IN REPLY REFER TO:
G-MD-CNM

Department of the Interior
Defense Minerals Administration
RECEIVED
JUL 24 1953

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

July 24, 1953

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-2865 (asbestos)

To: L. G. Houk, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant: B. E. Swartout.
Name of property: Loey and Lena Claims.
Location of property: Gila County, Arizona.
Date of field team report: April 1953.
Authorship of field team report: A. F. Shride and Lincoln A. Stewart.
Field team's recommendation: Denial.
Comments: I concur with Field Team.
ACTION SUGGESTED: Follow field team's recommendation.

D. M. Larrabee

D. M. Larrabee

IN REPLY REFER TO:

G-MD-CBM

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

JUL 24 1953

July 24, 1953

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-2865 (asbestos)

To: L. G. Hewk, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant: B. F. Swartout.
Name of property: Losy and Lena Claims.
Location of property: Gila County, Arizona.
Date of field team report: April 1953.
Authorship of field team report: A. F. Shride and Lincoln A. Stewart.
Field team's recommendation: Denial.
Comments: I concur with Field Team.
ACTION SUGGESTED: Fallow field team's recommendation.

D. M. Larrabee

Larrabee:jch
G-7/24/53
cc: Director's reading 4212
Branch reading 4212
DMEA 3
Larrabee (files G-232)

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

Defense Minerals Administration
RECEIVED
JUL 20 1953

224 New Customhouse
Denver 2, Colorado

July 15, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2865 (Asbestos), B. E. Swartout, Loey and Lena Claims, Gila County, Arizona.

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

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
7-24-53
(date)

FILE COPY
SURNAME: JB

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

600

July 23, 1953

Memorandum

Docket No. DMEA-2865 - Asbestos
Bruce E. Swartout
Loey and Lena Claims
Gila County, Arizona

To: Mr. C. O. Mittendorf

From: Lawrence G. Houk

Subject: Concurrence of the denial on the subject application

The Nonmetallic Minerals Division concurs with Region IV in the denial of this application because the deposit appears to be very local in extent, and no structural features are noted that would indicate potential deposits in the area.

LGHouk:gad 7/23/53

Copy to: Admr. R. File
Docket File
Mr. Houk

R.C.J. 7-24-53

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

July 23, 1953

Memorandum

Docket No. DMEA-2865 - Asbestos
Bruce E. Swartout
Loey and Lena Claims
Gila County, Arizona

To: Mr. C. O. Mittendorf

From: Lawrence G. Houk

Subject: Concurrence of the denial on the subject application.

The Nonmetallic Minerals Division concurs with Region IV in the denial of this application because the deposit appears to be very local in extent, and no structural features are noted that would indicate potential deposits in the area.

Noted
Com

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

COPY

224 New Customhouse
Denver 2, Colorado

July 15, 1953.

Mr. Bruce E. Swartout
Box 204
McNary, Arizona

Re: Docket DMEA-2865

Dear Mr. Swartout:

Reference is made to your application for Government aid on the Loey and Lena claims.

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

A careful study of your property and data available to this agency reveals that the probability of disclosing minerable reserves of asbestos by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Very truly yours,

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

/s/ A. H. Koschmann
Field Team, Region IV

HMC:cwm
cc: Administrator, DMEA
WRStorms
RFRobinson
Subject
AHKoschmann (2)
Chron.

Reviewed by
DMEA OPERATING COMMITTEE

(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

July 15, 1953.

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2865 (Asbestos), B. E. Swartout, Gila County, Arizona.

Enclosed are nine copies of the final engineering report on the subject docket.

The applicant requested $27,480.00 for exploration on the Losy and Lena claims.

The examiners concur that further exploration is not warranted and recommend that the application be denied.

We concur in this recommendation.

W. H. King
W. H. King

Enclosures

MINERALS [illegible]
REGION IV

April 24, 1953

Memorandum

To : W. A. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Branch, Mining Div., Region IV

Subject : Final Report, Docket DMA-2305, Joey & Gene Asbestos Prospect, Ft. Apache Indian Reservation, Gila County, Arizona.

Enclosed are original and 4 copies of the above report by L. A. Stewart of the Bureau of Mines. The Geological Survey participated in this examination and will submit a report on the geology, but as there seems to be a good possibility that the GSS report will not be submitted for sometime, we are sending you our report. I believe the geologist concurs with Stewart's recommendation.

As the deposit seems to be very local in extent and there appears to be no possibility of structural changes that would produce additional deposits in the area, the examiner recommends that an exploration loan be denied. I concur with this recommendation.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

cc: W. A. King (3)
R. F. Robinson
DMA-2305
MF

WRStorms:als

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

June 29, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2865, Loey and Lena Claims (Asbestos), B. E. Swartout, Gila County, Arizona

Enclosed are the original and 8 copies of the geologic report by A. F. Shride of the U. S. Geological Survey covering the above docket.

It has been recommended that the loan be denied.

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

Enclosures (9)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P.O. Box 4116, University Station
Tucson 5, Arizona

June 26, 1953

Memorandum

To: A. H. Koschmann, Denver, Colorado

From: R. F. Robinson, Tucson, Arizona

Subject: Geologic report, M. 2865, Lucy and Lena Claims (Asbestos), B. F. Swartout, Gila County, Arizona

Enclosed are the original and 8 copies of the above report by A. F. Shride of the Geological Survey.

This report recommends that an exploration loan be denied because there is little geologic probability of finding a significant extension of the deposit. The report and recommendation have my approval.

Raymond F. Robinson

Raymond F. Robinson
Acting District Supervisor
Arizona - New Mexico

Enclosures 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
DMEA IV

DMEA-235, Lucy and Lena Asbestos Prospect

Fort Apache Indian Reservation, Gila County, Arizona

Lincoln A. Stewart, Mining Engineer
U. S. Bureau of Mines

April 1953

[illegible], [illegible] [illegible]

by Lincoln [illegible] Stewart[1/]

An application from [illegible] Department of [illegible], Ariz. for a 27,[illegible] exploration lease on [illegible] and [illegible] asbestos lease was received January [illegible], 19[illegible] by the Reason Office of the Defense Minerals Exploration Administration. The application was docketed as [illegible]. The purpose of the lease was to construct an access road to the property, bulldoze the outcrop, and explore the deposit by 200 feet of drifting at [illegible] unspecified places.

The Joey and Lena property of 3[illegible] acres is held under a 10-year lease from the Fort Apache Indian Reservation. It is about 50 road miles north of [illegible], Ariz. The property consists of [illegible] tracts, separated by Cibecue Creek Canyon. The [illegible]-acre tract west of the creek contains the old Joey and Lena mine workings; this is the area for which exploration was proposed. An examination was made by the writer and Robert [illegible] Peterson[2/] on March 1[illegible] and 27, 1953, accompanied by [illegible]. F. Sorlie[2/] and [illegible]. Robinson[2/] on the latter date.

This deposit was worked in 19[illegible]-29 and again in 1935-40. The production was small; royalties were paid to the Indian Service for [illegible] tons of filler, all grades.

The mineralization is contained in the pre-Cambrian Pascal Limestone in bedding planes immediately under the massive algal member. The intrusion of the underlying diabase sill did not disturb

---

1/ Mining Engineer, [illegible], Bureau of Mines
2/ Geologist, [illegible], Bureau [illegible]

the horizontal bending of the formation. The old mine workings have thoroughly explored the deposit to the minable limits. The fiber content of the outcrop pinches out on either side of the workings. To the eastward, the diabase sill has cut out the favorable beds.

It is concluded that the deposit was very local in extent and there appears to be no possibility of structural changes that would produce additional deposits in the area examined. Therefore, it is recommended that the application of Bruce E. Swartout for exploration of his Icey and Lena property be denied.

LOLY AND LINA JACKS
[illegible] MOUNTAIN
GILA COUNTY, ARIZONA
[illegible]

IMLA 2865

Geology

By
A. F. Chride
Geologist, U. S. Geological Survey

LOXY AND LONE CLAIMS
BRUCE J. SWARTOUT
GILA COUNTY, ARIZONA
MMA 2065

CONTENTS

CONTENTS	Page
Description of Deposit	1
Conclusions	2

LIST OF FIGURES

Figure 3 Loxy and Lone mine workings See engineering report

DESCRIPTION OF DEPOSIT

The Lucy and Lena asbestos prospect, approximately 1 mile north of the junction of Cibicue Creek and the Salt River on the Fort Apache Indian Reservation, is typical of minor occurrences of chrysotile in the Arizona asbestos district. The asbestos-bearing serpentine zones parallel the bedding of the flat-lying pre-Cambrian Mescal limestone which is the host for the asbestos veins. The serpentine zones are exposed by 4 short adits from which stoping, totaling approximately 2500 square feet in area, has been done (see Figure 3 of engineering report), and are well exposed along approximately 100 feet of cliff outcrop.

The principal asbestos-serpentine zone is in the top one foot of the lower member of the Mescal limestone; a discontinuous zone, two feet lower, exists in a few places. A thick concordant diabase intruded the Mescal horizon 25 feet below the top of the lower member. Approximately 50 feet southeast of the southeastern end of the deposit the underlying sill may cut up discordantly to approximately the top of the member; talus covers the diabase-limestone contact so that exact relations cannot be seen.

Asbestos exists for an outcrop distance of 200 feet. The upper (principal) zone is 8 to 10 inches thick and contains traces of asbestos to veins totaling 1½ inch in width. In a few places the zone is barren of asbestos. The upper zone in most places is incompletely serpentinized. The lower zone, which

contains asbestos only in a few places, includes asbestos veins totaling as much as ½ inch. Except for approximately 50 feet of the southeastern part of the asbestos outcrop, where the asbestos is harsh, all asbestos exposed is soft and of good tensile strength. Asbestos crops out for a distance of 50 feet northwest of the stoped area. Although serpentine is common at the favorable horizon north and east of this point, only traces of asbestos were observed.

Apparently there was little preparation of the limestones for mineralization by pre-mineral faulting. Post-mineral bedding-plane faulting is apparent in the area. The host limestone beds are horizontal. There are no folds in the limestone. Folds if existent would probably be favorable loci for concentrations of asbestos.

CONCLUSIONS

The stratigraphic units in which asbestos is found at the Joey and Lone claims are favorable units for the localization of asbestos; the diabase is in favorable close proximity to these units. Nevertheless, there is very little asbestos except where pre-mineral bedding-plane faulting is most apparent. This faulting, which is essential to localization of significant amounts of asbestos, was not widespread. No folds favorable to concentrations of ore exist. The exposures are probably typical of the mineralized area, and greater amounts of asbestos are not likely to be penetrated

by the proposed exploration. Therefore it is recommended that the application for an exploration loan be denied.

DMA-2305, ILEY AND LENA ASBESTOS PROSPECT
FORT APACHE INDIAN RESERVATION, GILA COUNTY, ARIZONA

Engineering Report

By Lincoln A. Stewart
Mining Engineer
U. S. Bureau of Mines

April 1953

DGLA-2365, LOEY AND LENA ASBESTOS PROSPECT
FORT APACHE INDIAN RESERVATION, GILA COUNTY, ARIZONA

CONTENTS

Engineering report	Page
Introduction	1
Location and accessibility	1
Ownership and extent	2
History and production	2
Description of the deposit	3
Proposed exploration and cost	5
Conclusions	5
Recommendations	6

ILLUSTRATIONS

Figure		Following page
1	Location map	1
2	Property map	2
3	Map of Loey and Lena mine workings	4

INTRODUCTION

An application was submitted to the Defense Minerals Exploration Administration for a $27,400 exploration loan by Bruce E. Swartout for the Joey and Lena asbestos prospect. This application, docketed as 2844-2865, was received by the Tucson office of the Defense Minerals Exploration Administration on January 26, 1953. The work was to consist of dozing an access road to the property and stripping the outcrop for an estimated cost of $15,000; and 400 feet of exploratory drifting at $18,000. The drifting was to be in 4 unspecified locations.

The property is held under a 10-year lease from the Fort Apache Indian Reservation. The mine previously had been visited by the writer in 1942 and again in 1943. The current examination was made by the writer and Robert W. Ageton[1] on March 13 and 27, 1953. The latter visit was made in company with A. F. Shride and May F. Robinson, geologists of the Geological Survey, and the applicant.

LOCATION AND ACCESSIBILITY

The Joey and Lena property is located near the southern boundary of the Fort Apache Indian Reservation. It is in 2 tracts situated along the cliffs on each side of Cibecue Creek about 1 mile north of the Salt River (figure 1). The application states that it lies in approximate secs. 4, 5, 8, 9 and 16, T. 5 N., R. 17 E., unsurveyed.

1/ Mining Engineer, U. S. Bureau of Mines

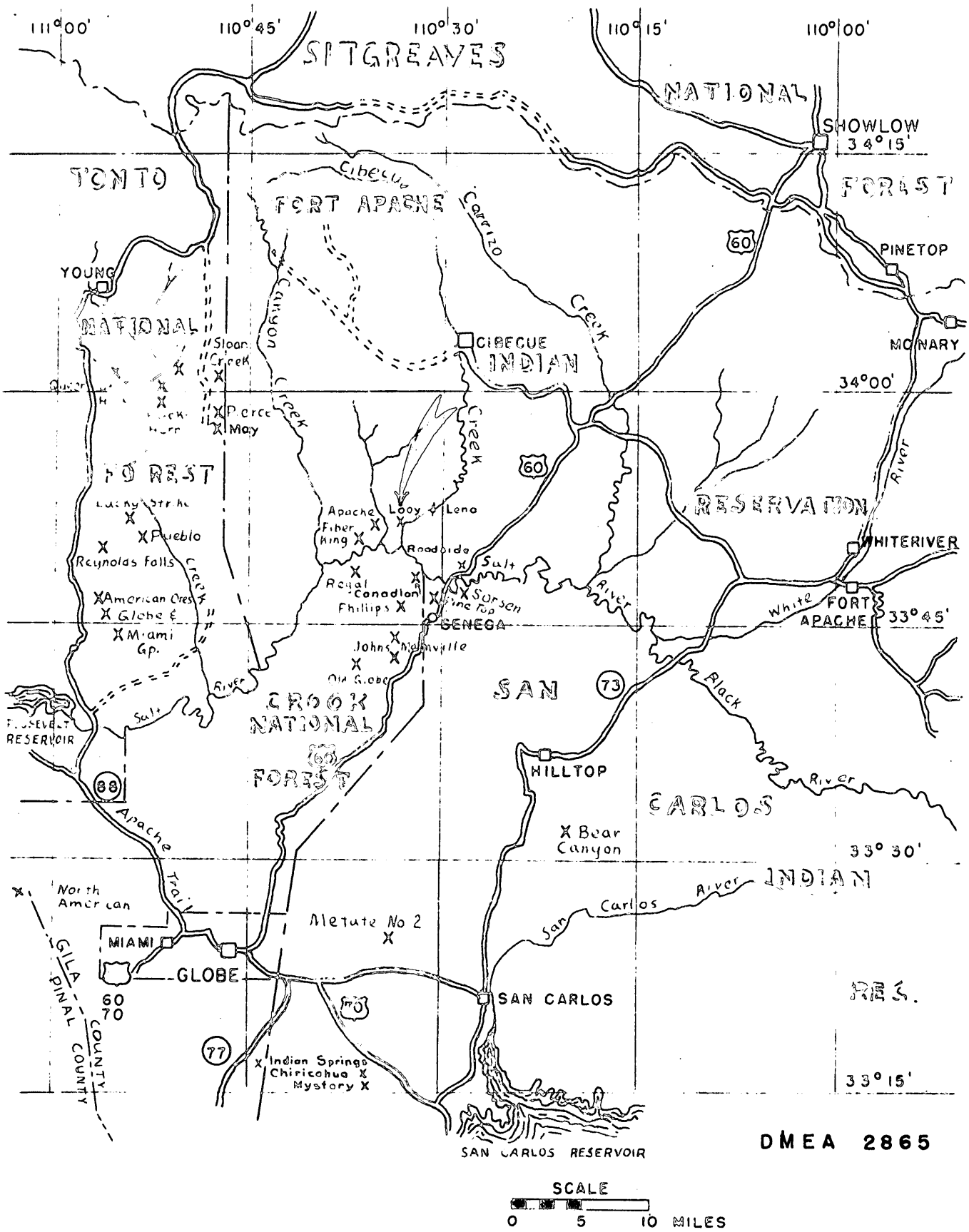


Fig. 1. - Location Map, Asbestos Deposits, Gila County, Arizona

It is reached from Globe by traveling 43 miles north on paved U. S. Highway 60, turning left a hundred yards beyond the Salt River bridge and following a fair dirt road down the north side of Salt River to Salt River Draw, a distance of 6.2 miles. Turn right up this stream for 1.2 miles to the end of the road. From there a 1½-mile trail leads over the ridge to the Loey and Lena prospect. These mine workings are in the base of a towering cliff face at an altitude of about 4,000 feet.

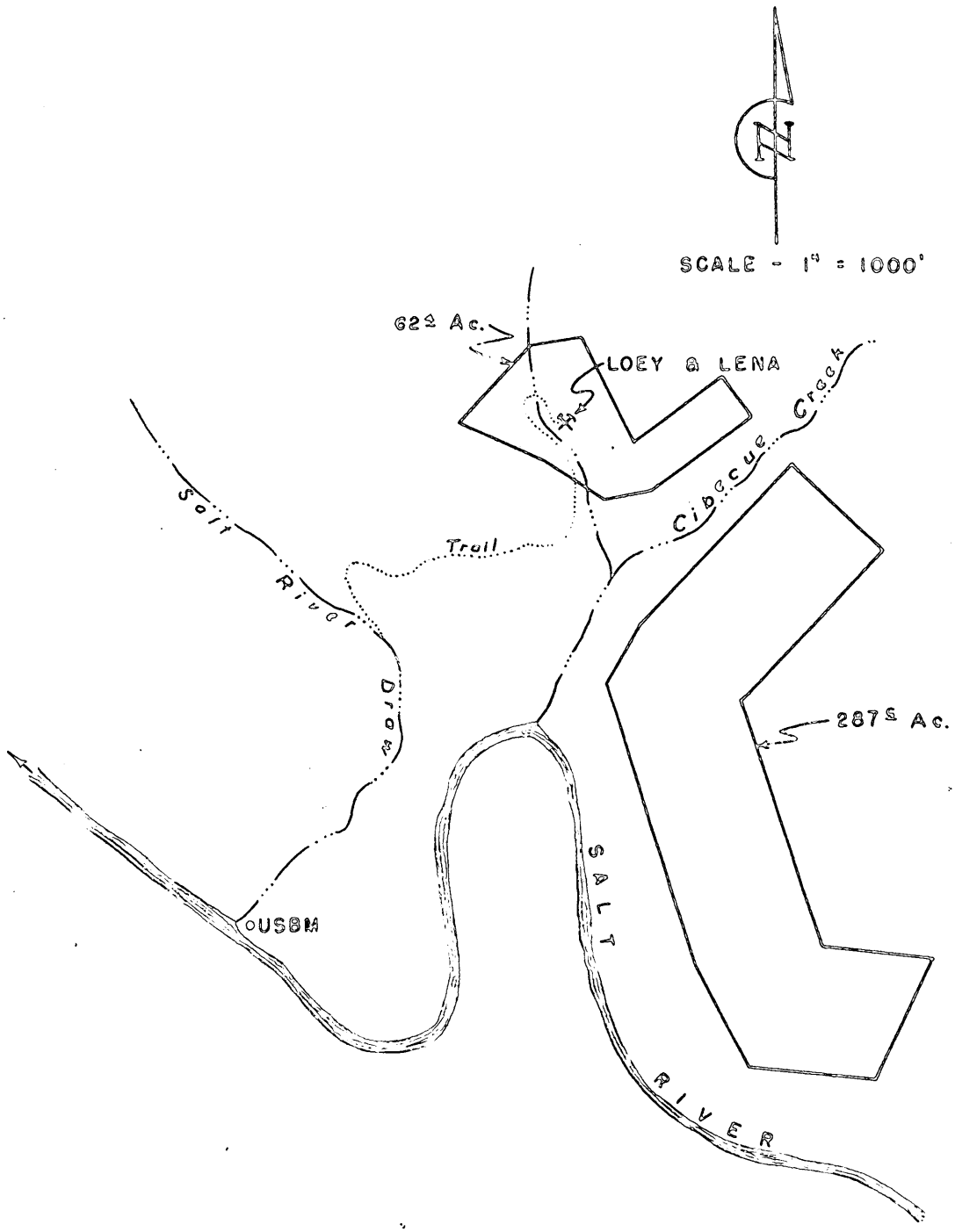
OWNERSHIP AND EXTENT

The Loey and Lena No. 2 lease, consisting of 350 acres in 2 tracts, is leased by Bruce L. Swartout and Eugene V. Ethelbah for a 10-year period from the Fort Apache Indian Reservation. The 2 tracts are separated by the deep, cliff-lined canyon of Cibecue Creek. Of interest to this application is the 62.4 acre parcel on the west side of Cibecue Creek that contains the Loey and Lena prospect (figure 2).

It is to be noted that the Fort Apache Reservation does not require mining leases to be laid out as conventional mining claims.

HISTORY AND PRODUCTION

The Loey and Lena deposit was first worked in 1928-29 and again during the period of 1935-40. All of the work was done by hand-steel methods. The former lessee, Chas. C. Reidhead, boarded up one of the stope entrances and lived in the mine during part of the 1930 depression years. During this time he mined and hand-cobbed the



SECTIONS 4, 5, 8, 9 & 16

T. 5 N. R. 17 E.

UNSURVEYED

FORT APACHE INDIAN RESERVATION

COPIED FROM DOCKET MAP

DMEA 2865

FIGURE 2. - MAP OF LOEY & LENA NO. 2 LEASE

ore to limits far below that which would normally be considered commercial. Records of the Indian Service at Whiteriver indicate that royalties had been paid on about 8 tons of fiber, all grades.

In 1943, Reidhead interested a Phoenix man in the property. A small mill was constructed at the mine in the fall of 1943, but it was never operated.

It is not known when Reidhead relinquished his lease. The present applicant secured a lease on Reidhead's claim and adjacent areas in January 1953, but has done no work on the property. The writer first visited this area in 1942 and thus knows that no work has been done in the mine since that time.

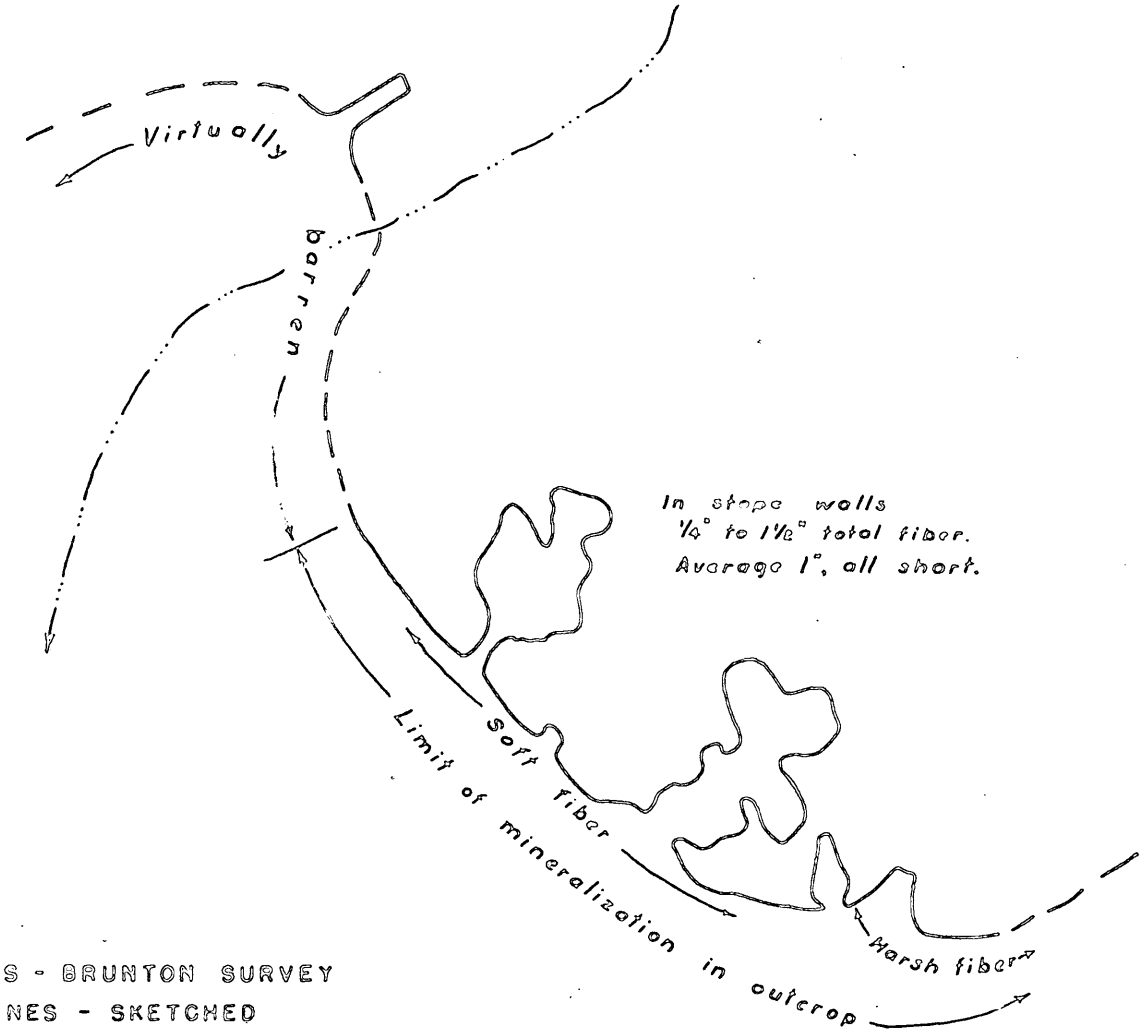
DESCRIPTION OF THE DEPOSIT

The outcrop of the Lucy and Lena deposit is confined to a length of about 200 feet along the cliff face. The main asbestos-bearing serpentine zone is immediately under the base of the massive algal member of the Mescal limestone formation. Locally there is a second zone about 2 feet below the main zone. A heavy diabase sill underlies the mined area, but the contact is obscured by overburden. In the canyon about 100 feet west of the workings the top of the sill is 25 feet below the algal base. At about 100 feet east of the mined area the diabase has cut up to the base of the algal member.

The limestone formations are virtually horizontal. The only disturbance of the beds caused by the diabase intrusive appears to be a bedding plane fault about 4 to 5 feet below the ore zone.

The deposit consisted of 2 lenses of ore that were mined out by two 50-foot stopes averaging 20 to 25 feet wide (figure 3). Judging from the remnants of the fiber zone left in the stope walls, the asbestos produced must have been very soft and of high tensile strength. However, these lenses have been completely worked out. The fiber showing in the stope walls usually occurs in several veinlets, the wider of which contain partings that reduce the individual fiber lengths. The total or combined fiber length over the stopes varies from ¼ to 1½ inches, averaging less than 1 inch. Except for a couple of local areas where a little No. 2 is visible, all the fiber would grade as Nos. 3 and 4. At several places in the stope faces there is virtually no fiber. A more detailed discussion of the veins will be found in the Geologic section of this report, written by the Geological Survey's geologist.

The fiber veins in the outcrop pinch out about 50 feet west of the west stope. The 20-foot drift furtherwest contains much serpentinized limestone, but no fiber. The asbestos in the easternmost opening totals about 1 inch of the harsh, spicular type, and the vein pinches out about 25 feet eastward. Further eastward the diabase sill rises to the base of the algal limestone, thus cutting out the potential ore-bearing beds. Although talus slopes obscure the contact, occasional outcropping patches of diabase indicate that the contact remains at or above the base of the algal limestone for several thousand feet northeastward.



SCALE - 1" = 50'

SOLID LINES - BRUNTON SURVEY
DASHED LINES - SKETCHED

DMEA 2867

FIGURE 3. - LOEY AND LENA MINE WORKINGS - GILA COUNTY, ARIZONA

The part of the property east of Cibecue Creek was not examined as the applicant himself had not investigated it and had no exploration plans for that side. Most of the area of this tract could be viewed from the west side of the canyon, and no prospect pits or old workings could be seen.

PROPOSED EXPLORATION AND COST

The application states "It is proposed to spend $15,000 with bulldozer equipment, compressor, etc., in building satisfactory roads to the property and in opening up the face of the veins to properly evaluate ore; $10,000 is needed to sink 400 feet of adits in four selected locations to property evaluate the fiber". A contingency factor was added to these estimated costs that made a total project cost of $27,480.

As the project is not considered justifiable, there is no point in discussing the elements on which these costs are based.

CONCLUSIONS

The proposed exploration work was limited to the immediate vicinity of the Lucy and Lena prospect. This is the only known mineralized area on the applicant's property. A previous operator has mined all of the commercial fiber from the two small leases. The underground work has demonstrated that the ore zones are pinching out laterally and at depth. The well-exposed surface outcrops indicate that the mineralization terminates within a very short distance on either side of the workings.

The underlying diabase intrusion did not disturb the horizontal bedding of the limestone. East of the mine workings, the rising diabase sill cuts out the favorable beds without distortion of the adjacent limestone. West of the workings the diabase contact is too far below the favorable beds to have caused mineralization.

The workings are on the southern point of a long ridge, consequently the level bedding visible along the northeast side of the ridge would indicate that no disturbance of the bedding would be expected within the limit of reasonable exploration into the hill.

It is concluded that the present Losy and Lena workings have exhausted the small local deposits and that no structural changes can be expected within the hill that would furnish a target for possible exploration.

RECOMMENDATIONS

On the basis of the above conclusions, there appears to be no possible justification for granting this exploratory lease. Therefore, it is recommended that the application of Bruce E. Swartout for exploration of his Losy and Lena lease be denied.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 1953

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

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

Not to be filled in by applicant

Docket No. dmea 2865
Metal or Mineral
Date Received 2-2-53
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:

Bruce C. Charbout
Box 204
Cottary, Arizona

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract

SEE DESCRIPTION ATTACHED

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

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

Lessee

(*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. Copy of Lease attached

(*e*) If you own the land, describe any liens or encumbrances on it

none

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

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

(*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*) [redacted]e the mineral or minerals for which you wi[redacted] 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 30..... days and be completed within ..12..... 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?

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated January 16, 1953, 195...

Bruce L. Swartout
(Applicant)

By Bruce L. Swartout

Box 204, Jerome, Arizona

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

REGISTRATION OF LOST & NEW
MINERAL CLAIMS BY
UNITED STATES
Box 224, Mohave
Arizona

1. (a) partnership in claim

(b) Eugene V. Schulbach, Box 224, Mohave, Arizona.

2. (a) 350.3 acres located on unsurveyed Fort Apache Indian Reservation, County of Gila and State of Arizona, known as "The Lucy and Lena No. 2 Lease" on sections 4, 5, 8, 9 & 16 Township 9 North, Range 17 East, Gila and Salt River Meridian, Gila County, State of Arizona.

(b) The Lucy and Lena Mine.

(c) Lease under 10 year lease.

(d) Copy of lease attached.

4. (a) Three adits on scattered area and pillar method between drift into one vein exposed to which each adit, so that a competent examination can be made. We have a compressor, some pipe and lumber on the ground. It is necessary to walk about 1-1/2 miles over difficult terrain to view the workings.

(b) Former lessee-owner, an old prospector, claims to have taken around $2500 worth of fibre from these adits in one season's work (spring-summer). No production at present. Exploration work required.

(c) The geologic features of the property are covered in Bureau of Mines Report of Investigations No. 4169 as it is similar to other claims mentioned therein. There seem to be three or four veins below the mine workings but covered with overburden which has accumulated down over exposures. I have no technologic information or engineering reports other than the one mentioned above. The fibre exposed in the walls of the three adits is extremely soft and tough; it is evident the old prospector continued back on the fibre until it played out and he then started anew in other locations within the adits. A consulting engineer has estimated the No. 1 and 2 fibre will run 4 or 5 percent of total tonnage about.

(d) The Government started a road up to this project during last war, but stopped 1-1/2 miles away as war ended. It would be approximately 67 miles to railroad. Only a horse trail now exists from end of Government road to mine.

(e) There is adequate labor in vicinity and an abundance of Apache Indian labor at Whiteriver and surrounding area. There is plenty of materials and supplies at Globe or Phoenix. A contractor is moving area and will have equipment available in about two months for work on this undertaking. There is satisfactory water in Salt River just below claims. Electric power required.

5 (b) It is proposed to spend $12,000 with ball center equipment, compressor, etc. in building satisfactory roads to property and in opening up the face of the veins to properly evaluate ore; $20,000 is noted to sink 400 ft. of adits in four selected locations to properly evaluate the mine.

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

(d) Have adequate schedules in engineering to conduct the general supervision. Have supervised many railroad projects, contracted tunnels and cuts, etc. and am presently General Manager of the Apache Railway Company. Plan to hire competent mining personnel to conduct the project. Mr. Scholes is a college man and has several years experience with powder work on the Apache Reservation.

6 (a) through (h) none accepted

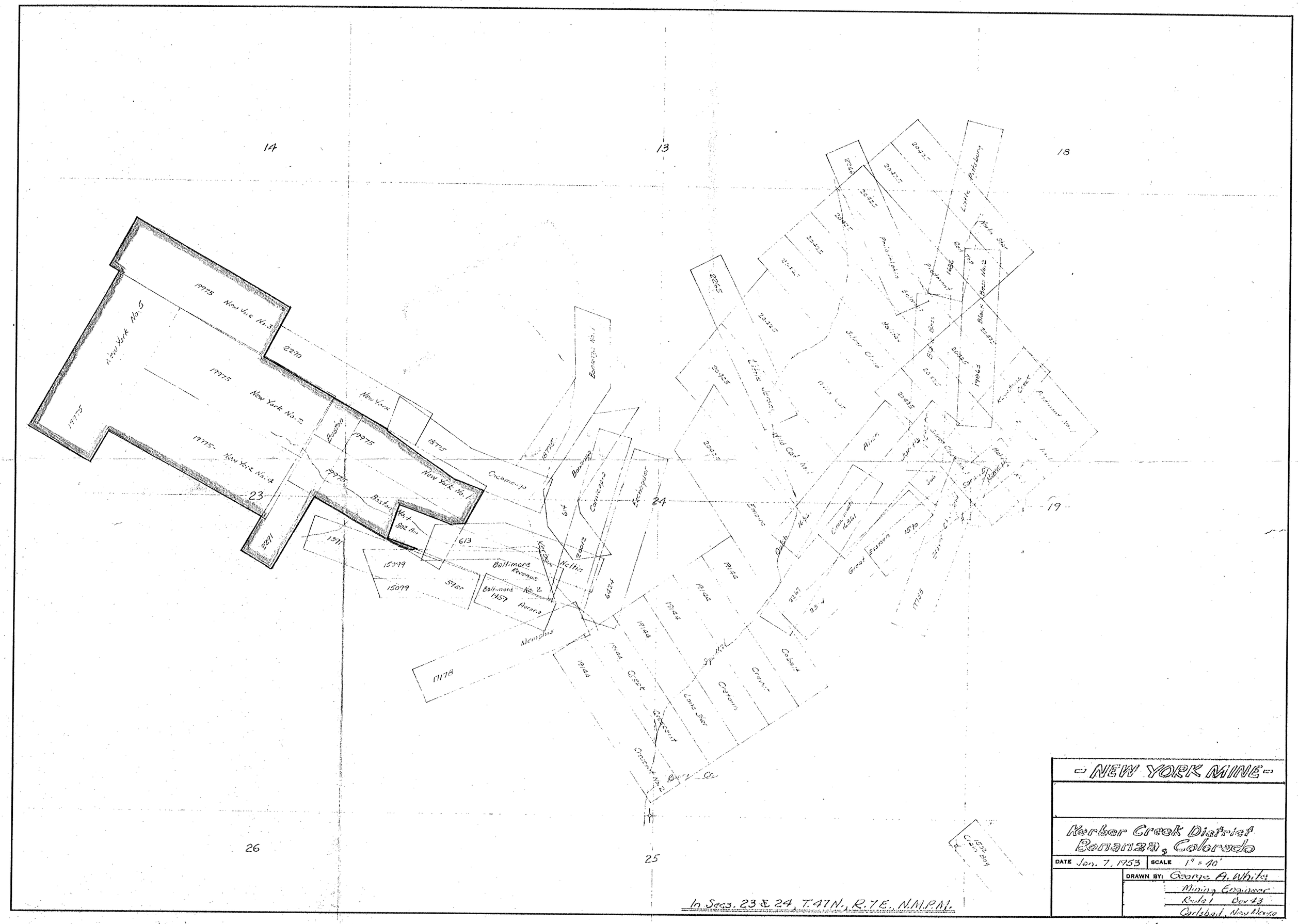
7 (a) Too as prepared to furnish my share of the cost of this proposed project. Part of the participation will be furnished in the form of equipment and balance in cash. To have some pipe, lumber and other material on the property which would also be used as part of the participating cost. To value the compressor at $1800 and the other essentials at $500, balance will be met by cash.

6 (a) Independent expenses:

	Taylor-Day Coal Co., 10% loss @ $14	$ 14,[illegible]	37.49
(b)	1 Dge., 1 ton @ $[illegible] per ton	[illegible]	
	1 Joseph " " [illegible] " "	[illegible]	
	1 Jewelmaster Gas Gen. @ $1.39	[illegible]	
	3 Stoves (Lessner) [illegible] @ $1.29	[illegible]	12.43
	Laboratory and medical equipment	[illegible]	.8
(c)	Milk, eggs and [illegible]	[illegible]	.38
	Butter, [illegible] and [illegible]	[illegible]	.81
	Fruits and [illegible]	[illegible]	.70
	Foods	[illegible]	.19
	Pies, [illegible] and pastries	[illegible]	.625
	Meat	[illegible]	.75
	Poultry	[illegible]	.13
	Cell and pastries	[illegible]	1.13
(d)	Depreciation period 2 @ $[illegible] per cu.	[illegible]	
	Gas air cel. [illegible] heater	[illegible]	2.06
(e)	Redecoration to equipment	[illegible]	.4
(f)	1 cable @ [illegible]	[illegible]	
	1 cred for [illegible]	[illegible]	2.13
(g)	Repairs to equipment and tools	[illegible]	.31
	Accounting	[illegible]	.38
	Workmen's compensation, insurance and payroll taxes	[illegible]	1.24
	Total	$4,[illegible]	
	10% contingency	[illegible]	
		$ 5[illegible],[illegible]	

D. D. Jones
Ind. 204
Valley Indiana

1400



NEW YORK MINE

Kerber Creek District
Bonanza, Colorado

DATE Jan. 7, 1953	SCALE 1" = 40'
DRAWN BY: George A. White	
Mining Engineer	
Rural Box 43	
Carlsbad, New Mexico	

Inv 2864