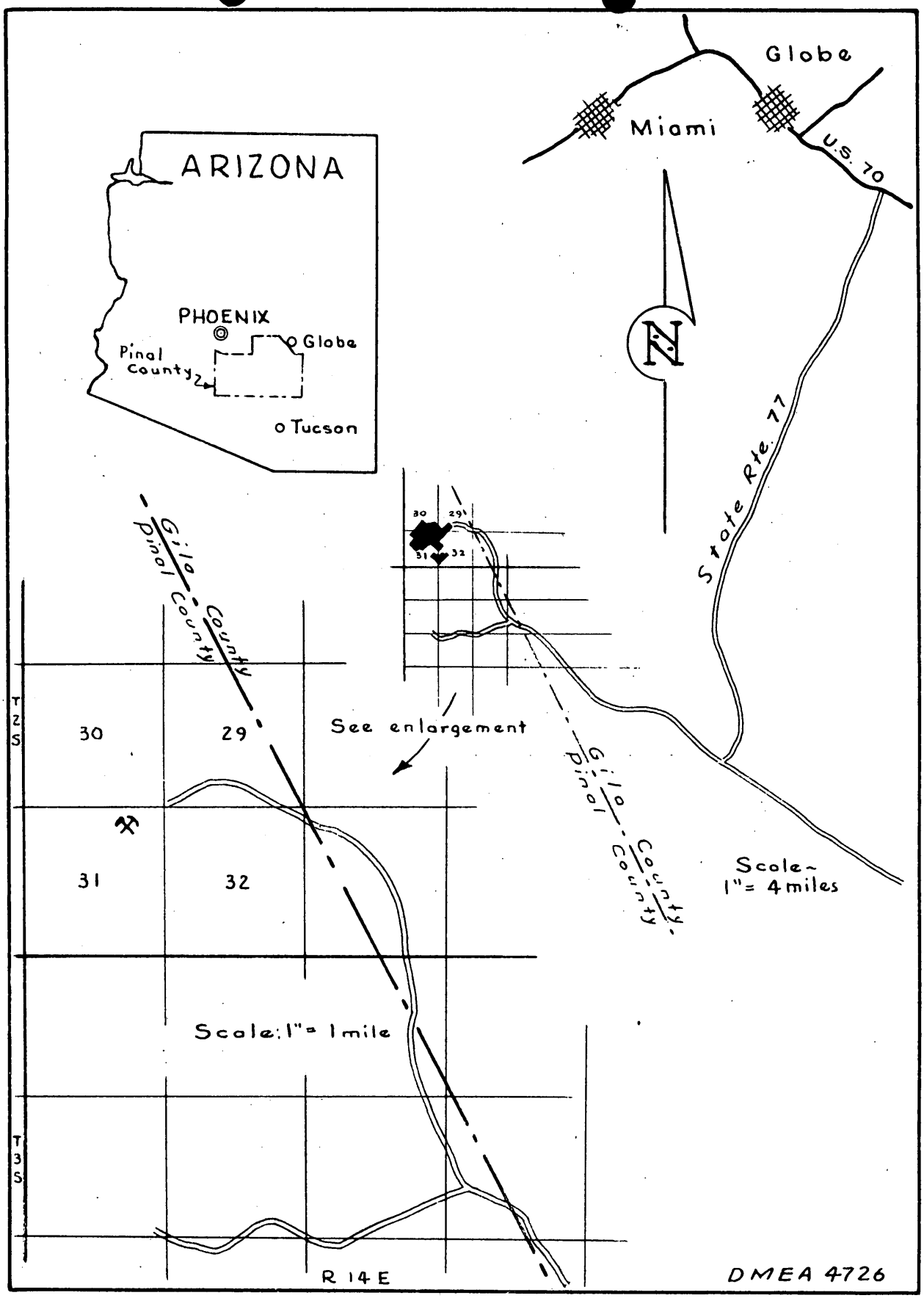


Fig. 1 Location map, Harry J Hagen
Monitor Group of Claims
Pinal County, Arizona

The property is accessible from Globe by traveling 6.0 miles southeasterly on paved U. S. Highway 70 to its junction with State Highway 77. Proceed 19.4 miles south on the latter highway of dirt or blacktop construction and then turn right onto a dirt road that is signed Bar Flag Ranch. A travel log for the remaining 17.1 miles to the mine is set down below:

Junction State 77 and Bar Flag Ranch road -----	0.0
Directory of travel at forks on dirt roads:	
Left ----------	1.4
Left ----------	4.6
Straight ahead ----------	6.2
Straight ahead ----------	12.9
Left onto mine road ----------	14.6
Lower open cut ----------	17.1

Very steep grades are confined to the 2.5 miles of mine road. A 4-wheel drive vehicle is recommended for travel over the mine road.

TOPOGRAPHY, PHYSICAL FEATURES AND CLIMATE

The Monitor Group of claims are at an average altitude of about 4,300 feet near the northern extremity of the northwesterly trending Dripping Spring Mountains. It is on the eastern slope and midway, about 1 mile, between the crestline of the mountains and Dripping Spring Valley that drains southeasterly. Topography near the mine is rugged. Relief between creek bottoms and mountain peaks within a mile is as much as 2,000 feet.

Vegetation at the higher altitudes is largely confined to forage grasses and scattered small shrubs. Mountain cedar and scrub oak trees occur as small growths along creek bottoms.

Summers are hot and winters are mild. Maximum temperatures range from about 10° F. to over 100° F.

Annual precipitation averaging about 15 inches principally occurs as summer thunder showers. Precipitation during the winters occurs as light falls of rain and snow.

HISTORY AND PRODUCTION

Mr. Hagen, the applicant, reported that the Monitor Group of claims was originally located by Thomas Haley and Wm. Suffrien, probably about 1880. During the following 20 to 30 years they produced small amounts of sorted silver ore from a shallow shaft and short adit. The ore was packed by mules to a nearby valley and then hauled by wagon to Tucson. The next operation was during 1944 when W. Crawford, W. T. Parker and R. W. Nicholas mined and shipped 2.4 tons of ore containing 22 percent copper and 79 ounces silver a ton to a smelter at Hayden, Arizona.

The property then was inactive to 1948 when it was worked by Steve Cochran and P. G. Flumerfelt. They produced, probably from the veins of the upper open pit, 43.8 tons of ore averaging 3.8 percent copper and 13.8 ounces silver a ton. In 1949 and 1950, John D. Tynes, the Monitor Mining and Development Co., and Charles F. Moore

successively mined the upper vein for a total of 443.8 tons of ore averaging about 2.5 percent copper and 8.8 ounces silver a ton. Operations during 1951 probably were confined to the drilling of 2 diamond drill holes by the Kennecott Copper Corp.

During 1952 and 1953, Charles F. Moore and G. R. French worked the lower vein by open pit mining. Run of mine ore was concentrated by screening. The oversize material, about 1 ton of plus 6-inch for each 4 tons treated, was discarded and the remainder was shipped to International's smelter, Miami, Arizona. Production for the 2 years, according to Bureau of Mines Minerals Yearbooks, was 5,904 tons of siliceous copper-silver ore. Smelter settlement sheets furnished by the applicant showed the 4,478 tons of the ore contained about 1.8 percent copper, 4.1 ounces silver a ton, 60 percent silica and 14 percent alumina. Grade of the ore as mined has been estimated at about 1.4 percent copper and 3.1 ounces silver a ton.

The property then was idle to 1956 when C. F. Moore produced 226 tons of ore averaging about 1.85 percent copper and 4.5 ounces silver a ton from the veins of the upper open cut. Subsequent to this production, Moore continued operations that were financed by Mr. Hagen to March 1957. During this period 25 to 30 test holes were put down with wagon drills mainly in the area of the upper and lower open cuts. The holes were bottomed at depths ranging from 40 to 100 feet. Other operations were confined to the production of 53.2 tons of ore averaging 4.46 percent copper and 22.1 ounces silver a ton. The ore came from a small open pit north of the main workings.

The total recorded production from the property is 6,047.2 tons of ore averaging about 2 percent copper and 4.5 ounces silver a ton.

The property has been inactive since March 1957. There is no mining or milling equipment on the property. Buildings are confined to a small frame building near the original discovery shaft.

EXTENT AND OWNERSHIP OF THE PROPERTY

The property comprises 17 unpatented lode mining claims all of which reportedly are recorded in books of Pinal County. As shown in figure 2, 14 of the claims are in the Monitor Group and the other 3 are in a nearby group.

The 17 claims of the 2 groups reportedly are owned by the applicant, Harry J. Hagen, Box 150, Globe, Arizona. Mr. Hagen said that he is the owner and operator of the Hagen Construction Company, Inc., which carries on varied construction projects of considerable size on a contract basis.

GEOLOGY

The geology of the Dripping Springs Mountains in the area of the Monitor Group of claims (Fig. 2) consists of Precambrian Pinal schist unconformably overlain by most of the Cambrian Apache Group of sediments. With the exception of the Scanlon conglomerate, all the other members of the Apache Group -- the Pioneer shale, Barnes

conglomerate, Dripping Spring formation of shales and quartzite, and the Mescal limestone -- crop out in the area. In general, the dips of the sediments are southerly. Diabase and quartz monzonite porphyry masses intrude the Paleozoic and older rocks. Normal faults trending northeast and northwest have displaced the rocks of the area in varying degrees.

Copper mineralization occurs mostly in a much crackled shaly member in the upper part of the Dripping Spring formation as disseminations and as incrustations along the crackled surfaces in the shale; as fillings along fissures in the shale; and locally along contacts. There is no persistency in the mineralization whether it occurs in the shale, in the fissures, or along the contacts. The fissures are not persistent either. The Pinal schist cropping out in the area appears unfavorable for mineralization except for very occasional occurrences of pyrite.

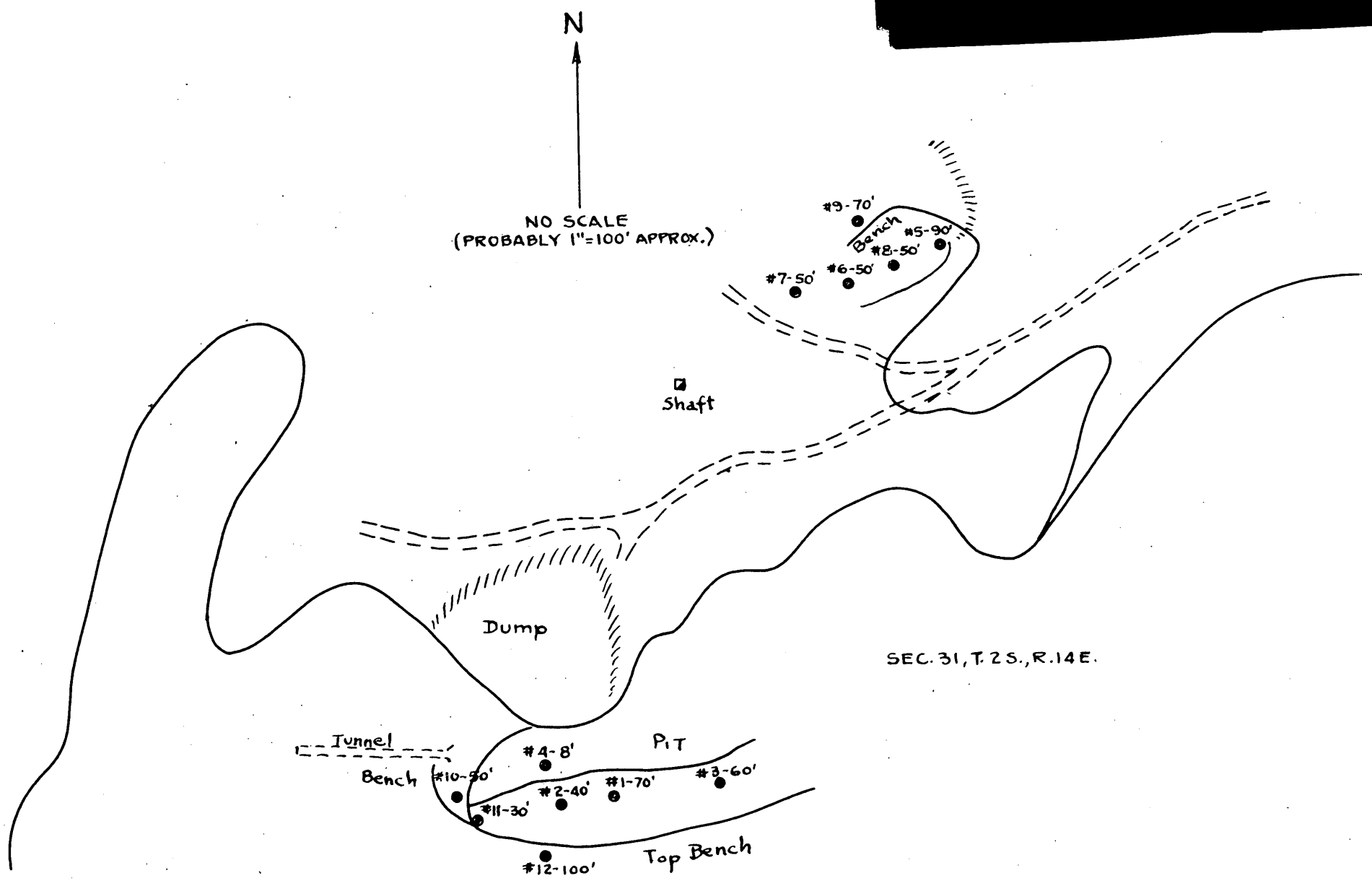
Sulphides are rare and the copper oxides, malachite and azurite, are the principal minerals. It is possible some cuprite is associated with the malachite and azurite in the contact vein exposed in the trench in the northern part of the Admiral Dewey claim (Figure 2).

In the Monitor pit (Figure 2) the mineralization is confined mostly to the 50-60 foot shaly member of the Dripping Spring formation in which the copper oxides impregnate the shale and occur as incrustations on the crackled surfaces of the shale. On the southwest end of the pit a thin (1/2-3/4 inch) vein along a vertical fissure was followed for about 40 feet with an adit before it pinched

out. Twelve wagon drill holes (Figure 3 and Annex) ranging from 8 to 100 feet in depth were put down in the Monitor pit area. Hole No. 1 encountered 40 feet of minable grade ore averaging 3.1 percent copper; Hole No. 4, eight feet of 2.2 percent copper; and the first 10 feet of Hole No. 5, material averaging 1.04 percent copper. None of the remaining 9 holes indicated any material above 0.8 percent copper. These holes suggest that the occurrence of the mineralization in the shale, as far as minable grade is concerned, is irregular and uncertain. It is probable that the local extent of the mineralized part of the shaly member is not much greater than already uncovered in the pit.

The two exposures of quartz monzonite porphyry, northwest of the Monitor pit (Fig. 2) in the road cut and along the northwest side of a fault, are unmineralized, and apparently the intrusion resulted only in very minor alteration of the intruded rocks along the contact. Near the south end of the limestone-porphyry contact northwest of the fault, earlier prospectors uncovered a small mineralized vein about 1 inch thick in which copper oxides are present in a black earthy material, probably manganese.

The Richmond pit (Fig. 2) is similar to the Monitor pit and here also the extent of copper mineralization seems to be roughly outlined by the pit. South extension of the material was tested in earlier exploration by driving adits along several southerly trending mineralized fissures in the Dripping Spring shaly member. Vein material along the fissures was too thin, or too low grade to



TRACED FROM SKETCH BY APPLICANT-1957.

DMEA 4726

FIGURE 3.- SKETCH MAP SHOWING LOCATION OF WAGON DRILL HOLES IN AREA OF MONITOR PIT, HARRY J. HAGEN, MONITOR GROUP OF CLAIMS, PINAL CO., ARIZONA.

be economic, and generally pinched out in less than a hundred feet. Twenty-five to thirty wagon drill holes were drilled in the area of the Richmond pit. The deepest hole was 100 feet, and the average depth of holes was 80 feet. Only one of these 25 to 30 holes had a few feet of material averaging about 2 percent copper. No records were available on the holes.

Kennecott Copper Corporation, whose objectives are unknown, drilled two holes on the property in 1951 (Fig. 2 and annex). Both holes were collared in diabase. Hole No. 1 was stopped in probable Dripping Spring formation at a depth of 407 feet; Hole No. 2 was stopped in the Pioneer shale at a depth of 368 feet. No ore grade material was encountered in either hole. Inasmuch as another 100 to 150 feet in Hole No. 2 probably would have penetrated the Pinal schist, it does not appear the schist was their objective if equipment and drilling conditions were satisfactory.

Having in mind the nearness of his property to the Ray mine of Kennecott Copper Corporation (approximately 4 miles southwest), the applicant proposed to drill 3 diamond drill holes to the underlying Pinal schist (Fig. 2) on a line between the Monitor and Richmond pits. The Pinal schist is the host rock for the copper ores at Ray. Examination of the Pinal schist exposed on the northeast corner of the Monitor claim and in adjacent claims to the northeast revealed the schist to be essentially barren of mineralization,

except possibly for a very occasional occurrence of pyrite. The geological probability that the schist underlying the applicant's proposed drill holes will be more favorable than shown by the outcrop on the property is small.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded from field examination, and a study of existing drill hole logs, that the copper deposits on the applicant's property in the Dripping Spring formation are small, local concentrations of limited extent and persistence from which significant tonnages of ore are not expectable. It is also concluded that the Pinal schist underlying the applicant's property is unfavorable and essentially barren of mineralization. It is therefore recommended that the application be denied.

Assays made in
January 1957

ANNEX

Drill Hole Samples (Monitor claim)

No.	Location		Silver oz./ton	Silver Value	Percentages Copper
1	Hole #1	0 - 10'	4.40	3.96	1.60
2	"	10' - 20'	47.60	42.84	6.90
3	"	20' - 30'	10.80	9.72	3.20
4	"	30' - 40'	2.80	2.52	0.80
5	"	40' - 50'	2.60	2.34	Nil
6	"	50' - 60'	2.20	1.98	Nil
7	"	60' - 70' water	0.40	0.36	0.80
8	Hole #2	0 - 10'	0.40	0.36	0.40
9	"	10' - 20'	0.80	0.72	0.30
10	"	20' - 30'	0.20	0.18	0.05
11	"	30' - 40' water	0.20	0.18	Nil
12	Hole #3	0 - 10'	0.30	-	0.20
13	"	10' - 20'	0.20	-	0.30
14	"	20' - 30'	Trace	-	0.04
15	"	30' - 40'	Trace	-	0.04
16	"	40' - 50'	Trace	- -	0.07
17	"	50' - 60'	Trace	-	0.12
18	Hole #4 Total 8' deep		2.60	2.35	2.20
19	Hole #5	0 - 10'	1.0	0.90	1.04
20	"	10' - 20'	Trace	-	0.20
21	"	20' - 30'	0.3	-	0.60
22	"	30' - 40'	Trace	-	0.15
23	"	40' - 50'	Trace	-	0.12
24	"	50' - 60'	Trace	-	0.05
25	"	60' - 70'	Trace	-	0.05
26	"	70' - 80'	0.20	0.18	Nil
27	"	80' - 90' water	0.40	0.36	0.10
28	Hole #6	0 - 10'	0.40	0.36	0.30
29	"	10' - 20'	0.20	0.18	0.20
30	"	20' - 30'	0.80	0.72	0.50
31	"	30' - 40'	1.40	1.26	0.70
32	"	40' - 50' water	1.80	1.62	0.70

ANNEX (Continued)

Drill Hole Samples (Monitor claim)

No.	Location			Silver oz./ton	Silver Value	Percentages Copper
33	Hole #7	0 - 10'		1.60	1.44	0.60
34	"	10'- 20'		0.60	0.54	0.20
35	"	20'- 30'		0.20	0.18	Nil
36	"	30'- 40'		0.20	0.18	Nil
37	"	40'- 50'	water	1.60	1.44	0.60
38	Hole #8	0 - 10'		0.10	-	0.40
39	"	10'- 20'		Trace	-	0.20
40	"	20'- 30'		Trace	-	0.08
41	"	30'- 40'		Trace	-	0.08
42	"	40'- 50'	water	Trace	-	0.20
43	Hole #9	0 - 20'		Trace	-	0.06
44	"	20'- 30'		Trace	-	0.04
45	"	30'- 40'		Trace	-	0.03
46	"	40'- 50'		Trace	-	0.04
47	"	50'- 60'		Trace	-	0.13
48	"	60'- 70'	mud	Trace	-	0.04
49	Hole 10	0 - 10'		0.40	0.36	Nil
50	"	10'- 20'		0.40	0.36	Nil
51	"	20'- 30'		1.20	1.08	Nil
52	"	30'- 40'		0.20	0.18	Nil
53	"	40'- 50'	much water	Nil	-	Nil
54	None for #54					
55	Hole #11	0 - 20'		Nil	-	Nil
56	"	20'- 30'	water	Nil	-	Nil
57	Hole #12	0 - 10'		Nil	-	Nil
58	"	10'- 20'		Nil	-	Nil
59	"	20'- 30'		0.60	0.54	0.80
60	"	30'- 40'		Nil	-	0.40
61	"	40'- 50'		Nil	-	Nil
62	"	50'- 60'		Nil	-	Nil
63	"	60'- 70'		Nil	-	Nil
64	"	70'- 80'		Nil	-	Nil
65	"	80'- 90'		Nil	-	Nil
66	"	90'-100'		Nil	-	Nil

ANNEX

Diamond Drill Hole No. 1 (Kennecott Copper Corp.)

Monitor Group

Depth	% Core recovery	% Cu	Oz.Au	Oz.Ag	Geology
0- 7	32	.020	Nil	Nil	Entered partly oxidized gray-green diabase
7- 13	57	.040	Nil	Nil	" " " " "
13- 16	64	.030	Nil	Nil	" " " " "
16- 18	41	.030	Nil	Nil	" " " " "
18- 24	18	.030	Nil	Nil	" " " " "
24- 26	79	.020	Nil	Nil	" " " " "
26- 29	33	.030	Nil	Nil	" " " " "
29- 33	58	.020	Nil	Nil	" " " " "
33- 38	80	.020	Nil	Nil	Diabase more sulphide in appearance
38- 42	100	.017	Nil	Nil	" " " " "
42- 49	94	.014	Nil	Nil	" " " " "
49- 51	100	.023	Nil	Nil	" " " " "
51- 55	100	.020	Nil	Nil	" " " " "
55- 60	100	.022	Nil	Nil	" " " " "
60- 65	100	.020	Nil	Nil	" " " " "
65- 69	100	.020	Nil	Nil	" " " " "
69- 73	100	.020	Nil	Nil	" " " " "
73- 80	94	.013	Nil	Nil	" " " " "
80- 89	94	.013	Nil	Nil	" " " " "
89- 93	100	.016	Trace	Trace	" " " " "
93- 99	100	.022	"	"	" " " " "
99-107	100	.037	"	"	Entered fault zone. Some calcite crystals. At 105' end of fault zone. Diabase.
107-117	97½	.094	"	"	At 109 to 111 fault zone. Same as above.
117-127	98	.030	"	"	Diabase
127-137	96	.033	"	"	"
137-143	76	.020	"	"	At 137 to 143 fault zone - red limey core. Diabase
143-146	67	.023	"	"	Diabase
146-151	97	.022	"	"	"
151-157	97	.026	"	"	"
157-160	100	.020	"	"	"
160-169	90	.026	"	"	"
169-177	100	.027	"	"	"
177-187	100	.010	"	"	At 176 entered bull quartz
187-197	100	.010	"	"	At 195 back in diabase

ANNEX

Diamond Drill Hole No. 1 (Kennecott Copper Corp.) - Cont'd

Monitor Group

Depth	% Core recovery	% Cu	Oz.Au	Oz.Ag	Geology
197-205	98	.010	Trace	Trace	Diabase
205-215	98	.020	"	"	"
215-218	100	.020	"	"	"
218-224	72	.020	"	"	At 224' entered limestone. Crystalline calcite. Probably marbleized limestone
224-234	100	.010	"	"	" " "
234-243	100	.010	"	"	" " "
243-253	100	.020	"	"	" " "
253-262	91	.010	"	"	At 261½ sharp change to blue-black shale. Some specks of pyrite.
262-270	31	.053	"	"	Blue-black shale.
270-275	08	.010	"	"	At 270' cased hole. Changed to EX rod.
275-280	18	.029	"	"	Black shale.
280-286	10	.010	"	"	" "
286-290	23	.010	"	"	" "
290-296	30	.011	"	"	" "
296-302	20	.010	"	"	" "
302-306	04	.010	"	"	" "
306-312	04	.010	"	"	" "
312-320	02	.010	"	"	Shale becoming more quartzy. Less pyrite.
320-324	18	.010	Nil	Nil	Black shale.
324-331	88	.010	"	"	" "
331-336	60	.014	"	"	" "
336-339	22	.020	"	"	" "
339-349	30	.018	"	"	" "
349-354	33	.016	"	"	At 349 entered gray quartzite. Probably Dripping Spring formation.
354-359	25	.020	"	"	" " " "
359-365	14	.010	"	"	" " " "
365-368	41	.012	"	"	" " " "
368-372	46	.010	"	"	" " " "
372-376	08	.010	"	"	" " " "
376-381	17	.019	"	"	" " " "
381-386	40	.010	"	"	" " " "
386-390	23	.021	"	"	" " " "
390-396	55	.018	"	"	" " " "
396-399	44	.010	"	"	" " " "
399-402	36	.010	"	"	" " " "
402-405	33	.011	"	"	" " " "
405-407	37	.021	"	"	" " " "

ANNEX

Diamond Drill Hole No. 2 (Kennecott Copper Corp.)

Monitor Group

Depth	% Core recovery	% Cu	Oz.Au	Oz.Ag	Geology
0- 11	21				Possibly four feet of limestone. No apparent mineralization. Green-gray diabase.
11- 20	78	.030	Nil	Nil	" " "
20- 27	98	.026	"	"	" " "
27- 34	90	.032	"	"	" " "
34- 40	100	.026	"	"	" " "
40- 46	93	.033	"	"	" " "
46- 50	94	.031	"	"	" " "
50- 55	88	.033	"	"	" " "
55- 57	100	.020	"	"	" " "
57- 62	100	.023	"	"	" " "
62- 65	100	.024	"	"	" " "
65- 68	100	.036	"	"	" " "
68- 73	80	.029	"	"	" " "
73- 81	87	.034	"	"	" " "
81- 91	100	.033	"	"	" " "
91- 98	100	.022	"	"	" " "
98-108	100	.026	"	"	" " "
108-117	100	.028	"	"	" " "
117-127	100	.027	"	"	" " "
127-132	100	.020	"	"	" " "
132-139	100	.030	"	"	" " " 135-137 porphyry.
139-144	100	.032	"	"	Diabase "
144-152	75	.030	"	"	"
152-158	84	.026	"	"	"
158-166	100	.020	"	"	"
166-170	100	.020	"	"	"
170-173	66	.019	Nil	Nil	Entered hard limestone with some chert banding. Probably Mescal.
173-183	100	.010	"	"	" "
183-185	100	.010	"	"	" "
185-191	100	.010	"	"	" "
191-200	100	.010	"	"	" "
200-204	100	.017	"	"	201 Back in diabase
204-207	100	.020	"	"	"
207-210	100	.011	"	"	"
210-219	100	.015	"	"	"
219-224	100	.016	"	"	"

ANNEX

Diamond Drill Hole No. 2 (Kennecott Copper Corp.) - Cont'd

Monitor Group

Depth	% Core recovery	% Cu	Oz.Au	OZ.Ag	Geology
224-231	100	.018	Nil	Nil	229 entered soft fault zone.
231-233	100	.010	"	"	231 entered limestone. Some chert banding. Probably Mescal.
233-238	100	.010	"	"	" "
238-247	77	.010	"	"	" "
247-253	100	.013	"	"	" "
253-258	65	.016	"	"	" "
258-260	75	.016	"	"	" "
260-263	33	.020	"	"	260 entered gray banded quartzite. Probably Dripping Spring.
263-269	42	.010	"	"	" " "
269-275	60	.010	"	"	" " "
275-278	80	.010	"	"	" " "
278-284	66	Trace	"	"	" " "
284-289	60	"	"	"	" " "
289-294	40	"	"	"	" " "
294-300	33	.010	"	"	" " "
300-305	20	.010	"	"	" " "
305-314	14	.010	"	"	Dripping Spring quartzite.
314-322	25	.020	"	"	" " "
322-326	75	.020	Trace	Trace	Quartzite contains some pyrite.
326-330	75	.020	"	"	" " " "
330-340	20	.020	"	"	Entered Pioneer shale at 340'.
340-346	6	.119	"	"	Pioneer shale.
346-350	12	.049	"	"	" "
350-355	20	.026	"	"	" "
355-359	62	.010	"	"	" "
359-362	08	.020	Nil	Nil	" "
362-368	04	.020	"	"	" "

DMEA
DEPARTMENT OF THE INTERIOR
MAY 2 - 1957
REGION III
DENVER, COLORADO

May 1, 1957

Docket

Memorandum

To: W. R. Storms

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 4726 (Copper) Harry J. Hagen (Monitor claim group) Pinal County, Arizona

Enclosed please find the application for Harry J. Hagen, Docket DMEA 4726, in the amount of $56,196.00 which was received in this office on May 1, 1957.

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

W. H. KING

W. H. King

cc: Acting Executive Officer (3)
E. H. Harshman
W. L. Emerick

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224 New Customhouse
Denver 2, Colorado

April 30, 1957

Memorandum

To: W. H. King, W. L. Emerick } w/enclosures, Items 1-5 below

From: DMEA Field Team, Region III

Subject: Docket DMEA-4726 (Copper) Harry J. Hagen (Monitor claim group) Pinal County, Arizona

Enclosed is the following material relating to the subject docket.

1. Copy of application for Government assistance in exploration work under the DMEA program.

2. Memorandum of Review by A. D. McMahon, USBM.

3. Memorandum of Review by N. E. Nelson, USGS.

4. Letter of transmittal of the foregoing to this office, dated April 26, 1957, from the Chairman, Operating Committee, DMEA.

5. Routing control sheet.

A joint report of recommendations based on available information or a joint report of findings and recommendations based on a field examination is requested.

If the field examiners view the work proposal favorably, they should inform the Applicant that we will require a bid for the proposed drilling from each of two independent drilling contractors.

Further, the field examiners should consider the comments made in paragraph two of the Chairman's letter when evaluating the Applicant's proposal.

If the field examiners recommend Government participation in the proposed exploration program, please submit twelve extra copies of each map used in the joint report which show the land to be subordinated and the location and extent of recommended work, relative to property boundaries.

The Bureau of Mines' copy of the application should be returned to this office with the joint report of examination. The Survey's copy of the application is to be returned to Mr. Harshman's office.

Original signed by
E. N. HARSHMAN

By E. N. Harshman
Acting Executive Officer

Enclosures

MHM:jy

cc: Sec. Op. Comm. (2)
Harshman w/enclosures, Items 2-4
King
Docket 4726
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

500

Date	Surname	Code
4/24	Sinamel	500
4/26	Selfridge	120
"	Johnson	110
		~~110~~
4/29	FWJ	220
		500.

APR 26 1957

Lamb
Williams

Mr. Harry J. Hagen
Box 150
Globe, Arizona

Re: Docket No. DMEA-4726 (Copper)
Harry J. Hagen
Monitor Claim Group
Pinal County, Arizona

Dear Mr. Hagen:

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 is being referred to:

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

If additional information concerning your application is needed, the Field Team will get in touch with you at an early date.

Sincerely yours,

Frank E. Johnson (for)

Administrator

WRGriswold/er 4/24/57
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. McMahon, USBM
Mr. Kiilsgaard, USGS
Region III (2)
Chron.

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

500

Date	Surname	Code
4/24	Swanson	500
4/26	Selfridge	120
"	Johnson	110
		225
		500

APR 26 1957

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-4726 (Copper)
Harry J. Hagen
Monitor Claim Group
Pinal County, Arizona

Dear Mr. Harshman:

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

In the event the Field Team might consider the application favorably, we should have at least two bids covering the proposed drilling. Furthermore, the field examiners should decide whether diamond drilling or churn drilling is the more advisable; we hesitate to get involved in a project to test low-grade copper ores by diamond drilling methods unless there is a likelihood of good core recovery.

We are enclosing three copies of memoranda dated April 16 and 18, 1957, by N. E. Nelson, Geological Survey, and A. D. McMahon, Bureau of Mines, respectively, relating to the proposed project.

Two extra copies of the application are also enclosed for the use of the Field Team.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (WB)

Enclosures

WRGriswold/er 4/24/57

Copy to: Docket
Admr R File
Op. Committee
Mr. McMahon, USBM
Mr. Kiilsgaard, USGS,
Chron.

APPROVED:

Frank D. Lamb (WB)
Member, Bureau of Mines

W. P. Williams (WB)
Member, Geological Survey

8623

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

OFFICIAL FILE COPY
DMEA
RECEIVED APR 18 1957

DATE	INITIALS	CODE
4/18	C	220
4/19	~~April 18, 1957~~	500

Memorandum

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

From: Commodity Specialist, Branch of Base Metals

Subject: Review of application, Docket No. DMEA 4726 (copper)
Harry Hagan, Monitor Group Claims, Pinal County, Arizona.
$56,196.00

The applicant proposes to explore a mineralized area by a two-stage core drilling program at a total estimated cost of $56,196.00. Stage I consists of 2200 feet of drilling in three holes between the Richmond and Monitor pits from which approximately 10,000 tons of ore have been shipped. If this drilling encounters promising ground 5,000 feet of additional drilling is proposed for Stage II.

Referral of the application to the Field Team is recommended.

A. D. McMahon

A. D. McMahon

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

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

IN REPLY REFER TO:

OFFICIAL FILE COPY
DMEA
RECEIVED APR 17 1957

DATE	INITIALS	CODE
4/17	C	220
4/22	WRG	500

April 16, 1957
Re: DMEA 4726
Harry Hagan
Monitor Group
Pinal County, Arizona
$56,196.00 - Copper

Memorandum

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

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

Subject: Review of application

The applicant requests assistance in prospecting for possible non-outcropping ore deposits in the favorably regarded Precambrian Pinal Schist. Considerable ore has been mined from orebodies in the Cambrian Dripping Springs quartzite, and the applicant thinks the known orebodies may presage larger deposits in the schist below, deposits comparable, perhaps to those at Ray, 4 miles to the south.

Without questioning the soundness of the theory, the accuracy of Fowell's geologic map may be suspect. The map shows the Pinal Schist cropping out in Silver Canyon almost to the 4000 contour, and almost under the Monitor orebody only 50 to 150 feet above. Signs of mineralization in the schist might be expected if the theory is valid. Vertical structure sections should be of assistance in resolving the seeming inconsistencies.

An examination is indicated. Referral of the application to the Field Team is recommended.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Washington 25, D. C.

April 15, 1957

Mr. Harry J. Hagen,
Box 150,
Globe, Arizona.

Subject: DMEA 4726
Re: Exploration Assistance

Dear Mr. Hagen:

Your application for exploration assistance, dated April 5, 1957, submitted to our office at Denver, Colorado, has been assigned Docket Number DMEA 4726 and referred to the Base Metals Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

Allen S. Dakan, Chief
Operations Control and
Statistics Division

Copy to: Region III.

3571

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

OFFICIAL BUSINESS

AG 15 5PM 1956 TENN 3

1956

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

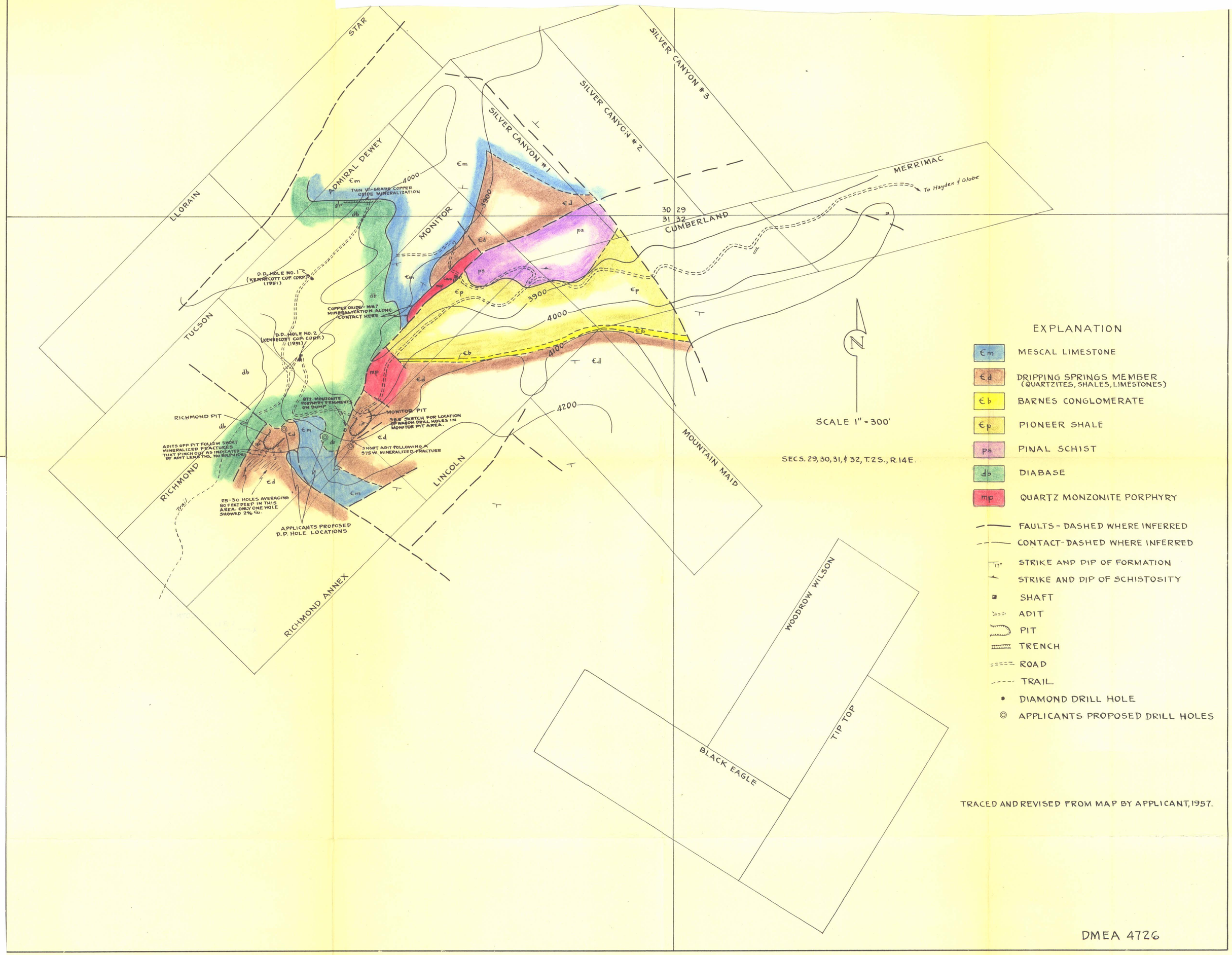
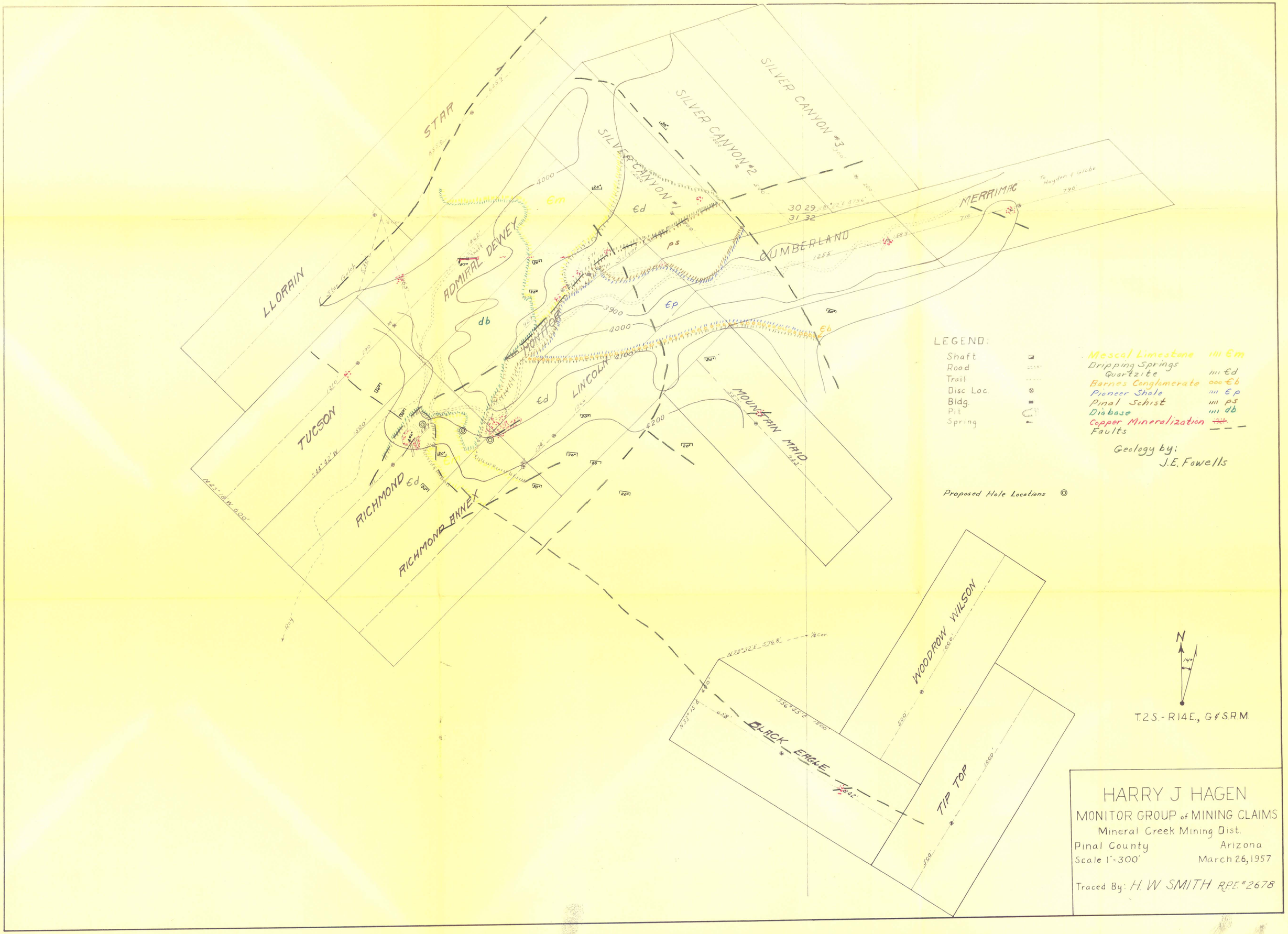


FIGURE 2.- CLAIM AND GEOLOGY MAP, HARRY J. HAGEN, MONITOR GROUP OF CLAIMS, PINAL COUNTY, ARIZONA.


STAR
LLORAIN
TUCSON
RICHMOND
RICHMOND ANNEX
ADMIRAL DEWEY
MONITOR
LINCOLN
SILVER CANYON #1
SILVER CANYON #2
SILVER CANYON #3
CUMBERLAND
MERRIMAC
MOUNTAIN MAID
WOODROW WILSON
TIP TOP
BLACK EAGLE
Em
Ed
ps
Ep
db
Eb
LEGEND:
Shaft
Road
Trail
Disc Loc.
Bldg.
Pit
Spring
Mescal Limestone Em
Dripping Springs Quartzite Ed
Barnes Conglomerate Eb
Pioneer Shale Ep
Pinal Schist ps
Diabase db
Copper Mineralization
Faults
Geology by: J.E. Fowells
Proposed Hole Locations
N
T2S.-R14E., G&S.R.M.
HARRY J HAGEN
MONITOR GROUP of MINING CLAIMS
Mineral Creek Mining Dist.
Pinal County Arizona
Scale 1"=300' March 26, 1957
Traced By: H. W. SMITH R.P.E. #2678