DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

## CONTROLLED DOCUMENT

DMA Docket No. 2972

## DO NOT DETACH THIS SLIP

Action on this document is recorded and controlled in Reports and Records Branch. Any movement of this document between divisions or offices of DMA or movement outside DMA must be reported to the Reports and Records Branch. Actions taken that affect status of the case must also be reported.

This document has been recorded as

EXPLORATION ASSISTANCE

Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

One copy to USBM. ~~AND TO USGS~~. One copy of application retained in Region III.

Routing Slip

| | | | |
|---|---|---|---|
| To: | Code 700, Room 4640 | Date | 4/7/53 |
| To: | Oper Com | Date | 4-24-53 |
| To: | Oper Com | Date | 7-22-53 |
| To: | | Date | |
| To: | | Date | |
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## DO NOT DETACH

## CONTROLLED DOCUMENT

JUL 12 1954

Miss Lillian Massey
315 First Street
Fillmore, California

Dear Miss Massey:

This will acknowledge your letter dated July 6, 1954, in which you request that there be returned to you copies of the map of the "Gold Buette Ranch, Nevada" (Docket No. IMEA 2972).

In accordance with your request there are returned herewith the maps requested.

Sincerely yours,
ROBERT E. ADAMS

Robert E. Adams, Chief
Operations Control and
Statistics Division

Enclosures 3

REAdams/la/7-12-54

Copy to: Adm. R. File
Mails & Files

Fillmore Cal.

7-6-54

Defense Minerals Administration
RECEIVED
JUL 8 - 1954

Dept of the Interior
Defense Minerals Explor. Administration
Washing D.C.

Dear Mr Mittendorf.

In reference to Docket No. D.M.E.A. -2972 (Samarskite) Edwin S. Huntsman & Lillian E. Massey, Hilltop Mine, Clark Co. Nevada.

I am writing you for a blue print map that we sent you in 1953. It was the map of Gold Butte Ranch, Nevada. I think we sent you four copies of the property. Would you be so kind as to check through your files and send me one of those blue print maps. If you have the original please send it to me, the map is of Gold Butte Ranch, Nevada.

Thank you for post foors. I will inclose some stamps for mailing costs:

Yours Very Truly.

Lillian Massey
315 First St.
Fillmore, Calif.

P.S. Mr Louis Gabrielsen handled our correspondance.

Sept. 11-53

Docket No. DNER-2972.

{Edwin J. Huntsman
{Lillian E. Massey.

Tel. Call from Mr John Laxalt - (Senator Marrans office) Ext. 976.
inquiring if there was any way in which this case which has been denied could be reinstated.

2:15 p.m.

Mr. Laxalt was referring to the Applicant's letter to Senator McCarran of Aug. 13. I explained fully the reason for the denial and furthermore we also had a letter dated Aug. 13 to which we replied on Aug 20 in full. My explanation satisfied Mr. Laxalt & he said he would simply write a letter of sympathy.

EWT.

8/21/53 gla

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 28 1953

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

August 24, 1953

Mr. Louis R. Gabrielson
c/o Fred G. Bryce, Public Accountant
Fillmore, California

Re: Docket DMEA-2972 (Samarskite)
Hilltop Mine
Clark County, Nevada

Dear Mr. Gabrielson:

Your letter addressed to Mr. Edgar Bailey, dated August 13, 1953, has been referred to me for reply. In answer to your questions, the claim from which the geologists obtained their samples was the Hilltop on which exploratory work has been done. The sample was from the same pegmatite dike and from the same cut from which the 300-pound sample assayed by the Atomic Energy Commission was obtained. The sample contained columbium, thorium and rare earths but in insufficient amount to be classed as ore.

The geologists found only a few small crystals of samarskite. When the property was visited at an earlier date by a geologist of the Geological Survey, a thorough radiometric examination was made. The samarskite was found to be highly radioactive, but except for the radiation near visible crystals of samarskite, the pegmatite was essentially non-radioactive, indicating that the amount of samarskite and other uranium or thorium minerals in the pegmatite is very low and verifies the visual estimate based on present exposures. The geologists report that a few pieces from the operator's "high-grade pile" contained less than 1 per cent samarskite. Based on these and other observations, the geologists concluded that insufficient samarskite is present to justify further explorations.

We would like to hear from you again, if, as the result of further exploration of the property you uncover what may be classed as minable ore.

Sincerely yours,

H. C. MILLER

H. C. Miller
Executive, Officer
DMEA Field Team, Region III

Copy to: DMEA, Washington, D. C.
E. H. Bailey, USGS

mdt

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 28 1953

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Sincerely yours,

H. C. MILLER
H. C. Miller
Executive Officer
DMEA Field Team, Region III

Copy to: DMEA, Washington, D. C.
E. H. Bailey, USGS

FILE COPY
SURNAME: 3/3

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

AUG 20 1953

Mr. Louis L. Gabrielsen
c/o Fred G. Bryce, Public Accountant
Fillmore, California

Re: Docket No. [illegible]-2972 (Samarskite)
Edwin S. Bhuteman & Lillian . Massey
Hilltop Mine, Clark County, Nevada

Dear Mr. Gabrielsen:

This will acknowledge receipt of your letter dated August 13, 1953, appertaining to the captioned application.

It is noted that you refer to our letter of denial to the Applicants under date of July 23, 1953, and wish to know what is considered an "acceptable grade" of ore and the "quantities" thereof that would warrant Government participation in an exploration project. These terms concern a multiplicity of factors depending on the commodity in question, such as the location of the deposit, the geology of the formation, the type of mining to be employed, the question of beneficiation or milling prior to shipment which in turn involves grade and type of ore, size of deposit, availability of water and power, transportation, and other factors. The Applicants' mineral is classified as samarskite, which is a complex mineral composed of a columbate and tantalate of uranium and containing rare earth oxides as well as titanium and thorium oxides. It is radioactive and, if found in quantity, might be considered valuable for its columbium-tantalum-uranium content, providing a buyer could be found. At the present time, it is my understanding that no plants are known to be purchasing samarskite for processing.

The mineral samarskite found in the subject property, apparently occurs for the most part in small crystals sparsely distributed throughout the pegmatite dike (which is not a vein), and this distribution seems to be such that the pegmatite dike was found to be essentially non-radioactive. Pegmatite dikes seldom contain the radioactive minerals in sufficient quantities to permit of sustained operation though some dikes are worked for other minerals such as beryl, mica, feldspar, and even tin bearing minerals. The sample you refer to was probably the one taken from the "high-grade pile". It was found to be too low in the radioactive minerals content to be considered shipping ore even if a buyer were available, or, for that matter, an ore that might be readily processed. However we are unable to supply you with an analysis statement as requested.

In regards to your question of filing another application or reopening the original application in the event "new veins" are uncovered, please be assured a new application may be considered should

future work at the property reveal greater concentration of the columbium-tantalum-uranium-thorium minerals than is presently known and their occurence is in an acceptable form. However, since there are apparently no known "veins" on subject property but only the pegmatite dike, the chances of finding greater concentration of these minerals in these dikes sufficient to be of importance are not considered good. The rare earth oxides, which usually form an appreciable percentage of samarskite, are no longer on our list of strategic and critical minerals for which an exploration project may be approved.

I trust this information quite fully answers your questions and regret the circumstances were such as to necessitate the action taken.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

EMEllis/gla/db
8-19-53
cc to: Adm. Reading File
Docket
Messrs: Ellis
DMEA Field Team, Region III (2)

HHK
8-20-53

8/18/53 glu

AUDITS INCOME TAX SYSTEMS

FRED G. BRYCE
PUBLIC ACCOUNTANT
TELEPHONE 45
FILLMORE, CALIFORNIA

DEPARTMENT OF THE INTERIOR
Defense Mineral Administration
RECEIVED
AUG 17 1953

August 13, 1953

Air Mail:

U. S. Dept. of the Interior
Defense Mineral Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA-2972(Samarskite)
Hilltop Mine
Clark County, Nevada

Attn: C. O. Mittendorf:

Dear Sir:

As Accountant for Mrs. Massey and Mr. Huntsman, they have asked me to write you concerning your letter dated July 23, 1953.

They were somewhat disappointed in the rejection of their application for Government aid inasmuch as they were of the opinion their claim contained ore of marketable quantities of ore as a result of the chemical analysis made by the Atomic Energy Commission.

As stated in your letter, the claims must "show definite promise of yeilding material of acceptable grade and in quantities that will significantly improve the mineral supply position for National Defense Program".

What is considered "acceptable grade" and what "quantities" are necessary to warrant Government participation? In the event that new veins are uncovered, is it possible to refile under our original application or will an entirely new application be required? Also could you give us a copy of the chemical analysis that was sent to you on the ore sample that was taken on your investigation?

Any information you can send us will be greatly appreciated.

Very truly yours

Louis R. Gabrielsen

dmea 2972

C
O
P
Y

United Stated Dept. of the Interior
Defense Minerals Exploration Administration
1012 Flood Building
870 Market Street
San Francisco 2, California

Gentlemen:

As requested in your letter dated March 4th, 1953, please find enclosed four copies of a sketch made of the area we propose to develop with the markings thereon indicating the pegmatite dike, proposed crosscut and tunneling. The probable length of the crosscut will be approximately 60 feet and around 35 feet deep. The length of tunneling is undetermined depending of course on what we run into to.

Also enclosed are five snapshots taken on claims and area where the 300 lb sample has been taken from.

Breakdown on contingency item:

| | |
|---|---|
| Possible cost of Jeep | $ 400.00 |
| Gas & Oil not accounted for in original estimate | 1,296.00 |
| Additional Labor- if necessary- depending upon the success of the showings after crosscut is made | 3,915.00 |
| | $5,611.00 |

Compressor is now on the claim but it does not belong to us. The compressor is in fairly good condition and we believe it can be purchased for $750.00 or less, otherwise we will have to pay rent on it. A new compressor of this size will run around $3,500.00.

Trusting that this is the the information requested, if not, please advise.

Very truly yours,

/s/t/ Lillian Massey

Lillian Massey (Mrs.)

MF-103
(Revised April 1952)

# UNITED STATES DEPARTMENT OF THE INTERIOR
## DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 6 1953

# 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. dmea 2972
Metal or Mineral
Date Received 4-6-53
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: SEE ATTACHED ACCOMPANYING PAPERS.

(*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 project.*—(*a*) State the mineral or minerals for which you 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 February 25, 1953, 195...

Edwin S. Huntsman/Lillian E. Massey
(Applicant)

By Lillian E. Massey

.....

.....

**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

UNITED STATES DEPARTMENT OF THE INTERIOR

Defense Mineral Exploration Administration

Application for aid in an Exploration Project
Pursuant to DMEA Order 1,
Under the Defense Profuction Act of 1950
as amended

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

1.(a) Name of Applicant

Edwin S. Huntsman & Lillian E. Massey - a Partnership

| | |
|---|---|
| Box 322 | 315 1st Street |
| Fillmore, Calif. | Fillmore, Calif. |

3. Applicant's Property Rights:

(a)

| | | | | |
|---|---|---|---|---|
| Hilltop Notice | #301268 | Bk. 19 | Page 291 | 11/30/48 |
| Hillside #1 C/L | #318772 | Bk. 19 | Page 528 | 8/ 2/49 |
| Hilside #3 C/L | #318772 | Bk. 19 | Page 529 | 8/ 2/49 |
| Hillside C/L | #318774 | Bk. 19 | Page 529 | 8/ 2/49 |
| Hillside N/L | #325127 | Bk. 19 | Page 584 | 10/26/49 |
| Basin N/L | #297261 | Bk. 19 | Page 264 | 10/ 4/48 |

(b) Gold Butte Mining District, Names of Claims, Hilltop, Hillside, Hillside 1, 2, & 3 and The Basin. ~~Thaxt~~ The above are the known claims - no actual mining operations has been done other than the exploratory work that has been done on the Hilltop Mine.

(c) Have Option Agreement for Lease - (See copy Attached)

(d) Same as (c) above

(e) Not applicable

(f) All unpatented Claims - See description listed in 3.(a)

4. Physical Description:

(a) Only exploratory work done on Hilltop claim.
No work being done at present.
No existing mine workings or production facilities.
Partnership has 90% mining option interest in property.
County dirt road within one mile of property and jeep road to claims.

(b) No production other than 300 pounds of ore taken out for samples, analyses, and grading. Sample sent to Atomic Energy Commission showed the following chemical analysis as per letter dated November 23, 1951.

"42% $Cb_2O_5$, 1% $Ta_2O_5$, 2% $TiO_2$, 11.5% $U_3O_8$, 1% $ThO_2$, 15.1% Rare Earth Oxides. This composition, particularly the low Titanium oxide content indicates the mineral should be classified as Samarskite."

(c) Property consists of small hills approximately 1000 feet, sloping down into a Basin. There are five claims, 1500' X 600' in Each Claim in a pigmatite Dyke. Indications and analyses show that rare earth ores are present.

(d) County road within one mile. Jeep road on property to claims. 72 miles to railroad. Supply and resident points within 42 miles. All shipping could be done by trucking direct from claims.

(e) Manpower, materials and supplies & equipment availability at Los Vegas 125 miles away. Gasoline power. Water available from drinking purposes only.

5. The Exploration Project:

(a) Samarskite and Thoreum.

(b) Prosposed work is to crosscut and tunnel.

(c) The work will start within 30 days and completed within
1 12 months from date of exploration project contract.

(d) Twenty years of exploration work and prospecting including 5 years of actual mine working in tunnels and shafts.

6. Estimate of costs: See attached schedule

7. (a) We are prepared to furnish our share of the cost of the proposed project in accordance with the regulations on Government participation.

(b) We proposed to furnish our share of the costs through labor and supervision of the mining operations during the length of the project.

Huntsman/Massey
DMEA Order 1
Application - Form MF-103

| Estimation of costs; | | Daily Costs per day basis | Cost for Project (261 probable working days) |
|---|---|---|---|
| (a) | None | | |
| 6.(b) | Mine Laborer | $ 15.00 | $ 3,915.00 |
| (c) | Shovels | .10 | 26.10 |
| | Picks | .10 | 26.10 |
| | Bits- Compressor | 1.50 | 391.50 |
| | Small Tools - Etc | .30 | 78.30 |
| (d) | Bulldozer-with operator | 56.00 | 14,616.00 |
| | Compressor | 5.00 | 1,305.00 |
| (e) | Probable house repairs | 1.00 | 261.00 |
| (f) | None | | |
| (g) | Comp. Insurance | .62 | 161.82 |
| | Other Insurance | .84 | 167.04 |
| | Accounting | 1.25 | 300.00 |
| | Payroll Taxes | .47 | 120.06 |
| (h) | Contingencies 20% | | 4,273.58 |
| | | Total | $25,641.50 |

7/13/53 gla

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

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

July 2, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2972 (Samarskite)
Edwin S. Huntsman and Mrs. Lillian E. Massey
Hilltop Mine, Clark County, Nevada

Reference is made to your letter dated April 23, 1953, requesting a field examination of the subject mine.

Attached are four copies of a report entitled "DMEA-2972 - Hilltop Mine, Samarskite, Clark County, Nevada," by George W. Walker, and Edgar H. Bailey, Geologists, U. S. Geological Survey, dated June 30, 1953.

The examining geologists are of the opinion that the deposit does not contain sufficient columbium- or uranium-bearing minerals to warrant Government participation in an exploration program.

We recommend, therefore, that the application be denied.

H. C. MILLER

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachment

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno (with copy of report)

Reviewed by
DMEA OPERATING COMMITTEE

7-10-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
SECRETARY OF THE INTERIOR, D. McKAY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

# REPORT OF EXAMINATION BY FIELD TEAM
REGION III

## DMEA 2972 - Hilltop Mine, Samarskite

## Clark County, Nevada

George W. Walker, Geologist
U. S. Geological Survey

Edgar H. Bailey, Geologist
U. S. Geological Survey

June 30, 1953

Reviewed by
DMEA OPERATING COMMITTEE
7-10-53
(date)

# Hilltop Mine, Clark County, Nevada

George W. Walker and Edgar H. Bailey

The Hilltop pegmatite deposit in Clark County, Nevada was examined by George W. Walker and Edgar H. Bailey on May 23, 1953 as a result of a request for a field examination made by George C. Selfridge, Chairman, Operating Committee, Defense Minerals Exploration Administration. The property contains a small body of pegmatite in which crystals and pods of samarskite have been found. The owners applied for Government assistance in an exploration program costing $25,641.50; the examining geologists believe the expenditure of Government funds is not warranted by the meagre showings at the property and recommend that the application be denied.

## Location

The Hilltop mine is in sec. 16, T. 19 S., R. 70 E., in southeastern Clark County, Nevada. The workings lie at an altitude of about 4,000 feet some 2 miles west of Gold Butte in the Gold Butte Mining district. The property is reached from Riverside on paved U. S. Highway 91 by travelling on fairly good gravel roads according to the following directions:

| | |
|---|---|
| Riverside | 0.0 miles |
| Go east on U.S. 91 across bridge over Virgin River and turn right onto gravel road | 0.2 |
| Fork, go left | 0.6 |
| Fork, go right | 10.3 |
| Fork, go left | 11.1 |
| Fork, go right | 11.2 |
| Fork, make sharp left turn | 13.4 |
| Fork, go right | 18.4 |
| Fork, go right | 21.1 |
| Fork, straight ahead | 25.2 |
| Fork, go right | 30.6 |
| Fork, go right | 36.5 |
| Fork, go right | 36.7 |
| Fork, go right | 40.0 |
| Fork, Sharp left onto mine road | 41.3 |
| Park car | 42.4 |

A steep jeep road extends from the parking area about half a mile to the mine.

## Ownership

The Hilltop property is owned by Howard Fitch, Jack A. Raridon, W. H. Garrett, and A. S. Coleman, who on September 17, 1952 granted an option to lease to E. S. Huntsman of Fillmore, California. Mr. Huntsman and Mrs. Lillian E. Massey, 315 First Street, Fillmore, California have submitted the application, but the data contained in it does not make Mrs. Massey's title clear.

## Workings

The workings at the property, as shown on the accompanying map, consist of two small trenches, an adit that is little more than an undercut bank, and shallow bulldozer cuts. A portable compressor and a few picks and shovels were on the property at the time of the examination.

## Water Supply

There is no water at the mine, but sufficient water for a small crew and limited drilling could probably be obtained from a spring at a nearby homestead. As the property is too small to supply feed for a concentrating mill, we did not ascertain where sufficient water for ore dressing could be obtained.

## Geology

The Hilltop mine explores a part of a lenticular pegmatite body exposed on the surface over a length of 180 feet and a width of 30 feet. The trend of the body is nearly north, and it is believed to dip steeply to the east. The pegmatite consists of three zones: a marginal band of coarse aplite, an intermediate zone of graphic granite and fine-grained pegmatite, and a central core of coarse pegmatite with crystals of feldspar up to 6 feet in maximum dimension and large masses of quartz. The last material to crystallize apparently was quartz, and locally the feldspar adjacent to the quartz contains a 5-inch, dark-colored band in which green mica is fairly abundant.

The rock surrounding the pegmatite is a porphyritic granite containing large phenocrysts of microperthite. The granite is a part of a stock some 4 miles long from east to west and 2 miles wide; locally it contains quartz veins, mined for gold, and lenticular masses of aplite and pegmatite. However, in the vicinity of the mine no other pegmatite bodies approaching the size of the one explored by the shallow working of the Hilltop mine were seen.

## Ore Deposit

The applicant requested funds to explore further the pegmatite for samarskite and other thorium-bearing minerals. The reviews by the Washington office commodity specialists suggest the exploration should be for "columbium-tantalum-uranium minerals" and that strategic mica might be recovered as a byproduct.

The applicant is reported to have recovered 300 pounds of samarskite--an oxide of iron, calcium, uranium, columbium, tantalum, and rare earths--from the pegmatite by means of carefully searching for surface float and carefully sorting the rock broken in making the shallow workings. A picked sample of nearly pure samarskite assayed by the Atomic Energy Commission contained:

| | |
|---|---|
| 42.0 % | $Cb_2O_5$ |
| 2.0 % | $TiO_2$ |
| 1.2 % | $ThO_2$ |
| 1.0 % | $Ta_2O_5$ |
| 11.5 % | $U_3O_8$ |
| 15.1 % | Rare earths |

In addition the pegmatite also contains small amounts of allanite and monazite, both of which are weakly radioactive. Other minerals present, besides the quartz and feldspar which form the bulk of the pegmatite, are purple fluorite that is non-radioactive, epidote and/or clinozoisite, muscovite, biotite, magnetite, stibiotantalite (?), and chlorite (?).

Only a few 1/4-inch crystals of samarskite were found during a two-hour search covering all exposed parts of the pegmatite. When the property was visited at an earlier date by George Walker, a thorough radiometric examination was made. The samarskite was found to be highly radioactive, but except for the radiation near visible crystals of samarskite, the pegmatite was essentially non-radioactive. This indicates the amount of samarskite, and other uranium or thorium minerals, in the pegmatite is very low, and verifies the visual estimate based on the present exposures. A few pieces set aside by the operator in a "high-grade pile" contained less than one percent samarskite. A sample of this material assayed by the U. S. Bureau of Mines, Hydrometallurgical and Assaying Laboratory at Reno, Nevada contained: 0.006 percent uranium, less than 0.1 percent columbium, less than 0.2 percent thorium, less than 0.2 percent rare earths. Because of the characteristic spotty occurrence of rare minerals in pegmatites, it is impossible to predict what might be encountered by further exploration, but it appears unlikely that uranium- or columbium-bearing minerals would be found in sufficient quantity to justify further exploration for these minerals alone.

The mica is chiefly confined to the 5-inch bands adjacent to the massive quartz, and in these bands it amounts to less than a third of the rock. It is all non-strategic, as it contains intergrown biotite and displays onion structure. In addition it is tangled, ruled, and crushed, and occurs in pieces too small for punch size.

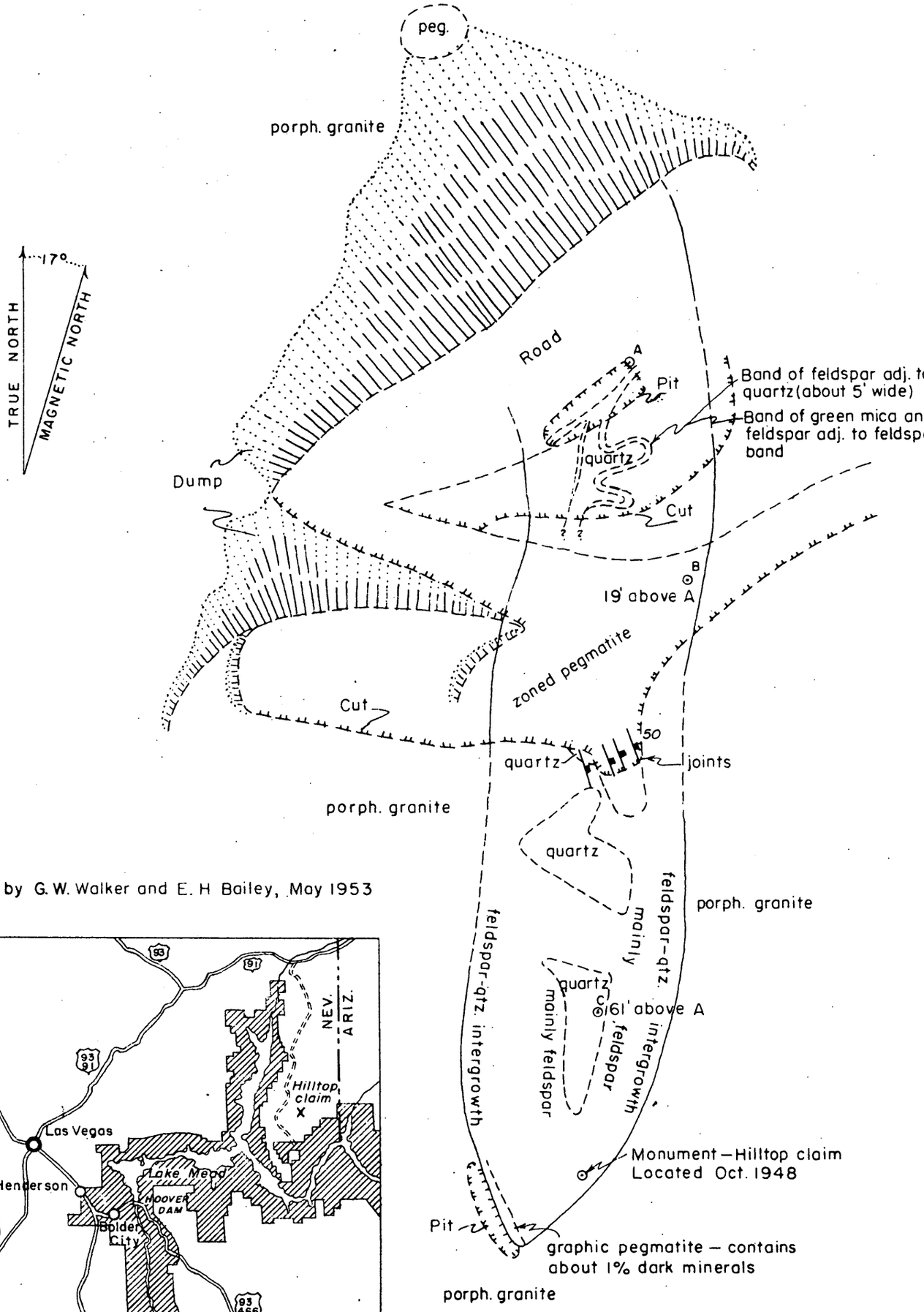
The feldspar and quartz appear to be of commercial quality, but the deposit is so remote that it would not pay to truck the product to a market. The fluorite amounts to less than one percent of the pegmatite.

## Recommendation

There appears to be no possibility of recovering any of the associated minerals as a byproduct of mining the pegmatite for samarskite, and the samarskite is present in too small amounts to justify further exploration. It is recommended that the application be denied.

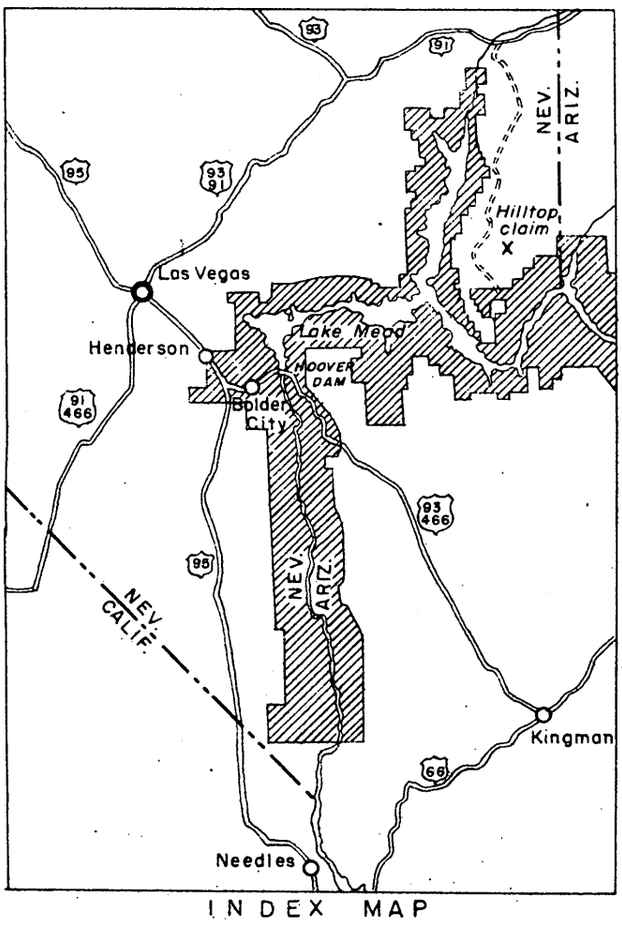
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA-2972
(SAMARSKITE)




Mapped by G. W. Walker and E. H Bailey, May 1953

SKETCH MAP OF PEGMATITE ON HILLTOP CLAIM




INDEX MAP

0 10 20 30 40 MILES

HILLTOP CLAIM, CLARK COUNTY, NEVADA

C
O
P
Y

United Stated Dept. of the Interior
Defense Minerals Exploration Administration
1012 Flood Building
870 Market Street
San Francisco 2, California

Gentlemen:

As requested in your letter dated March 4th, 1953, please find enclosed four copies of a sketch made of the area we propose to develop with the markings thereon indicating the pegmatite dike, proposed crosscut and tunneling. The probable length of the crosscut will be approximately 60 feet and around 35 feet deep. The length of tunneling is undetermined depending of course on what we run into to.

Also enclose is five snapshots taken on claims and area where the 300 lb sample has been taken from.

Breakdown on contingency item:

| | |
|---|---|
| Possible cost of Jeep | $ 400.00 |
| Gas & Oil not accounted for in original estimate | 1,296.00 |
| Additional Labor- if necessary- depending upon the success of the showings after crosscut is made | 3,915.00 |
| | $5,611.00 |

Compressor is now on the claim but it does not belong to us. The compressor is in fairly good condition and we believe it can be purchased for $750.00 or less, otherwise we will have to pay rent on it. A new compressor of this size will run around $3,500.00.

Trusting that this is the the information requested, if not, please advise.

Very truly yours,

/s/t/ Lillian Massey

Lillian Massey (Mrs.)

B-242A

MF-103
(Revised April 1952)

# UNITED STATES DEPARTMENT OF THE INTERIOR
## DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 6 1953

# 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. dmea 2972
Metal or Mineral
Date Received 4-6-53
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: SEE ATTACHED ACCOMPANYING PAPERS.

(*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 project.*—(*a*) State the mineral or minerals for which you 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 February 25, 1953, 195...

Edwin S. Huntsman/Lillian E. Massey
(Applicant)

By Lillian E. Massey

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

UNITED STATES DEPARTMENT OF THE INTERIOR

Defense Mineral Exploration Administration

Application for aid in an Exploration Project
Pursuant to DMEA Order 1,
Under the Defense Profuction Act of 1950
as amended

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

1.(a) Name of Applicant

Edwin S. Huntsman & Lillian E. Massey - a Partnership
Box 322 315 1st Street
Fillmore, Calif. Fillmore, Calif.

3. Applicant's Property Rights:

| | | | | | |
|---|---|---|---|---|---|
| (a) | Hilltop Notice | #301268 | Bk. 19 | Page 291 | 11/30/48 |
| | Hillside #1 C/L | #318772 | Bk. 19 | Page 528 | 8/ 2/49 |
| | Hilside #3 C/L | #318772 | Bk. 19 | Page 529 | 8/ 2/49 |
| | Hillside C/L | #318774 | Bk. 19 | Page 529 | 8/ 2/49 |
| | Hillside N/L | #325127 | Bk. 19 | Page 584 | 10/26/49 |
| | Basin N/L | #297261 | Bk. 19 | Page 264 | 10/ 4/48 |

(b) Gold Butte Mining District, Names of Claims, Hilltop, Hillside, Hillside 1, 2, & 3 and The Basin. ~~Thxxx~~ The above are the known claims - no actual mining operations has been done other than the exploratory work that has been done on the Hilltop Mine.

(c) Have Option Agreement for Lease - (See copy Attached)

(d) Same as (c) above

(e) Not applicable

(f) All unpatented Claims - See description listed in 3.(a)

4. Physical Description:

(a) Only exploratory work done on Hilltop claim.
No work being done at present.
No existing mine workings or production facilities.
Partnership has 90% mining option interest in property.
County dirt road within one mile of property and jeep road to claims.

(b) No production other than 300 pounds of ore taken out for samples, analyses, and grading. Sample sent to Atomic Energy Commission showed the following chemical analysis as per letter dated November 23, 1951.

"42% $Cb_2O_5$, 1% $Ta_2O_5$, 2% $TiO_2$, 11.5% $U_3O_8$, 1% $ThO_2$, 15.1% Rare Earth Oxides. This composition, particularly the low Titanium oxide content indicates the mineral should be classified as Samarskite."

(c) Property consists of small hills approximately 1000 feet, sloping down into a Basin. There are five claims, 1500' X 600' in Each Claim in a pigmatite Dyke. Indications and analyses show that rare earth ores are present.

(d) County road within one mile. Jeep road on property to claims. 72 miles to railroad. Supply and resident points within 42 miles. All shipping could be done by trucking direct from claims.

(e) Manpower, materials and supplies & equipment availability at Los Vegas 125 miles away. Gasoline power. Water available from drinking purposes only.

5. <u>The Exploration Project</u>:

(a) Samarskite and Thorium.

(b) Prosposed work is to crosscut and tunnel.

(c) The work will start within 30 days and completed within
1 12 months from date of exploration project contract.

(d) Twenty years of exploration work and prospecting including 5 years of actual mine working in tunnels and shafts.

6. <u>Estimate of costs</u>: See attached schedule

7. (a) We are prepared to furnish our share of the cost of the proposed project in accordance with the regulations on Government participation.

(b) We proposed to furnish our share of the costs through labor and supervision of the mining operations during the length of the project.

Huntsman/Massey
DMEA Order 1
Application - Form MF-103

| Estimation of costs; | | Daily Costs per day basis | Cost for Project (261 probable working days) |
|---|---|---|---|
| (a) | None | | |
| 6.(b) | Mine Laborer | $ 15.00 | $ 3,915.00 |
| (c) | Shovels | .10 | 26.10 |
| | Picks | .10 | 26.10 |
| | Bits- Compressor | 1.50 | 391.50 |
| | Small Tools - Etc | .30 | 78.30 |
| (d) | Bulldozer-with operator | 56.00 | 14,616.00 |
| | Compressor | 5.00 | 1,305.00 |
| (e) | Probable house repairs | 1.00 | 261.00 |
| (f) | None | | |
| (g) | Comp. Insurance | .62 | 161.82 |
| | Other Insurance | .84 | 167.04 |
| | Accounting | 1.25 | 300.00 |
| | Payroll Taxes | .47 | 120.06 |
| (h) | Contingencies 20% | | 4,273.58 |
| | | Total | $25,641.50 |

[illegible]

This agreement made and entered into this 17th day of September, 1952, by and between Howard Fitch of San Francisco, California, Jack A. Raridon of Sepulveda, California, W. H. Garrett, A. S. Coleman of Bunkerville, Nevada, parties of the first part; and E. S. [illegible] of Fillmore, California, parties of the second part;

[illegible]

[illegible]

[illegible] until March 17, 1953, [illegible] of the second [illegible]

[illegible]

[illegible]

[illegible]

Howard W. Fitch

Jack A. Raridon

W. H. Garrett

A. S. Coleman

PARTIES OF THE FIRST PART

[illegible]

FILE COPY
SURNAME:
Docket
F. L. Krause
E. J. Carlson
Kinkel
Hedges
Jeffrey Judge
K. J. Linder

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

JUL 23 1953

Mrs. Lillian L. Vassey
315 1st Street
Fillmore, California

Mr. Edwin S. Hunterman
Box 322
Fillmore, California

Re: Docket No. DMA-272 (Tanzanite)
Hilltop Mine (columbite-tantalate of uranium and rare earths)
Clark County, Nevada

Dear Mrs. Vassey and Mr. Hunterman:

Reference is made to your application for Government aid on the proposed captioned project estimated to cost $25,000.00.

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 application and data available to this Agency and an examination of the property concerned reveal that the probability of disclosing minable ore reserves by your proposed exploration program is not sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Your interest in the exploration program of the Defense Minerals Exploration Administration and your willingness to participate therein are appreciated.

Sincerely yours,

C. O. Mittendorf
Administrator

RWEllis/db
7-21-53
cc to: Adm. Reading File
Operating Committee
Docket
Messrs: E. J. Carlson, Rm. 3647
L. M. Larrabee, Rm. G-232, GSA
Ellis
DMA Field Team, Region III (2)

R.C.G.
7-23-53

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

JULY 21, 1953

SUMMARY OF PROPOSED PROJECT

Docket No. DMEA-2972
Applicant: Edwin S. Huntsman and Mrs. Lillian E. Massey
Box 322 Fillmore, California
315 1st Street Fillmore, California
Subject: Denial of application

Commodity: Samarskite
Location of property: Hilltop Mine Clark County, Nevada Region III
Amount of application: $25,641.50
Date of application: February 25, 1953

Outline of project: The applicant requested funds to explore further the pegmatite for samarskite and other thorium-bearing minerals.
Field Team Report: Dated June 30, 1953
by George W. Walker, Geologist, USGS
Edgar H. Bailey, Geologist, USGS
H. C. Miller, Executive Officer, Region III, transmittal letter dated July 2, 1953.

Recommendations: The property contains a small body of pegmatite in which crystals and pods of samarskite have been found. There appears to be no possibility of recovering any of the associated minerals as a by-product of mining the pegmatite for samarskite, and the samarskite is present in too small amount to justify further exploration. Denial recommended.

Commodity Members comments:

Bureau of Mines: E. J. Carlson - Denial letter surnamed in lieu of memorandum.

Geological Survey: D. M. Larrabee, dated July 10, 1953, concurs in Field Team's recommendation of denial.

Rare & Misc. Metals Division Engineer: Ernest Wm. Ellis

Comments: Denial letter prepared on basis of above recommendations.

F. L. Knouse
For: Ernest Wm. Ellis, Chief
Rare and Misc. Metals Division

7/14/53 gla

IN REPLY REFER TO:

G-MD-CNM

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 10 1953

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

July 10, 1953

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-2972 (samarskite)

To: E. W. Ellis, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant: E. S. Huntsman, Fillmore, California.
Name of property: Hilltop Mine.
Location of property: Clark County, Nevada
Date of field team report: June 30, 1953.
Authorship of field team report: G. W. Walker and E. H. Bailey.
Field team's recommendation: Denial.
Comments: Insufficient samarskite to warrant further exploration.
ACTION SUGGESTED: Follow field team's recommendation.

D. M. Larrabee

D. M. Larrabee

IN REPLY REFER TO:

G-MD-CNM

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

RECEIVED
JUL 10 1953

July 10, 1953

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-2972 (samarskite)

To: S. W. Ellis, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant: E. S. Huntsman, Fillmore, California.
Name of property: Hilltop Mine.
Location of property: Clark County, Nevada
Date of field team report: June 30, 1953.
Authorship of field team report: G. W. Walker and E. H. Bailey.
Field team's recommendation: Denial.
Comments: Insufficient samarskite to warrant further exploration.
ACTION SUGGESTED: Follow field team's recommendation.

D. M. Larrabee

Larrabee:jeh
G-7/10/53
cc: Director's reading 4212
Branch reading 4212
DMEA 3
Larrabee G-232 (files)

IN REPLY REFER TO:

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

G-HL-CNM

RECEIVED
JUL 16 1953

July 10, 1953

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-2972 (samarskite)

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ACTION SUGGESTED: Follow field team's recommendation.

D. M. Larrabee

Larrabee:jeh
G-7/10/53
cc: Director's reading 4212
Branch reading 4212
DMEA 3
Larrabee G-232 (files)

IN REPLY REFER TO:

G-FD-CRM

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

JUL 10 1953

July 10, 1953

Memorandum

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To: E. W. Ellis, Defense Minerals Exploration Administration
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Larrabee:jeh
G-7/10/53
cc: Director's reading 4212
Branch reading 4212
DMEA 3
Larrabee G-232 (files)

7/8/53 gla

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

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

July 2, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2972 (Samarskite)
Edwin S. Huntsman and Mrs. Lillian E. Massey
Hilltop Mine, Clark County, Nevada

Reference is made to your letter dated April 23, 1953, requesting a field examination of the subject mine.

Attached are four copies of a report entitled "DMEA-2972 - Hilltop Mine, Samarskite, Clark County, Nevada," by George W. Walker, and Edgar H. Bailey, Geologists, U. S. Geological Survey, dated June 30, 1953.

The examining geologists are of the opinion that the deposit does not contain sufficient columbium- or uranium-bearing minerals to warrant Government participation in an exploration program.

We recommend, therefore, that the application be denied.

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachment

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno (with copy of report)

Reviewed by
DMEA OPERATING COMMITTEE
7-10-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
SECRETARY OF THE INTERIOR, D. MCKAY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

# DMEA 2972 - Hilltop Mine, Samarskite

## Clark County, Nevada


George W. Walker, Geologist
U. S. Geological Survey

Edgar H. Bailey, Geologist
U. S. Geological Survey


June 30, 1953

Reviewed by
DMEA OPERATING COMMITTEE
7-10-53
(date)

# Hilltop Mine, Clark County, Nevada

George W. Walker and Edgar H. Bailey

The Hilltop pegmatite deposit in Clark County, Nevada was examined by George W. Walker and Edgar H. Bailey on May 23, 1953 as a result of a request for a field examination made by George C. Selfridge, Chairman, Operating Committee, Defense Minerals Exploration Administration. The property contains a small body of pegmatite in which crystals and pods of samarskite have been found. The owners applied for Government assistance in an exploration program costing $25,641.50; the examining geologists believe the expenditure of Government funds is not warranted by the meagre showings at the property and recommend that the application be denied.

## Location

The Hilltop mine is in sec. 16, T. 19 S., R. 70 E., in southeastern Clark County, Nevada. The workings lie at an altitude of about 4,000 feet some 2 miles west of Gold Butte in the Gold Butte Mining district. The property is reached from Riverside on paved U. S. Highway 91 by travelling on fairly good gravel roads according to the following directions:

| | |
|---|---|
| Riverside | 0.0 miles |
| Go east on U.S. 91 across bridge over Virgin River and turn right onto gravel road | 0.2 |
| Fork, go left | 0.6 |
| Fork, go right | 10.3 |
| Fork, go left | 11.1 |
| Fork, go right | 11.2 |
| Fork, make sharp left turn | 13.4 |
| Fork, go right | 18.4 |
| Fork, go right | 21.1 |
| Fork, straight ahead | 25.2 |
| Fork, go right | 30.6 |
| Fork, go right | 36.5 |
| Fork, go right | 36.7 |
| Fork, go right | 40.0 |
| Fork, Sharp left onto mine road | 41.3 |
| Park car | 42.4 |

A steep jeep road extends from the parking area about half a mile to the mine.

## Ownership

The Hilltop property is owned by Howard Fitch, Jack A. Raridon, W. H. Garrett, and A. S. Coleman, who on September 17, 1952 granted an option to lease to E. S. Huntsman of Fillmore, California. Mr. Huntsman and Mrs. Lillian E. Massey, 315 First Street, Fillmore, California have submitted the application, but the data contained in it does not make Mrs. Massey's title clear.

## Workings

The workings at the property, as shown on the accompanying map, consist of two small trenches, an adit that is little more than an undercut bank, and shallow bulldozer cuts. A portable compressor and a few picks and shovels were on the property at the time of the examination.

## Water Supply

There is no water at the mine, but sufficient water for a small crew and limited drilling could probably be obtained from a spring at a nearby homestead. As the property is too small to supply feed for a concentrating mill, we did not ascertain where sufficient water for ore dressing could be obtained.

## Geology

The Hilltop mine explores a part of a lenticular pegmatite body exposed on the surface over a length of 180 feet and a width of 30 feet. The trend of the body is nearly north, and it is believed to dip steeply to the east. The pegmatite consists of three zones: a marginal band of coarse aplite, an intermediate zone of graphic granite and fine-grained pegmatite, and a central core of coarse pegmatite with crystals of feldspar up to 6 feet in maximum dimension and large masses of quartz. The last material to crystallize apparently was quartz, and locally the feldspar adjacent to the quartz contains a 5-inch, dark-colored band in which green mica is fairly abundant.

The rock surrounding the pegmatite is a porphyritic granite containing large phenocrysts of microperthite. The granite is a part of a stock some 4 miles long from east to west and 2 miles wide; locally it contains quartz veins, mined for gold, and lenticular masses of aplite and pegmatite. However, in the vicinity of the mine no other pegmatite bodies approaching the size of the one explored by the shallow working of the Hilltop mine were seen.

## Ore Deposit

The applicant requested funds to explore further the pegmatite for samarskite and other thorium-bearing minerals. The reviews by the Washington office commodity specialists suggest the exploration should be for "columbium-tantalum-uranium minerals" and that strategic mica might be recovered as a byproduct.

The applicant is reported to have recovered 300 pounds of samarskite--an oxide of iron, calcium, uranium, columbium, tantalum, and rare earths--from the pegmatite by means of carefully searching for surface float and carefully sorting the rock broken in making the shallow workings. A picked sample of nearly pure samarskite assayed by the Atomic Energy Commission contained:

| | |
|---|---|
| 42.0 % | $Cb_2O_5$ |
| 2.0 % | $TiO_2$ |
| 1.2 % | $ThO_2$ |
| 1.0 % | $Ta_2O_5$ |
| 11.5 % | $U_3O_8$ |
| 15.1 % | Rare earths |

In addition the pegmatite also contains small amounts of allanite and monazite, both of which are weakly radioactive. Other minerals present, besides the quartz and feldspar which form the bulk of the pegmatite, are purple fluorite that is non-radioactive, epidote and/or clinozoisite, muscovite, biotite, magnetite, stibiotantalite (?), and chlorite (?).

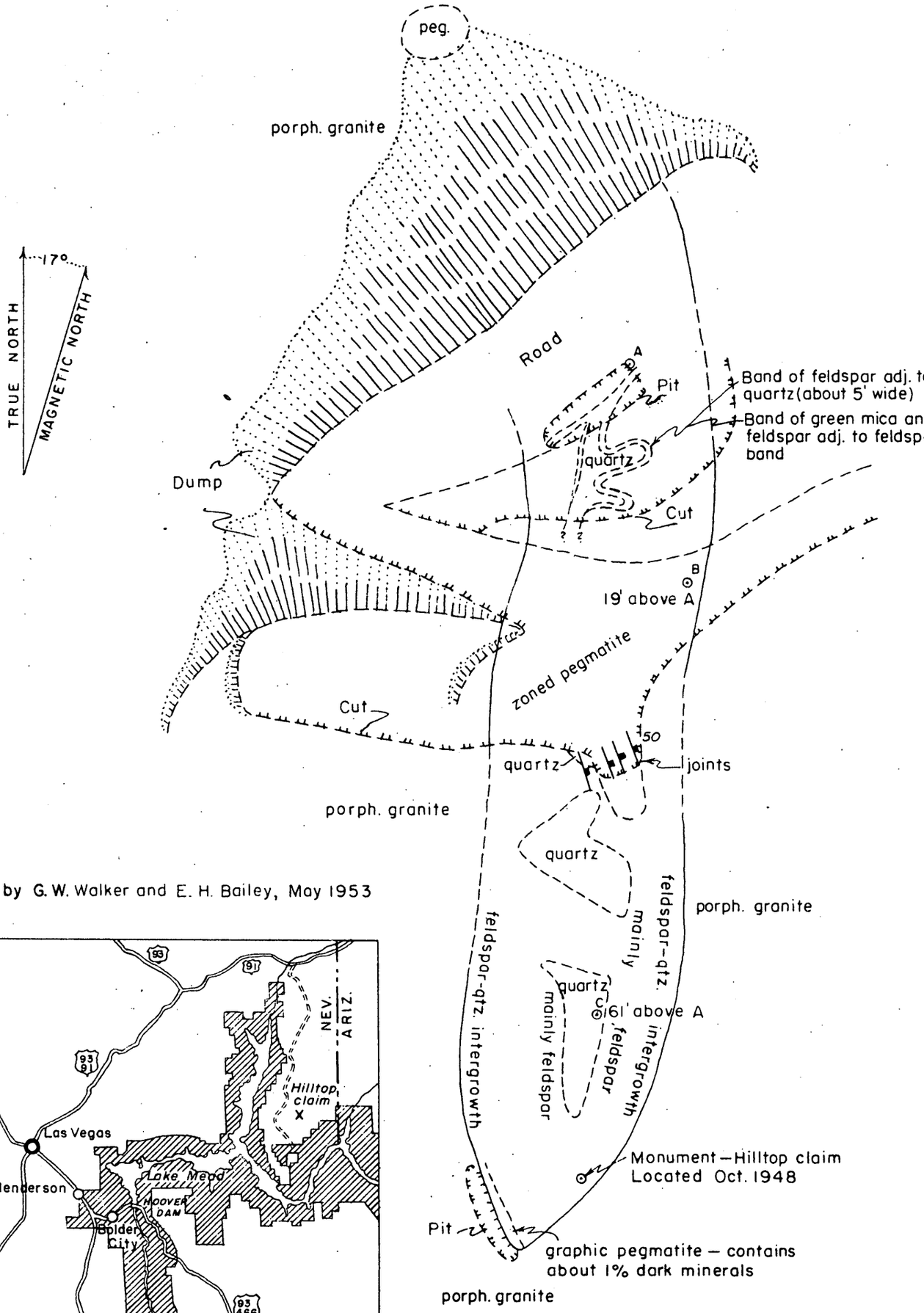
Only a few 1/4-inch crystals of samarskite were found during a two-hour search covering all exposed parts of the pegmatite. When the property was visited at an earlier date by George Walker, a thorough radiometric examination was made. The samarskite was found to be highly radioactive, but except for the radiation near visible crystals of samarskite, the pegmatite was essentially non-radioactive. This indicates the amount of samarskite, and other uranium or thorium minerals, in the pegmatite is very low, and verifies the visual estimate based on the present exposures. A few pieces set aside by the operator in a "high-grade pile" contained less than one percent samarskite. A sample of this material assayed by the U. S. Bureau of Mines, Hydrometallurgical and Assaying Laboratory at Reno, Nevada contained: 0.006 percent uranium, less than 0.1 percent columbium, less than 0.2 percent thorium, less than 0.2 percent rare earths. Because of the characteristic spotty occurrence of rare minerals in pegmatites, it is impossible to predict what might be encountered by further exploration, but it appears unlikely that uranium- or columbium-bearing minerals would be found in sufficient quantity to justify further exploration for these minerals alone.

The mica is chiefly confined to the 5-inch bands adjacent to the massive quartz, and in these bands it amounts to less than a third of the rock. It is all non-strategic, as it contains intergrown biotite and displays onion structure. In addition it is tangled, ruled, and crushed, and occurs in pieces too small for punch size.

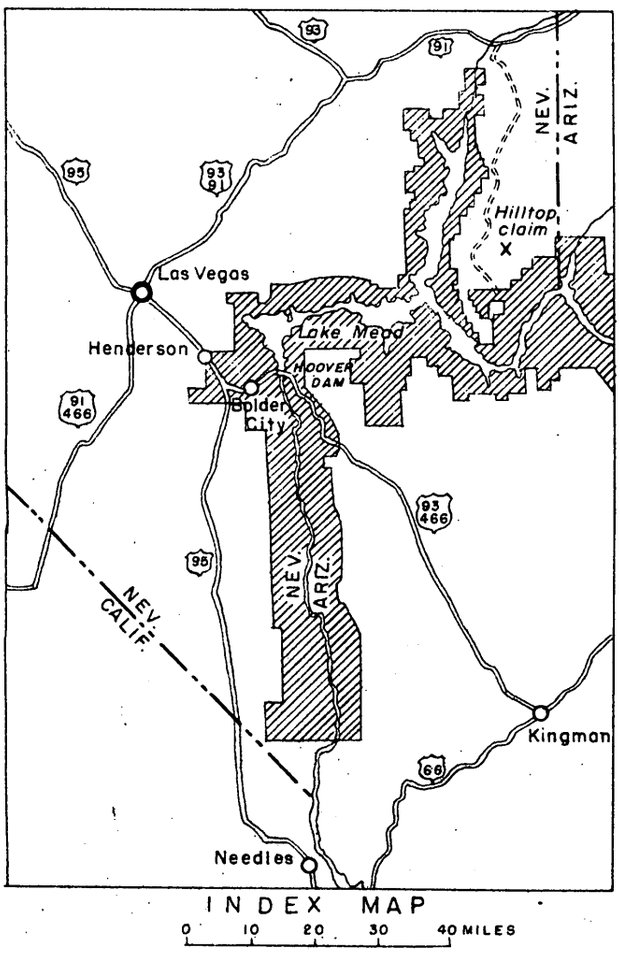
The feldspar and quartz appear to be of commercial quality, but the deposit is so remote that it would not pay to truck the product to a market. The fluorite amounts to less than one percent of the pegmatite.

## Recommendation

There appears to be no possibility of recovering any of the associated minerals as a byproduct of mining the pegmatite for samarskite, and the samarskite is present in too small amounts to justify further exploration. It is recommended that the application be denied.




Mapped by G. W. Walker and E. H. Bailey, May 1953




HILLTOP CLAIM, CLARK COUNTY, NEVADA

FILE COPY
SURNAME:

Ellis
Selfridge
Jackson

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

Mrs. Lillian T. Massey
315 1st Street
Fillmore, California

Mr. Edwin C. Huntsman
Box 322
Fillmore, California

APR 23 1953

Re: Docket No. DMEA-2972 (Samarskite)
Hilltop Mine
Clark County, Nevada

Dear Mrs. Massey and Mr. Huntsman:

J.C. 4/24/53

The application for assistance in exploring your property, under the above-captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. It has been referred to the Executive Officer of Region III at the following address:

Mr. W. C. Miller
Executive Officer, Region III
DMEA Field Team
1012 Flood Building
870 Market Street
San Francisco 2, California

The Regional Office will contact you at the earliest opportunity in regard to your project.

Sincerely yours,

R. D. Wittendorf (for)
Administrator

cc to Mr. Edwin C. Huntsman

cc to: Adm. Reading File
Docket
Mr. Ellis
DMEA Field Team, Region III (2)

700
FILE COPY
SURNAME:

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

Mr. H. C. Miller
Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

APR 23 1953

Re: Docket No. DMEA-2972 (Lazarskite)
Edwin E. Huntsman and
Mrs. Lillian E. Massey
Hillto Mine
Clark County, Nevada

J. C. 4/24/53

Dear Mr. Miller:

The above-captioned application is referred to your office for a Field Team examination.

Enclosed are copies of memoranda from the commodity specialists. One memorandum, dated April 8, is from Mr. M. H. Kline of the Bureau of Mines, and the other, dated April 17, is from Mr. D. M. Larrabee of the Geological Survey.

The application is certainly lacking in detail. However, the Applicant has answered in the letter of March 31, 1953, some of the questions that naturally arise. It will be necessary for the Field Team, among other things, to ascertain, if possible, where the nearest water supply may be found. If a contract is recommended, the actual location and footage of the proposed exploration work should be shown, together with a proper breakdown of the costs thereof.

A copy of the application was retained by your office.

Sincerely yours,

George C. Selfridge

(JHB)

Chairman, Operating Committee

Enclosures 2

CONCURRED:

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

A. R. Kinkel, Jr. (JHB)
Member, Geological Survey

EWEllis/Sla 4-22-53
cc to: Adm. Reading File
Operating Committee
Docket
Messrs. M. H. Kline, Rm. 1345
D. M. Larrabee, Rm. G-232
Ellis
DMEA Field Team, Reg. III

4/17/53 gla

IN REPLY REFER TO:
G-MD-CNM

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

April 17, 1953

Memorandum

REVIEW OF APPLICATION DMEA-2972 (samarskite)

To: E. W. Ellis, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicants: Edwin S. Huntsman, Box 322, Fillmore, California, and Lillian E. Massey, 315 1st Street, Fillmore, California.
Name of property: Hilltop, Hillside, Hillside Nos. 1, 2, and 3, and Basin claims.
Location of property: 43 airline miles N. 59° E. of Boulder City, in sec. 16, T. 19 S., R. 70 E., Clark County, Nevada.
Estimated cost of project: $25,641.50.
Summary of applicant's proposal:
(1) Adit.
(2) Drift.
Sources of information on applicant's property:
(1) Hill, J. M., 1916, Notes on some mining districts in eastern Nevada: U. S. Geol. Survey Bull. 648, pp. 43-45.
Comments:
(1) Hill's map shows many pegmatites in an area of granite, particularly on the eastern peak of Gold Butte.
(2) The analysis by AEC indicates a mineral rather than a representative sample of material which could be economically mined. The 300-lb. (reported) sample is likely from a pod of samarskite and might well be all that is in the pegmatite.
(3) The plans and costs for exploration are a bit hazy--costs appear high, especially for bulldozer to make the proposed crosscut.
(4) Although this is certainly a very long shot, because mica (strategic???) was found in 1943, a field team report might be helpful.
RECOMMENDATION:
Field team examination???

D M Larrabee

D. M. Larrabee

IN REPLY REFER TO:
G-ND-CNM

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

April 17, 1953

Memorandum

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(4) Although this is certainly a very long shot, because mica (strategic ??) was found in 1943, a field team report might be helpful.
RECOMMENDATION:
Field team examination?

D. M. Larrabee

Larrabee:jeh
G-4/17/53
cc: Director's reading 4212
Branch reading 4212
DMEA 3
Larrabee G-230

G-MN-CNR REFER TO:

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

April 17, 1953

Memorandum

REVIEW OF APPLICATION DMEA-2972 (samarskite)

To: E. W. Ellis, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
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RECOMMENDATION:
Field team examination??

D. M. Larrabee

Larrabee:jeh
G-4/17/53
cc: Director's reading 4212
Branch reading 4212
DMEA 3
Larrabee G-230

STANDARD FORM NO. 64

# *Office Memorandum* • UNITED STATES GOVERNMENT

TO : D. Larabee, Mineral Deposits Branch DATE: April 15, 1953

FROM : A. P. Butler, Jr., TEB CO *A P Butler*

SUBJECT: DMEA Docket 2972, Huntsman and Massey Applicants, Fillmore, Calif.; Hilltop, Hillside and Basin Claims, Secs 16, T. 19 S., R. 70 E., Clark Co., Nev.

I am returning this application, as suggested in our phone conversation of this date, because the information in the application suggests that the property is much more likely to be significant for columbium than for uranium, if it has any significance at all.

Joe O. Hosted of the Atomic Energy Commission tells me that the AEC has no buying program for refractory rare-earth minerals such as samarskite, but may consider buying the uraniferous sludges resulting from the processing of such minerals for rare-earths and columbium. Thus, unless ore of this type can be marketed for its columbium or rare-earth content it cannot be considered a source of uranium. For these reasons I think that this application has to be considered on its merits with respect to columbium and rare-earths.

4/10/53 gla

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 10 1953

April 8, 1953

Memorandum

To: Ernest Wm. Ellis, Chief, Rare and Miscellaneous Metals Division, DMEA, Room 4640

From: M. H. Kline, Chief, Rare and Precious Metals Branch, Bureau of Mines

Subject: Docket No. DMEA 2972, Samarskite-bearing pegmatites in Clark County, Nevada

The above-mentioned docket has been reviewed by E. J. Carlson and R. F. Griffith of this branch. Their comments are noted in the following paragraphs.

In the letter of transmittal from Mrs. Lillian Massey and under item 5 (b) of the application, the proposed work is stated to be "a crosscut 60 feet (long) and around 35 feet deep, with probable additional tunneling from the crosscut." By this, we assume they plan to bulldoze a trench to a depth of 35 feet. In the estimate of costs, there are no explosives listed for either such deep trenching or for probable tunneling afterwards.

One sample ran high in columbium and uranium. No other sample analysis is noted. We believe the application should read in 5 (a) "Columbium-tantalum-uranium minerals" rather than "samarskite and thorium".

The lack of water would be a serious problem. We know of no dike material that could be trucked for many miles (such as 125 miles to Las Vegas, or even half that distance) for separation of small amounts of heavy minerals.

It is recommended that a field examination be made of the property and that in such examination the following items be covered:

1. The distance to a supply of water which would be sufficient for ore dressing.

2. The taking of a number of samples to determine which minerals are of economic interest, and to determine the probable mineral content as indicated by sampling exposed parts of the dike.

3. The thickness and length of the dike should be estimated.

4. If bulldozer trenching appears logical to disclose the dimensions of the dike and to obtain more accurate samples, then it should be determined by the field engineer whether a dozen or more shallow bulldozer trenches would not disclose more pertinent data than one short 60-foot long, 35-foot deep trench and probable tunneling.

M. M. Milne

Attachment

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

April 8, 1953

Memorandum

To: Ernest Wm. Ellis, Chief, Rare and Miscellaneous Metals Division, DMEA, Room 4640

From: M. H. Kline, Chief, Rare and Precious Metals Branch, Bureau of Mines

Subject: Docket No. DMEA 2972, Samarskite-bearing pegmatites in Clark County, Nevada

The above-mentioned docket has been reviewed by E. J. Carlson and R. F. Griffith of this branch. Their comments are noted in the following paragraphs.

In the letter of transmittal from Mrs. Lillian Massey and under item 5 (b) of the application, the proposed work is stated to be "a crosscut 60 feet (long) and around 35 feet deep, with probable additional tunneling from the crosscut." By this, we assume they plan to bulldoze a trench to a depth of 35 feet. In the estimate of costs, there are no explosives listed for either such deep trenching or for probable tunneling afterwards.

One sample ran high in columbium and uranium. No other sample analysis is noted. We believe the application should read in 5 (a) "Columbium-tantalum-uranium minerals" rather than "samarskite and thoreum".

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3. The thickness and length of the dike should be estimated.

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M. H. Kline

Attachment

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

April 8, 1953

Memorandum

To: Ernest H. Ellis, Chief, Rare and Miscellaneous Metals Division, B.M., Room 5640

From: M. H. Klinz, Chief, Rare and Precious Metals Branch, Bureau of Mines

Subject: Docket No. [illegible] A 2072, Samarskite-bearing pegmatites in Clark County, Nevada

The above-mentioned Docket has been reviewed by [illegible] J. Carlson and L. F. Griffith of this branch. Their comments are noted in the following paragraphs.

In the letter of transmittal from Mr. Milton Massey and under item 5 (b) of the application, the proposed work is stated to be "a crescent 60 feet (long) and around 25 feet deep, with probable additional tunneling from the crescent." By this, we assume they plan to build one a trench to a depth of 25 feet. In the estimate of costs, there are no explosives listed for either such deep trenching or for probable tunneling, afterwards.

One sample was high in columbium and tantalum. No other assay analysis is noted. We believe the application should read in 5 (a) "Columbium-tantalum-uranium minerals" rather than "samarskite and thorium".

The lack of water would be a serious problem. We know of no dike material that could be trucked for many miles (such as 12, miles to Las Vegas, or even half that distance) for separation of small amounts of heavy minerals.

It is recommended that a field examination be made of the property and that in such examination the following items be covered:

1. The distance to a supply of water which would be sufficient for ore dressing.

2. The taking of a number of samples to determine which minerals are of economic interest, and to determine the probable mineral content as indicated by sampling exposed parts of the dike.

3. The thickness and length of the dike should be estimated.

4. If bulldozer trenching appears logical to disclose the dimensions of the dike and to obtain more accurate samples, then it should be determined by the field engineer whether a dozen or more shallow bulldozer trenches would not disclose more pertinent data than one short 60-foot long, 35-foot deep trench and probable tunneling.

M. H. Kline

Attachment

April 7, 1953

Mrs. Lillian E. Massey
315 1st Street
Fillmore, California

DMEA-2972
Subj: Exploration Assistance
Re: Hilltop, Hillside & Basin Claims

My dear Mrs. Massey:

The receipt of your application dated February 25, 1953 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-2972 and referred to the Rare and Miscellaneous Metals Division.

Kindly refer to DMEA-2972 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Chief, Operations Control
and Statistics Division

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

April 7, 1953

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

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

DMEA-2972 Edwin S. Huntsman and Lillian E. Massey

ROBERT E. ADAMS

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

33980

dmea 2972

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 6 1953

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

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

April 2, 1953

Memorandum

To: Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for Exploration Loan - Samarskite and Thorium - Edwin S. Huntsman and Mrs. Lillian E. Massey - a partnership - Box 322, 315 1st Street, Fillmore, California

This office received four copies of MF-103 forms and supporting data from Mrs. Lillian Massey on February 27, 1953. A cursory review of the application indicated that no map or sketch was included showing the claims and the location of the proposed crosscut and tunnel; neither was there a map or sketch of the location of the pegmatite dike or the location from which the 300-pound sample sent to the Atomic Energy Commission was taken.

The section, township, and range of the claims were not included information. Also, the relatively large contingency item was not broken down. It was not indicated either whether the compressor was to be purchased or rented.

I thereupon wrote Mrs. Massey on March 4 for the indicated information. By letter dated March 31, 4 copies of a map were received. A copy of her letter is being attached to each set of applications, as it contains information that is needed in evaluating her application.

Three copies of the application and one set of 5 photographs (all she sent) are attached herewith.

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachments

Copy to: E. H. Bailey, USGS

DMCA 2972

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 6 1953

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

April 2, 1953

Memorandum

To: Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

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H. C. MILLER

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachments

Copy to: E. H. Bailey, USGS

dmea 2972

C
O
P
Y

United Stated Dept. of the Interior
Defense Minerals Exploration Administration
1012 Flood Building
870 Market Street
San Francisco 2, California

Gentlemen:

As requested in your letter dated March 4th, 1953, please find enclosed four copies of a sketch made of the area we propose to develop with the markings thereon indicating the pegmatite dike, proposed crosscut and tunneling. The probable length of the crosscut will be approximately 60 feet and around 35 feet deep. The length of tunneling is undetermined depending of course on what we run into to.

Also enclose is five snapshots taken on claims and area where the 300 lb sample has been taken from.

Breakdown on contingency item:

| | |
|---|---|
| Possible cost of Jeep | $ 400.00 |
| Gas & Oil not accounted for in original estimate | 1,296.00 |
| Additional Labor- if necessary- depending upon the success of the showings after crosscut is made | 3,915.00 |
| | $5,611.00 |

Compressor is now on the claim but it does not belong to us. The compressor is in fairly good condition and we believe it can be purchased for $750.00 or less, otherwise we will have to pay rent on it. A new compressor of this size will run around $3,500.00.

Trusting that this is the the information requested, if not, please advise.

Very truly yours,

/s/t/ Lillian Massey

Lillian Massey (Mrs.)

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 6 1953

# 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. dmea 2972
Metal or Mineral
Date Received 4-6-53
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: SEE ATTACHED ACCOMPANYING PAPERS.

(*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 project.*—(a) State the mineral or minerals for which you [illegible] 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 February 25, 1953, 195..

Edwin S. Huntsman/Lillian E. Massey
(Applicant)

By Lillian E. Massey

**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

UNITED STATES DEPARTMENT OF THE INTERIOR

Defense Mineral Exploration Administration

Application for aid in an Exploration Project
Pursuant to DMEA Order 1,
Under the Defense Profuction Act of 1950
as amended

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

1.(a) Name of Applicant

Edwin S. Huntsman & Lillian E. Massey - a Partnership
Box 322 315 1st Street
Fillmore, Calif. Fillmore, Calif.

3. Applicant's Property Rights:

| | | | | | |
|---|---|---|---|---|---|
| (a) | Hilltop Notice | #301268 | Bk. 19 | Page 291 | 11/30/48 |
| | Hillside #1 C/L | #318772 | Bk. 19 | Page 528 | 8/ 2/49 |
| | Hilside #3 C/L | #318772 | Bk. 19 | Page 529 | 8/ 2/49 |
| | Hillside C/L | #318774 | Bk. 19 | Page 529 | 8/ 2/49 |
| | Hillside N/L | #325127 | Bk. 19 | Page 584 | 10/26/49 |
| | Basin N/L | #297261 | Bk. 19 | Page 264 | 10/ 4/48 |

(b) Gold Butte Mining District, Names of Claims, Hilltop, Hillside, Hillside 1, 2, & 3 and The Basin. ~~There~~ The above are the known claims - no actual mining operations has been done other than the exploratory work that has been done on the Hilltop Mine.

(c) Have Option Agreement for Lease - (See copy Attached)

(d) Same as (c) above

(e) Not applicable

(f) All unpatented Claims - See description listed in 3.(a)

4. Physical Description:

(a) Only exploratory work done on Hilltop claim.
No work being done at present.
No existing mine workings or production facilities.
Partnership has 90% mining option interest in property.
County dirt road within one mile of property and jeep road to claims.

(b) No production other than 300 pounds of ore taken out for samples, analyses, and grading. Sample sent to Atomic Energy Commission showed the following chemical analysis as per letter dated November 23, 1951.

"42% $Cb_2O_5$, 1% $Ta_2O_5$, 2% $TiO_2$, 11.5% $U_3O_8$, 1% $ThO_2$, 15.1% Rare Earth Oxides. This composition, particularly the low Titanium oxide content indicates the mineral should be classified as Samarskite."

(c) Property consists of small hills approximately 1000 feet, sloping down into a Basin. There are five claims, 1500' X 600' in Each Claim in a pigmatite Dyke. Indications and analyses show that rare earth ores are present.

(d) County road within one mile. Jeep road on property to claims. 72 miles to railroad. Supply and resident points within 42 miles. All shipping could be done by trucking direct from claims.

(e) Manpower, materials and supplies & equipment availability at Los Vegas 125 miles away. Gasoline power. Water available from drinking purposes only.

5. The Exploration Project:

(a) Samarskite and Thorium.

(b) Prosposed work is to crosscut and tunnel.

(c) The work will start within 30 days and completed within 12 months from date of exploration project contract.

(d) Twenty years of exploration work and prospecting including 5 years of actual mine working in tunnels and shafts.

6. Estimate of costs: See attached schedule

7. (a) We are prepared to furnish our share of the cost of the proposed project in accordance with the regulations on Government participation.

(b) We proposed to furnish our share of the costs through labor and supervision of the mining operations during the length of the project.

Huntsman/Masby
DMEA Order 1
Application - Form MF-103

| Estimation of costs; | | Daily Costs per day basis | Cost for Project (261 probable working days) |
|---|---|---|---|
| (a) | None | | |
| 6.(b) | Mine Laborer | $ 15.00 | $ 3,915.00 |
| (c) | Shovels | .10 | 26.10 |
| | Picks | .10 | 26.10 |
| | Bits- Compressor | 1.50 | 391.50 |
| | Small Tools - Etc | .30 | 78.30 |
| (d) | Bulldozer-with operator | 56.00 | 14,616.00 |
| | Compressor | 5.00 | 1,305.00 |
| (e) | Probable house repairs | 1.00 | 261.00 |
| (f) | None | | |
| (g) | Comp. Insurance | .62 | 161.82 |
| | Other Insurance | .84 | 167.04 |
| | Accounting | 1.25 | 300.00 |
| | Payroll Taxes | .47 | 120.06 |
| (h) | Contingencies 20% | | 4,273.58 |
| | | Total | $25,641.50 |

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

OFFICIAL BUSINESS

U. S. Bureau of Mines
1912 Flood Building
870 Market Street
San Francisco 2, Calif.

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, $300
(PMGC)

SAN FRANCISCO, CALIF.
APR 2
P

FIRST CLASS

Defense Minerals Exploration Administration
Interior Building
Washington 25, D. C.

FIRST CLASS

Lmea 2972

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2972

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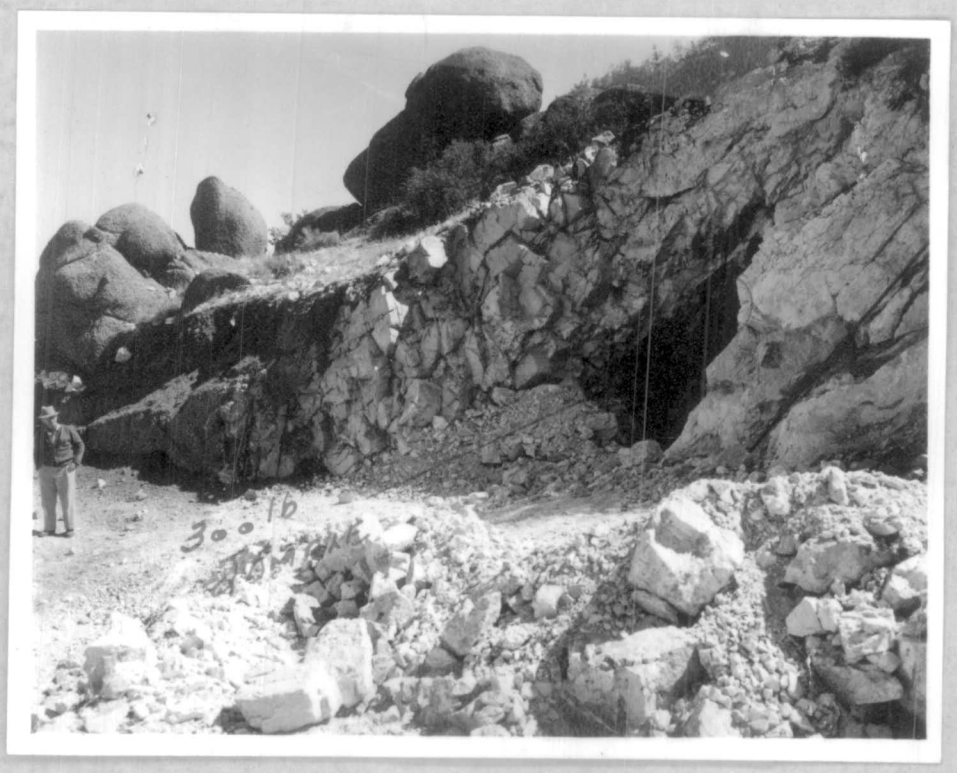
dmea 2972




dmea 2992

## OPTION AGREEMENT FOR LEASE

This agreement made and entered into this 17th day of September, 1952, by and between Howard Fitch of San Francisco, California, Jack A. Raridon of Sepulveda, California, W. H. Garrett, A. S. Coleman of Bunkerville, Nevada, parties of the first part; and E. S. Huntsman of Fillmore, California, parties of the second part;

WITNESSETH:

That the parties of the first part for and in consideration of the sum of Ten Dollars ($10.00) to them in hand paid upon the execution of this agreement, the receipt whereof is hereby acknowledged, do hereby grant unto the parties of the second part, an exclusive o tion for a lease upon the following named mining claims, situated in the County of Clark, State of Nevada, located in the Gold Butte Mining District, names of Claims, Hill Top, Hill Side, Hill Side Nos. 1, 2, & 3, and The Basin.

That this o tion for a lease shall commence upon the date hereof and shall continue and be effective until March 17, 1953, inclusive, during which time the said parties of the second part shall have the right to commence, conduct and carry on exploratory and development operations upon said properties. That parties of the second part will be granted an extension of this option after thirty (30) days if desired; extension of option not to exceed one hundred eighty (180) days. Terms of extension of option, One Hundred Dollars ($100.00) a month payable on or before the 17th of September and of each and every month for six (6) months. Failure to make payments on or before above dates, this agreement will be null and void.

That the parties of the second part, upon deciding at any time prior to the expiration of this option to undertake and enter into a lease upon said properties, shall have a right to such lease from parties of the first part. That such proposed lease shall contain the usual terms, covenants and conditions of the ordinary mining lease. That same shall provide for and be in consideration of ten per cent (10%) of gross royalties on all mineral extracted from said properties.

Howard W. Fitch
Howard W. Fitch

Jack A. Raridon
Jack A. Raridon

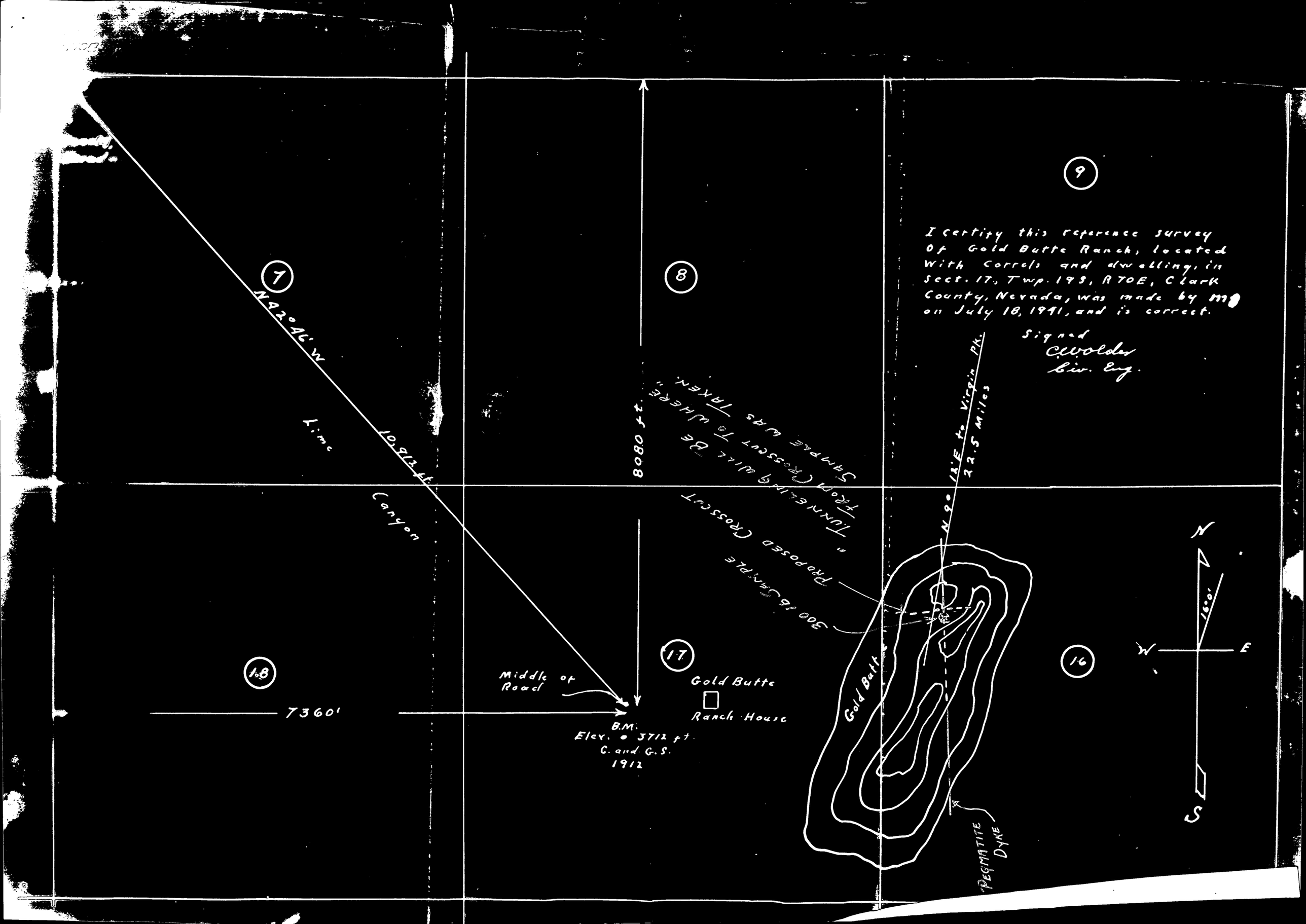
W. H. Garrett
W. H. Garrett

A. S. Coleman
A. S. Coleman

PARTIES OF THE FIRST PART

E. S. Huntsman
E. S. Huntsman

PARTY OF THE SECOND PART


7
N 42° 46' W
1013 ft.
Lime
Canyon
8
8080 ft.
"Tunneling will be from Crosscut to where Sample was taken."
Proposed Crosscut
300 ft. Sample
9
I certify this reference survey Of Gold Butte Ranch, located With Corrals and dwelling, in Sect. 17, Twp. 19S, R70E, Clark County, Nevada, was made by me on July 18, 1941, and is correct.
Signed
C. W. Older
Civ. Eng.
N 2° 12' E to Virgin Pk.
22.5 Miles
N
W
E
S
1600'
16
17
18
Gold Butt
Middle of Road
Gold Butte
Ranch House
B.M.
Elev. = 3712 ft.
C. and G.S.
1912
7360'
Pegmatite Dyke