CKET COPY

Hook
Talbert
Robin

TERMINATION OF EXPLORATION PROJECT CONTRACT BY AGREEMENT
AFTER COMMENCEMENT BUT BEFORE COMPLETION OF THE WORK

It is agreed this 12th day of May, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government", and Bore Tree Saddle Asbestos Company, a partnership consisting of: John V. Bustamante, Jr., Fred Fritz, William Nunez, and Steve Wusich, hereinafter called the "Operator", parties to that certain Exploration Project Contract Idm-E571, Docket No. DMEA 2975, dated July 20, 1953, that the said contract shall be and is hereby terminated as of March 1, 1954.

Any work prosecuted or costs incurred by the Operator after March 1, 1954 shall be for the sole account of the Operator.

The undersigned Operator hereby releases and agrees to save harmless the Government from all claims and demands under or arising out of said Exploration Project Contract, except as herein expressly otherwise provided.

Witness the following signatures as of the day and year first above written.

BORE TREE SADDLE ASBESTOS COMPANY

By John V. Bustamante Jr
John V. Bustamante, Jr., Partner

By Fred Fritz
Fred Fritz, Partner

By William Nunez
William Nunez, Partner

By Steve Wusich
Steve Wusich, Partner

UNITED STATES OF AMERICA

By W.H. King
W.H. King
Executive Officer
DMEA Field Team
Region IV

Partin 2

No. 1

AMENDMENT OF CONTRACT: No. Idm-E571

Contract Docket No. DMA 2975, dated July 20, 1953, between the United States of America and the Bore Tree Saddle Asbestos Company, a partnership consisting of: John V. Bustamante, Jr.
Fred Fritz
William Nunez
Steve Wusich

is hereby amended as follows, effective as of the date of said contract:

> Referring to EXHIBIT "A" attached to Exploration Project Contract Form EP-200(a) (February 1952), caption "Description of the Work", subheading "Stage II" following the words "/or crosscutting", add "or raising"; further referring to said EXHIBIT "A", caption "Estimated Costs of the Project", subheading "Stage II", delete the following:
> "300 feet of drifting and/or crosscutting at
> $27.50 per foot.....$8,250.00"
> and in lieu thereof substitute the following:
> "250 feet of drifting and/or crosscutting at
> $27.50 per foot.....$6,875.00
> 100 feet of raising at $13.75 per foot.....$1,375.00"

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated JAN 11 1954

BORE TREE SADDLE ASBESTOS COMPANY

By John V. Bustamante Jr.
John V. Bustamante, Partner

By Fred Fritz
Fred Fritz, Partner

By William Nunez
William Nunez, Partner

By Steve Wusich
Steve Wusich, Partner

UNITED STATES OF AMERICA

By W H King
W.H. King, Executive Officer
DMEA Field Team, Region IV

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2975

COMMODITY Asbestos

Idm-E571

OK Cone 8/11/53 Rutin

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 27 1953

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

IT IS AGREED this 20th day of July, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Bore Tree Saddle Asbestos Co., a partnership consisting of:

John V. Bustamante, Jr.)
Fred Fritz) Box 1724
William Nunez) Globe, Arizona
Steve Musich)

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Arizona, County of Gila, described as follows:[3] Two unpatented claims, the Extension No. 1 and Extension No. 2, recorded in the County Recorder's Office in Globe, Arizona, in Book of Mines 49, Pages 160 and 161.

the Operator represents and undertakes:[4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:

None

(*b*) ~~[illegible]~~.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within 60 days from the date of this contract shall commence work on a project of exploration for Asbestos in or upon the described land; and shall bring the project to completion within a period of one year from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay Ninety (90) percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $9,724.50, which is Ninety (90) percent of $10,805.00, the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account and statement of work performed to accompany his final report.

ARTICLE 6. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided*, that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* .....

Executed in sextuplicate ~~the day and year~~ first above written.

John F. Guglomarde Jr.
Fred Fritz
(Operator)
William Nuney
By

THE UNITED STATES OF AMERICA

By W. H. King
W. H. King, Executive Officer
DMEA Field Team, Region IV

I, , certify that I am the secretary of the corporation named as Operator herein; that , who signed this contract on behalf of the Operator, was then of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

EXHIBIT A

Description of the Work

The proposed work is divided into two stages.

STAGE I

The proposed work consists of the following:

1. Construction of an access road from the Globe-Young Highway at the Board Tree Saddle loading corral to the Extension No. 1 claim as shown on Figure 2, which is attached and made a part of Exhibit A.

2. Stripping and benching so as to expose the mineralized zone approximately 15 feet below the base of the Algal member of the Mescal formation for a distance of approximately 375 feet. This work is to be done with a bulldozer, and supplemented by jackhammer drilling and blasting where necessary to completely expose the mineralized zone. The location of this work is shown in Figure 3 which is attached and made a part of Exhibit A.

3. If in the opinion of the DMEA representative the results of Stage I indicate that additional work is warranted Stage II will be authorized.

STAGE II

With prior written approval of the DMEA representatives 300 feet of drifting and/or crosscutting will be done at locations acceptable to the DMEA representatives.

Estimated Costs of the Project

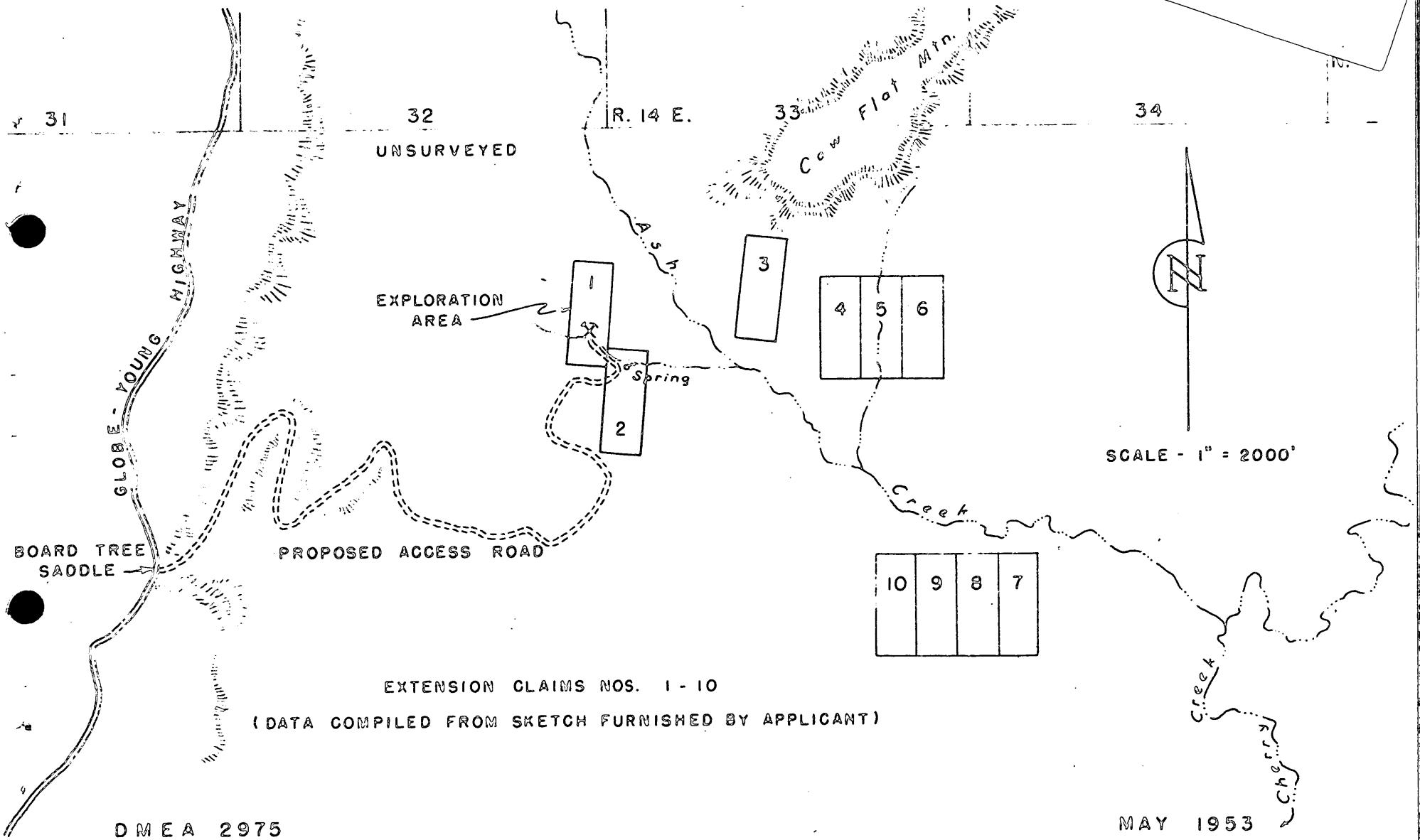
STAGE I

1/ Access road construction, including bulldozing, drilling, blasting, and any and all other costs incurred in completing the access road from Board Tree Saddle corral to Extension No. 1 claim -	$1,155.00
1/ Stripping and benching the mineralized zone approximately 375 feet -	1,400.00
Total Stage I	$2,555.00
Government's participation at 90%	$2,299.50

STAGE II

300 feet of drifting and/or crosscutting at $27.50 per foot -	$8,250.00
Total Stage II	$8,250.00
Government's participation at 90%	$7,425.00
Total Cost Stage I and Stage II	$10,805.00
Government's participation, Stage I and Stage II at 90%	$ 9,724.50

1/ The entire work constitutes the unit of work.



EXTENSION CLAIMS NOS. 1 - 10

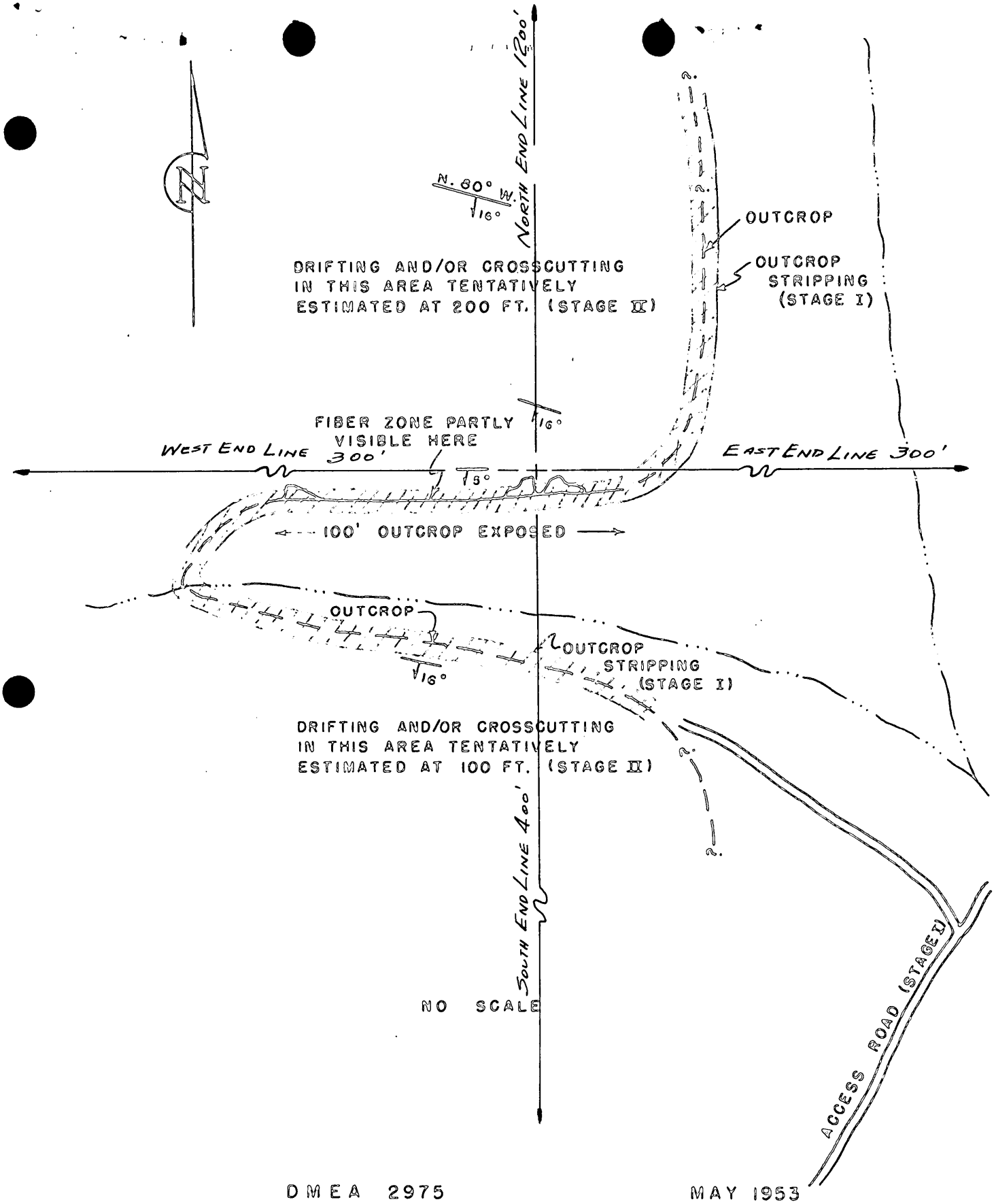
(DATA COMPILED FROM SKETCH FURNISHED BY APPLICANT)

DMEA 2975

MAY 1953

FIGURE 2. - SKETCH MAP OF BORE TREE SADDLE ASBESTOS CO. CLAIMS

GILA COUNTY, ARIZONA



DMEA 2975 MAY 1953

FIGURE 3.- SKETCH MAP OF PROPOSED WORK ON EXTENSION NO. I CLAIM

BORE TREE SADDLE ASBESTOS CO. GILA COUNTY, ARIZONA

DMEA-2975, Idm-E571

October 1, 1957

Mr. Joseph Crosby of Behr-Stearn & Co., Investment Brokers, #1 Wall Street, New York, visited the office today and showed me a report of Chapman, Wood & Griswald of Albuquerque, New Mexico.

The report was on the Bore Tree Saddle Asbestos Claims in Arizona. The company has spent between $60,000 and $70,000 prospecting, drilling and building a mill. Mr. Wood directed the drilling of 59 grid holes on 100 foot centers and claims to have outlined 5,500 tons of grades 2 and 3. 80% soft, their average fiber width is 1.9 inches. His principal interest was in raising money to build a mill and mine the ore. He was referred to Small Business Administration and the General Services Administration. The property was the subject of a DMEA contract in 1953 (DMEA-2975, Idm-E571). The DMEA spent $1,155 on access road and bulldozing; $1,400 on stripping and benching; and $5,183.75 on 188½ feet of drifting and crosscutting; and 30 feet of raising at $412.50. The contract was terminated by mutual agreement, no reserves of strategic asbestos were estimated, and no certification of discovery was made in this case.

He was given application forms for possible additional exploration work in other parts of the deposit.

Lawrence G. Houk, Director
Division of Nonmetallic Minerals

Docket Copy
Surname:
Houk
Hoffland
Chambers
Selfridge
Gilman

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

OCT 6 1954

Bore Tree Saddle Asbestos Co.
Box 1724
Globe, Arizona

INTERIOR DEPT.
SEP 30 1954
SOLICITOR

Re: Docket No. DMEA-2975 - Asbestos
Extension Asbestos Claims
Gila County, Arizona
Contract No. Idm-E571

Gentlemen:

We are pleased to advise you that your performance of exploration work under the subject contract has been acceptable to the Government, and the account relating thereto has been closed. The final audit of the Contract Administration and Audit Division shows:

Total claimed for units of work performed	$8,151.25
Total Government contribution at 90 percent	$7,336.12

Your attention is called to the provision of the contract which requires you to keep and preserve your records and accounts of this transaction for a period of three years for possible future reference.

We sincerely regret that the work performed did not result in a certification of discovery or development under the provisions of the exploration contract. In the absence of such certification, the Government retains no claim or lien against the property for royalty on any production made after the date of this letter.

The Government thanks you for your interest and participation in the exploration program of the Defense Minerals Exploration Administration.

Sincerely yours,

C. O. Mittendorf

Administrator

LGHouk:gad 9/30/54
Copy to: Admrl R. File
Docket
Mr. Chambers
Mr. Bowles, 3516
Field Team, Region IV
Mr. Kiilsgaard, 5227
Mr. Houk

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

September 28, 1954

Memorandum

To: Administrator

From: Lawrence G. Houk

Subject: Concurrence on Termination Agreement by Region IV, under their delegation of authority, and project summary report.

1. Docket No. DMEA-2975 - Asbestos
Contract No. Idm-E571
Bore Tree Saddle Asbestos Claims
Gila County, Arizona

Operator: Bore Tree Saddle Asbestos Co. (A Partnership)
Box 1724
Globe, Arizona

Operator's property rights: Owner

2. Contract dated July 20, 1953

Work authorized:

Stage I:

Access road construction, including bulldozing, etc., completing the access road from corral to Extension No. 1 claim	$1,155.00
Stripping and benching the mineralized zone approx. 375 ft.	1,400.00
	$2,555.00

Stage II:

300 ft. of drifting and/or cross-cutting @ $27.50 per ft.	$8,250.00
Total cost of Stage I and Stage II	$10,805.00
Government participation @ 90%	$ 9,724.50

Amendments:

Amendment No. 1 - January 11, 1954 to provide more penetrations of the ore zone within the total estimated cost of the contract.

Work completed:

Access road 1.7 miles	$1,155.00
Bulldozing & Benching 375 ft.	1,400.00
Drifting and crosscutting 188½ ft. @ $27.50	5,183.75
Raising 30 ft. @ $13.75	412.50
Total cost of project	$8,151.25
Government participation @ 90%	$7,336.12

Work began on August 30, 1953, and completed February, 1954. Termination by mutual consent, effective March 1, 1954, dated May 12, 1954.
Field Team Final Report received July 6, 1954
Operator's Final Report received April 9, 1954.
No reserves of strategic grade asbestos can be estimated.

3. Audit - certificate issued June 24, 1954.

Accepted cost	$8,151.25
Government participation @ 90%	$7,336.12

4. Certification of discovery - none recommended.

5. Comments: 75 tons of badly weathered semi-harsh fiber along outcrop only about 1/3 would be recovered in mining.

Operation - carried out in an efficient manner. Difficulty experienced in obtaining and holding good men because of isolated location. Heavy snows hampered travel to and from property.

Engineering - The location of the exploration openings should have followed the undulations of the ore horizon, given more information on the deposit.

Geological premise - A 15" serpentine band was exposed during the stripping phase and 2" of fiber size #2.

Geological criteria upon which work was based - Strategic asbestos concentrations occurred down dip.

Criteria developed during project - None, but sufficient work was performed to indicate that a significant deposit does not exist adjacent to the area explored.

Future possibilities - No additional exploration justified according to the Field Team, however, a block of potential ore was not explored (100-120) east of present adit along a north trending discordancy.

Recommendations:

The Nonmetallic Minerals Division concurs with the Field Team that no certification of discovery or development be issued. The Geological Survey and the Bureau of Mines concur.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 5 1953

224 New Customhouse
Denver 2, Colorado

July 29, 1953

Memorandum

To: Secretary to the Operating Committee, Defense Minerals Exploration Administration

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2975, (Asbestos), Bore Tree Saddle Asbestos Company, Gila County, Arizona

Enclosed are the original and three copies of the ~~final~~ field team report pertaining to the above application.

The contract has been signed and is now in effect.

W. H. King
W. H. King

E. H. Koschmann
A. H. Koschmann

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

June 19, 1953.

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2975 (Asbestos), Bore Tree Saddle Asbestos Company, Gila County, Arizona.

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

The applicant requested $24,825.00 to build an access road and explore unspecified locations by 750 feet of drifting.

The field examiners and the applicant have agreed on a more realistic program with an estimated cost of $10,805.00. The work is recommended to be done in two stages. Stage I to include an access road and stripping the outcrop. Stage II will consist of 300 feet of drifting and/or crosscutting if the findings in Stage I warrant further exploration.

We concur in this recommendation.

W. H. King
W. H. King

Enclosures

MINING DIVISION
REGION IV

May 28, 1953

Memorandum

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

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

Subject : Report on Docket DMA-2975, Bare Tree Saddle Asbestos Co., Gila County, Ariz.

Enclosed is a report on the above property by L. A. Stewart of the Bureau of Mines. A separate section on the geology probably will be submitted by A. F. Shride of the Geological Survey, but it may reach you after the June 5 deadline.

As there seems to be a very good chance of discovering a substantial quantity of strategic quality asbestos by this exploratory work, the examiners recommend a loan of $10,805. I believe Shride of the Geological Survey concurs with this recommendation as do I.

Brochure will be sent in by the Geological Survey.

Walter R. Storms
Walter R. Storms

cc W. H. King (8)
DMA-2975
DF

WRStorms:frj

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

June 15, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2975, Bore Tree Saddle Asbestos Company, Gila County, Arizona.

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

It has been recommended that the loan be approved for an exploration program to be set up in two stages--Stage 2 to be pursued only if exposures obtained in Stage 1 prove adequate.

The brochure is enclosed.

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

Enclosures (10)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P.O.Box 4126, University Station
Tucson 5, Arizona

June 12, 1953

Memorandum

To: A. H. Koschmann, Denver, Colorado

From: Raymond F. Robinson, Tucson, Arizona

Subject: DMEA 2975, Bore Tree Saddle Asbestos Company, Gila County, Arizona

Enclosed please find original and 8 copies of a geologic memorandum report by A. F. Shride on the subject docket.

The U. S. Geological Survey and the U. S. Bureau of Mines examiners agree that this property deserves a modest amount of exploration which should be set up in two stages. Stage 2 should not be pursued unless exposures obtained by bulldozing in Stage 1 prove adequate in the judgment of the examining team.

I concur with their judgment and conclusions. The brochure is enclosed.

Raymond F. Robinson

Raymond F. Robinson
Acting District Supervisor
Arizona-New Mexico

Enclosures 10

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P.O.Box 4126, University Station
Tucson 5, Arizona

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 5 1953

June 12, 1953

Memorandum

To: A. H. Koschmann, Denver, Colorado

From: A. F. Shride, Tucson, Arizona

Subject: DMEA 2975, Bore Tree Saddle Asbestos Company, Gila County, Arizona

The area proposed for a modest exploration program on the Extension No. 1 claim may be geologically favorable to concentrations of asbestos. The description of the deposit on this claim, in Mr. Stewart's engineering report is adequate. The writer concurs with Mr. Stewart's recommendations concerning an exploration program.

The asbestos-serpentine zone on the Extension No. 1 claim occurs in limestone beds 6 to 12 inches thick. These beds by comparison with like occurrences are considered only moderately favorable to asbestos localization.

The asbestos-bearing limestones strike N. 80° W. and dip 16° to 18° S. Locally, along the outcrop on the north side of the stream shown on Figure 3 of the engineering report, the strata dip is only 5° S. If this change in attitude of the enclosing limestones is only a local feature due to drag on intrusion of the underlying diabase sill, and the asbestos is limited to a very narrow area, at a maximum 15 to 20 feet wide and 100 feet long, exploration may not be warranted.

It is possible that the change in attitude noted is due to slump of the limestones along the steep-sided ravine which cuts through the mineralized area. If this is the case the mineralization noted may be concentrated along bedding-plane faults which entered over more area than just adjacent to a discordancy in the underlying diabase and exploration would be warranted. The latter possibility can be optimistically entertained because asbestos was observed south of the ravine at the same stratigraphic horizon as the asbestos exposed by the open cuts on the north side of the ravine.

Debris covers most of the outcrops that are essential to evaluation of this deposit. Therefore, it is not possible to determine which of the two alternatives outlined above are most likely. The outcrops exposed show sufficient structural preparation of the host limestone to warrant Stage 1 (Bulldozing) of the proposed exploration. Stage 2 should not be entered on unless the exposures afforded by Stage 1 indicate an area of several thousands of square feet underlain by mineralized limestone. To warrant Stage 2 exposures made by Stage 1 of the proposed exploration should include an average cumulative thickness of asbestos veins of about 2 inches, and the mineralization should be continuous.

R. F. Robinson
for

A. F. Shride
Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA-2975, Bore Tree Saddle Asbestos Company

Gila County, Arizona

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

May 1953

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By Lincoln A. Stewart[1/]

An application from the Bore Tree Saddle Asbestos Co. for a $24,825 exploration loan on its asbestos prospects was received April 20, 1953 by the Tucson office of the Defense Minerals Exploration Administration as docket DMEA-2975. The purpose of the requested $24,825 loan was to construct a 2-mile access road to the property, bulldoze the outcrops, and explore unspecified locations by 750 feet of drifting.

The property consists of 10 unpatented claims in the Tonto National Forest about 57 road miles north of Globe, Gila County, Ariz. There has been only a negligible production from these claims. An examination of the deposit was made on May 20, 1953, by the writer, accompanied by Robert W. Ageton of the Bureau of Mines, and A. F. Shride, accompanied by James Noel and Fred Houser, all of the Geological Survey.

Several prospects were investigated, but only the deposit on Extension Claim No. 1 was considered as a likely exploration site. A 12- to 15-inch asbestos-bearing serpentine band, showing lateral extent of 100 feet, had been exposed by 3 cuts. The limestone bedding near the exposure had an east-west strike and dipped 5° to the south, but further back on the hill the formations showed a dip of 16° to the

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

south. The contour of the hill is such that the outcrop can be stripped to the northward, thus giving an indication of northward extent of the deposit. The same favorable beds are present on the opposite side of an eastward trending gulch and also can be exposed by stripping.

The company representative, who accompanied the examiners on this investigation, verbally modified the original proposal, suggesting that 300 feet of exploratory drifting was sufficient to determine the extent of this deposit. The originally proposed access road and outcrop stripping were to be the first stage of the work. The project cost thus was revised to a total of $10,805.

The examiners concluded, that although the 3 cuts showed only marginal ore of strategic grade, the strength of serpentine mineralization present, combined with the favorable stratigraphic location of the deposit, justified an exploration loan.

Therefore it is recommended that this project be favorably considered. Stage I will cost $2,555. If further exploration is shown to be justified, the maximum drifting cost of Stage II will be $8,250, or a total project cost of $10,805.

DMEA-2975, BORE TREE SADDLE ASBESTOS COMPANY
GILA COUNTY, ARIZONA

Engineering Report

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

May 1953

DMEA-2975, BORE TREE SADDLE ASBESTOS COMPANY
GILA COUNTY, ARIZONA

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INTRODUCTION

In April 1953, an application was submitted to the Defense Minerals Exploration Administration for a $24,825 exploratory loan by the Bore Tree Saddle Asbestos Co. for its asbestos prospect. This application, docketed as DMEA-2975, was received by the Tucson office of the Defense Minerals Exploration Administration on April 20, 1953. The purpose of the loan was to construct an access road to the property, expose the outcrops by bulldozing, and prospect the deposits with 750 feet of drifting and crosscutting.

The field examination was made on May 20, 1953 by A. F. Shride, James Noel, and Fred Houser of the Geological Survey, and Lincoln A. Stewart and Robert W. Ageton of the Bureau of Mines. John V. Bustamante, one of the owners, accompanied the party and acted as a guide.

The examiners investigated 5 or 6 outcrops at various places on the property, but only one appeared to be worthy of a modest exploration project. Bustamante then suggested the following modified proposal: bulldoze an access road to the deposit of interest; clear off the outcrop to determine the extent of mineralization; and if showings justify, explore the deposit with up to 300 feet of drifting. The total cost of this latter proposal was estimated at $10,805.

LOCATION AND ACCESSIBILITY

The claims are situated on the steep west slope of the Cherry Creek Canyon in the Sierra Ancha Mountains on both sides of Ash Creek, a short tributary of Cherry Creek. Township 7 N., R. 14 E., in which the claims are situated, is unsurveyed, but by projection from the next township north, the location can be established as within sections 4 and 5. The property is reached from Globe via the Globe-Young-Holbrook road (figure 1). At 57 miles north of Globe, the trail to the claims takes off eastward at a loading corral that is signed "Board Tree Saddle". The head of the trail is on the rim at an altitude of 6,000 feet; the claims are 1,300 to 1,500 feet lower.

This area is in the Tonto National Forest about 13 miles south of Young. Travel on the proposed 2-mile access road to the property would be virtually impossible during extremely wet weather, but the Globe-Young road is passable throughout the year, except possibly for a day or two after a heavy snowstorm.

OWNERSHIP AND EXTENT

The Bore Tree Saddle Asbestos Co. is a partnership consisting of John V. Bustamante, Jr., Fred Fritz, William Nunez, and Steve Wusich, all of whom reside at Globe, Ariz. The company address is Box 1724, Globe, Gila County, Ariz.

The property is composed of 10 unpatented claims (figure 2), which are recorded at the Gila County courthouse in Globe as Extension Nos. 1 to 10, in Book of Mines 49, pages 160, 161, 166, and 167.

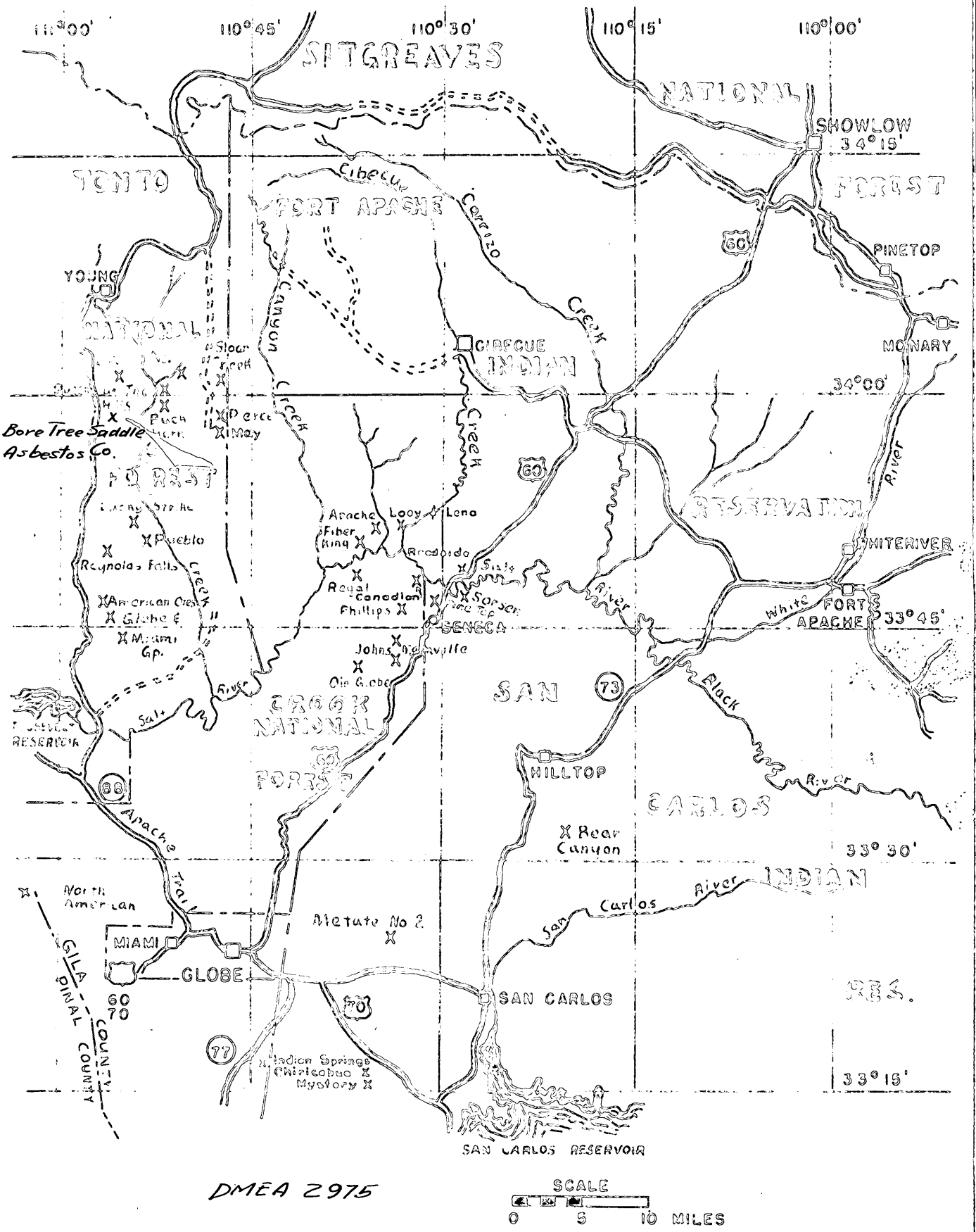


Fig. 1 Location Map, Asbestos Deposits, Gila County, Arizona

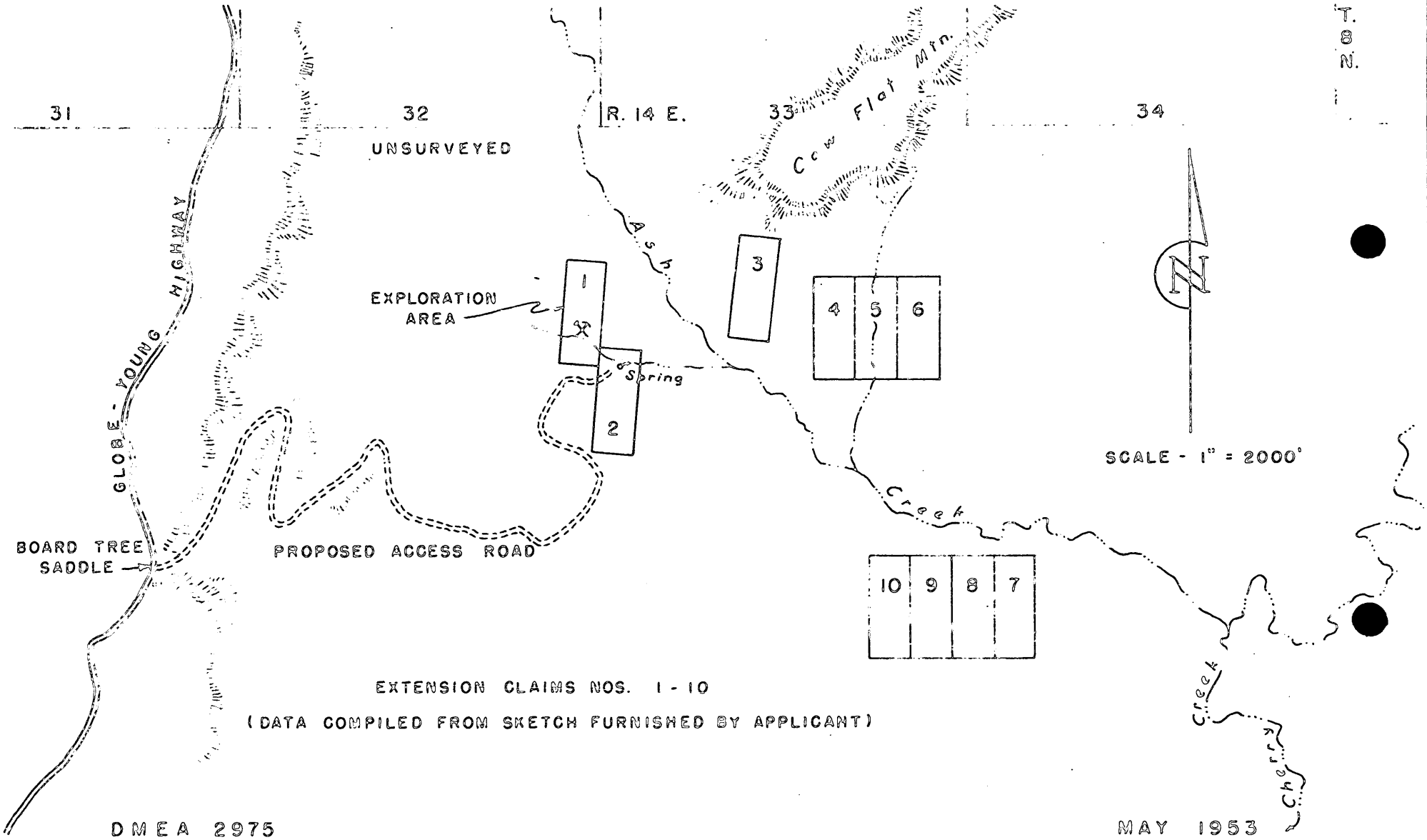


FIGURE 2. - SKETCH MAP OF BORE TREE SADDLE ASBESTOS CO. CLAIMS

GILA COUNTY, ARIZONA

HISTORY AND PRODUCTION

Claims in this area probably were located previous to 1940. The locality is so difficult of access that little work has been done. A prior owner is said to have packed out about 2 tons of mill rock. The present partnership has done only assessment work.

DESCRIPTION OF THE DEPOSITS

Bustamante took the examiners to prospects on several of the claims. On claim No. 5, a deposit had been opened on a cliff face by 2 adits, each about 25 feet long. The ore horizon, essentially horizontal, was 5 feet above a concordant diabase sill. In a 5- to 8-inch band of poorly serpentinized material, asbestos fiber veins totaled 1 to 3 inches. The individual fibers were short, due to numerous partings, and were of harsh quality with poor tensile strength. The deposit was limited to about 60 to 75 feet of outcrop length. On No. 3 claim there were a couple of shallow pits that showed $\frac{1}{2}$ inch of fiber. At another place on the point of a hill, a 12-inch serpentine band contained a total of 1 to $1\frac{1}{2}$ inches of short, soft fiber. This deposit is very limited in extent, due to topography and a discordant diabase sill that cut off the ore zone.

The most interesting deposit is on claim No. 1 along the east-west face of a hill, where 3 cuts and a partially exposed outcrop suggest a continuous mineralized length of 100 feet. A 12- to 15-inch serpentine zone, 2 to 3 feet above a concordant diabase sill,

contains asbestos up to a total length of nearly 2 inches in places. Some of this fiber is of No. 2 length. Because of the strong serpentine mineralization, a possibility exists that increased quantities of fiber may be present in the deposit.

The general strike of the limestone bedding at the exposed outcrop is east-west, with a dip of 5° to the south (figure 3). About 30 feet eastward from the east cut, the outcrop swings northward along the hill slope, but the favorable horizon is covered with considerable overburden. Along this hillside and also back of the cuts, the formations steepen to about 16°.

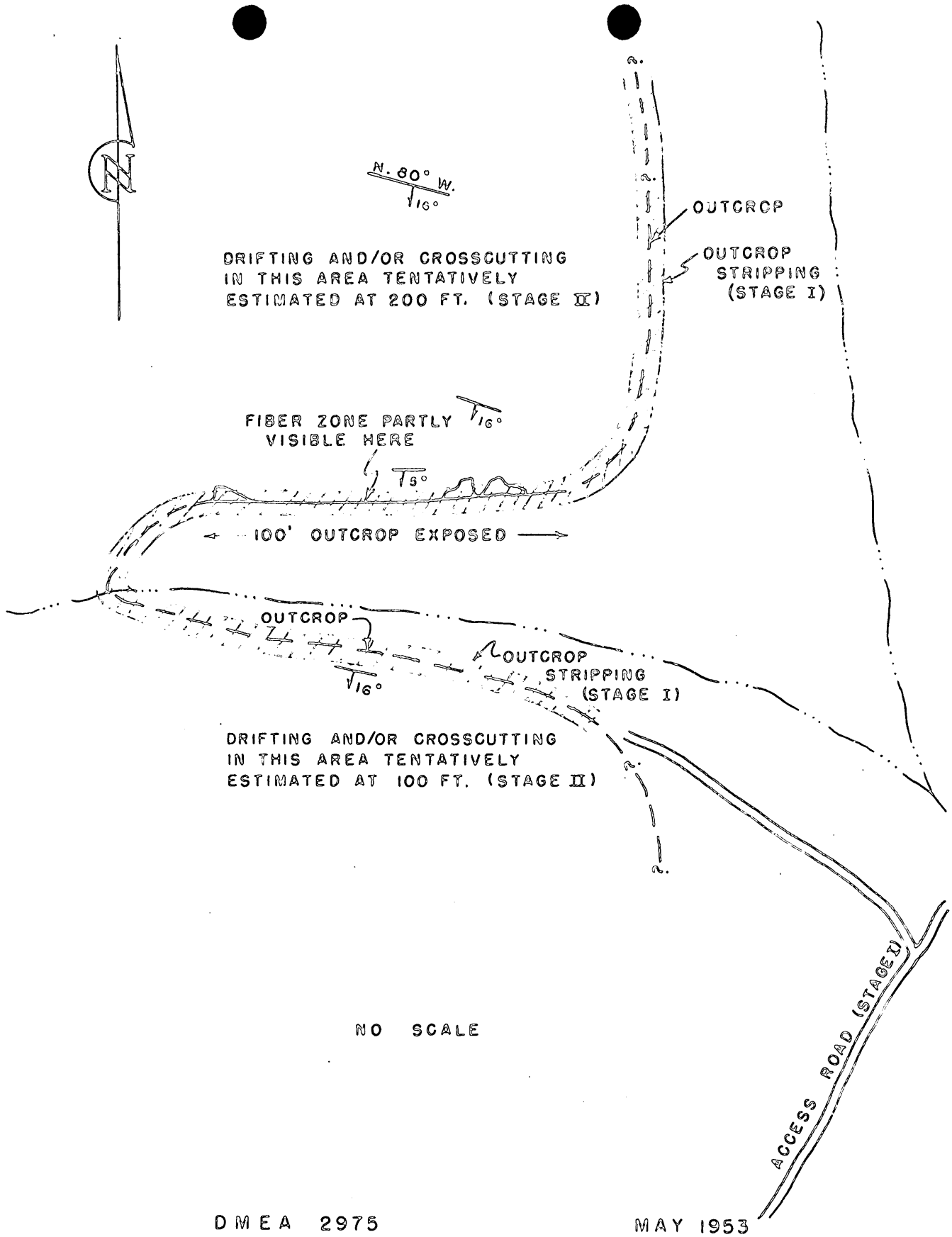
Across the gulch to the south of the prospected outcrop, the favorable beds are present, but have not been prospected.

The limestone unit that contains this mineralization is about 15 feet below the base of the Algal member of the Mescal formation, a favorable position in this part of the district.

It is the opinion of the examiners that a modest exploration program is justified on this deposit.

PROPOSED EXPLORATION

The original proposal was to construct an access road to the claims, bulldoze and expose outcrops, and drift a total of 750 feet at favorable, but unspecified locations. Examinations of the property indicated to the examiners that only one area justified a less extensive exploration project. John Bustamante, one of the partners,



DMEA 2975 MAY 1953

FIGURE 3.- SKETCH MAP OF PROPOSED WORK ON EXTENSION NO. 1 CLAIM

BORE TREE SADDLE ASBESTOS CO. GILA COUNTY, ARIZONA

who was present throughout the investigation and discussions of the relative potentials of the various deposits, suggested that work be confined to the one deposit that showed the best indications.

The following is his verbal, modified proposal:

(1) Construction of a pilot road to Extension No. 1 claim, estimated at 7 days of bulldozer work at $150 per day, plus 7 days for one jackhammer operator to drill and blast rock ledges as required at $15 per day.

(2) 7 days bulldozer work in conjunction with 2 jackhammer operators to drill, blast, and strip the outcrop at $200 per day.

If the exposures justify underground exploration, allow 300 feet of drifting and/or crosscutting at $27.50 per foot.

Thus the allowable total project will be as follows:

7 days dozer work on road @ $150/day	$1,050
7 days jackhammer operator @ $15/day	105
7 days outcrop stripping, including dozer work, 2 jackhammer operators, etc., @ $200/day	1,400
300 feet drifting @ $27.50/foot	8,250
Total project cost	$10,805

DISCUSSION OF PROPOSAL

The cost estimate of the original proposal, totaling $24,825, is appended to this report merely for the record. Except for the rental basis, the estimated costs are considered reasonable, considering the remoteness of the project and the difficulty of access. Bustamante stated to the writer that they miscalculated the drifting cost, and that he considered $27.50 per foot for drifting as an equitable figure.

In such rough terrain, the unit bid of $150 per day for dozer work certainly is reasonable. The usual rate with a D-8 cat is $185 per 10-hour day, fully maintained. The company is absorbing the moving in and out charge. The jackhammer operator will be necessary to drill and blast rock ledges, road toe, etc. Stripping of the outcrop will necessitate drilling and blasting along the entire outcrop in order to adequately expose the fiber zone a few feet back of the surface.

CONCLUSIONS

In the estimation of the examiners, exploration of the deposits, other than on Extension No. 1 claim, is not justified. The deposit on the No. 5 claim, although the exposures contained considerable fiber, consisted of short, harsh asbestos and would not be expected to improve in quality at depth. The other deposits were either poorly mineralized or definitely restricted in size.

On Claim No. 1, the 3 cuts indicate fair mineralization for a width of 80 feet and further work probably will extend this dimension laterally. An indication of the depth of the deposit into the hill may be gained by stripping the outcrop northward along the hillside. If fair mineralization persists for some distance northward along this face, exploration westward by drifting would appear feasible, as this is the general strike direction. Stripping of the outcrop on the south side of the gulch might indicate that some exploration is justified down dip.

An access road into this area will not only benefit the applicant, but may be conducive to intensified prospecting in this area of difficult access.

This exploration should be set up in 2 stages: Stage I to consist of construction of the access road to the property, and stripping and benching the outcrops. If the resultant showings at the completion of this work are not favorable, the project can be terminated. If further exploration appears justified, Stage II will consist of underground work.

RECOMMENDATIONS

Such a small amount of work has been done on the claim No. 1 deposit that it can be classed only as a "raw prospect". However, it appears worthy of an exploration project for the following reasons:

1. It is thought the fiber will be of strategic quality;

2. The known length of the asbestos-bearing serpentine zone is 100 feet; it may be longer. If the deposit continues into the hill for 100 feet or more, the potential could be significant.

3. The position of the deposit is in a stratigraphic horizon from which commercial production of asbestos has been made elsewhere in the Sierra Ancha district.

It is suggested that the unit bids. as given verbally by Bustamante, the company representative, be accepted for the various classes of work, as follows:

Stage I

Access road construction

An allowable maximum of 7 days dozer work @ $150/day---$1,050
With an accompanying jackhammer operator @ $15/day----- 105

Stripping and benching the outcrop

An allowable maximum of 7 days dozer work in conjunction with 2 jackhammer operators to drill and blast the outcrop for a total of $200/day----------$1,400

Total for stage I ----------$2,555

Stage II

Underground exploration

An allowable maximum of 300 feet of drifting and/or crosscutting @ $27.50/foot---------- $8,250

Total project cost ----------$10,805

The location of the drifting will be dependent upon the showings encountered by the outcrop stripping and benching. It might be found advisable to place some of the drifting on the segment of the deposit that lies south of the gulch (as indicated in figure 3), but at present this is an unknown factor. In any case, justification for Stage II and the location of the underground work should be determined by the Government representatives.

It is suggested that 30 days be allowed to start work and one year be allowed for completion. The latter figure may seem unreasonably long for such a small footage, but severe weather conditions can be expected during the winter months.

In summary, it is recommended that an exploration loan be given to the Bore Tree Saddle Asbestos Co. to explore its Extension Claim No. 1 deposit, for a total project cost of $10,805.

APPENDIX

DMEA-2975, BORE TREE SADDLE ASBESTOS COMPANY

GILA COUNTY, ARIZONA

ORIGINAL APPLICATION FOR EXPLORATION

May 1953

Bore Tree Saddle Asbestos Company Cost Estimate

Basis:

Two Mi. excess road from county road to mine
7 days work by bulldozer to expose face
750 ft. of drifting and crosscutting to show extent of underground ore body

Time Estimate:

Due to weather conditions during winter
Minimum time set at 18 Mo. and
Maximum time set at 24 Mo.

Bulldozer work:

6 days on road at $ 150.00 per day	$	900.00
7 days at stripping $ 150.00 per day	$	1050.00
	$	1950.00

Total for Bulldozer $ 1950.00

Mine development

Rental of Equipment

105 cu.ft. compressor	$ 150.00 per mo.	$ 3600.00
Jack hammer	42.25	1014.00
Air hase	7.05	169.20
		4783.20

Rental basis pr ft. advance $ 6.37

Labor:

1 forman Mechanic	$ 15.00
1 Miner	15.00
1 mucker	13.00
	$ 43.00

This Includs S/S Industral Insurance Etc.

Labor on advance of three ft. per day $ 14.33

Supplies:

16 gal Gasoline per shift at 35 cents per gal	$ 5.60
2 Qts. oil per shift at 40 cents per Qt.	.80
	6.40

This Includs delivery to mine

Fuel per ft. advance $ 2.13

Explosives:

Dynamite, 30 lbs. at 23 cents a lb.	$ 6.90
Caps 14 @ $2\frac{1}{2}$ cents each	.35
Fuse 90 ft. @ .013 per ft.	1.17
	$ 8.32

Cost per ft. @ 4 ft. rounds per ft. $ 2.08

Pipe and Track

Rails, ties, spiks, and fishplates	$ 1.60
2 inch air line	.59
1 inch water line	.34
Sleeves, valves, Etc.	$ .25
Above to remain on the property with	$ 2.78
40 % to be charged to project	

Cost to project at 40% $ 1.11

Drill Steel and Bits

Steel breakage estimated 1-4 ft.
steel per 3 rounds or 9 ft. advance

Steel $\frac{\$\ 6.00}{9\ \text{ft.}}$ 0.66

4 Tinken bits per rounds,
this includs sharping

$\frac{4 \times .60}{3\ \text{ft.}}$ 0.80

$ 1.46 Total Per ft. $ 1.46

Minc's

Machine oil	$ 0.12
Carbide	0.15
resharping of picks and moils	0.10
Bars, loading sticks, Jim crows, wrenches, and Etc.	0.40
	0.77

Per ft. $0.77

Repairs:

Normal repairs on machineray including breakage and replacement per ft. $ 0.80

Timber:

25 sets estimated at a cost of $ 6.00 per set

$\frac{\$\ 6.00 \times 25}{750\ \text{ft.}}$ per ft. $ 0.20

Supervision and Engineering	per ft.	$ 1.25
	Total cost per ft.	$ 30.50

Summary:

Bulldozer work		$ 1950.00	
Rental of equipment	per ft.	6.37	high
Labor	" "	14.33	
Supplies	" "	2.13	
Explosives	" "	2.08	
Pipe and track	" "	1.11	
Drill steel and bits	" "	1.46	high
Minc's	" "	0.77	
Repairs	" "	0.80	
Timber	" "	0.20	
Supervision and Engineering	"	1.25	
		$ 30.50	

Total cost for drifting $ 22,875.00

B T S Asbestos Co.	$	2,287.50
D M P A		20,587.50

Total for Dozer work

B T S asbestos co.	$	195.00
D M P A		1,755.00

Total for Project

B T S asbestos co.	$	2,482.50
D M P A		22,825.50
		24,825.00

Total for project $24,825.00

C
O
P
Y

Bore Tree Saddle Mine
Globe, Arizona

Mr. W. H. King
Bureau of Mines
224 New Customhouse Building
Denver 2, Colorado

Dear Mr. King:

Enclosed you will find a loan appication and cost estimate for the Bore Tree Saddle Mine.

This work consists of 13 days Bulldozer work to build a road from the Globe-Young road to the Mine, and to bulldoze along the face of the outcrop to show definetly, the strike and pitch of the outcrop.

After the Bulldozing is completed. It is then proposed to run 750 feet of drift and crosscut to find out the extent of the ore body.

Due to Weather conditions in the winter, Maximum time has been set at 24 months from the starting time.

Cost of the bulldozer work is estimated at $ 1,950.00 with $1,755.00 to be paid by D.M.P.A. and $ 195.00 by the Bore Tree Saddle Co.

Cost of the underground work is estimated at $ 22,875.00 with $ 20,587.00 Paid by the D.M.P.A., and $ 2,287.50 by the Bore Tree Saddle Co.

Total is, $ 22,342.50 to be paid by D.M.P.A., $ 2,482.50 by the Bore Tree Saddle Company. For a total of $ 24,825.00

Thank you

J. V. Bustamante

Fred Fritz

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

August 12, 1954

Memorandum

To: Mr. Lawrence G. Houk, Chief, Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Commodity Specialist, Construction and Chemical Materials Branch

Subject: Review of Field Team Report DMEA 2975, Bore Tree Saddle Asbestos Co.

As the final report on this project indicates that no significant discovery of asbestos has been made, I concur in the recommendations of the Field Team, namely

1. That the project be terminated by agreement before completion and

2. That no certification of discovery be issued.

Oliver Bowles

Oliver Bowles

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

224 New Customhouse
Denver 2, Colorado

July 15, 1954

Memorandum

To: Secretary to the Operating Committee

From: DMEA Field Team, Region IV

Subject: DMEA Docket No. 2975 (Asbestos), Contract Idm-E571, Bore Tree Saddle Asbestos Company, Gila County, Arizona.

Enclosed are two copies of a memorandum to Mr. T. A. Christensen dated June 30, 1954, relative to final payment under the terms of the contract.

Final payment to the Operator in the amount of $249.99 has now been made in conformance with the Report of Review by the Contract Administration and Audit Division dated June 24, 1954.

W. H. King

W. H. King

for E. M. Hirschman
A. H. Koschmann
DMEA Field Team
Region IV

Enclosures

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

224 New Customhouse
Denver 2, Colorado

March 24, 1954

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 2975 (Asbestos), Contract Idm-E571, Bore Tree Saddle Asbestos Company, Gila County, Arizona.

Enclosed are two copies of the Operator's Monthly Progress Report, Form MF-104 and MF-104A, Operator's Narrative Report, Inspecting Engineer's Narrative Report, and other supporting data pertaining to work under the subject contract for the month of February 1954.

John F. Shaw
For W. H. King

Enclosures

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

224 New Customhouse
Denver 2, Colorado

July 15, 1954

Memorandum

To: Secretary to the Operating Committee

From: DMEA Field Team, Region IV

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W. H. King

per A. H. Koschmann
DMEA Field Team
Region IV

Enclosures

IN REPLY REFER TO:
G-MD-CNM

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

Defense Minerals Administration
RECEIVED
JUL 8 - 1954

July 8, 1954

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-2975 (asbestos)

To: L. G. Houk, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant: Bore Tree Saddle Asbestos Company.
Name of property: Extension No. 1 claim.
Location of property: Gila County, Arizona.
Date of Field Team Report: So many dates are given that it's difficult to determine! (April-June, 1954).
Authorship of Field Team Report: U. S. Geological Survey and U. S. Bureau of Mines.
Field Team's recommendation:

Final report

1. Project terminated by agreement before completion.

2. No significant discovery so no certification.

Comments: Reserves negligible.
ACTION RECOMMENDED: Follow Field Team's recommendation.

D M Larrabee
D. M. Larrabee

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

224 New Customhouse
Denver 2, Colorado

June 30, 1954.

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region IV

Subject: Docket DMEA-2975 (Asbestos), Contract Idm-E571, Bore Tree Saddle Asbestos Company, Gila County, Arizona.

Enclosed are the following final reports pertaining to work completed under the subject contract:

1. Original and one copy of the Operator's final report.

2. Original and three copies of the final geologic report by the U. S. Geological Survey.

3. Original and three copies of the final engineering report by the U. S. Bureau of Mines.

The contract was terminated by agreement after commencement but before completion of the work by agreement of May 12, 1954, effective March 1, 1954. The project work completed consisted of one and seven tenths miles of road construction; 375 feet of stripping; 188.5 feet of drifting and 30 feet of raises at a total accepted cost of $8,151.25, in which the Government participated to the extent of 90% or an amount of $7,336.12. Final payment to the Operator was processed by this office June 30, 1954 in conformance with the final report of review by the Contract Administration and Audit Division, dated June 24, 1954.

The exploration work did not result in a significant discovery of commercial grade asbestos ore; therefore, no certification of such is recommended.

W. H. King

W. H. King

E. N. Hawkmann
for A. H. Koschmann

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
7-9-54
(date)

Mining Division
Date Rec'd
APR 16 1954
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION

TUCSON, ARIZONA

April 15, 1954

Memorandum

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

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

Subject : Final Engineering Report, DMEA Contract Idm-E571, Docket DMEA-2975, Bore Tree Saddle Asbestos Co.'s Extension Asbestos Claims, Sierra Ancha Mining District, Gila County, Ariz.

Enclosed are original and 8 copies of the final engineering report on work done under DMEA Exploration Project Contract No. Idm-E571.

Walter R. Storms

Walter R. Storms

CC W. H. King (8)
J. N. Faick
DMEA-2975
DF

WRStorms:frj

Reviewed by
DMEA OPERATING COMMITTEE
7-9-54
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

Final Engineering Report

DMEA-2975, Contract Idm-E571

Bore Tree Saddle Asbestos Company

Extension Asbestos Claims

Gila County, Arizona

Walter R. Storms, Supervising Mining Engineer
and
William R. Hardwick, Mining Engineer
U. S. Bureau of Mines

April 1954

Reviewed by
DMEA OPERATING COMMITTEE

7-9-54
(date)

DMEA-2975, CONTRACT Idm-E571
BORE TREE SADDLE ASBESTOS COMPANY
EXTENSION ASBESTOS CLAIMS
SIERRA ANCHA MINING DISTRICT
GILA COUNTY, ARIZONA

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SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The Bore Tree Saddle Asbestos Co., a partnership composed of John V. Bustmante, Jr., Fred Fritz, William Nunez, and Steve Wusich, P. O. Box 1724, Globe, Ariz., applied to the Defense Minerals Exploration Administration early in 1953 under the Defense Production Act of 1950, as amended, for Governmental assistance in exploring its asbestos deposit in the Sierra Ancha Mining District of Gila County, Ariz. The application was docketed as DMEA-2975. It requested that a 2-mile access road be built to the deposit, that the outcrop be stripped to expose the ore zone, and that the ore zone be explored by 750 feet of drifting.

In May 1953 the property was visited by DMEA field examiners[1/] who recommended that exploratory assistance be granted the applicant. On July 20, 1953, Exploration Project Contract No. Idm-E571 was signed. It provided for construction of an access road, stripping and benching along the outcrop, and 300 feet of drifting and/or crosscutting if the stripping exposed a favorable-appearing ore zone. The total cost was to be $10,805.00, the Government's share to be 90 percent, or $9,724.50.

Work on the access road was started on August 30, 1953 and completed in September for a length of 1.7 miles. The outcrop along the ore zone also was stripped and benched for approximately 375 feet during September. As this stripping exposed weathered asbestos fiber in a 15-inch serpentine band, the DMEA representatives

1/ Stewart, L. A. & Ageton, R. W., U. S. Bureau of Mines; Shride, A. F., Houser, Fred, & Noel, James, U. S. Geological Survey.

recommended that 300 feet of drifting be done on this zone. This drifting was started in October 1953. As the drift advanced horizontally, it was found that the ore zone dipped upward at about 12 degrees. In order that this zone could be inspected, the contract was amended to allow 100 feet of raising in lieu of 50 feet of drifting, thus cutting the drifting to 250 feet. Two short raises were driven, the last one from near the drift face, the drift being 123.5 feet long. The raise near the drift face was driven 20 feet, then 65 feet of drifting was done from its top along the ore zone. This work was completed in February for a total footage of 188.5 feet of drifting and 30 feet of raising. As the upper drift encountered diabase and as the fiber that had been found was poor, the operator and the DMEA examiners agreed that the project should be terminated. Of the $10,805.00 provided in the contract, only $8,151.25 was spent. The Government's share of this expenditure was $7,336.125.

Results of this project seem to indicate that further exploration work is not justified.

INTRODUCTION

The Bore Tree Saddle Asbestos Co. applied early in 1953 to the Defense Minerals Exploration Administration for assistance in exploring its asbestos deposit in Gila County, Ariz. The DMEA examiners, who visited the property in May 1953, recommended that exploratory assistance be granted, so Exploration Project Contract

No. Idm-E571 was signed in July 1953. The contract provided that an access road was to be constructed to the deposit, the ore zone was to be stripped, and 300 feet of drifting were to be done if a favorable zone was uncovered.

The Bore Tree Saddle claims are situated in the Sierra Ancha Mining District of Gila County, Ariz. along Ash Creek on the steep west slope of Cherry Creek Canyon, approximately in secs. 4 and 5, T. 7 N., R. 14 E., unsurveyed (see figures 1 and 2). They may be reached by automobile by traveling 57 miles northerly from Globe on the Globe-Young-Holbrook road to a stock corral, then easterly for 1.7 miles over a very steep, crooked truck trail to the exploration site near the bottom of Ash Creek.

The claims are in the Tonto National Forest about 13 miles south of Young, at an approximate altitude of from 4,600 to 4,800 feet, or about 1,300 feet below the canyon rim (see figure 2).

The property consists of 10 unpatented claims (figure 2), but only two, the Extension No. 1 and Extension No. 2, are mentioned in the contract. All project work was done on Extension No. 1.

DESCRIPTION OF DEPOSIT

In his original report,[2] L. A. Stewart of the Bureau of Mines describes the asbestos deposit on the Extension No. 1 claim as follows:

2/ Stewart, L. A., "DMEA-2975, Bore Tree Saddle Asbestos Company, Gila County, Ariz." U. S. Bureau of Mines, DMEA Report, May 1953.

"The most interesting deposit is on claim No. 1 along the east-west face of a hill, where 3 cuts and a partially exposed outcrop suggest a continuous mineralized length of 100 feet. A 12- to 15-inch serpentine zone, 2 to 3 feet above a concordant diabase sill, contains asbestos up to a total length of nearly 2 inches in places. Some of this fiber is of No. 2 length. Because of the strong serpentine mineralization, a possibility exists that increased quantities of fiber may be present in the deposit.

"The general strike of the limestone bedding at the exposed outcrop is east-west, with a dip of 5° to the south (figure 3). About 30 feet eastward from the east cut, the outcrop swings northward along the hill slope, but the favorable horizon is covered with considerable overburden. Along this hillside and also back of the cuts, the formations steepen to about 16°.

"Across the gulch to the south of the prospected outcrop, the favorable beds are present, but have not been prospected.

"The limestone unit that contains this mineralization is about 15 feet below the base of the Algal member of the Mescal formation, a favorable position in this part of the district."

When the outcrop area was stripped (see figure 3), weathered asbestos fiber was exposed in a 15-inch serpentine band in the limestone about 2 feet above the diabase sill. The total fiber

2/ Stewart, L. A., "DMEA-2975, Bore Tree Saddle Asbestos Company, Gila County, Ariz." U. S. Bureau of Mines, DMEA Report, May 1953.

content, where exposed, was about 2 inches with some No. 2 grade. A drift then was started on the limestone-diabase contact, but as the drift was driven horizontally and the ore zone dipped about 12 degrees upward, the drift soon left the contact. At 56 feet from the adit portal this contact was in the drift back.

The drift was advanced some 85 feet, then a 10-foot raise was driven above the drift at the 80-foot point. At 7.7 feet above the back of the drift the raise cut the limestone-diabase contact. Asbestos fiber, which was exposed, was semi-soft, of good tensile strength, and occurred in 3 to 5 separate bands. The maximum fiber length was 5/16 inch.

At about 117 feet in the drift, another raise was driven up 20 feet above the adit back. The limestone-diabase contact was cut 15 feet above the drift back and the ore zone at 16.5 feet. Asbestos fiber was exposed in this zone in 5 separate veinlets in the serpentine band which was 1.0 to 1.5 feet wide. Total fiber was less than 1 inch with maximum length of fiber of 0.25 inch. The limestone beds had a strike of approximately N. 80° W. and a dip of 13° to the southwest.

From the top of the 20-foot raise, the operator drove 65 feet of drift (see figures 3 and 4). At a point 5 feet northerly from the top of the raise, a discordant diabase contact was exposed. The diabase discordancy cut across the fiber zone, then remained concordant. The strike of the discordancy was about N. 70° W. In

order to continue the exploratory work, the operator then advanced the drift parallel to the diabase for another 60 feet. The left drift wall exposed 2 or 3 fiber bands containing minus 1/4 inch to plus 1/2 inch total fiber within a 3- to 6-inch serpentine zone. The right wall was diabase.

ORE RESERVES

No ore reserves of strategic grade can be estimated.

DESCRIPTION OF WORK COMPLETED

The operator bulldozed an access road for a distance of approximately 1.7 miles from the Globe-Young-Holbrook road to the exploration site on No. 1 claim at a cost of $1,155.00. Next, the outcrop was stripped and benched for approximately 375 feet at a cost of $1,400.00.

The operator then drove a total of 188.5 feet of drifts and 30 feet of raises under the contract terms. The original adit was advanced 123.5 feet. Raise No. 1 was driven upward for 10 feet at the 80-foot point from the back of this drift. Raise No. 2 was driven upward for 20 feet from the drift's 117-foot point, and 65 feet of drifts were driven from its top (see figure 3).

Total costs were $8,151.25 for the access road, stripping the outcrop, 188.5 feet of drifting at $27.50 per foot, and 30 feet of raising at $13.75 per foot.

The total reported advance under terms of the contract was as follows:

Month	Road	Stripping	Drifts	Raises
Aug. - Sept. 1953	1.7 miles	-	-	-
Sept. - Oct.	-	375 ft.		
Nov.	-	-	56.5 ft.	-
Dec.	-	-	67	10 ft.
Jan. 1954	-	-	-	18
Feb.		-	65	2
Totals	1.7 miles	375 ft.	188.5 ft.	30 ft.

EXPENDITURES

Total expenditures were $8,151.25 for about 1.7 miles of access road, 375 feet of stripping and benching along the outcrop, 188.5 feet of drifting, and 30 feet of raising.

Total approved by contract ----------	$10,805.00
Total cost of project ----------	8,151.25
Government's share of cost ----------	7,336.125
Government's share unexpended ----------	2,288.375

EFFICIENCY OF OPERATIONS

Operations under terms of the contract were carried out in an efficient manner. However, some difficulty was experienced in obtaining and holding miners as the project site was in a very isolated section. Heavy snow during the winter months also hampered the work as it made the road inaccessible at times.

EQUIPMENT AND SUPPLIES

As the contract was on the short form, or unit cost basis, there was no Government participation in the cost of supplies or equipment.

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Exploration Administration
Denver Federal Center
Denver 2, Colorado

June 22, 1954

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2975, Contract Idm-E571, Bore Tree Saddle Asbestos Company, Extension No. 1 Claim, Gila County, Arizona

Enclosed are 9 copies of the final geologic report by Messrs. F. N. Houser and Leonid Bryner of the U. S. Geological Survey covering the above docket.

Messrs. Houser and Bryner conclude that although minor amounts of marginal and submarginal asbestos ore were discovered by the exploration program, it is almost certain that production of ore, if any, will be insignificant. They therefore recommend that no Certification of Discovery be issued. I concur in this recommendation.

E. N. Hauchman
for A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (9)

Reviewed by
DMEA OPERATING COMMITTEE
7-9-54
(date)

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Box 4126 University Station
Tucson, Arizona

June 18, 1954

MEMORANDUM

To: A. H. Koschmann

From: J. N. Faick

Subject: Completion geologic report
Contract Idm-E571 (DMEA 2975)
Bore Tree Saddle Asbestos Co., Extension No.1 Claim
Gila County, Arizona

Enclosed are the original and 8 copies of the subject report.

Because the recoverable reserves of marginal and submarginal asbestos resulting from the exploration under this contract are very small and because it is unlikely that any attempt will be made to mine this deposit, it has been recommended that no certification be made.

I concur with this recommendation.

John N. Faick
J. N. Faick

JNF:ms

cc. Koschmann (8)
Storms

Reviewed by
DMEA OPERATING COMMITTEE
7-9-54
(date)

BORE TREE SADDLE ASBESTOS CO.
EXTENSION NO. 1 CLAIM
GILA COUNTY, ARIZONA

(ASBESTOS)

DMEA 2975

COMPLETION REPORT
GEOLOGY

by
F. N. Houser and Leonid Bryner
Geologists, U.S.Geological Survey

Reviewed by
DMEA OPERATING COMMITTEE
7-9-54
(date)

BORE TREE SADDLE ASBESTOS CO.
EXTENSION NO. 1 CLAIM
GILA COUNTY, ARIZONA

(ASBESTOS)

DMEA 2975

CONTENTS

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Result of explorations	2
Reserves	4
Conclusions	5

ILLUSTRATIONS

Figure 1 Sketch map and cross-sections of Bore Tree Saddle Asbestos Co. workings on Extension #1 Claim, Gila County, Arizona — Follows page 1

INTRODUCTION

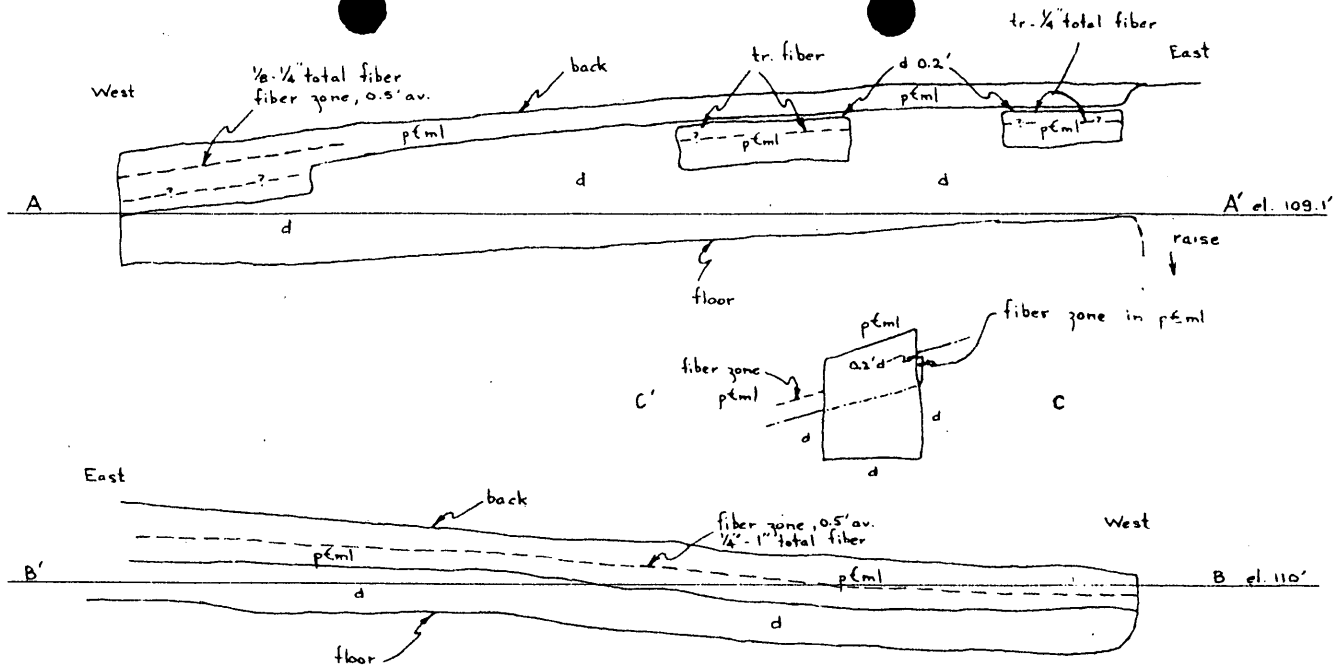
Final examination of the work done under Contract Idm-E571, Bore Tree Saddle Asbestos Company's Extension No. 1 claim, Gila County, Arizona (DMEA Docket 2975) was made on May 11, 1954.

The exploration was done in two stages. Stage 1 consisted of an access road and stripping of the outcrop; Stage 2 consisted of drifting and raising to explore further the asbestos exposed during Stage 1. The exploratory work was satisfactorily completed; the mine work completed is shown on figure 1.

GEOLOGY

The asbestos-bearing serpentine zone of the Extension No.1 claim parallels the bedding of the lower Mescal limestones of Pre-Cambrian age, which strike generally N. 80° W. and dip 12° to 18° S. in the vicinity of the workings (fig. 1). The limestone is underlain by a concordant diabase sill in the general area of the workings. The fiber zone is 1 to 3 feet above the sill and 15 feet below the base of the middle (algal) member of the Mescal. The favorable limestone beds are also present to the south in the hill across the gulch from the workings (see fig. 3, U.S.B.M. Final engineering report by Storms and Hardwick, April 1954).

The diabase intruded the limestone discordantly about 125 feet east of the workings (fig. 1). This discordancy trends N. 20° W. and truncates the asbestos-bearing beds to the east. About 90 feet west of this discordancy, a north-northwest trending high-angle fault displaces the asbestos zone down on the west. The fault is well exposed only in the bulldozer cut, 25 feet east of the portal of the exploration adit (fig. 1). Here the throw is 6 feet.



Vert scale 1" = 10'
p€ml = Mescal, lower member
d = diabase
Datum assumed

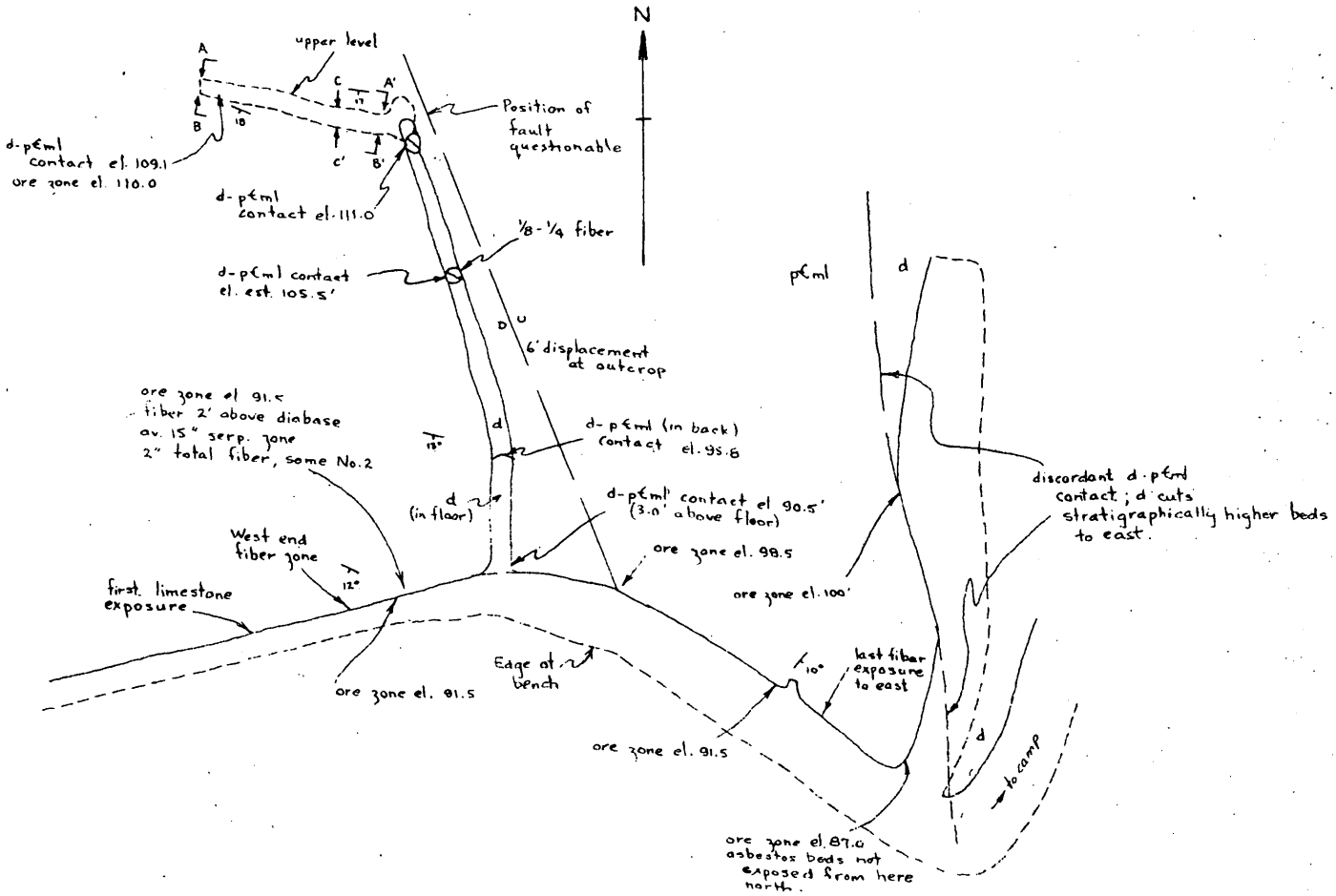


Fig. 1 Sketch map & cross-sections of Bore Tree Saddle Asbestos Co. workings on Extension #1 claim, Gila County, Arizona

DMEA 2975 Scale 1" = 50' May 11, 1954

Result of exploration

The outcrop stripping of Stage I exposed an average total of $1\frac{1}{2}$ inches of soft fiber in a zone of serpentinized limestone 12 to 15 inches in thickness. The exposed fiber extends from a point 35 feet west of the adit portal to a point about 100 feet east of the portal where it begins to thin. Up to $1\frac{1}{2}$ inches total weathered fiber was exposed in a serpentinized limestone zone 4 to 8 inches thick on the hill opposite the portal. This fiber is exposed for only a few feet along the outcrop.

The limestone north of the portal dips more steeply southward than had been supposed at the time of the original examination. The adit was started west of the 6-foot fault and directed so as to avoid the fractured limestone of the fault. Therefore, the 125-foot adit penetrated stratigraphically lower units as extended northward. The diabase-limestone contact is in the back of the adit 30 feet from the portal and the remainder of the adit is in the diabase sill that underlies the asbestos-bearing limestones.

A 10-foot raise 80 feet from the portal and a 15-foot raise 118 feet from the portal of the adit were driven to expose the fiber zone.

The operator intended to drive northward from the head of the second raise to expose the ore zone. Within a few feet, however, this work intersected a N. 81° W. trending discordancy in the diabase-limestone contact which cuts out the asbestos-bearing limestones to the north. The operator then drifted about 55 feet N.81° W. in the limestone parallel with and adjacent to the discordant contact.

The first 20 feet of the adit exposed a serpentine zone 12 to 15 inches in thickness and containing veins of asbestos totaling $1\frac{1}{2}$ inches. The zone in the raise 80 feet from the portal included asbestos veins totaling one-eighth to one-quarter inch.

The limestone exposed in the drift at the head of the second raise is moderately serpentinized, and contains 1/4 to 1 inch total semi-harsh fiber (no fiber over 1/4 inch in length) in a zone ranging from 4 to 9 inches in thickness along the south wall of the drift. The same zone is exposed sporadically along the north wall in limestone blocks on the south of and adjacent to the discordancy (fig. 1, X-Sect. A-A' and C-C'). Here the zone consists of serpentinized limestone and a few traces of very short fiber. Another zone is exposed for 10 to 12 feet along the west end of the north wall above the main zone (fig. 1, X-sect. A-A') where it is about 6 inches thick and contains 1/8 to 1/4 inch total semi-harsh fiber. Traces up to 1/4 inch of total fiber are exposed in the blocks of limestone at the top of the discordancy on the eastern half of the north wall (fig. 1, X-sect. A-A'). This fiber may represent the upper part of the fiber zone exposed on the south wall.

The exploration completed appears adequate for a reliable consideration of the potentialities of the deposit. The outcrop is well exposed by stripping. Sufficient mine work has been accomplished on the south along the adit line by means of raising and to the north and west by drifting to preclude the need of further work in those directions. The only direction that has not been covered by this exploration is to the east between the present adit and the north-trending discordancy 100 to 120 feet east of the adit.

It is doubtful, however, that drifting to the east from the second raise, although geologically more promising than to the west, would have exposed asbestos in quantity and that it would have made any appreciable change in the estimated potential of the property. Because of the likelihood of heavy ground in the vicinity of the north-northwest-trending fault (fig. 1) the operator apparently preferred to drift to the west. Then too, exploration to the east might have required additional raising. Asbestos is probably more plentiful adjacent to the discordant diabase that terminates and hides the ore-bearing beds on the outcrop 120 feet east of the exploratory workings. But judging from the scarcity of asbestos in the two raises much of the limestone block east of the fault probably is not extensively mineralized. If the discordancy defined in the west-northwest-trending drift continues east across the fault, it would limit the east block to a maximum north-south dimension of 120 feet; the block averages about 100 feet east-west. Optimistically then, the asbestos that might be discovered in such a block probably would not exceed 100 tons of all grades of fiber. The lack, therefore, of a drift to the east from the adit is not critical in an evaluation of potential for the property.

Reserves

This exploration has partly delineated a deposit of marginal or submarginal asbestos. The part of the deposit that might conceivably be mined parallels the outcrop exposed by bulldozing east and west from the adit and includes a maximum of 75 tons of asbestos of all grades. More probably the reserves are on the order of 30 to 40 tons. It is estimated that not more than one-third of the

optimistically estimated reserves of 75 tons would be recovered because of the badly weathered and semi-harsh character of the fiber and because of the considerable area of pillars that would be left in the mining operations.

Conclusions

Although additional drifting to the east of the adit could have been done, the exploration as completed is adequate. Recoverable reserves of asbestos resulting from exploration under this contract are very small. It is very unlikely that anyone will attempt to mine asbestos from this deposit. Therefore it is recommended that no certification of discovery be made.

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

224 New Customhouse
Denver 2, Colorado

May 20, 1954

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2975 (Asbestos), Contract Idm-E571, Bore Tree Saddle Asbestos Company, Gila County, Arizona

Enclosed are the original and two copies of "Termination of Exploration Project Contract by Agreement After Commencement But Before Completion of the Work" which has been prepared and executed in conformance with authorization contained in a teletype from the Chairman of the Operating Committee dated May 12, 1954.

Copies of the termination agreement have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

W. H. King

W. H. King

Enclosures

RECEIVED
JUN 1 - 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

Docket File
Surname:
Houk
Martin
Hatfield
Selfridge
Wittenberg

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

Houk: X-2971
Room 4637

MAY 12 1954

Interior
Defense Minerals Exploration
Administration
14X4401(01) Revolving Fund,
Defense Production Act,
Interior (Allocated Working Fund to the
Office of the Sec.)

TELETYPE

To: W. H. King, Executive Officer, DMEA Field Team, Region IV, Bureau Of Mines, 224 New Customhouse Building, Denver 2, Colorado

Subject: Docket No. DMEA-2975, Contract No. Idm-E571, Bore Tree Saddle Asbestos Company, Gila County, Arizona.

Authorization granted to terminate by agreement if no certification is recommended.

George C. Selfridge

George C. Selfridge (JB)
Chairman, Operating Committee, DMEA

LGHouk:gad 5/11/54
Copy to: Admr. R. File
Docket File
Operating Committee
Dr. Bowles, 3516
Mr. Larrabee, G-232 GSA Bldg.
Mr. Houk
Confirmation to Region IV

SENT
MAY 12 1954
Clerical Service Section

R.C.S.

Mr. C. O. Mittendorf
May 10, 1954
(unattended service after 4:15)

DEPARTMENT OF
Defense Minerals
RECEIVED
MAY 11 1954

DN 235 BUREAU MINES 5-10-54 3-49 PM

C O MITTENDORF

REFERENCE DOCKET DMEA 2975, ASBESTOS, CONTRACT IDM-E571, BORE TREE SADDLE ASBESTOS COMPANY. RESULTS OF WORK PERFORMED TO FEBRUARY 28 INDICATES THAT FURTHER WORK NOT JUSTIIXXX JUSTIFIED WXXXXXWXXXXX WHICH LEAVES AN UNEXPENDED BALANCE OF APPROXIMATELY $1200.00. PLEASE TELETYPE AUTHORIZATION FOR OUR PREPARATION OF FORM FOR TERMINATION BY MUTUAL AGREEMENT.

W H KING

Denver, Colo.

MAY 11 8 30 AM '54
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Denver
APR 1 2 1954
BUREAU OF MINES
Denver, Colorado

SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION
TUCSON, ARIZONA

April 9, 1954

Memorandum

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

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

Subject : Operator's Final Report, DMEA Contract Idm-E571, Docket DMEA-2975, Bore Tree Saddle Asbestos Co., Gila County, Ariz.

Enclosed are original and 4 copies of the Operator's Final Report for work done under Exploration Project Contract No. Idm-E571. This report seems adequate.

Walter R. Storms

Walter R. Storms

CC W. H. King (4)
A. F. Shride
DMEA-2975
DF

WRStorms:Frj

P.O. Box 1724
Globe, Arizona, April 7, 1954

Mr. Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV
Box 4097, Tucson, Arizona

Final Report
Bore Tree Saddle Asbestos Company
Contract No. Idm-E571
Docket D.M.E.A.2975

Dear Mr. Storms:

In response to your request for final report, I am more than pleased to furnish you with one.

On our first stage, as contract read, we built the road as mapped to our No. 1 claim; then we stripped with dozer the amount of footage to open up ore vein, as required by contract.

Stage No 2 We started with drift where the engineers and ourselves agreed upon as a starting point. We went 20', then our ore vein went on a 12 to 13 degree pitch. We kept on with the drift. At 80' we put a 10' raise to contact ore again.

We still kept on to 123½'. At this point we put an 18' raise to contact our ore body again; also we put our manway and a shute. Then from the last raise we started to follow the ore vein, which showed about 18" to 24" in thickness. We had only gone 9½' when the diabase cut us out completely.

We then decided to crosscut in a northwesterly direction, following diabase on our right and ore vein at our left.

Our ore kept on getting to where finally at 56' it just about ran out. The ground overhead bot bad and big cracks appeared.

The engineers and ourselves, by mutual agreement, decided there was no use in spending any more money on the project, as I have already reported.

The ore we have uncovered runs from No. 2, 3, 4 and smaller grade, although it is of high and Chrysotile grade.

We regret that our luck in exploring a large enough body of ore to where it would have been a success, failed, but I hope that in the future our luck will change.

Thanking you for your excellent cooperation, and this extends to all members of the Bureau of Mines, I remain

Yours very truly,

U. S. BUREAU OF MINES
MINING DIVISION
APR 9 1954
TUCSON, ARIZONA

BORE TREE SADDLE ASBESTOS COMPANY

By John V. Bustamante Jr.

JOHN V. BUSTAMANTE, Jr.

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

224 New Customhouse
Denver 2, Colorado

March 4, 1954.

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 2975 (Asbestos), Contract Idm-E571, Bore Tree Saddle Asbestos Company, Gila County, Arizona.

Enclosed are two copies of the Operator's Monthly Progress Report, Form MF-104 and MF-104A, Operator's Narrative Report, Inspecting Engineer's Narrative Report, and other supporting data pertaining to work under the subject contract for the month of January 1954.

W H King
W. H. King

Enclosures

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

224 New Customhouse
Denver 2, Colorado

January 29, 1954.

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 2975 (Asbestos), Contract No. Idm-E571, Bore Tree Saddle Asbestos Company, Gila County, Arizona.

Enclosed are two copies of the Operator's Monthly Progress Report, Form MF-104 and MF-104A, Operator's Narrative Report, Inspecting Engineer's Narrative Report, and other supporting data pertaining to work under the subject contract for the month of December 1953.

W. H. King

Enclosures

FILE COPY
SURNAME:

Houk

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

N.S. in R.R.

January 18, 1954

Memorandum

To: Administrator

From: Nonmetallic Minerals Division

Subject: Amendment No. 1 - Docket No. DMEA-2975 - Asbestos
Bore Tree Saddle Asbestos Co.
Gila County, Arizona
Contract No. Idm-E571

The Nonmetallic Minerals Division concurs in Amendment No. 1 as written and executed in the field to provide more penetrations of the ore zone within the total estimated cost of the contract.

LGHouk:gad 1/18/54

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

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 14 1954

224 New Customhouse
Denver 2, Colorado

January 11, 1954

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2975 (Asbestos), Contract Idm-E571, Bore Tree Saddle Asbestos Co., Gila County, Arizona

Enclosed are the original and two copies of Amendment No. 1 to Contract Idm-E571 which has been executed to authorize 100 feet of raising at $13.75 per foot in lieu of 50 feet of drifting at $27.50 per foot. Also enclosed are three sets of data relevant to the amendment.

Copies of this amendment have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

W. H. King

Enclosures

RECEIVED
JAN 27 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

MINING DIVISION
REGION IV

December 15, 1953

Memorandum

To : W.H. King, Chief, Mining Division, Region IV, Denver, Colo.

From : Chief, Mining Methods Branch, Mining Division, Region IV, Tucson, Ariz.

Subject : Proposed Amendment, Contract Ida-2571, Docket DMRI-2975, Bore Tree Saddle Asbestos Co., Gila County, Ariz.

Enclosed are the following:

(1) Original and four copies (lacks one copy) of a request for an amendment to Contract Ida-2571 from the Bore Tree Saddle Asbestos Co. to allow for raising;
(2) Original and five copies of the Bureau of Mines engineer's recommendations.

This prospect raising is needed to test the ore zone above the back of the present drift, and is recommended by A.F. Shride of the Geological Survey and R.W. Agster of the Bureau of Mines. I concur with their recommendations.

Walter R. Storms

Walter R. Storms

cc: WHKing (5)
AFShride

MINING DIVISION
REGION IV

December 15, 1953

Memorandum

To : Walter R. Storms, Chief, Mining Method Branch, Mining Division, Region IV, Tucson, Ariz.

From : R.W. Ageton, Mining Engineer, Tucson, Ariz

Subject : Proposed Amendment to the contract, Contract Idm-E571, Docket DMEA-2975, Bore Tree Saddle Asbestos Company, (Asbestos), Gila County, Ariz.

Since additional drifting may be warranted in the direction originally planned, a small amount of prospect raising will be required to test the ore horizon above the back of the drift. The examiners believe that an equitable cost for raising to test the ore horizon would be $13.75, or one-half the contracted drifting rate. The amount of raising required would not exceed 100 feet. If an amendment could provide for raising and permit the application of the footage not used to be applied for drifting, the examiners believe that such an amendment would facilitate exploration of the deposit as it is now interpreted.

It is recommended that an amendment be considered which would allow a total of 100 feet of prospect raising at a unit cost of $13.75, and provide that excess footage could be applied to drifting and/or crosscutting at the contracted unit cost of $27.50. The amendment would not increase the contracted cost of the project; it would merely apply a portion of the contracted funds to raising.

Robert W. Ageton
Mining Engineer, Mining Methods Branch,
Mining Division, Region IV

cc: WWKing
AFShride

Box 1724 Globe, Arizona, 12-14-53

Mr. W. R. Storms
U.S.Bureau of Mines
P.O.Box 4097
Tucson 5, Arizona

Re: Contract No.IDME 571
Docket No.DMEA 2975

Dear Sir:

We would like to apply for an amendment to our contract to use some of our drifting footage for putting a raise, or raises, at fifty (50') foot intervals.

Of course we would like to have about 100' of raises all told but in case we don't use this amount of footage, we would like to use the balance of said footage for our drifting as called for by the contract.

This amendment is required because our ore vein dips from 12° to 13°, and raising is necessary.

The U.S.Bureau of Mines Engineers from Tucson have agreed; also they have checked our mining operations.

The cost of this raising, as near as I can estimate on a total basis, will frun from $13.75 per foot to $15.00 per foot.

I would very much appreciate it if you can take prompt action on this amendment.

Respectfully yours,

BORE TREE SADDLE ASBESTOS COMPANY

By John V. Bustamante Jr

JOHN V. BUSTAMENTE, JR.

U. S. BUREAU OF MINES
MINING DIVISION
DEC 15 1953
TUCSON, ARIZONA

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Defense Minerals Exploration Administration
Denver Federal Center
Denver 2, Colorado

December 23, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: Amendment request of 12/14/53, DMEA Docket 2975, Contract Idm-E571, Bore Tree Saddle Mining Company (asbestos), Gila County, Arizona

Enclosed are 9 copies of a memorandum report by A. F. Shride of the U. S. Geological Survey covering a request for amendment of the above docket.

E. M. Hackman
for A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (9)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 4126, University Station
Tucson 5, Arizona

December 17, 1953

Memorandum

To: A. H. Koschmann A.H.K. by E.H.H.

From: A. F. Shride

Subject: Amendment request of 12-14-53, Contract Idm-5571 (IMSA-2975), Bore Tree Saddle Mining Company (Asbestos), Gila County, Arizona.

The limestone beds of this asbestos occurrence dip more steeply to the south than was anticipated from adjacent outcrops. Therefore the exploration adit, which bears N. 21° W. and was started on the asbestos horizon, passes beneath the horizon. The adit would not effectively explore the horizon if turned to parallel the strike of the fiber zone; therefore the requested raising is the only logical way of testing the horizon.

If presently known attitudes persist the asbestos horizon can be expected to rise 20 feet vertically per hundred feet of adit length. Raises should be driven approximately every 50 feet. An additional raise or two may be necessary if the asbestos content of the zone varies erratically. Assuming an adit length of 175 feet approximately 75 feet of raising would be required under the proposed amendment.

It is recommended that a maximum of 100 feet of raising be allowed. The cost of this raising is to be deducted from the amount originally allowed for drifting. If extra raises are not needed the cost of such raises would be applied to drifting. If the asbestos deposit persists as far as is hoped, raising at the expense of drifting could cut the drifting that might be needed down to a point approaching ineffectiveness. Therefore raising must be kept to the minimum necessary.

At some future time it may be necessary to consider an amendment to add funds for drifting, if this project is to be adequately carried to completion. This possibility should not deter favorable consideration of the present request. If the requested amendment is not granted, the adit now being driven will no longer be effective exploration.

I should emphasize that the future plan of exploration cannot be entirely predicted and further modifications may be required.

A. F. Shride

A. F. Shride
Geologist

AFShride:mvt
Copies to Koschmann (5)
Storms
Shride

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

Department of the Interior
Bureau of Mines Administration
RECEIVED
SEP 8 - 1953

September 8, 1953

Memorandum

To: Lawrence G. Houk, Director, Non-Metallic Minerals Division, DMEA

From: Oliver Bowles, Commodity Specialist, Construction and Chemical Materials Branch

Subject: DMEA Docket No. 2975, Bore Tree Saddle Asbestos Company, Gila County, Arizona

The two-stage program of exploration as outlined in the reports of the Geologist and Engineer appears to be consistent with existing conditions. Therefore, I concur in their recommendation.

Oliver Bowles

Oliver Bowles, Commodity Specialist
Construction and Chemical Materials Branch

IN REPLY REFER TO:

G-MD-CNM

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

Department of the Interior
Defense Minerals Administration
RECEIVED
Aug 6 1953

August 6, 1953

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-2975 (asbestos)

To: L. G. Houk, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant: Bore Tree Saddle Asbestos Co., Gila County, Arizona.
Name of property: Extension No. 1 claim.
Location of property: Tonto National Forest.
Date of field team report: June 19, 1953.
Authorship of field team report: A. F. Shride and L. A. Stewart.
Field team's recommendation:

Stage 1. Access road and stripping overburden.
Stage 2. 300' drifts or cross-cuts if (1) warrant it.
$10,805

Comments: None.
ACTION SUGGESTED: Follow field team's recommendation.

D M Larrabee

D. M. Larrabee

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

August 5, 1953

Memorandum

To: Mr. C. O. Mittendorf

From: Lawrence G. Houk

Subject: Docket No. DMEA-2975 - Asbestos, Bore Tree Saddle Asbestos Co., Contract No. Idm-E571.

The Nonmetallic Minerals Division concurs with the work outlined in this contract and the costs proposed by the field team with the following exceptions:

It should not require one year to complete this contract which consists of approximately 21 working days under Stage 1, and 300 feet of drifting under Stage II.

RECEIVED
AUG 10 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

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

224 Nev Customhouse
Denver 2, Colorado

July 29, 1953

Memorandum

To: Secretary to the Operating Committee, Defense Minerals Exploration Administration

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2975, (Asbestos), Bore Tree Saddle Asbestos Company, Gila County, Arizona

Enclosed are the original and three copies of the ~~Final~~ field team report pertaining to the above application.

The contract has been signed and is now in effect.

W. H. King
W. H. King

for E. N. Hirschman
A. H. Koschmann

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
8-7-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

June 19, 1953.

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2975 (Asbestos), Bore Tree Saddle Asbestos Company, Gila County, Arizona.

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

The applicant requested $24,825.00 to build an access road and explore unspecified locations by 750 feet of drifting.

The field examiners and the applicant have agreed on a more realistic program with an estimated cost of $10,805.00. The work is recommended to be done in two stages. Stage I to include an access road and stripping the outcrop. Stage II will consist of 300 feet of drifting and/or crosscutting if the findings in Stage I warrant further exploration.

We concur in this recommendation.

W. H. King
W. H. King

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
8-7-53
(date)

MINING DIVISION
REGION IV

May 28, 1953

Memorandum

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

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

Subject : Report on Docket DMMA-2975, Bare Tree Saddle Asbestos Co., Gila County, Ariz.

Enclosed is a report on the above property by L. A. Stewart of the Bureau of Mines. A separate section on the geology probably will be submitted by A. F. Shride of the Geological Survey, but it may reach you after the June 5 deadline.

As there seems to be a very good chance of discovering a substantial quantity of strategic quality asbestos by this exploratory work, the examiners recommend a loan of $10,605. I believe Shride of the Geological Survey concurs with this recommendation as do I.

Brochure will be sent in by the Geological Survey.

Walter E. Storms

Walter E. Storms

cc W. H. King (3)
DMMA-2975
DF

WEStorms:frj

Reviewed by
DMMA OPERATING COMMITTEE
6-7-53
(date)

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

June 15, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2975, Bore Tree Saddle Asbestos Company, Gila County, Arizona.

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

It has been recommended that the loan be approved for an exploration program to be set up in two stages--Stage 2 to be pursued only if exposures obtained in Stage I prove adequate.

The brochure is enclosed.

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

Enclosures (10)

Reviewed by
DMEA OPERATING COMMITTEE
8-7-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P.O.Box 4126, University Station
Tucson 5, Arizona

June 12, 1953

Memorandum

To: A. H. Koschmann, Denver, Colorado

From: Raymond F. Robinson, Tucson, Arizona

Subject: DMEA 2975, Bore Tree Saddle Asbestos Company, Gila County, Arizona

Enclosed please find original and 8 copies of a geologic memorandum report by A. F. Shride on the subject docket.

The U. S. Geological Survey and the U. S. Bureau of Mines examiners agree that this property deserves a modest amount of exploration which should be set up in two stages. Stage 2 should not be pursued unless exposures obtained by bulldozing in Stage 1 prove adequate in the judgment of the examining team.

I concur with their judgment and conclusions. The brochure is enclosed.

Raymond F. Robinson

Raymond F. Robinson
Acting District Supervisor
Arizona-New Mexico

Enclosures 10

Reviewed by
DMEA OPERATING COMMITTEE
8-7-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P.O.Box 4126, University Station
Tucson 5, Arizona

June 12, 1953

Memorandum

To: A. H. Koschmann, Denver, Colorado

From: A. F. Shride, Tucson, Arizona

Subject: DMEA 2975, Bare Tree Saddle Asbestos Company, Gila County, Arizona

The area proposed for a modest exploration program on the Extension No. 1 claim may be geologically favorable to concentrations of asbestos. The description of the deposit on this claim, in Mr. Stewart's engineering report is adequate. The writer concurs with Mr. Stewart's recommendations concerning an exploration program.

The asbestos-serpentine zone on the Extension No. 1 claim occurs in limestone beds 6 to 12 inches thick. These beds by comparison with like occurrences are considered only moderately favorable to asbestos localization.

The asbestos-bearing limestones strike N. 80° W. and dip 16° to 18° S. Locally, along the outcrop on the north side of the stream shown on Figure 3 of the engineering report, the strata dip is only 5° S. If this change in attitude of the enclosing limestones is only a local feature due to drag on intrusion of the underlying diabase sill, and the asbestos is limited to a very narrow area, at a maximum 15 to 20 feet wide and 100 feet long, exploration may not be warranted.

Reviewed by
DMEA OPERATING COMMITTEE
8-7-53
(date)

It is possible that the change in attitude noted is due to slump of the limestones along the steep-sided ravine which cuts through the mineralized area. If this is the case the mineralization noted may be thoroughfared along bedding-plane faults which entered over more area than just adjacent to a discordancy in the underlying diabase and exploration would be warranted. The latter possibility can be optimistically entertained because asbestos was observed south of the ravine at the same stratigraphic horizon as the asbestos exposed by the open cuts on the north side of the ravine.

Debris covers most of the outcrops that are essential to evaluation of this deposit. Therefore, it is not possible to determine which of the two alternatives outlined above are most likely. The outcrops exposed show sufficient structural preparation of the host limestone to warrant Stage 1 (Bulldozing) of the proposed exploration. Stage 2 should not be entered on unless the exposures afforded by Stage 1 indicate an area of several thousands of square feet underlain by mineralized limestone. To warrant Stage 2 exposures made by Stage 1 of the proposed exploration should include an average cumulative thickness of asbestos veins of about 2 inches, and the mineralization should be continuous.

R. F. Robinson for

A. F. Shride
Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION OF FIELD TEAM
REGION IV

DMEA-2973, Mere Tree Saddle Asbestos Company

Gila County, Arizona

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

May 1953

Reviewed by
DMEA OPERATING COMMITTEE
8-7-53
(date)

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

by Lincoln A. Stewart[1]

An application from the Bere Tree Saddle Asbestos Co. for a $24,825 exploration loan on its asbestos prospects was received April 20, 1953 by the Tucson office of the Defense Minerals Exploration Administration as docket DMEA-2975. The purpose of the requested $24,825 loan was to construct a 2-mile access road to the property, bulldoze the outcrops, and explore unspecified locations by 750 feet of drifting.

The property consists of 10 unpatented claims in the Tonto National Forest about 57 road miles north of Globe, Gila County, Ariz. There has been only a negligible production from these claims. An examination of the deposit was made on May 20, 1953, by the writer, accompanied by Robert W. Ageton of the Bureau of Mines, and A. F. Shride, accompanied by James Noel and Fred Houser, all of the Geological Survey.

Several prospects were investigated, but only the deposit on Extension Claim No. 1 was considered as a likely exploration site. A 12- to 15-inch asbestos-bearing serpentine band, showing lateral extent of 100 feet, had been exposed by 3 cuts. The limestone bedding near the exposure had an east-west strike and dipped 5° to the south, but further back on the hill the formations showed a dip of 16° to the

---

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

south. The contour of the hill is such that the outcrop can be stripped to the northward, thus giving an indication of northward extent of the deposit. The same favorable beds are present on the opposite side of an eastward trending gulch and also can be exposed by stripping.

The company representative, who accompanied the examiners on this investigation, verbally modified the original proposal, suggesting that 300 feet of exploratory drifting was sufficient to determine the extent of this deposit. The originally proposed access road and outcrop stripping were to be the first stage of the work. The project cost thus was revised to a total of $10,805.

The examiners concluded, that although the 3 cuts showed only marginal ore of strategic grade, the strength of serpentine mineralization present, combined with the favorable stratigraphic location of the deposit, justified an exploration loan.

Therefore it is recommended that this project be favorably considered. Stage I will cost $2,555. If further exploration is shown to be justified, the maximum drifting cost of stage II will be $8,250, or a total project cost of $10,805.

DMLA-2975, BURE IRELL SADDLE ASBESTOS COMPANY
GILA COUNTY, ARIZONA

Engineering Report

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

May 1953

1964-1975, [illegible] MINING COMPANY
GILA COUNTY, ARIZONA

CONTENTS

Engineering report

	Page
Introduction	1
Location and accessibility	2
Ownership and extent	2
History and production	3
Description of the deposits	3
Proposed exploration	4
Discussion of proposal	5
Conclusions	6
Recommendations	7
Appendix	8

ILLUSTRATIONS

Figure		Following page
1	Location map	2
2	Claim map and location of proposed work	2
3	Detailed sketch of proposed work	4

INTRODUCTION

In April 1953, an application was submitted to the Defense Minerals Exploration Administration for a $24,825 exploratory loan by the Bare Tree Saddle Asbestos Co. for its asbestos prospect. This application, docketed as DMEA-2975, was received by the Tucson office of the Defense Minerals Exploration Administration on April 20, 1953. The purpose of the loan was to construct an access road to the property, expose the outcrops by bulldozing, and prospect the deposits with 750 feet of drifting and crosscutting.

The field examination was made on May 20, 1953 by A. F. Shride, James Neal, and Fred Houser of the Geological Survey, and Lincoln A. Stewart and Robert A. Ageton of the Bureau of Mines. John V. Bustamante, one of the owners, accompanied the party and acted as a guide.

The examiners investigated 5 or 6 outcrops at various places on the property, but only one appeared to be worthy of a modest exploration project. Bustamante then suggested the following modified proposal: bulldoze an access road to the deposit of interest; clear off the outcrop to determine the extent of mineralization; and if showings justify, explore the deposit with up to 300 feet of drifting. The total cost of this latter proposal was estimated at $10,805.

LOCATION AND ACCESSIBILITY

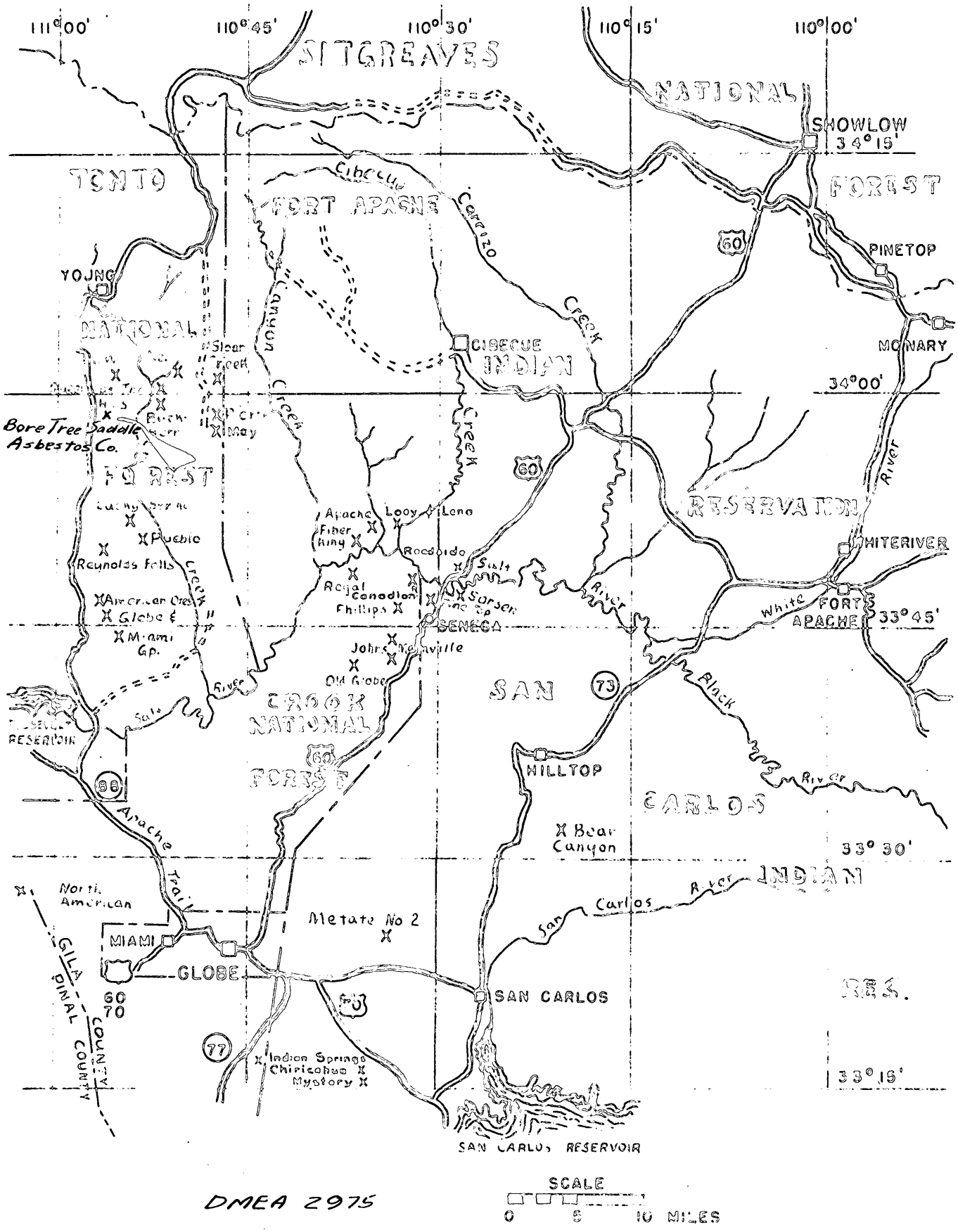
The claims are situated on the steep west slope of the Cherry Creek Canyon in the Sierra Ancha Mountains on both sides of Ash Creek, a short tributary of Cherry Creek. Township 7 N., R. 14 E., in which the claims are situated, is unsurveyed, but by projection from the next township north, the location can be established as within sections 4 and 5. The property is reached from Globe via the Globe-Young-Salbrook road (figure 1). At 37 miles north of Globe, the trail to the claims takes off eastward at a leading corral that is signed "Beard Tree Saddle". The head of the trail is on the rim at an altitude of 6,000 feet; the claims are 1,300 to 1,500 feet lower.

This area is in the Tonto National Forest about 13 miles south of Young. Travel on the proposed 2-mile access road to the property would be virtually impossible during extremely wet weather, but the Globe-Young road is passable throughout the year, except possibly for a day or two after a heavy snowstorm.

OWNERSHIP AND EXTENT

The Bare Tree Saddle Asbestos Co. is a partnership consisting of John V. Bustamante, Jr., Fred Fritz, William Nunez, and Steve Wusich, all of whom reside at Globe, Ariz. The company address is Box 1724, Globe, Gila County, Ariz.

The property is composed of 10 unpatented claims (figure 2), which are recorded at the Gila County courthouse in Globe as Extension Nos. 1 to 10, in Book of Mines 49, pages 160, 161, 166, and 167.



DMEA 2975

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

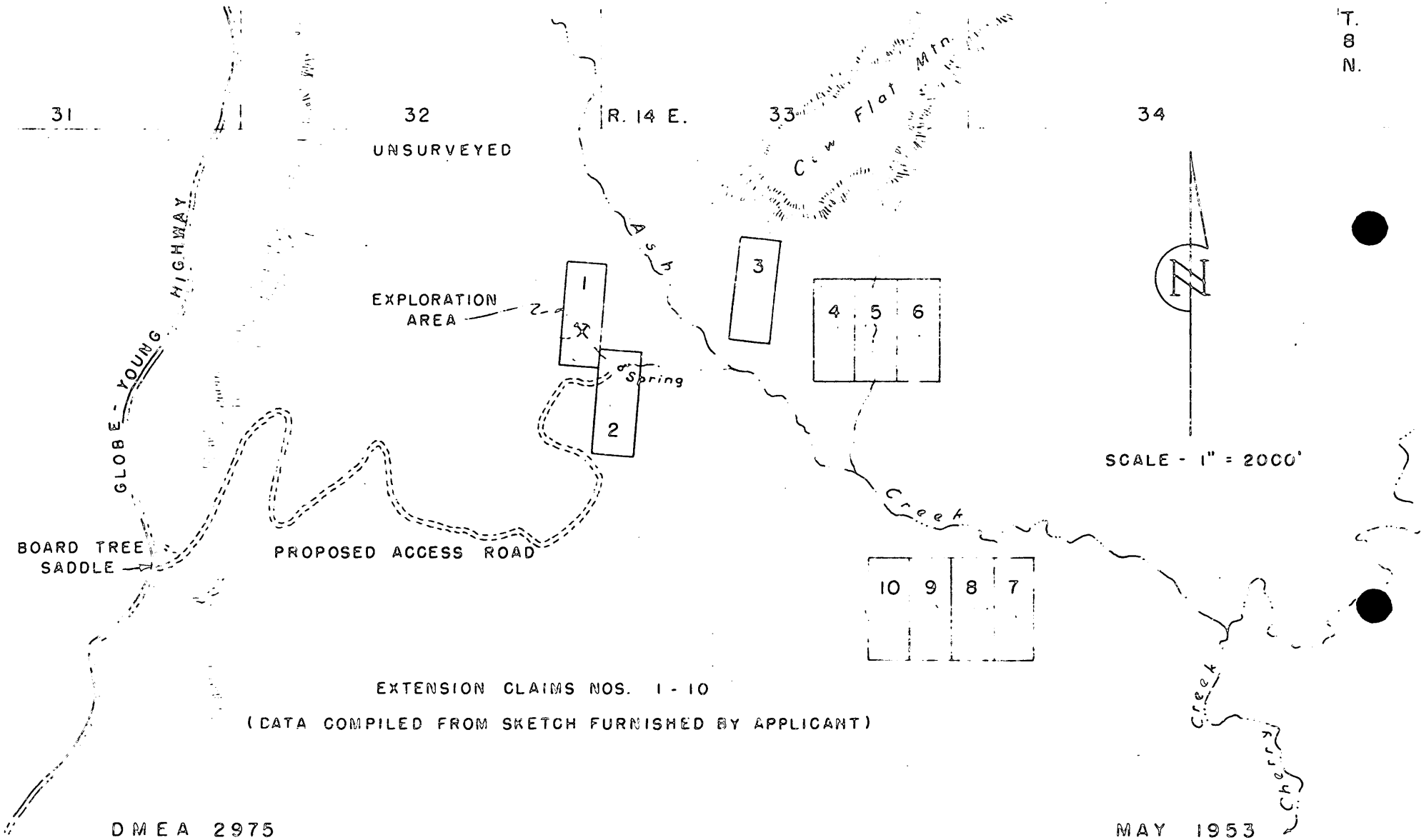


FIGURE 2. - SKETCH MAP OF BORE TREE SADDLE ASBESTOS CO. CLAIMS
GILA COUNTY, ARIZONA

HISTORY AND PRODUCTION

Claims in this area probably were located previous to 1940. The locality is so difficult of access that little work has been done. A prior owner is said to have packed out about 2 tons of mill rock. The present partnership has done only assessment work.

DESCRIPTION OF THE DEPOSITS

Bustamante took the examiners to prospects on several of the claims. On claim No. 5, a deposit had been opened on a cliff face by 2 adits, each about 25 feet long. The ore horizon, essentially horizontal, was 5 feet above a concordant diabase sill. In a 5- to 8-inch band of poorly serpentinized material, asbestos fiber veins totaled 1 to 3 inches. The individual fibers were short, due to numerous partings, and were of harsh quality with poor tensile strength. The deposit was limited to about 60 to 75 feet of outcrop length. On No. 3 claim there were a couple of shallow pits that showed ½ inch of fiber. At another place on the point of a hill, a 12-inch serpentine band contained a total of 1 to 1½ inches of short, soft fiber. This deposit is very limited in extent, due to topography and a discordant diabase sill that cut off the ore zone.

The most interesting deposit is on claim No. 1 along the east-west face of a hill, where 3 cuts and a partially exposed outcrop suggest a continuous mineralized length of 100 feet. A 12- to 15-inch serpentine zone, 2 to 3 feet above a concordant diabase sill,

contains asbestos up to a total length of nearly 2 inches in places. Some of this fiber is of No. 2 length. Because of the strong serpentine mineralization, a possibility exists that increased quantities of fiber may be present in the deposit.

The general strike of the limestone bedding at the exposed outcrop is east-west, with a dip of 5° to the south (figure 3). About 30 feet eastward from the east cut, the outcrop swings northward along the hill slope, but the favorable horizon is covered with considerable overburden. Along this hillside and also back of the cuts, the formations steepen to about 16°.

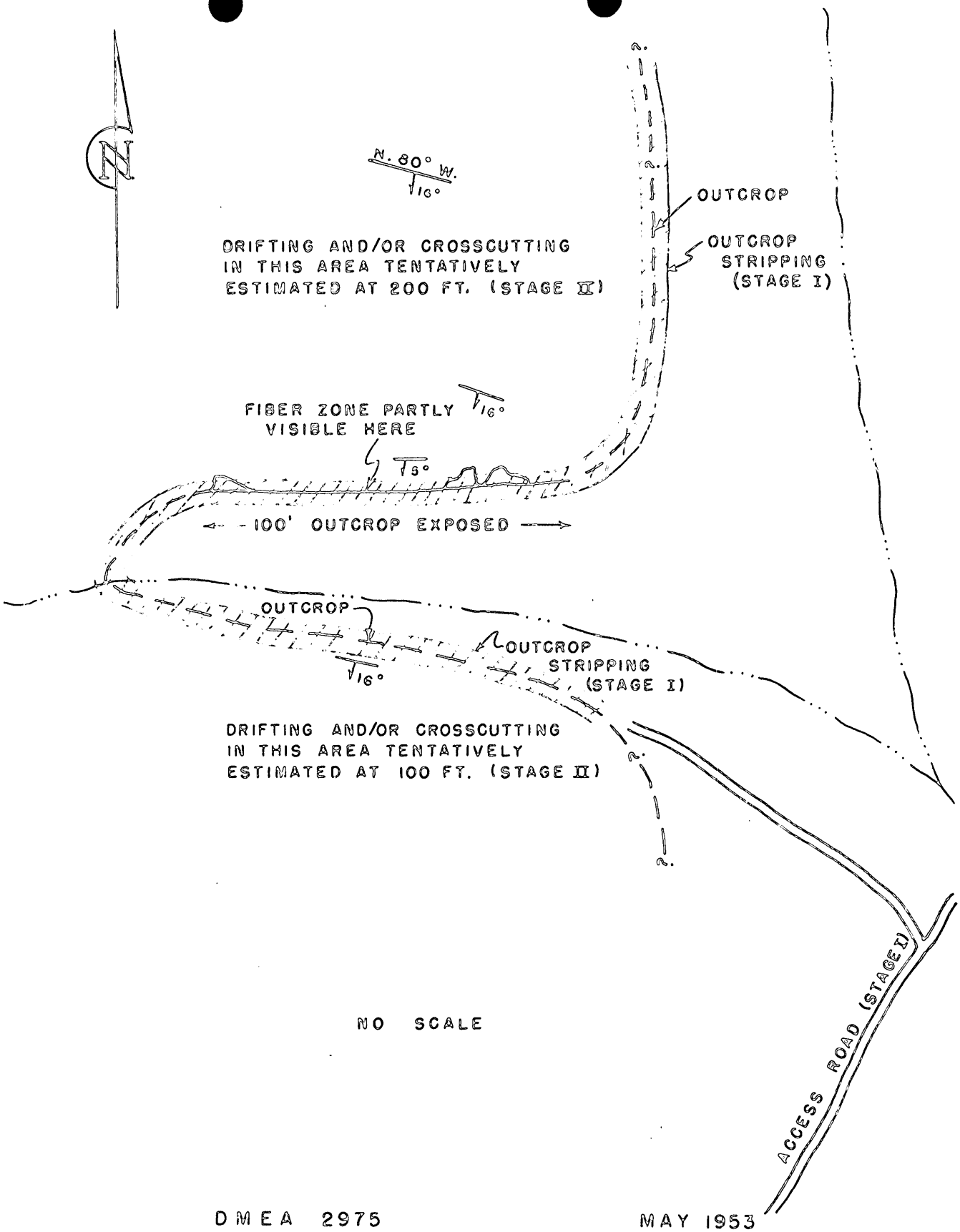
Across the gulch to the south of the prospected outcrop, the favorable beds are present, but have not been prospected.

The limestone unit that contains this mineralization is about 15 feet below the base of the Algal member of the Mescal formation, a favorable position in this part of the district.

It is the opinion of the examiners that a modest exploration program is justified on this deposit.

PROPOSED EXPLORATION

The original proposal was to construct an access road to the claims, bulldoze and expose outcrops, and drift a total of 750 feet at favorable, but unspecified locations. Examination of the property indicated to the examiners that only one area justified a less extensive exploration project. John Bustamante, one of the partners,



DMEA 2975 MAY 1953

FIGURE 3.- SKETCH MAP OF PROPOSED WORK ON EXTENSION NO. 1 CLAIM

BORE TREE SADDLE ASBESTOS CO. GILA COUNTY, ARIZONA

who was present throughout the investigation and discussions of the relative potentials of the various deposits, suggested that work be confined to the one deposit that showed the best indications.

The following is his verbal, modified proposal:

(1) Construction of a pilot road to extension No. 1 claim, estimated at 7 days of bulldozer work at $150 per day, plus 7 days for one jackhammer operator to drill and blast rock ledges as required at $15 per day.

(2) 7 days bulldozer work in conjunction with 2 jackhammer operators to drill, blast, and strip the outcrop at $200 per day.

If the exposures justify underground exploration, allow 300 feet of drifting and/or crosscutting at $27.50 per foot.

Thus the allowable total project will be as follows:

7 days dozer work on road @ $150/day	$1,050
7 days jackhammer operator @ $15/day	105
7 days outcrop stripping, including dozer work, 2 jackhammer operators, etc., @ $200/day	1,400
300 feet drifting @ $27.50/feet	8,250
Total project cost	$10,805

DISCUSSION OF PROPOSAL

The cost estimate of the original proposal, totaling $24,825, is appended to this report merely for the record. Except for the rental basis, the estimated costs are considered reasonable, considering the remoteness of the project and the difficulty of access. Bustamante stated to the writer that they miscalculated the drifting cost, and that he considered $27.50 per foot for drifting as an equitable figure.

In such rough terrain, the unit bid of $150 per day for dozer work certainly is reasonable. The usual rate with a D-6 Cat is $185 per 10-hour day, fully maintained. The company is absorbing the moving in and out charge. The jackhammer operator will be necessary to drill and blast rock ledges, road toe, etc. Stripping of the outcrop will necessitate drilling and blasting along the entire outcrop in order to adequately expose the fiber zone a few feet back of the surface.

CONCLUSIONS

In the estimation of the examiners, exploration of the deposits, other than on extension No. 1 claim, is not justified. The deposit on the No. 5 claim, although the exposures contained considerable fiber, consisted of short, harsh asbestos and would not be expected to improve in quality at depth. The other deposits were either poorly mineralized or definitely restricted in size.

On Claim No. 1, the 3 cuts indicate fair mineralization for a width of 80 feet and further work probably will extend this dimension laterally. An indication of the depth of the deposit into the hill may be gained by stripping the outcrop northward along the hillside. If fair mineralization persists for some distance northward along this face, exploration westward by drifting would appear feasible, as this is the general strike direction. Stripping of the outcrop on the south side of the gulch might indicate that some exploration is justified down dip.

An access road into this area will not only benefit the applicant, but may be conducive to intensified prospecting in this area of difficult access.

This exploration should be set up in 2 stages: Stage I to consist of construction of the access road to the property, and stripping and benching the outcrops. If the resultant showings at the completion of this work are not favorable, the project can be terminated. If further exploration appears justified, Stage II will consist of underground work.

RECOMMENDATIONS

Such a small amount of work has been done on the claim No. 1 deposit that it can be classed only as a "raw prospect". However, it appears worthy of an exploration project for the following reasons:

1. It is thought the fiber will be of strategic quality;

2. The known length of the asbestos-bearing serpentine zone is 100 feet; it may be longer. If the deposit continues into the hill for 100 feet or more, the potential could be significant.

3. The position of the deposit is in a stratigraphic horizon from which commercial production of asbestos has been made elsewhere in the Sierra Ancha district.

It is suggested that the unit bids, as given verbally by Gustamante, the company representative, be accepted for the various classes of work, as follows:

Stage I

Access road construction

An allowable maximum of 7 days dozer work @ $150/day---$1,050
with an accompanying jackhammer operator @ $15/day---- 105

Stripping and benching the outcrop

An allowable maximum of 7 days dozer work in conjunction with 2 jackhammer operators to drill and blast the outcrop for a total of $200/day----------1,400

Total for stage I ----------2,555

Stage II

Underground exploration

An allowable maximum of 300 feet of drifting and/or crosscutting @ $27.50/foot---------- 8,250

Total project cost ----------10,805

The location of the drifting will be dependent upon the showings encountered by the outcrop stripping and benching. It might be found advisable to place some of the drifting on the segment of the deposit that lies south of the gulch (as indicated in figure 3), but at present this is an unknown factor. In any case, justification for stage II and the location of the underground work should be determined by the Government representatives.

It is suggested that 30 days be allowed to start work and one year be allowed for completion. The latter figure may seem unreasonably long for such a small footage, but severe weather conditions can be expected during the winter months.

In summary, it is recommended that an exploration loan be given to the Mere True Saddle Asbestos Co. to explore its extension claim No. 1 deposit, for a total project cost of $10,805.

APPENDIX

[illegible]-2975, [illegible] SANDS [illegible]

[illegible] COUNTY, ARIZONA

ORIGINAL APPLICATION FOR [illegible]

[illegible]ay 1953

Bare Tree Saddle Asbestos Company Cost Estimate

Basis:

Two mi. excess road from county road to mine
7 days work by bulldozer to expose face
750 ft. of drifting and crosscutting to show
extent of underground ore body

Time Estimate:

Due to weather conditions during winter
Minimum time set at 18 mo. and
Maximum time set at 24 mo.

Bulldozer work:

6 days on road at $ 150.00 per day	$	900.00
7 days at stripping $ 150.00 per day	$	1050.00
	$	1950.00

Total for bulldozer $ 1950.00

Mine development

Rental of equipment

105 cu.ft. compressor	$ 150.00 per mo.	$	3600.00
Jack hammer	42.25		1014.00
Air hose	7.05		169.20
			4783.20

Rental basis pr ft. advance $ 6.37

Labor:

1 foreman mechanic	$ 15.00
1 miner	13.00
1 mucker	13.00
	$ 43.00

This Include S/S Industral Insurance Etc.

Labor on advance of three ft. per day $ 14.33

Supplies:

16 gal Gasoline per shift at 35 cents per gal	$ 5.60
2 qts. oil per shift at 40 cents per qt.	.80
	6.40

This Include delivery to mine

Fuel per ft. advance $ 2.13

Explosives:

Dynamite, 30 lbs. at 23 cents a lb.	$ 6.90
Caps 14 @ 2½ cents each	.35
Fuse 90 ft. @ .013 per ft.	1.17
	$ 8.32

Cost per ft. @ 4 ft. rounds per ft. $ 2.08

Pipe and Track

Rails, ties, spikes, and fishplates	$ 1.60
2 inch air line	.59
1 inch water line	.34
Sleeves, valves, etc.	.25
Above to remain on the property with	$ 2.78
40 % to be charged to project	

Cost to project at 40% $ 1.11

Drill Steel and Bits

Steel breakage estimated 1-4 ft.
steel per 3 rounds or 9 ft. advance

Steel $ 6.00 / 9 ft. 0.66

4 Timken bits per rounds,
this include sharping

4 X .60 / 3 ft. 0.80

$ 1.46 Total Per ft. $ 1.46

Mine's

Machine oil	$ 0.12
Carbide	0.15
resharping of picks and mells	0.10
Bars, leading sticks, jim crows, wrenches, and etc.	0.40
	0.77

Per ft. $0.77

Repairs:

Normal repairs on machinery including breakage and replacement per ft. $ 0.80

Timber:

25 sets estimated at a cost of $ 6.00 per set

$ 6.00 X 25 / 750 ft. per ft. $ 0.20

Supervision and Engineering per ft. $ 1.25

Total cost per ft. $ 30.50

Summary:

Bulldozer work		$ 1950.00
Rental of equipment	per ft.	6.37
Labor	" "	14.33
Supplies	" "	2.13
Explosives	" "	2.08
Pipe and track	" "	1.11
Drill steel and bits	" "	1.46
Mine's	" "	0.77
Repairs	" "	0.80
Timber	" "	0.20
Supervision and Engineering	"	1.25
		$ 30.50

Total cost for drifting $ 22,875.00

B I S Asbestos Co.	$	2,287.50
D M P A		20,587.50

Total for Dozer work

B I S asbestos co.	$	195.00
D M P A		1,755.00

Total for Project

B I S asbestos co.	$	2,482.50
D M P A		22,825.50
		24,825.00

Total for project $24,825.00

C
O
P
Y

Bore Tree Saddle Mine
Globe, Arizona

Mr. W. H. King
Bureau of Mines
224 New Customhouse Building
Denver 2, Colorado

Dear Mr. King:

Enclosed you will find a loan appication and cost estimate for the Bore Tree Saddle Mine.

This work consists of 13 days bulldozer work to build a road from the Globe-Young road to the Mine, and to bulldoze along the face of the outcrop to show definetly, the strike and pitch of the outcrop.

After the bulldozing is completed. It is then proposed to run 750 feet of drift and crosscut to find out the extent of the ore body.

Due to weather conditions in the winter, maximum time has been set at 24 months from the starting time.

Cost of the bulldozer work is estimated at $ 1,950.00 with $1,755.00 to be paid by D.M.P.A. and $ 195.00 by the Bore Tree Saddle Co.

Cost of the underground work is estimated at $ 22,875.00 with $ 20,587.00 Paid by the D.M.P.A., and $ 2,287.50 by the Bore Tree Saddle Co.

Total is, $ 22,342.50 to be paid by D.M.P.A., $ 2,482.50 by the Bore Tree Saddle Company. For a total of $ 24,825.00

Thank you

J. V. Bustamante

Fred Fritz

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

224 New Customhouse
Denver 2, Colorado

July 22, 1953

RECEIVED
JUL 23 1953

REGISTERED

Memorandum

To: C.O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Contract Idm-E571, Docket No. DMEA-2975, Bore Tree Saddle Asbestos Company (Asbestos), Gila County, Arizona

Enclosed are the original and two copies of Contract Idm-E571. Copies of this contract have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

W. H. King
W. H. King

Enclosures

RECEIVED
AUG 10 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

cc
7-27

SURNAME COPY

Adams

Defense Minerals Exploration Administration
Robert E. Adams
2017

14X3923.970, Working Fund, Interior, DMEA
July 22, 1953
8:30 a.m.

W.H.King, Executive Officer, Region IV, 224 New Customhouse Bldg., Denver 2, Colo.

Assignment of Contract Number

REURTEL 7-21-53 DOCKET NUMBER DMEA 2975, BORN TREE SADDLE ASBESTOS CO., PROPERTY LOCATED IN GILA COUNTY, ARIZONA, COMMODITY ASBESTOS. CONTRACT NUMBER IDM-R571 ASSIGNED THIS CONTRACT.

C. O. Mittendorf

ADMINISTRATOR

REAdams/meb
cc to: Adm.Reading File
Mails & Files Br.
BU. OF MINES AUDITS DIVISION, Rm. 2509
Miss Curtin

SENT
JUL 22 1953
Clerical Service Section

R.C.J. 7-24-53

C. O. Mittendorf
7-21-53
12:26

Defense Minerals Administration
RECEIVED
JUL 21 1953

DN 235 BUREAU MINES 7-21-53 9-26 AM

C O MITTENDORF

PLEASE ASSIGN A NUMBER TO CONTRACT COVERING DOCKET NUMBER DMEA 2975, BORE TREE SADDLE ASBESTOS CO., A PARTNERSHIP CONSISTING OF-- JOHN V. BUSTAMANTE, JR., FRED FRITZ, WILLIAM NUNEZ, STEVE WUSICH, BOX 1724, GLOBE, ARIZONA. PROPERTY LOCATED IN GILA COUNTY, ARIZONA, COMMODITY ASBESTOS. CONTRACT DATED JULY 20,1953, AMOUNT OF CONTRACT $10,805.00, AMOUNT OF GOVERNMENT PARTICIPATION $9,724.50.

W H KING

IDM-E571
9090

Denver, Colo.

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

224 New Customhouse
Denver 2, Colorado

June 19, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2975 (Asbestos), Bore Tree Saddle Asbestos Company, Gila County, Arizona.

Exploration aid in the amount of $10,805.00 has been approved and the contract will be prepared by this office. Four copies of the final report will be forwarded you when the contract is executed. Two copies of Form 3b are attached.

W. H. King

A. H. Koschmann

Enclosures

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

224 New Customhouse
Denver 2, Colorado

June 19, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2975 (Asbestos), Bore Tree Saddle Asbestos Company, Gila County, Arizona.

Exploration aid in the amount of $10,805.00 has been approved and the contract will be prepared by this office. Four copies of the final report will be forwarded you when the contract is executed. Two copies of Form 3b are attached.

W. H. King

A. H. Koschmann

A. H. Koschmann

Enclosures

DMEA Form 3b
(Revised)

DEFENSE MINERALS EXPLORATION ADMINISTRATION

CONTROLLED DOCUMENT
Revised Abstract

DMEA Docket No. 2975

Name of Applicant Bore Tree Saddle Asbestos Company

Change:	From		To	
	III 1	☐	III 1	☒ 6-16-53
	III 2	☐	III 2	☐
	III 3	☐	III 3	☐
	III 4	☒	III 4	☐
	III 5	☐	III 5	☐
			III 6	☐
			III 7	☐

Add:

II 7 $ 24,825.00

II 8 $ 10,805.00

II 8a % 90

II 9 $

Remarks:

Initials of person preparing sheet HMC

Date sheet prepared 6-16-53

33978

DMEA Form 3b
(Revised)

DEFENSE MINERALS EXPLORATION ADMINISTRATION

CONTROLLED DOCUMENT
Revised Abstract

DMEA Docket No. 2975

Name of Applicant Bore Tree Saddle Asbestos Company

Change:	From		To	
	III 1	☐	III 1	☒ 6-16-53
	III 2	☐	III 2	☐
	III 3	☐	III 3	☐
	III 4	☒	III 4	☐
	III 5	☐	III 5	☐
			III 6	☐
			III 7	☐

Add:

II 7 $ 24,825.00

II 8 $ 10,805.00

II 8a % 90

II 9 $

Remarks:

Initials of person preparing sheet BMC

Date sheet prepared 6-16-53

33978

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

224 New Customhouse
Denver 2, Colorado

April 10, 1953.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 13 1953

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Executive Officer, Field Team, Region IV

Subject: Docketing for Exploration Assistance

Enclosed herewith in duplicate is DMA Form 3a and Form MF-103 in duplicate and supporting data pertaining to the following applications for Government assistance in exploration work:

Bore Tree Saddle Asbestos Co.
Box 1724
Globe, Arizona

Cibecue Mining Co., Inc.
2635 N. 21st Avenue
Phoenix, Arizona

M. V. Lee and others
Box 564
Benson, Arizona

Duke B. Woods
P. O. Box 351
Moab, Utah

Enclosures

W. H. King
W. H. King

C
O
P
Y

Bore Tree Saddle Mine
Globe, Arizona

Mr. W. H. King
Bureau of Mines
224 New Customhouse Building
Denver 2, Colorado

Dear Mr. King:

Enclosed you will find a loan appication and cost estimate for the Bore Tree Saddle Mine.

This work consists of 13 days Bulldozer work to build a road from the Globe-Young road to the Mine, and to bulldoze along the face of the outcrop to show definetly, the strike and pitch of the outcrop.

After the Bulldozing is completed. It is then proposed to run 750 feet of drift and crosscut to find out the extent of the ore body.

Due to Weather conditions in the winter, Maximum time has been set at 24 months from the starting time.

Cost of the bulldozer work is estimated at $ 1,950.00 with $ 1,755.00 to be paid by D.M.P.A. and $ 195.00 by the Bore Tree Saddle Co.

Cost of the underground work is estimated at $ 22,875.00 with $ 20,587.00 Paid by the D.M.P.A., and $ 2,287.50 by the Bore Tree Saddle Co.

Total is, $ 22,342.50 to be paid by D.M.P.A., $ 2,482.50 by the Bore Tree Saddle Company. For a total of $ 24,825.00

Thank you

J. V. Bustamante

Fred Fritz

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 13 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-2975
Metal or Mineral
Date Received 4-13-53
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: J.V. Bustamanate Jr., and Fred Fritz, Partnership
William Nunez & Steve Wusich Bore Tree Saddle Asbestos Co.
Box 1724, Globe, Arizona

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Unpatented mining claims situated in the Florence Mining District, of the County of Gila, State of Arizona: Extensions No I,2,3,4, 5,6,7,8,9,IO.

(*b*) State any mine name by which the property is known. Bore Tree Saddle Asbestos Co.

(*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. Book 49, page Numbers I60, I6I, I66, I67

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

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you. NONE

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. Approximately 2 Miles off the Globe- Young highway, 56 miles from Globe Arizona

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.
Water Available at the mine. Power will be gas or deisel, Man power, Materials available from Globe Arizona

16—66551-1

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

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc. ATTACHED

(*c*) The work will start within 60 days and be completed within 24 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations. Mined Silver & lead for Self

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project: ATTACHED

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.). NONE

(*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. ATTACHED

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel. ATTACHED

(*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. ATTACHED

(*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. ATTACHED

(*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. NONE

(*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. ATTACHED

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)? YES

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

[XX] 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 4/8, 1953

Bore Tree Saddle Asbestos Co.
(Applicant)

By John V. Bustamante Jr.
William Nunez
Fred Fritz — Fred Schmied

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

Bare Tree Saddle Asbestos Company Cost Estimate

Basis:

Two Mi. excess road from county road to mine
7 days work by bulldozer to expose face
750 ft. of drifting and crosscutting to show extent of underground ore body

Time Estimate:

Due to weather conditions during winter
Minimum time set at 18 Mo. and

Maximum time set at 24 Mo.

Bulldozer work:

6 days on road at $ I50.00 per day	$ 900.00	
7 days at stripping $ I50.00 per day	$ I050.00	
	$ I950.00	
Total for Bulldozer		$ I950.00

Mine development

Rental of Equipment

I05 cu.ft. compressor	$ I50.00 per Mo.	$ 3600.00
Jack hammer	42.25	I0I4.00
Air hose	7.05	I69.20
	199.30	4783.20
Rental basis pr ft. advance		$ 6.37

Labor:

I foreman Mechanic	$ I5.00
I Miner	I5.00
I mucker	I3.00
	$ 43.00

This Includs S/S Industrial Insurance Etc.

Labor on advance of three ft. per day $ I4.33

Supplies:

I6 gal Gasoline per shift at 35 cents per gal	$ 5.60
2 Qts. oil per shift at 40 cents per Qt.	.80
	6.40

This Includs delivery to mine

Fuel per ft. advance $ 2.I3

Explosives:

Dynamite, 30 lbs at 23 cents a lb.	$ 6.90
Caps I4 @ 2½ cents each	.35
Fuse 90 ft. @ .0I3 per ft.	I.I7
	$ 8.32

Cost per ft. @ 4 ft. rounds per ft. $ 2.08

Pipe and Track

Rails, ties, spike, and fishplates	$ I.60
2 inch air line	.59
I inch water line	.34
Sleeves, valves, Etc.	.25
Above to remain on the property with	$ 2.78
40 % to be charged to project	

Cost to project at 40% $ I.II

Drill Steel and Bits

Steel breakage estimated I-4 ft.
steel per 3 rounds or 9 ft. advance

Steel $\frac{\$\ 6.00}{9\ ft.}$ 0.66

4 Tinken bits per rounds,
this includ sharping

$\frac{4 \times .60}{3\ ft.}$ 0.80

$ I.46

total Per ft. $ I.46

Mine's

Machine oil	$ 0.I2
Carbide	0.I5
resharping of picks and moils	0.I0
Bars, loading, sticks, Jim crows, wrenches, and Etc.	0.40
	0.77

per ft. $ 0.77

Repairs:

Normal repairs on machineray including breakage and replacement per ft $ 0.80

Timber:

25 sets estimated at a cost of $ 6.00 per set

$\frac{\$\ 6.00 \times 25}{750\ ft.}$ per ft. $ 0.20

Supervision and Enginering	per ft.	$ I.25
	Total cost per ft.	$ 30.50

Summary:

Bulldozer work		$ I950.00
Rental of equipment	per ft.	6.37
Labor	" "	I4.33
Supplies	" "	2.I3
Explosives	" "	2.08
Pipe and track	" "	I.II
Drill Steel and bits	" "	I.46
Minc's	" "	0.77
Repiars	" "	0.80
Timber	" "	0.20
Supervision and Enginering	" "	I.25
		$ 30.50
Total cost for drifting		$ 22,875.00

B T S Asbestos co.	$	2,287.50
D M P A		20,587.50

Total for Dozer work

B T S asbestos co.	$	I95.00
D M P A		I,755.00

Total for Project

B T S asbestos co.	$	2,482.50
D M P A		22,825.50
		24,825.00

Total for project $ 24,825.00