Folder No. 1

Contract File

DMEa 3852, E887, amend #1, 2,

400

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

RECEIVED
OCT 29 1956

224 New Customhouse
Denver 2, Colorado

October 25, 1956

Memorandum

To: Chairman, Operating Committee

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3852 (Tungsten) Contract Idm-E887 George W. Kaske (Austin Claim) Cochise County, Arizona

Enclosed are the original and two copies of Amendment No. 3 to Contract Idm-E887, which has been executed under authority delegated to this office, to extend the date fixed for the completion of the project work from September 30, 1956 to October 31, 1956, and extend the maximum period for royalty payments from ten years to eleven years.

Also enclosed are four sets of data relative to the Amendment.

Copies of the Amendment have been distributed to the Operator, the Finance Office, Region III, and to others concerned.

Original signed by
W. M. TRAVER

W. M. Traver

amend #3

RECEIVED
OCT 20 1956

EXPLORATION PROJECT CONTRACT
GEORGE W. KAAKE
DOCKET NO. DMEA 3852
CONTRACT NO. Idm-2887

AMENDMENT NO. 3

It is agreed this 12th day of October, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and George W. Kaake, hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-2887, Docket No. DMEA 3852, dated October 10, 1959, hereinafter called the "Contract," that the Contract is amended as follows, effective September 30, 1956:

1. The date fixed in "Article 3", as amended by Amendment No. 2, as the date on or before which the work shall be completed, is extended from September 30, 1956, to October 31, 1956.

2. The maximum period for royalty payments and lien for the payment thereof, provided for in the Contract, is increased to eleven (11) years.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

Executed in sextuplicate the day and year first above written.

OPERATOR

By George W. Kaake
George W. Kaake

UNITED STATES OF AMERICA

By W. M. Traver
W. M. Traver
Executive Officer, DMEA
Field Team, Region III

DMEA
DEPARTMENT OF THE INTERIOR
OCT 11 1956
REGION III
DENVER, COLO.

Box 4126 University Station
Tucson, Arizona

OCT 11 1956
RECEIVED

MEMORANDUM

October 9, 1956
OCT 2 0 1956

To: Executive Officer, DMEA Field Team, Region III

From: T. M. Romslo, U.S. Bureau of Mines
W. L. Emerick, U.S.Geological Survey

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

Subject: Proposed Amendment, Contract Idm-E807, Docket DMEA-3352 (Tungsten), George W. Kaske (Austin Claim), Cochise County, Arizona

George W. Kaske in a letter of October 8, 1956 belatedly requests that the termination date of subject contract be extended 1 month, from September 30, to October 31, 1956.

Romslo visited the property for progress inspections September 6 and October 3, 1956. During the first of these visits, Kaske said that a time extension was not necessary because all work probably would be completed by September 30. During the latest visit, Romslo found all work completed except desirable sampling in the raise and adit. At that time, he informed Mr. Kaske that the cost of the sampling and assaying could not be approved unless the termination date of the contract was extended.

Mr. Kaske's request was made after the effective termination date of the contract. Although the request could be denied on this basis, we believe it should be approved so that the small amount of desirable sampling and assaying may be completed under the contract.

Original signed by
T. M. Romslo

T. M. Romslo

W L Emerick

W. L. Emerick

WLE:ms
cc: W. M. Traver (8)
Harshman
Storms
Emerick

DMEA
DEPARTMENT OF THE INTERIOR
OCT 11 1956
REGION III
DENVER, COLORADO

RECEIVED
OCT 29 1956

Dos Cabezas, Arizona
October 8, 1956

Mr. W.M. Traver
224 New Customs House
Denver, Colorado

P MEA-3852
gston Contract Idm-5887
in Mining Claim
a County, Arizona

Dear Mr. Traver:

I hereby request that the termination date of act be extended a period of 1 month from September 30th, 1956, er 31, 1956.

I had anticipated having all work done by Septemb 6. As it turned out I completed all work except sampling. Th were obtained during the first week of October and are being pre d at Jacob's Assay Office in Tucson, Arizona.

Thanking you for your considerate cooperation, I am

Very truly yours,

George W. Kaske

George W. Kaske
Box 17, Dos Cabezas, Arizona

400

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

224 New Customhouse
Denver 2, Colorado

July 6, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3852 (Tungsten), Contract Idm-2887, George W. Kaske (Austin Claim), Cochise County, Arizona

Enclosed are the original and two copies of Amendment No. 2 to Contract Idm-2887, which has been executed under authority delegated to this office, to extend the date fixed under Article 3 of the contract form for completion of the project work from June 30, 1956 to September 30, 1956; and to authorize an extension of the adit crosscut not to exceed an additional 30 feet.

Also enclosed are four sets of data relative to the Amendment.

Copies of the Amendment have been distributed to the Operator, the Finance Office, Region III, and to other offices concerned.

W. M. Traver

W. M. Traver

Enclosures

Amend No 2

EXPLORATION PROJECT CONTRACT
GEORGE V. KASHE
DOCKET NO. [illegible]
CONTRACT NO. [illegible]

AMENDMENT NO. 1

It is agreed this 1st day of June, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and George V. Kashe, hereinafter called the "Operator," parties to that certain Exploration Project Contract No. [illegible], Docket No. [illegible], dated October 10, 1955, hereinafter called the "Contract," that:

1. The date fixed under "Article 3" of the Contract form, as amended by Amendment No. 1, is extended from "June 30, 1956" to "September 30, 1956."

2. Referring to the 100 feet of drifting on the vein provided under item "F" of Exhibit "A", not to exceed 30 feet of the 100 feet of drifting may be used to extend the adit entrance that additional distance if found necessary to enable exploration of the vein to the north wall.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, nor the fixed unit cost of any item of work.

Executed in counterparts the day and year first above written.

UNITED STATES OF AMERICA

By W. M. Weaver
W. M. Weaver
Executive Officer, DMEA
Field Team, Region XII

OPERATOR

By George V. Kashe
George V. Kashe

DMEA
Date Rec'd.

JUN 22 1956

BUREAU OF MINES
Denver, Colorado

JUN 22 1956

June 18, 1956

Memorandum

To : Executive Officer, DMEA Field Team, Region III

From : T. M. Romslo
J. H. Faich

Through: W. R. Stone
E. H. Sprague

Subject : Proposed Amendments Nos. 2 and 3, Contract Ida-2007, Project DMEA-2022 (Tungsten), George V. Kuhn (Austin Kuhn), Gooding County, Idaho.

Reference is made to the attached five copies of Kuhn's letter, with maps, of June 16, 1956 to W. R. Stone.

Mr. Kuhn requests that: (1) the termination date of the contract be extended from June 30, 1956 to September 30, 1956; and (2) a 20-foot extension of the authorized 160-foot adit be allowed.

Our recommendations follow:

Proposed Amendment No. 2: Approval is recommended for reasons given by operator.

Proposed Amendment No. 3: An extension of the adit is recommended for reasons given by the operator and on the basis of detailed findings contained in Leonid Bryner's Interim Report of June 15, 1956 to the Executive Officer.

However, since the width of the favorable zone may be more than the requested additional 20 feet we recommend that the amendment should provide for driving the adit until the zone has been penetrated or until the findings indicate further advance is not warranted.

Permission to extend the adit beyond the authorized 160 feet should be made retroactive to May 1, 1956.

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

J. H. Faich, Geologist
U. S. Geological Survey

CC: W. R. Stone (Orig. + 8)
E. H. Sprague
J. H. Faich
DMEA-2022 MF Tidemaloffr]

MINERAL DEPOSITS
RECEIVED
JUN 20 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

Box 4186 University Station
Tucson, Arizona

June 15, 1956

MEMORANDUM

To: Executive Officer, DMEA Field Team, Region III

From: Leonid Bryner Through: J. M. Faisk JMF
E. N. Harshman

Subject: Interim report, Docket DMEA 3032 (Tungsten) Contract Idm-2087
Austin Tungsten Prospect, Cochise County, Arizona

On June 4, the writer visited the Austin Tungsten Prospect in order to inspect the DMEA adit which, according to the operator, had been driven the distance required by the contract.

The writer made a Brunton-tape traverse between the face of the adit and the shaft which contains the scheelite, the target at which the adit was aimed. The relative positions of the adit and the bottom of the shaft, according to this survey, are shown in figure 1. This survey also indicated that the back of the adit is approximately 50 feet vertically below the floor of the shaft. The adit therefore has been driven according to plan and offers a satisfactory starting point from which to raise toward the shaft.

The geology of the adit was mapped and is shown in figure 1. There is much faulting and small-scale folding and only the main features are shown in the sketch. In the last 20 feet, the adit has penetrated a vertical to steeply-dipping zone which contains scheelite. Bunches and veinlets of quartz, limonite-staining, chloritization that increases toward the face of the adit, and also the shattered condition of the rock, characterize this zone. Scheelite, as well as small stringers

of mixed galena and sphalerite, also distinguish the zone as probably the same one that is exposed in the shaft. Where quartz is most abundant, scheelite also is generally the most abundant. The scheelite, however, is considerably more scattered in the adit than in the shaft, and reaches maximum concentration in the west wall of the adit, about 10 feet back from the face. If the writer is correct in believing this to be the downward extension of the scheelite zone exposed in the shaft, the mineralization has noticeably declined with depth. On the other hand, as long as the adit is still in the shear zone and this zone continues to show tungsten, the adit should be extended forward. Two or three more five-foot rounds should be enough to show whether the main scheelite zone has already been cut. If so, a raise can be started to the shaft. Also, a drift can be started along the shear zone from the adit. Drifting can be carried in both directions from the adit, that is, W-SW and E-NE. The exact directions should be dependent on the direction which the scheelite mineralization takes, and should start where this mineralization is at a maximum.

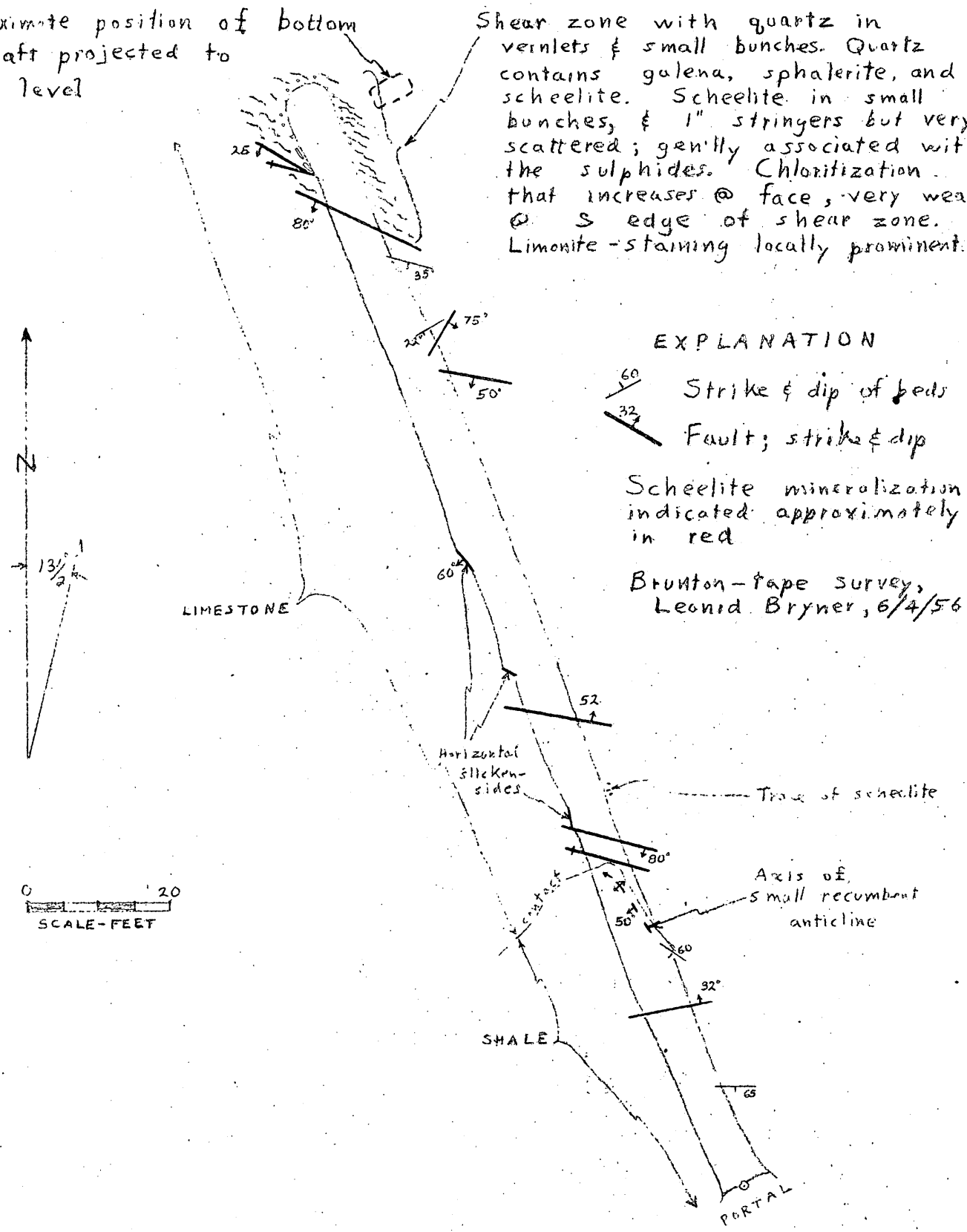


FIGURE 1 - GEOLOGY AND PLAN OF DMEA ADIT, AUSTIN TUNGSTEN PROSPECT, COCHISE CO., ARIZONA

DMEA 3852; CONTRACT Idm-E 887

DMEA
Date Rec'd.

JUN 22 1956

BUREAU OF MINES
Denver, Colorado

Dos Cabezas, Arizona
June 18, 1956

Mr. W. M. Traver,
224 New Customs House
Denver 5, Colorado.

RE: Docket No.3852 DMEA Tungsten Contract
Idm. E887 Austin Claim, Cochise County,
Arizona.

Dear Mr. Traver:

I herewith request Amendments Nos. 2 and 3, to the Contract:

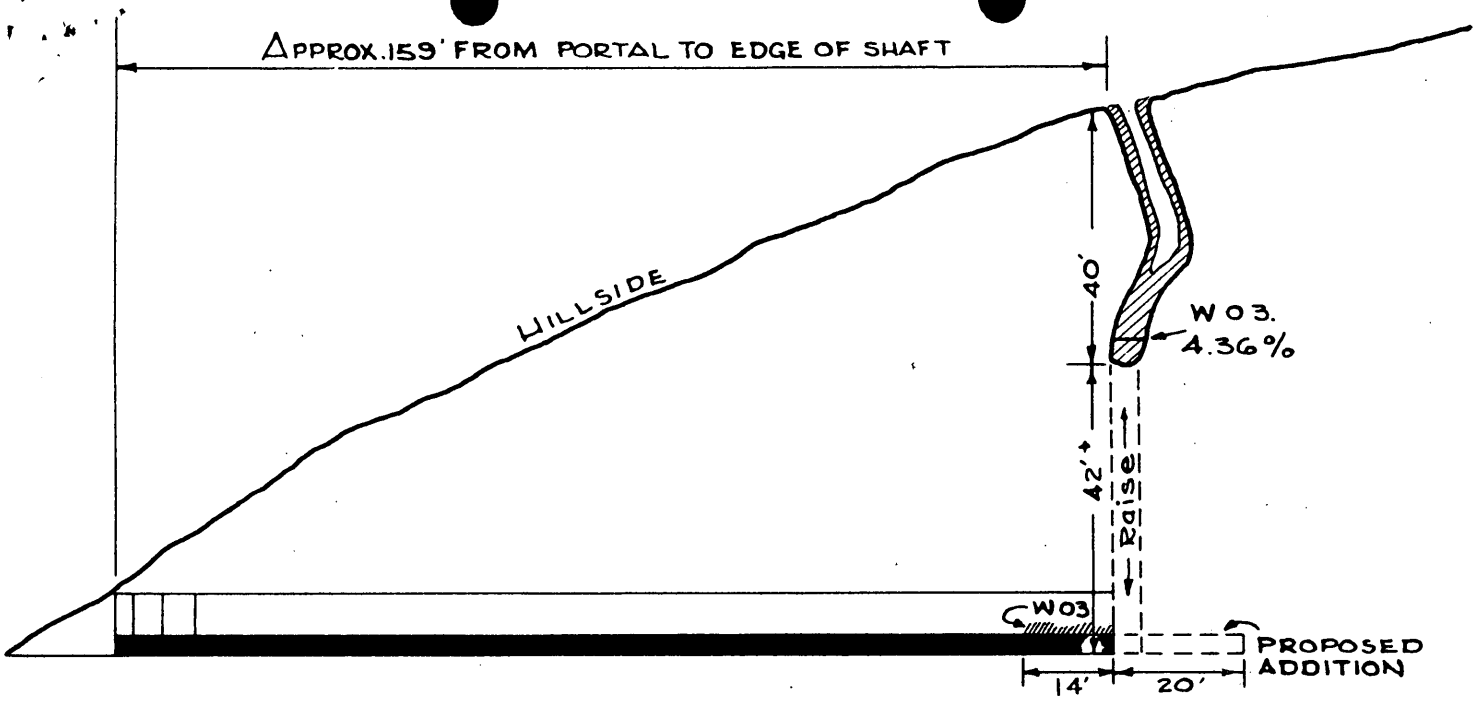
Amendment No.2: Extension of the termination date from June 30, 1956 to September 30,1956. Progress during the initial stages was slower than anticipated, but at present the rate of advance is such that authorized work should be completed before September 30, 1956.

Amendment No.3: Extension of the adit an estimated 20 feet. The adit has been driven the authorized 160 feet. 146 TMP Tungsten mineralization was encountered at about 156 feet on the adit. It occurs irregularly throughout the 14 feet as small pockets and blebs of scheelite in an altered limestone. Driving of the adit an additional 20 feet should result in the cutting of the full width of the mineralized zone and the selection of the most favorable site for the allowable raise and cross-cut.

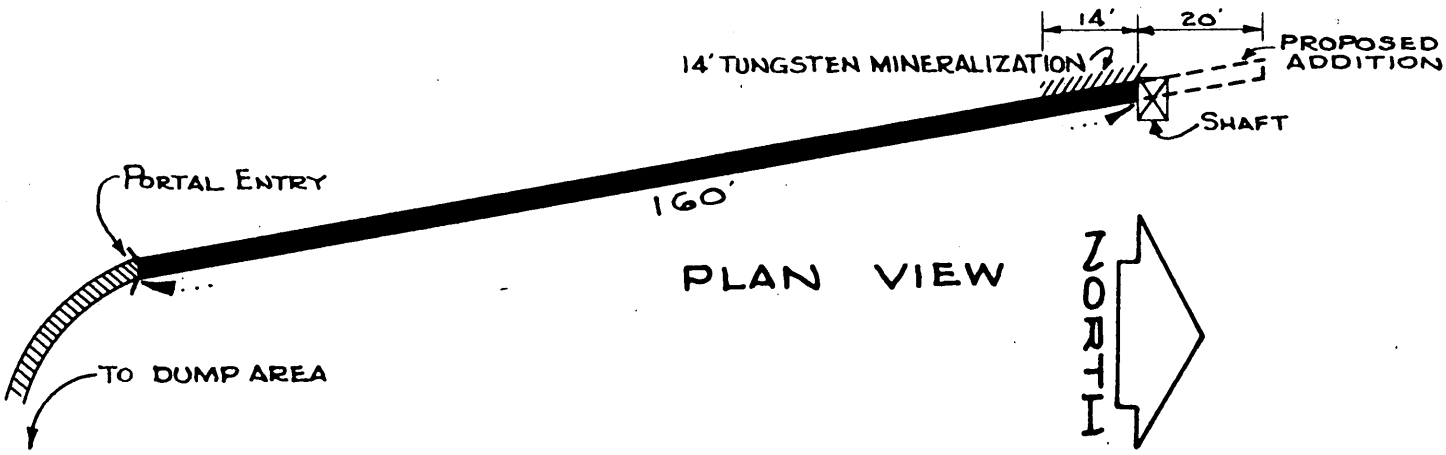
Very truly yours,

George W. Kaske

George W. Kaske
Box 17 Dos Cabezas
Arizona.



VERTICAL PROFILE
OF SHAFT—LOOKING WEST
Cross-Section
1" = 30'



PLAN VIEW

AUSTIN TUNGSTEN PROSPECT
COCHISE COUNTY, ARIZ.
DOCKET NO. 3852
CONTRACT NO-IDM-E887

406

RECEIVED
APR 6 - 1956

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

224 New Customhouse
Denver 2, Colorado

April 4, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3852 (Tungsten), Contract Idm-E887, George W. Kaske, (Austin Claim), Cochise County, ARizona

Enclosed are the original and two copies of Amendment No. 1 to Contract Idm-E887, which has been executed under authority delegated to this office to extend the period for completion of the project work from April 30, 1956, to June 30, 1956.

Also enclosed are four sets of data relevant to the Amendment.

Copies of the Amendment have been distributed to the Operator, the Finance Office, Region III, and other offices concerned.

W. M. Traver

Enclosures

Amend. #1

EXPLORATION PROJECT CONTRACT

GEORGE W. KASKE

DOCKET NO. DMEA 3852

CONTRACT NO. IDM-2887

RECEIVED
APR 6 - 1956

AMENDMENT NO. 1

It is agreed this 19th day of March, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and George W. Kaske, hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-2887, Docket No. DMEA 3852, dated October 10, 1955, hereinafter called the "Contract," that the Contract is amended as follows:

1. The date of April 30, 1956, fixed under Article 3 of the Contract form as the date on or before which the Operator shall complete the work, is extended to June 30, 1956.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, nor the fixed unit cost of any item of work.

Executed in sextuplet the day and year first above written.

OPERATOR

George W. Kaske
George W. Kaske

UNITED STATES OF AMERICA

By W. M. Traver
W. M. Traver
EXECUTIVE OFFICER, DMEA,
Field Team, Region III

DMEA
Date Rec'd
MAR 16 1956
BUREAU OF MINES
Denver, Colorado

MAR 15 1956

RECEIVED
APR 6 - 1956

March 12, 1956

Memorandum: Executive Officer, [illegible] Field Team, Region III

From: T. [illegible] Romslo
Leonid Bryner

Through: J. [illegible] Falck
[illegible] Storms
[illegible] Harshman

Subject: Proposed amendment, Docket [illegible]-3852, Contract Ind-[illegible]887, George W. Kaske's Austin Claims (Tungsten), Cochise County, Ariz.

George W. Kaske in the attached letter of March 12, 1956 to [illegible] Traver, requests that the termination date of subject contract be extended from April 30, 1956 to June 30, 1956.

Kaske's request should be granted because work of the project has been unavoidably delayed by inclement weather and inability to obtain necessary equipment. Another reason for granting his request is that collaring of the adit has proved to be more difficult than anticipated.

T. [illegible] Romslo
U. S. Bureau of Mines

Leonid Bryner
Leonid Bryner
U. S. Geological Survey

[illegible] Traver (Orig. & 8)
J. W. Falck
[illegible]-3852
DF

[illegible]:
[illegible]: frj

RECEIVED
APR 6 - 1956

Mr. R.G. Traver
DMSA Field Team, Reg. VII
224 New Custom House Bldg.
Denver, Colorado.

Re: Doc. No. DMSA 3652
Contract No. Ids-5 887

Dear Sir:

I hereby wish to make application for a sixty days extension on the time of completion on my contract from April 30, 1956 to June 30, 1956.

Due to unusual inclement weather and my inability to obtain the mining equipment contracted in time, the work on the contract has been delayed.

Thanking you for your attention and consideration, I remain,

Respectfully yours,

George W. Kaske

George W. Kaske

March 12, 1956

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

Div

RECEIVED
OCT 31 1955

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

October 26, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3852 (Tungsten), Contract Idm-2887, George W. Eanke, (Austin claims), Cochise County, Arizona

Enclosed are the Government's, Division, and Docket copies of Exploration Project Contract Idm-2887, which was forwarded by your letter of October 10, 1955, for signature by the Operator.

Also enclosed are two copies of a letter from this office to the Operator containing instructions relative to reporting on work performed under the contract.

Copies of the contract have been given to the Operator, Finance Office, Region III, and distributed to other DMEA personnel concerned.

Enclosures

W. M. Traver

Enclosed
cc: Berthman
Stamm
Reich
Finance Off.
Hammond
General file
Chron.

} w/copy of Contract and Letter to Operator.

Contract

224 New Customhouse
Denver 2, Colorado

October 24, 1955

Mr. George W. Kaske
P. O. Box 55
Sahuarita, Arizona

Re: Docket DMEA 3852 (Tungsten),
Contract Idm-E887

Dear Mr. Kaske:

Enclosed herewith is your copy of Exploration Project Contract No. Idm E-887, Docket No. DMEA 3852, which has been prepared in conjuction with your application for Government assistance in exploration work under the Defense Minerals Exploration Administration program.

Also enclosed are six copies of form MF-104, "Operator's Monthly Report and Voucher," and six copies of form MF-104A, "Operator's Unit Cost and Progress Report." At the completion of the first calendar month of operation and monthly thereafter you are required to submit five copies of the forms to Mr. W. R. Storms, U. S. Bureau of Mines, P. O. Box 4097, University Station, Tucson 5, Arizona. The sixth form is for your records.

Please note that the monthly report requires a narrative report which should be accompanied by maps or sketches. The narrative report must be signed by the operator. The monthly report will not be processed for payment unless accompanied by a narrative report. Additional copies of forms MF-104 and MF-104A will be forwarded to you as required.

For your information and in reply to many questions that have been asked, after forms MF-104 and MF-104A are received an engineer will check progress and approve your accounts, after which it will be sent to the Regional Office, Region III, U. S. Bureau of Mines, 224 New Customhouse, Denver 2, Colorado, for auditing and vouchering. If the report is in order a check will be issued by the Treasury Department for the Government's portion of the costs.

The contract is prepared on short-form MF-200A, which establishes fixed unit costs for performing the various categories of work and which are the basis for reimbursement to you under the terms of the contract as units of work are completed and reported on forms MF-104 and MF-104A.

No oral statement of any person shall be construed to modify or change the terms of this contract. Field representatives of the Government are not authorized to approve any changes in the work program or contract provisions. Such approval can only be given by the Washington Office, DMEA, or the DMEA Field Team, Region III.

There is a regulation that reimbursement for the cost of work accomplished prior to the date of the contract will not be allowed. It is a requirement and imperative that you notify this office in writing the date work actually commences under the contract, with a copy of your letter to Mr. Storms.

Very truly yours,

W. M. Traver

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

Enclosures

JWT:prl
cc: Chairman, Oper. Comm. (2)
Amendment file
Earshman
Storms
Faick
Townsend
Subject
Chron.

Division Copy

RECEIVED
OCT 3 1 1955

MF-200A
(Revised June 1954)

Docket No. DMEA [illegible]

Commodity [illegible]

Contract No. Idm-E 887

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
EXPLORATION PROJECT CONTRACT[1]
(Short Form)

It is agreed this OCT 1 0 1955 day of ....., 195...., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] [illegible]

By ltr of 3/13 changed to: c/o General Delivery, Dos Cabezas, Arizona.

whose mailing address is ([illegible]),

hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200A), the attached Exhibit "A," Annex I, and [illegible].

The Operator shall not transfer or assign this contract or any right thereunder without the written consent of the Government.

ARTICLE 2. *Operator's property rights.*—(a) The land which is the subject of this contract (hereinafter called "the land") is in the State of [illegible], County of [illegible], and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] [illegible] of [5] all mineral rights in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] [illegible], [7] recorded in Book [illegible], page [illegible], official records of said County; and

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: [illegible]

(c) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above, and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title of the land (lessor, seller, optionor, etc.), are attached, as follows: .....

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] Insert name, and if an organization, its nature (corporation and place of incorporation, partnership with names of partners, etc.).
[3] State on a separate sheet marked "Annex I" the legal description or enough to identify the property, particularly excluding any areas from which the production is not to be subject to the Government's percentage royalty.
[4] Insert "owner," "lessee," "contract purchaser," "locator," etc.
[5] Insert "the entire interest," "the mineral rights," "an undivided one-third," etc.
[6] Insert "deed," "lease," "contract," "location notice," "patent," etc.
[7] If not recorded, so indicate by inserting "un."

16—70618-1

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 7, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 7(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of [illegible] The work to be performed is described in Exhibit "A." The Operator on or before December 15, 1955 shall commence the work, and on or before [illegible] (unless the Operator's obligation to complete the work is terminated—see Article 8) shall complete the work.

ARTICLE 4. *Performance of the work.*—(a) *Operator's responsibility.*—The work shall be performed with reasonable diligence, efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for liability insurance covering employment; and with suitable and adequate equipment, facilities, materials, supplies, and labor, to bring it to completion within the time fixed.

(b) *Government may inspect.*—The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract, and also after a certification of discovery or development to inspect production operations and underground workings. The operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 5. *Contribution by the Government.*—A fixed cost for each unit of work to be performed (per foot of drifting, per foot of drilling, per hour of operations, etc.) is hereby agreed upon, and is set forth in Exhibit "A" in connection with the estimated total cost of the project in the sum of $[illegible] The Government will contribute [illegible] percent of the fixed unit costs as work is performed, in a total sum not in excess of $[illegible]: *Provided,* That until the Operator has rendered to the Government his final report, and any final 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 10 percent of the estimated total cost of the work. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 6(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. To the extent that excesses over fixed unit costs or any excess over the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such excesses for his own account without contribution by the Government. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine any pertinent books, documents, papers, and records of the Operator. All of the Operator's vouchers and records and accounts relating thereto and the Government's payments thereof remain subject to adjustment until final audit by the Government.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing a detailed statement of units of work performed during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and the fixed unit costs incurred for each type of work; and (3) a Narrative Report of the work

performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

(c) *Final report.*—Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with five copies of a final report (in addition to the final progress report and voucher). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and the unit costs thereof.

(d) *Report of sales.*—The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's percentage royalty relates, such as copies of smelter or concentrator settlement sheets, and certified accounts of production and sale or other disposition of production.

(e) *Compliance with requirements.*—If in the opinion of the Government any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the making or completion of such with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records or accounts.

ARTICLE 7. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after a sufficient final report and final account (see Article 6) has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

(b) *Royalty on production.*—The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, within a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

(c) *Basis for computation.*—The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f. o. b. point); *except,* that charges of *the buyer* arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by *the buyer,* sampling and assaying to determine the value of the production sold, and freight paid by *the buyer* to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the crude ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

(d) *Unsold production.*—If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

(e) *Percentages of royalty.*—The percentages of the Government's royalty shall be as follows:

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

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

(f) *Time for computation and payment.*—The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be, as above provided in this article.

(g) *Lien for payment.*—To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(h) *Notice to purchasers.*—The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

(i) *No obligation to produce.*—Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(j) *Government not obligated to buy.*—Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

ARTICLE 8. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The remedy provided for the Government in this paragraph "(b)" is in addition to any other remedy provided in this contract, and in addition to any other remedy the law may provide for breach of contract.

(c) The giving of any notice by the Government under the provisions of this Article 8 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and such rights shall be fully preserved.

ARTICLE 9. *Notices to be given by the Government* may be delivered to the Operator, or may be sent by registered mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 10. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 11. *Changes and added provisions.*—

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

GEORGE W. KASHE
(Operator)

By Lorente E. Johnson
ACTING Administrator, Bureau of Mineral Exploration Administration

By George W. Kashe

Appd. Sol. Off.
Chapman
Martin
Falbert

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]

Selfridge

U. S. GOVERNMENT PRINTING OFFICE 16—70618-1

RECEIVED
OCT 31 1955

EXPLORATION PROJECT CONTRACT
GEORGE W. KASKE
DOCKET NO. DMEA-3852

ANNEX I

The land referred to in Article 2 of the contract form consists of one unpatented lode mining claim, recorded in Book 104, page 188, Cochise County, Arizona.

This claim is located in the Dos Cabezas Mining District, Section 30, T. 14 S., R. 28 E., G. S. R. B. and M. and is shown, outlined in green, on a claim map, Figure 2, attached hereto.

EXPLORATION PROJECT CONTRACT
GEORGE W. KASKE
DOCKET NO. DMEA-3852

RECEIVED
OCT 31 1955

EXHIBIT "A"

Description of the Work

1. By bulldozing, improve approximately 1 mile of road, build approximately 150 feet of access road to proposed adit portal site, and level area for portal site.

2. Drive a crosscut adit approximately 160 feet to a point under the existing shaft, and drift from the adit approximately 100 feet on the vein, the exact direction or directions to be determined by the extent of mineralization. This work is shown generally on Figure No. 2, and a geologic map, Figure No. 3. Crosscuts and drifts shall be not less than 4½ feet by 6½ feet in the clear.

3. Raise from the adit approximately 40 feet to connect with shaft. The raise shall be not less than 4 feet by 7 feet in the clear.

4. Assay approximately 30 samples for tungstic acid (WO_3). Samples shall be taken at 5-foot intervals in mineralized zones.

All workings shall be timbered as necessary.

The location, direction, and extent of all work are subject to the approval of the Government.

Estimated Cost of the Project

Fixed Unit Costs

1.	Bulldozing, 20 hours at $14.00 hr.	$ 280.00	
2.	Driving 260 feet of adit and drifts at $32.00 ft.	8,320.00	
3.	Raising 40 feet at $32.00 ft.	1,280.00	
4.	Assaying 30 samples at $4.00 each sample	120.00	
	Estimated Total Cost of Project		$10,000.00
	Government participation, 75 percent		7,500.00

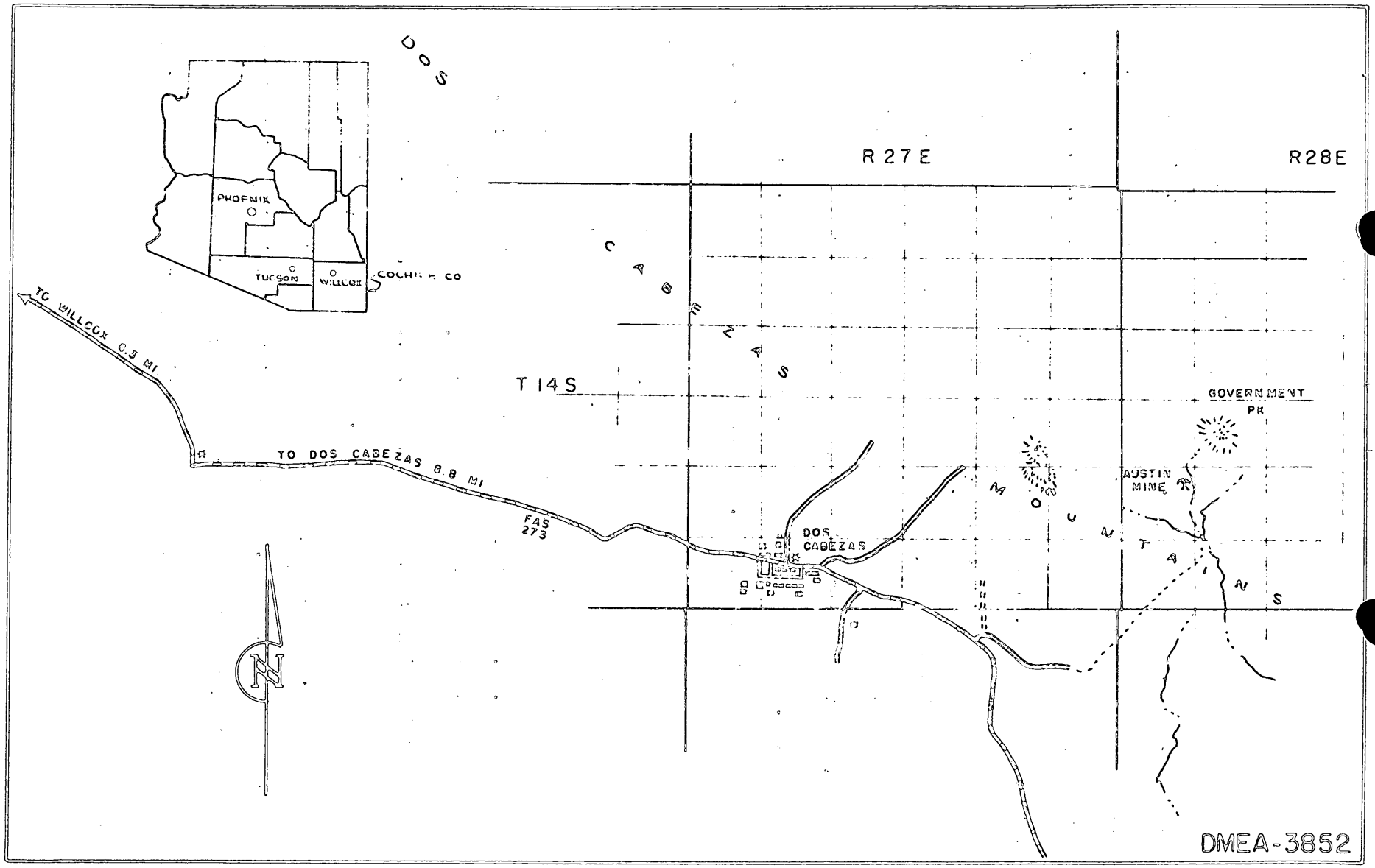


FIG.-1-LOCATION MAP, GEORGE W. KASKE, AUSTIN CLAIM
COCHISE CO. ARIZONA

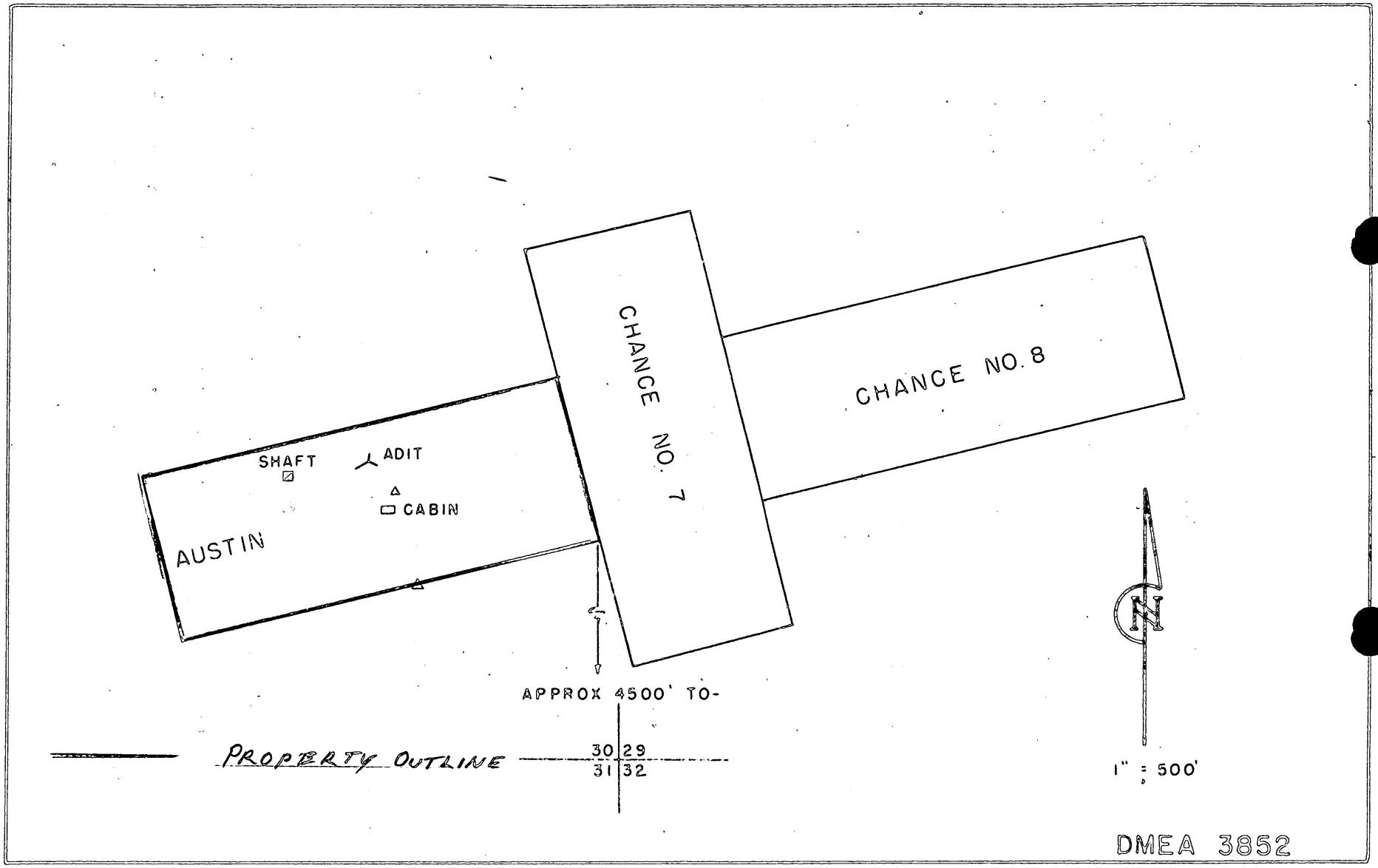
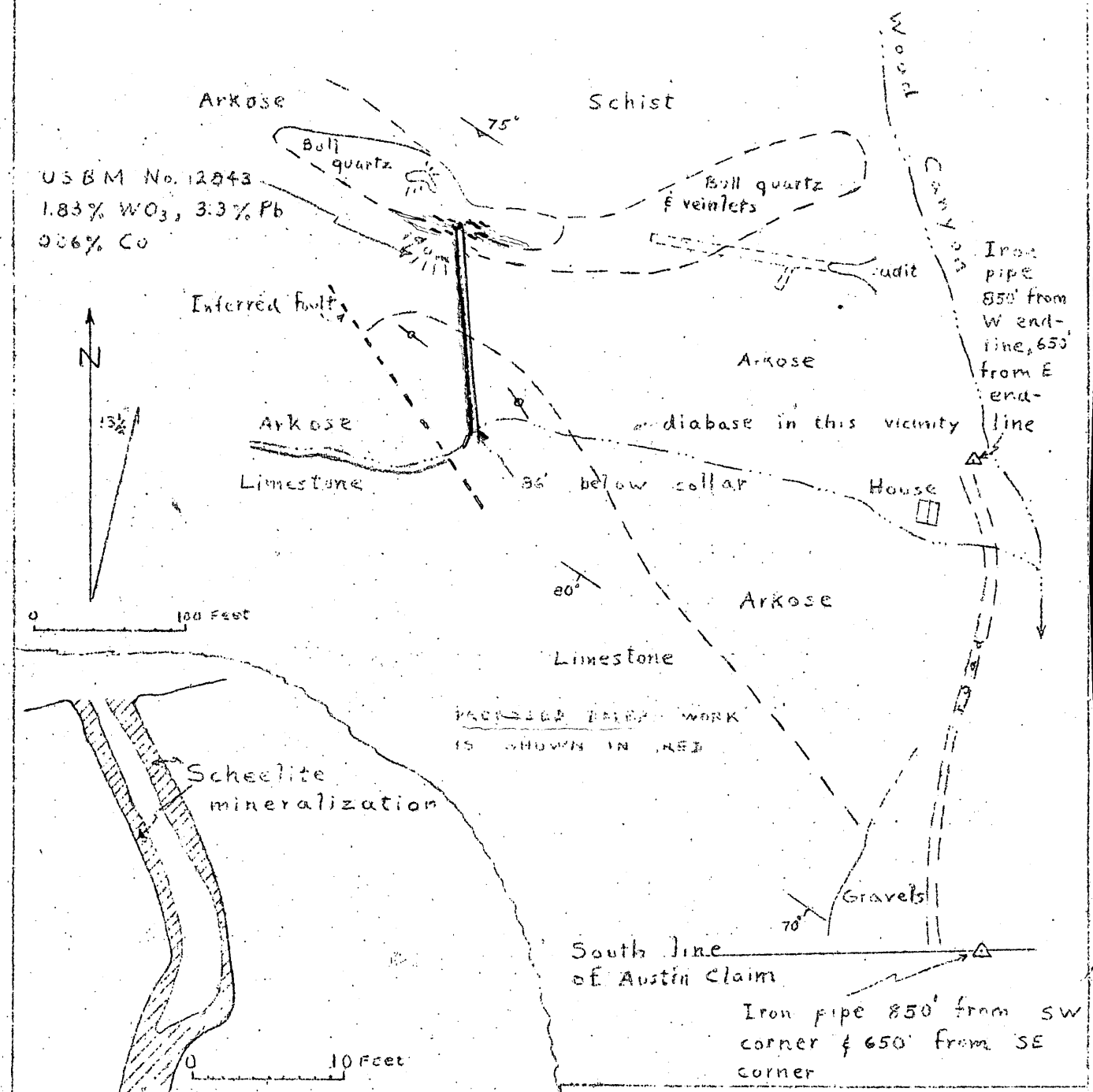


FIG. 2 CLAIM MAP, GEORGE W. KASKE, AUSTIN CLAIM
COCHISE CO. ARIZONA

BRUNTON-FALE SURV[illegible] L. BRYNER,
U.S. GEOL. SURVEY, July 12, 1955.



VERTICAL PROFILE
OF SHAFT, LOOKING WEST

FIGURE 3.- GEOLOGIC MAP, AUSTIN TUNGSTEN PROSPECT COCHISE COUNTY, ARIZ.

FIG. 3

DMEA 3852

400

CERTIFIED MAIL

224 New Customhouse
Denver 2, Colorado

October 18, 1955

Memorandum

To: W. R. Storms

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3852 (Tungsten), Proposed Contract Idm-E887, George W. Keske, Cochise County, Arizona

Enclosed are the original and five copies of proposed Exploration Contract No. Idm-E887, which have been signed by the Acting Administrator for the Government.

We have initiated a policy of, where possible, to deliver contracts to the operator in person, so that the contract and reporting procedure can be thoroughly explained to the operator, thereby facilitating administration of the contract. If the contract is satisfactory to you, please present it to the operator for his signature, retaining the operator's copy in your possession until the remaining copies have been properly executed and returned to you.

We are enclosing a letter of instructions to the operator which should be dated at that time. Upon return to this office of the executed copies of the contract and the extra copies of the letter, we will then send you your copies.

W. M. Traver

W. M. Traver

Enclosures

JWT:prl
cc: Chairman, Oper. Comm. (2)
Harshman
Faick
Townsend
Subject
Chron.

Copy retained

400

400

OCT 10 1955

Mr. W. M. Traver, Executive Officer
DMEA Field Team, Region III
224 New Custom House
Denver 2, Colorado

Re: Docket No. DMEA 3852, Tungsten
George W. Kaske
Austin Claim
Cochise County, Arizona

Dear Mr. Traver:

Enclosed are the original and five copies of a proposed contract for an exploration program by the above-referenced applicant, signed by the Administrator for the Government, together with Exhibit "A" (1 page), Annex I (1 page), and 3 maps.

If the terms and conditions of this proposed contract are satisfactory to you and the Operator, all six copies should be signed and the usual distribution made.

If any part of the proposed contract does not have your approval or that of the Operator and cannot be altered within your delegated authority, the original and all copies are to be returned to this office, together with the proposed changes for consideration.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

/s/ Robert W. Geehan
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

cc: Docket
Code 400
Adm. Read. File
Oper. Committee
Thor Kiilsgaard, USGS
W. McInnis, USBM
FT, Region 3

TLChapman/ls
10/5/55

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SOLICITOR
WASHINGTON 25, D. C.

OCT 3 1955

Memorandum

To: The Administrator, DMEA
Attention: Mr. W. S. Martin

From: Associate Solicitor
Division of Mineral Resources

Subject: Docket No. DMEA-3852, George W. Kaske

As requested in Mr. Martin's memorandum of April 23 we have prepared the attached contract which is in satisfactory legal form for execution, subject to the attachment of the 3 maps referred to in the contract.

Robert P. Dwyer
Associate Solicitor
Division of Mineral Resources

HCRubin:wog

Copy to: DMEA Docket
Solicitor's Docket
W. S. Martin (2)
R. P. Dwyer
H. C. Rubin
Chron. File

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

(400)

September 8, 1955

Re: DMEA-3852
(Tungsten-Lead)
George W. Knake
Austin Tungsten
Claims
Cochise Co., Ariz.

Memorandum

To: W. S. Martin, DMEA

From: O. M. Bishop,
Branch of Base Metals

Subject: Review of field team report and subject application

I have reviewed the application and field team report covering the proposed exploration on the Austin lode claim to the extent of $8,360.

The property consists of northwesterly-trending, steeply-dipping sediments and metamorphics which contain a zone of massive quartz and quartz veinlets which trends east-west, and is mapped as being about 400 feet long. At the south edge of the quartz mass, apparently at the contact with the arkose, a 37-foot shaft exposes an average of 2 1/2 feet of mineralization which contains about 2 percent WO_3, 3 percent lead and 0.1 percent copper. To the east a 120-foot adit level has been driven toward the shaft. It penetrated the quartz contact but showed no values.

The applicant proposes driving a new 160-foot adit crosscut from the south to a point 40 feet below the bottom of the shaft, raising 40 feet to connect with the shaft, and drifting totaling 50 feet.

The work plan seems thoroughly sound and I recommend it as planned for exploring and developing the presently discovered ore. It may be that during the life of the contract further exploration will be suggested. The value of the lead content of the ore is small as compared to the worth of the contained tungsten, and the prospect does not appear to hold much promise as a source of lead. I therefore suggest that the contract be written as a tungsten exploration contract rather than a tungsten-lead contract.

O. M.

O. M. Bishop

Copy to - Div. of Minerals
Mr. Kiilsgaard, Rm. 5222
O. M. Bishop
Files

IN REPLY REFER TO:

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

402

RECEIVED
SEP - 5 1955

September 2, 1955

Re: DMEA 3852
Geo. W. Kaske
Austin Tungsten Claim
Cochise Co., Arizona
$8,360 - Tungsten

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

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

Subject: Review of Field Team report.

If the prospectability of the ground traversed by the crosscut is high the work program set up for this promising prospect is tailored to the probable returns. Nothing is said about ore in the adit and presumably there is no premise there, otherwise continuation of the adit might be preferred.

I concur with the acceptance recommendation of the Field Team.

N. E. Nelson

N. E. Nelson

NENelson:iml
G-9/2/55

cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
R. Holliday, 3513

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

RECEIVED
AUG 29 1955

400
ARC.

August 25, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Report of Examination, DMEA Docket 3652 (Tungsten), George W. Kaske, Austin claim, Cochise County, Arizona

Enclosed are the original and three copies of the report pertaining to the above application.

We concur in the recommendation of the field examiners that exploration in the amount of $8,360.00. is warranted.

It is noted that small amounts of lead occur with the tungsten and some consideration might be given to a combined (Tungsten-Lead) contract with Government participation at 62.5%.

Nine copies each of figures 2 and 3 are included for possible use in the contract.

DMEA Field Team, Region III

W. M. Traver

E. N. Harshman

E. N. Harshman

Enclosures

D.M.E.A.
Date Rec'd.
AUG 13 1955
BUREAU OF MINES
Denver, Colorado

RECEIVED
AUG 29 1955

TRANSMITTED
AUG 25 1955

Denver 5, Ariz.

August 16, 1955

Memorandum

To : W. A. Tanner, Executive Officer, DMEA Field Team, Region III

From : Superintendent, Southwest Experiment Station

Subject : Field Examination Report, Docket DMEA-3838, George W. Kimbro's Austin Tungsten Claim, Bee Cabbage Mining District, Yavapai County, Ariz.

Enclosed are original and 2 copies of the section on Geology, Conclusions and Recommendations by Donald Bryant of the Geological Survey and T. H. Kerstle of the Bureau of Mines, and the section on Engineering by Kerstle for the above report. A separate section on Geology will be submitted by the Survey.

As there seems to be a good chance of discovering tungsten ore by the proposed exploratory pegmatite and as the amount of Government financial assistance is small, the DMEA engineers have recommended Government aid. I concur with this recommendation.

Structure is enclosed.

Walter R. Storms

Walter R. Storms

cc: W. A. Tanner (6)
J. E. Fitch
DMEA-3838
RF

Enclosure(5)

TRANSMITTED
RECEIVED
AUG 29 1955
AUG 25 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

[redacted]

[redacted]

Leonid Weyner, Geologist
U. S. Geological Survey

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

August 1955

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By Leonid Bryant[1] and T. A. Rowlo[2]

In an application to the Defense Minerals Exploration Administration, dated May 20, 1955, Geo. W. Kaebe requested Government participation in a program estimated to cost $8,360, to explore for tungsten on the Austin claim, Cochise County, Arizona. The Austin claim is an unpatented lode claim, located and held by Kaebe. It is situated in Wood Canyon, 9 miles by road east of the town of Bos Cabezas. The nearest rail point is Willcox, 15 miles northwest of Bos Cabezas.

The rocks in the mine area consist mainly of Cretaceous and possibly older sediments and metamorphics that strike northwest and dip vertically or steeply to the south. These rocks contain an easterly-trending, vertically-dipping zone of quartz. The quartz occurs in masses up to 10 feet wide and grades out into the country rock through a network of veinlets. Near the south edge of the quartz zone a 37-foot shaft has been sunk, and 100 feet east of the shaft, a 130-foot adit has been driven toward the shaft. Tungsten mineralization occurs in the east and west walls of the shaft. The average mineralized width is about 2½ feet and this thinning is continuous from the collar to the bottom of the shaft. The tungsten occurs as scheelite. Lead is the form of very finely disseminated cerussite and galena accompanies the scheelite.

---

[1] Geologist, U. S. Geological Survey
[2] Mining engineer, U. S. Bureau of Mines

No ore is known to have been shipped from this property. Based on samples of the shaft walls and of dump material from the shaft the ore is estimated to contain 2 percent WO_3 and 3 percent lead. There are no measured reserves. Indicated and inferred reserves together are estimated at 2,000 tons. This reserve tonnage might be substantially increased by the proposed exploration.

The applicant proposes to explore for extensions of the mineralized zone at the shaft by: 1) driving a 160-foot crosscut adit from the gulch mouth of the shaft; 2) raising 40 feet to the shaft from the end of the adit; and 3) 50 feet of drifting from the adit. The estimated total cost of this work is $8,350. This plan appears to offer an efficient and relatively inexpensive way to initiate exploration for substantial reserves in the project area. Although a gravity concentration test and a microscopic examination of samples from the mine indicate that a saleable product may be difficult to obtain, the comparatively high tungsten content of the rock, combined with the possibility of finding a substantial tonnage, justify exploration. Therefore, it is recommended that the Government participate in this exploration project.

RECEIVED
AUG 29 1955

[illegible], JEROME W. LARK, ANTI TURNPIKE CLAIM
COCHISE COUNTY, ARIZONA

Engineering Report

By T. H. [illegible]
Mining Engineer
U. S. Bureau of Mines

August 1955

[illegible], JUNIOR V. LARK, ARTIN TUNGSTEN CLAIM
COCHISE COUNTY, ARIZONA

CONTENTS

Engineering report	Page
Introduction	1
Location, accessibility, physical features and climate	1
History and production	1
Extent and ownership of property	3
Present status	4
Description of deposit	4
Ore reserves	5
Proposed exploratory project	6
Estimated cost of proposed project	7
Conclusions	9
Recommendations	10

ILLUSTRATIONS

Figure		To follow page
1	Location map	1
2	Claim map	3
3	Geologic map showing proposed explorations	4

INTRODUCTION

On June 3, 1955, the Defense Minerals Exploration Administration received an application from George W. Kemble for Government aid on proposed exploration for tungsten ore at the Austin mine in Cochise County, Ariz. Proposed explorations involved improvement to roads and driving 200 feet in an adit, drift and raise. Total cost of the proposed project was estimated at $8,350.00.

The application, designated as DMEA-2002, was reviewed by the Operating Committee and referred to the Field Team of Region III for field investigation. Field investigations were made by L. Heyner, U. S. Geological Survey, July 12, 1955, and by T. M. Kemble, U. S. Bureau of Mines, on July 21, 1955. The applicant was present during Heyner's investigations, and discussed phases of the proposed work with Kemble on August 3.

LOCATION, ACCESSIBILITY, PHYSICAL FEATURES AND CLIMATE

The Austin mine is about 19 air-miles southeast of Willcox, Ariz., a town on the Southern Pacific Railroad and U. S. Highway 666 and State Highway 86. It is described as being in the north half of sec. 30, T. 14 S., R. 28 E., Fort Grant Mining District, Cochise County, Ariz. (figure 1).

The mine is accessible from Willcox by driving 15.1 road miles southeasterly to the village of San Simon. A few miles of the road is paved and the remainder is of graded dirt construction. A road log of the remaining distances follows:

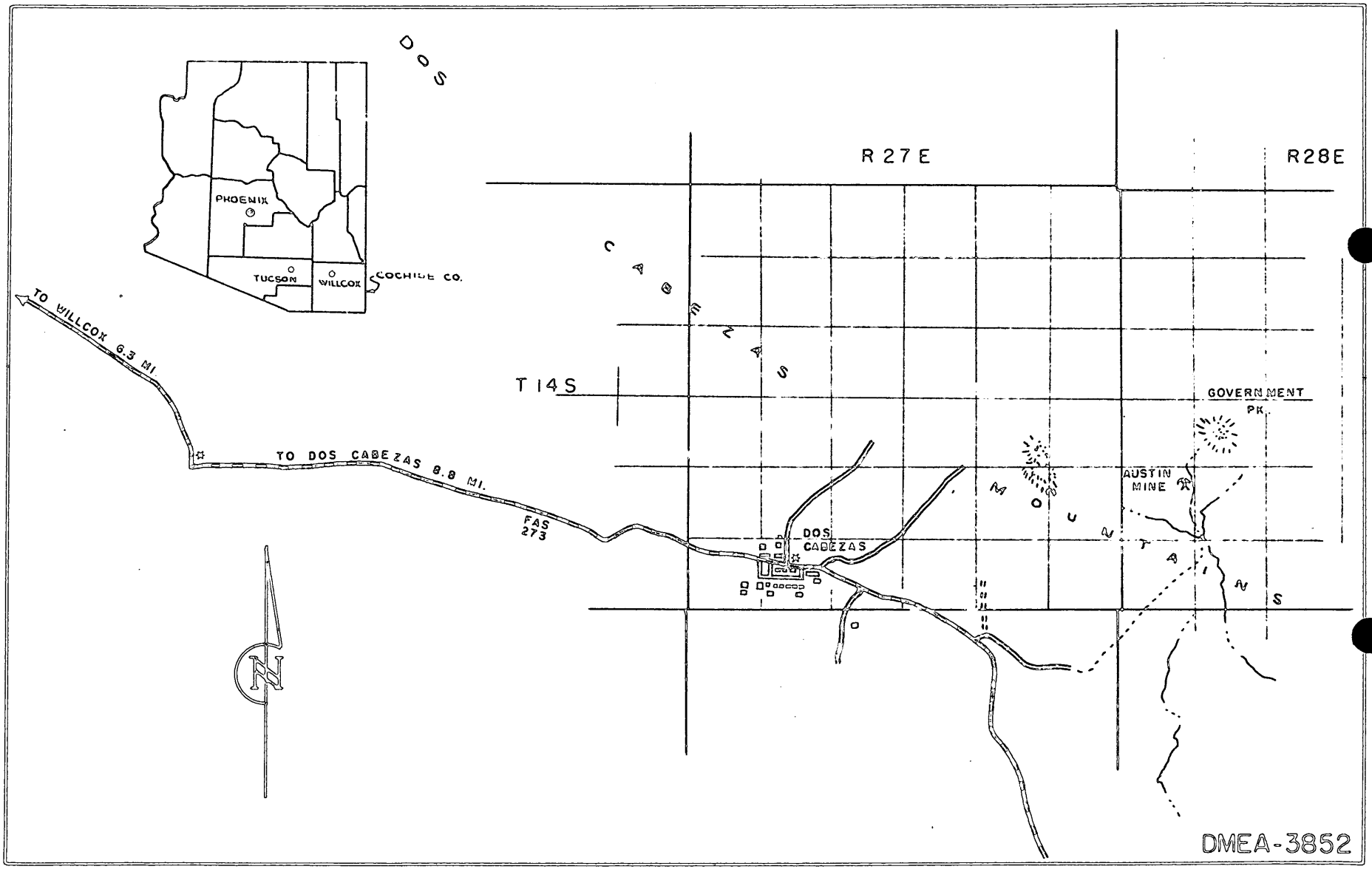


FIG.-1-LOCATION MAP, GEORGE W. KASKE, AUSTIN CLAIM
COCHISE CO. ARIZONA

0.0 San Cayetano;
3.0 Turn left, cross cattle guard, and turn right on to Rancho Ranch road;
4.4 Rancho Ranch. Turn right;
4.6 Gate;
5.4 Take left branch of "Y";
6.1 Gate;
6.9 Gate;
7.4 Gate at windmill and movement marking common corner of secs. 35, 36, 31, and 32, T. 14 S., R. 20 E.
8.5 House at four hundred feet southeast of hunting shack.

About 6.3 miles in by fairly level dirt roads and the last 2 miles in over a rough road that follows up wash Canyon. During the rainy seasons the Canyon road may become impassable for other than 4-wheel drive vehicles.

The property is situated on the southeastern flank of the San Cayetano Mountains. It is in a moderately rugged area at an average altitude of about 6,000 feet.

The climate and vegetation are characteristic of the intermediate altitudes of southern Arizona. Summers are hot and winters are mild. Precipitation, mainly as heavy summer thunder showers and light falls of snow and rain in the winter, probably averages about 15 inches annually. Vegetation is confined to native grasses and cactus, except for scattered small groves of live oak trees along the principal drainages.

There are no permanent streams in the area that drains southwesterly to Sulphur Valley. Sufficient water for domestic use and small mining and milling operations is available from springs and shallow wells.

HISTORY AND PRODUCTION

According to the applicant, the Austin property originally was located for gold by Tom Hutton in 1880. In that year or shortly thereafter, Hutton sank the existing 30-foot shaft and drove the adit a distance of 80 feet. No ore was produced during this period of activity. The property then was idle to 1943 when the applicant discovered scheelite in the shaft. During 1943, the applicant and 2 partners advanced the adit to the present face at 128 feet from the portal. No further work was done until 1948 when the applicant supplied the Arizona Bureau of Mines with a sample of ore from the shaft for testing purposes.

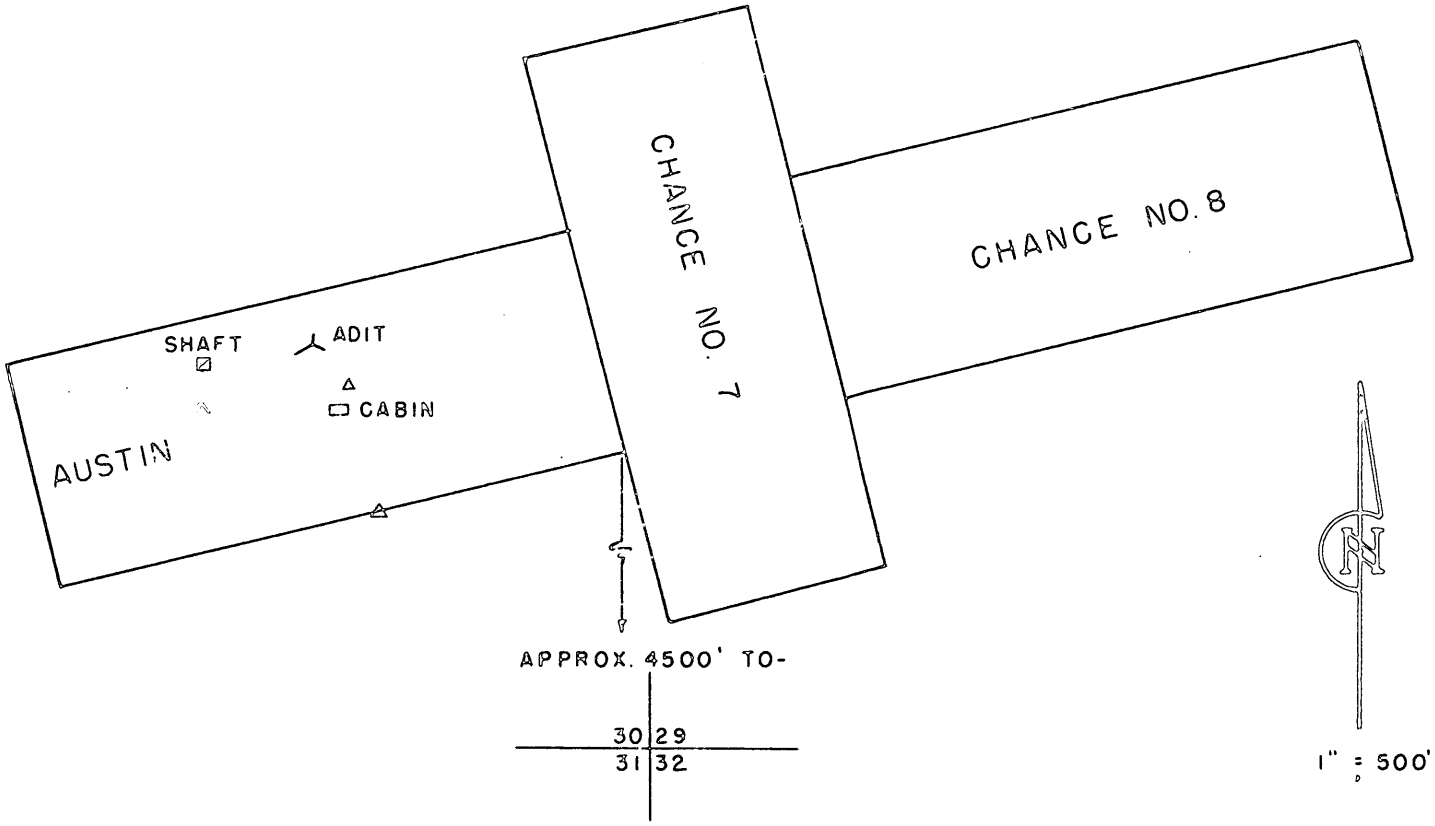
Assay concentration of the sample containing 1.96 percent WO_3, yielded a concentrate contained 48.87 percent WO_3 and 21.5 percent lead. Tailings containing 0.20 percent WO_3 for an indicated recovery of 90 percent of the tungsten. The property then was abandoned because exploitable concentrates were not marketable.

The applicant relocated the property July 1954. Since then, assessment work has been done and Arthur W. Jacobs, a Registered Mining Engineer of Tucson, examined the property for the applicant.

EXTENT AND OWNERSHIP OF PROPERTY

The Austin property comprises a group of 3 unpatented lode mining claims (figure 2). It is owned by the applicant, George W. Hanks, P. O. Box 56, Sahuarita, Ariz.

Proposed exploratory work is confined to one of the 3 claims, the Austin.



DMEA 3852

FIG. 2 CLAIM MAP, GEORGE W. KASKE, AUSTIN CLAIM
COCHISE CO. ARIZONA

PRESENT STATUS

At present, the property is inactive and the single structure, a cabin, is unoccupied.

The previously described principal workings consist of the accessible 130-foot adit, low and narrow in places, and the 35-foot nearly vertical shaft.

Mining equipment on the property is confined to one mine car. Equipment owned by the applicant and stored elsewhere comprises a 105-CFM portable compressor, a 160-CFM stationary compressor, and 3 jackhammers. He intends to supplement this equipment by purchasing a jackleg-type drill if the proposed project is approved.

Materials and supplies on the mine or in storage consist of a few hundred feet of track rail, with accessories, air and water lines, drill steel and bits, and miscellaneous small tools.

DESCRIPTION OF THE DEPOSIT

Known tungsten mineralization is given in confined to the shaft that is situated on the north margin of a quartz mass (figure 3). The quartz cuts diagonally across the contact of schists and saline country rocks. Large masses of the quartz grade out into the country rocks as a network of veinlets. Traces of scheelite, the chief ore mineral, are found in float rock for a distance of about 120 feet west of the shaft.

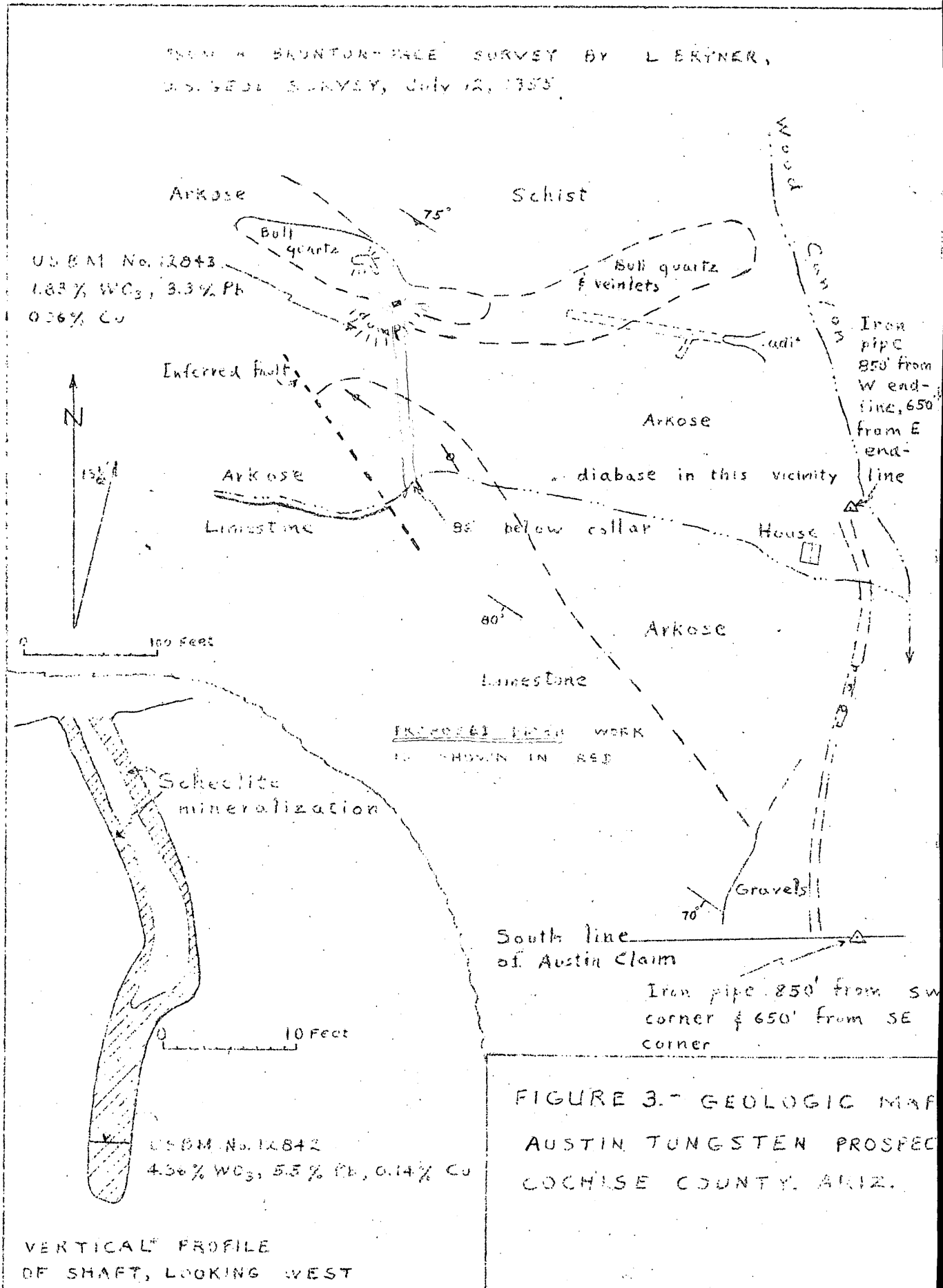


FIGURE 3.- GEOLOGIC MAP
AUSTIN TUNGSTEN PROSPECT
COCHISE COUNTY, ARIZ.

The shaft follows a vein that consists mainly of quartz stringers and veinlets up to several feet wide. Wall rock of the vein is highly altered. Scheelite occurs in the quartz vein as irregular patches, up to an inch or two in diameter, and as intersecting veins. Other minerals present in small amounts are arsenopyrite, limonite, talc, wolframite, azurite, molybdenite, galena, sphalerite, and chalcopyrite.

The mineralized vein is continuous from the collar to the bottom of the shaft. Its width ranges from approximately 2 to 4 feet and averages about 3.5 feet. Two samples, obtained during the investigation, were assayed at Tucson by the Bureau of Mines. Assays of these samples and two reported by the applicant follow:

Sample	Location	Width	Percent WO_3	Pb	Zn
Applicant's	Bottom east side of shaft.	47 inches	0.92	1.1	—
Applicant's	4' above bottom of shaft on west wall.	40 inches	2.55	4.1	—
USBM 12041	Same as above.	37 inches	4.36	3.6	0.14
USBM 12042	Dump rock.	—	1.81	3.3	0.06

Results of microscopic examination of the USBM samples are given in the geological report. They indicate that grinding the material to pass a 100-mesh screen would be required to free a large portion of the lead and tungsten minerals from each other and from the quartz gangue.

ORE RESERVES

The deposit contains no measurable ore reserves.

Indicated and inferred reserves to a depth of 50 feet, the depth of proposed explorations, have been estimated at about 2,000 tons of

material containing approximately 2 percent WO_3 and 3 percent lead. These reserves could be substantially greater if the proposed exploration is successful.

PROPOSED EXPLORATORY PROJECT

The applicant proposes to explore for extensions of the mineralized zone at the shaft by: (1) driving a 160-foot adit from the gulch south of the shaft; (2) raising 40 feet to the shaft from the end of the adit; and (3) 30 feet of drifting from the adit (figure 3). Prior to initiation of this work, he proposes to repair short sections of the road near the mine and to build a new road from near the cabin to the site of the proposed adit, a distance of about 300 feet.

There are other ways in which the property could be explored at the suggested low cost. However, the examining team favors the applicant's plan for the following reasons:

1. The proposed adit will crosscut a possible favorable zone;

2. Sinking on the ore would require expenditures of possibly double the proposed $6,250.00 because (1) road work would be in rock for an estimated 700 feet, a surface plant and additional equipment would have to be installed, and the existing shaft would have to be straightened and timbered;

3. Extension of the existing adit would encounter the potential ore zone at a vertical depth of about 15 feet below the proposed adit. The overall cost of this plan would be about the same as that proposed, but potentially favorable ground south of the shaft would remain untested.

ESTIMATED COST OF PROPOSED PROJECT

Road Work

The applicant requested $250.00 for construction of an estimated 150 feet of road and necessary minor improvement of 1.0 mile of existing road. He said that as owner of a bulldozer who lives within about 10 miles of the mine he's offered to do necessary work for the requested sum. A probably average bid would be about $300.00 for in-and-out mobilize of the bulldozer and $12.50 to $17.50 an hour for work. As the requested amount is below average requirements, I suggest that road work be set up as an independent contract with estimated minimum bulldozer costs of $15.00 per hour and $300.00 for the job.

Underground Work

The applicant has offered to do the proposed underground work under an independent contract. Following are his proposed costs by units:

Adit, 100 feet at $30.00 per foot	$3,000.00
Drift, 50 feet at $30.00 per foot	1,500.00
Raise, 40 feet at $35.00 per foot	1,400.00
Total	$5,900.00

In addition to the above total cost he has requested $300.00 for camping, accounting, liability insurance, and miscellaneous. If $110.00 is set aside for camp costs, then the total cost of the proposed 200 feet of underground work would be $6,000, or an average of $30.00 per foot.

I have estimated monthly supervision and labor costs, including insurance and taxes, at about $1,[illegible]. This cost is for 2 men working on each of 2 shifts for 6 days weekly. Estimated pay rates are 2 men at $2.50 per hour, 1 at $1.75 per hour, and $2.00 per hour for the applicant who would be employed as shift-supervisor. On this basis an expectable advance of 100 feet monthly, 4 feet per day, would result in a supervision and labor cost of $16.00 per foot. Other costs, including hauling in and installing equipment, would probably amount to an additional $14.00 or $17.00 a foot of advance. Thus the total estimated costs would be from $33.00 to $34.00 per foot.

The above estimates indicate that the applicant's proposed unit costs are acceptable. However, a fairer distribution of the costs would be $30.00 a foot for each type of heading, mainly because costs for hauling and timbering the vein zone of the drift and raise probably will exceed the cost of similar work in the adit.

Assays

The sum of $110.00 provides for actual costs of sampling samples of tungsten, lead and possibly silver.

Summary of Estimated Costs

Independent Contract.

Road work with bulldozer - construct new road from mine cabin to site of proposed adit and make necessary repairs to existing road ———————— $300.00

Driving adit to a point below existing shaft, raising from end of adit to shaft, and drifting on vein zone, - estimated 150 feet at $30.00 per foot ———————— 4,500.00

Assaying

Estimated channel samples for tungsten, lead and possibly silver ———————— 110.00

Total ———————— $4,[illegible]

Proposed work specifications

All workings to be timbered where necessary.

Minimum cross sections, in the clear, should be 5 by 7 feet for the adit and drifts, and 5 by 6 feet for the raises.

Completion of the project would be expected in 4 months. Road and preparatory work should take about 1½ months and the underground work would be completed in 2½ months.

CONCLUSIONS

The Austin claim has a small exposure of material containing a relatively high percentage of tabulite and moderate amounts of sulfide and oxide lead minerals.

Geologic conditions indicate that exploration of the mineralized zone by the proposed feasible and low cost program has a good chance of developing a small tonnage of similar material and could possibly indicate the presence of substantial additional reserves.

A marketable product probably cannot be produced by gravity concentration, but it is possible that a satisfactory recovery of marketable tungsten and lead concentrates may be made by flotation.

If adequate reserves are indicated by the proposed explorations, metallurgical tests will be in order. Favorable results could result in development of the deposit and production of significant amounts of tungsten and lead.

[illegible]

[illegible]ental participation in the proposed exploratory project costing an estimated $[illegible] is recommended for approval.

IN REPLY REFER TO:
Date Rec'd.

AUG 19 1955

BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR

Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

August 19, 1955

RECEIVED
AUG 29 1955

TRANSMITTED
AUG 25 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Harshman

Subject: DMEA Docket 3852 (Tungsten), George W. Kasko, Austin claim, Cochise County, Arizona

Enclosed are the original and eight copies of a geologic report by Leonid Bryner, U. S. Geological Survey, covering his examination of the subject property.

Scheelite is found in a quartz vein associated with minor amounts of cerussite, limonite, talc, malachite, azurite, anthosmite, and galena. The country rocks are schist, arkosic quartzite, and limestone. Samples taken by the applicant and by the examiners indicate an average content of about 2 percent WO_3 across a width of 2-1/2 feet.

Although the strike length of the deposit may be relatively short, Bryner concludes that limited exploration is warranted.

I concur with this recommendation.

E. N. Harshman

E. N. Harshman
Member, Field Team

Enclosures (9)

EHHarshman:arh

MINERAL DEPOSITS
DMEA
RECEIVED
AUG 18 1955
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

Box 4126 University Station
Tucson, Arizona

August 16, 1955

DMEA
Date Rec'd.
AUG 19 1955
BUREAU OF MINES
Denver, Colorado

MEMORANDUM

To: Mr. E. H. Marshman

From: J. H. Faick

Subject: Geo. W. Knabe, Austin Claim (Tungsten)
Cochise County, Arizona - DMEA 3692

Enclosed are the original and 8 copies of an examination report on the above subject property, by Leonid Bryner. A joint summary, conclusions and recommendation is being submitted through W. H. Storms with the engineering report. A small exploration project having an estimated cost of $3,360 is recommended. I concur with this recommendation.

John H. Faick

John H. Faick

JHF:mm

Enclosures

cc. Marshman (8)
Storms

U. S. DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
AUG 29 1955
DMEA
Date Rec'd
AUG 19 1955
BUREAU OF MINES
Denver, Colorado

REGION III

GEOLOGY

EXAMINATION REPORT

DMEA 3858

GEO. W. KASKE
ARIZONA CLAIM
COCHISE COUNTY, ARIZONA
(Tungsten)

By
Leonid Bryner
Geologist
U. S. GEOLOGICAL SURVEY
August 15, 1955

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
FIELD TEAM XII

RECEIVED
AUG 29 1955

GEOLOGY
EXAMINATION REPORT
DMEA 3652
GEO. W. KASKE
AUSTIN CLAIM
COCHISE COUNTY, ARIZONA
(Tungsten)

CONTENTS

	Page
INTRODUCTION	1
GEOLOGY	1
PRODUCTION AND GRADE	4
EXPLORATION	5
RESERVES	5
CONCLUSIONS AND RECOMMENDATIONS	6

ILLUSTRATIONS

Fig. 1 Location Map	See Engineering Report
Fig. 2 Claim Map	" " "
Fig. 3 Geologic Map, Austin Tungsten Prospect	Following page 6

RECEIVED
AUG 29 1955

INTRODUCTION

In an application to the Defense Minerals Exploration Administration, dated May 29, 1955, George W. Kanke requested government participation in a program estimated to cost $8,360 to explore for tungsten on the Austin Claim, Cochise County, Arizona.

The claim is located in the NW¼ of the NW¼ of Section 30, T. 14 S., R. 29 E. It is in Wood Canyon, which drains southward from the Don Cabezas Mountains to Sulphur Springs Valley. The elevation of the property is about 6,000 feet. The mine is 9 miles by road east of the town of Don Cabezas. The last 1½ miles of this road is rough and narrow and easily subject to washout by summer rains.

The Austin claim is an unpatented lode claim. Geo. W. Kanke is the locator and present owner. Kanke accompanied the writer in his examination of the property on July 12. W. M. Romslo of the U. S. Bureau of Mines visited the property on July 21.

The deposit has not been described in any report known to the writer, and the geology of the surrounding mountains has been described only in a very general way.

GEOLOGY

The rocks in the mine area consist mainly of Cretaceous and possibly older sediments and metamorphics that strike about northwest and dip vertically or steeply to the south (fig. 3). In the project area these rocks, from north to south, are, 1) a coarse-grained, dark schist that possibly is of igneous origin, 2) a series of coarse, arkosic quartzites, 3) a narrow zone of limy shale and shaly limestone (not indicated on map), and 4) a series of dark gray limestones.

The limestones are somewhat contorted and silicated along the easterly-trending gulch shown in figure 3, suggesting the presence of an easterly-trending fault along this gulch. Also, a northwesterly-trending fault appears to have offset the beds in this gulch. A thin diabase dike or sill is exposed in the north bank of the gulch. An easterly-trending, steep to vertically-dipping zone of quartz cuts diagonally across and partly follows the arkose-schist contact. The quartz occurs in large masses up to 10 feet wide. Most of this "wall" quartz is confined to the arkose and gives the easterly-sloping ground a low but resistant "crown" that also trends east. The large masses of quartz grade out at their margins into the country rock through a network of veinlets. Near the south edge of this quartz zone, a 37-foot shaft has been sunk and, 250 feet east of the shaft, a 120-foot adit has been driven toward the shaft (fig. 3). The known tungsten mineralization is confined to the shaft.

The chief ore mineral is scheelite in irregular patches and interconnecting seams. These patches may be up to an inch or two in diameter. Under ultra violet light the color varies from chalky white to pale yellow, suggesting a certain amount of admixed powellite. But a microscopic examination by Luther G. Evans, of the U. S. Bureau of Mines, found no powellite, and therefore the ore was not assayed for molybdenum. This microscopic examination was also to check for lead tungstates as lead was reported to be a deterrent to successful concentration of this ore.

The report by Evans, dated July 28, reads as follows:

"Sample No. 18642 is composed predominantly of quartz in which small amounts of cerussite, scheelite, limonite, talc, malachite, azurite, smithsonite and galena occur. The cerussite and scheelite are closely associated throughout the sample; grinding of the ore to pass a 100-mesh screen will be required to free a large portion of the two minerals from each other and from the quartz gangue. Sporadic grains of scheelite have a greenish color due to absorbed malachite along the fracture planes. The lead content of this sample is represented by cerussite with only sporadic grains of galena. In sample No. 18643 the lead content is represented equally by cerussite and galena. This sample also contains small amounts of sphalerite and chalcopyrite in addition to the above listed minerals found in sample 18642. Insofar as could be determined by optical methods neither of the two samples contain any lead tungstate minerals."

The gangue mineral is vein quartz which, in the shaft, occurs as stringers and also as masses several feet wide in a soft, bleached rock that has been altered beyond recognition. A sketch of the distribution of tungsten minerals in the west wall of the shaft is shown in fig. 3. The scheelite on the opposite wall of the shaft, that is, the east wall, is more or less the mirror image of that on the west wall, indicating a westerly trend for the scheelite zone. This zone, exclusive of horses of waste, ranges from 2 to 4 feet in width and averages about 2½ feet. The mineralization is more or less continuous from the collar to the bottom of the shaft. It appears to be higher grade near the bottom than near the collar. The strike length of the zone is unknown because of the talus mantle east and west of the shaft. To the west, however, for a distance of about 150 feet, traces of scheelite are found in the talus. As the float is uphill from the shaft it probably represents a westerly extension of the deposit. Evidence for an easterly extension, however, is

looking. Though massive quartz occurs in the last 20 feet of the adit east of the shaft, no scheelite was recognized in the adit. Possibly the ore has been localized in tension fractures genetically related to the fault that is about one hundred feet southwest of the shaft.

The flat-lying beds on the applicant's geologic section actually should be shown as almost vertically dipping; and the "granite-gneiss intrusive" mentioned in the application apparently is that the present writer identifies as "bull" quartz.

PRODUCTION AND GRADE

Nothing is known of the history of this mine beyond what is given in a private report included with the application. Here it is stated that "the ground was originally located for gold by Mr. Tom Hutten in 1880. Scheelite was discovered in a 40-foot shaft by Mr. Hacke in 1943. There has been no production of tungsten ore for shipment from the property, except for testing purposes. The Ewell mine about a mile to the east and the Cottonwood mine about four miles to the south operated in the past for gold and silver."

The location of samples taken on the property are shown in fig. 3. A sample across the west wall of the shaft, about 4 feet above the floor (fig. 3) was taken by the applicant and also by the writer, with the following results:

	Width (inches)	WO_3 (percent)	Pb. (percent)	Cu. (percent)
Applicant's sample	40"	2.98	4.1	-
USBM No. 18842	37"	4.36	5.5	0.14

This represents better than average ore, both as to width and as to grade. The applicant also took a sample on the opposite wall of the shaft and at the same depth, with the following results:

Width (Inches)	WO_3 (percent)	Pb. (percent)
46	0.95	1.1

The writer took a grab sample of dump material from the shaft, with the following results:

	WO_3 (percent)	Pb. (percent)	Cu. (percent)
[illegible] #12843	1.83	3.3	0.06

From the above data it is concluded that the mineralized rock in this deposit will average about 2 percent WO_3 and about 3 percent Pb. The ore also contains traces of copper and it is reported to contain some silver.

EXPLORATION

The applicant proposes exploring for extensions of the ore in the shaft by driving an adit from the gulch immediately south of the shaft and raising and drifting from the end of the adit. Total cost for this work is estimated at $8,360. The examiners favor this exploration plan.

RESERVES

On the basis of total depth of 90 feet and a strike length of 120 feet, about 2000 tons of indicated and inferred reserve containing 2% WO_3 and 3% Pb are estimated for this deposit. This reserve

figure might be doubled or tripled if the exploration proposed above is successful. The total possible reserves of this deposit, however, appear to be limited horizontally by a strike length of about 150 feet, but there is nothing to indicate its probable depth.

CONCLUSIONS AND RECOMMENDATIONS

The Austin claim contains a persistent though small showing of fairly high-grade tungsten ore with moderate amounts of lead. Geologic indications are that the deposit has the possibility of several thousand tons of reserves. The proposed exploration program appears to offer an efficient way to discover whether such reserves exist and also to explore for additional possible veins, paralleling the known vein. Such exploration is needed also to gain some idea of whether, with further exploration, large enough reserves to justify a mill might be expected. Although the reserves, judging from our present knowledge of the deposit, probably are of a small order of magnitude, the exploration proposal is a relatively inexpensive one and not out of proportion to the possible size of the discovery. It is recommended, therefore, that the government participate in this exploration.

FROM A BRUNTON-TAPE SURVEY BY L. BRYNER, U.S. GEOL. SURVEY, July 12, 1955.

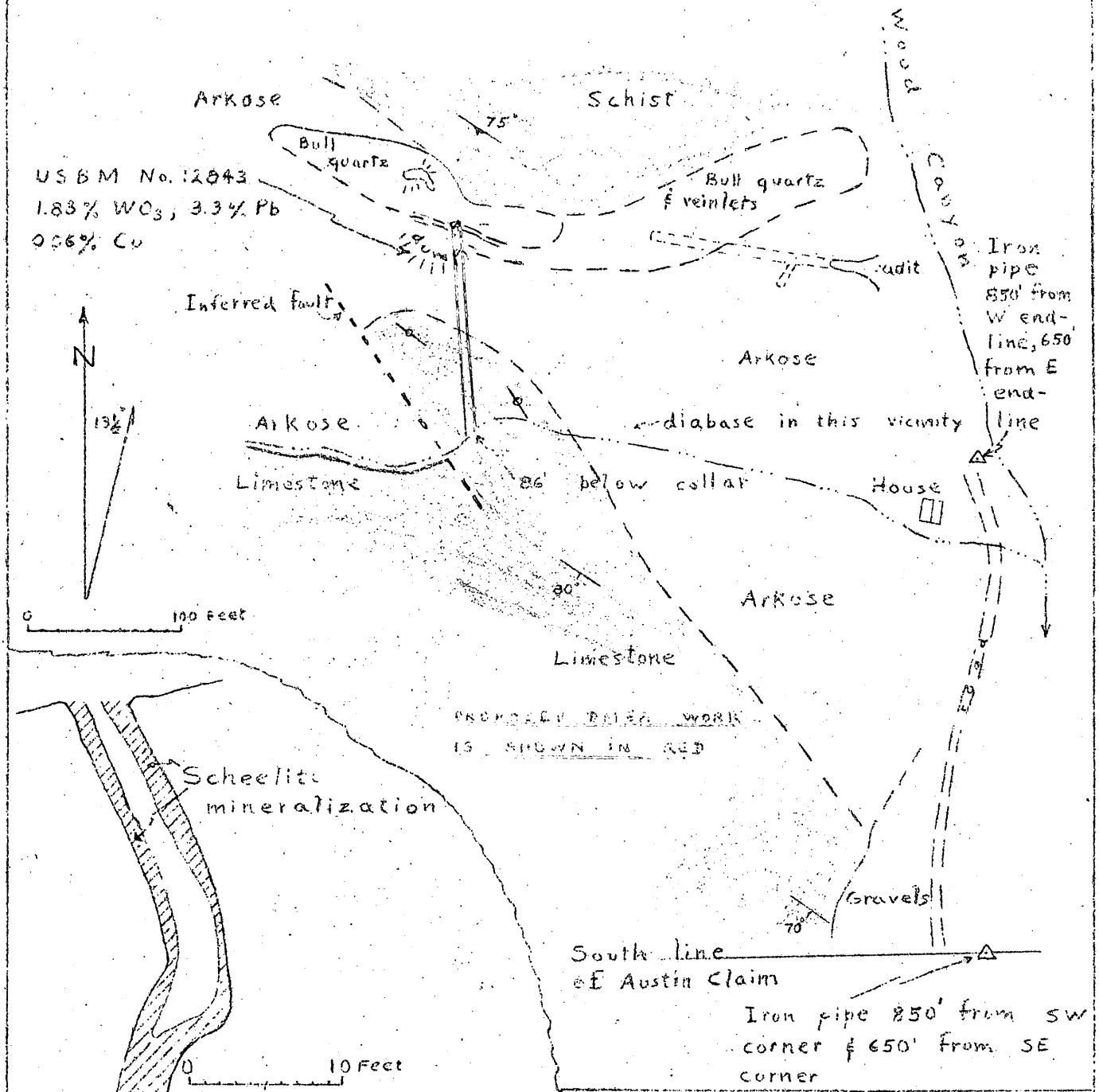


FIGURE 3.- GEOLOGIC MAP, AUSTIN TUNGSTEN PROSPECT COCHISE COUNTY, ARIZ.

DMEA 3852

RECEIVED
AUG 29 1955

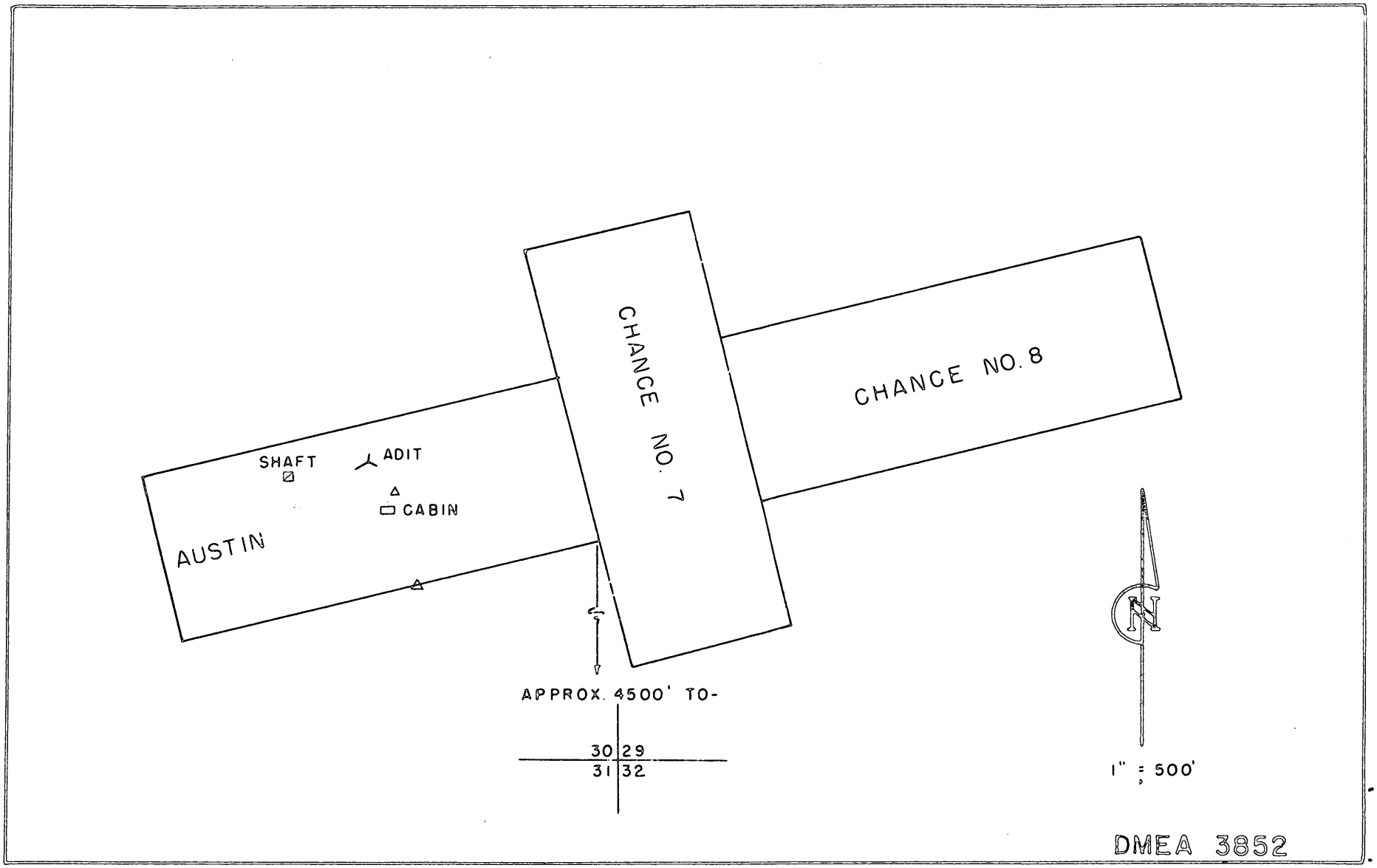


FIG. 2 CLAIM MAP, GEORGE W. KASKE, AUSTIN CLAIM
COCHISE CO. ARIZONA

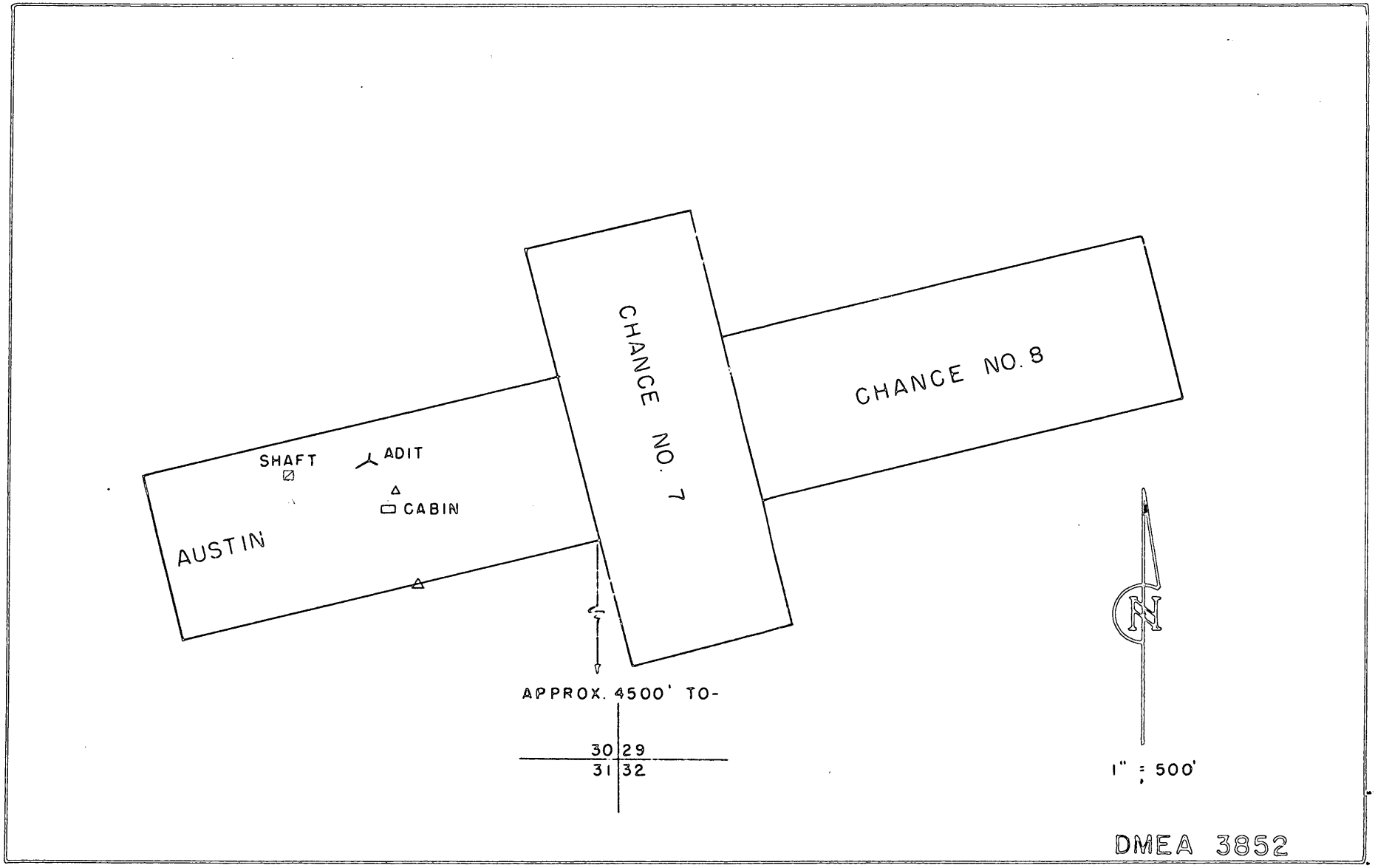


FIG. 2 CLAIM MAP, GEORGE W. KASKE, AUSTIN CLAIM
COCHISE CO. ARIZONA

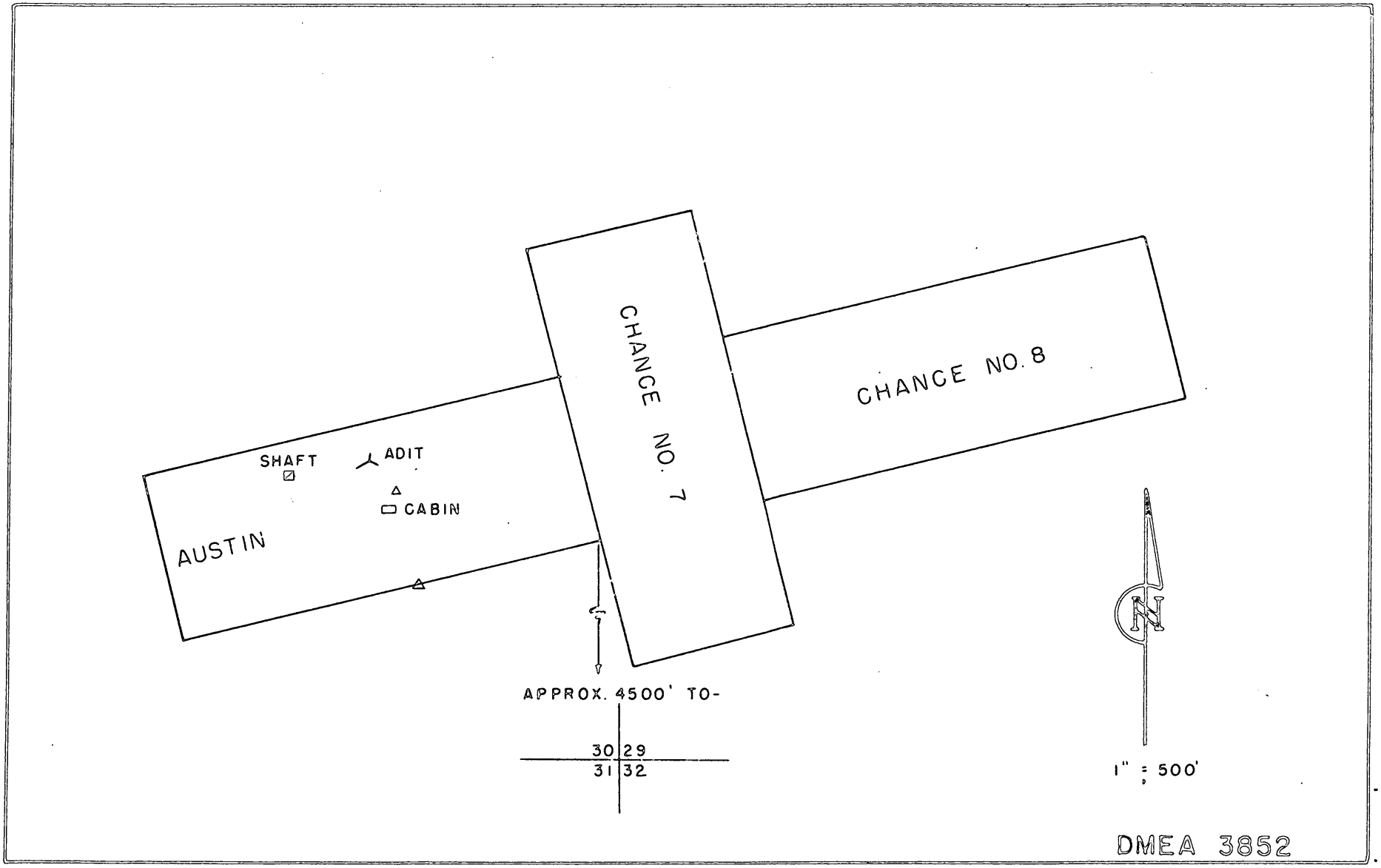


FIG. 2 CLAIM MAP, GEORGE W. KASKE, AUSTIN CLAIM
COCHISE CO. ARIZONA

RECEIVED
AUG 2 9 1956

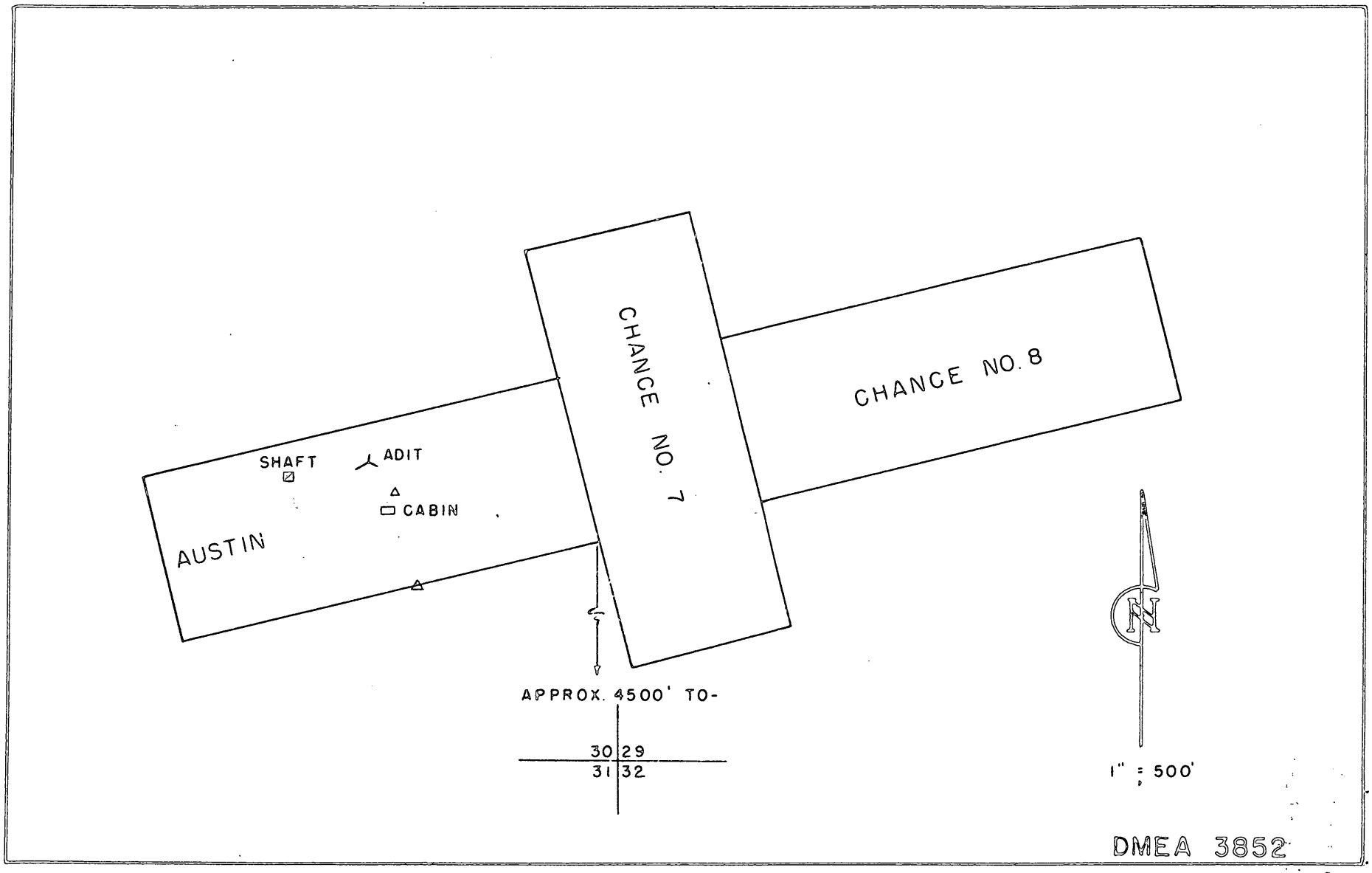


FIG. 2 CLAIM MAP, GEORGE W. KASKE, AUSTIN CLAIM
COCHISE CO. ARIZONA

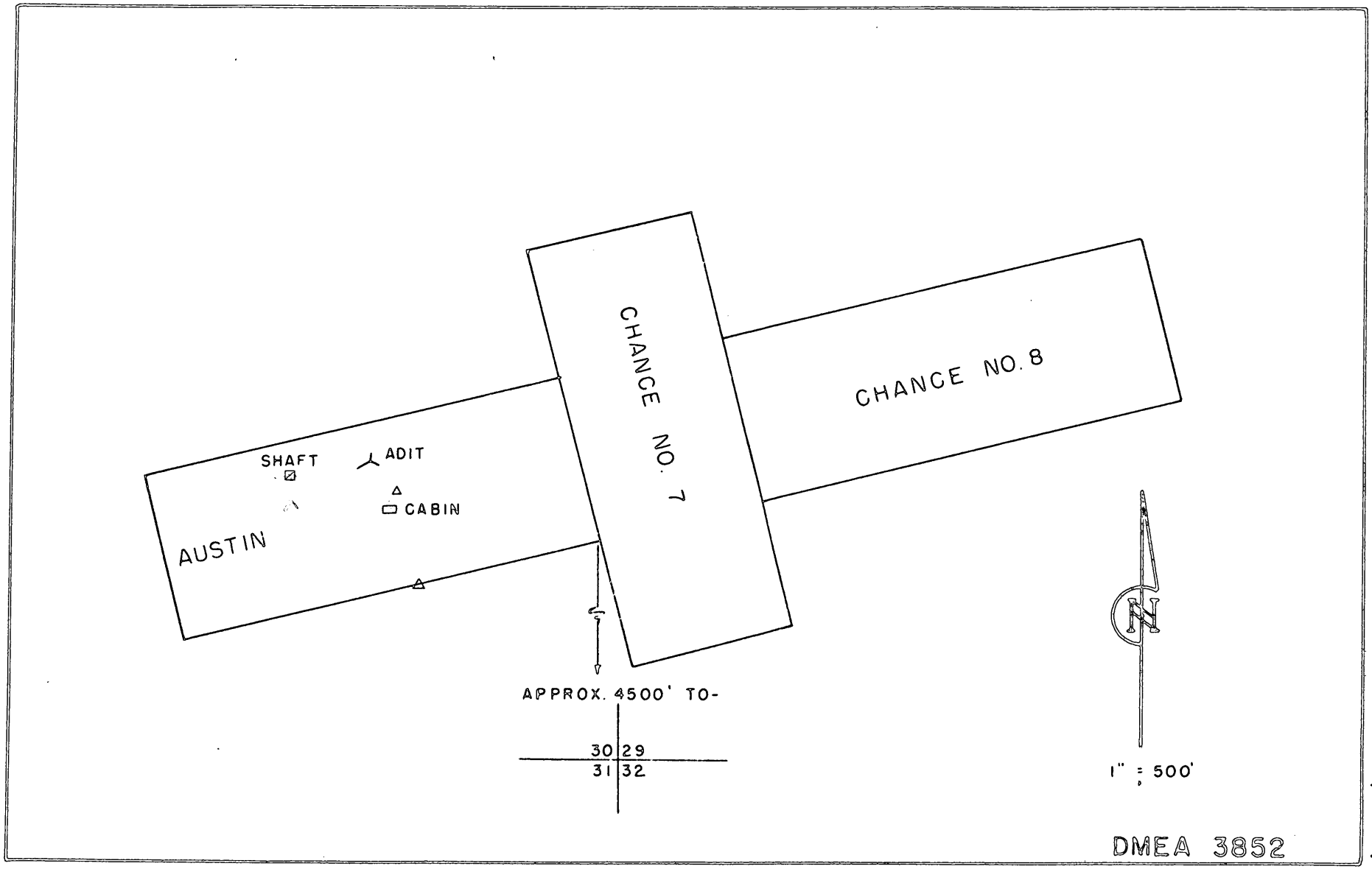


FIG. 2 CLAIM MAP, GEORGE W. KASKE, AUSTIN CLAIM
COCHISE CO. ARIZONA

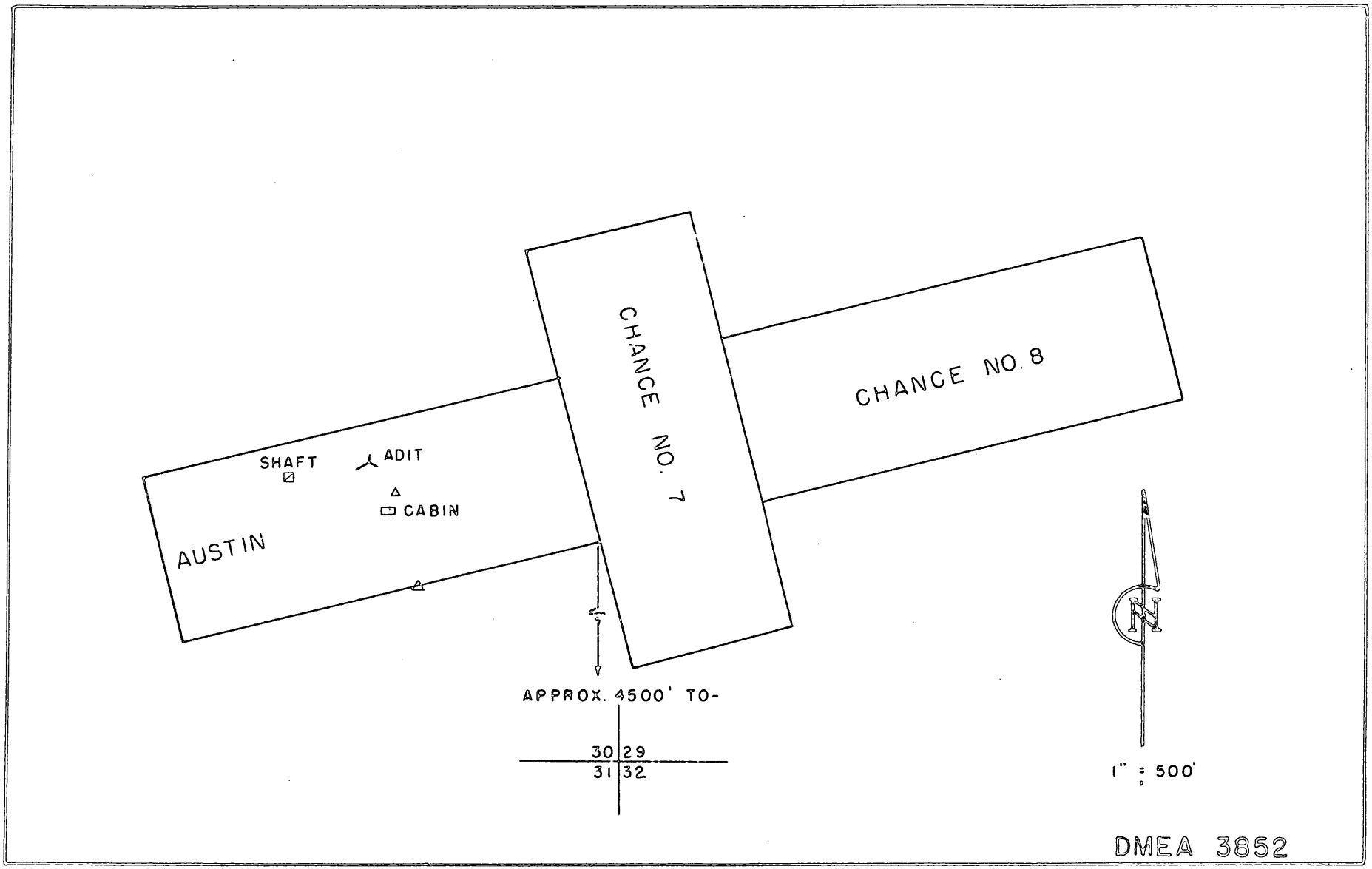


FIG. 2 CLAIM MAP, GEORGE W. KASKE, AUSTIN CLAIM
COCHISE CO. ARIZONA

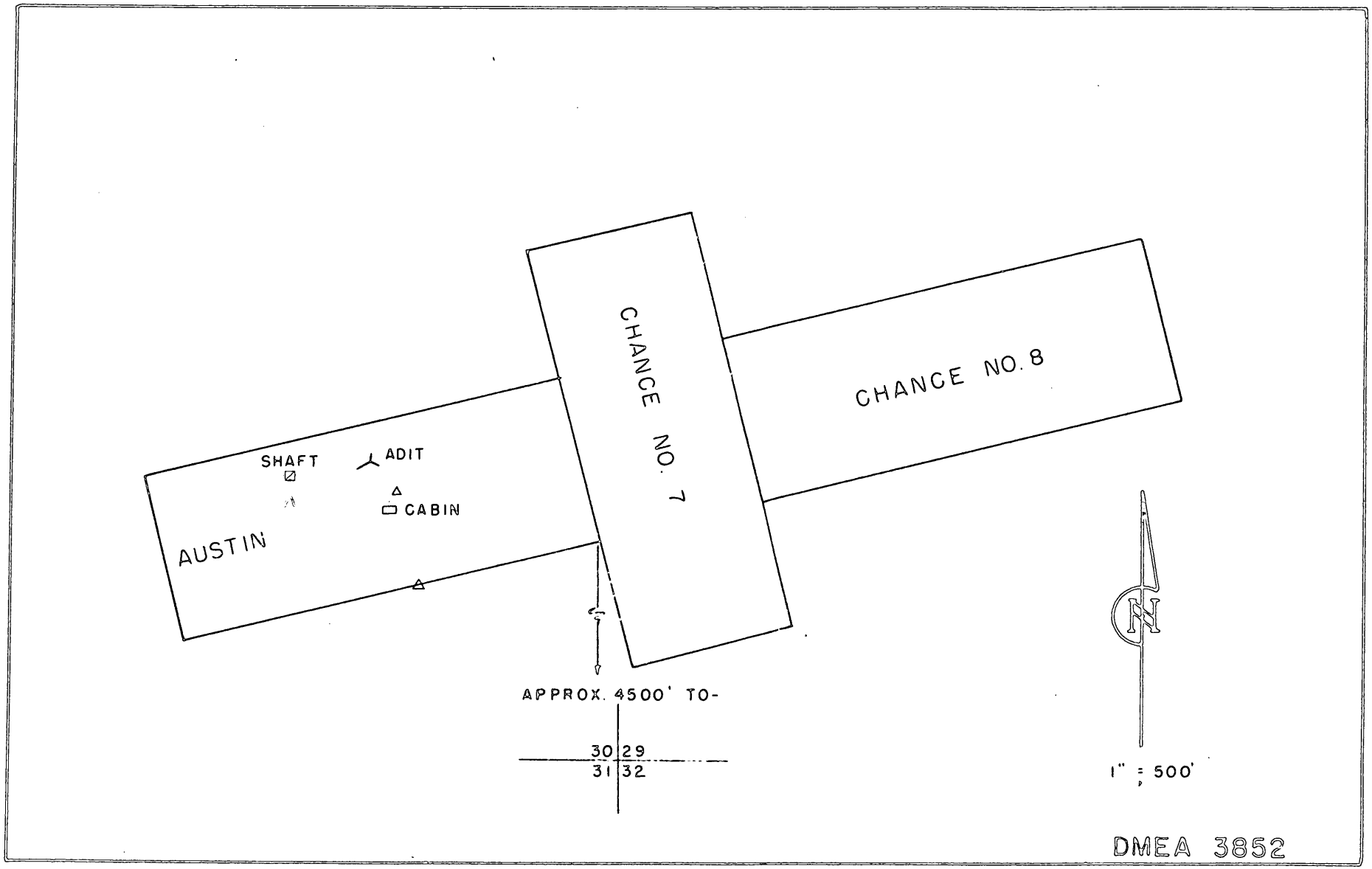


FIG. 2 CLAIM MAP, GEORGE W. KASKE, AUSTIN CLAIM
COCHISE CO. ARIZONA

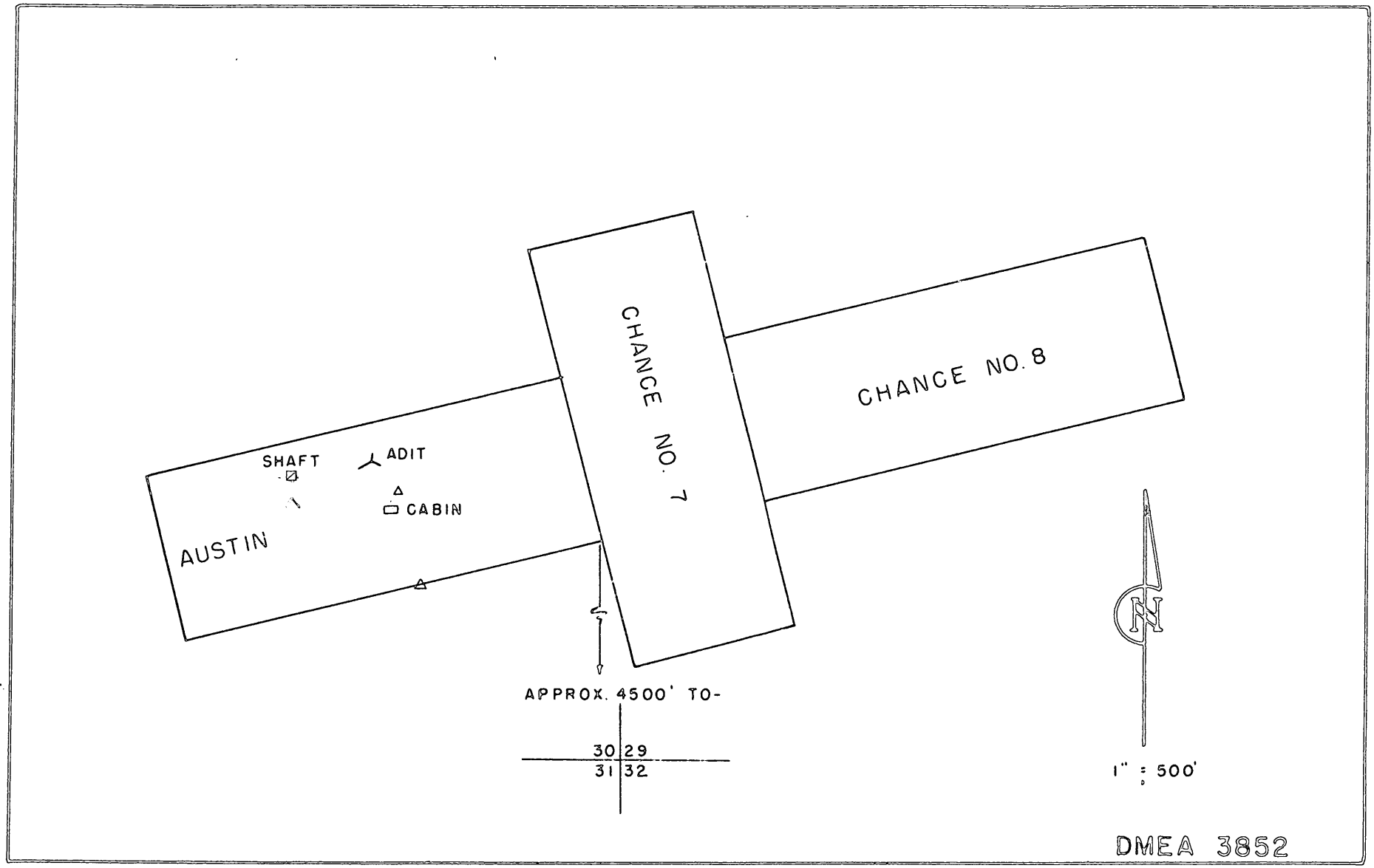


FIG. 2 CLAIM MAP, GEORGE W. KASKE, AUSTIN CLAIM
COCHISE CO. ARIZONA

RECEIVED
AUG 2 9 1955

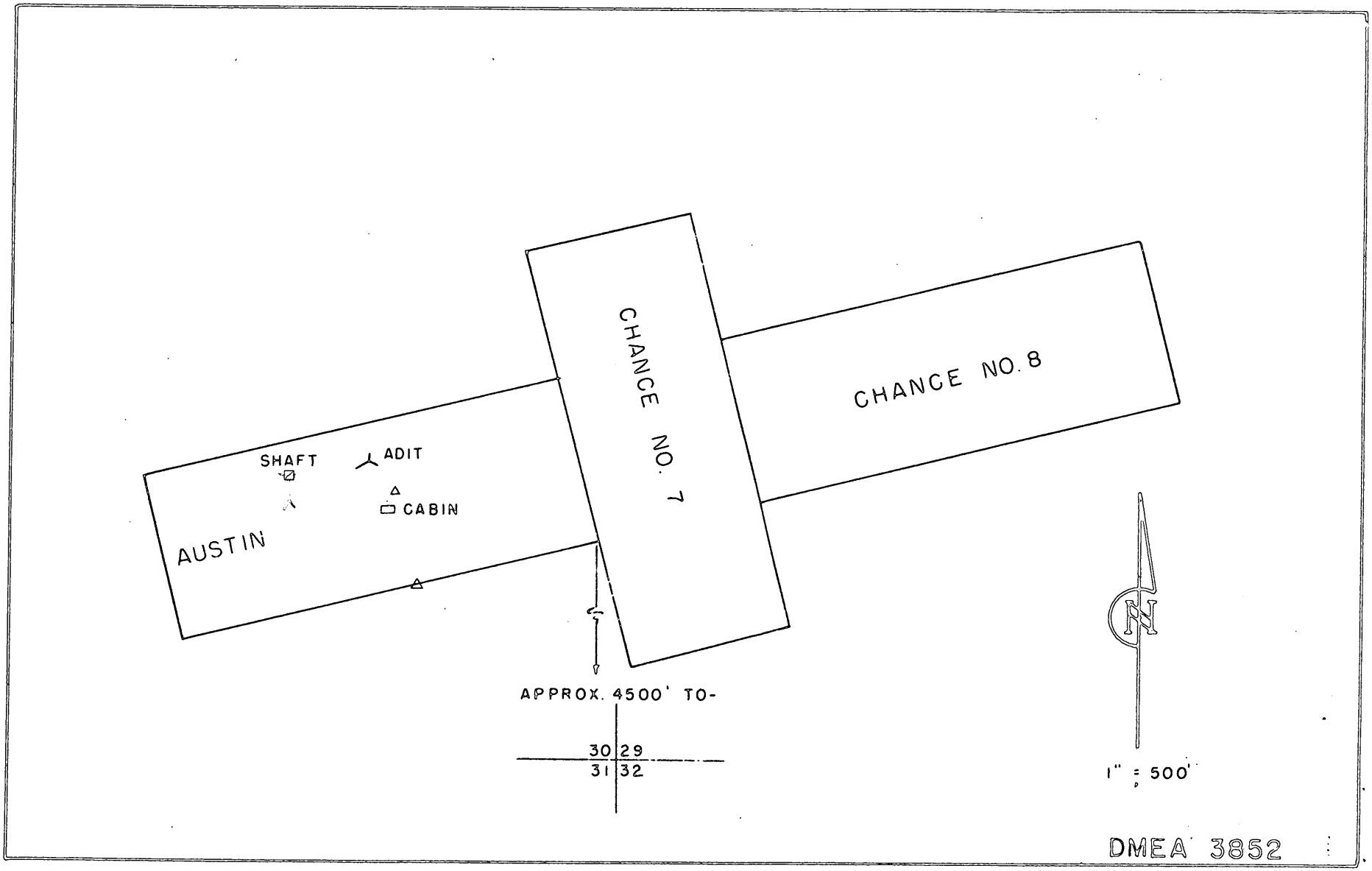


FIG. 2 CLAIM MAP, GEORGE W. KASKE, AUSTIN CLAIM
COCHISE CO. ARIZONA

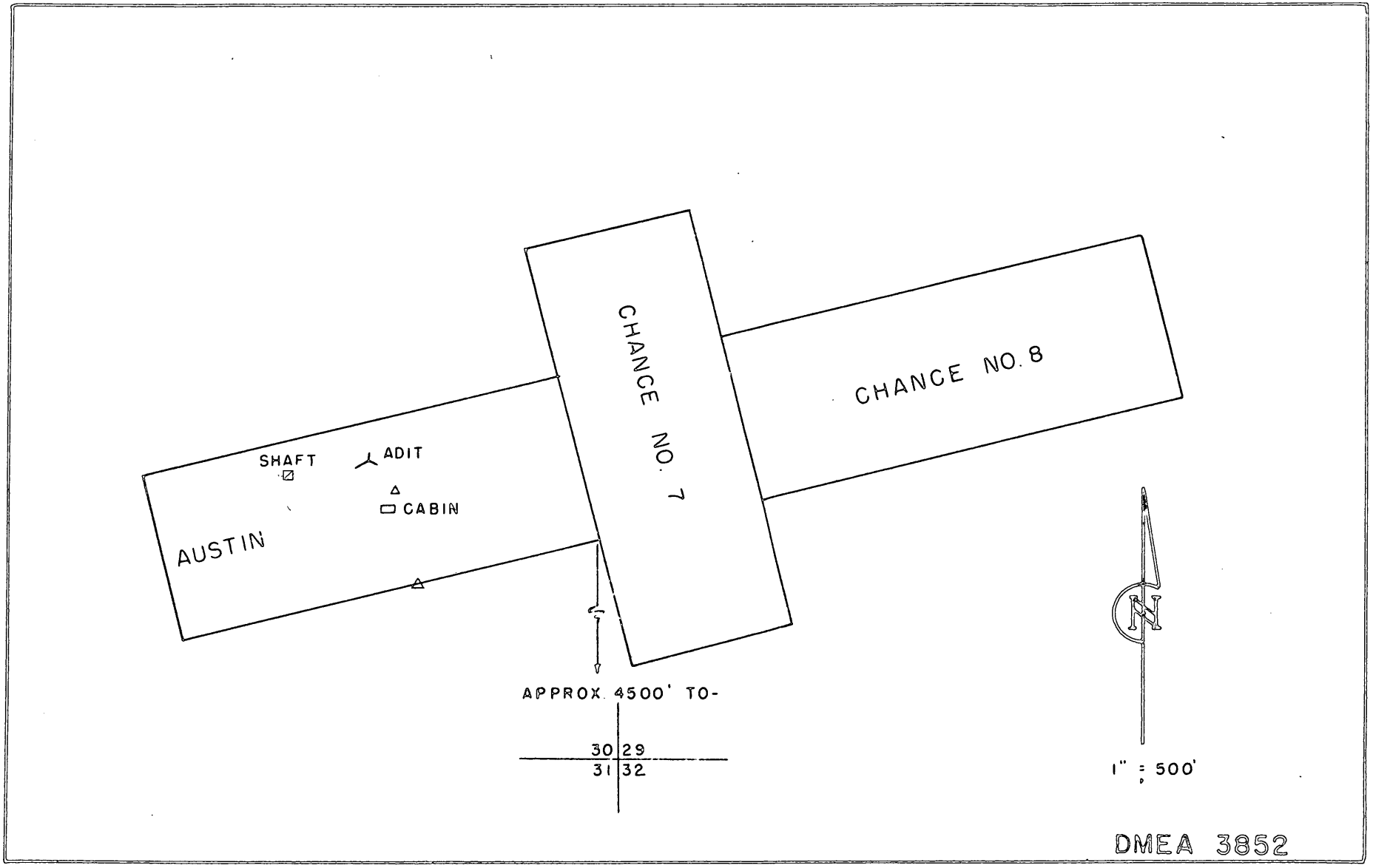


FIG. 2 CLAIM MAP, GEORGE W. KASKE, AUSTIN CLAIM
COCHISE CO. ARIZONA

RECEIVED
AUG 29 1956

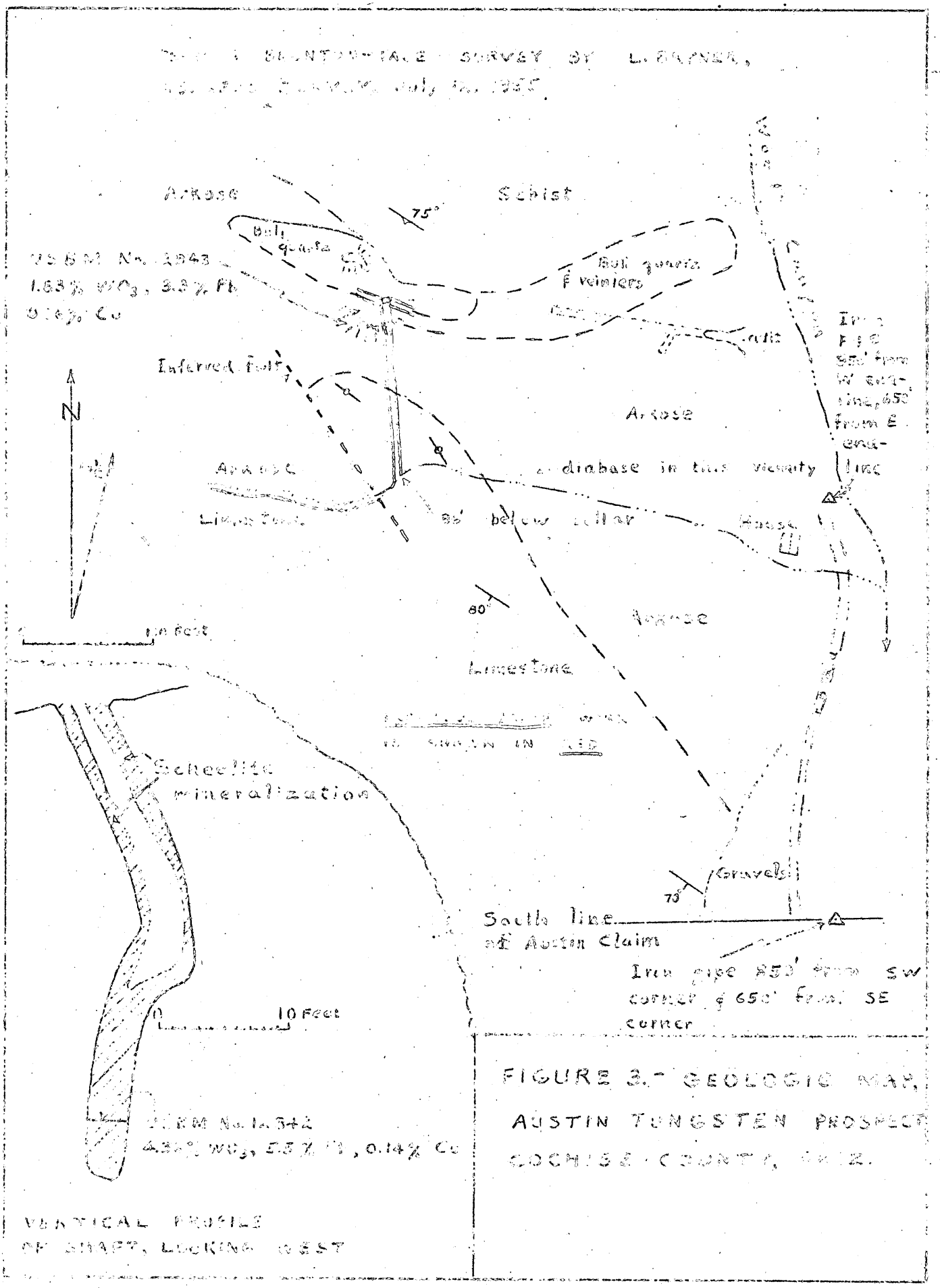


FIGURE 3.- GEOLOGIC MAP, AUSTIN TUNGSTEN PROSPECT COCHISE COUNTY, ARIZ.

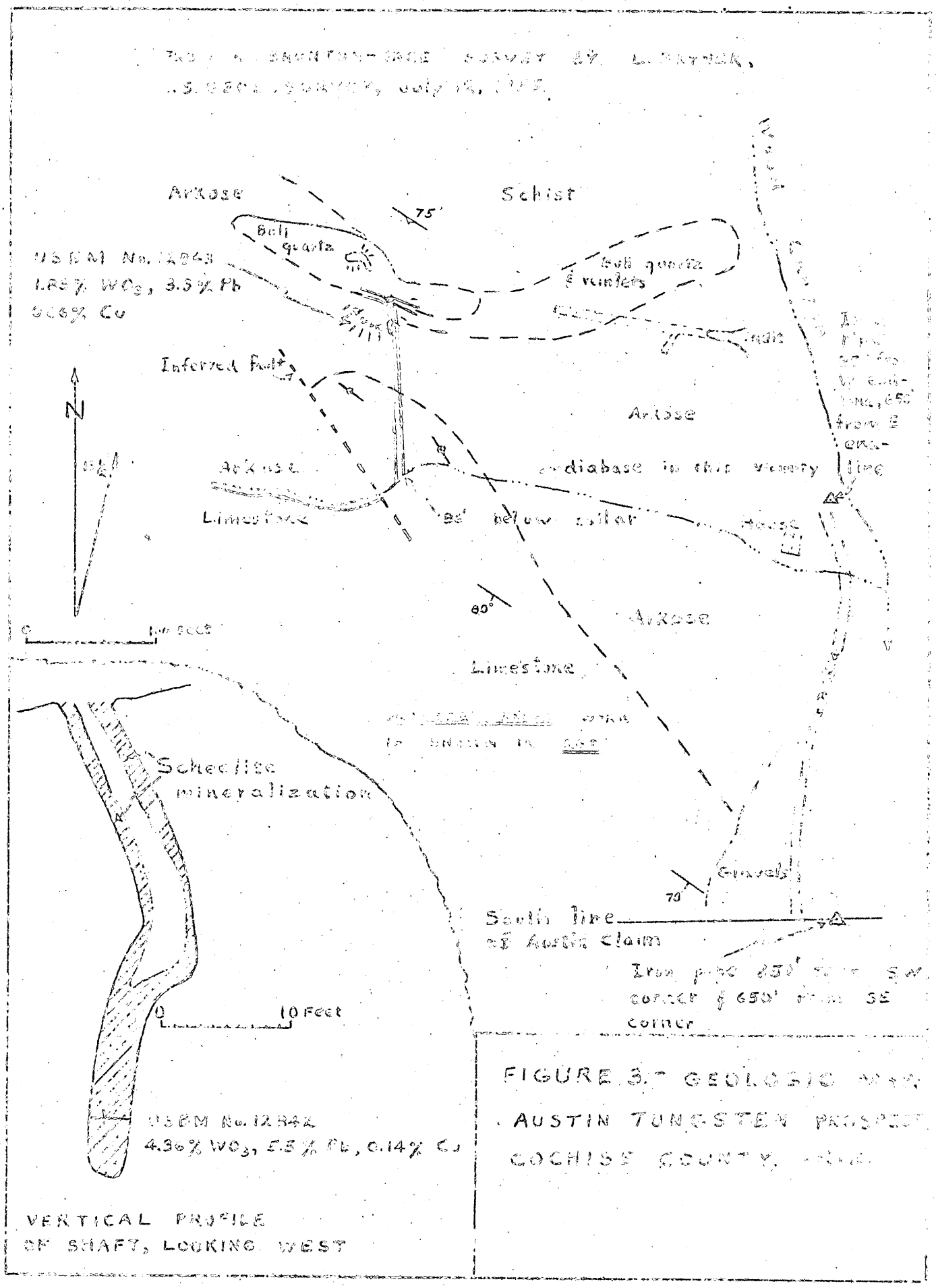


FIGURE 3.— GEOLOGIC MAP, AUSTIN TUNGSTEN PROSPECT, COCHISE COUNTY, ARIZ.

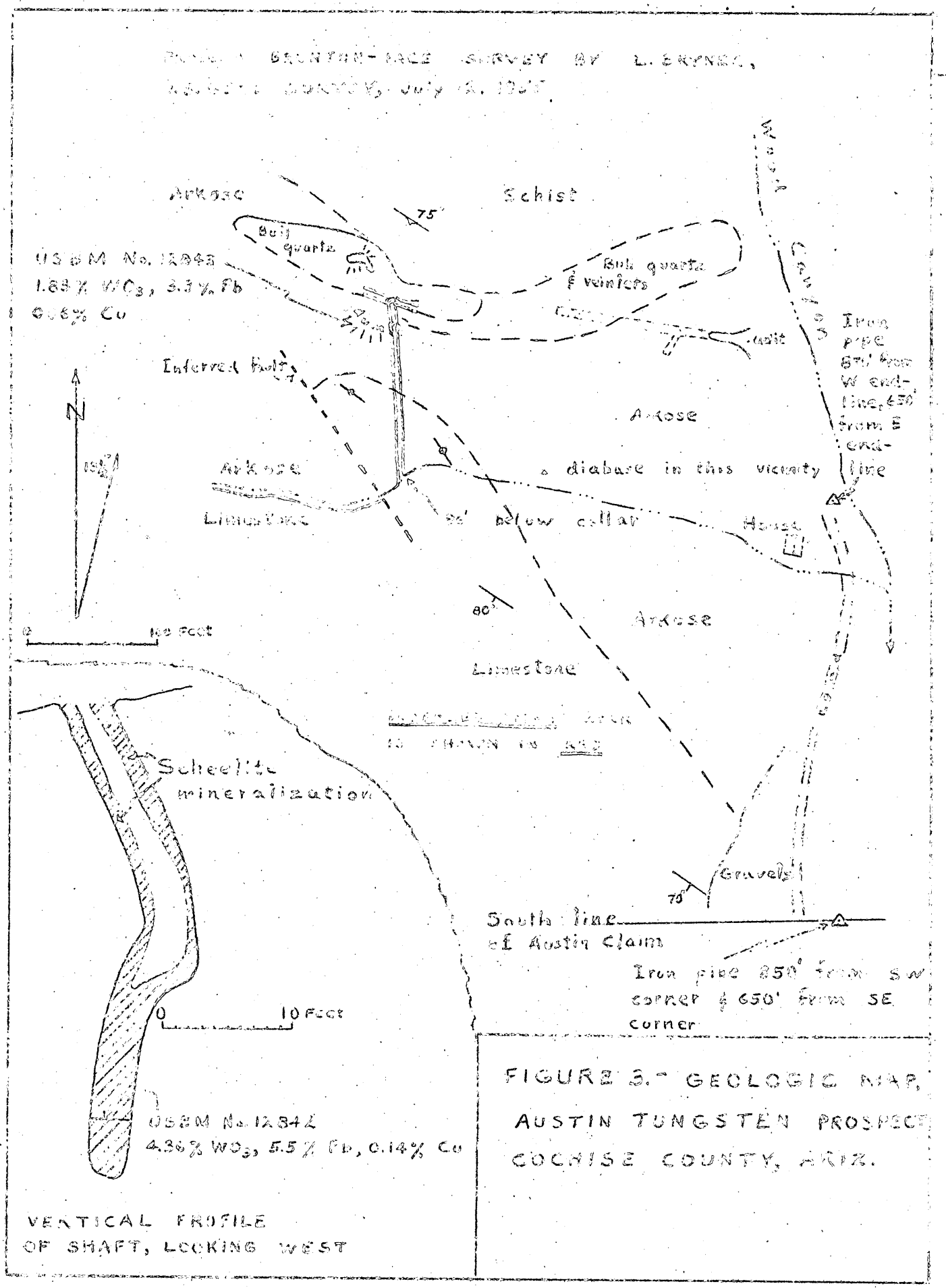


FIGURE 3.- GEOLOGIC MAP, AUSTIN TUNGSTEN PROSPECT COCHISE COUNTY, ARIZ.

BMEA 5252

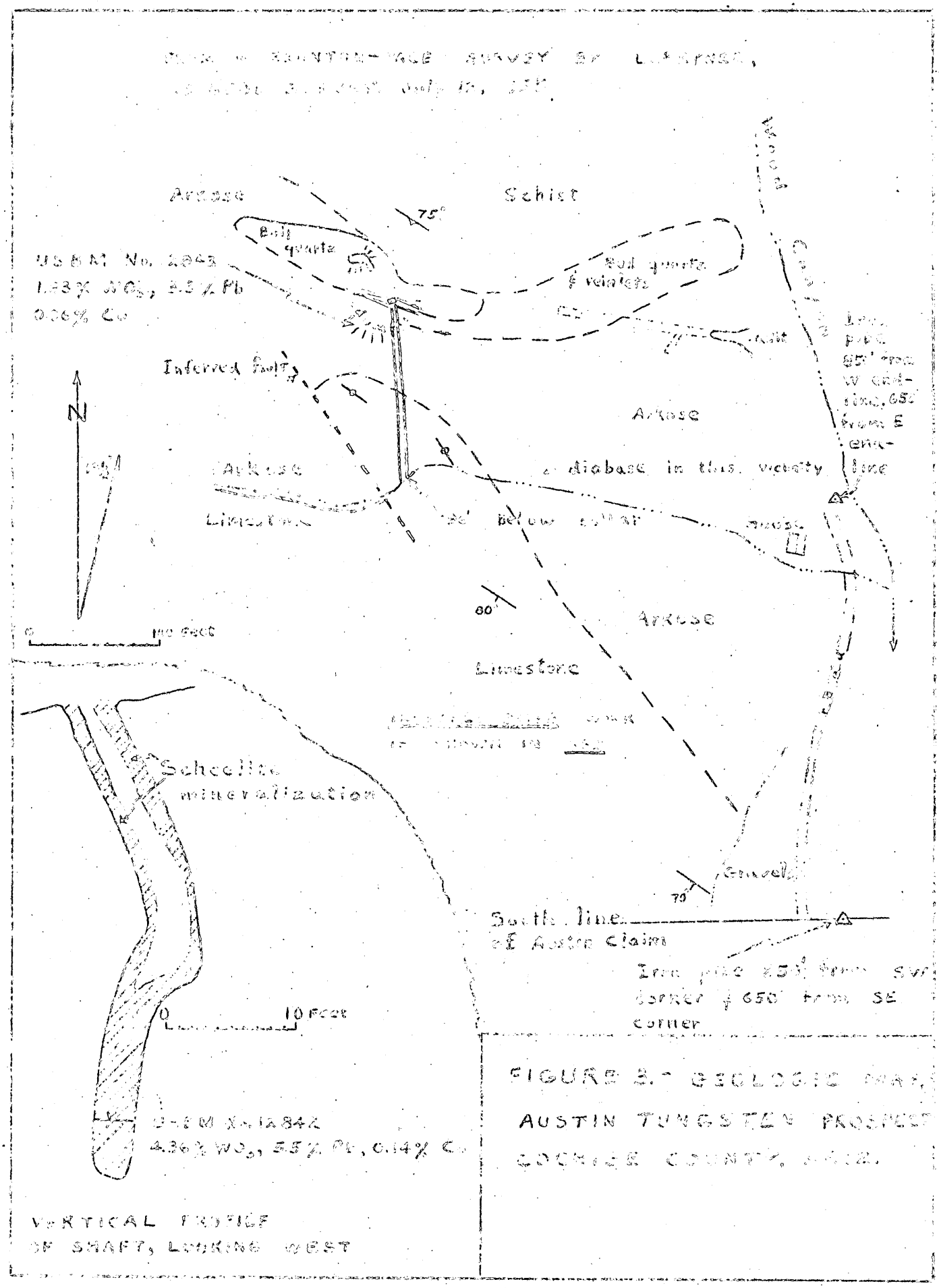
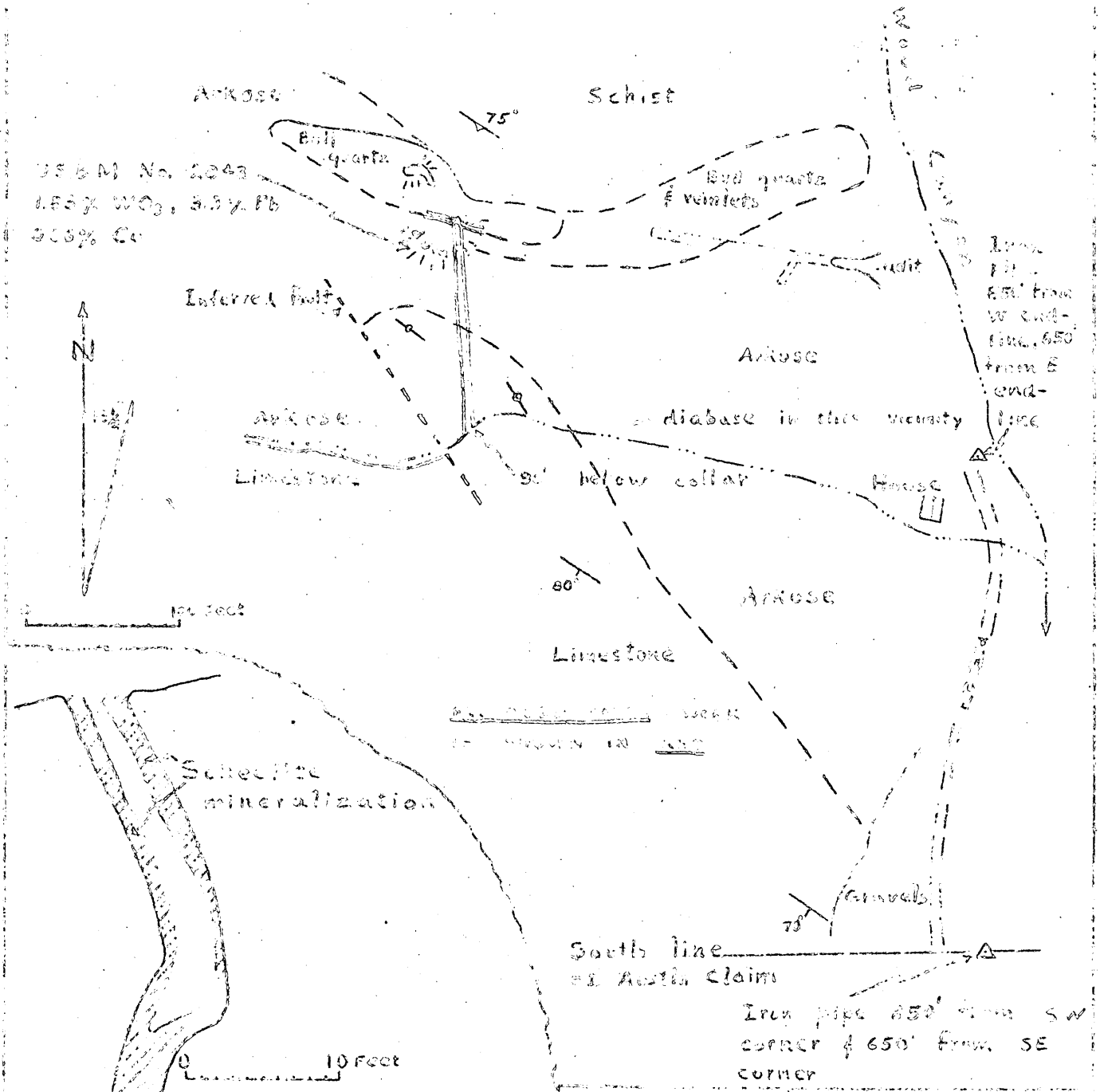


FIGURE 3.- GEOLOGIC MAP, AUSTIN TUNGSTEN PROSPECT COCHISE COUNTY, ARIZ.

RECEIVED
AUG 29 1955



VERTICAL PROFILE OF SHAFT, LOOKING WEST

FIGURE 3.- GEOLOGIC MAP, AUSTIN TUNGSTEN PROSPECT COCHISE COUNTY, ARIZ.

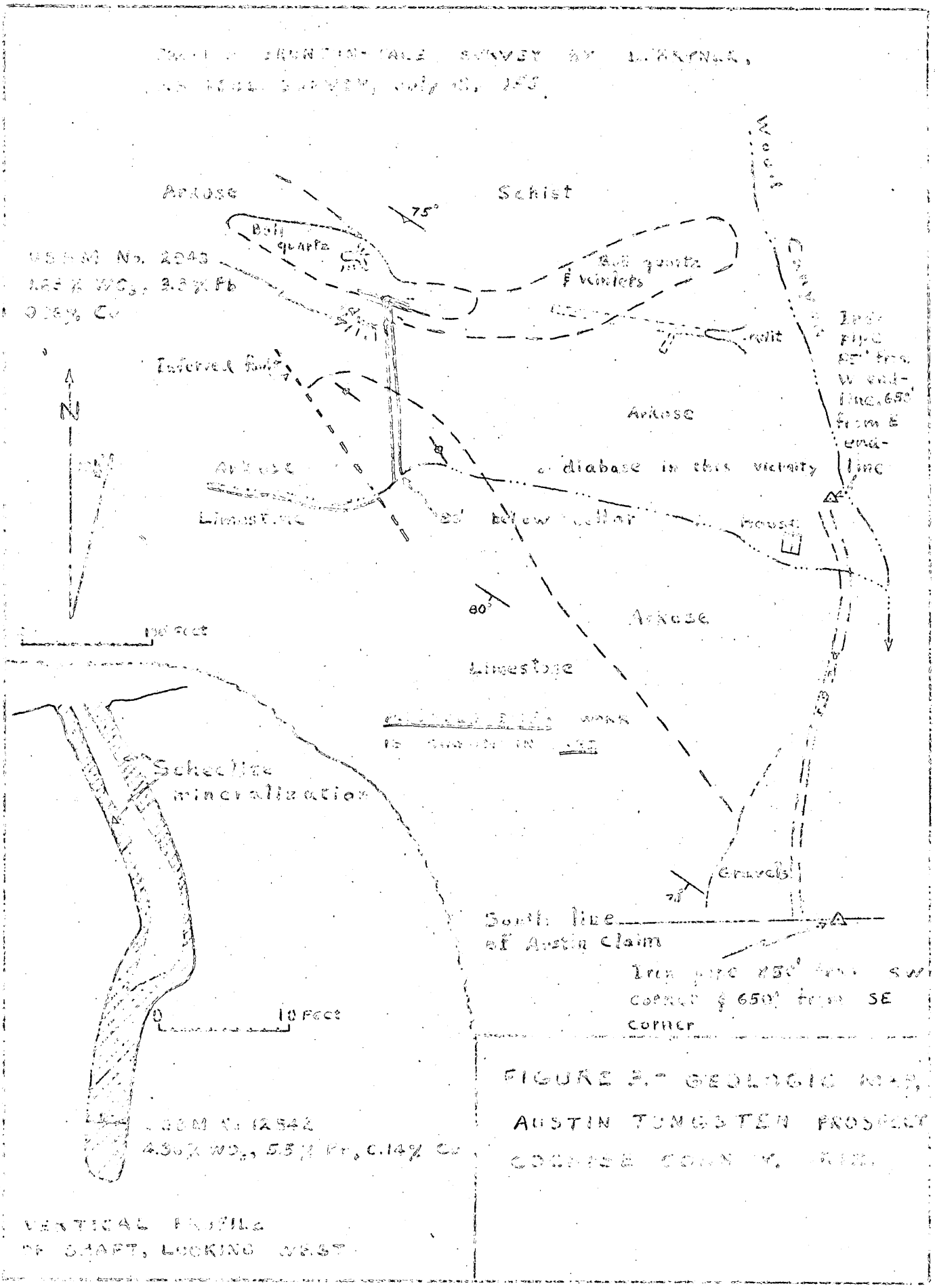


FIGURE 3.- GEOLOGIC MAP, AUSTIN TUNGSTEN PROSPECT, COCHISE COUNTY, ARIZ.

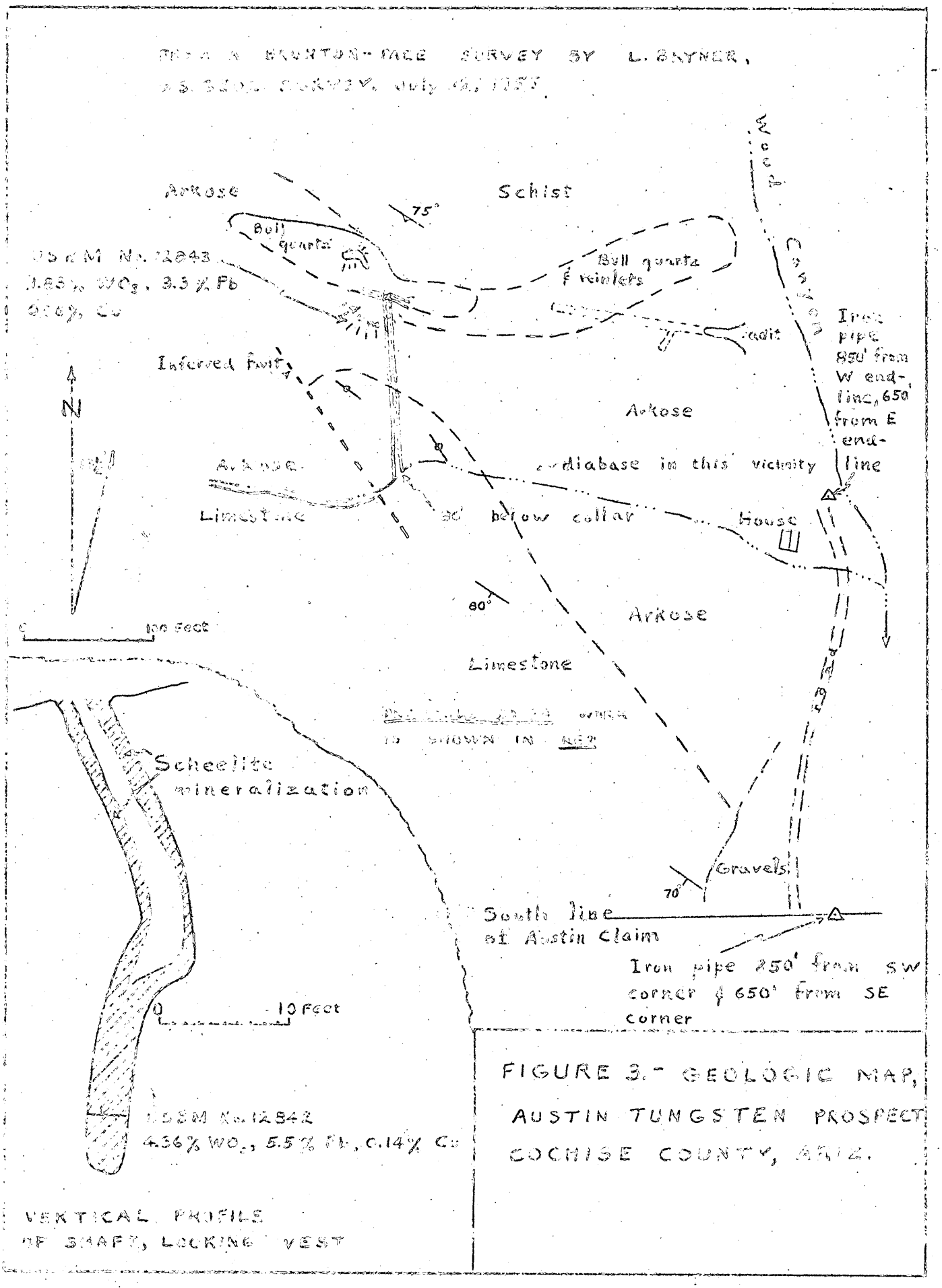


FIGURE 3.- GEOLOGIC MAP, AUSTIN TUNGSTEN PROSPECT COCHISE COUNTY, ARIZ.

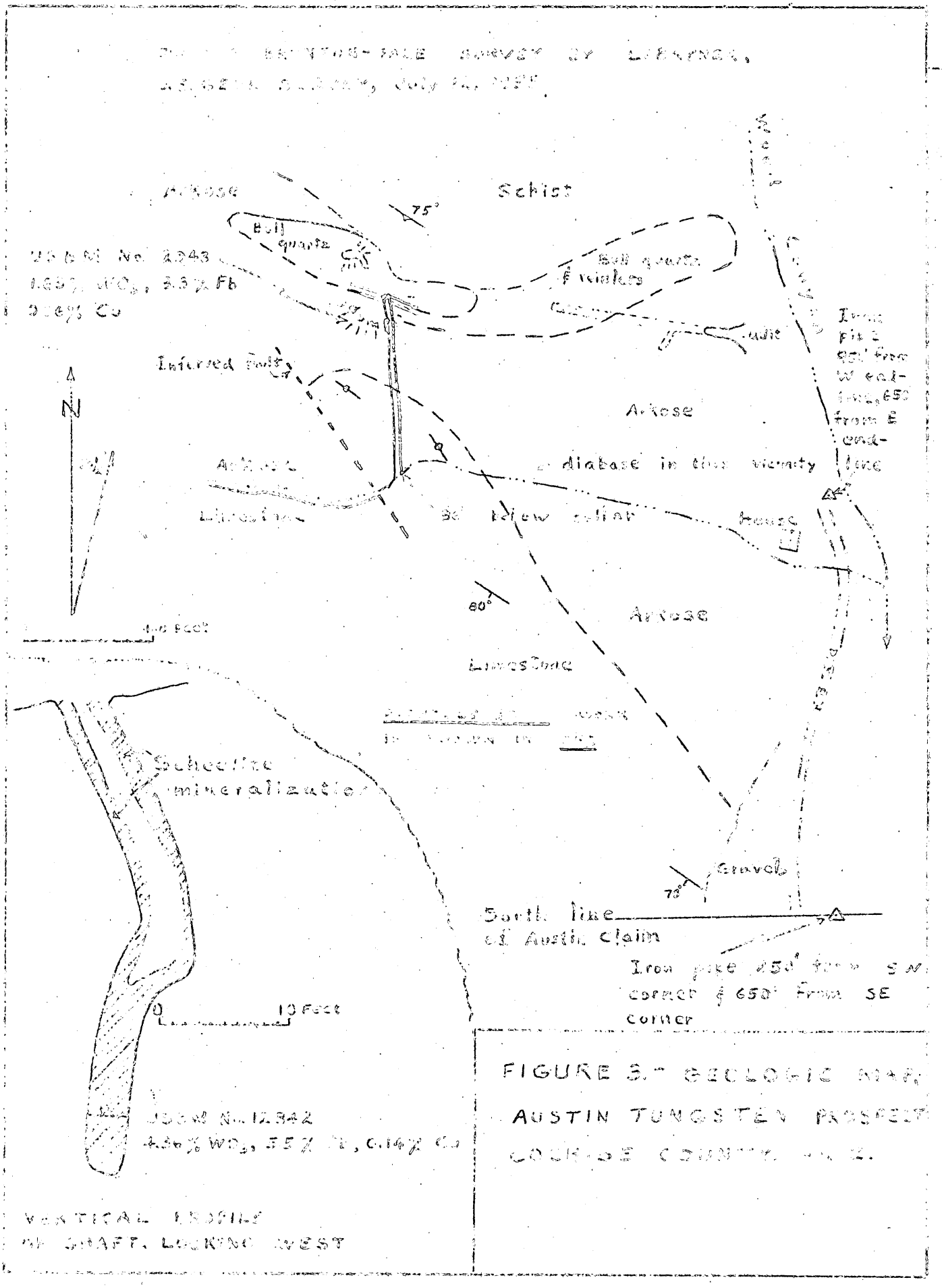
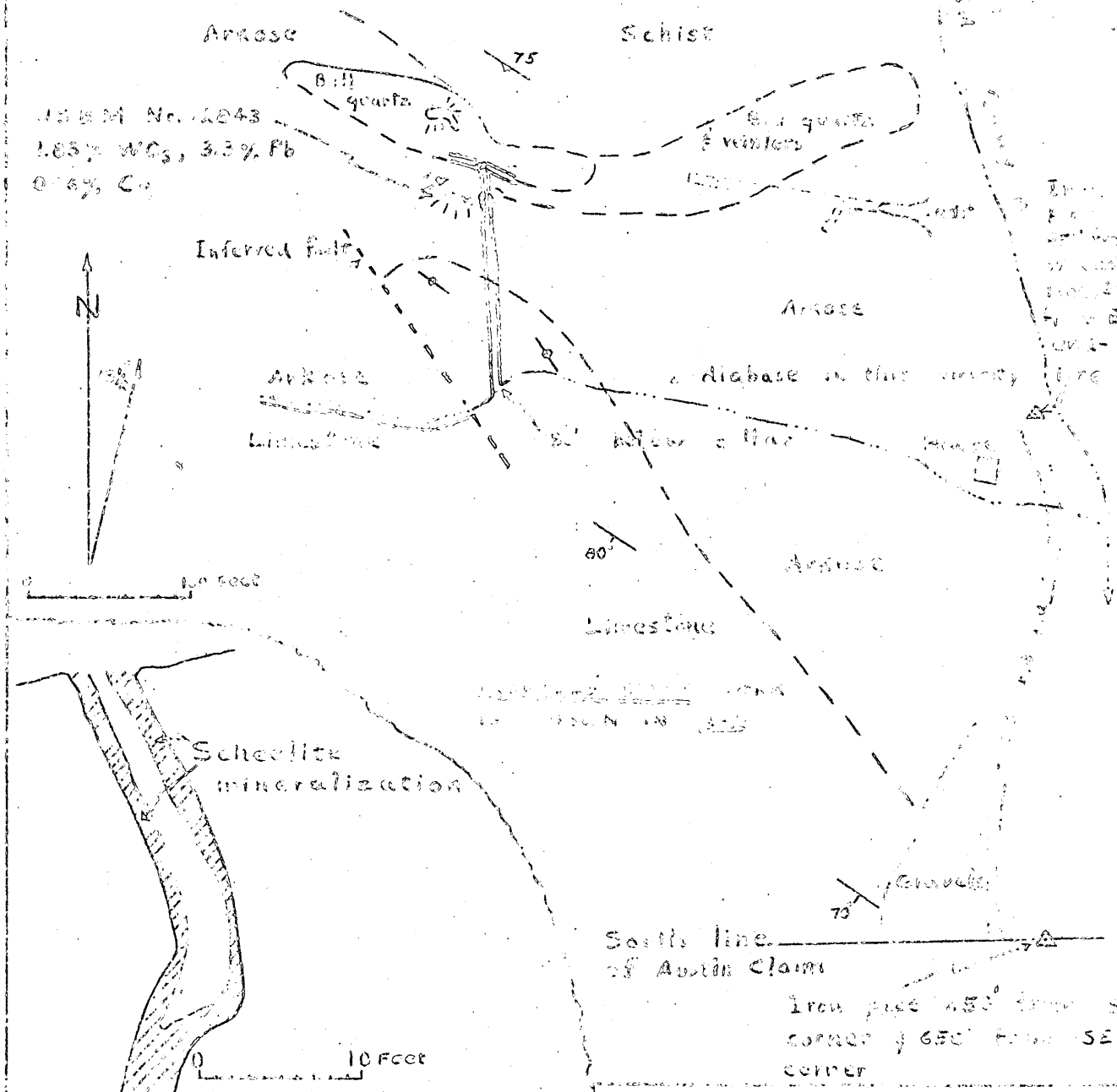


FIGURE 3.- GEOLOGIC MAP, AUSTIN TUNGSTEN PROSPECT COCHISE COUNTY, ARIZ.



VERTICAL PROFILE
OF SHAFT, LOOKING WEST

FIGURE 3.- GEOLOGIC MAP
AUSTIN TUNGSTEN PROSPECT
[illegible] COUNTY, [illegible]

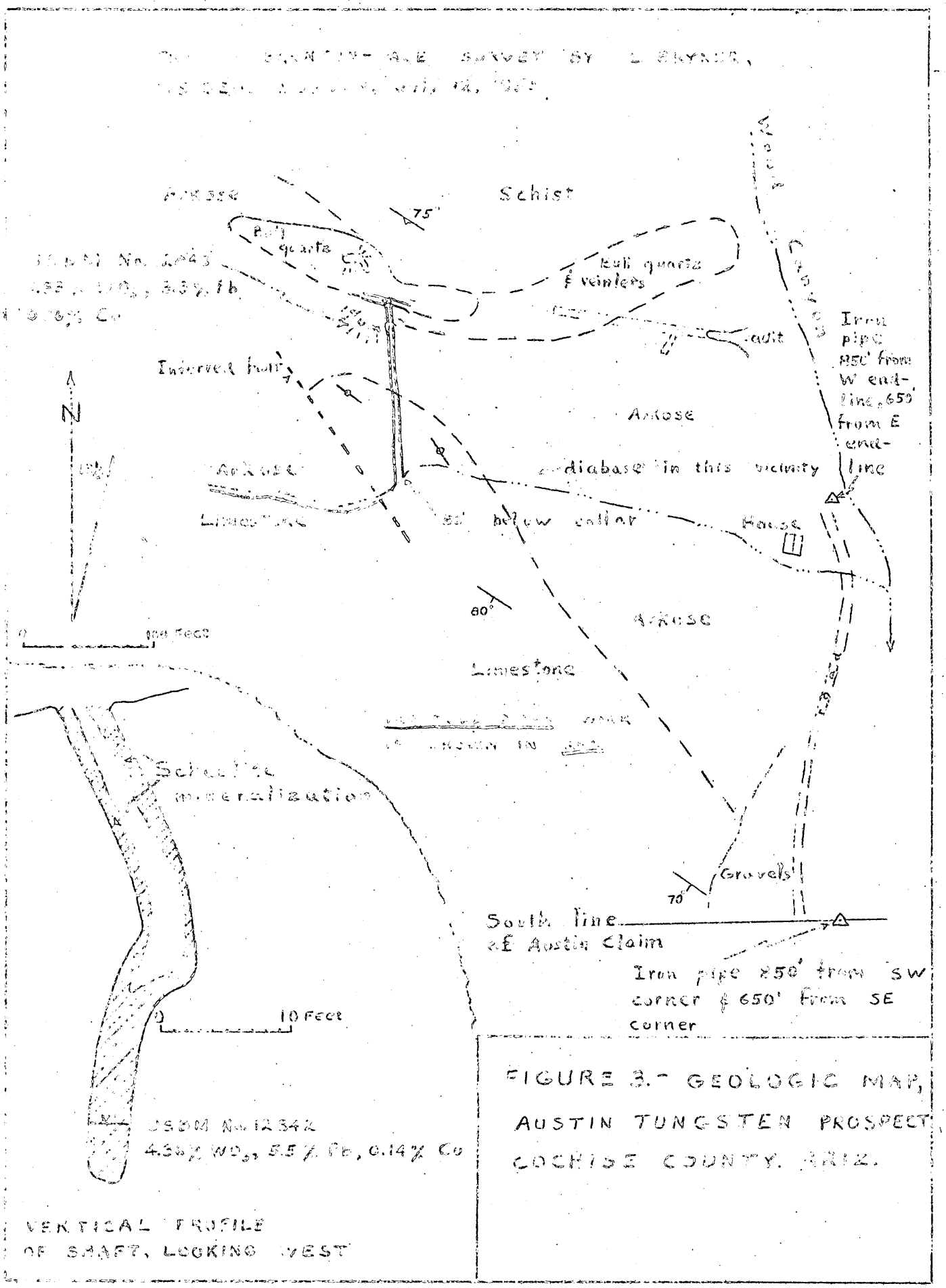


FIGURE 3.- GEOLOGIC MAP, AUSTIN TUNGSTEN PROSPECT, COCHISE COUNTY, ARIZ.

RECEIVED
AUG 29 1955

400

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

RECEIVED
JUL - 5 1955

224 New Customhouse
Denver 2, Colorado

June 28, 1955

Memorandum

To: W. R. Storms (w/brochure)
J. N. Fick

From: Field Team, Region III

Subject: Docket DMEA-3852 (Tungsten), George W. Kaske, Austin claim, Cochise County, Arizona

Enclosed is the subject application in the amount of $8,360.00.

The brochure consists of:

1. Form DF-103 and attached answering sheets.

2. A claim map of the Austin Mine.

3. Two assay certificates.

4. A USGS map of Cochise County.

Also attached is a copy of a letter from the Chairman of the Operating Committee and a relevant memorandum from N. E. Nelson.

A field examination and suitable report are required.

W. M. TRAVER

W. M. Traver

Enclosures

HMC:pw

cc: Sec.Op.Comm. (2)
Harshman
Subject
Chron

E. N. Harshman

E. N. Harshman

DMEA Field Team, Region III

JUN 23 1955

Mr. W. M. Traver, Executive Officer
DMEA Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 3852 - Tungsten
George W. Kasko
Austin claim
Cochise County, Arizona

Dear Mr. Traver:

The above documented application for exploration assistance is being referred to your office for a field examination of the property.

Two copies of a relevant memorandum dated June 16, 1955, by N. E. Nelson, Geological Survey, are enclosed for your information.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosure

TLChapman:foc 6-21-55
cc to: Docket
Code 400
Admr. Read. File
Operating Comm.
FT. REG. III
Messrs. Holliday, USBM
Kiilsgaard, USGS

APPROVED:

J. H. Hedges

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

JUN 23 1955

Mr. George W. Kesler
P. O. Box 55
Sahuarita, Arizona

Re: Docket No. DMEA 3852 - Tungsten
Austin claim
Cochise County, Arizona

Dear Mr. Kesler:

The above docketed application for exploration assistance for tungsten ores has been reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration and referred to Mr. W. M. Trever, Executive Officer, DMEA Field Team, Region III, Denver 2, Colorado, for a field examination of the property.

Any assistance that you can give the members of the Field Team will be appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

TLChapman:foc
6-21-55
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. REG. III
Messrs. Holliday, USBM
Killsgaard, USGS

4022

IN REPLY REFER TO:

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

RECEIVED
JUN 17 1955

June 16, 1955

Re: DMEA-3852
C. W. Kaske
Austin Mine
Cochise Co., Ariz.
$8,300 - Tungsten

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

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

Subject: Review of application

I have no information on this property.

The geologic relations are favorable for the occurrence of scheelite, if as shown on the vertical cross section, and might continue so to the level of the proposed crosscut.

The "bite" of the crosscut tunnel would not be large, but 'staying with' the ore showing in shaft is believed to be the safer way.

Referral to the Field Team is suggested.

N. E. Nelson

N. E. Nelson

NENelson:hlm
G-6/16/55

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
Robert Holliday, 3513 Interior

400

April 23, 1955

Memorandum

To: Acting Assistant Solicitor, Defense Minerals

From: Iron and Ferro-Alloys Division, DMEA

Subject: Preparation of proposed contract
Docket No. DMEA 3852 - Tungsten
George W. Kaske
Austin claim
Cochise County, Arizona

Transmitted herewith is a rough draft of a proposed contract for your use in preparing the final draft. Copies of the three maps referred to in the draft are attached hereto.

W. S. Martin

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

Attachments

TLChapman/ls
9/23/55

cc: Docket
Code 400

MF-200A
(Revised June 1954)

Docket No. DMEA 3852

Commodity Tungsten

Contract No. Idm-E

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
EXPLORATION PROJECT CONTRACT[1]
(Short Form)

It is agreed this ..... day of ....., 195...., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] George W. Kaske

whose mailing address is P. O. Box 55, Sahuarita, Arizona

hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200A), the attached Exhibit "A," Annex I, and ~~maps~~.

The Operator shall not transfer or assign this contract or any right thereunder without the written consent of the Government.

ARTICLE 2. *Operator's property rights.*—(a) The land which is the subject of this contract (hereinafter called "the land") is in the State of Arizona, County of Cochise, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] owner of [5] all rights in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of ~~a~~[6] location, [7] recorded in Book 104, page 188, official records of said County; and

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: None

(c) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above, and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title of the land (lessor, seller, optionor, etc.), are attached, as follows: .....

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] Insert name, and if an organization, its nature (corporation and place of incorporation, partnership with names of partners, etc.).
[3] State on a separate sheet marked "Annex I" the legal description or enough to identify the property, particularly excluding any areas from which the production is not to be subject to the Government's percentage royalty.
[4] Insert "owner," "lessee," "contract purchaser," "locator," etc.
[5] Insert "the entire interest," "the mineral rights," "an undivided one-third," etc.
[6] Insert "deed," "lease," "contract," "location notice," "patent," etc.
[7] If not recorded, so indicate by inserting "un."

16—70616-1

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 7, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 7(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Tungsten The work to be performed is described in Exhibit "A." The Operator on or before ..... shall commence the work, and on or before April 30, 1956 (unless the Operator's obligation to complete the work is terminated—see Article 8) shall complete the work.

ARTICLE 4. *Performance of the work.*—(a) *Operator's responsibility.*—The work shall be performed with reasonable diligence, efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for liability insurance covering employment; and with suitable and adequate equipment, facilities, materials, supplies, and labor, to bring it to completion within the time fixed.

(b) *Government may inspect.*—The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract, and also after a certification of discovery or development to inspect production operations and underground workings. The operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 5. *Contribution by the Government.*—A fixed cost for each unit of work to be performed (per foot of drifting, per foot of drilling, per hour of operations, etc.) is hereby agreed upon, and is set forth in Exhibit "A" in connection with the estimated total cost of the project in the sum of $10,000.00 The Government will contribute 75 percent of the fixed unit costs as work is performed, in a total sum not in excess of $7,500.00: *Provided,* That until the Operator has rendered to the Government his final report, and any final 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 10 percent of the estimated total cost of the work. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 6(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. To the extent that excesses over fixed unit costs or any excess over the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such excesses for his own account without contribution by the Government. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine any pertinent books, documents, papers, and records of the Operator. All of the Operator's vouchers and records and accounts relating thereto and the Government's payments thereof remain subject to adjustment until final audit by the Government.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing a detailed statement of units of work performed during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and the fixed unit costs incurred for each type of work; and (3) a Narrative Report of the work

performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

(c) *Final report.*—Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with five copies of a final report (in addition to the final progress report and voucher). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and the unit costs thereof.

(d) *Report of sales.*—The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's percentage royalty relates, such as copies of smelter or concentrator settlement sheets, and certified accounts of production and sale or other disposition of production.

(e) *Compliance with requirements.*—If in the opinion of the Government any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the making or completion of such with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records or accounts.

ARTICLE 7. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after a sufficient final report and final account (see Article 6) has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

(b) *Royalty on production.*—The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, within a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

(c) *Basis for computation.*—The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f. o. b. point); *except,* that charges of *the buyer* arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by *the buyer,* sampling and assaying to determine the value of the production sold, and freight paid by *the buyer* to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the crude ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

(d) *Unsold production.*—If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

(e) *Percentages of royalty.*—The percentages of the Government's royalty shall be as follows:

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

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

(f) *Time for computation and payment.*—The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be, as above provided in this article.

(g) *Lien for payment.*—To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(h) *Notice to purchasers.*—The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

(i) *No obligation to produce.*—Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(j) *Government not obligated to buy.*—Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

ARTICLE 8. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The remedy provided for the Government in this paragraph "(b)" is in addition to any other remedy provided in this contract, and in addition to any other remedy the law may provide for breach of contract.

(c) The giving of any notice by the Government under the provisions of this Article 8 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and such rights shall be fully preserved.

ARTICLE 9. *Notices to be given by the Government* may be delivered to the Operator, or may be sent by registered mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 10. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 11. *Changes and added provisions.*—

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

.....
(Operator)

By .....

By .....

.....

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—70618-1

EXPLORATION PROJECT CONTRACT
GEORGE W. KASKE
DOCKET NO. DMEA 3852

ANNEX NO. 1

The land referred to in Article 2 of the contract form consists of one unpatented lode mining claim, recorded in Book 104, page 188, Cochise County, Arizona.

This claim is located in the Dos Cabezas Mining District, Section 30, T. 14 S., R. 28 E., G. S. R. B. and M. and is shown on a map, Figure 2, outlined in green, attached hereto and made a part hereof.

draft

EXPLORATION PROJECT CONTRACT
GEORGE W. KASKE
DOCKET NO. DMEA 3852

EXHIBIT "A"

Description of the Work

1. By bulldozing, improve approximately 1 mile of road and build approximately 150 feet of access road to proposed adit portal, and level area for portal site.

2. Drive a crosscut adit approximately 160 feet to a point under shaft and drift approximately 100 feet on vein (Figures 2 and 3), the direction or directions to be determined by the extent of mineralization. Crosscuts and drifts to be not less than 4½ X 6½ feet in the clear and timbered where necessary.

3. Raise approximately 40 feet to connect with shaft; raise to be not less than 4 X 7 feet in the clear and timbered to the extent necessary for passage and safety.

4. Assay approximately 30 samples for tungstic acid (WO_3). Samples shall be taken at 5-foot intervals in mineralized zones.

draft

Estimated Cost of the Project

Fixed Unit Costs

1.	Bulldozing, 20 hours at $14.00/hr. To include all costs of operation: Operator, transportation, fuel, upkeep, etc.	$ 280.00	
2.	Driving 260 feet of adit and drifts at $32.00/ft.	8,320.00	
3.	Raising 40 feet at $32.00/ft.	1,280.00	
4.	Assaying 30 samples at $4.00/each sample	120.00	
Total estimated cost of project			$10,000.00
Government participation, 75 percent			$ 7,500.00

Three maps accompany and are made a part of this contract: Figure 1, Index map showing location of property; Figure 2, Austin claim outlined in green; Figure 3, Geologic map showing location of proposed work.

Draft