DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

Idm-E NO. 653

DMEA NO. 3078

Application
- [ ] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [X] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [X] Certification of Discovery
- [ ] Closing Letter
- [X] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [X] Contract Amendments
- [X] Contract with all exhibits and annexes & Power of Attorney
- [ ] Owner's Consent to Lien and Subordination Agreement
- [X] Application and attachments

Right Side

- [X] Project summary (final)
- [X] Work Completed analysis (final)

All other material filed in chronological order including the following reports if checked:

- [X] Field Team Semi-Annual Report for Certified Project
- [X] Final Field Team Report (Tab)
- [X] Operator's Final Report (Tab)
- [X] Interim Field Team Reports
- [X] Operator's monthly reports and all attachments
- [X] On-site Exam Report (Tab)
- [X] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No. _____ : Reports
- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

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

Folders No. _____ : Maps (Use pocket folder or envelope)

Folders No. _____ : Settlement Sheets

Folders No. _____ : Drill Logs

Folders No. _____ : Royalty material

17963

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Washington office pertaining to Contract Idm-E633, Docket DMEA-3078 (thorium), dated January 4, 1954, with

George D. Schweigert and Pete Cowan
780 Magnolia Street
Denver 20, Colorado

for the purpose of determining the amount of royalty payable to the U. S. Government on sales of minerals from property referred to as the GW and Antrim Claims, located in Custer County, Colorado, during the period June 16, 1959, through April 13, 1962.

A certification of discovery or development was issued on September 20, 1954, and, in accordance with Article 6 and Annex I of the contract, royalty is payable on all minerals produced from the land described in Article 2 of the contract for a period of 10 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. A Report of Review dated May 14, 1954, indicated accepted costs under the exploration contract amounting to $2,886.95 with the Government's contribution on a 90 percent basis being $2,598.26.

The status of the project, the scope of review, and the reasons therefor are stated on page 2.

This review established no sales subject to the Government's royalty subsequent to the period covered by a prior Report of Royalty Review which also found no sales subject to the Government's royalty through June 15, 1959. Accordingly, as of April 13, 1962, the royalty account of this project was found to be:

Total Royalty Payable	$ -0-
Total Royalty Paid	-0-
Balance of Royalty Due	$ -0-

May 7, 1962

E. D. Talbert, OME Auditor

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

This contract provides that the Operators or their successors in interest shall pay to the Government a percentage royalty on all minerals produced from the two patented lode mining claims (GW and Antrim) located in secs. 9 and 10, T. 22 S., R. 71 W., 6th P.M., Hardscrabble Mining District. At the time the contract was executed each of the partners held an undivided one-half interest in the property through a tax sale deed from the County. The contract contains the so-called "abandonment" provision.

Exploration work under the contract was completed during April 1954. No minerals were produced during the exploration period. Subsequent examinations of the property and inquiries have disclosed that the property has remained inactive since completion of the exploration work.

On December 30, 1954, the Thorium Development Company (a Colorado corporation with George D. Schweigert as president) acquired 100% ownership of the property through a series of six deeds, as follows:

(1) An undivided 45% interest from George D. Schweigert to the Corporation,
(2) An undivided 20% interest from Pete Cowan to the Corporation,
(3) An undivided 10% interest from George D. Schweigert and Pete Cowan to John L. Schweigert,
(4) An undivided 10% interest from John L. Schweigert to the Corporation,
(5) An undivided 25% interest from Pete Cowan to Aylwin L. Smith, and
(6) An undivided 25% interest from Aylwin L. Smith to the Corporation.

Each of these six deeds included a provision to the effect that conveyance was subject to the Government's rights under the exploration project contract.

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(1) The files indicate that the property has been inactive during the period covered by this review; and
(2) The administrative cost to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Executive Officer, OME Field Team, Region III, Denver, Colorado pertaining to Contract IAm-2653, Docket No. DMRA 3078, dated January 4, 1954, with

George D. Schweigert, 780 Magnolia St., Denver, Colorado, and
Pete Cowan, Westcliffe, Colorado

for the purpose of determining the amount of royalties due the U. S. Government on the sales of Thorium, from property referred to as GW and Antrim Lodes, located in Custer County, Colorado, during the period January 4, 1954 to June 15, 1959.

A Certification of Discovery or Development was issued on September 20, 1954 and accordingly royalty is payable on all production from the land described in Article 2 of the contract for a maximum period of 10 years from the date of the contract. A Report of Review in lieu of Final Cost Audit dated May 14, 1954, indicated accepted costs under the exploration contract amounting to $2,886.95, with the Government's contribution on a 90 percent basis being $2,598.26.

No royalty has been paid to the Government to date in connection with this contract.

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(a) According to the Field Team's Semi-Annual Report of certified project for the period July 1, 1954 to December 31, 1954, operation ceased about April 30, 1954; no ore has been shipped since January 4, 1954, (The date of the exploration contract). Subsequent semi-annual reports of the Field Team during the period January 1, 1955 to December 31, 1958, indicate the property inactive and no operations or ore shipments are anticipated in 1959.

(b) The administrative costs to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

June 15, 1959

Donald T. Finch
Donald T. Finch
OME Auditor

700

File Copy
Surname

Ching
Ellis
Hoffland
Chambers
Hedges
Kilsgaard
Selfridge

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

INTERIOR DEPT.
SEP 7 - 1954
SOLICITOR

CERTIFICATION BY THE UNITED STATES OF AMERICA OF A DISCOVERY OR DEVELOPMENT UNDER AN EXPLORATION PROJECT CONTRACT

To: Mr. George D. Schweigert
780 Magnolia Street
Denver 20, Colorado
and
Mr. Pete Cowan
Westcliffe, Colorado

Pursuant to the provisions of Exploration Project Contract No. Idm-E653, dated January 4, 1954 (Docket No. DMEA-3078), hereinafter called the "Contract," between you and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien thereon and on the land described in the Contract, the Government considers and therefore certifies that discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

Trenching, shaft sinking, and crosscutting on the outcrop of one or more veins in a shear zone on the property described in Article 2 of the Contract resulted in the discovery of a deposit of thorium ore of significant proportions.

Dated: SEP 2 0 1954

THE UNITED STATES OF AMERICA

MChing:ep 9-3-54

By Frank E. Johnson
ACTING Administrator, Defense Minerals Exploration Administration
Hoffland

Copy to: Docket
Administrator
Admr's Reading File
Operating Committee
Field Team, Reg. IV (2)
Finance Officer
Mr. Chambers
Mr. J. H. Hedges, Rm. 3641
Mr. Thor H. Kilsgaard, Rm. 5227
Mr. J. O. Hosted, 3210, GSA
Code 700 (Division)
Mr. Ching
F. E. Johnson

5/21

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

George D. Schweigert, 780 Magnolia St., Denver, Colorado
and Pete Cowan, Westcliffe, Colorado
a joint venture

pertaining to Exploration Project Contract No. Idm-E653, Docket No. DMEA 3078, including Amendment Nos. 1 and 2, for the months of February 1954 to April 1954, inclusive, covering a project for the exploration of Thorium on property, known as GW and Antrim Lodes located in Custer County, Colorado.

My review included an examination of the Monthly Reports (Form MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, consultation with the Government's representative who visited the property, and a determination of the reasonableness and propriety of the costs.

This review was made in lieu of a final audit of the Operator's accounts and records for the following reason:

All of the costs incurred were under a contract provision for payment by the Government on the basis of agreed estimated costs of units of work actually performed.

The review disclosed the following facts in regard to the amount paid or to be paid the contractor:

Total cost as billed by Contractor	$2,886.95
Exceptions	-0-
Total Accepted Cost	$2,886.95

The contract calls for a 90 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Two Thousand Five Hundred Ninety-Eight and 26/100ths Dollars,

$2,598.26

is considered valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

T. H. Brading, Auditor

May 14, 1954

Final Audit Report
of Review

No. 2

AMENDMENT OF CONTRACT: No. Idm-E653

Contract Docket No. DMEA 3078, dated January 4, 1954, between the United States of America and a joint venture consisting of George D. Schweigert and Pete Cowan is hereby amended as follows, effective April 1, 1954:

> Referring to EXHIBIT "A" attached to Exploration Project Contract Form MP-200(A) (February 1952), captions "Description of the Work" and "Estimated Costs of the Project" and with further reference to Amendment No. 1 dated March 10, 1954, which amended said EXHIBIT "A" caption "Description of the Work", said EXHIBIT "A" captions "Description of the Work" (amended) and "Estimated Costs of the Project" are further modified and amended as follows:
>
> > In lieu of performing 125 feet of surface trenching and an aggregate of 20 feet of crosscutting from the bottom of the shaft, an aggregate of 89 feet of surface trenching and 30.5 feet of crosscutting from the bottom of the shaft will be performed instead, at the rates established in said EXHIBIT "A" for that type of work, total cost of the two types of work not to exceed $2,166.00.

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

Dated APR 13 1954

GEORGE D. SCHWEIGERT
and PETE COWAN

By George D. Schweigert
George D. Schweigert, Agent

UNITED STATES OF AMERICA

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

Rec'd 5/25/54

No. 1

AMENDMENT OF CONTRACT: No. Idm-E653

Contract Docket No. DEx 3073, dated January 4, 1954, between the United States of America and a joint venture consisting of George D. Schweigert and Pete Cowan is hereby amended as follows, effective as of the date of said contract:

> Referring to EXHIBIT "A" attached to Exploration Project Contract Form MF-200(A) (February 1952) caption "Description of the Work", second paragraph, delete the last sentence beginning with the words "From the bottom of the shaft..." and in lieu thereof substitute the following:
>
> "From the bottom of the shaft crosscut northerly and southerly approximately at right angles to the strike of the vein to expose the full width of the vein, total aggregate crosscutting in both directions not to exceed 20 feet. The extent of crosscutting in either direction must be acceptable to the Government."

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

Dated MAR 10 1954

GEORGE D. SCHWEIGERT AND PETE COWAN

By George D. Schweigert
George D. Schweigert, Agent

UNITED STATES OF AMERICA

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

Recorded [illegible] 9:30 o'clock A.M., March [illegible], 1955

Reception No. 86447 Elmer Miller Recorder

[illegible] day of [illegible], 19[illegible]

[illegible] year of our Lord one thousand nine hundred [illegible], between

[illegible]

of the [illegible] County of [illegible] and State of [illegible], party

[illegible] part, and

[illegible] a Colorado corporation [illegible]

of the [illegible] County of [illegible] and State of Colorado, party

of the second part:

WITNESSETH, that the said party [illegible] of the first part, for and in consideration of the sum of [illegible] ($[illegible]) and [illegible] consideration [illegible] Dollars,

[illegible] in hand paid by the said party [illegible] of the second part, the receipt whereof is hereby [illegible] acknowledged [illegible] granted, bargained, sold, remised, released and forever quit-claimed, and by these presents do [illegible] grant, bargain, sell, remise, release and forever quit-claim, unto [illegible] said party [illegible] of the second part, [illegible] heirs and assigns, the following described property, [illegible] lying and being in [illegible] County of [illegible], and State of Colorado, to-wit:

[illegible]

TOGETHER with all the dips, spurs, and angles, and all the metals, ores, gold and silver-bearing quartz, rock and earth therein, and all the rights, privileges and franchises thereto incident, appendant and appurtenant or herewith usually had and enjoyed; and all and singular the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining, and the rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever, as well in law as in equity, of the said party [illegible] of the first part, of, in or to the said premises, and every part and parcel thereof, with the appurtenances.

TO HAVE AND TO HOLD, all and singular, the said premises, together with the appurtenances and privileges thereto incident, unto the said party [illegible] of the second part [illegible] heirs and assigns forever.

IN WITNESS WHEREOF, The said party [illegible] of the first part [illegible] hereunto set [illegible] hand [illegible] the day and year first above written.

Signed, sealed and delivered in the presence of: [illegible]

[illegible] (Seal)

[illegible] (Seal)

STATE OF COLORADO, Texas
County of Hansford } ss.

The foregoing instrument was acknowledged before me this 10th day of January, [illegible] by Sylvia L. Smith.

[illegible] March 8, [illegible], 19[illegible]. Witness my hand and official seal.

[illegible]

[illegible]

see J. W. Townsend memo 2/4/60

Recorded at ..... o'clock ..... M., ...

Reception No. ..... Recorder

Copy

CORRECTION DEED

THIS INDENTURE, Made this 5th day of February, in the year of our Lord one thousand nine hundred fifty-five, between

Pete Cowan

of the County of Custer and State of Colorado, party of the first part, and

Aylwin L. Smith

of ~~the~~ Houston County of Harris and State of ~~XXXXXX~~ Texas, party of the second part;

WITNESSETH, That the said party of the first part, for and in consideration of the sum of Ten Dollars ($10.00) and other valuable consideration ~~Dollars~~

to him in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, has granted, bargained, sold, remised, released and forever quit-claimed, and by these presents does grant, bargain, sell, remise, release and forever quit-claim, unto the said party of the second part, his heirs and assigns, the following described property, situate, lying and being in Hardscrabble Mining District, in the County of Custer, and State of Colorado, to-wit:

Undivided twenty-five per cent (25%) interest in:

G. W. Lode, U. S. Survey No. 16533A and Antrim Lode, U. S. Survey No. 16141, two patented mining claims located in Sections 9 and 10, T. 22 S., R. 71 W., 6th P.M.; and Barite No. 2 Lode, unpatented mining claim located in Sections 7 and 8, T. 22 S., R. 71 W., 6th P.M., the amended location certificate of which is recorded in Book Q, page 310 of the records in the office of the County Clerk and Recorder of Custer County, Colorado.

Subject to rights of United States of America under Exploration Project Contract Idm-E653, dated January 4, 1954. This conveyance is made without warranty of title, express or implied.

This is a correction deed only, executed for the sole purpose of correcting the spelling of the first name of the party of the second part in that certain Mining Deed dated December 30, 1954, and recorded in Book 121, page 193 of Custer County records.

TOGETHER with all the dips, spurs, and angles, and all the metals, ores, ~~gold and silver~~ metal-bearing quartz, rock and earth therein, and all the rights, privileges and franchises thereto incident, appendant and appurtenant, or therewith usually had and enjoyed; and all and singular the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining, and the rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever, as well in law as in equity, of the said party of the first part, of, in or to the said premises, and every part and parcel thereof, with the appurtenances.

TO HAVE AND TO HOLD, all and singular, the said premises, together with the appurtenances and privileges thereto incident, unto the said party of the second part his heirs and assigns forever.

IN WITNESS WHEREOF, The said party of the first part has hereunto set his hand and seal the day and year first above written.

Signed, sealed and delivered in the presence of

Pete Cowan [SEAL]

..... [SEAL]

..... [SEAL]

STATE OF COLORADO, }
County of Custer } ss.

The foregoing instrument was acknowledged before me this 5th day of February A. D. 19 55, by Pete Cowan.

My commission expires MY COMMISSION EXPIRES MAY 12, 1959. Witness my hand and official seal.

Anna M. Hunsaker
Notary Public.

Recorded at ..... o'clock ..... M., ...

Reception No. ....Recorder.

THIS INDENTURE, Made this 30th day of December, in the year of our Lord one thousand nine hundred fifty-four, between

Pete Cowan

of the County of Custer and State of Colorado, party of the first part, and

Thorium Development Company, a Colorado corporation,

of the City and County of Denver and State of Colorado, party of the second part;

WITNESSETH, That the said party of the first part, for and in consideration of the sum of Ten Dollars ($10.00) and other valuable consideration ~~Dollars,~~ 100

to him in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, has granted, bargained, sold, remised, released and forever quit-claimed, and by these presents do es grant, bargain, sell, remise, release and forever quit-claim, unto the said party of the second part, its successors ~~heirs~~ and assigns, the following described property, situate, lying and being in Hardscrabble Mining District, in the County of Custer, and State of Colorado, to-wit:

Undivided twenty per cent (20%) interest in:

G. W. Lode, U. S. Survey No. 16533A and Antrim Lode, U. S. Survey No. 16141, two patented mining claims located in Sections 9 and 10, T. 22 S., R. 71 W. 6th P.M.; and Barite No. 2 Lode, unpatented mining claim located in Sections 7 and 8, T. 22 S., R. 71 W., 6th P.M., the amended location certificate of which is recorded in Book Q, page 310 of the records in the office of the County Clerk and Recorder of Custer County, Colorado.

Subject to rights of United States of America under Exploration Project Contract Idm-E653, dated January 4, 1954. This conveyance is made without warranty of title, express or implied.

TOGETHER with all the dips, spurs, and angles, and all the metals, ores, ~~gold and silver~~ metal bearing quartz, rock and earth therein, and all the rights, privileges and franchises thereto incident, appendant and appurtenant, or therewith usually had and enjoyed; and all and singular the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining, and the rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever, as well in law as in equity, of the said party of the first part, of, in or to the said premises, and every part and parcel thereof, with the appurtenances.

TO HAVE AND TO HOLD, all and singular, the said premises, together with the appurtenances and privileges thereto incident, unto the said party of the second part its successors ~~heirs~~ and assigns forever.

IN WITNESS WHEREOF, The said party of the first part has hereunto set his hand and seal the day and year first above written.

Signed, sealed and delivered in the presence of | Pete Cowan [SEAL]

..... | ..... [SEAL]

..... | ..... [SEAL]

STATE OF COLORADO,
County of Custer } ss.

The foregoing instrument was acknowledged before me this 30 day of December 19 54 by Pete Cowan

My commission expires , 19 . Witness my hand and official seal.

MY COMMISSION EXPIRES MAY 12, 1956

Anna M. Hansen
Notary Public.

Recorded at.....o'clock.....M., ...

Reception No..... .....Recorder.

THIS INDENTURE, Made this 30th day of December, in the year of our Lord one thousand nine hundred fifty-four, between

John L. Schweigert

of the County of Custer and State of Colorado, party of the first part, and

Thorium Development Company, a Colorado corporation,

of the City and County of Denver and State of Colorado, party of the second part;

WITNESSETH, That the said party of the first part, for and in consideration of the sum of Ten Dollars ($10.00) and other valuable consideration ~~XXXXXX~~ 100 Dollars, to him in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, has granted, bargained, sold, remised, released and forever quit-claimed, and by these presents does grant, bargain, sell, remise, release and forever quit-claim, unto the said party of the second part, its successors ~~XXXXX~~ and assigns, the following described property, situate, lying and being in Hardscrabble Mining District, in the County of Custer, and State of Colorado, to-wit:

Undivided ten per cent (10%) interest in:

G. W. Lode, U. S. Survey No. 16533A and Antrim Lode, U. S. Survey No. 16141, two patented mining claims located in Sections 9 and 10, T. 22 S., R. 71 W., 6th P.M.; and Barite No. 2 Lode, unpatented mining claim located in Sections 7 and 8, T. 22 S., R. 71 W., 6th P.M., the amended location certificate of which is recorded in Book Q, page 310 of the records in the office of the County Clerk and Recorder of Custer County, Colorado.

Subject to rights of United States of America under Exploration Project Contract Idm-E653, dated January 4, 1954. This conveyance is made without warranty of title, express or implied.

TOGETHER with all the dips, spurs, and angles, and all the metals, ores, ~~gold and silver~~ metal-bearing quartz, rock and earth therein, and all the rights, privileges and franchises thereto incident, appendant and appurtenant, or therewith usually had and enjoyed; and all and singular the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining, and the rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever, as well in law as in equity, of the said party of the first part, of, in or to the said premises, and every part and parcel thereof, with the appurtenances.

TO HAVE AND TO HOLD, all and singular, the said premises, together with the appurtenances and privileges thereto incident, unto the said party of the second part its successors ~~XXXX~~ and assigns forever.

IN WITNESS WHEREOF, The said party of the first part has hereunto set his hand and seal the day and year first above written.

Signed, sealed and delivered in the presence of | John L. Schweigert [SEAL]

..... | ..... [SEAL]

..... | ..... [SEAL]

STATE OF COLORADO,
City and County of Denver } ss.

The foregoing instrument was acknowledged before me this 30th day of December A. D. 1954, by John L. Schweigert

My commission expires May 1, 1955 Witness my hand and official seal.

Russell A. Magatz
Notary Public.

No. 94. WARRANTY DEED. – Bradford-Robinson Ptg. Co., Mfrs. Robinson's Legal Blanks, 1824-46 Stout St., Denver, Colorado

Recorded at ..... o'clock ..... M., ... Copy

Reception No. ..... Recorder.

THIS INDENTURE, Made this 30th day of December, in the year of our Lord one thousand nine hundred fifty-four, between

George D. Schweigert

of the County of Custer and State of Colorado, party of the first part, and

Thorium Development Company, a Colorado corporation,

of the City and County of Denver and State of Colorado, party of the second part;

WITNESSETH, That the said party of the first part, for and in consideration of the sum of Ten Dollars ($10.00) and other valuable consideration ~~Dollars~~, to him in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, has granted, bargained, sold, remised, released and forever quit-claimed, and by these presents do es grant, bargain, sell, remise, release and forever quit-claim, unto the said party of the second part its successors ~~heirs~~ and assigns, the following described property, situate, lying and being in Hardscrabble Mining District, in the County of Custer, and State of Colorado, to-wit:

Undivided forty-five per cent (45%) interest in:
G. W. Lode, U. S. Survey No. 16533A and
Antrim Lode, U. S. Survey No. 16141, two patented mining claims located in Sections 9 and 10, T. 22 S., R. 71 W., 6th P.M.; and
Barite No. 2 Lode, unpatented mining claim located in Sections 7 and 8, T. 22 S., R. 71 W., 6th P.M., the amended location certificate of which is recorded in Book Q, page 310 of the records in the office of the County Clerk and Recorder of Custer County, Colorado.

Subject to rights of United States of America under Exploration Project Contract Idm-E653, dated January 4, 1954. This conveyance is made without warranty of title, express or implied.

TOGETHER with all the dips, spurs, and angles, and all the metals, ores, ~~gold and silver~~ metal-bearing quartz, rock and earth therein, and all the rights, privileges and franchises thereto incident, appendant and appurtenant, or therewith usually had and enjoyed; and all and singular the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining, and the rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever, as well in law as in equity, of the said party of the first part, of, in or to the said premises, and every part and parcel thereof, with the appurtenances.

TO HAVE AND TO HOLD, all and singular, the said premises, together with the appurtenances and privileges thereto incident, unto the said party of the second part its successors ~~heirs~~ and assigns forever.

IN WITNESS WHEREOF, The said party of the first part has hereunto set his hand and seal the day and year first above written.

Signed, sealed and delivered in the presence of

George D. Schweigert [SEAL]

..... [SEAL]

..... [SEAL]

STATE OF COLORADO,
County of Custer } ss.

The foregoing instrument was acknowledged before me this 30 day of December 1954 by George D. Schweigert, 19 . Witness my hand and official seal.

My commission expires MY 12, 2000

Agnes M. Hansen
Notary Public.

No. 37. MINING DEED.—Dow Ford-Robinson Pty. Co., Office Stationers Legal Blanks, 1224-30 Glenarm St., Denver, Colorado

Recorded at ..... o'clock ..... M., ...

Reception No. .... Recorder.

THIS INDENTURE, Made this 30th day of **December**, in the year of our Lord one thousand nine hundred **fifty-four**, between

George D. Schweigert and Pete Cowan

of the County of **Custer** and State of Colorado, parties of the first part, and **John L. Schweigert**

of the **City and** County of **Denver** and State of Colorado, party of the second part;

WITNESSETH, That the said parties of the first part, for and in consideration of the sum of **Ten Dollars ($10.00) and other valuable consideration** ~~Dollars~~, to **them** in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, have granted, bargained, sold, remised, **and conveyed** ~~released and forever quit-claimed~~, and by these presents do grant, bargain, sell, remise, ~~release and forever quit-claim~~ **and convey** unto the said party of the second part, **his** heirs and assigns, the following described property, situate, lying and being in **Hardscrabble** Mining District, in the County of **Custer**, and State of Colorado, to-wit:

Undivided ten per cent (10%) interest in:

G.W. Lode, U. S. Survey No. 16533A and Antrim Lode, U. S. Survey No. 16141, two patented mining claims located in Sections 9 and 10, T. 22 S., R. 71 W., 6th P. M.; and Barite No. 2 Lode, unpatented mining claim located in Sections 7 and 8, T. 22 S., R. 71 W., 6th P. M., the amended location certificate of which is recorded in Book Q, page 310 of the records in the office of the County Clerk and Recorder of Custer County, Colorado.

Subject to rights of United States of America under Exploration Project Contract Idm-E653, dated January 4, 1954. This conveyance is made without warranty of title, express or implied.

TOGETHER with all the dips, spurs, and angles, and all the metals, ores, ~~gold and silver~~ **metal**-bearing quartz, rock and earth therein, and all the rights, privileges and franchises thereto incident, appendant and appurtenant, or therewith usually had and enjoyed; and all and singular the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining, and the rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever, as well in law as in equity, of the said parties of the first part, of, in or to the said premises, and every part and parcel thereof, with the appurtenances.

TO HAVE AND TO HOLD, all and singular, the said premises, together with the appurtenances and privileges thereto incident, unto the said party of the second part **his** heirs and assigns forever.

IN WITNESS WHEREOF, The said parties of the first part have hereunto set **their** hand~~s~~ and seal~~s~~ the day and year first above written.

Signed, sealed and delivered in the presence of

Pete Cowan [SEAL]

George D. Schweigert [SEAL]

[SEAL]

STATE OF COLORADO,
County of Custer } ss.

The foregoing instrument was acknowledged before me this 30 day of December 1954, by Pete Cowan and George D. Schweigert

, 19 . Witness my hand and official seal.

My commission expires MAY 18, 1955

Anna M. Hansen
Notary Public.

FORM 37 — PRINTED. — Bradford-Robinson Ptg. Co., Mfrs. Robinson's Legal Blanks, 1824-46 Stout St., Denver, Colorado

MF-200 (A)
(February 1952)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 12 1954

DOCKET NO. DMEA 3078

COMMODITY Thorium

Idm-E653 Putin 1/19/54

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

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this 4th day of January, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] a joint venture consisting of George D. Schweigert, 780 Magnolia Street, Denver 20, Colorado and Pete Cowan, Westcliffe, Colorado

hereinafter called the "Operator," as follows: and as set forth in Annex I attached hereto and made a part hereof.

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Colorado, County of Custer, described as follows:[3] Two patented mining claims located in Sections 9 and 10, T. 22 S., R. 71 W., GW Lode, U.S. Survey No. 16533A, and Antrim Lode, U.S. Survey No. 16141.

the Operator represents and undertakes:[4]

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

None

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

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

ARTICLE 3. *Exploration project.*—The Operator, within sixty (60) days from the date of this contract shall commence work on a project of exploration for[5] Thorium

in or upon the described land; and shall bring the project to completion within a period of 125 days from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay ninety (90) percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $2,599.20, which is ninety (90) percent of $2,888.00, the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Executed in sextuplicate the day and year first above written.

Leo Schweiger
Pete Cowdan
(Operator)

By .....

THE UNITED STATES OF AMERICA

By W S King
Executive Officer, DMEA
Field Team, Region IV

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

..... [CORPORATE SEAL]

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

EXHIBIT A

Description of the Work

Clear the access road by bulldozing from the L. E. Herington ranch to the property, a distance of approximately one mile.

Exploration at pit Number 2 will consist of sinking a shaft on the vein a distance of 10 feet below the present bottom of the pit to expose less weathered and less disturbed bedrock. From the bottom of the shaft crosscut a maximum of 10 feet both to the northeast and southwest to expose the full width of the vein.

Excavate three trenches across the vein to expose its full width to permit thorough and accurate sampling. The maximum total length of trenching is 125 feet and the location, direction, and depth of each trench is to be determined by the DMEA representative. The location of all the work is shown on Figure 2 which is attached and made a part of Exhibit A.

ESTIMATED COSTS OF THE PROJECT

Clearing access road with bulldozer 1/	$72.00
Sinking shaft at pit Number 2, 10 feet at $65.00 per foot	650.00
Crosscutting 20 feet from bottom of shaft at $38.30 per foot	766.00
Trenching 125 feet at $11.20 per foot	1,400.00
Total estimated cost	2,888.00
Government participation 90%	2,599.20

1/ The entire work constitutes the unit of work.

The above estimated costs include any and all costs incurred in the completion of the work.

DEPARTMENT OF
Defense Mineral
REVIEW
12 1954

ANNEX I

The following provisions are in lieu of all of paragraph (a) of Article 6 which precedes the colon:

If the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after a sufficient, complete, final report and final account referred to in the contract 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. The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2, 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 of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for 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. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

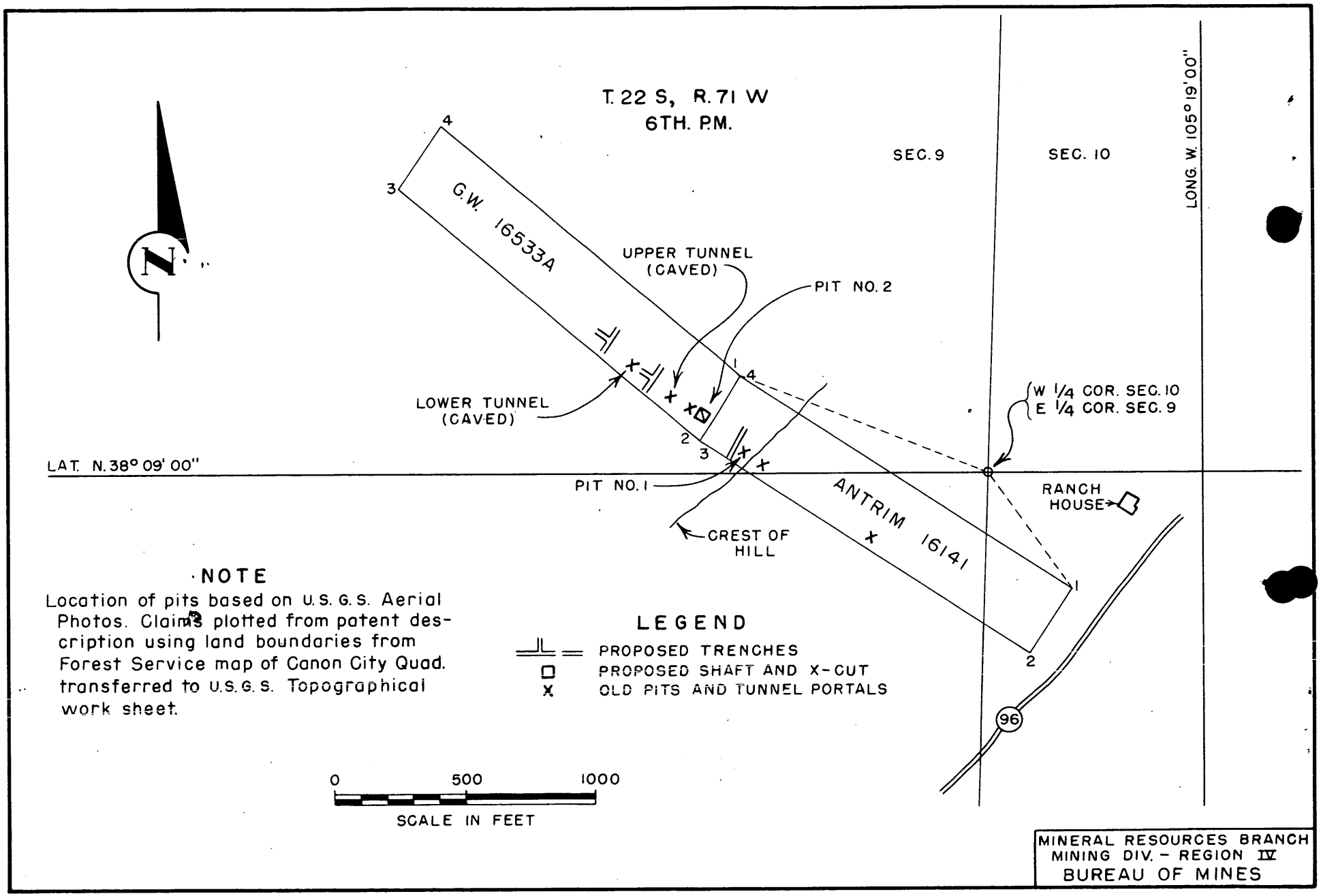


FIGURE 2 - PLAN MAP OF GW AND ANTRIM LODE CLAIMS, CUSTER COUNTY, COLO. (DMEA 3078)

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

FEB 12 1954

224 New Customhouse
Denver 2, Colorado

February 10, 1954.

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA-3078 (Thorium), Contract No. Idm-E653. A joint venture consisting of George D. Schweigert and Pete Cowan, Custer County, Colorado.

Enclosed are the original and two copies of a Power of Attorney, dated January 29, 1954, executed by Pete Cowan in favor of George D. Schweigert to act as the agent of the joint venture under Contract Idm-E653.

W H King
W. H. King

Enclosures

RECEIVED
12 1954

January 29, 1954

I, the undersigned, a member of a joint venture consisting of George D. Schweigert and Pete Cowan, do hereby appoint Geo D. Schweigert to act as the agent of said joint venture in all matters connected with the United States Department of the Interior, Defense Minerals Exploration Administration DMEA Docket 3078 (Thorium), Contract Idm-E653, and in behalf of said partnership to submit to the Government all necessary reports and information required under said contract; and said agent is authorized to receive individually, and to receipt for, any monies that are now or may hereafter become due to said joint venture by reason of said Contract Idm-E653.

Dated Feb. 2. 1954 Signed Pete Cowan

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

224 New Customhouse
Denver 2, Colorado

June 12, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: Code 200

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docketing for Exploration Assistance

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

George D. Schweigert (Columbium)
780 Magnolia Street
Denver 20, Colorado

George D. Schweigert (Thorium)
780 Magnolia Street
Denver 20, Colorado

W. H. King
W. H. King

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Approved.
Bureau No. 42-R1035.2.

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

Not to be filled in by applicant

Docket No. DMEA 3078
Metal or Mineral
Date Received 6/15/53
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: George D. Schneider, 700 Lincoln Street, Denver 20, Colorado

Signed answers to all following questions are attached hereto and made part hereof, because of insufficient space on blank.

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

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

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

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

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

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

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

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

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

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

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

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

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

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

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

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

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

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

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

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

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

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

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

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

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

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

☐ Money ☐ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated JUN 8 1953, 195...

X Geo. P. Schmeiger
(Applicant)

By .....

.....

.....

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

G W LODE and ANTRIM LODE

THE FOLLOWING ANSWERS ARE ATTACHED TO AND MADE PART OF APPLICATION FOR AID IN AN EXPLORATION PROJECT PURSUANT TO DMEA ORDER 1 UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED:

1. Name of applicant: (a) George D. Schweigert, 780 Magnolia Street, Denver 20, Colorado.
(b) and (d) Joint venture in which applicant above named and Pete Cowan, address Westcliffe, Colorado, are associated.
(c) Not applicable.

2. General: (Instructions)

3. Applicant's property rights: (a) Applicant and associate own two patented mining claims located in Sections 9 and 10, Township 22 South, Range 71 West of 6th P.M., in Hardscrabble Mining District, Custer County, Colorado.
(b) G W Lode, U. S. Mining Survey No. 16533A, and Antrim Lode, U.S. Mining Survey No. 16141, end to end, total 3,000 feet long and 300 feet wide.
(c) and (d) Ownership of the property is by deed from the Treasurer of Custer County, Colorado, which County obtained the property on sale for delinquent taxes 43 years ago.
(e) No liens or encumbrances on the property.
(f) Not applicable.

4. Physical description: (a) Many years ago, probably during or as a result of the mining boom in the 1880's, someone made a few shallow excavations on a formation near the top of a large hill. Examination by Geiger counter gave very positive results in one of the pits about 6 feet deep and over a large area around and near it, despite dirt covering. Samples from the bottom of the pit test as high as 6% thorium and 1% or more rare earths. No further exploration operations are now being conducted on the property. It is readily accessible for examination purposes by about ¼ mile climb from the highway. Construction of road from highway to property would not be difficult.
(b) No past or current production.
(c) Men from the United States Geological Survey have examined this property. There is some question in the applicant's mind whether the formation is vein or volcanic flow from surface indications and position on the mountain. The reasons for desiring to explore it is the belief that it is a large deposit of radio-active minerals and rare earths.
(d) The property is near the top of a large hill, at the base of which runs a public highway down Hardscrabble Canon. Construction of less than ½ mile of road, mostly by bulldozer, would connect the property with the highway, by which it would be about 35 miles to Florence, Colorado, on the main line of the Denver & Rio Grande Western Railroad. Resident point is Westcliffe, Colorado, about 9 miles west of the property.
(e) There is a power line about 1½ miles distant, but no water. Some water could probably be obtained by digging or boring a well on the flat at the bottom of the hill. Manpower, materials, supplies and equipment are available.

5. The exploration project: (a) Thorium, rare earths and uranium. Government made radio metric analysis on May 9, 1952, showing "radio activity equivalent to 1% uranium". Tests by spectroscope show presence of many of the rare metals group.

(b) Several open cuts probably 10 to 15 feet deep across the deposit, length of each depending on exposures in the process, and such aide-cuts or cross-cuts therefrom as discovery may justify for prospecting purposes, total length of excavations 100 feet or more.

(c) The work will start within 30 days from approval of application and be completed within 12 months, or less, depending on delays in assays and winter weather.

(d) Applicant was born in Custer County, Colorado, has lived in Denver many years, and is at present a substantial businessman who can furnish high references if required. He has employed his spare time the past 3 years in prospecting the mineral formations in the region of the property here involved. His associate, Pete Cowan of Westcliffe, Colorado, has spent many years of his life in underground mining, having directed work and worked in several mines, and he will locally supervise this operation. He is now in charge of road maintenance in Custer County, Colorado.

6. Estimates of costs:

(a) Independent contracts: None.

(b) Labor, supervision, consultants: U. S. Geological Survey has recently examined the property, and if report is made by it and accepted, the delay and expense of further geological examination may be saved. Labor of 2 miners will be required at $1.75 an hour, or $10.80 each for 8-hour day. Supervision by applicant's associate, Pete Cowan, part time, at $20. a week. To the foregoing should be added transportation costs for 2 workmen in 1 automobile, 22 miles a day from Westcliffe to the property and return, at 8 cents a mile, making $1.76 a day or $10.56 a week, and same mileage allowance for supervisor Cowan, 3 trips a week, making $5.28 a week. Two trips a month by applicant for examinations and reports, from Denver to property and return, 350 miles at 8 cents a mile, making $28.00 for each trip.

(c) Operating materials and supplies: Applicant owns an air-compressor and air-drill now located 10 miles from the property, and if it proves reasonably possible to transport the same to the property, that would greatly expedite the work, and in that event the cost of transportation of the same would be about $50. and its reasonable use cost would be $3. for each hour the machinery is actually worked, plus oil and gasoline costs for it. Some timber and rough lumber may be required, estimated cost $50. Powder, fuse and caps, estimated cost not over $100. If air-compressor and air-drill cannot be moved on the property, drilling by hand will be necessary, and reasonable use of drills, sledges and other tools to be furnished by applicant would be $50. a month. In either case $100. premium for workmens' compensation insurance will be required.

(d) Operating equipment: See (c) above.

(e) Rehabilitation and repairs: None, except in case of breakage during operation.

(f) New buildings, improvements and installations: None.

(g) Miscellaneous: None.

(h) Contingencies: Allowance of $25. a month for unforeseen contingency costs which may become necessary to complete the operation.

7. (a) Applicant requests $3,000. aid for the operation proposed, and will pay his 10% share all in cash or part in cash and part in such allowances as may be determined, which latter in case the air-compressor and air-drill can be installed and used, are estimated at $50. for its transportation and installation and $200. for its use and gasoline and oil for it. If the work shall be done by hand drilling, a reasonable use allowance for drills, sledges and other tools furnished by applicant, not over $50.

Applicant, undersigned, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated JUN 8 1953, in quadruplicate.

Geo Schmeeger

Applicant

Docket 700

Ching
Ellis
CM

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

Project Summary Report

By: Michael Ching September 17, 1954

1. Docket No. DMEA-3078 (Thorium)
   Contract No. Idm-E653
   Property - GW and Antrim Lode Claims Patented
   Custer County, Colorado

   Operator - George D. Schweigert
   780 Magnolia Street, Denver 20, Colorado
   Pete Cowan
   Westcliffe, Colorado

   Operator's property rights - Owner of the patented GW and Antrim mining claims

2. Contract dated January 4, 1954

   Work authorized (as amended)

Clearing access road with bulldozer	$72.00
10 feet of shaft sinking @ $65.00 per foot	650.00
30.5 feet of crosscutting from bottom of shaft @ $38.30 per foot	1,168.15
89 feet of surface trenching @ $11.20 per foot	996.80
Estimated total cost of project	$2,886.95
Government participation at 90 percent	$2,598.26

Amendments -

Amendment No. 1, dated March 10, 1954. The 20 feet of crosscutting from the bottom of the shaft may be driven northerly or southerly in any proportion acceptable to the Government instead of a fixed maximum of 10 feet in each direction.

Amendment No. 2, dated April 13, 1954. Substitute 89 feet of surface trenching and 30.5 feet of crosscutting for 125 feet of trenching and 20 feet of crosscutting.

Work completed -

All the work authorized was completed. The Operator, for his own account, sank the shaft an additional 2.5 feet to a point 20 feet below the collar, drove the crosscut an additional 11 feet, and did 18 feet of additional trenching. The work was started on February 15, and completed in April 1954.

3. Auditor's Report of Review, dated May 14, 1954

Total cost as billed by contractor	$2,886.95
Exceptions	-0-
Total accepted cost	$2,886.95
Government participation at 90 percent	$2,598.26

4. Certification of Discovery - Dated September 20, 1954

5. Comments -

The work was conducted in a safe and efficient manner by the Operator. Openings were left in good condition for sampling and examination. The work authorized was exceeded, with the Operator assuming the cost of the additional work.

A thorium-bearing vein along a shear zone in pre-Cambrian gneiss and gneissic granite was the subject of the exploration. The deposit strikes N 55° - 60° W and has a known length of approximately 1,000 feet, dying out to the east and passing under overburden to the west.

Exploration was limited to the northwestern, more radioactive section of the deposit and consisted of 6 trenches, a shaft, and a crosscut from the shaft at a depth of 20 feet. A principal vein 2 to 5 feet wide was exposed in the crosscut and Trench No. 1. A smaller parallel vein was also found in Trench No. 1. The vein material consisted of red to reddish-yellow sillicified gneiss. Two other trenches reached bedrock without exposing vein material. The other three trenches did not reach bedrock but in each of them highly radioactive float was exposed in the walls. Continuity of mineralization along the shear zone was not proven and the indications are that the deposit consists of two or more veins of varying continuity. However, the work indicated more or less continuous mineralization along a length of approximately 200 feet. Depth of the mineralization was not established but an average grade of 0.53% ThO_2 led to a tentative calculation of 2,700 tons of inferred ore reserves.

In the event the demand for thorium ore as a source of fissionable material makes this type of deposit economical, the potentials of this property would warrant further exploration work.

Michael Ching

Michael Ching

[X] Audited

[X] Certified

K ANALYSIS SHEET -- DMEA PROJEC

Analysis as of 12-2-54
Incl. Voucher for April, 1954

[ ] Actual Cost

[X] Agreed Unit Costs

Name George D. Schweigert

Docket No. 3078

State Colorado

Commodity Thorium

Idn-E No. 653

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	30.5	1168.15	30.5	1168.15	1168.15
Raising					
Shafts	10	650.00	10	650.00	650.00
Winzes					
Drilling (Specify)					
Surface Excavation		996.80		996.80	996.80
Underground Excavation					
Roads and Trails		72.00		72.00	72.00
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify)					
Totals		2886.95		2886.95	2886.95

Prepared by Michael Ching

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver, Colorado 80225

OFFICIAL FILE COPY
O. M. E
RECEIVED FEB 3 1964

DATE		
January 30, 1964		
2/3		800
2/4		120
		500
		220

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington, D. C. 20240

From: Acting Field Officer, OME, Region ~~III~~

Subject: DMEA-3078 (Thorium)
Contract Idm-E653
Schweigert and Cowan
(GW and Antrim Claims)
Custer County, Colorado

Closed 1/24/64

I talked to Mr. George D. Schweigert by telephone today. He informs me that no production of thorium has ever been made from the subject property and that no work has been accomplished on the property since the DMEA work was completed.

I recommend that our books be closed on this contract.

Hugh M. Connors

Hugh M. Connors

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
1/23	Murphy	500
1/23	Talbot	800
	Selfridge	120
1/24	Johnson	110
	Fumich	100
		220

Mr. George D. Schweigert and
Mr. Pete Cowan
780 Magnolia Street
Denver 20, Colorado

JAN 24 1964

Re: DMEA-3078 (Thorium)
Schweigert and Cowan
GW and Antrim Claims
Custer County, Colorado
Contract Idm-E653

Gentlemen:

Thank you for returning the completed Form 63's mailed on January 9, 1964.

By the terms of the subject Exploration Project Contract, as amended, and the certification of discovery or development dated September 20, 1954, all minerals mined or produced from January 4, 1954, to January 4, 1964, were subject to the Government's royalty as set forth in said contract.

As the period during which production was subject to royalty has now expired, the Government according to its present records retains no claim or lien against the property subject to the contract or any future production therefrom. We, therefore, are closing our books and records on this contract. Your attention, however, is called to the provisions of the contract which require the Operator to keep and preserve certain records for the periods indicated.

Sincerely yours,

George Fumich, Jr.

Acting Director

MMerrithew/mm
1/23/64
cc: Director's Reading File
CA&A Division
Region III w/cy of Form 63 dated 1/9/64
Docket
Code 500

43683

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

January 9, 1964

Re: DMEA-3078 (Thorium)
Schweigert & Cowan
GW and Antrim Claims
Custer County, Colorado
Contract Idm-E653

Mr. George D. Schweigert
780 Magnolia Street
Denver 20, Colorado

Dear Sir:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

F. M. Murphy

F. M. Murphy, Acting Chief
Division of Minerals

OFFICIAL FILE COPY
O. M. E
RECEIVED JAN 22 1964

DATE	INITIALS	CODE
1/22		800
1-23		100
1/22		~~110~~
		~~500~~
		320

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. From September 14, 1963, to January 4, 1964 ~~Since~~ , has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☒

2. From September 14, 1963, to January 4, 1964 ~~Since~~ , has there been any production from the land subject to the contract? Yes ☐ No ☒

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☐

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name George Schwergert Title President

Address 788 Magnolia Denver Co Date Jan 17 1964

4511

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

OFFICIAL FILE COPY

September 4, 1963

O. M. E
RECEIVED SEP 19 1963

DATE	INITIALS	CODE
9/20		800
9/20		100
9/23	Murphy	500
		320

Re: DMEA-3078 (Thorium)
Schweigert and Cowan
GW and Antrim Claims
Custer County, Colorado
Contract Idm-E653

Mr. George D. Schweigert
780 Magnolia Street
Denver 20, Colorado

Dear Mr. Schweigert:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

F M Murphy

F. M. Murphy, Acting Chief
Division of Minerals

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since April 13, 1962, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☒

2. Since April 13, 1962, has there been any production from the land subject to the contract? Yes ☐ No ☒

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☒

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name Leon Schweizer Title Thorium Development Co

Address 7810 Magnolia Date Sept 14 1963

4511

Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E
RECEIVED MAY 17 1962
DATE
5/17 gla 500
220

May 14, 1962

Memorandum

To: Fiscal Section, Division of Administrative Services
Office of the Secretary, Department of the Interior
Washington 25, D. C.

From: Acting Field Officer, OME, Region III

Subject: DMEA-3078 (Thorium)
Contract Idm-E653
Schweigert and Cowan
(GW and Antrim Claims)
Custer County, Colorado

Attached is the original Report of Royalty Review on the subject property dated May 7, 1962 covering the period June 16, 1959, through April 13, 1962.

Original signed by
TMR

for

Hugh M. Connors

Attachments
HMC/lm
cc Chief, Division of Field Operations, OME
E. D. Talbert, Acting Chief
Contract Administration and Audit Division
Royalty Corres Idm-E653
Chron

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		220

MAY 7 1962

Memorandum

To: Acting Field Officer, Region III

From: E. D. Talbert, Acting Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: DMEA-3076 (Thorium)
Schweigert and Cowan
GW and Antrim Claims
Custer County, Colorado
Contract Idm-E653

The original and one copy of a Report of Royalty Review covering the subject contract are enclosed. If you concur in the facts stated therein, please make the following distribution:

(a) Original to the Fiscal Section, Division of Administrative Services, Office of the Secretary, Department of the Interior, Washington 25, D. C.; and

(b) One copy for your files.

This Report of Royalty Review is made for record purposes only; therefore, no copy for the Operator is provided.

As evidence of your concurrence, a copy of your memorandum transmitting the original report to the Fiscal Section should be furnished this Division. If for any reason you do not concur, both copies of the report should be returned to this Division with your comments.

Enclosures

EDTalbert/ama 5-7-62

cc:
Docket
Director's Reading File
CA & A Division
Mr. Rothrock

43683

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

OFFICIAL FILE COPY
O. M. E.
APR 16 1962

APR 6 1962

Re: DMEA-3078 (Thorium)
George D. Schweigert
GW and Antrim Claims
Custer County, Wyoming
Contract Idm-E653

Thorium Development Company
c/o George D. Schweigert
780 Magnolia Street
Denver 20, Colorado

Dear Mr. Schweigert:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

Willis R. Griswold

Willis R. Griswold, Chief
Division of Minerals

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since January 1, 1960 , has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☒

2. Since January 1, 1960 , has there been any production from the land subject to the contract? Yes ☐ No ☒

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☐

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name Thorium Development Co Title Pres.

Address 780 Magnolia St. Denver, Colo Date April 13, 1962

4511

OME, REGION III

Statement in Lieu of Semiannual Report

Reporting Period January 1, 1960
Docket and Contract Number DMEA 3078, Idm-E653 (Thorium)
Operator Thorium Development Company, (G.W. and Antrim Lodes)
Custer County, Colorado

The project has been inactive during the reporting period [x]

Pertinent data relative to the subject contract has remained unchanged since the last report [ ]

Remarks:

Mr. Schweigert brought to the OME office copies of deeds transferring all interests in the claims to Thorium Development Company. The property is inactive.

Signed H. M. Connors
H. M. Connors

Date February 3, 1960

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

~~130~~
~~110~~
~~500~~
225

February 12, 1960

Memorandum

To: Acting Director
Office of Minerals Exploration

From: Acting Associate Solicitor
Division of Mineral Resources

Subject: Docket No. DMEA-3078 (Thorium)
George D. Schweigert
G. W. and Antrim Lodes
Custer County, Colorado
Contract No. Idm-E653

We return to you herewith, without legal approval, a proposed letter for the signature of the Acting Director to the Operator referring to "six Indentures" dated in 1954.

The proposed letter purports to describe particularly one of these indentures and then states the Government's approval of all six. We do not find any indenture that corresponds to the description to the one stated, nor does there seem to be any reason for writing a letter of approval. The Operator has not asked for the approval of the indentures and they have been supplied by the Operator simply to show the fact of the transfer of the property rights pursuant to the requirements of the exploration contract.

J. L. Hofflund
Acting Associate Solicitor
Division of Mineral Resources

Attachment

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
2/11/60	Murphy	500
	Fuson	500
2/12	J. Lynch	~~1500~~
		~~1470~~
		800
		120
		110
		220
		225

Mr. George D. Schweigert
780 Magnolia Street
Denver, Colorado

R
SOLICITOR

FEB 11 1960

INTERIOR DEPT.

Re: Docket No. IMEA-3078 (Thorium)
George D. Schweigert and Pete Cowan
G. W. and Antrim Lodes
Custer County, Colorado
Contract No. Idm-E653

Dear Mr. Schweigert:

~~This is to acknowledge receipt of~~ six Indentures, one of which was signed by you and Pete Cowan on December 30, 1954, wherein an undivided 25 percent interest in the above-named patented mining claims was assigned to the Thorium Development Company, a Colorado corporation.

The Indenture conforms to the requirement, stated in Article 7 of the contract form, that such conveyances shall contain a suitable provision for the preservation of the Government's right to percentage royalty on production and lien for the payment thereof. ~~Therefore, the Government approves the above-mentioned Indenture~~.

Sincerely yours,

Acting Director

FMMurphy/gla
2-11-60
cc to: Director's Reading File
Operating Committee
Contract Adm. & Audit
OME Field Team, Region III (2)
Docket
Chron

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado
February 2, 1960

OFFICIAL FILE COPY
O M. E
RECEIVED FEB 8 1960

DATE	INITIALS	CODE
2-8	gad	220
2/8	[illegible]	800
"	Murphy	500
		225

Memorandum

TO: Chairman, Operating Committee, OME

From: Executive Officer, OME Field Team, Region III

Subject: Docket No. DMEA 3078 (Thorium) Contract No. Idm-E653
George D. Schweigert (G.W. & Antrim Lodes) Custer
County, Colorado

Enclosed is a copy of a letter returned by Mr. Schweigert giving the status of the captioned property. Also enclosed are six Indentures transferring title in the G.W. and Antrim Lodes to the Thorium Development Company.

J. W. Townsend

J. W. Townsend

OME
DEPARTMENT OF THE INTERIOR
FEB 2 1960
REGION III
DENVER, COLORADO

Jan. 27 1960

Geo. D. Schweigert
780 Magnolia St.
Denver Colo.

Mr. J.W. Townsend
Executive Officer.OME
Field Team Region 3

Dear Sir-

As per our conversation you will find inclosed and in duplicate the deeds (6) we discussed. Hoping this is now all in order I remain very truly yours

Geo. D. Schweigert

Rec'd Wash. 2/8/60

(2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado
January 22, 1960

OME
DEPARTMENT OF THE INTERIOR
FEB 2 1960
REGION III
DENVER, COLORADO

Mr. George Schweigert
780 Magnolia Street
Denver, Colorado

Re: Docket No. DMEA 3078 (Thorium)
Contract No. Idm-E653
(GW & Antrim Lodes)
Custer County, Colorado

Dear Mr. Schweigert:

In reference to the "Certification by the United States of America of a Discovery or Development under an exploration Project Contract" and the instructions in the Washington Office letter of transmittal of the Certification on the captioned project, please indicate your answer to the following questions and return one copy of the questionnaire immediately to this office.

Very truly yours,

J. W. Townsend
Executive Officer, OME
Field Team, Region III

1. Has the property been sub-leased or any change made in ownership other than this office has been notified? Yes ✓ No___. If yes, please furnish details of the transaction on a separate sheet and include a true or signed copy of any instrument that was executed in conjunction with the matter. ?

2. Has there been production from the land subordinated under the referenced contract since January 1, 1959 ? Yes___ No X. If yes, and shipments made, who was the purchaser?_____

3. Is any of the following material stockpiled? Yes___ No___.

(a) Ore, Tons_____ Estimated grade_____
(b) Concentrates, lbs._____ Estimated grade_____
(c) Low grade ore, tons_____ Estimated grade_____
Place stockpiled_____

Signed George Schweigert

Title_____ Date Jan 22 1960

4 DEEDS OF TRANFER ATTACHED - (COPIES)

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
6/22	a	220
		700
		225

JUN 19 1959

Memorandum

To: Mr. Donald T. Finch, OME Auditor

From: E. D. Talbert, Acting Director (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: Docket No. DMEA-3078 (Thorium)
George D. Schweigert and Pete Cowan
Contract No. Idm-E653

Your Report of Royalty Review on the subject contract is acceptable for regional distribution after correction, in the first paragraph, of the second mentioned address to "Westcliffe, Colorado" and the first mentioned lode claim to "GW". These corrections have been made on the Washington copies.

EDTalbert/ama
June 19, 1959

Copies to: Docket
Director's Reading File
Code 800

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

224 New Customhouse
Denver 2, Colorado

January 20, 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 26 1959

DATE	INITIALS	CODE
1/26	C	220
"	JG	110
1/28	GJF	800
1/30	[illegible]	700
		[redacted]
		225

docket files in mt files

Memorandum

To: Chairman, Operating Committee, OME

From: Executive Officer, OME Field Team, Region III

Subject: Semiannual Report of Certified Project for the Period July 1, 1958 - December 31, 1958
Docket DMEA 3078 (Thorium), Contract No. Idm-E-653,
George W. Schweigert (Antrim and G. W. lodes),
Custer County, Colo.

Enclosed are the original and three copies of the subject report prepared in conformance with instructions contained in memorandum of January 6, 1956 from this office, Memorandum 29, and Special Notice in Minutes of Operating Committee Meeting No. 692.

J. W. Townsend

Enclosures

J. W. Townsend

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 26 1959

DATE	INITIALS	CODE

OME
DEPARTMENT OF THE INTERIOR
JAN 19 1959
REGION III
DENVER, COLORADO

OME, REGION III

Statement in Lieu of Semiannual Report

Reporting Period **July 1, 1958 to December 31, 1958**
Docket and Contract Number **DMEA 3078 (Thorium) Contract Idm-2653**
Operator **George W. Schweigert (Antrim and G. W. lodes)**
Custer County, Colo.
Mile High Bldg., Al. 5 1451

The project has been inactive during the reporting period [x]

Pertinent data relative to the subject contract has remained unchanged since the last report [x]

Remarks:

According to Geo. W. Schweigert, no work was done at the property in 1958 and no work is contemplated while the present market exists.

Signed Carl Belser
Carl Belser

Date **Jan. 15, 1959**

September 11, 1958

Memorandum

To: W. N. Chamberlain
Records Division

From: F. L. Knouse, Acting Director
Division of Rare and Miscellaneous Metals

Subject: Semiannual Reports of Certified Projects for the period January 1, 1958, through June 30, 1958

Region III has advised that the following projects have been inactive for the above period and data has remained unchanged since the last report:

DMEA-1702	Idm-E61	Cherokee Mines	Uranium
DMEA-2573	Idm-E422	Black Bear Consolidated Mining Co. (Glenn Mining Company, Inc.)	Uranium
DMEA-3078	Idm-E653	George W. Schweigert	Thorium

/s/ F. L. Knouse

F. L. Knouse

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

September 4, 1958

	INITIALS	CODE
9-8	C	220
9	[illegible]	100
"	[illegible]	110
9/10	[illegible]	800
9/11	[illegible]	700
9/11	[illegible]	700

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Semiannual Report of Certified Project for the period January 1, 1958, through June 30, 1958

DMEA Docket 3078 (Thorium)
Contract Idm-E 653
George W. Schweigert (Antrim and G. W. lodes)
Custer County, Colorado

Enclosed are the original and three copies of the subject report prepared in conformance with instructions contained in memorandum of January 6, 1956 from this office, Memorandum 29, and Special Notice in Minutes of Operating Committee Meeting No. 692.

J. W. Townsend
Alternate Acting Executive Officer

Enclosures

dz
cc: Semiannual Report File Idm-E 653
Harshman
Salsbury, DMEA/DFC
Chron.

DMEA
DEPARTMENT OF THE INTERIOR
AUG 28 1958
REGION III
DENVER, COLORADO

DMEA, REGION III

Statement in Lieu of Semiannual Report

Reporting Period	January 1, 1958 through June 30, 1958
Docket and Contract Number	DMEA 3078 (Thorium) Contract Idm-E653
Operator	George W. Schweigert (Antrim and G. W. lodes) Custer County, Colo.

The project has been inactive during the reporting period [X]

Pertinent data relative to the subject contract has remained unchanged since the last report [X]

Remarks:

Status of property was verified by George W. Schweigert

Signed M. H. Salsbury

Date 8/22/58

March 13, 1958

Memorandum

To: Wingfield N. Chamberlain
Records Branch

From: Ernest Wm. Ellis, Director
Division of Rare and Miscellaneous Metals

Subject: Semiannual Reports of Certified Projects

Reports have been received by this Division on the following projects indicating that the property has been inactive and data have remained unchanged since the last report:

Period January 1 - June 30, 1957

DMEA-4182 Idm-E 963 Vitro Minerals Corporation Uranium

Period July 1 - December 31, 1957

	DMEA-1631	Idm-E 236	Excalibur Uranium Corporation	"
	DMEA-1957	Idm-E 397	Ellihill Mining Company	"
	DMEA-2328	Idm-E 320	Moreno Uranium Corporation	"
	DMEA-2771	Idm-E 577	Granlich Exploration Company	"
**	DMEA-3003	Idm-E 650	Ol Jato Uranium Company	"
	DMEA-3078	Idm-E 653	George W. Schweigert	Thorium
	DMEA-3620	Idm-E 792	Uranium Prospectors Co.	Uranium
	DMEA-3762	Idm-E870	Shannon Oil Company	"

** The mine is presently active. The operator plans to terminate operations in June or July (1958) due to exhaustion of known ore reserves.

/s/ Ernest Wm. Ellis

Ernest Wm. Ellis

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

RECEIVED FEB 21 1958

DATE		
2/21	C	220
21	Com	100
"	Fil	110
2/24	C.E.P.	800
"	Cling	700

February 19, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Semiannual Report of Certified Project for the period July 1, 1957 to December 31, 1957

DMEA Docket 3078 (Thorium)
Contract Idm-E 653, George W. Schweigert (Antrim and G. W. Lodes) Custer County, Colorado

Enclosed are the original and three copies of the subject report prepared in conformance with instructions contained in memorandum of January 6, 1956 from this office, Memorandum 29, and Special Notice in Minutes of Operating Committee Meeting No. 692.

W H King
Executive Officer, DMEA
Field Team, Region III

Enclosures

cc: Semiannual Report File E 653
Harshman
DMEA, DFC - 2
Chron.

DMEA
DEPARTMENT OF THE INTERIOR
FEB 10 1958
REGION III
DENVER, COLORADO

DMEA, REGION III

Statement in Lieu of Semiannual Report

Reporting Period July 1, 1957, to December 31, 1957.
Docket and Contract Number DMEA 3078 (Thorium) Idm-E653
Operator George W. Schweigert
780 Magnolia St., Denver, Colo.
Antrim and G. W. Lodes, Custer County, Colorado.

The project has been inactive during the reporting period [X]

Pertinent data relative to the subject contract has remained unchanged since the last report [ ]

Remarks:

Mr. Schweigert stated that he has been approached by Lindsay Chemical Co. but has done no work during the last six months and does not have a permit to ship thorium ore.

Signed Carl Belser
Carl Belser

Date February 6, 1958

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Rare & Misc. Metals Division Date 7-18-57

Semi-Annual Report - Certified Project Date 7-11-57 Jan. 1 to June 30, 1957

DMEA No. 3078 Operator George D. Schweigert Contract No. Idm-E 653

Ore Reserves

Ore Estimates	Tons	Analysis
Original (DMEA)	2,700	0.53% ThO_2
Increase (Operator)	—	
Total	2,700	"
Decrease (Production)	—	
Net Available	2,700	"

Investment

None.

Shafts			Winzes			Drifts & Crosscuts		
Size	Feet	Cost	Size	Feet	Cost	Size	Feet	Cost

Raises			Drilling			Rehabilitation	
Size	Feet	Cost	Type & Size	Feet	Cost	Description	Cost

Facilities

Mine Plant		Mill		Roads	
Description	Cost	Description	Cost	Description	Cost

Remarks

No change in production status since Dec. 31, 1956.
Schweigert has purchased Cowan's share of property.

Michael Ching

100338

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 15 1957

DATE	INITIALS	CODE
7/18	C	220
18	Com	100

July 11, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Semiannual Report of Certified Project for the period January 1, 1957 through June 30, 1957
DMEA Docket 3078 (Thorium)
Contract Idm-E 653, George D. Schweigert (Antrim & G. W. Lodes)
Custer County, Colorado

Enclosed are the original and ~~three~~ two copies of the subject report prepared in conformance with instructions contained in memorandum of January 6, 1956 from this office, Memorandum 29, and Special Notice in Minutes of Operating Committee Meeting No. 692.

W S King
~~XXXXXXXXXXXXXX~~
Executive Officer, DMEA
Field Team, Region III

Enclosures
MHM/vj

cc: Semiannual Report File E 653
Royalty File E653
Harshman
DMEA/DFC
Chron.

DMEA
DEPARTMENT OF THE INTERIOR
JUN 26 1957
REGION III
DENVER, COLORADO

DMEA, REGION III

STATEMENT IN LIEU OF SEMIANNUAL REPORT

Reporting Period Jan. 1, 1957 to June 30, 1957
Docket and Contract Number DMEA 3078, Idm-E653
Operator George D. Schweigert
780 Magnolia St., Denver, Colorado
Antrim and G. W. Lodes (Thorium) Custer County, Colorado

The project has been inactive during the reporting period [X]

Pertinent data relative to the subject contract has remained unchanged since the last report [ ]

Remarks:

The property was visited on June 21, 1957. Schweigert has purchased Cowan's share in the property, and is now the only known owner.

No! Series of 6 deeds on 12/30/54 resulted in Thorium Development Co., a Colo. corp., becoming 100% owner. Talbert

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 15 1957

DATE	INITIALS	CODE

Signed W. J. Tesch Jr.
W. J. Tesch, Jr.
Bureau of Mines

Date June 21, 1957

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Rare & Misc. Metals Division

Date ~~March 18, 1957~~ March 13, 1957

Semi-Annual Report - Certified Project

Date July 1 to Dec. 31, 1956

DMEA No. 3078 Operator George D. Schweigert Contract No. Idm-E 653

Ore Reserves

Ore Estimates	Tons	Analysis
Original (DMEA)	2,700	0.53% ThO_2
Increase (Operator)	—	—
Total	2,700	"
Decrease (Production)	—	—
Net Available	2,700	"

Investment

None

Shafts			Winzes			Drifts & Crosscuts		
Size	Feet	Cost	Size	Feet	Cost	Size	Feet	Cost

Raises			Drilling			Rehabilitation	
Size	Feet	Cost	Type & Size	Feet	Cost	Description	Cost

Facilities

Mine Plant		Mill		Roads	
Description	Cost	Description	Cost	Description	Cost

Remarks

No change in status since last semi-annual report.

Michael Ching

100338

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

March 13, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 15 1957

DATE	INITIALS	CODE
3/15	C	220
18	Com	100

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region ~~III~~

Subject: Semiannual Report of Certified Project for the period July 1, 1956 through December 31, 1956
DMEA Docket 3078 (Thorium)
Contract Idm-E 653, George D. Schweigert (G. W. & Antrim Lodes), Custer County, Colorado

Enclosed are the original and three copies of the subject report prepared in conformance with instructions contained in memorandum of January 6, 1956 from this office, Memorandum 29, and Special Notice in Minutes of Operating Committee Meeting No. 692.

E. M. Harshman

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

Enclosures

MHM/vj

cc: Semiannual Report File E 653
J. F. Shaw (2)
Harshman
Chron.

DMEA, REGION III

DMEA
DEPARTMENT OF THE INTERIOR
MAR 13 1957
REGION III
DENVER, COLORADO

STATEMENT IN LIEU OF SEMIANNUAL REPORT

Reporting Period July 1, 1956 to December 31, 1956
Docket and Contract Number DMEA 3078, Idm-E653
Operator George D. Schweigert
780 Magnolia Street, Westcliff, Colo.
Antrim and G. W. Lodes, (Thorium) Custer County, Colorado

The project has been inactive during the reporting period [ ]

Pertinent data relative to the subject contract has remained unchanged since the last report [X]

Remarks:

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 15 1957

DATE	INITIALS	CODE

Signed D. E. Redmon
D. E. Redmon
U. S. Bureau of Mines

Date
March 8, 1957

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Rare & Misc. Metals Division Date Oct 19, 1956

Semi-Annual Report - Certified Project Date Oct. 10, 1956 Jan. 1 to June 30, 1956

DMEA No. 3078 Operator ~~George D. Schweigert~~ Contract No. Idm-E 653

Ore Reserves

Ore Estimates	Tons	Analysis
Original (DMEA)	2,700	0.53 % ThO_2
Increase (Operator)	—	—
Total	2,700	"
Decrease (Production)	—	"
Net Available	2,700	"

Investment

None.

Shafts			Winzes			Drifts & Crosscuts		
Size	Feet	Cost	Size	Feet	Cost	Size	Feet	Cost

Raises			Drilling			Rehabilitation	
Size	Feet	Cost	Type & Size	Feet	Cost	Description	Cost

Facilities

Mine Plant		Mill		Roads	
Description	Cost	Description	Cost	Description	Cost

Remarks

No activity on property since contract was completed in April, 1954. No market for this grade ore.

Michael Ching

100338

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

RECEIVED
OCT 15 1956

224 New Customhouse
Denver 2, Colorado

Date: October 10, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Semiannual Report of Certified Project for the period January 1, 1956 through June 30, 1956
DMEA Docket 3078 (Thorium-Rare Earths-Uranium)
Contract Idm-E 653, George D. Schweigert (G.W. and Antrim Lodes), Custer County, Colorado

Enclosed are the original and three copies of the subject report prepared in conformance with instructions contained in memorandum of January 6, 1956 from this office, ~~and~~ Memorandum 29, and Special Notice in Minutes of Operating Committee Meeting No. 692.

E. N. Harshman

~~XXXXXXXXXXXX~~
Acting Executive Officer, DMEA
Field Team, Region III

Enclosures
MHM/vj
cc: Semiannual Report File E 653
J. F. Shaw (2)
E. N. Harshman
Chron.

DMEA, REGION III

STATEMENT IN LIEU OF SEMIANNUAL REPORT

RECEIVED
OCT 4 1956

DMEA
DEPARTMENT OF THE INTERIOR
OCT 8 1956
REGION III
DENVER, COLORADO

Reporting Period **January 1, 1955 to June 30, 1956**
Docket and Contract Number **DMEA 3078 Idm-E653**
Operator **George D. Schweigert and Pete Cowan**
780 Magnolia St. Westcliffe, Colo.

	"X" one
The project has been inactive during the reporting period	X
Pertinent data relative to the subject contract has remained unchanged since the last report	

Remarks:

Antrim and G. W. lodes (Thorium). There has been no activity on the property since the contract was completed in April, 1954. Mr. Schweigert states that he cannot find a market for thorium ore but will resume operations if a mill is built in the area.

Signed Carl Belser
Carl Belser
Mining Engineer

Date **10/5/56**

5/31/56

U. S. DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

RECEIVED
MAY 31 1956

224 New Customhouse
Denver 2, Colorado

Date: May 25, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Royalty payments, Docket DMEA 3078 (Thorium-Rare Earths-Uranium), Contract Idm-E653, George D. Schweigert (GW and Antrim Lodes), Custer County, Colorado

Period: March, 1956

During the above month the following royalty payments were received for ore or concentrates shipped from the subject property:

Date	Lot No.	Dry Tons	Royalty Due	Royalty Paid	Bonus Roy. Due	Bonus Roy. Pd.
			(NONE)			

Totals:

Past Due Royalties Collected	None
Total Dry Tons (Ore or Cons.) Shipped to Date	None
Expiration Date of Royalty Repayment	January 4, 1964
Amount of Government Participation	$2,598.26
Total Royalty Payments to Date	None
Percent of Loan Repayment	----

for W. M. Traver

vj

cc Royalty File E 653 w/Settlement Sheets
Monthly Royalty Payment File
J. W. Shaw (2)
Chron.

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

224 New Customhouse
Denver 2, Colorado

February 8, 1955

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, DMEA Field Team, Region III

Subject: Semi-annual Report - Docket DMEA-3078 (Thorium), Contract Idm-E653, George D. Schweigert and Pete Cowan, Antrim and GW Lode claims, Custer County, Colorado

Enclosed are four copies of the Semi-annual Report on Contract No. Idm-E653.

W. M. Traver

W. M. Traver

Enclosures

DMEA

FEB 2 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 11 1955

Period:	July 1, 1954, to December 31, 1954
Docket no.:	DMEA 3078 Contract Idm-E653 (Thorium)
Operator:	George D. Schweigert, 780 Magnolia Street, Denver 20, Colorado and Pete Cowan, Westcliffe, Colorado
Name of mine:	Antrim and GW Lode claims, Custer County, Colorado
Date certified:	September 20, 1954
Contract amount:	$2,888.00 Amount spent: $2,886.95
Government participation:	90 percent, or $2,598.26
Remarks:	Exploration under this project was started on February 15, 1954, and completed by April 30, 1954, on which date the operation was suspended. A definite but small occurrence of thorium was discovered and a reserve of 2,700 tons of inferred ore averaging 0.53 percent ThO_2 was estimated. There is no market for ore of this grade and in this location at the present time, the deposit has no current economic value, and no shipments have been made. Because of the possible future importance of thorium as a source of fissionable material, a Certification of Discovery by the Government was recommended and made.

700

File Copy
Surname

Ching
Ellis
Chambers
Hedges
Rülsgaard
Selfridge
F E Johnson

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

INTERIOR DEPT.
SEP 7 - 1954
SOLICITOR

SEP 21 1954

Messrs. George D. Schweigert
780 Magnolia Street
Denver 20, Colorado
and
Pete Cowan
Westcliffe, Colorado

Re: Docket No. DMEA-3078 (Thorium)
Contract No. Idm-E653
GW and Antrim Lode Claims
Custer County, Colorado

Gentlemen:

Enclosed is a "Certification by the United States of America of a Discovery or Development under an Exploration Project Contract." This certification covers all the land described in Article 2 of the above-described contract.

By the terms of the Exploration Project Contract, as amended, and of the certification, all thorium and other valuable minerals produced from the claims described in Article 2 of the contract, from January 4, 1954, the date of the contract, are subject to the Government's percentage royalty as set forth in the contract until the sum of $2,598.26 is paid, or until January 4, 1964, whichever occurs first.

Payments should be made to Mr. W. H. King, Executive Officer, DMEA Field Team, Region IV, 224 New Customhouse Building, Denver 2, Colorado. Checks should be payable to the Defense Minerals Exploration Administration. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward the check directly to the Executive Officer. Any bonus payments or allowances received by you from the sale of ore are considered to be a part of the purchase price to which the Government's royalty applies. Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets, showing quantity and grade of the products sold, the name of the purchaser, and the price and charges, certified to be correct by the purchaser.

You are requested to notify Mr. King of any changes in ownership or production rights that might have any effect on the Government's right to its percentage royalty. Also, if production ceases at any time for an extended period, please notify Mr. King at six-month intervals that no production has been made, when that is the case.

Sincerely yours,

Frank E. Johnson

ACTING Administrator

Enclosure

Code 700
Mr. Ching
Mr. Chambers
Mr. Hedges, Rm. 1604, 3611
Mr. Rülsgaard, Rm. 5227, 212, GSA
Mr. J. O. Hosted, 3210, GSA
Admr's Reading File
Operating Committee
Field Team, Reg. IV (2)
Mr. F. E. Johnson

MChing:ep 9-3-54

Copy to: Docket Administrator

K.C.G.

700

File Copy
Surname
Ching
Ellis
Chambers
Hedges
Kilsgaard
Eldridge
Johnson

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

SEP 21 1954

Mr. Irving Gumbel
Acting Director, Materials Division
Emergency Procurement Service
General Services Administration
Seventh and D Streets, S. W.
Washington 25, D. C.

Re: Docket No. DMEA-3078 (Thorium)
Contract No. Idm-E653
George D. Schweigert and Pete Cowan
GW and Antrim Lode Claims
Custer County, Colorado

Dear Mr. Gumbel:

Enclosed is a copy of a certification of discovery or development of the captioned project.

The contract, dated January 4, 1954, covers an exploration project estimated to cost $2,888.00, with Government participation to the extent of 90 percent, or $2,599.20. Work under the project was started in February 1954 and completed in April. An auditor's report of review shows total expenditures during the life of the contract were $2,886.95, with Government participation amounting to $2,598.26.

The contract, as amended, provided for the clearing of an access road by bulldozer, deepening a small shaft by 10 feet, crosscutting from the bottom of the shaft a total distance of 30.5 feet to explore the full width of the vein, and surface trenching across the vein at favorable points, an aggregate distance of 89 feet.

The work completed was in accordance with contract provisions. The Operator, for his own account, sank the shaft an additional 2.5 feet to a point 20 feet below the collar, drove the crosscut an additional 11 feet, and did 18 feet of additional trenching.

The work exposed a thorium vein or veins with an average width of 3.25 feet, an average content of 0.53 percent Th O_2, and an indicated length of 200 feet. A tentative calculation of ore reserves resulted in a figure of 2,700 tons of inferred ore.

The economic exploitation of this small ore body may not be feasible at this time; however, because of the possible use of thorium ore as a source of fissionable material, a certification of discovery or development is considered in order.

Sincerely yours,

Frank E. Johnson
ACTING Administrator

Enclosure

Code 700
Mr. Ching
Mr. F. E. Johnson
Mr. John H. Hedges, Rm. 4604
Mr. Thor H. Kilsgaard, Rm. 3641
Mr. J. O. Hosted, 3210, GSA
Operating Committee
Field Team, Reg.IV (2)
Finance Officer
Mr. Chambers
Docket
Administrator
Admr's Reading File

MChing:ep 9-3-54
Copy to:

RCJ.

DMEA Docket

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

September 15, 1954

Memorandum

To: The Administrator, DMEA
Through: Mr. James D. Farriott, Jr.

From: Acting Assistant Solicitor, Defense Minerals

Subject: Certification of discovery or development (Schweigert and Cowan DMEA-3078, Contract Idm-E653)

With respect to certifications of discovery or development, our contract forms state: "The certification shall describe broadly or indicate the nature of the discovery or development."

The last paragraph of DMEA Circular 26, Supplement 1, requires the field team's report to contain for purposes of certification: "a description of the deposit to be certified, including the grade and quantity of the ore, the type of deposit, and the structural control." The added statement is made that: "Probably estimates of grade and quantity will be omitted from the certification . . . ."

I have before me in connection with the contract above mentioned a more or less typical certification in these terms:

> "Trenching, shaft sinking, and crosscutting on the outcrop of one or more veins in a shear zone on the property described in Article 2 of the Contract resulted in the discovery of a deposit of thorium ore of significant proportions."

When we were drafting the new contract forms we discussed whether we should omit the requirement that the certification should "describe broadly or indicate the nature of the discovery or development," and we came to the conclusion that the operator is entitled to this information and that the requirement should be left in the contract forms.

All of the foregoing seems to me to raise an obvious question, frequently discussed with you heretofore,

as to the sufficiency of certifications of the character above stated. Inasmuch as the only work called for by the contract is "trenching, shaft sinking, and crosscutting," the certification actually merely states that: As a result of the work performed under the contract a deposit of thorium ore of significant proportions was discovered.

No doubt an engineer is better qualified than a lawyer to say whether such a certification conforms with the requirements of the contract, but I seriously doubt if it does. It seems to me that if we do not wish to give the operator any more information than that we should strike from our contract forms the requirement that the certification "shall describe broadly or indicate the nature of the discovery or development." We have already had some complaints from operators on this point (Amerimex Mining Co., DMMA-8202).

The contract specifies the work that is to be done, and the certification should not be in terms of "as a result of work done (describing the work)" except where the description of some particular element of the work aids in locating the discovery. The certification should merely describe the deposit and its location sufficiently to identify it. I cannot believe that merely naming the ore, "a deposit of thorium ore," complies with the requirements of the contract.

If it is your opinion that I am wrong and that such a certification does comply with the requirements of the contract, I would appreciate it if you would so advise me. On the other hand, if you think that it does not comply with the requirements of the contract, you may wish to direct your staff to make proper certifications. If you wish to change the contract form no doubt we can strike out the troublesome provisions, but this will not help in the case of contracts now outstanding.

In the past when I have discussed this type of troublesome certification with Messrs. Selfridge or Johnson they have devised some sort of phrasing that makes the certification at least sound as if it complied with the contract requirements. I do think that if the staff were instructed in the matter they could do the same thing and avoid the frequent objections I have to this form of certification.

The subject contract is very small and I have surrendered the certification as I deem it unlikely that it can result in any detriment to the Government in this particular case.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

JLHofflund:bbh
9-14-54

Copy to: Mr. Selfridge
Mr. Johnson
Solicitor's Docket
DMEA Docket
Mr. Hofflund
Chron

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : E. Wm. Ellis, DMEA Member, Uranium Commodity Committee

DATE: August 20, 1954

FROM : Arthur P. Butler, Jr., USGS Member, Uranium Commodity Committee

SUBJECT: Field Team recommendation for Certification of Discovery, DMEA Docket 3078 (Thorium), Contract Idm-E653, George D. Schweigert and Pete Cowen, Custer County, Colorado

As the result of exploration consisting of 89 feet of surface trenching, 10 feet of shaft sinking, 30.5 feet of cross-cutting, and clearing an access road, a small reserve of thorium ore was discovered.

The cost of the exploration was $2,886.95, of which the Government's share was $2,598.56. The geologist and engineer examiners estimate an inferred reserve of 2700 tons of 0.53 percent ThO_2. No monetary value has been placed on the ore because there is no established market price for thorium at this time. However, because thorium ore may become a source of fissionable material, certification of discovery has been recommended by the Field Team. I concur in that recommendation and in the recommendation that no additional exploration is warranted at this time, because the strategic significance of thorium has not been determined.

Arthur P. Butler, Jr.

Copy to: E. Wm. Ellis (2)

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

224 New Customhouse
Denver 2, Colorado

August 9, 1954

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 3078 (Thorium), Contract Idm-E653, George D. Schweigert and Pete Cowan, Antrim Lode Claims, Custer County, Colorado

Reference is made to your letter of August 4, 1953 wherein you request to be informed as to the approximate date we expect to forward the final report and recommendation relative to a certification of discovery or development.

The Field Team final report, which contains recommendations relative to the issuance of a certificate of discovery or development, was forwarded to the Secretary to the Operating Committee by our memorandum of August 3, 1954.

W. H. King

W. H. King

Surname 700

Ellis
Selfridge
Mitchenor

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

AUG 4 1954

Mr. W. H. King
Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-378 (Thorium)
Contract No. DMI-1653
George T. Schweigert
G. W. and Antrim Lode Claims
Custer County, Colo.

Dear Mr. King:

It is noted in your monthly status report ending June 30 that the final report recommending a certification of discovery or development on the captioned project is pending. In order that we may keep the record current, kindly inform us the approximate date you expect to forward said report.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee GCS

APPROVED:

J. H. Hedges

Member, Bureau of Mines (GCS)

Philip W. Guild

Member, Geological Survey (GCS)

EWEllis/am
8-3-54
cc to: Admin. Reading File
Operating Committee
Docket
Messrs. A. P. Butler, Jr. Rm.3212,GSA
J. O. Hosted, Rm. 3210, GSA
H. D. Keiser, Rm. 3641
Code 700
Mr. Ellis

RAG

8-17-54
File.

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

224 New Customhouse
Denver 2, Colorado

August 3, 1954

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region IV

Subject: Docket DMEA 3078 (Thorium), Contract Idm-E653, George D. Schweigert and Pete Cowan, Custer County, Colorado

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

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

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

3. Original and three copies of Form B "Certification by the United States of America of a Discovery or Development under an Exploration Project Contract" relative to a certification of discovery or development as a result of the work performed under the contract.

FT Final Report

The operator's narrative reports attached to Form MF-104 for the month of April 1954 and for prior months appear to be adequate as a description of the work performed and it is recommended that they be accepted as the operator's final report under the circumstances.

Final payment to the operator was processed by this office May 14, 1954, in conformance with the report of review by the Contract Administration and Audit Division dated May 14, 1954.

The exploration work performed under the contract as amended consisted of clearing an access road, 89 feet of surface trenching, 10 feet of shaft sinking, and 30.5 feet of crosscutting, at a total accepted cost of $2,886.95, in which the Government participated to the extent of 90% or an amount of $2,598.26. The exploration work resulted in a discovery or development of thorium ore to an estimated extent of 2700 tons of inferred ore on which a certification of discovery or development is recommended in conformance with Form B enclosed under item 3.

W.H. King
W.H. King

Reviewed by
DMEA OPERATING COMMITTEE
8-13-54
(date)

E.N. Hershman
for A.H. Koschmann

Enclosures

21254-3

CERTIFICATION BY THE UNITED STATES OF AMERICA
OF A DISCOVERY OR DEVELOPMENT UNDER
AN EXPLORATION PROJECT CONTRACT

FORM B

To: 1/ George D. Schweigert, 780 Magnolia Street, Denver 20, Colorado, and Pete Cowan, Westcliffe, Colorado

Pursuant to the provisions of Exploration Project Contract No. Idm -E653, dated January 4, 1954, (Docket No. 3078), hereinafter called the "contract" between you and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien thereon and on the land described in the contract, the Government considers and therefore certifies that discovery or development from which production may be made, has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

Trenching, shaft sinking, and crosscutting on the outcrop of a vein or veins in a shear zone on the mining claims described in Article 2 of contract Idm-E653 resulted in the discovery of a deposit of thorium ore estimated to constitute a significant inferred reserve with an average grade of approximately 0.53 percent ThO_2

Dated: _____

THE UNITED STATES OF AMERICA

Reviewed by
DMEA OPERATING COMMITTEE
8-13-54
(date)

By _____
Administrator, Defense Minerals
Exploration Administration

1/ Insert full name of operator as it appears in the Exploration Project Contract.

IN REPLY REFER TO:

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

June 11, 1954

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3078, Antrim and G. W. lode claims, Custer County, Colorado

Enclosed are 10 copies of the final geologic report by E. N. Harshman of the U. S. Geological Survey covering the above docket.

By exploration on the Antrim and G. W. lode claims, a small reserve of thorium bearing ore was discovered. Because of the possible importance of thorium ore as a source of fissionable material, Harshman recommends certification of a discovery. However, he does not believe additional exploration is warranted at this time.

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

Enclosures (10)

Reviewed by
DMEA OPERATING COMMITTEE
8-13-54
(date)

ANTRIM AND G. W. LODE CLAIMS

CUSTER COUNTY, COLORADO

GCS
9/20/54

DMEA DOCKET 3078

Final Geologic Report

Reviewed by
DMEA OPERATING COMMITTEE
8-13-54
(date)

By E. N. Harshman
U. S. Geological Survey

ANTRIM AND G. W. LODE CLAIMS
CUSTER COUNTY, COLORADO

INTRODUCTION

Contract Idm-E653 between the Government, George D. Schweigert, and Pete Cowan was signed on January 4, 1954. It authorized exploration for thorium ore on the Antrim and G. W. Lode claims in secs. 9 and 10, T. 22 S., R. 71 W., 6th P.M., Custer County, Colorado.

The approved program included clearing of an access road, 10 feet of shaft deepening, 20 feet of crosscut, and 125 lineal feet of trench at a total cost of $2,888 (Govennment participation $2,599.20). By amendment of the contract, the crosscutting was increased from 20 to 30.5 feet and trenching reduced from 125 to 89 feet, at no change in the total cost. The program was started in February and completed in April 1954.

A small reserve of thorium ore is indicated by the exploration accomplished under the contract. The market for thorium ores is not known and the recommendation for certification of a discovery is based entirely on a possible future use of thorium ore as a source of fissionable material.

GEOLOGY AND EXPLORATION

The Antrim and G. W. Lode claims are in an area underlain by pre-Cambrain metamorphic rocks of both sedimentary and igneous origin including gneisses, schists, migmatites, and gneissic granites. Younger intrusive rocks include syenites and rhyolites, in small stocks, plugs, and dikes. These rocks have been disturbed by several periods of folding and faulting.

The thorium deposits explored under Contract Idm-E653 occur along a sheared zone in hornblende-plagioclase gneiss, biotite-quartz-

plagioclase gneiss, and gneissic granite. The wall rocks, to the depth explored, are disturbed by surface creep and small displacements along minor fractures. Surficial alteration, particularly along and near the shear zone, is intense.

The thorium mineral is probably thorite or hydrothorite. It is associated with a vein, 2 to 5 feet wide, of silicified country rock, characteristically red or reddish-yellow, dense, and hard. The vein strikes from N. 55° to N. 60° W. and dips 80° to 85°S.

A rhyolite dike, probably post-mineral, is intruded along the shear zone, parallel to the thorite-bearing vein. In Pits Nos. 1, 2, and 3 and in Trench No. 1 (figure 1), the dike is on the footwall side of the vein and separated from it by 1 to 3 feet of country rock. In the southwest crosscut from the shaft, a rhyolite dike is in the hangingwall of the shear zone. It is separated from the vein by 16 feet of altered country rock. Although the two dikes occupy the same shear zone, they may be separate intrusive bodies.

Thorium-bearing vein material is exposed discontinuously over a length of about 1,000 feet, but contrary to the original belief, that the exposures were part of the same vein, they now appear to be on 2 separate veins. Exploration was limited to the northwestern and higher grade deposit, and consisted of 6 trenches, 10 feet of shaft deepening, and a short crosscut from the bottom of the shaft (figure 1). Trenches 2 and 6 and a part of the crosscut was excavated at the applicant's expense. Pits 1 to 4 inclusive were excavated by a prior claim owner.

Two thorium bearing veins are exposed in Trench No. 1 (section A-A' figure 1). The principal vein is exposed in the northeast part of the

trench. It is 5 feet wide, strikes N. 60° W., dips 80° S. and consists of red to reddish-yellow silicified gneiss. The contact with the wall rock is sharp, and hydrothermal alteration is negligible. Geiger counter readings of 0.1 to 0.2 M.R./hr. were obtained across this zone. A minor radioactive zone is exposed near the southwest end of the trench. It is poorly defined, about 1 foot wide and consists of iron stained somewhat silicified country rock. Counter readings of 1.0 M.R./hr. were obtained across this zone.

A thorium-bearing vein is encountered in the shaft about 12 feet below the collar. The vein material is similar to that exposed in Trench No. 1. Although the dip, strike, and width of the vein range between wide limits, the general dip is north at 50° to 80°, the strike is easterly and the average width is about 2 feet. Geiger counter readings of as much as 2.0 M.R./hr. were obtained across this zone.

The wall rocks in the shaft and northeastern part of the crosscut are gneiss, considerably disturbed and weathered. Southwest of the shaft, the crosscut exposes a 17-foot rhyolite dike, similar in appearance to the dike in Trench No. 1 but weathered to a gray-soft clay. Southwest of the dike the wall rocks are weathered gneiss (figure 1 - plan of 20-foot level).

Bedrock was reached in Trench No. 2 and the southwest end of Trench No. 3. No vein material is exposed in either trench. Trenches Nos. 4, 5, and 6 did not reach bedrock, but in each of them highly radioactive float is exposed in the walls.

SAMPLES AND ORE RESERVES

The following samples were taken by a representative of the U. S. Bureau of Mines and analyzed in their Salt Lake laboratory:

Sample No.	Description	%ThO_2	%U_3O_8
MHS-46	Cut across 5-foot vein in NE end Trench No. 1; 9 feet below ground surface	0.11	0.008
MHS-47	Cut across 2 feet of vein material in SE corner of shaft; 14 to 16 feet below shaft collar	1.38	0.083
MHS-48	Cut across 1 foot of vein material 7 feet from SW end of Trench No. 1	0.50	0.0031
MHS-49	Cut across 1.2 feet of vein material in NE end of Pit No. 1; 6 feet below ground surface. Full vein width not exposed.	0.82	0.020
MHS-50	Cut across 1.5 foot vein in SE corner of shaft; 16 feet below shaft collar.	1.46	0.027
MHS-51	Grab of float 11 feet from NE end of Trench No. 3; 6.5 feet below ground surface	1.71	0.028
MHS-52	Cut across 1.2 feet of gneiss in SW end of Trench No. 3	0.53	0.017
MHS-57	Cut across 1.5 feet of back of crosscut 32 feet SW of shaft.	0.03	0.005
MHS-58	Grab sample of 2.5 feet of vein material in NE end of Trench No. 6	2.26	0.013
MHS-59	Cut across 14 feet of bedrock in bottom of Trench No. 3 SW end; 9.5 feet below ground surface	0.39	0.014

MHS-60	Cut from 5.5 to 10 feet in NE end of Trench No. 1; 10 feet below ground surface	0.23	0.003
MHS-61	Cut across 1.5 feet decomposed gneiss in SW end of Trench No. 1	0.44	0.024

Exploration on the Antrim and G. W. lode claims is sufficient to indicate a small reserve of thorium-bearing ore but it is insufficient to permit a detailed evaluation of the ore reserves. It appears that the deposit consists of several small veins or lenses of silicified material in a shear zone which is in part occupied by a rhyolite dike.

Ore reserves are estimated as follows:

Inferred ore - 2700 tons containing 0.53% ThO_2

For the purpose of this estimate the exposures of ore in the shaft, Pit No. 1 and in Trench No. 1 are assumed to be on the same vein, the average width of the vein is considered to be 3.25 feet, and a convervative depth is estimated to be 50 feet. The grade of the ore is based on the weighted average of samples MHS 46, 47, 49, 50, and 60.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that a small reserve of thorium-bearing ore has been discovered on the Antrim and G. W. lode claims by exploration pursued under contract Idm-E653, DMEA Docket 3078. Inferred ore reserves are estimated at 2700 tons containing 0.53% ThO_2 and insignificant amounts of U_3O_8. Although the shear zone containing the ore was not located northwest of the shaft, it may well continue in that direction in which case the ore reserve estimates may prove to be low.

Data on the strategic importance, price, and market for thorium ore are not available, and an appraisal of the economic importance of this small deposit is difficult. However, because of the possible use of thorium ore as a source of fissionable material, certification is a discovery is recommended.

Additional exploration with Government assistance does not appear justified.

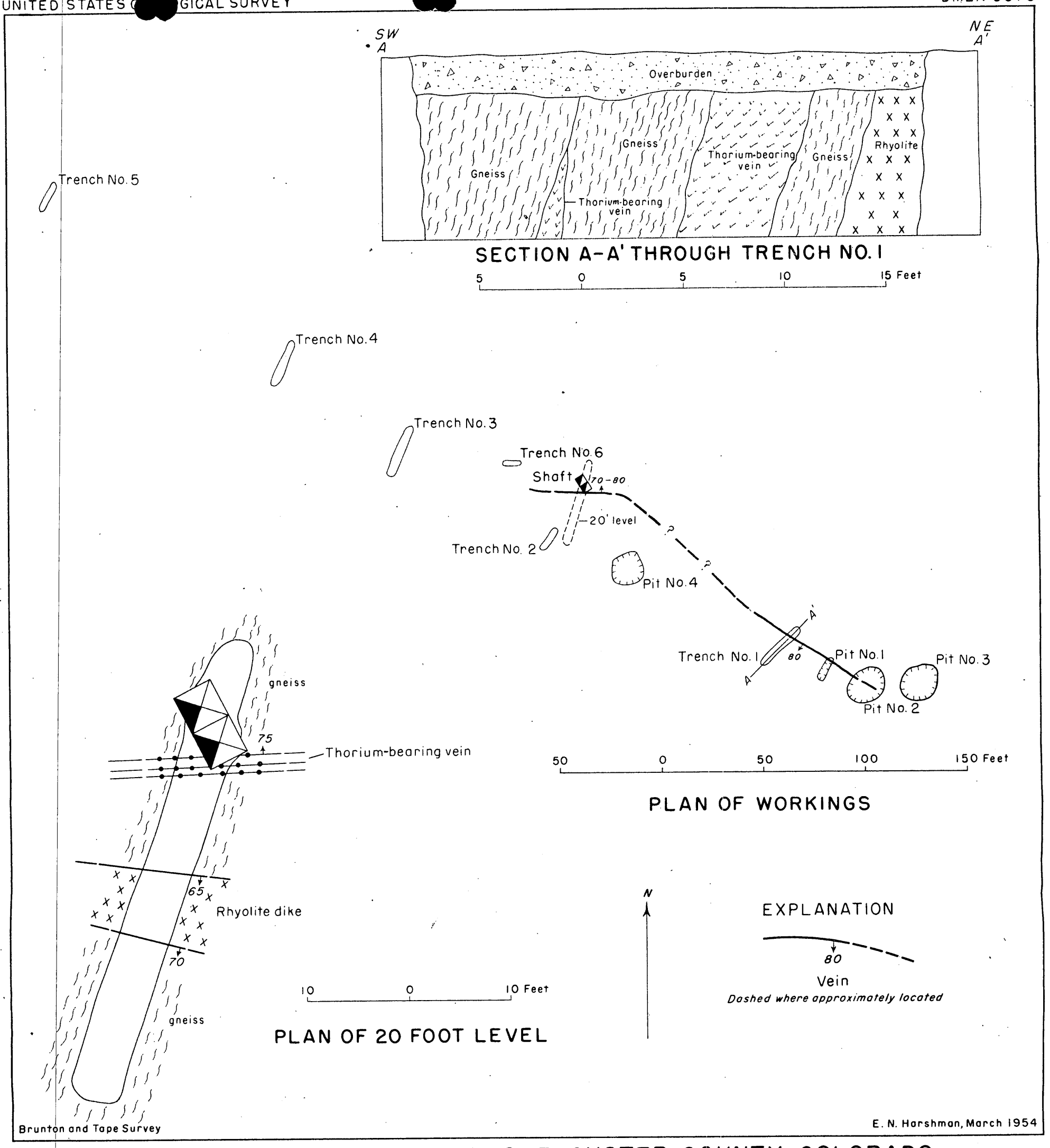


FIGURE 1—ANTRIM AND G.W. LODE, CUSTER COUNTY, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Date Rec'd.
JUL 30 1954
BUREAU OF MINES
Denver, Colorado

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
July 29, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3078, contract Idm-E653 (Thorium) George D. Schweigert and Pete Cowan (G. W. and Antrim lode claims) Custer County, Colorado

Transmitted herewith are the original and ten copies of a final engineering report by M. H. Salsbury on the above docket. Contract operations were started February 15 and completed satisfactorily April 30, 1954.

The exploration contract comprised clearing an access road, shaft sinking, crosscutting from the bottom of the shaft, and surface trenching at a total estimated cost of $2,888.00. Approved costs totaled $2,886.95 in which the Government participated in the amount of $2,598.26. Additional exploration or development either financed privately or with Government assistance is not considered justified or is it suggested at the present time.

Certification of Discovery or Development is recommended and three copies of form "B" with suggested description of the discovery are included for your approval and submission to the Administrator as a suggestion for his certification of the exploration project.

W. M. Traver

W. M. Traver

enclosures

cc 10
E653
DMEA Chron

WMT/pam

Reviewed by
DMEA OPERATING COMMITTEE
8-13-54
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

GCS
9/20/54

FINAL ENGINEERING REPORT

DMEA 3078, Exploration Project Contract Idm-E653

Antrim and G. W. lode claims

George D. Schweigert and Pete Cowan

Custer County, Colorado

Thorium

M. H. Salsbury, Mining Engineer
Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
8-13-54
(date)

July 21, 1954

DMEA 3078, Contract Idm-E653

ANTRIM AND G. W. LODE CLAIMS
GEORGE D. SCHWEIGERT AND PETE COWAN
CUSTER COUNTY, COLORADO

CONTENTS

Final Engineering Report — Page

Summary and introduction 1
Location and ownership 3
History and production 4
Description of the deposits 5
Work completed under contract 7
Description of discovery 10
Expenditures 13
Conclusions 13
Recommendations 13

TABLES

Page

1. Sampling results, G. W. and Antrim lode claims, DMEA 3078 contract Idm-E653 — 11

ILLUSTRATIONS

Figure — Follows Page

1. Location map, GW and Antrim lode claims, George D. Schweigert, Custer County, Colo. 3
2. Plan map of GW and Antrim lode claims, Custer County, Colo.. 3
3. Plan and section of surface and shaft workings, GW and Antrim lode claims, Custer County, Colo. 5

DMEA 3078, Contract Idm-E653

ANTRIM AND G. W. LODE CLAIMS
GEORGE D. SCHWEIGERT AND PETE COWAN
CUSTER COUNTY, COLORADO

FINAL ENGINEERING REPORT

By

M. H. Salsbury

SUMMARY AND INTRODUCTION

In June 1953, George D. Schweigert, 780 Magnolia Street, Denver 20, Colo., applied for a Defense Minerals Exploration Administration loan of $3,000.00 to explore for thorium a vein believed to outcrop on the Antrim and G. W. lode claims in the Hardscrabble mining district, Custer County, Colo.

The property was examined on August 4-5, 1953, by a DMEA examining team and a slightly revised exploration program approved at a recommended cost of $2,890.00. In the revision, limited underground work was substituted for part of the trenching proposed by the applicants.

Processing of the application was delayed pending a DMEA policy decision on thorium exploration. On January 4, 1954, a short-form contract, Idm-E653, was signed, after the applicants had furnished a satisfactory survey of the property. The contract called for an expenditure of $2,888.00--Government participation 90 percent, or $2,599.20, for an access road, 125 feet of trenching, 10 feet of shaft sinking, and 20 feet of crosscutting from the shaft.

The contract was made out to Schweigert and to Pete Cowan, of Westcliffe, Colo., an associate, who was not listed in the original

application but who was to supervise the project. Permission was requested to delay the start of the work until spring, but before a request for the necessary amendment was submitted, the contractors decided to commence operations immediately, in view of the unusually open winter.

Work was started on February 15, 1954, after a Bureau of Mines engineer had established starting points for the trenches and shaft.

Exploration was completed satisfactorily by April 30, 1954, including extra work not called for in the contract for which the operators did not claim or receive reimbursement.

As a result of the exploration, it was concluded that thorium minerals occur in small lenses and stringers in and adjacent to fractures in a silicified shear zone. On surface, radiometric readings indicated mineralization over a width of as much as 30 feet but sampling and examination of thorium-bearing material did not show a maximum width of more than 4.5 feet, and it was concluded that the extent of radioactivity at surface was not a good index of the true vein width. Continuity of mineralization along the vein was not proven, but it was indicated that continuous mineralization extends along a length of at least 200 feet. Depth of mineralization was not established.

A combined progress and final examination was made on May 6, 1954, after the work was completed.

A Certification of Discovery or Development for the project is recommended on the assumption that the future demand for thorium will make this deposit economically important.

The contractors submitted a final report to the Executive Officer, DMEA Region IV Field Team which was considered acceptable.

A Report of Review was submitted by the Contract Administration and Audit Division on May 14, 1954, and final payment to the contractor was recommended.

LOCATIONS AND OWNERSHIP

The G. W. lode claim, Survey No. 16533A, and the Antrim lode claim, Survey No. 16141, are located in secs. 9 and 10, T. 22 S., R. 71 W., Hardscrabble mining district, Custer County, Colo. (figs. 1 and 2). The region, at an altitude of 9,000 feet in the Rosita Hills, is 9 miles east of Westcliffe, Colo., and 35 miles southwest of Florence, Colo. It is easily accessible over graveled Colorado State Highway 96 and surfaced Colorado State Highway 69. The area is 35 miles from the nearest railroad at Texas Creek, Colo., on the Denver and Rio Grande Western Railroad and is served by scheduled truck transportation from Denver and Pueblo, Colo., where stocks of mining supplies and equipment are maintained. Mining timber can be obtained locally.

There are no purchasing depots or treatment plants for thorium ores in Colorado. The Lindsay Chemical Company of Chicago, Illinois, has acted as a buying agent for thorium for the Atomic Energy Commission but is not purchasing ore at the present time, so far as is known.

The G. W. and Antrim lode claims are owned by the applicants who have a treasurer's deed. The property had reverted to Custer County for delinquent taxes. During the examination made to investigate the loan application, an unsuccessful effort was made to locate the claim corners and establish the position of the radioactive outcrop in relation to the

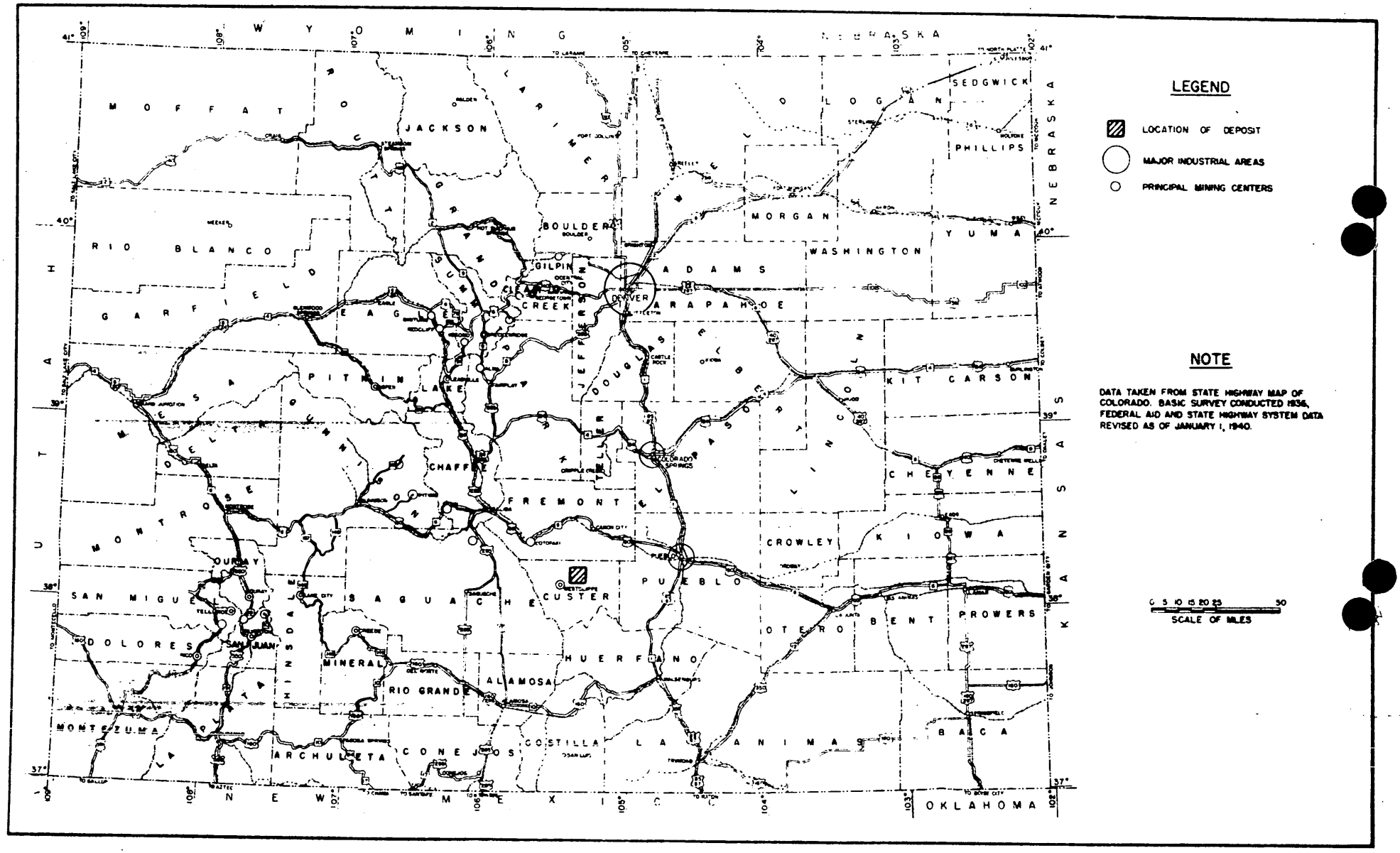


FIGURE 1 - LOCATION MAP, GW AND ANTRIM LODE CLAIMS, GEORGE D. SCHWEIGERT, CUSTER COUNTY, COLO. (DMEA 3078, CONTRACT Idm-E653)

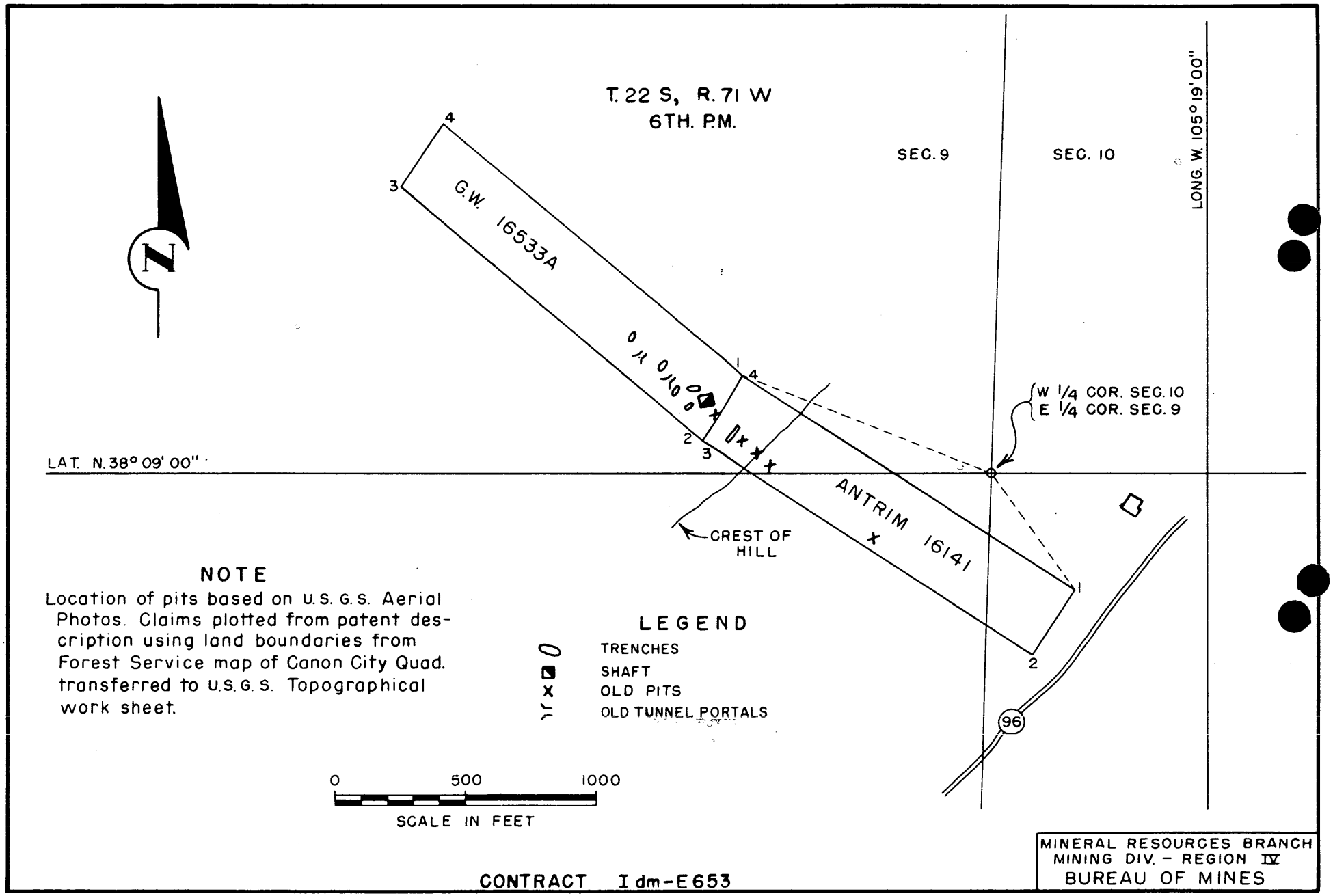


FIGURE 2 - PLAN MAP OF GW AND ANTRIM LODE CLAIMS, CUSTER COUNTY, COLO. (DMEA 3078)

claims. Later the applicants had the property surveyed and the location of the outcrop established within the claim boundaries, satisfying the Government requirements.

HISTORY AND PRODUCTION

The G. W. and Antrim lode claims are part of a scattered group of claims patented in 1903 by the Grand Rapids Gold Mining Company. A small amount of exploration by trenching and shallow underground workings was done in an effort to develop a gold mine but no commercial deposits were found and eventually the claims reverted to the county for taxes. The ground immediately surrounding the two claims is grazing land, held under agricultural patents.

In 1952 and 1953, the Geological Survey conducted investigations in the Custer County area, acting for the Atomic Energy Commission, to determine the potential of the region as a source of thorium. The immediate area surrounding the G. W. and Antrim lode claims was included in the program. The mapping party had not covered the vicinity of the G. W. and Antrim lode claims at the time of the DMEA examination, but Survey personnel furnished valuable information and topographical maps to the examining team from reconnissance work already completed. The project has been continued by the Survey in 1954 without Atomic Energy Commission participation.

Cowan and Schweigert discovered the radioactivity on the property while prospecting in 1952.

No mineral production has come from the claims or from any property in the immediate vicinity.

DESCRIPTION OF THE DEPOSITS

The G. W. and Antrim lode claims are located end to end with the side lines bearing northwest and southeast approximately parallel to the thorium-bearing outcrop which strikes N. 50° to 57° W. and extends the length of the claims near the southwest side lines (figs. 2 and 3). The strike was determined by tracing radioactivity with a Geiger counter and by a line of old prospect pits and tunnel dumps marking early day workings, now caved, which were driven on the same mineralized zone.

Two veins in place have been definitely exposed in one trench and one vein in the shaft. In the trench, the dip of the veins is 80 degrees southwest but the one in the shaft appears to have a dip of 70 degrees northeast. The position of the vein is further indicated by radioactivity of float in two old pits and two other trenches which were not excavated deep enough to reach bedrock. The relative positions of the various vein exposures indicate either that the strike is highly variable, or that the several exposures are not all on the same vein. There are definitely two veins in trench T-1, and variations in dip and position of other exposures indicate strongly that there may be more than one vein elsewhere.

On surface there is substantial radioactivity in a zone up to 30 feet wide, starting near the common endline of the two claims, and extending northwesterly down the hill, disappearing under an alluvial fan at the northwest end of the G. W. lode claim. Radioactivity decreases and fades out completely southeasterly on the Antrim lode claim. Strong radioactivity can be noted along a strike length of 500 feet and work under the

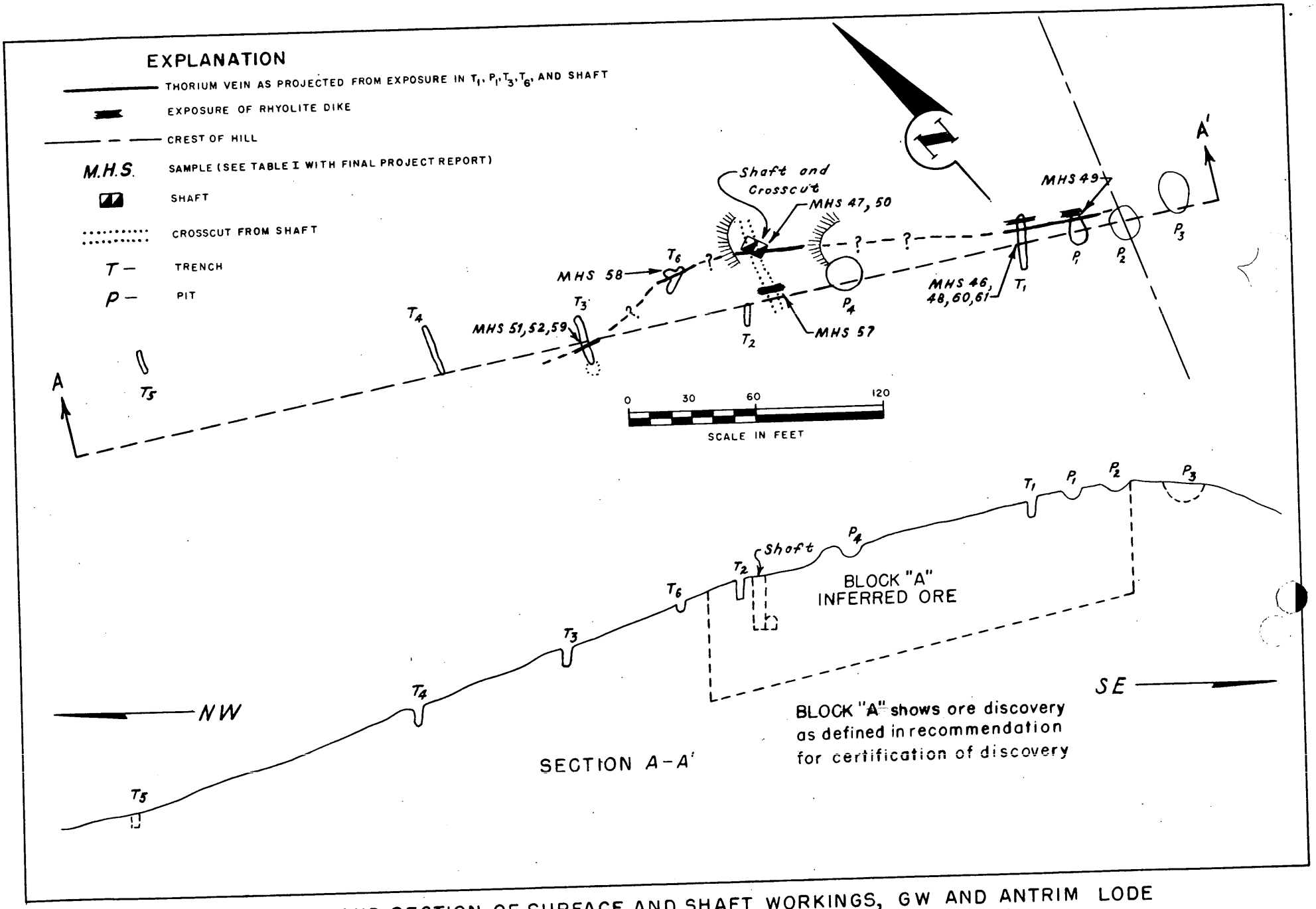


FIGURE 3 - PLAN AND SECTION OF SURFACE AND SHAFT WORKINGS, GW AND ANTRIM LODE CLAIMS, CUSTER COUNTY, COLO. (DMEA 3078, CONTRACT Idm E653)

exploration project was concentrated in this area. The actual width of the veins in place, where seen, is narrow compared with the wide zone of mineralization at surface. It is concluded that the width of radioactivity at surface is caused by dispersal of vein matter in the overburden and is not a good index of the true vein width.

The thorium-bearing material is a red to reddish-yellow jasperoid rock in a shear zone up to 20 feet or more in width. The red rock appears to be associated with higher radioactivity than the yellow. The thorium mineral present has been tentatively identified by the Geological Survey as thorite or hydrothorite. A. T. Sweet, of the metallurgical field office of the Bureau of Mines at Denver Federal Center confirms this identification. The rock, when freshly broken, gives off a distinct unpleasant odor which Sweet states is caused by phosphorus compounds contained. A pocket spectroscope shows a fine brown line in a red band, indicating the presence of other rare earths of the cerium group. The gangue rock was at first identified as syenite of which there are a number of known dikes in the area. Further study by the Geological Survey did not substantiate this, and E. N. Harshman, the Survey participant in the final examination, refers to the gangue as silicified country rock. The wall rock consists of several types of gneissic rock of the regional pre-Cambrian complex.

Paralleling the thorium vein on the northeast or footwall side, and separated from the vein by several feet of country rock, is a rhyolite dike. This can be seen in a trench and pits at the crest of the hill. In the shaft workings a rhyolite dike about 6 feet wide was cut 16 feet southwest of the vein in the shaft. The exposures in the shaft and those further northeast at surface are not necessarily the same dike. The rhyolite is

tentatively assigned to a later period of mineralization than the thorium.

WORK COMPLETED UNDER CONTRACT

The contract called for the following exploration as listed in Exhibit A:

Clearing access road with bulldozer	$ 72.00
Sinking shaft at pit No. 2, 10 feet at $65.00 per foot	650.00
Crosscutting 20 feet from bottom of shaft at $38.30 per foot	766.00
Trenching 125 feet at $11.20 per foot	1,400.00
Total estimated cost	$2,888.00
Government participation, 90 percent or	$2,599.20

Exploration by shaft and crosscut was substituted for part of the trenching as proposed originally because it was probable that the depth to bedrock at some points might be too great for successful exploration by trenching. This proved to be the case except at the crest of the hill.

During the course of the work two amendments which were requested by the applicants and recommended for approval by a DMEA examining team, were authorized as follows:

(1) Amendment No. 1, dated March 10, 1954, permitted a change from crosscutting 10 feet each way at the bottom of the shaft to crosscutting a total of 20 feet either way.

(2) Amendment No. 2, dated April 13, 1954, permitted substitution of 10.5 feet of additional crosscutting for 36 feet of trenching, at no increase in total cost of the project. This change was logical because no more trenching was considered advisable after it was found that most of the bedrock surface was too deeply buried.

Amendment No. 1 was requested because it became apparent, after 5.5 feet of crosscutting had been done northeast, that there was probably no further mineralization in that direction, and it was desirable to expend all the remaining authorized footage in crosscutting southwest.

Amendment No. 2 was requested because, at the completion of 20 feet of crosscutting authorized originally, a rhyolite dike had been cut southwest of the shaft, but no vein, and it was believed that additional crosscutting might expose a vein lying on the southwest side of the dike, similar to the relative position of dike and vein in trench T-1 and pit P-1. However, no vein was found in an additional 11 feet of crosscut.

Work completed under the contract and amendments, including that authorized and claimed, and additional work not authorized, for which payment was not claimed or made, is as follows:

Item description	Performed	Allowable maximum authorized	Amount claimed and paid for
Clearing access road with bulldozer	Job	Job	Job
Sinking shaft at test pit No. 2	12.5 feet	10.0 feet	10.0 feet
Crosscutting at bottom of shaft	41.5 feet	30.5 feet	30.5 feet
Trenching (authorized)			
Trench T-1 - 25 feet			
Trench T-3 - 26 feet			
Trench T-4 - 24 feet			
Trench T-5 - 14 feet			
Total authorized trenching	89.0 feet	89.0 feet	89.0 feet
Trenching (unauthorized)			
Trench T-2 - 10 feet			
Trench T-6 - 8 feet			
Total unauthorized trenching	18.0 feet	0	0

The trenches, shaft sinking, and crosscutting, for which payment was approved and made, were at locations and to depths designated by the

inspecting engineer (fig. 3). The shaft was started in an old pit already 7.5 feet deep and the actual sinking amounted to 12.5 feet. Following are dimensions of the various items as completed:

Trench T-1	- Maximum depth	10.0 feet,	length 25 feet
Trench T-2	- Maximum depth	8.0 feet,	length 26 feet
Trench T-3	- Maximum depth	9.5 feet,	length 24 feet
Trench T-4	- Maximum depth	9.0 feet,	length 14 feet
Trench T-5	- Maximum depth	7.0 feet,	length 10 feet
Trench T-6	- Maximum depth	3.0 feet,	length 8 feet
Shaft (depth measured from collar)		20.0 feet	
Crosscut (southwest)		36.0 feet,	S. 20° W.
Crosscut (northeast)		5.5 feet,	N. 20° E.

In Trench T-1, two veins, one 4.5 feet wide and the other 1.6 feet wide, were found in place.

In the shaft a vein 2.0 feet wide was intersected. In Pit P-1, which the contractors cleaned out on their own account, and in Trench T-3, bedrock was not reached but may not have been far away. The sampled width of mineralization was 1.2 feet and 14.0 feet, respectively. In Trench T-6 good mineralization for a width of 2.5 feet was found in the overburden to a depth of 3 feet but bedrock was probably some distance below.

In Trenches T-2, T-4, and T-5, while radioactivity was exposed in the bottom erratically higher than normal background count of about .015 MR/HR, it was not appreciably greater than at surface and therefore did not indicate proximity of a vein outcrop.

The quality of the work was excellent. All trenches were completed and cleaned up for easy sampling, and underground work was carried on safely. Openings were timbered adequately where necessary and left in good condition for examination.

DESCRIPTION OF DISCOVERY

The thorium discovery can be defined as a thorium vein or veins with a general strike of N. 50° to 57° W. and an average width, as sampled, of 3.25 feet and average content of 0.53 percent ThO_2, exposed in place in Trench T-1, Pit P-1, and the shaft, and indicated in Trenches T-3 and T-6 by radioactive material in the overburden (fig. 3).

Projecting the ore 25 feet northwest and 25 feet southeast of the certain exposures, continuous ore-grade mineralization along 200 feet of the vein is assumed. On the basis that the exposure in the shaft is at least 50 feet below that in Trench T-1, a depth of 50 feet of ore is assumed.

Using the foregoing figures and a tonnage factor of 12, a block of ore 200 feet long, 50 feet deep, and 3.25 feet wide is inferred for a total of 2,700 tons of ore with an average content of 0.53 percent ThO_2. No dollar value is assigned. This inferred ore reserve is tentative, and would be affected by factors as yet unknown, such as the possibility of the occurrence of overlapping stringers in the shear zone, instead of one vein, or the presence of barren sections along the vein or veins. Table 1 lists the samples taken during the operation of the project and shows the computation of ore reserves. Sample locations are shown on figure 3. Sampling was supplemented by radioactive measurements with a Geiger counter.

The presence of uranium in the samples is not necessarily significant because many granite-type rocks contain small amounts of uranium and thorium.

TABLE 1. - Sampling results, G. W. and Antrim lode claims, DMEA 3078, contract Idm-E653

Sample No.	Description	Content ThO_2 (percent)	Content U_3O_8 (percent)
MHS-46	Cut across 5 feet vein matter in Trench T-1 9 feet below ground level. Rock still shattered but may be in place.	0.11	0.008
MHS-47	Two diagonal 4-foot cuts across 2 feet of vein in shaft 14 to 16 feet below collar. Vein in place.	1.38	0.083
MHS-48	Cut across 1 foot in Trench T-1 at 7 feet from southwest end trench 9 feet below ground level.	0.50	0.031
MHS-49	Cut across 1.2 feet of vein material in northeast end Pit P-1 6 feet below ground level. Full vein not exposed	0.82	0.020
MHS-50	Cut across 1.5 feet vein in southeast corner shaft. Check on sample MHS-47	1.46	0.027
MHS-51	Grab of float in overburden in Trench T-3, 6.5 feet below ground surface and 11 feet from northeast end	1.71	0.028
MHS-52	Cut across 1.2 feet altered gneiss in hole excavated in southwest end Trench T-3, 6.5 feet below surface	0.53	0.017
MHS-57	Cut across 1.5 feet of altered gneiss in back of southwest crosscut at 32 feet from southwest edge of shaft	0.03	0.005
MHS-58	Grab sample of 2.5 feet of vein material, float in northeast end of Trench T-6	2.26	0.013
MHS-59	Cut along 14 feet of Trench T-3 starting at southwest end. Material is shattered and may not be in place, sample taken 9.5 feet below surface	0.53	0.017
MHS-60	Cut in bottom Trench T-1 taken from 5-1/2 feet to 10 feet from northeast end; 10 feet below ground surface	0.23	<0.003
MHS-61	Cut across 1.6 feet red-colored rock 10 feet below ground surface in Trench T-1, 4.0 from southwest end. Sample cut on southeast wall just above bottom	0.44	0.024

< Less than

Computation of Ore Reserves

Sample No.	Width (feet)	Percent ThO_2	Width times percent
MHS-46	5.0	.11	.55
MHS-47	2.0	1.38	2.76
MHS-49	*1.2	0.82	.984
MHS-50	1.5	1.46	2.19
MHS-60	4.5	.23	1.035
	14.2		7.519

Average width $\frac{13.0}{4}$ = 3.25 feet

Average content $\frac{7.519}{14.2}$ = 0.53 percent ThO_2

Inferred ore = $\frac{200 \times 50 \times 3.25}{12}$ = 2,700 tons ore averaging 0.53 percent ThO_2

*Not a vein width and not used in computing average width.

EXPENDITURES

Following is a tabulation of expenditures during the project:

Estimated maximum cost as shown in Annex I of the contract	$2,888.00
Estimated Government participation 90 percent, or	2,599.20
Actual expenditure (as verified by the Report of Review, dated May 14, 1950, submitted by the Contract Administration and Audit Division	2,886.95
Cost claimed by the contractors	2,886.95
Amount paid the contractor by the Government at 90 percent participation	2,598.26

CONCLUSIONS

It is concluded that a definite small occurrence of thorium has been discovered as a result of the Government-assisted exploration. It is not mineable at the present time, but may become of economic importance at some time in the future, depending on a greater demand for the mineral.

The contractors carried out the work efficiently and the excellence of workmanship exhibited is commendable.

RECOMMENDATIONS

(1) Additional exploration does not appear to be warranted at this time, either privately or with Government assistance. Further development of the deposit should await establishment of ore-treatment facilities and a more definite market. A decision on the economic worth of the deposit would have to be based on the price to be paid for thorium, of mining, shipping, and treatment costs, as well as better definition of ore reserves, based on additional development.

(2) It is recommended that a Certification of Discovery or Development be made and that any ore produced from the property be

subject to Government royalty in accordance with Article 6 of the contract.

(3) Production is not economically feasible at this time. The price of thorium nitrate, the form in which thorium is marketed, is variously given as $2.50 to $4.00 a pound. There is no established market price. Mr. Tom of the Lindsay Chemical Company is authority for this price range, but he could not quote a firm price. The value of an ore averaging 0.5 percent ThO_2 would be too low to make a mining operation on a small deposit economically feasible at this price level, particularly as it would have to be shipped to Chicago, Illinois, and processed at a probable high cost.

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

224 New Customhouse
Denver 2, Colorado

May 19, 1954.

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA-3078 (Thorium), Contract No. Idm-E653, George D. Schweigert and Pete Cowan, Custer County, Colorado.

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

Also enclosed are two copies of a memorandum to Mr. T. A. Christensen, dated May 14, 1954, relative to final payment under the terms of the subject contract.

Final payment to the Operator in the amount of $472.82 has now been made in conformance with the Report of Review by the Contract Administration and Audit Division dated May 14, 1954.

W. H. King

W. H. King

Enclosures

OP'S. FINAL Report

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

224 New Customhouse
Denver 2, Colorado

May 14, 1954

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 3078 (Thorium), Contract Idm-5653, George D. Schweigert and Pete Cowan, Custer County, Colorado - Form IP-104 Operator's Monthly Progress Report and Voucher for the month of April 1954 - FINAL PAYMENT

Enclosed are the original and four copies of Forms IP-104 and 104A, narrative report, and engineer's report for the above period, which constitute the operator's final accounting report under the terms of the contract.

Work has been accomplished as authorized in the contract and the operator has complied with all requirements. Final payment is recommended as follows, which is in conformance with the report of review by the Contract Administration and Audit Division dated May 14, 1954:

Basis for Final Payment

Total accepted cost (as per report of review)	$2,886.95
Government participation at 90%.....	2,598.26
Total prior payments.....	2,125.44
Balance due the operator.....	$ 472.82

Reconciliation with operator's final IP-104 Report for the month of April 1954

Gross amount of operator's claim.....	$ 525.35
Government participation at 90%.....	472.82
Amount due the operator.....	$ 472.82

John F. Shaw
John F. Shaw
For W. H. King

JWT:jp

Enclosures
cc Contract
Chron
Sec. to Oper. Comm. (2)
WMTraver
JWTownsend

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
May 11, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Reg. IV

Subject: DMEA 3078, Contract Idm-E653 (Thorium), George D. Schweigert and Pete Cowan (OW and Antrim lodes), Custer County, Colorado--Progress report for April 1954

Enclosed are the original and four copies of the subject progress report, the third and final one--forms MF-104 and MF-104A, with narrative and sketch map--and 6 copies of M. H. Salsbury's memorandum covering his inspection of the completed surface and underground work, and checking of the reporting forms. The contract and amendments are unit cost prepared on short form MF-200(A) and no documentation is required.

Salsbury made a progress and final inspection of the project May 6, 1954, and confirms the completion satisfactorily of 10.5 feet of crosscutting at the bottom of the 10 foot shaft and 11.0 feet of trench as shown on the MF-104A forms. The operator completed additional shaft sinking, crosscutting, and surface trenching, not authorized by the contract, nor claimed. The narrative is more in the nature of a final report than a progress report, failing to mention the accomplishments in April. All work was in accordance with the terms of the contract or amendments No. 1 and No. 2, and entries and extensions on the reporting forms are correct.

Payment is approved and certified on the MF-104 forms of $472.81 or 90 percent of the total claimed by the contractor.

With completion of the contract in a satisfactory and workmanlike manner, if the operator's April narrative is satisfactory to you as a final report, the contract can be closed after an audit report by a representative of the Contract Administration and Audit Division. The engineer is prepared to submit a final engineering report recommending Certification of Discovery or Development when you so instruct, and when assay returns are received on samples taken during the final inspection.

T. D. Everett, for
W. M. Traver

enclosures
cc: 4

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
May 11, 1954

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Reg. IV

From: M. N. Salsbury

Subject: DMEA 3078, Contract Idm-8653 (Thorium), George D. Schweigert and Pete Cowan (G4 and Antrim lodes) Custer County, Colorado--Progress report for April 1954

Progress under the subject contract was inspected on May 6, 1954, in company with Pete Cowan, one of the partners representing the contractors.

All work was done in accordance with the terms of the contract and amendments. The project has been completed.

The amounts claimed are as follows:

Crosscutting 10.5 feet at $38.30 per foot	$402.15
Trenching 11 feet at $11.20 per foot	123.20
Total claimed in April 1954	$525.35

Under the short-form contract and amendments, the items claimed bring the total amounts claimed to the allowable maximums. Work accomplished exceeds the footages claimed for shaft-sinking, crosscutting, and trenching. The additional crosscutting in April did not encounter any significant mineralization. Trench T-1 was deepened to 10 feet although it was not required. Trench T-3 was deepened to 9.0 feet, so as to be satisfactory to the DMEA representative. Evidence of radioactivity previously noted in these trenches was substantiated by the additional depth. Trench T-5, 8 feet long and 3 feet deep was dug between the shaft and trench T-3. A flat dipping radioactive layer about 2.5 feet wide was cut in the overburden. Bedrock was not reached, and the radioactive material cannot be satisfactorily correlated with other exposures. Trench T-6 was not authorized, nor was payment claimed by the contractor.

Five samples were taken by the inspecting engineer at exposures in the new work, bringing to 12 the total number of samples from the property sent to the Region IV Salt Lake City Metallurgical Division for analyses.

From the results of the exploration project, it must be concluded that the thorium occurrences are small lenses and stringers occupying fractures in an altered syenitic dike. There is no evidence indicating a large or continuous ore body. From the narrow widths of ore in place as actually seen in trench T-1, and at the bottom of the shaft, it is evident that the width of mineralization, as indicated by radiometric readings at surface and in the overburden in trench T-3, is probably not a good index of the true width of the ore occurrences. The downward extent of the deposits was not determined.

The contractor's claims are not in excess of allowable maximums and are approved.

A tabulation of the work accomplished during the project follows:

Item	Description	Actually performed	Allowable maximum	Amount claimed
1	Clearing access road with bulldozer	job	job	job
2	Sinking shaft at test pit No. 2	12.5 feet	10.0 feet	10.0 feet
3	Crosscutting at bottom of shaft	41.5 feet	30.5 feet	30.5 feet
4	Trenching (Authorized)			
	Trench T-1 - 25 feet			
	Trench T-3 - 26 feet			
	Trench T-4 - 24 feet			
	Trench T-5 - 14 feet			
	Total authorized	89.0 feet	89.0 feet	89.0 feet
	Trenching (unauthorized)			
	Trench T-2 - 10 feet			
	Trench T-6 - 8 feet			
	Total unauthorized	18.0 feet	0	0

The contractor submitted a combined final report and narrative report for April 1954, sketch map, and forms MF-104 and MF-104A in quintuplicate, all of which are satisfactory.

Totals entered on forms MF-104 and MF-104A for April 1954 are correct. Payment of $472.81, or 90 percent of the amount claimed, $525.35, is approved, subject to final audit.

M. H. Salsbury
M. H. Salsbury
Mining Engineer

cc: 6

MHS/ici

Form ME-104 (Rev.) (April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April, 1954 Docket No. DMEA 3078 Contract No. Idr-2358
Operator's Name Poto Cowan & George D. Schwolgert Minerals Thorium
Mailing Address 780 Magnolia St-Denver 20, Colo
Contract Amount, $ 2888.00 Government Participation: 80 % Amount, $ 2500.00
(As amended-$2600.95) (As amended-$2500.95)

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contractors: Short Form Contracts:						
Drilling Shaft	none	350.00	350.00			
Bulldozing Road		72.00	72.00			
Crosscutting	402.15	766.00	1168.15			
Drifting						
Tromphing	123.20	670.60	893.80			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	525.35	2361.60	2886.95	525.35	2361.60	2886.95

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Apr. 30, 1954 *Payee Poto Cowan & George D. Schwolgert

Per George Schwolgert Title Partner

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$472.82

Signature [illegible]
(Authorized Certifying Officer)

Date 5/17/54 Vou. No. DMA 54-124

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. IdmF653 in accordance with the terms of the contract.

Signature M. H. Salsbury #472-81 WMT Title Mining Engineer Date May 10, 1954

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. H. KING Title Executive Officer Date MAY 14 1954

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952); however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1954 Docket No. DMEA 3078 Contract No. Idm-2553
Operator's Name Pete Cowan & George D. Schweigert Minerals Thorium
Mailing Address 780 Magnolia St-Denver 20, Colo.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting	ft.	402.15	10.5	1168.15	30.5	38.30	30.5	38.30
Raising								
Shafts	ft.	none	none	650.00	10	65.00	10	65.00
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	ft.	123.20	11	993.80	89	11.20	89	11.20
Test Pits								
Roads ~~and Trails~~	Job	none	none	73.00	none	none	Job	73.00
TOTAL DISTRIBUTED COSTS		525.35	21.5	2886.95				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								2888.00
Initial Rehabilitation and Repairs					As ammended			2886.95
New Buildings, Improvements, etc.								
TOTAL COSTS		525.35						

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Apr. 30, 1954 Operator Pete Cowan & George D. Schweigert

By Geo D Schweigert Title Partner
George D. Schweigert

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

George D. Schweigert
780 Magnolia Street
Denver, Colorado

April 30, 1954

Docket #DMEA 3078
Contract #Idm-E353

FINAL REPORT

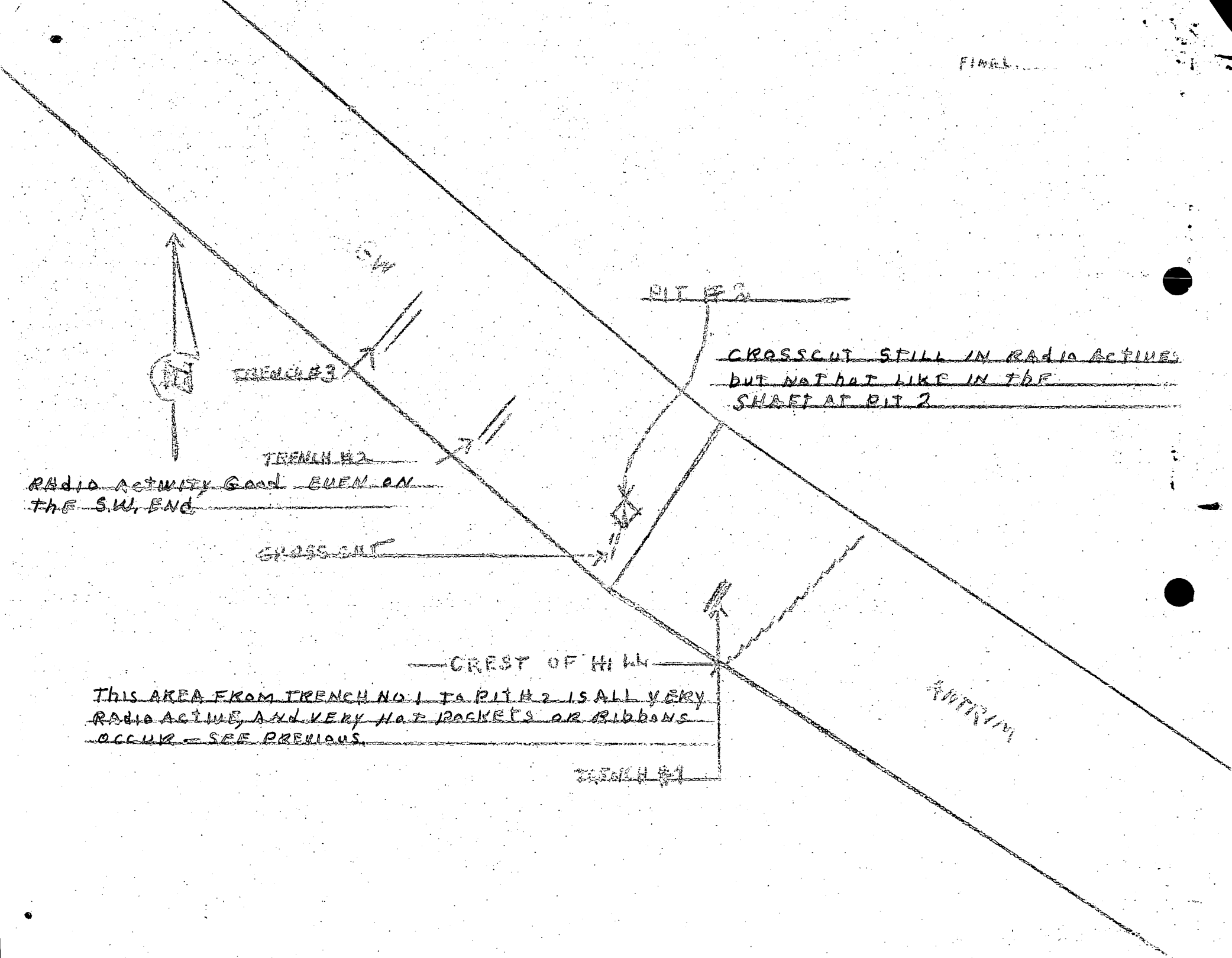
We have now completed the project by finishing the crosscutting from the bottom ot the shaft at pit #2 and deepening trenches where suggested. Although we have crosscutted the 25½ feet in a southernly direction, we still hit into radio actives, which might indicate the formation here is wider than we had figured, judging from trench #1 at the crest of the hill, or it might be a somewhat different formation than we have knowledge to pass upon.

Where we deepened trench #2, good indications were apparent as the trench is very radio active throughout and was hot on the southwest end which might again be an indication the formation here too is bigger than we at first supposed. It is my personal opinion at present that if the ores we have uncovered in this surface exploration are considered of commercial quality, there is a large amount available near the surface, and the indications would be that it could be much better at depth. It would necessitate tunneling, drilling or something of that nature and on a larger scale, to really prove the extent of the ore body. We desire to thank all those that aided in taking an interest in this small project, and would like to make mention of the business like and prompt manner in which things have been handled, and whether it proves to be commercial or not, we consider it a job well done.

By George D. Schweigert
George D. Schweigert

MF-104 narratives
in lieu of final rep

FINAL


PIT #2
CROSSCUT STILL IN RADIO ACTIVES
BUT NOT HOT LIKE IN THE
SHAFT AT PIT 2
TRENCH #3
TRENCH #2
RADIO ACTIVITY GOOD EVEN ON
THE S.W. END
CROSS CUT
CREST OF HILL
THIS AREA FROM TRENCH NO 1 TO PIT #2 IS ALL VERY
RADIO ACTIVE, AND VERY HOT POCKETS OR RIBBONS
OCCUR - SEE PREVIOUS.
TRENCH #1

April 19, 1954

Memorandum

To: Hazel Berry, Operating Committee

From: Grace L. Ault
Rare & Miscellaneous Metals Division

Subject: Amendment to contract

Mr. Ching has reviewed and approved Amendment No. 2, dated April 13, 1954, to Contract No. Idm-E653, Docket No. DMEA-3078, George D. Schweigert (Thorium).

Grace L. Ault

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
APR 15 1954

224 New Customhouse
Denver 2, Colorado

April 13, 1954

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 3078 (Thorium), Contract Idm-E653, George D. Schweigert and Pete Cowan, Custer County, Colorado

Enclosed are the original and two copies of Amendment No. 2 to Contract Idm-E653 which has been executed to modify the description of the work to be performed. Also enclosed are three sets of data relevant to the amendment.

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

W. H. King

Enclosures

RECEIVED
APR 21 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

✓7

George D. Schweigert
780 Magnolia Street
Denver 20, Colorado

April 1, 1954

Mr. W. H. King
Executive Officer, DMEA
Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Re: Docket DMEA 3078 (Thorium)
Contract Idm-E653

Dear Mr King:

As the 20 feet of crosscutting from the bottom of the shaft at pit #2 has been completed and we do not appear to have crossed the formation in the southerly direction, it would appear that the best way to expose as much of the full width as possible would be to continue to crosscut in a southerly direction.

We therefore request that the last sentence in amendment #1 be made to read: Total aggregate crosscutting not to exceed 30 & ½ feet, and the crosscutting in a southerly direction be continued another 10 & ½ feet, or a total of 25 & ½ feet in the southerly direction, as 5 feet has already been completed in a northerly direction.

The total amount of trenching, as required in paragraph 3 of exhibit A, be reduced to 89 feet and so eliminate the cost of the 36 feet of trenching at $11.20 a foot, or a total of $403.20, and in lieu thereof, complete the additional 10 & ½ feet of crosscutting at $38.30 a foot, or a total of $402.15.

By Geo D Schweigert

April 5, 1954

Memorandum

To: A. H. Koschmann AHK

From: E. N. Marshman

Subject: DMEA Docket 3078, Contract Idm-E653, George Schweigert, Antrim and G. W. Lode Claims, Custer County, Colorado

The subject property was examined on March 31, 1954, in company with M. H. Salsbury, U. S. Bureau of Mines. At the time of the examination five trenches had been excavated, a 20-foot shaft had been sunk, and 26 feet of crosscut had been driven in an attempt to ascertain the length, width, and thorium content of small vein on the property (figure 1).

Exploration to date has not been encouraging. Bedrock was reached in Trench No. 1 and a vein of thorium ore 5 to 6-feet wide is exposed. Trench No. 2 reached bedrock but no vein material is exposed in this excavation. In the area of Trenches Nos. 3, 4, and 5, the overburden proved to be thick and it has not been possible to reach bedrock in these hand-dug excavations.

In a 20-foot shaft, excavated between Trenches Nos. 1 and 3 (figure 1), a narrow, poorly defined, thorium-bearing vein is exposed in the southeast wall from a point 15 feet below the collar to the bottom of the shaft. It does not appear to be the vein exposed in Trench No. 1 but may be a split from it.

A short crosscut, driven northeast from the bottom of the shaft, is entirely in gneiss; a southwesterly crosscut is in gneiss for the first 15 feet and in a rhyrolite dike for the last 6 feet. At the face, crosscut appears to be entering altered gneiss.

In Trench No. 1 the thorium-bearing vein lies parallel to and about 3 feet southwest of a rhyolite dike. Assuming similar geologic conditions in the southwest crosscut, the vein should be 3 to 5 feet

southwest of the present face. Extension of the southwest crosscut therefore appears warranted.

All funds allotted for crosscutting under the contract have been expended. There remains, however, about $403.20 to be expended for trenching and it is the operator's belief that this sum should be expended in extending the southwest crosscut.

It is concluded that additional trenching will add little to our knowledge of the deposit but that an extension of the southwest crosscut should expose the thorite bearing vein which is the exploration objective. It is, therefore, recommended that the contract be amended to permit the unexpended funds to be used in extending the southwest crosscut.

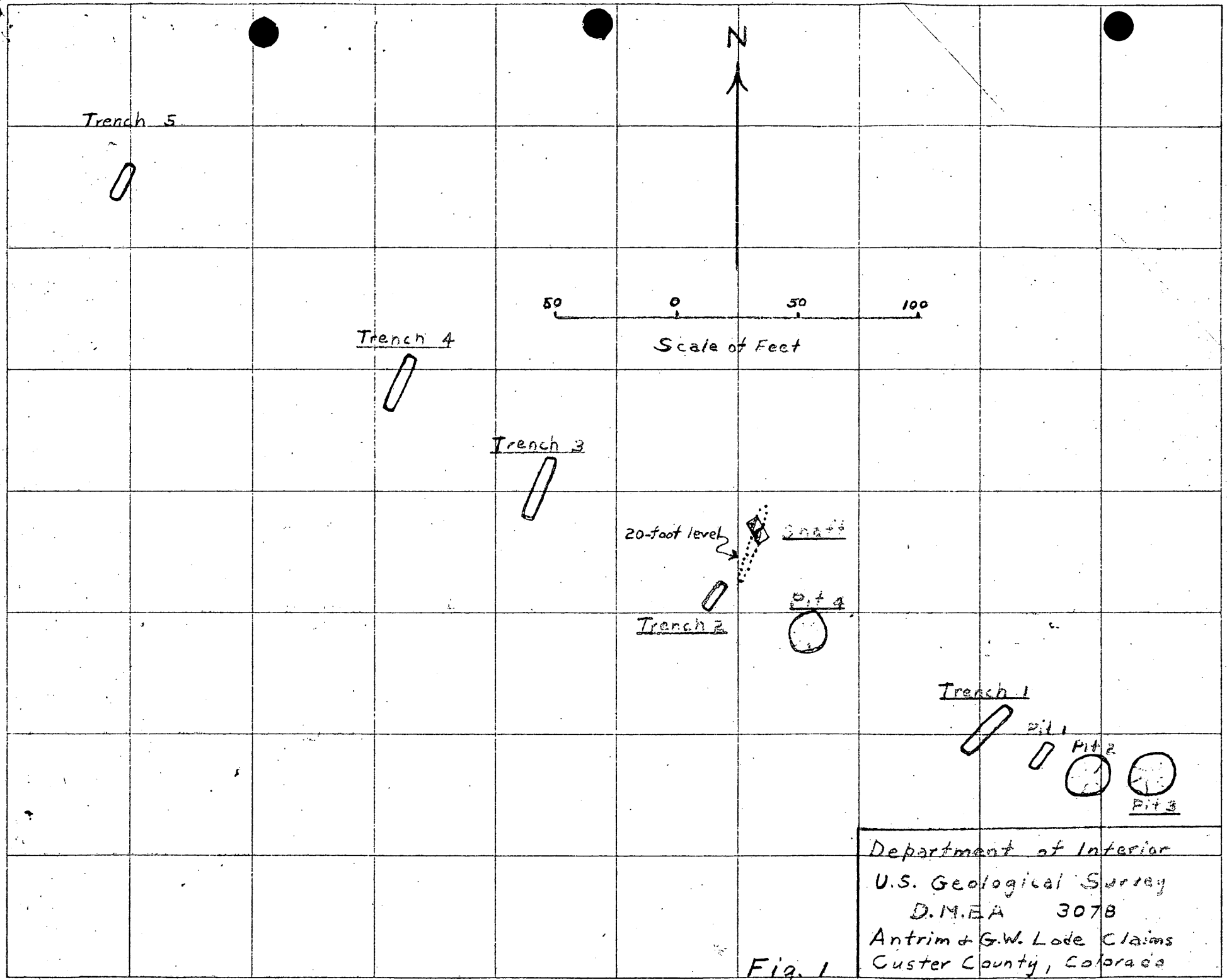


Fig. 1

"ALBANENE" NO. 196M K&E CO., N.Y.

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
April 6, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3078, Contract Idm-E653 (Thorium), George D. Schweigert and Pete Geman (GW and Antrim Lodes), Custer County, Colorado

Enclosed are the original and seven copies of M. M. Salsbury's memorandum recommending the substitution of drifting from the bottom of the present shaft for the surface trenching remaining uncompleted. Funds left of $403.86 will permit approximately 10.5 feet of additional drifting southwest at the contract unit price of $38.30 a foot which will be considerably more informative than trenching.

The recommendation has my approval.

W. M. Traver

W. M. Traver

enclosure

WMT/ky

cc ✓7
E653
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 80, Room 137
Denver Federal Center
Denver 14, Colorado
April 2, 1954

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: M. H. Salisbury

Subject: MMRA 3078, Contract Ida-8453 (Thorium), George B. Schweigert and Pete Gemma (GW and Antrim Lodes), Custer County, Colorado--Request for amendment

Progress under the subject contract was inspected on March 31, 1954, in company with E. H. Marshman of the Geological Survey, and Pete Gemma. The contractors' request to substitute further crosscutting at the bottom of the shaft for the remainder of the trenching allowed by contract was also investigated.

The contractors have completed 89 feet of trenching out of a total of 125 feet allowed under Exhibit A of the contract, and 12.5 feet of shaft sinking and 26 feet of crosscutting, exceeding the maximum of 10 feet of shaft sinking and 20 feet of crosscutting allowed. The attempt to determine the length and width of the deposit has been only partly successful. Five trenches have been excavated, starting with trench T1 just northwest of the crest of the hill and numbered consecutively going northwest down the hill, ending with trench T5 (fig. 1). Trenches T1, T3, T4, and T5 were completed under the contract. Trench T2 and some excavation in pit 1 at the crest of the hill were not done or payment claimed under the contract.

Only the shaft and trench T1 have reached the formation in place. In trench T1, the thorium-bearing vein with a width of 5 feet is definitely exposed. None of the other trenches have reached bedrock and only one, T3, shows definite radioactivity which, however, is general and may come from radioactive material in the wash.

The shaft was sunk in an old pit where good radioactive material, which appeared to be in place, was found. It was assumed that this location was on the vein outcrop. Exploration has shown

that this ore is only a stringer not over 2 feet wide which may or may not be connected with a continuous vein deposit. No more ore was encountered in crosscutting from the shaft 5.5 feet northeast, and 20.5 feet southwest. However, in the end of the southwest crosscut, a rhyolite dike has been cut which appears to be the same one showing on the northeast side of the ore in trench T1 and pit 1 at the crest of the hill. If this is the case, the southwest crosscut should encounter a continuation of the vein within the next 10 feet.

Thirty-six feet of trenching at $11.20 per foot, or $403.26, could be done without exceeding the maximum allowed under the contract. Because of the depth of the wash on the northwest slope and the scattered evidence of radioactivity on the southeast slope, completion of the limited amount of trenching left would not be likely to result in information of any value, and is not recommended.

A Brunton survey tieing in the various trenches, pits, and shaft workings was made and five samples of radioactive material taken.

An amendment to the contract, permitting substitution of a maximum of 10.5 feet of crosscutting, at a cost not to exceed $403.26, to extend the present southwest crosscut which has been driven a distance of 20.5 feet, is recommended.

F. W. Everett, for
M. M. Salsbury
Mining Engineer

MMS/kp

cc ✓7
R653
Chron

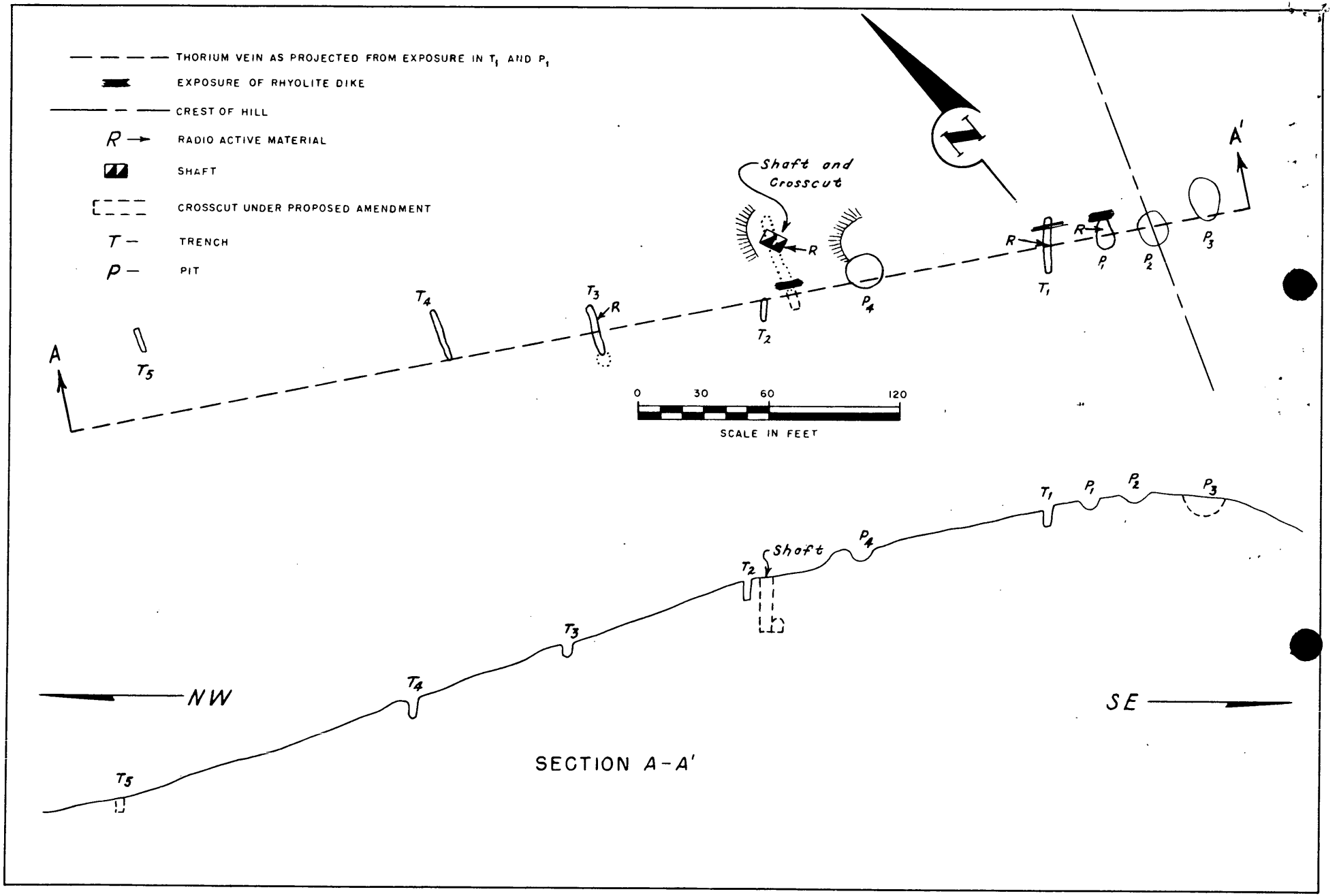


FIGURE 1 - PLAN AND SECTION OF SURFACE AND SHAFT WORKINGS, GW AND ANTRIM CLAIMS
CUSTER COUNTY, COLO. (DMEA 3078, CONTRACT Idm E653)

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

224 New Customhouse
Denver 2, Colorado

April 20, 1954.

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 3078 (Thorium), Contract Idm-E653, George D. Schweigert and Pete Cowan (GW and Antrim lodes), Custer County, Colorado.

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

John F. Shaw
For W. H. King
Executive Officer
DMEA Field Team, Region IV

Enclosures

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

224 New Customhouse
Denver 2, Colorado

April 15, 1954.

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 3078 (Thorium), Contract Idm-E653, George D. Schweigert and Pete Cowan (GW and Antrim lodes), Custer County, Colorado. Operator's Monthly Progress Report for the period March 1954.

Enclosed are the original and four copies of Form MF-104 and MF-104A, Narrative Report, and Engineer's Report for the above period.

Work has been completed as authorized by the contract. No documentation is required for work performed under contracts prepared on Form MF-200A, therefore we recommend that payment be made for 90 percent of the amount reported by the Operator on Form MF-104, contingent on your verification of arithmetical accuracy within the report.

Remarks:

Date of Report	March 31, 1954.
Date Received in Field Office	April 8, 1954.
Date Received in Region Office	April 15, 1954.

John F. Shaw
For W. H. King

Enclosures

RDB:cwm

cc: Contract
Secretary to the Oper. Comm. (2)
WMTraver
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
April 13, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3078, contract Idm-E653 (Thorium), George D. Schweigert and Pete Cowan (GW and Antrim lodes), Custer County, Colorado - Progress report for March 1954

Enclosed are the original and four copies of the above progress report, the second one--forms MF-104 and MF-104A, with narrative and sketch maps, one by the contractor and one by the engineer--and the original and six copies of M. H. Salsbury's memorandum covering his inspection of the work accomplished and checking the reporting forms. The contract is a unit cost one prepared on short form MF-200(A) and documentation is not required.

Salsbury confirms the completion of 20 feet of crosscutting, 38 feet of trenching, and 1-1/2 feet of shaft sinking to the depth allowed by contract, as reported in the narrative, shown on the operators' sketch, and entered on the MF-104A forms. He calls attention to a difference in the designations on the operators' sketch and his sketch which in no way affects the claim and otherwise describes the results of the month's work satisfactorily stating that work is in conformance with the terms of the contract with entries and extensions on the reporting forms correct reflecting the previous disallowance.

Payment is approved and certified on the MF-104 forms of $1,160.19, or 90 percent of the total $1,289.00 claimed by the contractor.

W. M. Traver

W. M. Traver

enclosures

cc 4
E653
DMEA Chron.

WMT/pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
April 13, 1954

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: M. H. Salsbury

Subject: DMEA 3078, contract Idm-E653 (Thorium), George D. Schweigert and Pete Cowan (GW and Antrim lodes), Custer County, Colorado - Progress report for March 1954

Progress under the subject contract was inspected on March 31, 1954, in company with Pete Cowan, one of the contractors, and E. N. Harshman of the Geological Survey.

The contractors claim the following items in March 1954 under the short-form contract (amended):

(1)	Shaft sinking 1.5 feet at $65.00 per foot	$ 97.50
(2)	Crosscutting 20 feet at $38.30 per foot	766.00
(3)	Trenching 38 feet at $11.20 per foot	425.60
		$1,289.10

At the time of the inspection, the following work had been completed during the months indicated:

(1) Clearing access road with bulldozer (February 1954)
(2) Sinking 12.5 feet of shaft at pit No. 2 (February and March)
(3) Crosscutting 5.5 feet northeast and 20.5 feet southwest (March 1954)
(4) Trench No. 1 - 40 feet long, maximum depth 9 feet (February)
Trench No. 2 - 10 feet long, maximum depth 9 feet (March)
Trench No. 3 - 26 feet long, maximum depth 6.5 feet (March)
Trench No. 4 - 24 feet long, maximum depth 9 feet (March)
Trench No. 5 - 14 feet long, maximum depth 7 feet (March)

All of this work was done in accordance with the terms of the contract and Amendment No. 1 thereto, with the exception of 2.5 feet of

shaft sinking and 6.0 feet of crosscutting in excess of allowable maximums, 10 feet of trenching at trench No. 2, not done at an approved location, and trench No. 3 which was not deep enough to be satisfactory to the DMEA representative. Trenching to date which could be approved totals 78 feet.

The contractors' claims are not in excess of allowable maximums and are approved.

The narrative report, sketch map, and forms MF-104 and MF-104A submitted are satisfactory. On the sketch map, the contractors do not show trench T 2 (figure 1) which is not claimed, and their trenches Nos. 2 and 3 correspond to trenches T 3 and T 4, respectively, shown on the sketch.

In the five trenches dug, the formation in place was reached in only trench T 1. Definite radioactivity was noted in trenches T 1 and T 3, although that in T 3 did not appear to be from rock in place.

Radioactivity encountered in the shaft proved to be a flat-lying stringer about 1.5 feet thick in the southeast end of the shaft rather than a possible continuation of the vein in trench T 1. The northeast and southwest crosscuts encountered no radioactive material. The southwest crosscut encountered a rhyolite dike in the last 6 to 8 feet which might correspond to the rhyolite exposed in trench T 1 on the northeast side of the thorium-bearing vein. It appears possible that a continuation of the crosscut might cut a continuation of the thorium vein and a requested amendment substituting crosscutting for 36 feet of trenching was recommended by a Region IV examining team.

Seven samples of radioactive material have been taken and sent to the Region IV Salt Lake City Metallurgical Division for analyses.

Totals entered on forms MF-104 and MF-104A for March 1954 are correct. Payment of $1,160.19, or 90 percent of the amount claimed, $1,289.10, is approved.

F. V. Everitt, for
M. H. Salsbury
Mining Engineer

cc 6
E653
DMEA Chron.

MHS/pam

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 1954 Docket No. DMEA 3070 Contract No. [illegible]
Operator's Name Poto Cowan & George D. Schweigert Minerals Fluorite
Mailing Address 200 Magnolia St. Denver 20, Colo.

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting	ft.	733.00	30	733.00	30	33.30	30	33.30
Raising								
Shafts	ft.	97.50	1.5	350.00	10	35.00	10	35.00
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	ft.	405.00	30	873.10	78	11.00	125	11.00
Test Pits								
Roads and Trails	Job			72.00			Job	72.00
Total Distributed Costs		1208.10	58.5	2031.10				Total Costs Authorized by Contract
Operating Equipment Purchased								2088.00
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		1208.10						

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Mar. 31, 1954 Operator Poto Cowan & George D. Schweigert

Per George D. Schweigert Title Partner
George D. Schweigert

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

Remarks:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Form ME-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

APR 22 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March, 1954 Docket No. DMEA 3078 Contract No. Idm-E353
Operator's Name Pete Cowan & George D. Schweigert Minerals
Mailing Address 780 Magnolia St-Denver 20, Colo
Contract Amount, $2888.00 Government Participation: 90% Amount, $2599.20

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contracts: Short Form						
Sinking Shaft	97.50	552.50	650.00			
Bulldozing Road		72.00	72.00			
Crosscutting	766.00	none	766.00			
Drifting						
Trenching	425.60	448.00	873.60			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1289.10	1072.50	2361.60	1289.10	1072.50	2361.80

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Mar. 31, 1954 Payee Pete Cowan & George D. Schweigert

Per Geo D Schweigert Title Partner

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$1160.19

Signature [illegible]
(Authorized Certifying Officer)

Date 4/15/54 Voucher No. DMEA 54-109

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. IAm-E653 in accordance with the terms of the contract.

Signature W. H. Salabury $1160.19 DMM Title Mining Engineer Date April 12, 1954

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: R.D.B.

Signature R.D.B. for W. H. King Title Executive Officer Date APR 15 1954

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Pete Cowan & George D. Schweigert
780 Magnolia Street
Denver 20, Colorado

March 31, 1954

Docket #DMEA 3078
Contract #Idm-E353

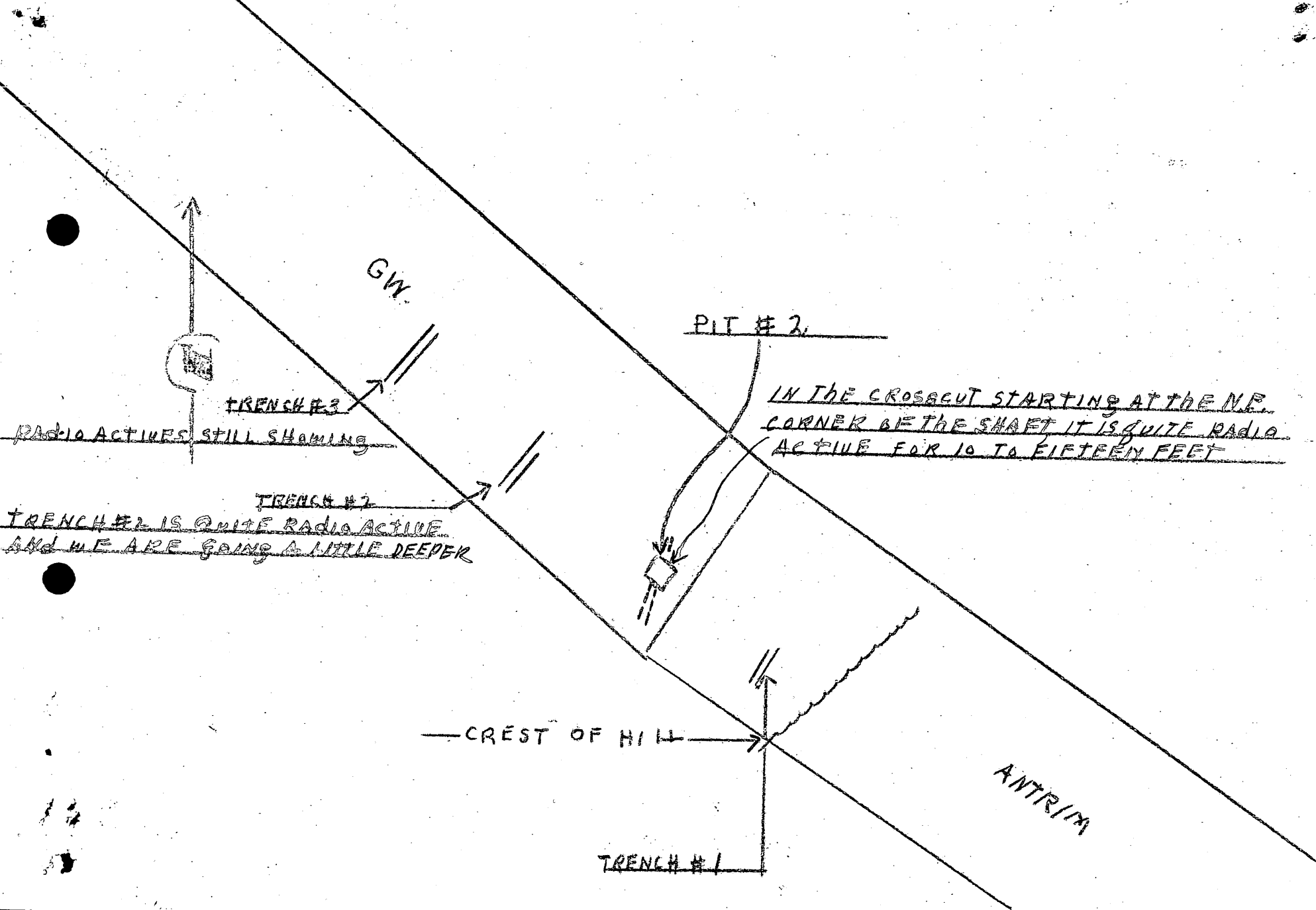
We have completed the shaft to the required depth.

We have completed 5 feet of crosscutting in a northerly direction, and 15 feet of crosscutting in a southerly direction.

We have completed at least 38 feet more of trenching, but are deepening trench #2 as the instruments gave good indications.

Radio activity also continues in trench #3.

By Geo D Schweigert


GW
PIT #2
IN THE CROSSCUT STARTING AT THE N.E. CORNER OF THE SHAFT IT IS QUITE RADIO ACTIVE FOR 10 TO FIFTEEN FEET
TRENCH #3
RADIO ACTIVES STILL SHOWING
TRENCH #2
TRENCH #2 IS QUITE RADIO ACTIVE AND WE ARE GOING A LITTLE DEEPER
CREST OF HILL
ANTRIM
TRENCH #1

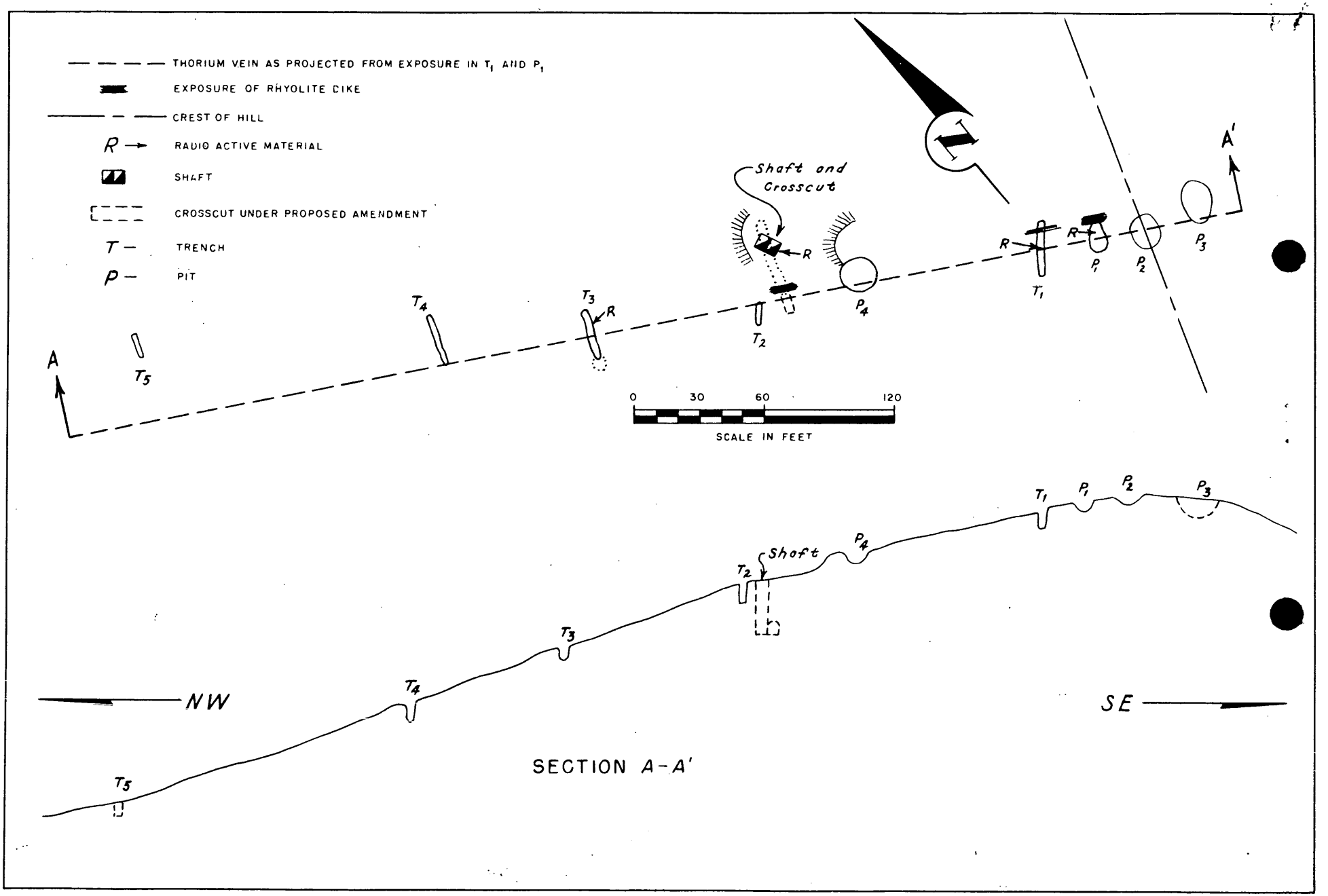


FIGURE 1 - PLAN AND SECTION OF SURFACE AND SHAFT WORKINGS, GW AND ANTRIM CLAIMS
CUSTER COUNTY, COLO. (DMEA 3078, CONTRACT Idm E653)

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

224 New Customhouse
Denver 2, Colorado

March 11, 1954

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 3078 (Thorium), Contract Idm-E653, George D. Schweigert and Pete Cowan, Custer County, Colorado

Enclosed are the original and two copies of Amendment No. 1 to Contract Idm-E653 which has been executed to modify the description of the work described in Exhibit "A". Also enclosed are three sets of data relevant to the amendment.

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

W. H. King

Enclosures

RECEIVED
APR 6 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
March 3, 1954

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3078, contract Idm-E653 (Thorium), George D. Schweigert and Pete Cowan, Custer County, Colorado - Request for amendment

Enclosed are the original and seven copies of a memorandum by M. H. Salsbury recommending the subject amendment request. The recommendation has my approval.

W. M. Traver

enclosures

cc 5
E653
DMEA Chron.

WMT/pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
March 2, 1954

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: M. H. Salsbury

Subject: DMEA 3078, contract Idm-E653 (Thorium), George D. Schweigert and Pete Cowan, Custer County, Colorado - Request for amendment

In a letter to the Executive Officer DMEA Field Team, Region IV, dated February 25, 1954, George D. Schweigert requested an amendment to the subject contract permitting a change in direction of crosscutting from the bottom of the shaft being sunk on the vein. He suggests changing the wording in the contract as follows: "From the bottom of the shaft crosscut in a northerly and southerly direction to endeavor to expose more of the full width of the vein. Total aggregate footage of crosscutting not to exceed 20 feet."

The intent of the work is to expose the width of the vein, and, in order to do so by crosscutting, the opening would have to be driven northeast or southwest in order to cut the vein at right angles. The strike of the vein, as indicated by the several exposures, is about N. 50° W. Thus an opening driven south or north would not crosscut the vein at right angles. It is the opinion of the examining team that the crosscuts should be driven approximately at right angles. However, it is recommended that the total of crosscutting be allowed either southwesterly or northeasterly, according to the mineralization encountered.

If the limit of mineralization is encountered on one side of the shaft in less than 10 feet, crosscutting on the opposite side should be permitted for more than 10 feet, not exceeding the maximum of 20 feet for both crosscuts. It is not definitely known that the shaft is on the centerline of the vein.

An amendment permitting the above change is recommended, making it clear that the crosscuts are to be driven approximately at right angles to the vein.

for W. M. Shaver
M. H. Salsbury
Mining Engineer

cc
E653
DMEA Chron.

MHS/pam

George D. Schweigert
780 Grenell Street
Denver 10, Colorado

February 18, 1954

Mr. W. R. King
Executive Officer, OTS
Field Team, Region IV
and Dep. Customhouse
Denver 2, Colorado

Docket #3070

Dear Mr. King:

In going over the vertings February 20, 1954 we see about 4 feet below the original bottom of pit #1. We hit into very valuable active material on the south end of shaft. We therefore think it would be better to drift across the vein in a southerly direction and offer the following change in the contract for your consideration.

Delete the last sentence of paragraph 2. In lieu thereof, substitute the following. Change the last sentence of the 2nd paragraph of exhibit A to read: From the bottom of the shaft crosscut in a northerly and southerly direction to endeavor to expose more of the full width of the vein. Set 1 arrow to footage of crosscutting not to exceed 10 feet.

Very truly yours

George D. Schweigert

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

224 New Customhouse
Denver 2, Colorado

March 25, 1954

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 3078 (Thorium), Contract Idm-E653, George D. Schweigert and Pete Cowan, (G. W. and Antrim Lodes), Custer County, Colorado.

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

John F. Shaw
John F. Shaw
For W. H. King

Enclosures

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION IV

Administrative Audit Difference Statement

Date: March 19, 1954
Payee's
Reference: Progress Report
February, 1954

George Schweigert
780 Magnolia St.,
Denver, Colo.
Idm-E653

Upon examination of the above Payee's Reference a difference was found which made it necessary to suspend your account accordingly:

Amount Claimed $ 1077.50

Difference $ 5.00

Amount Approved $ 1072.50

The reason for the difference was due to:

8½ feet of shaft sinking at $65.00 per foot equals $552.50 instead of $557.50

Any reclaim for deductions made above must be supported by the ORIGINAL of this form.

Very sincerely yours,

N. E. Stokes
Audit Section

R-IV-B & F Form No. 4
4-15-52 D

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

224 New Customhouse
Denver 2, Colorado

March 16, 1954.

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 3078 (Thorium), Contract Idm-E653, George D. Schweigert and Pete Cowan, (G. W. and Antrim Lodes), Custer County, Colorado. Operator's Monthly Progress Report for the period February 1954.

Enclosed are the original and four copies of Form MF-104 and MF-104A, Narrative Report, and Engineer's Report for the above period.

Work has been completed as authorized by the contract. No documentation is required for work performed under contracts prepared on Form MF-200A, therefore we recommend that payment be made for 90 per cent of the amount reported by the Operator on Form MF-104, contingent on your verification of arithmetical accuracy within the report.

Eight and one-half feet of shaft sinking at $65.00 a foot equals $552.50 instead of $557.50. Therefore, the $5.00 difference is disallowed.

Remarks:

Date of Report	February 27, 1954.
Date Received in Field Office	March 9, 1954.
Date Received in Region Office	March 15, 1954.

W. H. King
W. H. King

Enclosures

RDB:cwm

cc: Contract; Secretary to the Oper. Comm. (2); WMTraver; Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
March 12, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3078, Contract Idm-E653 (Thorium), George D. Schweigert and Pete Cowan (GW and Antrim Lodes), Custer County, Colorado--Progress report for February 1954

Transmitted herewith are the original and four copies of the above progress report, the initial one--forms MF-104 and MF-104A, with narrative, sketch map--and the original and six copies of M. H. Salsbury's memorandum covering inspection of the work accomplished and his review of the reporting forms. The contract is unit cost on short form MF-200(A) and documentation is not required.

Salsbury verifies satisfactory completion of the work reported in the narrative and entered on the MF-104A forms--namely, 8-1/2 feet of shaft sinking, 40 feet of trenching, and the job of road work. The work was performed in conformance with the terms of the contract, and entries and extensions on the reporting forms are correct, except for the contractor's faulty arithmetic. Eight and one-half feet of shaft sinking at $65.00 a foot equals $552.50 instead of $557.50; and consequently, $5.00 is disallowed from the total claimed, reducing the claim to $1,072.50 instead of $1,077.50. Of the amount allowed, $1,072.50, $965.25, or 90 percent, is recommended for payment and certified on the MF-104 forms.

W. M. Traver

W. M. Traver

enclosure

WMT/kp

cc 4
E653
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
March 9, 1954

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: M. H. Salsbury

Subject: DMEA 3078, Contract Idm-8653 (Thorium), George D. Schweigert and Pete Cowan (GW and Antrim Lodes), Custer County, Colorado--Progress report for February 1954

The exploration project under the subject contract was inspected on March 3, 1954, in company with Pete Cowan, one of the contractors. Cowan and two other men are employed.

At the time of the visit, work was being carried on in the shaft which had been sunk to a point 16 feet below the collar. The pit was 7.5 feet deep before work was started so that 8.5 feet of sinking has been accomplished. Forty feet of trenching at the location near pit No. 1 at the west of the hill had been completed. The trench is from 5.5 to 9 feet deep and exposes shattered rock which appears to be in place. It was excavated by hand. A deeper trench at this point is not feasible or necessary.

The contractors claim the following items under the short-form contract:

(1)	Clearing access road with bulldozer	$ 72.00
(2)	Sinking 8.5 feet of shaft at $65.00 per foot	557.50
(3)	Trenching 40 feet at $11.20 per foot	448.00
	Total claimed	$1,077.50

The work done was verified and is approved. There is a $5.00 arithmetical error in computing 8.5 feet of shaft sinking at $65.00 per foot. The correct amount should be $552.50, and the total claim should be $1,072.50.

There was appreciable radioactivity for a width of 15 feet in the trench at pit No. 1, and over a width of 4 feet in the fairly solid rock in the southeast corner of the shaft at 13 to 16 feet below the collar. Two samples were taken and are being held for analysis at a later date.

Excellent workmanship is evidenced in the operation.

All work was done in accordance with the terms of the contract.

Totals entered on forms MF-104 and MF-104A for February 1954 are correct except for the $5.00 error noted, and the narrative report is adequate. Payment of $965.25, or 90 percent of the amount claimed, $1,077.50, less $5.00, is approved.

M. H. Salsbury
M. H. Salsbury
Mining Engineer

MHS/kp

cc 6
E653
Chron

Form MR-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1954 Docket No. DMEA 3078 Contract No. Tan-2353
Operator's Name Pete Cowan & George D. Schweigert Minerals Thorium
Mailing Address 780 Magnolia St., Denver, Colorado
Contract Amount, $ 2888.00 Government Participation: 90% Amount, $ 2599.20

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Contractor Short Form						
~~Drilling~~ Shaft Sinking	557.50	None	557.50	552.50		552.50
~~Bulldozing~~ Road	72.00	None	72.00			
Crosscutting						
Drifting						
Trenching	448.00	None	448.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1077.50		1077.50	1072.50		1072.50

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 27 Feb 1954 *Payee Pete Cowan & Geo. D. Schweigert
Per Geo D Schweigert Title Partner

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 965.25

Signature
(Authorized Certifying Officer)

Date 3/19/54 Vou. No. DMA 54-91

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E653 in accordance with the terms of the contract.

Signature W.H. Salsbury #965.2 S Title Mining Engineer Date March 9, 1954

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: R.D.B.

Signature C.H. King Title Executive Officer Date MAR 16 1954

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1954 Docket No. DMEA 3078 Contract No. Ism-E353
Operator's Name Pete Cowan & George D. Schweigert Minerals Thorium
Mailing Address 780 Magnolia St., Denver, Colorado

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting	ft.						20.	38.30
Raising								
Shafts	ft.	557.50	8.5	557.50	8.5	65.00	10.	65.00
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	ft.	448.00	40 ft.	448.00	40 ft.	11.20	125.	11.20
Test Pits								
Roads ~~and Trails~~	Job	72.00	Job 72.00	72.00			Job	72.00
TOTAL DISTRIBUTED COSTS		1077.50	48	1077.50				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS 1077.50								2888.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 27 Feb 1954 Operator Pete Cowan and George D. Schweigert

Per Geo D Schweigert George D. Schweigert Title Partner

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

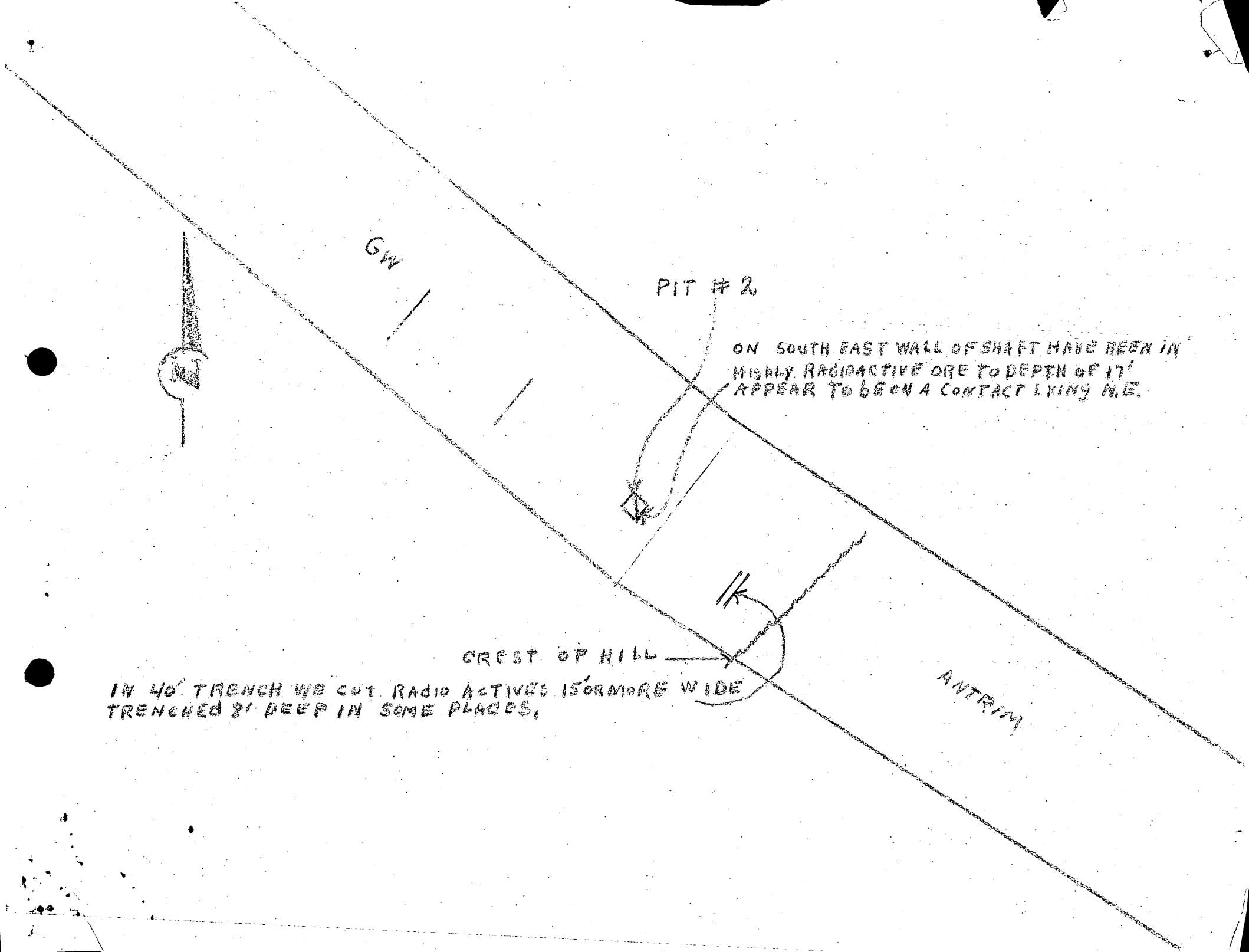
February 27, 1954

On February 16, 1954, we started work on exploration project Idm-E653, Docket #3078. At the end of February the status is as follows: A trench 40 ft. long was dug at the place of beginning and is completed. This trench cut through at least 15 feet of radio active material and as we have had no assays from here cannot tell if it is of commercial value. It seems to grade off into less radio active substance, or to put it in other words, richer pockets of ore encountered in places. It can be considered much wider than the 15 feet if the less radio actives are taken into consideration. I am informed by Pete Cowan we went to 8 feet in depth in some places.

The access road is cleared so a car can drive to the crest of the hill.

We moved in on pit #2 and have squared it out and the shaft is all timbered and sunk to a depth of at least 8½ feet below its original bottom. We encountered very radio active material as we sunk the shaft. The south east end of the shaft appears to be quite solid in this material. I enclose a rough map enlarged from the original.

Jy Geo H Schwerzert


GW
PIT # 2
ON SOUTH EAST WALL OF SHAFT HAVE BEEN IN HIGHLY RADIOACTIVE ORE TO DEPTH OF 17' APPEAR TO BE ON A CONTACT LYING N.E.
CREST OF HILL
IN 40' TRENCH WE CUT RADIO ACTIVES 15' OR MORE WIDE TRENCHED 8' DEEP IN SOME PLACES.
ANTRIM

STANDARD FORM NO. 64

2/18/54 gla

Office Memorandum • UNITED STATES GOVERNMENT

TO : E. Wm. Ellis, DMEA Member, Uranium Commodity Committee

DATE: February 15, 1954

Defense Minerals Administration
RECEIVED
FEB 17 1954

FROM : Arthur P. Butler, Jr., USGS Member, Uranium Commodity Committee

SUBJECT: Field Team Report, DMEA Docket 3078 (Thorium), G. E. Schweigert, applicant, 780 Magnolia Street, Denver, Colorado; Antrim and GW lode claims, Sec. 9 and 10, T. 22 S., R. 71 W., Custer County, Colorado

The Field Team Report recommending exploration on the property identified above has been reviewed. A contract for the work has been signed in Region IV and is in effect.

The Field Team recommended trenching to expose the full width of a thorium-bearing vein in several places at an estimated total cost of $2,888.

Investigation of the property and analysis of the samples collected show that the ThO_2 content ranges from 0.32 percent to 4.90 percent over widths adequate for mining. The thorium-bearing material occurs for at least a thousand feet along a more extensive shear zone but appears to be richest in the northwestern 500 feet of the presently known length. The proposed trenching and pitting would furnish more conclusive information on the probable continuity, width, and distribution of the thorium-bearing materials at a relatively low cost.

I concur in the Field Team's recommendation that the property be explored in the manner set forth in the report.

Copies to: E. Wm. Ellis (2)

Arthur P. Butler, Jr.

January 15, 1954

Memorandum

To: Hazel Berry, Operating Committee

From: Grace L. Ault, Rare & Misc. Metals Division

Subject: Contract finalized by Region IV

Mr. Ellis has reviewed and approved Contract No. Idm-2653, dated January 4, 1954, Docket No. DMEA-3078, George D. Schweigert and Pete Cowan.

Grace L. Ault

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

224 New Customhouse
Denver 2, Colorado

January 7, 1954.

ON-SITE EXAM

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Report of Examination - DMEA Docket 3078 (Thorium), George D. Schweigert, Custer County, Colorado.

Enclosed are four copies of the report of examination on the subject docket.

The contract has been signed and is in effect.

for John F. Shaw
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

October 7, 1953.

Memorandum

To: Field Team, Region IV

From: Chief Mining Division, Region IV

Subject: Report of Examination, Docket 3078 (Thorium), George D. Schweigert, Custer County, Colorado.

Attached are ten copies of the engineering report of examination on the subject property.

The applicant's proposed exploration was only slightly modified by the field examiners who recommend trenching to expose the full width of the vein in several places at an estimated total cost of $2,888.00.

We concur in this recommendation.

W. H. King

W. H. King

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colo.
August 25, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMMA 3078, GW and Antrim lode claims (Uranium-Thorium-Rare Earths), George B. Schreiguest, applicant, Custer County, Colo.

Transmitted herewith are the original and ten copies of the "Summary, Conclusions, and Recommendations", by M. H. Salsbury, Bureau of Mines, and E. N. Harshman, Geological Survey, and of Salsbury's engineering report on the subject docket.

While the applicant mentioned uranium and rare earths in addition to thorium in his loan request, the field examination and laboratory results indicated that only thorium was of commercial importance.

Subject to a decision as to whether or not thorium is on the critical or strategic list, Salsbury concludes the GW and Antrim lode claims have a sufficient showing of the mineral to justify recommending a small project of road clearance, trenching, and pit deepening at an estimated cost of $2,850.00. He suggests a short-form, unit cost contract. The modified project is slightly different than the applicant's proposal which he estimated would cost $3,000.00.

I approve Salsbury's conclusions and recommendations.

The brochure submitted with your memorandum of June 22, 1953, instructing us to make a field examination, is also enclosed.

W. M. Towner

W. M. Towner

Enclosures

WMT/kp

cc 10
DMMA 3078
DMMA Chron.

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

August 24, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3078, George Schweigert (Uranium-Thorium), Custer County, Colorado

Attached are 10 copies of the geological report by E. N. Harshman covering DMEA Docket 3078, George Schweigert, Antrim and G. W. Lode claims, Custer County, Colorado.

The applicant proposes to explore subject property for uranium and thorium ore by excavating several open cuts. Thorite occurs along a shear zone in pre-Cambrian gneiss and granite. Because of excessive slope work and overburden and poor exposures, the length and width of the deposit cannot be determined. Five samples were selected and show ThO_2 to range from 0.32% to 4.90%, and Harshman concludes that this is one of the better small deposits in the Wet Mountain area. He therefore recommends that the exploration loan estimated to cost $2,890 be approved. He suggests that the program of exploration be limited to the higher grade northwest portion of the deposit.

I concur in his recommendation.

The brochure is enclosed.

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

Enclosures (10)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA 3078, George D. Schweigert, Applicant

GW and Antrim Lode Claims

Custer County, Colorado

Uranium-Thorium-Rare Earths

M. H. Salsbury, Mining Engineer
Bureau of Mines

E. N. Harshman, Geologist
Geological Survey

August 25, 1953

DEPARTMENT OF THE INTERIOR
Bureau of Land Management
JAN 15 1954

DMEA 3078

GEORGE D. SCHWEIGERT, APPLICANT
GW AND ANTRIM LODE CLAIMS
CUSTER COUNTY, COLORADO

Summary, Conclusions, and Recommendations

By M. H. Salsbury
Mining Engineer
Bureau of Mines

E. N. Harshman
Geologist
Geological Survey

DMEA 3078

GEORGE D. SCHWEIGERT, APPLICANT
GW AND ANTRIM LODE CLAIMS
CUSTER COUNTY, COLORADO

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By M. H. Salsbury and E. N. Harshman

George D. Schweigert, 780 Magnolia Street, Denver, Colo., has applied to the Defense Minerals Exploration Administration for assistance to explore the GW and Antrim lode claims, Custer County, Colo., for uranium, rare earths, and thorium (DMEA 3078). The applicant proposed trenching a total of 100 linear feet to uncover the outcrop of a thorium-bearing vein on the property at an estimated cost of $3,000.00--Government participation 90 percent, or $2,700.00.

Thorite occurs along a shear zone in pre-Cambrian granite and gneissic rocks. The zone strikes N. 50° to 60° W. and is essentially vertical. The shear zone is associated with a premineral syenite dike and is occupied by a postmineral rhyolite dike. Radioactive material is exposed over a width of 3 to 4 feet in one test pit, but actually the vein width may be somewhat greater. Although the shear zone can be traced for a distance of over 1,000 feet, only the northwestern 500 feet is believed to contain mineralization of economic importance.

The examining team concludes that a definite deposit of thorium exists on the property and a revised exploration program is recommended because of the physical conditions on the ground. As much as 30,000 tons of thorium ore containing as much as 1.0 percent ThO_2 is inferred roughly by preliminary sampling.

It is recommended that an exploration project costing $2,890.00--Government participation 90 percent, or $2,601.00--be approved, subject to the continued inclusion of thorium on the critical mineral list. A short-form contract is suggested.

GEORGE SCHWEIGERT

ANTRIM AND G. W. LODE CLAIMS

CUSTER COUNTY, COLORADO

DMEA DOCKET 3078

Geologic Report

By E. N. Harshman
U. S. Geological Survey

GEORGE SCHWEIGERT
ANTRIM AND G. W. LODE CLAIMS
CUSTER COUNTY, COLORADO

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INTRODUCTION

George Schweigert, 780 Magnolia Street, Denver, Colorado, has applied to the Defense Minerals Exploration Administration, DMEA Docket 3078, for a loan of $3,000.00 to explore for uranium and thorium on the Antrim and the G. W. Lode claims, Hardscrable Mining District, Custer County, Colorado. The contiguous patented claims are 8 miles (airline) east of Westcliffe, Colorado, in sections 9 and 10, T. 22 S., R. 71 W., 6th P.M. The applicant and his partner, Pete Cowan, of Westcliffe, Colorado, obtained the two claims by tax deed from the Treasurer of Custer County. The property is readily accessible, lying about 1/4 mile west of State Highway No. 96.

Exploration proposed by the applicant consists of several open cuts 10 to 15 feet deep, with a combined length of 100 feet or more, and such other excavation as may be deemed advisable as exploration progresses.

The property was examined on July 2, 1953, in company with Robert A. Pearson, U. S. Geological Survey, and the applicant.

GEOLOGY

The thorite deposit is along a shear zone in pre-Cambrian gneiss and granite. The zone strikes N. 55° - 60° W., and appears to be vertical. Due to slope wash, overburden, and limited exposures, the actual length and width of the deposit could not be determined at the time of the examination. It has a known length of about 1000 feet, dying out to the east and passing under overburden to the west. Observed widths were as much as 3 to 4 feet. The presence of considerable radioactive float in

the overburden made it impossible to extend the observed length or width by means of the counter. The shear zone appears to be associated with a pre-mineral syenite dike and to be occupied by a post-mineral rhyolite dike. The rhyolite dike has been intruded along the walls, either hanging or foot, of the shear zone.

The ore is similar to that found in other Wet Mountain deposits, consisting of red to yellow, iron stained quartz and silicified country rock. No thorite could be definitely identified in the hand specimen; it is assumed to be present because of the similarity of this ore to that in nearby deposits, and because of its high radioactivity.

A preliminary radiometric survey indicates that the eastern 500 feet of the deposit is considerably lower in grade than the western 500 feet. The decrease in radioactivity toward the east appears to be accompanied by a decrease in intensity of shearing and silicification.

SAMPLES

Five samples were selected as representing the ore in the western part of the deposit. These samples were analyzed for equivalent uranium. Thorium oxide content was computed using a factor of 5.7 times % eU, for past experience in the Wet Mountain area indicates that the U_3O_8 content of the ore is insignificant. Analytical results follow:

Sample No.	Description	% eU	% ThO_2
TWH I-A	Grab of dump, caved upper tunnel	0.120	0.68
TWH I-B	Grab of dump from pit 200 feet west of crest of hill (Pit #2)	0.075	0.43
TWH I-C	Grab of high grade ore on dump of Pit #2	0.860	4.90

Sample No.	Description	% eU	% ThO_2
TWH I-D	Across 3 feet of silicified material in pit at crest of ridge (Pit #1)	0.056	0.32
TWH I-E	Cut across 5 feet of overburden over vein near Pit #1.	0.130	0.74

CONCLUSIONS AND RECOMMENDATIONS

The thorite deposit on the Antrim and G. W. Lode claims is considered one of the better small deposits in the Wet Mountain area. The present uncertainties of milling, marketing, and price made definite recommendations somewhat open to question. However, since this deposit may contain 20,000 to 30,000 tons of ore containing between 1/2 percent and 1 percent ThO_2, the moderate sum requested by the applicant is believed to be justified.

The program requested by the applicant is not specific as to location of the proposed work or the exact character of the exploration. A suggested program of exploration, limited to the higher grade northwestern 500 feet of the deposit, follows:

(1) Excavate three trenches across the vein to expose its full width to permit thorough and accurate sampling. The location of the trenches is shown on Figure 2 of the engineering report. A bulldozer can be used for a part of the excavation but considerable hand work will be involved in a final clean-up of the trenches.

(2) Deepen Pit No. 2 ten feet to expose less weathered and less disturbed bedrock and cross-cut a maximum of 10 feet both to the northeast and southwest to expose the full width of the vein.

Approval of the request for exploration assistance, DMEA Docket 3078, is recommended. The cost of the suggested program is estimated by the U. S. Bureau of Mines to be $2,890 (Government participation $2,601.00).

DMEA 3078

GEORGE D. SCHWEIGERT, APPLICANT
GW AND ANTRIM LODE CLAIMS
CUSTER COUNTY, COLORADO

Engineering Report

By M. H. Salsbury
Mining Engineer
Bureau of Mines

DMEA 3078

GEORGE D. SCHWEIGERT, APPLICANT
GW AND ANTRIM LODE CLAIMS
CUSTER COUNTY, COLORADO

CONTENTS

Engineering Report	Page
Introduction	1
Acknowledgements	1
Location, topography, and physical features	1
Labor and living conditions	3
History, production, and ownership	3
Description of the deposits	5
Ore reserves	6
Present status	7
Exploration and development	7
Mining and milling equipment and other facilities	7
Project proposals, with costs	7
Cost estimate	9
Manpower	13
Power	13
Other	13
Production plan	13
Summary: Cost of project	13
Proposed financing	14
Conclusions	14
Recommendations	15

ILLUSTRATIONS

Figure		Follows Page
1.	Location map, GW and Antrim lode claims, George D. Schweigert, Custer County, Colorado	2
2.	Plan map of GW and Antrim lode claims, Custer County, Colorado	4

DMEA 3078

GEORGE D. SCHWEIGERT, APPLICANT
GW AND ANTRIM LODE CLAIMS
CUSTER COUNTY, COLORADO

ENGINEERING REPORT

By M. H. Salsbury

INTRODUCTION

The GW and Antrim lode claims were examined on August 4 and 5, 1953, by a Bureau of Mines engineer for the Defense Minerals Exploration Administration. The property had been previously examined by a Geological Survey representative. The Bureau of Mines examiner was accompanied by Pete Cowan of Westcliffe, Colo., one of the owners. The information in a loan application by George D. Schweigert for exploration assistance (DMEA 3078) at an estimated cost of $3,000.00--Government participation 90 percent, or $2,700.00--was verified. The proposal called for 100 feet of trenching to determine the limits of a deposit of thorium ore indicated by radioactivity noted in and around several shallow pits which had been dug many years before.

ACKNOWLEDGEMENTS

Data have been obtained by personal observation, from Pete Cowan, from the applicant, and by consultation with the field party of the Geological Survey currently engaged in mapping the thorium-bearing area in which the applicant's property is located.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The GW lode claim, survey number 16533A, and the Antrim lode claim, survey number 16141, are located in secs. 9 and 10, T. 22 S.,

R. 71 W., Hardscrabble Mining District, Custer County, Colo. (fig. 1).

The region, at an altitude of 9,000 feet, is in the hills to the east of the towns of Westcliffe and Silver Cliff, Colo.

The summer climate is cool with moderate rainfall, and winters are moderate to severe with precipitation varying widely from year to year. Year-around operation is feasible.

The area is covered by a drainage network of narrow, steep-walled gulches with ridges and rounded hills 300 to 500 feet above the floors of the gulches. There is no stream flow except during the spring runoff or after rains.

The property is just north of Tyndall Gulch, on Colorado State Highway 96, a good gravelled road, 9 miles east of Westcliffe and 35 miles southwest of Florence. Florence is on the main line of the Denver and Rio Grande Western Railroad. Texas Creek, also on the railroad, is about the same distance northwest over State Highways 96 and 69. The area is served by trucklines connecting with Pueblo and Denver.

There are no treatment plants or purchasing depots for thorium-bearing ores in the region at the present time. The Lindsey Chemical Company, of Chicago, Ill., has provided a market for such ores in the past. The future market will probably depend on the policy of the Atomic Energy Commission in regard to the need for and purchase of thorium. No information on these matters is available to the examining team.

A very limited stock of mining supplies is carried in Westcliffe. Most mining needs must be filled from Pueblo or Denver, 50 and 175 miles away, respectively. A timber supply adequate for exploration needs can

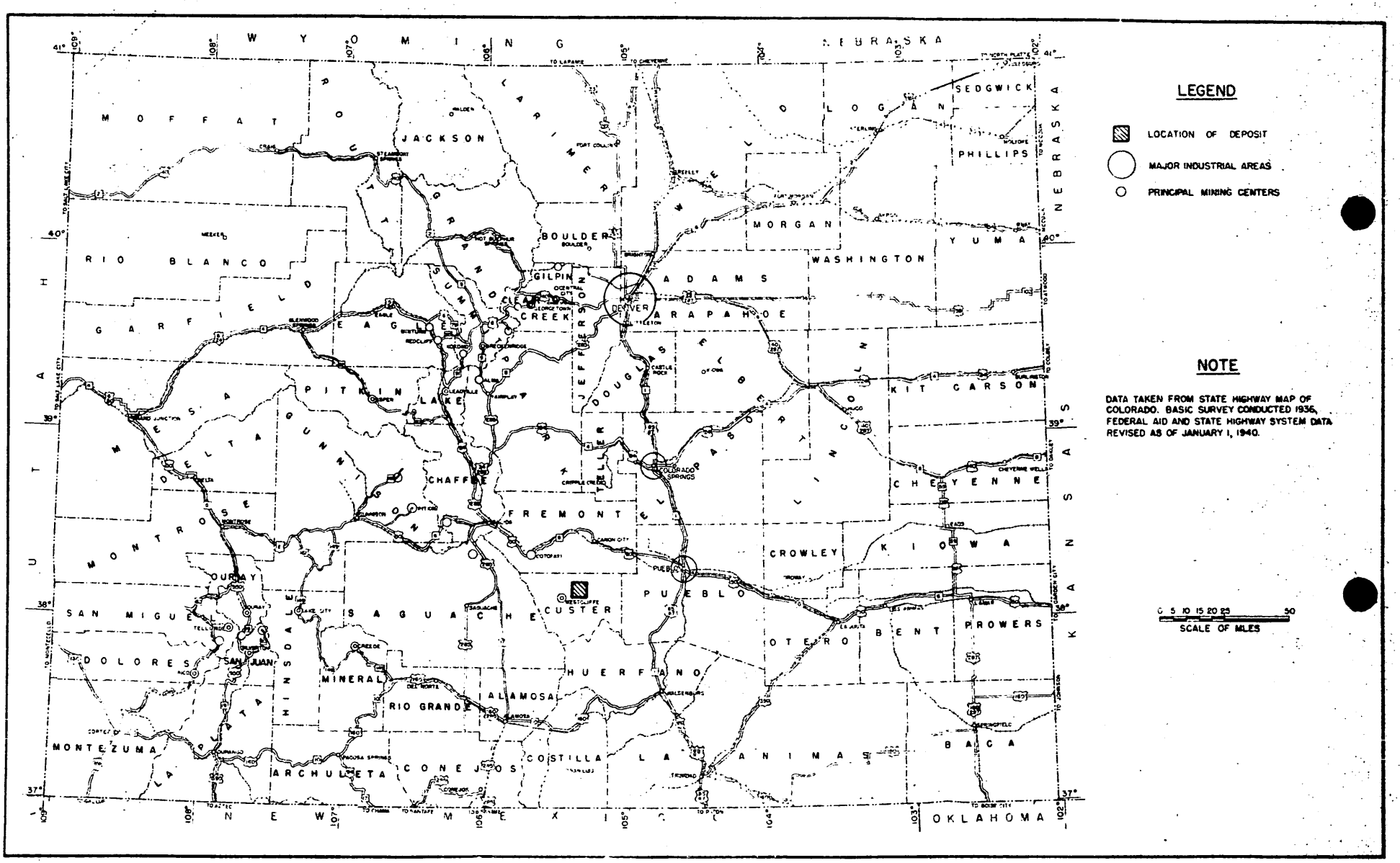

FIGURE 1. - LOCATION MAP, GW AND ANTRIM LODE CLAIMS, GEORGE D. SCHWEIGERT, CUSTER COUNTY, COLORADO (DMEA 3078)

be cut from sparse growth on and near the property. Further needs can be met by timbercutters in nearby areas.

Power lines of the Southern Colorado Power Company are within 1-1/2 miles of the claims.

There is no water supply nearby, but the applicant believes water could be developed by boring in an alluvial fan at the north end of the property.

Labor and Living Conditions

A limited supply of experienced mine labor is available in the area. The standard wage rate for miners is $1.35 per hour for a 40-hour week, with time and one-half for over 40 hours. There are no housing facilities at the property. Housing is available in Westcliffe and Silver Cliff.

HISTORY, PRODUCTION, AND OWNERSHIP

The GW and Antrim lode claims are part of a group of claims patented in 1903 by the Grand Rapids Gold Mining Company which was organized to explore them. Gold was not discovered in commercial quantities and the claims were allowed to revert to Custer County for taxes. No mining was done until the present applicant and his partner, Pete Cowan, acquired the two claims from the county in 1951, after examination with a Geiger counter disclosed the presence of radioactivity around the old workings. Analyses made for the applicant showed the presence of thorium and rare earths. He quotes a Geological Survey analysis on May 9, 1952, showing "radioactivity equivalent to 1.0 percent uranium."

There has been no mineral production from the applicant's claims or any others in the vicinity.

George D. Schweigert, the applicant, 780 Magnolia Street, Denver, and Pete Cowan, Westcliffe, Colo., have a treasurer's deed to the GW and Antrim lode claims which lie end to end covering the vein outcrop (fig. 2). The Treasurer of Custer County stated that all taxes are paid. Schweigert stated that Cowan will be associated with him in the venture although not listed as an applicant.

The five other claims in the immediate area, also patented in 1903, are not contiguous with the applicant's ground which is surrounded by open grazing land or land held under agricultural patents. The claims have not been surveyed in recent years, claim corners are missing, or unidentified, and the claims were mapped by the Bureau of Mines engineer by plotting the patent descriptions obtained from the Custer County courthouse on a working topographical sheet supplied by the Geological Survey party. Section lines, not on the Survey map, were plotted by transferring them from the Forest Service map of the Canon City Quadrangle. The plotted locations of the line of pits marking the vein outcrop, as shown on the topographical map and based on an aerial survey, are very close to the southwest sideline of the claims. Because of the small scale of the Forest Service map from which land boundaries were obtained, there is a possibility of error in the plotted position of the claims as shown on figure 2. While it is reasonable to assume that the claims were located originally to cover the outcrop, it would be necessary for protection of the Government's interest, to have a survey made to verify this. However, it need

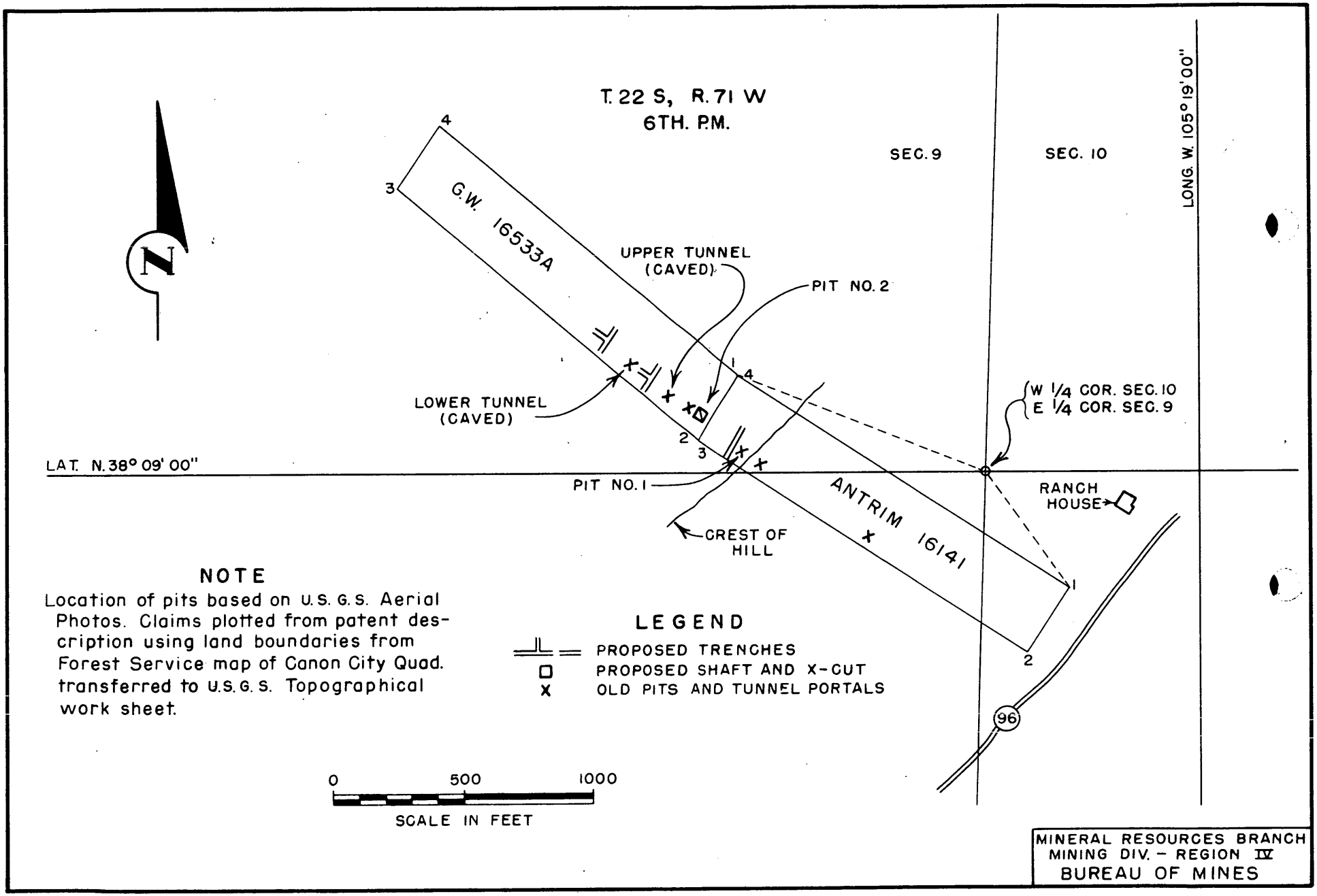

FIGURE 2 - PLAN MAP OF GW AND ANTRIM LODE CLAIMS, CUSTER COUNTY, COLO. (DMEA 3078)

not be done unless approval of an exploration loan is assured and a contract made.

DESCRIPTION OF THE DEPOSITS

The thorium-bearing outcrop on the GW and Antrim lode claims appears to be a vertical vein in a shear zone in gneissic rock of the regional pre-Cambrian complex. The line of pits which marks the outcrop indicates a strike from N. 50° W. to N. 57° W. The vein matter has the appearance of jasper in a gangue of fine ground rock identified tentatively by Geological Survey personnel as syenite, occurring as a dike. The rock has a distinctive red color and is similar to known dikes elsewhere in the area. Just north of the property, a rhyolitic plug is exposed, and, in two pits on the outcrop, rhyolite is showing, probably in the form of a dike parallel to the syenite and the thorium-bearing vein. The rhyolite is presumed to be postmineral with little or no connection to ore deposition.

No thorium minerals are visible in the vein matter. The presence of the element is shown by radioactivity which is all attributable to thorium, there being no appreciable known uranium in the region, according to the Geological Survey's investigations.

The strongest radioactivity is noted from the crest of the hill near the common endline of the two claims, extending northwesterly down the hill, disappearing under an alluvial fan at the northwest end of the GW claim. The mineralization is strong for a length of some 500 feet on the outcrop, most of it on the GW claim, particularly in the vicinity of pit number 2 (fig. 2). On the Antrim claim, it appears to fade out going southeasterly.

The syenitic gangue shows appreciable radioactivity without any vein matter being visible, and even the gneissic wall rock shows a reaction on the counter above the usual background count. The presence of fragments of syenite and vein matter in the overburden makes it impossible to define the width and length of the deposit by use of the counter. In the vicinity of the best exposure, there is a reaction for 20 feet on either side of the test pit. Wherever the distinctive red syenite can be found in the wash, radioactivity can be detected. This serves to mask the true dimensions. In the pit 200 feet northwest of the crest of the hill (pit number 2, fig. 2) 3.5 feet of vein matter are showing and the full width may not be exposed.

ORE RESERVES

The property has no known ore reserves. There is a possible potential of perhaps 30,000 tons of inferred ore containing 0.5 to 1.0 percent ThO_2 in a roughly estimated block 500 feet long by 3 feet wide by 100 feet deep. Five samples were taken by the Geological Survey representative with results as shown below. All analyses were made by radiometric means in the Geological Survey laboratory at Denver Federal Center.

Sample No.	eU	ThO_2 (eU x 5.7)	Sample description
THW-1-A	0.120	0.684	Grab of dump caved upper tunnel
1-B	0.075	0.475	Grab of dump at pit number 2
1-C	0.860	4.90	Grab of high grade in dump at pit number 2
1-D	0.056	0.32	3.0-foot cut in trench at pit number 1, crest of hill

1-E	0.130	0.741	5.0-foot cut of overburden at pit number 1
MHS 26	0.11	0.627	3.5 chip sample across southeast end of pit number 2, 8 feet down

One additional chip sample across 3.5 feet of vein matter in pit number 2 was taken by the Bureau of Mines engineer for assay, in addition to the field determinations made with a Geiger counter. The sample for assay, number MHS 26, is listed below the Geological Survey samples. No determination of the rare earth content was made.

PRESENT STATUS

Exploration and Development

The property has been developed by four pits and two tunnels or cuts. The important pits are designated pit number 1 and 2. The other pits are partly filled in and the tunnels or cuts are caved (fig. 2). There are no development openings on adjoining ground.

Mining and Milling Equipment and Other Facilities

There are no buildings or mining or milling equipment on the property. The applicant states that he and Cowan have a portable gasoline-powered compressor, a rock drill, and miscellaneous mining tools which they can furnish. No other equipment is required.

PROJECT PROPOSALS, WITH COSTS

The applicant's exploration proposal is logical and reasonable. However, it is general in character. The 100 feet of trenching, more or less, at a cost of $3,000.00 would hardly develop the possible

extent of the deposit but would serve to determine if it is worth further exploration.

The shear zone, in which the vein occurs, appears to have been weathered to a greater depth than the gneissic rock on either side. It is marked by a ravine which was later partly filled. Consequently, the overburden over sections of the outcrop is quite deep. This is true around pit number 2. The vein exposed in this pit is shattered but appears to be in place. So much material would have to be moved in further exploration here by trenching that continuing the pit to solid and driving two short crosscuts is recommended instead. Three trenches, in addition, are recommended. Bulldozing was considered for stripping the overburden but the only place it appears feasible is near pit number 1, where 4 hours of bulldozing is provided for in the estimate.

Cost Estimate

(1) Clearing road from L. E. Herrington Ranch (Estimated time - 1 day)

Bulldozer and operator 6 hours at $12.00 per hour	$ 72.00	
Total cost of clearing road		$ 72.00

(2) Exploration at pit number 2 (Estimated time - 27 days)

Labor and Supervision		
Labor:		
Two miners at $1.50 per hour base pay; time and one-half over 40 hours; 4 weeks 3 days at $78.00 per week for each miner	676.00	
Supervision:		
One foreman at $100.00 per month (1 month)	100.00	
Technical Services:		
Two-thirds of applicant's part-time services at $60.00 per month	40.00	
Total cost of Labor and Supervision		$816.00
Operating Materials and Supplies		
Timber	50.00	
Explosives	75.00	
Drill steel and bits	27.00	
Power gasoline and oil for compressor (20 days at $8.00 per day)	160.00	
Supplies, Other	30.00	
Total cost of Operating Materials and Supplies		342.00
Operating Equipment		
Rental	None	
Purchase	None	

Depreciation of equipment owned and furnished by the applicant

Machine	Value
Air compressor	$6,000.00
Sinker drill and hoses	600.00
Windless (or air hoist) bucket, wheelbarrow, and miscellaneous tools	600.00
Total value	$7,200.00

Depreciation per month (1 month)		$120.00	
Total cost of Operating Equipment			$120.00
Miscellaneous			
Hauling compressor and equipment to site (Estimated time - 1 day)			
Truck and driver 8 hours at $4.00 per hour	$32.00		
Labor, two men 1 day at $1.50 per hour	24.00		
Total cost of hauling compressor and equipment to site		56.00	
Payroll taxes		19.00	
Workman's Compensation Insurance		25.00	
Bookkeeping - one-third of applicant's part-time services at $60.00 per month (1 month)		20.00	
Sampling and analysis - Two samples at $10.00 each		20.00	
Total cost of Miscellaneous			140.00
Total cost of exploration at pit number 2			$1,418.00
Total cost of clearing road and exploration at pit number 2			$1,490.00

(3) Trenching

	Length of trench	Units of work	Estimated time for completion
Pit number 1	25 feet	150	6 days
Lower tunnel	50 feet	500	15 days
Northwest of lower tunnel	50 feet	500	15 days
Total	125 feet	1,150	36 days

For convenience, a trenching unit consisting of 1 linear foot of trench 1 foot deep was adopted.

Bulldozing at pit number 1

Bulldozer and operator (4 hours at $12.00 per hour)		
Total cost of bulldozing at pit number 1		$ 48.00

Labor and Supervision

Labor:		
Two miners at $1.50 per hour base pay; time and one-half for over 40 hours; 6 weeks at $78.00 per week for each miner	$936.00	
Supervision:		
One foreman at $100.00 per month (1-1/2 months)	150.00	
Technical Services:		
Two-thirds of applicant's part-time services at $60.00 per month for 1-1/2 months	60.00	
Total cost of Labor and Supervision		1,146.00

Operating Materials and Supplies

Explosives	10.00	
Drill steel and bits	3.00	
Power gasoline and oil for compressor (2 days at $8.00 per day)	16.00	
Supplies, Other	24.00	
Total cost of Operating Materials and Supplies		53.00

Operating Equipment

Depreciation of owner's equipment			
Compressor at $100.00 per month for 2 days	$ 8.50		
Sinker drill and hoses at $10.00 per month for 2 days	1.00		
Small tools at $5.00 per month for 1-1/2 months	7.50		
Total cost of Operating Equipment		$ 17.00	
Miscellaneous			
Payroll taxes	23.00		
Workman's Compensation Insurance	33.00		
Bookkeeping by applicant at one-third of part-time services at $60.00 per month for 1-1/2 months	30.00		
Sampling and analysis - Five samples at $10.00	50.00		
Total cost of Miscellaneous		136.00	
Total estimated cost of trenching			$1,400.00
Total estimated cost of project			$2,890.00

Manpower

Two miners will be employed with part-time supervision by Pete Cowan, and bookkeeping and technical services furnished by the applicant on a part-time basis.

Power

Required power would be compressed air to be furnished by the applicant.

Other

Accounting is included in the applicant's compensation.

Assaying costs are based on a quotation from a commercial laboratory. A maximum of seven analyses is provided for; samples to be prepared at the project by cutting down large samples taken in the trenches and shaft workings.

Provision for an access road is made in the estimate.

PRODUCTION PLAN

Time schedule for completion of the project:

On a basis of 6 days per week, the estimated time for completion of the project is 65 days.

Clearing road and hauling equipment	2 days
Exploration at pit number 2	27 days
Trenching	36 days
Total	65 days

SUMMARY: COST OF PROJECT

The estimated total cost of the proposed project, as revised by the Bureau of Mines engineer, is $2,890.00, as itemized below:

Clearing access road	$ 72.00
Exploration by shaft at pit number 2	1,418.00
Trenching	1,400.00
Total cost	$2,890.00
Estimated cost per foot for underground work	47.26 for 30'
Estimated cost of trenching per trenching unit of 1 linear foot, 1 foot deep	1.22

PROPOSED FINANCING

Government participation in the proposed project would be 90 percent of the total of $2,890.00, or $2,601.00. The applicant states he is able to finance his 10 percent of the cost.

CONCLUSIONS

The property definitely contains an occurrence of thorium ore which appears to be in a vein deposit, width and extent undetermined. The exploration requested should expose the width of the ore and provide some indication of the length but not of the possible vertical extent.

From an engineering standpoint, the proposed project is justified. The advisability of approving the project is necessarily dependent on the policy of the Atomic Energy Commission and its effect on the Defense Minerals Exploration Administration's assistance program for thorium.

The applicant is a responsible businessman employed in the loan department of the United States National Bank of Denver. Pete Cowan, who would have actual supervision of the work, has had long experience as a miner and operator in the Westcliffe area and is presently overseer for Custer County. He is competent to give adequate supervision.

RECOMMENDATIONS

Subject to a decision on the status of thorium as a critical mineral, it is recommended that an exploration project costing $2,890.00--Government participation 90 percent, or $2,601.00--be approved.

A short-form contract at a unit cost price for the several types of exploration is suggested.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 12 1954

224 New Customhouse
Denver 2, Colorado

January 6, 1954

REGISTERED

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 3078 (Thorium), Contract Idm-E653, George D. Schweigert and Pete Cowan, Custer County, Colorado

Enclosed are the original and two copies of Contract Idm-E653. Copies of this contract have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

W. H. King

Enclosures

RECEIVED
JAN 20 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

Adams

Defense Minerals Exploration Administration
Robert E. Adams
2017 4070

14X3923.970, Working fund, Interior, DMEA
January 5, 1954
2.45 P.M.

W. H. King, Executed Officer, Region IV, 224 New Customhouse Bldg., Denver 2, Colorado.

Assignment of contract numbers:

REUNTEL 1-4-54 GEORGE D. SCHWEIGERT AND PETE COWAN, DMEA 3078 CONTRACT NUMBER IDM-E 653 ASSIGNED THIS CONTRACT.

LLOYD P. MOCK, DMEA 3182, CONTRACT NUMBER IDM-E 654 ASSIGNED THIS CONTRACT.

R. O. Mittendorf (for)

ADMINISTRATOR

REAdams/cac
cc to: adm reading file
Mails and files ✓
Audits Division
Miss Curtin

SENT
JAN 5 1954
Clerical Service Section

Mr. C. O. Mittendorf
January 4, 1954
4:12 P.M.

E 653

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN - 5 1954

DN 235 BUEREAU MINES Q 1-4-54 2-10 PM

C O MITTENDORF

PLEASE ASSIGN A NUMBER TO CONTRACT COVERING DOCKET NO. DMEA 3078, A JOINT VETXXX VENTURE CONSISTING OF GEORGE D. SCHWEIGERT, 780 MAGNOLIA STREET, DENVER 20, COLORADO AND PETE COWAN, WESTCLIFFE, COLORADO, COMMODITY THORIUM. PROPERTY IN CUSTER COUNTY, COLORADO. CONTRACT DATED JANUARY 4,1954. AMOUNT OF CONTRACT $2888.00, GOVERNMENT, 90 000 S

PARTICIPATION $2599.20.

W H KING

90%

Denver, Colo.

JAN 5 8 20 AM '5-
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

11/9/53

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
NOV - 6 1953

224 New Customhouse
Denver 2, Colorado

November 3, 1953

Mr. George Schweigert
780 Magnolia St.
Denver 20, Colorado

Re: Docket DMEA 3078

Dear Mr. Schweigert:

On October 7, 1953, we requested a true map of your claims to prove that the proposed work is within the property lines.

Will you please advise what progress is being made on obtaining this map?

If we do not hear from you within 30 days, we will assume that you are no longer interested in the proposed exploration work, and we will close the docket.

Very truly yours,

W. H. King

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

HMC:es

cc: Mittendorf
Traver
Koschmann
Connors
Docket
Chron.

10/14/53 gla

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 14 1953

224 New Customhouse
Denver 2, Colorado

October 8, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration

From: Field Team, Region IV

Subject: Report of Examination, DMEA Docket 3078 (Thorium), George D. Schweigert, Custer County, Colorado.

The application for Government assistance in exploration work estimated to cost $2,888.00 has been approved by us and a contract is being prepared.

Government participation will be 90 percent or $2,599.20.

Four copies of the Report of Examination will be forwarded when the contract is executed. Two copies of Form 3b are attached.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

FILE COPY
SURNAME:

700

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

Mr. Selfridge
Mr. Johnson

SEP 30 1953

Mr. W. R. King
Executive Officer
DMEA Field Team, Region IV
224 New Courthouse Building
Denver 2, Colorado

Re: Docket No. DMEA-3078 (Thorium)
George D. Schweigert
G. W. and Antarin Lode Claims
Custer County, Colorado

Dear Mr. King:

This refers to our letter dated September 15, 1953, and your teletype of the same date, appertaining to the captioned application.

It is now our understanding that procurement arrangements by the Atomic Energy Commission for the supply of thorium are adequate for the foreseeable future. Hence, that Agency will probably not arrange for additional supplies from new sources. However, since thorium is still on our list of eligible commodities which may receive exploration aid, you may proceed to process subject application in the usual manner.

Under the circumstances, if the Applicant still desires to enter into an exploration contract and you approve, it is within your authority to do so.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

APPROVED:

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

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

EWEllis/gla/db
9-18-53
cc to: Adm. Reading File
Operating Committee
Docket
Messrs: A.P.Butler, Jr., Rm. 3212, GSA
H.D.Keiser, Rm. 3641
J. O. Hosted, Rm. 3210, GSA
Ellis

R.C.S. 9-30-53

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT - 2 1953

224 New Customhouse
Denver 2, Colorado

September 29, 1953

Mr. George D. Schweigert
780 Magnolia Street
Denver, Colorado

Re: Docket No. DMEA 3078
(Thorium)

Dear Mr. Schweigert:

Reference is made to your application for exploration assistance, Docket No. DMEA 3078 on the G. W. and Antrim Lode Claims.

Question of the desirability of aid to Thorium applicants has been raised by the Atomic Energy Commission. A settlement of that question still remains unanswered after two months.

Because of this, we are placing your application in our inactive file until such time as the Atomic Energy Commission reaches a decision.

We will keep you informed regarding this matter.

Very truly yours,

W. H. King

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

JFS:es

cc: Docket
Mittendorf (2)
Chron.
Traver
Koschmann

Mr. C. O. Mittendorf
Sept. 15, 1953
Unattended service (after 4:15)

September 16, 1953. In telephone conversation today with Mr. King, Region IV, Mr. Ellis covered this matter; therefore, no reply is required. He also told him that a letter was mailed on Sept. 15 in reply to his previous inquiry.

gla

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 16 1953

DN 235 BUREAU MINE 9-15-53 4-12 PM

C O MITTENDORF

RE OUR MEMORANDUM SEPTMEMBER 3,1953, DOCKET DMEA 3078, GEORGE D. SCHWEIGERT, COMMODITY THORIUM. PLEASE ADVISE BY TELETYPE IF WE CAN APPROVE AS EXPLORATION PROJECT AND EXECUTE A CONTRACT FOR THORIUM.

W H KING

Denver, Colo.

Mr. J:

Do you ~~xx~~ want to see the incoming memo.?

fw

AB

No

SEP 16 8 02 AM '53
BUREAU OF MINES
MAIL ROOM
WASHINGTON D.C.

FILE COPY
SURNAME:

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

SEP 1 5 1953

Mr. W. K. King
Executive Officer
DMEA Field Team, Region IV
221 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-3078 (Thorium)
George D. Schmeigert
G. W. and Marie Lode Claims
Custer County, Colorado

Dear Mr. King:

This will acknowledge receipt of your letter of September 3, 1953, appertaining to the captioned application.

It is noted that Applicant has requested an exploration contract in the amount of $2,390.00 for the purpose of trenching and pit deepening on the subject property. You request information with regards to executing a contract for thorium.

It is true that DMEA Order 1, Amendment No. 2, dated May 25, 1953, placed thorium on the list of commodities eligible for exploration aid. However, following the issuance of that amendment, a question of the desirability of aid to thorium applicants has been raised by the Atomic Energy Commission. A settlement of that question has been held in abeyance for nearly two months and still remains unanswered. Because of that fact, we are withholding action on the Rare Earth Mining Company's application (DMEA-3082), as thorium is the chief commodity of that property. Consequently, it is suggested that you likewise defer action on the George D. Schmeigert application until such time as a decision has been reached by the Atomic Energy Commission.

We will keep you informed in the matter.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

J. H. Hedges
Member, Bureau of Mines

A. R. Kinkel, Jr.
Member, Geological Survey

Memorandum: H. L. Keiser, Rm. 3641
A. P. Butler, Jr., Rm. 3206, GSA
J. O. Horted, Rm. 3210, GSA
Ellis

EMEllis/gla/db
9-11-53
cc to: Adm. Reading File
Operating Committee
Docket

HHK
9-15-53

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

224 New Customhouse
Denver 2, Colorado

September 3, 1953

Memorandum

To: C.O. Mittendorf, Administrator, DMEA

From: DMEA Field Team, Region IV

Subject: Docket No. DMEA-3078 (Thorium), G.W. and Antrim Lode Claims, George D. Schweigert, applicant, Custer County, Colorado

We will approve a small exploration project on the subject property consisting of trenching and pit deepening at an estimated cost of $2,890.00 subject to your decision that a contract can be executed for thorium.

Will you please advise?

W. H. King

W. H. King

A. H. Koschmann

A. H. Koschmann